

UNITED STATES  
DEPARTMENT OF COMMERCE  
WASHINGTON

SURVEY OF  
CURRENT BUSINESS

SEPTEMBER, 1930

No. 109



ISSUED BY  
BUREAU OF FOREIGN AND DOMESTIC COMMERCE

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 or decrease compared with the base period. Thus a relative number of 115 means an increase of 15 per cent over the base period, while a relative number of 80 means a decrease of 20 per cent from the base.

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

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

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

## RATIO CHARTS

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

## RECORD BOOK

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

## METHODS OF USE

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

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



# SURVEY OF CURRENT BUSINESS

PUBLISHED BY



UNITED STATES DEPARTMENT OF COMMERCE

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No. 109

WASHINGTON

September, 1930

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## PRELIMINARY SUMMARY FOR AUGUST

Commercial transactions for the first weeks of August, as reflected by bank debits, outside New York City, were smaller than for the preceding period and the corresponding number of weeks in 1929. The value of new building contracts, although greater than the preceding period, were lower than a year ago. The activity of steel plants showed no change from the last of July but was considerably lower than during August last year. Detroit employment, reflecting the automobile industry, showed declines from both comparative periods. Loans and discounts of Federal Reserve member banks registered little change from July, but were below the level of the end of August, 1929. Interest rates at the end of August on call money were higher than July, while rates on time money were less. Both rates were lower than a year ago. Wholesale prices of commodities, as measured by Fisher's index, declined from the preceding month

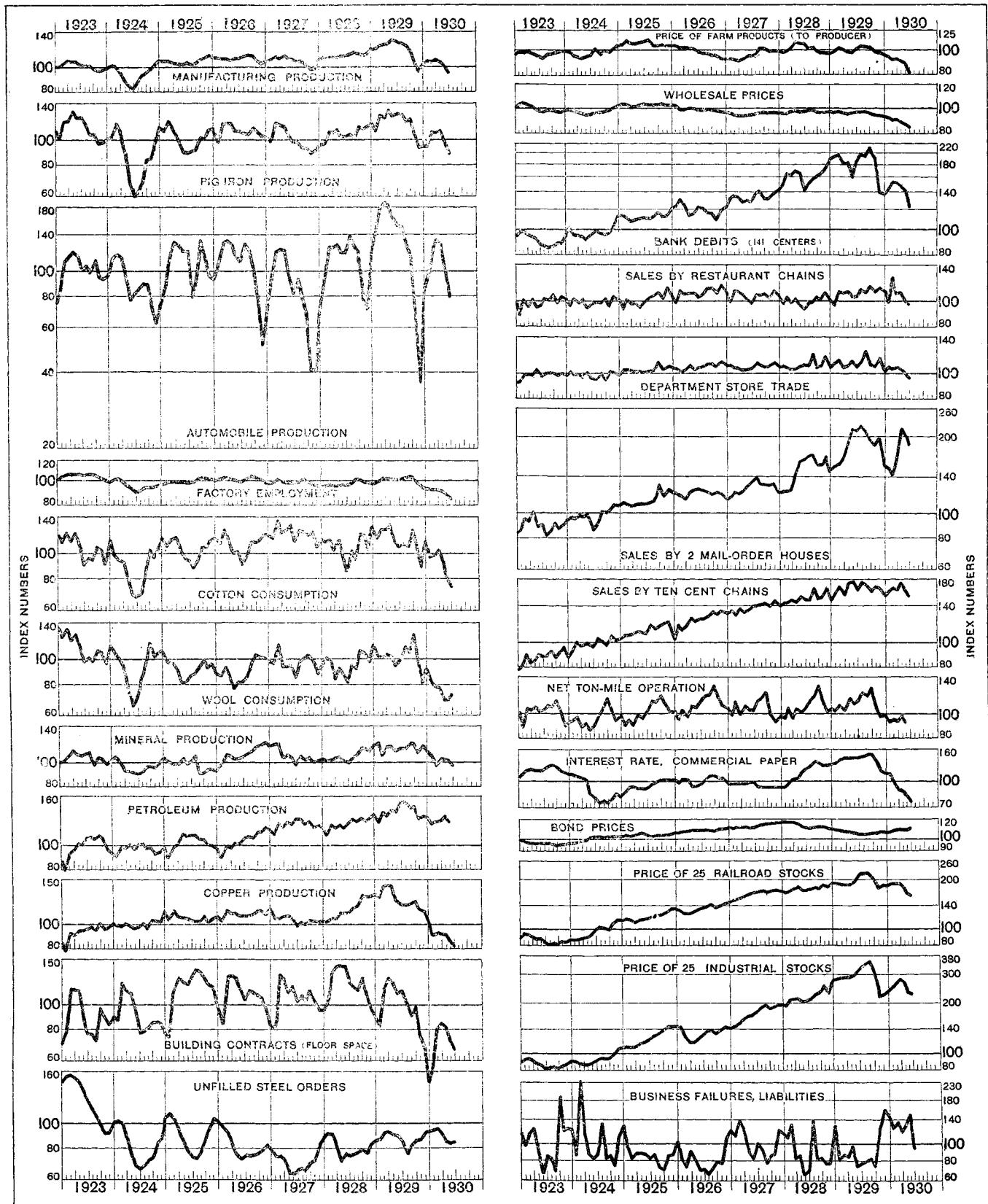
and were considerably lower than a year ago. Prices for wheat and cotton declined while iron and steel prices showed little change during the month.

Bond prices during August continued to rise and showed gains over the preceding month and August a year ago. Stock prices on the other hand showed little difference from the previous month. Brokers' loans at the end of August were lower than at the end of July and a year ago. The Federal Reserve ratio continued at about the same level as at the end of July and was considerably above last year. Business failures during August were less numerous than during the preceding month.

The production of lumber fell off when compared with the month of August, 1929, as did bituminous coal and crude petroleum output. Freight car loadings showed little change from July, but were lower than last year.

## 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							1923		1929				1930							
	1923	1924	1925	1926	1927	1928	1929	June	July	July	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	
	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	111.0	125.0	117.0	105.0	96.0	102.0	107.0	105.0	107.0	104.0	101.0	94.0	
* Total minerals.....	105.0	96.0	99.0	108.0	107.0	106.0	115.0	101.0	100.0	114.0	118.0	110.0	116.0	112.0	109.0	96.0	104.0	103.0	100.0	97.0	
Pig iron.....	111.7	86.7	101.5	109.0	101.0	105.5	117.9	103.1	102.8	126.7	120.1	106.5	94.9	94.0	95.0	108.6	106.5	108.2	98.2	88.4	
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	120.2	130.9	108.3	110.1	140.3	131.2	101.9	84.0	109.8	118.0	124.4	119.8	116.4	98.2	88.4	
Automobiles.....	101.7	90.8	107.5	108.4	85.7	109.9	135.1	120.0	118.6	151.5	114.9	65.8	36.3	83.3	104.9	121.4	134.0	126.2	101.5	79.4	
Cement.....	92.1	99.8	108.1	110.0	115.3	118.0	114.1	140.8	140.6	139.3	134.6	113.1	90.2	68.4	65.7	90.3	108.8	134.0	138.7	137.4	
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.2	106.7	114.6	99.5	85.7	106.6	124.9	106.0	88.4	112.5	96.5	99.1	103.7	92.3	79.0	73.8	
Wool (consumption).....	112.8	94.6	92.6	88.7	97.0	94.7	103.1	87.1	80.4	99.8	125.3	98.5	79.8	92.1	80.9	78.5	77.7	68.9	69.2	73.2	
<b>Raw material output:</b>																					
Animal products.....	100.0	104.0	96.0	96.0	97.0	99.0	99.2	116.2	108.4	116.0	102.6	95.2	93.0	94.7	83.8	97.6	100.5	110.5	116.7	109.9	
Crops.....	91.0	104.0	104.0	109.0	113.3	117.0	114.2	51.8	86.8	91.1	246.3	154.6	139.2	78.7	62.6	55.6	53.2	55.0	45.6	86.9	
Forest products.....	99.0	97.0	104.0	98.0	93.0	88.2	85.4	94.5	87.1	88.3	89.2	82.0	69.6	63.3	66.5	73.6	79.2	84.9	73.8	69.5	
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.4	136.5	118.4	123.1	148.8	143.5	127.3	130.9	129.4	121.2	126.1	125.7	130.6	124.6	125.0	
Bituminous coal.....	108.0	92.5	99.5	109.7	99.0	95.8	100.5	82.6	83.3	94.5	117.6	104.9	107.5	114.3	90.8	82.1	82.3	82.5	77.4	79.7	
Copper.....	93.4	100.2	103.4	110.2	104.9	114.9	127.1	111.0	111.3	120.1	125.2	115.1	113.4	102.9	89.8	92.8	91.7	91.3	86.0	82.3	
<b>Power and construction:</b>																					
Electric power.....	92.5	98.1	109.5	122.6	133.3	146.0	161.8	139.5	142.4	161.0	173.7	164.3	169.7	172.5	151.9	163.0	159.5	159.8	154.6	156.9	
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	121.4	99.6	142.2	123.7	113.7	98.9	76.9	66.3	49.6	57.6	80.6	53.3	81.0	72.6	67.2	
<b>Unfilled orders:</b>																					
General index.....	121.7	87.0	91.3	84.6	74.0	76.2	80.8	75.3	76.8	82.1	76.8	73.7	77.7	80.2	79.4	82.0	77.9	75.0	76.4	75.7	
U. S. Steel Corporation.....	125.8	83.6	90.6	82.1	71.1	80.7	87.1	76.2	74.8	85.6	85.6	86.4	92.5	93.6	93.8	95.7	91.2	85.0	83.1	84.2	
<b>Stocks:</b>																					
General index.....	94.5	102.0	103.5	114.6	120.8	123.0	136.8	108.7	105.8	121.8	154.8	156.5	158.0	150.8	147.3	141.8	134.6	127.7	124.8	126.5	
Manfd. commodities (28).....	93.8	103.2	103.0	106.3	112.5	117.4	120.1	118.0	119.3	120.3	113.9	115.6	118.9	121.5	124.9	127.4	124.1	117.7	124.8	126.9	
Cotton.....	102.5	91.4	106.2	146.5	153.1	123.6	126.8	74.7	58.6	54.2	177.5	199.8	206.4	192.5	177.4	158.3	141.1	129.5	118.7	108.0	
Copper (refined).....	106.4	113.0	73.1	84.8	85.4	58.4	78.4	52.0	48.5	86.3	78.1	111.7	151.3	179.7	205.9	226.2	266.2	272.6	279.8	284.5	
<b>Employment:</b>																					
Factories.....	104.2	96.2	99.7	101.4	98.8	97.2	100.4	96.2	95.7	100.7	102.1	98.2	94.8	92.9	92.9	92.7	92.1	90.4	88.2	84.6	
<b>Prices:</b>																					
Farm products, to producers.....	97.8	97.1	106.5	98.6	94.9	100.7	100.0	105.1	105.1	101.4	101.4	98.6	97.8	97.1	94.9	91.3	92.0	89.9	89.1	80.4	
Wholesale, all commodities.....	99.9	97.4	102.8	99.3	94.7	97.0	95.8	96.9	97.6	97.3	95.6	93.7	92.5	92.8	91.5	90.2	90.1	88.5	86.2	83.2	
Retail food.....	97.6	97.6	104.9	107.6	103.6	102.9	104.6	102.0	102.1	105.9	107.2	106.7	105.6	103.8	102.2	100.3	102.9	100.3	98.8	96.2	
Cost of living (including food).....	98.2	99.4	102.4	100.0	98.7	98.4	98.0	98.1	98.8	99.4	99.3	98.7	97.4	96.8	95.6	96.2	95.0	94.4	92.6		
<b>Distribution (values):</b>																					
* Bank debits, 141 cities.....	91.2	96.7	111.9	119.6	132.5	158.2	184.5	165.4	140.4	184.8	211.1	190.0	139.8	136.7	144.4	153.4	152.1	145.8	142.2	125.8	
* Department stores, sales.....	98.0	99.0	103.0	106.0	107.0	108.0	110.0	106.0	108.0	106.0	109.0	107.0	115.0	102.0	106.0	104.0	106.0	100.0	96.0		
* Mail-order sales, 2 houses.....	89.3	97.2	111.9	120.6	126.2	147.7	188.6	160.8	163.6	212.2	194.7	186.0	199.9	154.7	149.6	140.7	164.0	216.0	200.2	199.8	
* 10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	150.0	164.0	153.0	148.0	162.0	159.0	166.0	165.0	152.0	162.0	164.0	161.0	174.0	160.0	152.0	
Postal receipts.....	93.6	98.5	107.9	114.5	117.3	117.7	121.1	111.9	99.6	109.1	133.5	122.0	153.3	120.9	111.3	121.8	122.3	117.3	104.9	101.2	
Imports.....	97.8	93.1	109.0	114.3	108.0	105.5	113.5	98.2	98.4	109.6	121.1	104.8	96.1	96.3	87.2	93.0	95.3	88.1	77.5	68.2	
Exports.....	91.5	100.8	107.8	105.5	106.8	112.6	115.2	102.4	99.8	106.1	139.6	116.5	112.4	108.3	91.9	97.4	87.4	84.2	77.7	70.8	
<b>Transportation:</b>																					
Freight, net ton-miles.....	102.2	95.9	101.9	109.1	106.0	106.5	109.9	100.0	104.9	109.2	128.1	103.8	96.6	98.3	92.0	94.6	93.5	99.0	92.2		
<b>Finance:</b>																					
Member bank loans and discounts.....	94.1	98.5	107.4	112.9	117.3	126.8	135.9	128.4	126.6	136.2	151.1	141.3	140.9	133.1	131.1	135.0	135.4	134.4	135.4	135.3	
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	112.8	135.7	113.2	119.0	139.2	145.0	133.4	116.0	113.2	110.2	98.6	90.0	87.0	81.2	75.4	
Federal reserve ratio.....	99.0	104.1	96.9	96.0	99.1	89.1	93.4	84.7	88.9	96.4	89.9	93.0	90.2	101.4	102.1	103.4	106.9	108.7	104.5	108.2	
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	113.0	106.5	112.3	110.9	104.9	105.2	105.0	107.1	106.8	107.0	109.3	109.2	109.2	109.1	109.5	
Price, railroad stocks.....	86.0	96.1	117.9	133.4	162.7	174.5	194.3	169.6	170.3	213.4	203.5	176.2	181.4	180.6	188.6	188.1	187.6	176.7	162.8	162.6	
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	214.8	292.6	202.1	206.1	330.8	316.3	219.4	229.3	235.5	251.9	262.2	279.2	261.3	227.2	225.8	
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.2	96.2	95.0	70.3	69.8	76.5	73.9	122.8	159.1	144.3	121.1	134.1	115.7	131.0	148.9	93.9	

\* Seasonal adjustments.

## BUSINESS CONDITIONS IN JULY

### PRODUCTION

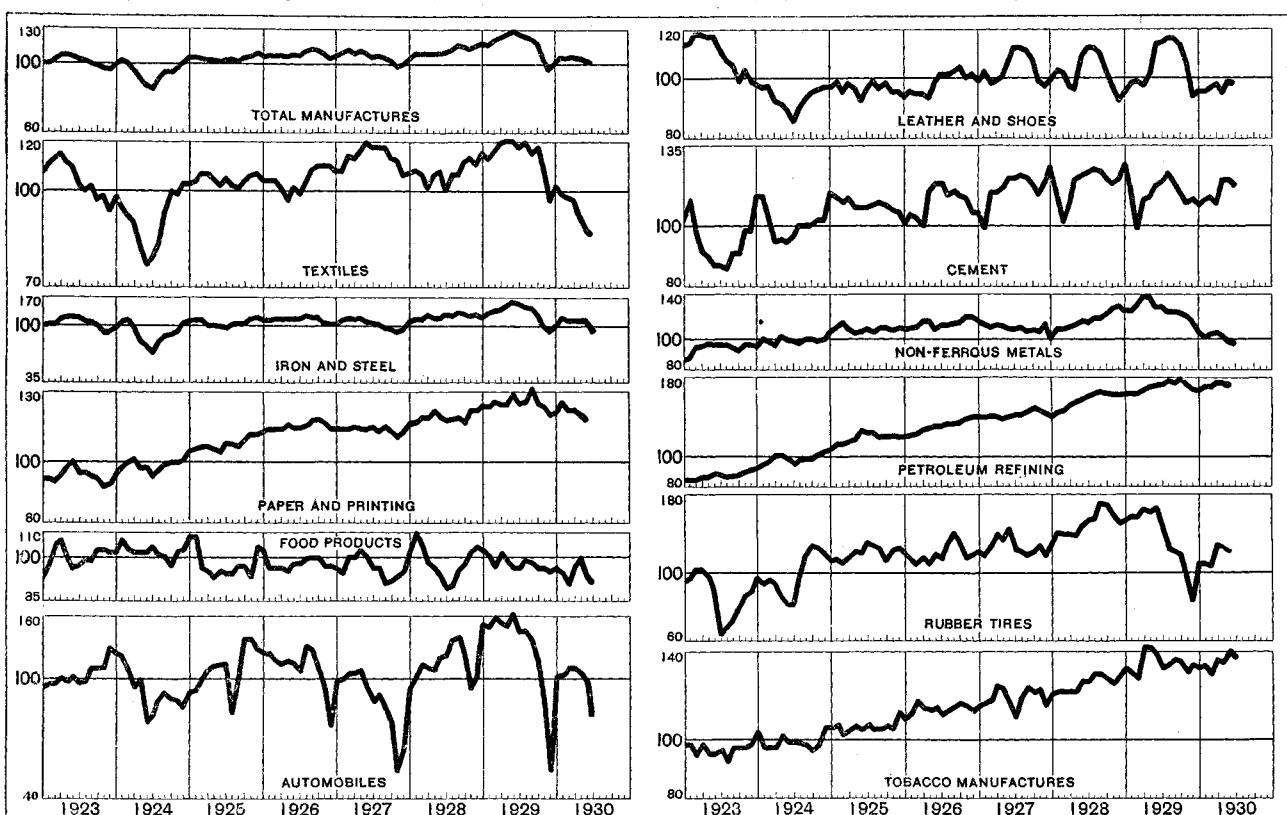
Industrial production in July, according to the weighted index of the Federal Reserve Board, showed a decline from both the preceding month and the corresponding month in 1929. The output of manufactured commodities and minerals likewise declined from both periods after adjustments for seasonal variations were made. In manufacturing, declines from June were registered in all major groups except textiles which showed a gain. In the output of minerals all groups declined from both the preceding period and the month of July, 1929.

### DISTRIBUTION

Wholesale trade in July was generally lower than during July, 1929, declines occurring in the sales of groceries, dry goods, hardware, and drugs. For the period of January 1 to July 31, 1930, the sales of dry goods showed a decline of 20 per cent, hardware 14 per cent, and drugs 7 per cent from the corresponding period a year ago. The sales of groceries during this period, due to constant demand, showed only a small loss when compared with the first seven months of last year. Retail trade in July, as measured by department-store sales in 265 cities, recorded a decline

### 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 July registered a gain of 1 per cent over those held at the end of the preceding period and 3 per cent over a year ago; the increase being largely due to increased holdings of raw materials. Stocks of finished goods in the hands of manufacturers registered an increase at the end of July over both comparative periods.

### SALES

The general index of unfilled orders showed at practically the same level of the month of June but when compared with the month of July, 1929, a slight decline was noted. As compared with the month of June the textile and lumber groups showed no change while the iron and steel and transportation equipment groups declined. Compared with a year ago, the textile, iron and steel, and lumber groups declined while the transportation group recorded an increase.

of 10 per cent from July a year ago. For the first seven months of 1930 a loss of 5 per cent was noted from the corresponding period in 1929. The sales of mail-order systems and representative 10-cent chains registered declines from both comparative periods.

### IMPORTS AND EXPORTS

Total imports of merchandise during July were smaller than during the preceding month and July 1929. Declines from June occurred in the imports of crude materials, crude and manufactured foodstuffs, and semi and finished manufactures. Total exports also declined from the month of June and a year ago; increases over the preceding month were noted in the crude foodstuffs and animal groups, while other major lines declined. As contrasted with July, 1929, declines occurred without exception in all

### PRICES

The general index of wholesale prices in July showed a decline of 3 per cent from the month of June and 14 per cent from July, 1929. All groups in the index registered declines when compared with last year. As compared with the month of June, the following groups registered declines: Farm products, foods, hides and leather products, textile products, fuel and lighting metals and metal products, building materials, chemicals and drugs and miscellaneous items, while the prices for house-furnishing goods showed no change.

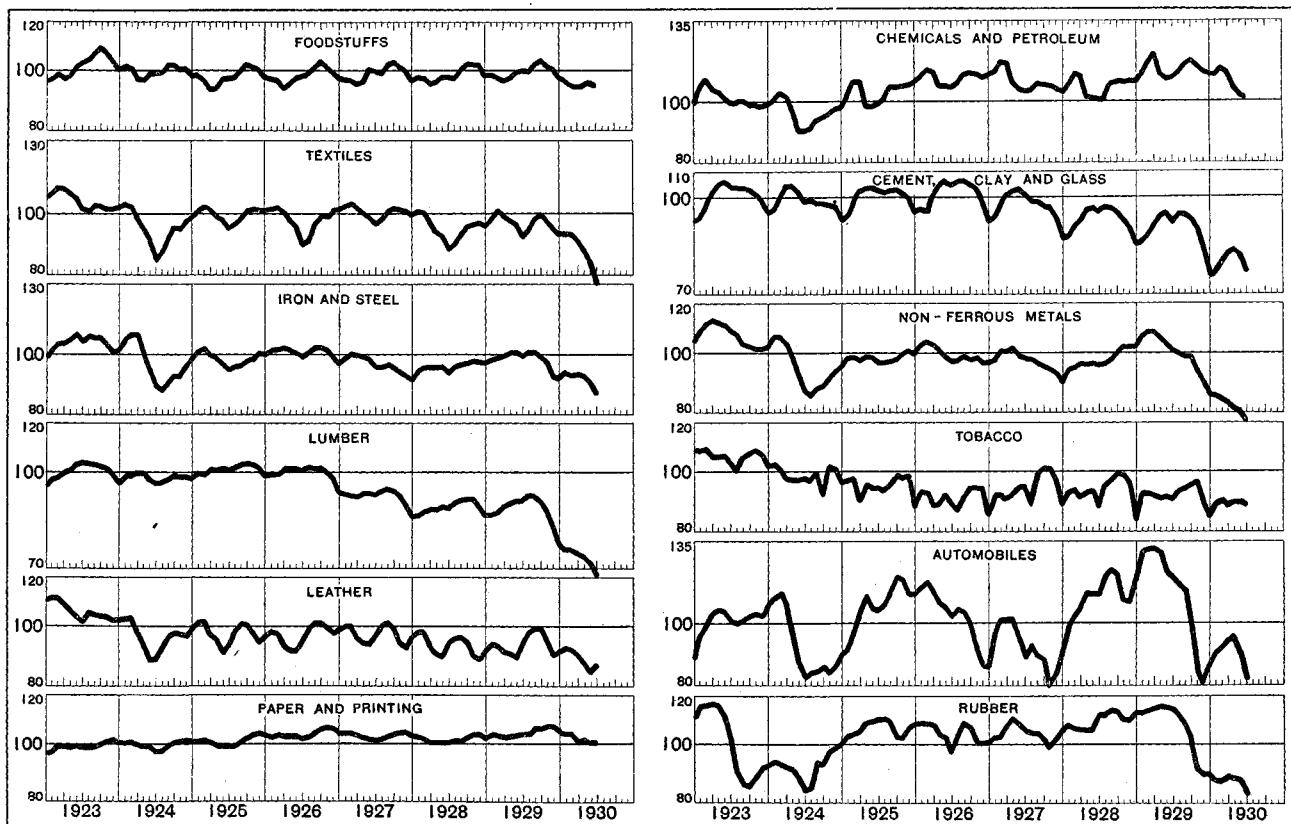
Classified by state of manufacture, prices for all groups showed lower averages than in either the pre-

### EMPLOYMENT

Factory employment as shown by the index compiled by the Federal Reserve Board was 3 per cent less than the previous month and 6 per cent lower than in July, 1929. As compared with the month of June, increased employment was noted in factories producing leather and shoes while factories making foodstuffs and chemicals showed no change. The principal declines occurred in factories producing iron and steel, machinery, textiles, paper, lumber, transportation equipment, cement, clay and glass, nonferrous metals, and rubber and tobacco products. As compared with the month of July last year all groups showed decreased employment.

### FACTORY EMPLOYMENT, BY GROUPS

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



ceding month or the corresponding period a year ago, the principal declines from last month occurring in raw materials, semimanufactured articles, and finished products.

The index representing prices received by farmers for their goods was 10 per cent lower than in June and 21 per cent lower than a year ago. As compared with the preceding month decreases occurred in prices received for grains, fruits and vegetables, meat animals, dairy and poultry products, cotton and cottonseed, and unclassified items. In comparison with July, 1929, prices received for fruits and vegetables showed an increase of 27 per cent, while decreases of 25 per cent for grains, 24 per cent for meat animals, 19 per cent for dairy and poultry products occurred.

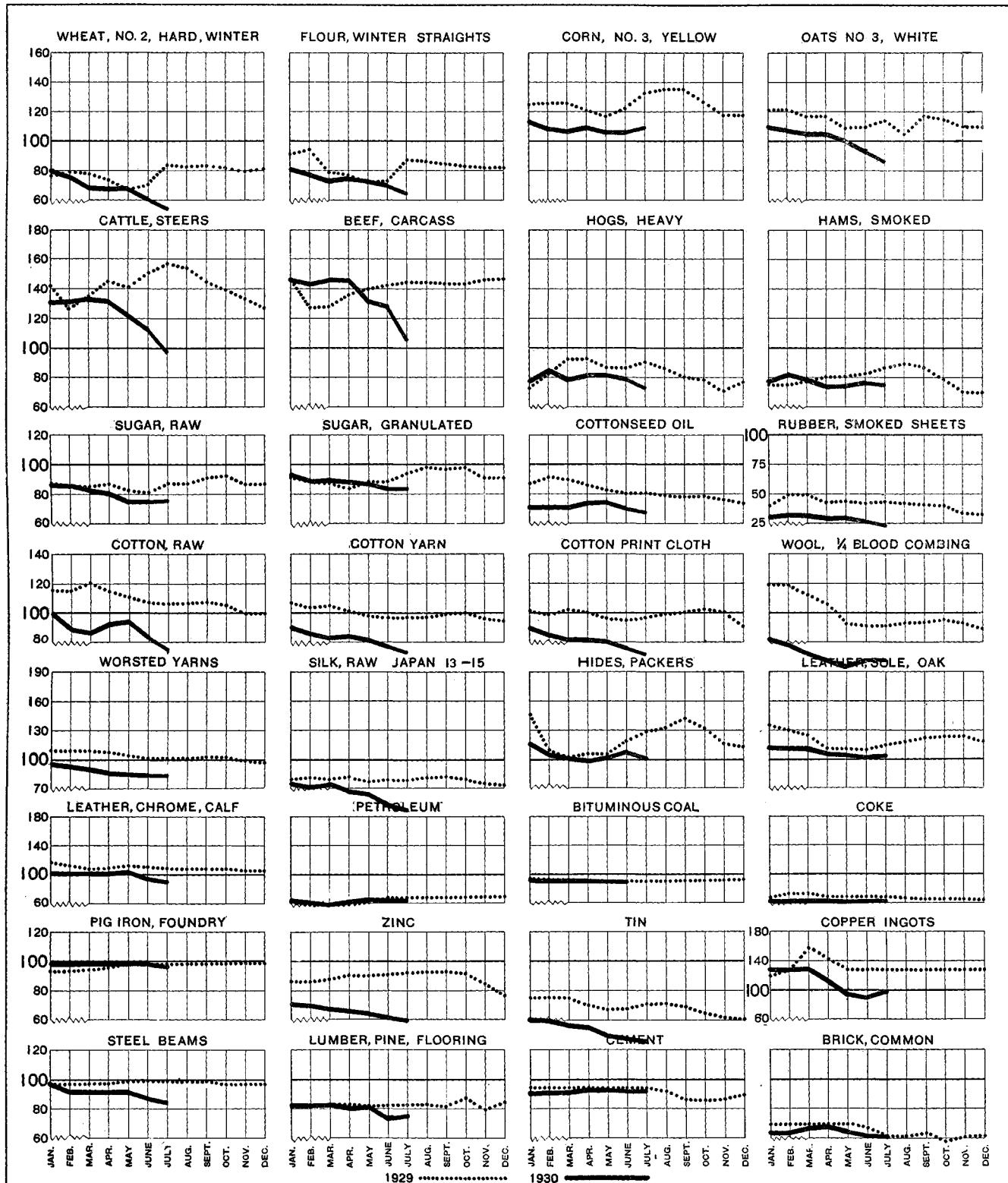
Factory pay rolls in July were 9 per cent lower than in June and 22 per cent lower than in July a year ago. As compared with the month of June, 1930, all groups showed smaller wage payments except the leather group.

### COST OF LIVING

The general cost of living during July was lower than both comparative periods. Declines from June, 1930, occurred in the food, housing, clothing, and sundries groups, while the group comprising fuel and light showed a fractional increase. As compared with July, 1929, all cost of living groups registered substantial declines with the exception of the fuel and lighting group, where the decrease was only slight.

## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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



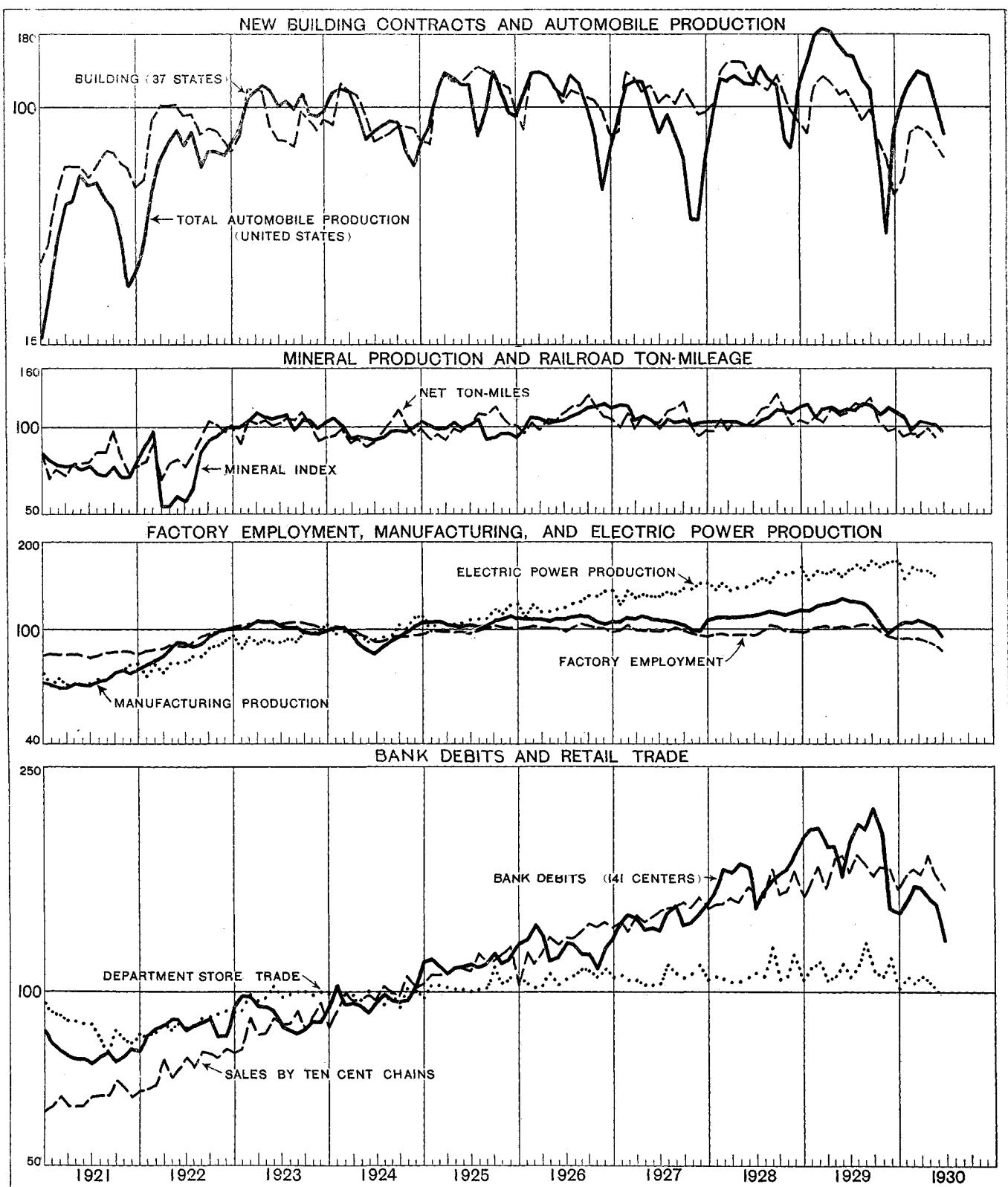
## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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				
					1926 average=100				
		June, 1930	July, 1930	July, 1929	May, 1930	June, 1930	July, 1930	June, 1929	July, 1930
<b>FARM PRODUCTS—AVERAGE PRICE TO PRODUCER</b>									
Wheat.....	Bushel.....	0.879	0.706	1.024	65	65	52	64	76
Corn.....	Bushel.....	.790	.771	.912	111	113	110	124	131
Potatoes.....	Bushel.....	1.486	1.294	.870	81	80	70	34	47
Cotton.....	Pound.....	.140	.119	.178	96	93	79	118	119
Cottonseed.....	Ton.....	29.66	27.35	34.84	113	109	101	132	128
Cattle, beef.....	Pound.....	.0820	.0712	.0980	129	127	110	151	152
Hogs.....	Pound.....	.0910	.0838	.1033	76	77	71	83	88
Lambs.....	Pound.....	.0902	.0808	.1190	77	78	70	106	103
<b>FARM PRODUCTS—MARKET PRICE</b>									
Wheat, No. 1, northern spring (Minneapolis).....	Bushel.....	1.00	.92	1.43	68	63	58	73	91
Wheat, No. 2, red, winter (St. Louis).....	Bushel.....	1.05	.85	1.39	74	68	55	78	90
Wheat, No. 2, hard, winter (Kansas City).....	Bushel.....	.89	.80	1.25	66	60	54	71	84
Corn, No. 3, yellow (Chicago).....	Bushel.....	.79	.82	.99	105	105	109	121	132
Oats, No. 3, white (Chicago).....	Bushel.....	.38	.35	.47	100	93	85	110	115
Barley, No. 2 (Minneapolis).....	Bushel.....	.49	.47	.69	86	77	73	94	108
Rye, No. 2 (Minneapolis).....	Bushel.....	.57	.55	1.07	71	62	60	91	116
Cotton, middling upland (New York).....	Pound.....	.145	.132	.186	94	83	75	107	106
Wool, $\frac{1}{4}$ blood combing, Ohio and Pennsylvania fleeces (Boston).....	Cwt.....	10.725	9.281	14.975	121	113	97	151	157
Cattle, steers, good to choice, corn fed (Chicago).....	Cwt.....	9.675	8.944	11.200	81	78	73	86	91
Hogs, heavy (Chicago).....	Cwt.....	3.450	3.063	5.550	73	52	47	81	84
Sheep, ewes (Chicago).....	Cwt.....	9.725	8.125	13.800	66	71	59	93	101
<b>FOOD</b>									
Flour, standard patents (Minneapolis).....	Barrel.....	5.825	5.505	7.690	71	69	65	76	91
Flour, winter straight (Kansas City).....	Barrel.....	4.994	4.644	6.313	73	69	64	73	87
Sugar, 96° centrifugal (New York).....	Pound.....	.032	.033	.038	74	74	75	81	88
Sugar, granulated, in barrels (New York).....	Pound.....	.045	.046	.052	87	83	84	89	94
Cottonseed oil, prime yellow (New York).....	Pound.....	.083	.080	.096	74	70	67	81	81
Beef, fresh, carcass, good native steers (Chicago).....	Pound.....	.195	.174	.238	131	119	106	143	145
Beef, fresh, carcass, steers (New York).....	Pound.....	.218	.177	.255	129	127	104	139	149
Pork, smoked hams (Chicago).....	Pound.....	.233	.230	.287	74	76	75	82	87
Butter, creamery, 92 score (New York).....	Pound.....	.33	.35	.42	78	73	78	98	93
Oleomargarine, standard, uncolored (Chicago).....	Pound.....	.228	.205	.235	103	100	90	103	103
<b>TEXTILES</b>									
Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston).....	Pound.....	.273	.262	.348	81	76	73	97	97
Cotton-print cloth 64 x 60-38 $\frac{1}{2}$ "-5.35—yards to pound.....	Yard.....	.056	.054	.073	80	75	72	96	97
Cotton sheeting, brown 4/4 "Itron" (New York).....	Yard.....	.075	.070	.083	84	80	75	90	89
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....	Pound.....	1.200	1.200	1.450	85	84	84	101	101
Women's dress goods, French, 39 inches, at mills, serge.....	Yard.....	.900	.900	.975	87	87	87	94	94
Suitings, unfinished worsted—13-ounce, mill.....	Yard.....	1.756	1.696	1.996	88	88	85	100	100
Suitings, serge, 11-ounce, 56-58 inch.....	Yard.....	1.843	1.806	1.959	85	85	83	90	90
Silk, Japan, 13-15.....	Pound.....	3.251	2.955	4.876	64	53	48	80	79
Hosiery, women's pure silk, mill.....	Dozen pair.....	8.000	8.000	9.250	73	69	69	80	80
<b>LEATHER</b>									
Hides, green salted, packers' heavy native steers (Chicago).....	Pound.....	.152	.141	.181	102	108	100	119	129
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....	Pound.....	.175	.165	.199	97	101	95	107	115
Leather, sole, oak, scoured backs, heavy (Boston).....	Pound.....	.440	.460	.505	105	100	105	111	115
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.....	3.902	3.891	3.906	90	91	90	91	91
Coal, bituminous, prepared sizes (composite price).....	Net ton.....	4.096	4.156	4.245	85	85	87	87	89
Coal, anthracite, chestnut (composite price).....	Long ton.....	12.251	12.366	12.754	91	89	90	92	93
Coke, Connellsville (range of prompt and future), furnace—at ovens.....	Short ton.....	2.500	2.520	2.800	62	61	61	68	68
Petroleum, crude, Kansas-Oklahoma—at wells.....	Barrel.....	1.178	1.178	1.300	63	63	63	69	69
<b>METALS</b>									
Pig iron, foundry No. 2, northern (Pittsburgh).....	Long ton.....	20.260	19.860	20.260	98	98	96	98	98
Pig iron, basic, valley furnace.....	Long ton.....	18.500	18.100	18.500	100	100	98	100	100
Steel billets, Bessemer (Pittsburgh).....	Long ton.....	31.000	31.000	35.000	93	89	89	101	100
Copper ingots, electrolytic, early delivery (New York).....	Pound.....	.1205	.1102	.1778	93	87	80	129	129
Brass, sheets, mill.....	Pound.....	.192	.182	.233	104	101	96	122	122
Lead, pig, desilverized, for early delivery (New York).....	Pound.....	.0541	.0525	.0680	66	64	62	80	81
Tin, straits (New York).....	Pound.....	.3030	.2981	.4640	49	46	46	68	71
Zinc, slab, western (St. Louis).....	Pound.....	.0444	.0435	.0677	63	61	59	91	92
<b>BUILDING MATERIAL AND MISCELLANEOUS</b>									
Lumber, pine, southern, yellow flooring, mill.....	M feet.....	33.060	33.890	37.270	81	73	75	82	83
Brick, common red, domestic building (New York).....	Thousand.....	10.000	10.000	10.125	64	61	61	67	62
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district).....	Barrel.....	1.600	1.600	1.650	93	92	92	95	95
Steel beams, mill (Pittsburgh).....	Cwt.....	1.700	1.650	1.950	92	87	84	100	100
Rubber, smoked sheets (New York).....	Pound.....	.124	.115	.213	29	26	24	43	44
Sulphuric acid, 66° (New York).....	Ton.....	15.500	15.500	15.500	107	107	107	107	107
Newsprint, rolls, contract, mill.....	Cwt.....	3.250	3.250	3.250	94	94	94	94	94

## MEASURES OF INDUSTRIAL AND COMMERCIAL ACTIVITY

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



## REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

### TEXTILES

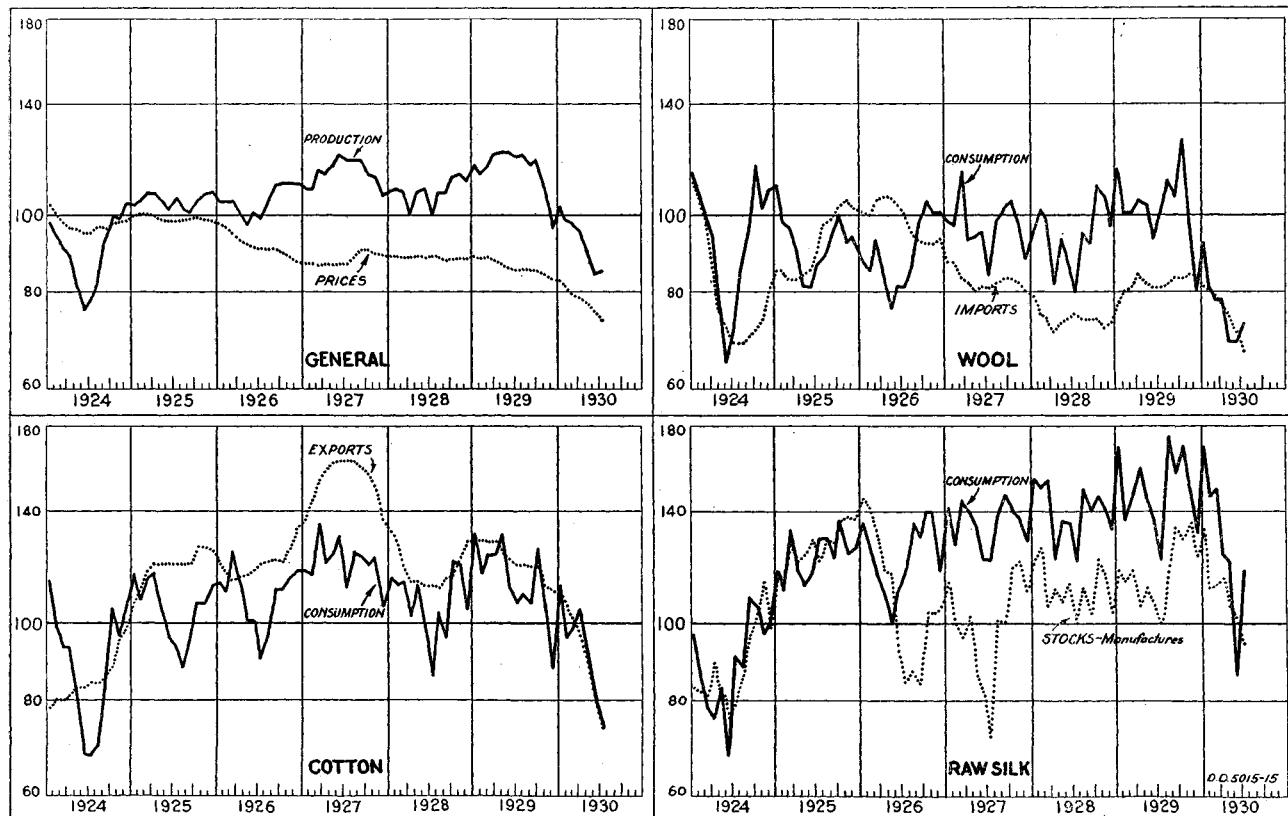
Total wool receipts at Boston showed an increase of 33 per cent over the receipts of June, and 35 per cent over July, 1929. Imports during the month were equal to those of the preceding month, but when compared with the imports of July, 1929, a considerable decline was noted.

Consumption of cotton by mills declined both from June and from a year ago, exports and stocks showing similar comparisons. For the first seven months of the calendar year of 1930 consumption and exports were considerably below the 1929 period. Ginning

Imports and deliveries of silk during July showed marked increases over the preceding month, but were well under the level of a year ago. Stocks of silk at warehouses recorded a gain of 25 per cent over June, but declined 17 per cent from July last year. Stocks at manufacturing plants were smaller than both periods. The price of raw silk showed a decline of 9 per cent from the month of June and 39 per cent from a year ago. Rayon imports declined both from June and a year ago, while the prices showed marked reductions from both periods.

### THE TEXTILE INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. July, 1930, is latest month plotted. Curves covering imports of wool and exports of cotton are plotted from 12 months' moving monthly average plotted on the end month]



reports show more cotton ginned to August 16 than a year ago. Raw cotton prices averaged lower than in June and July, a year ago.

The activity of cotton spindles was less than in June or a year ago. Cotton-yarn production, however, showed a fractional gain over the preceding month, but was less than a year ago. Yarn prices declined from both periods. Production, shipments, and unfilled orders of cotton textiles continued to decline, while new orders showed a marked increase. The decline in cotton goods production reflects the tightened condition in the industry. Prices for finished cotton goods, in general, averaged lower than the previous month and a year ago.

Reports of dividends paid during the first six months of 1930 by Fall River mills were considerably greater than those paid a year ago. Payments by New Bedford mills, however, were considerably less than last year. Production of fresh-water pearl buttons showed a decline from the preceding period and a year ago. Imports of buttons from the Philippines, although declining from the month of June, were greater than during July, 1929. Mother-of-pearl shells, used in the manufacture of buttons, were considerably larger than the preceding month. The imports of Tagua nuts or vegetable ivory during July declined 2 per cent, and 21 per cent from July, 1929.

### METALS

Iron-ore shipments from the mines were fractionally smaller than in June and showed a falling off of 20 per cent when compared with July, 1929. Pig-iron production declined both from the preceding month and a year ago. Fewer merchant furnaces were in blast at the end of July than a month ago or the year previous.

Their capacity also declined from both comparative periods. Pig-iron prices, in general, showed little change from the level of last month but were lower than a year ago.

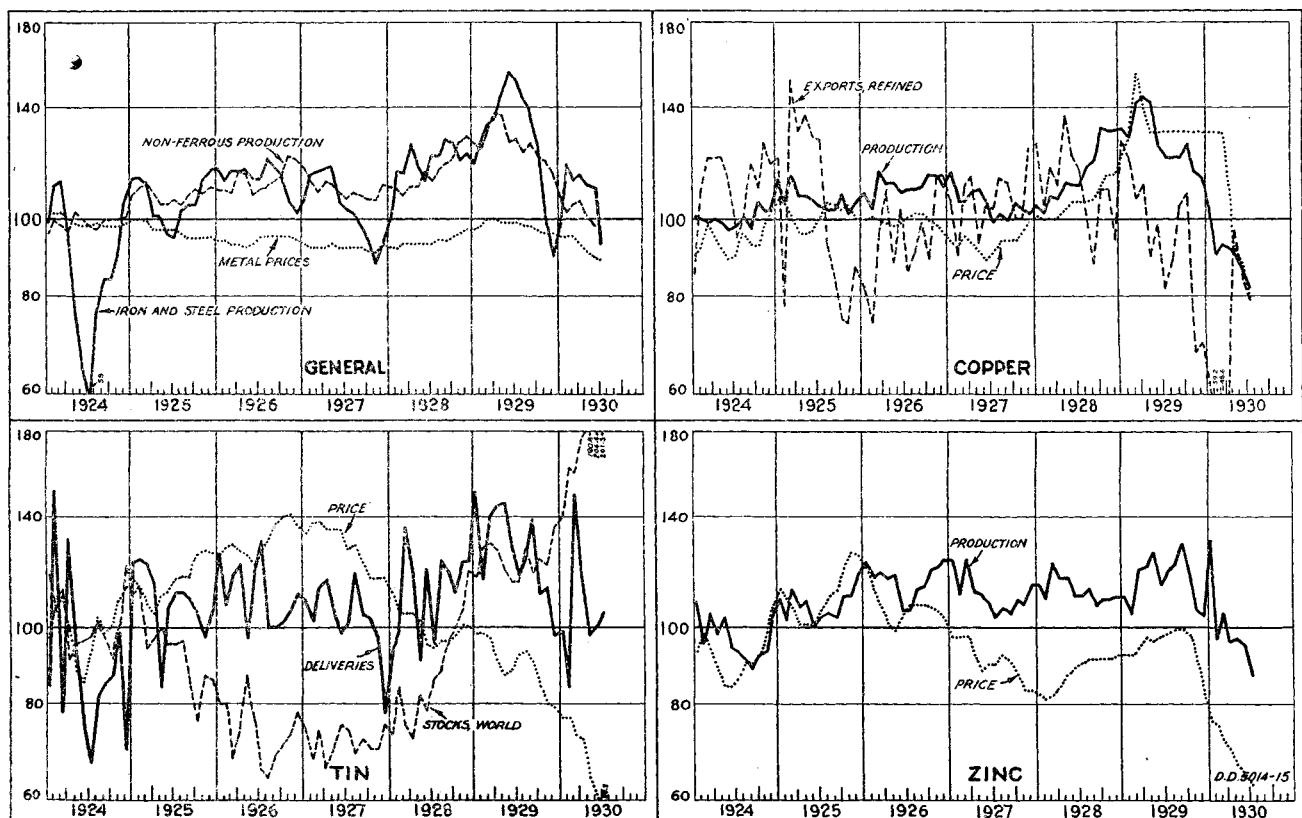
The output of steel ingots registered declines of 15 and 40 per cent, respectively, from the previous month and July, 1929. Unfilled steel orders of the

and unfilled orders of business items. As compared with the month of July, 1929, all items of steel furniture showed declines. Shipments, stocks, and new orders of enameled sanitary ware were generally smaller than in either the previous month or a year ago. New orders for machine tools, foundry equipment, and electric hoists were all smaller in July than in June or a year ago. July new orders for electric overhead cranes and shipments of water softeners and motor-fire extinguishing equipment, although larger than those of the month of June, were less than last year. The number of patents issued during July on all items were about half what they were in June.

Copper production showed little change from June but continued lower than last year. Exports declined

### THE METAL INDUSTRIES

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



United States Steel Corporation showed an increase of 1 per cent in orders placed during July over the previous month and were slightly below the level of orders at the end of July a year ago.

Structural steel, new orders and shipments, showed gains over the month of June of 3 per cent in each case, while production of steel barrels, new orders for fabricated plate, and track work production declined. New orders for steel boilers fell off 3 per cent from the month of June and were much lower than a year ago. Steel furniture showed declines from June in shipments of business items and shelving and new and unfilled orders of shelving; but increases in new

about 7 per cent from June and 7 per cent from a year ago. Stocks of refined copper in North and South America increased over both the preceding month and July, 1929. Copper in ingots at 11 cents in July showed a loss of 9 per cent from June and 38 per cent from a year ago. Deliveries of tin during July registered a gain of 4 per cent over June, but declined when compared with a year ago. Stocks of tin, both the world and United States, although below those held at the end of June, were considerably greater than a year ago.

Zinc production was lower than in June and a year ago July. Stocks of zinc showed gains over both the month of June and last year.

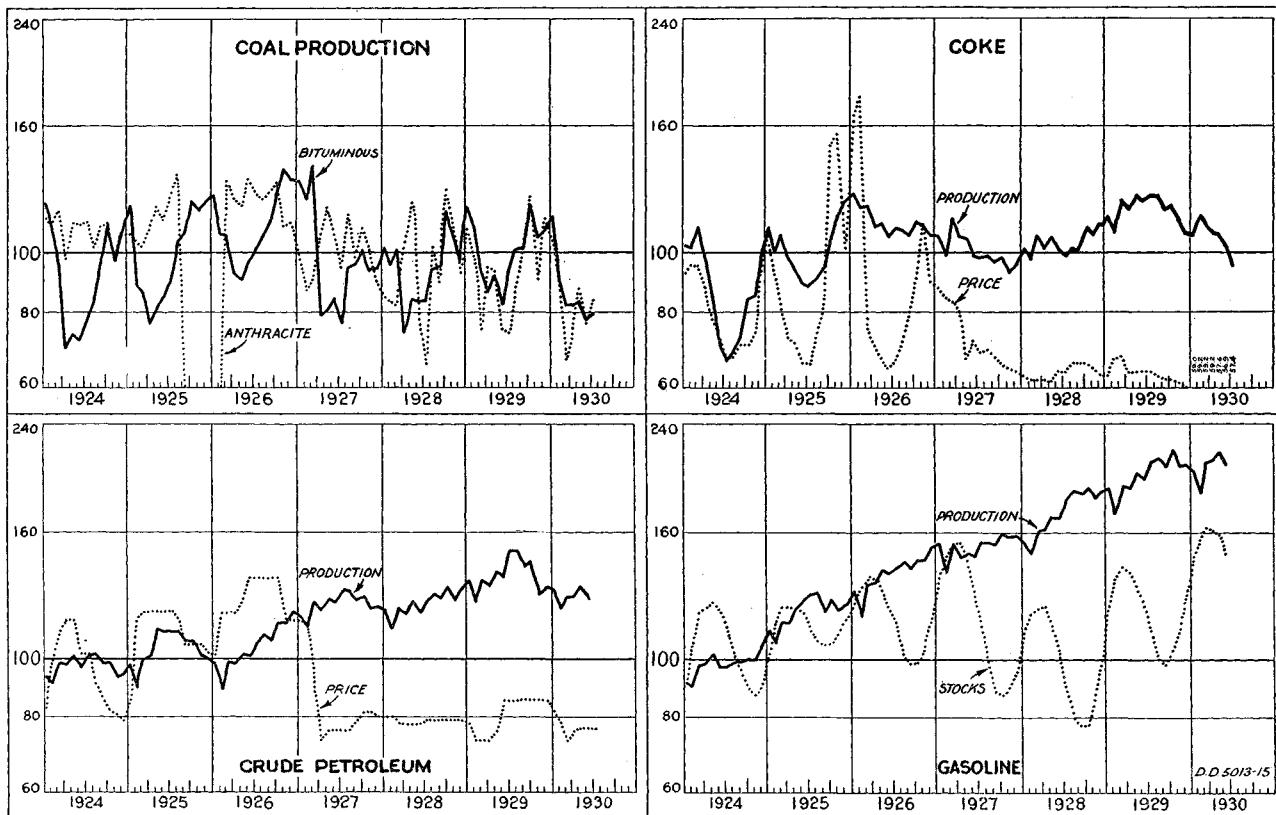
### FUELS

The production of bituminous coal in the United States registered an increase of 3 per cent over June but was 16 per cent lower than a year ago. Wholesale prices showed but little change when compared with June, 1930, and July, 1929. Anthracite coal output showed a gain over the previous month 9 per cent and was 13 per cent greater than in July last year. Prices of anthracite were slightly higher than last month and lower than in 1929. Production of both beehive and by-product coke during July declined from both the preceding month and a year ago. The price of Connellsville coke was fractionally higher than in June, but was 10 per cent lower than in July last year.

lower than in June and 22 per cent lower than a year ago. Calfskin prices declined from both prior periods. Sole leather production increased both over the preceding month and a year ago while exports of sole and belting leather declined from both periods. The price for sole leather showed a slight increase over June's price but is still lower than the price of a year ago. Preliminary figures on the output of leather boots and shoes show that there were 20,761,004 pairs made in July as against 20,804,317 pairs made during June by 734 establishments. Leather gloves and mittens cut in July were 12 per cent lower than in June and 18 per cent less than in July 1929. Wholesale prices of men's and women's shoes remained unchanged

### THE FUEL INDUSTRIES

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



### AUTOMOBILES

Automobile production registered marked declines from both comparative periods. Passenger car output was 22 per cent less than in June and 48 per cent lower than in 1929. Truck output likewise showing a loss was 13 per cent lower than the preceding period and 47 per cent less than a year ago. Exports of assembled cars and trucks declined in July from both prior periods.

### HIDES AND LEATHER

Production of hides, as shown by the number of cattle and sheep slaughtered under Federal inspection, was greater than during both the preceding months and July, 1929. Imports of hides and skins declined from June and were much lower than in July, 1929. Prices for green salted packer hides were 7 per cent

both from prices prevailing in June and a year ago.

### PAPER AND PRINTING

Shipments of newsprint paper in both the United States and Canada were lower than in either the month of June or a year ago. Production in the United States declined 5 per cent from the month of June and 8 per cent from a year ago. Imports into the United States fell off 7 per cent from those of the preceding period and were 8 per cent less than in July last. Exports from Canada showed an increase of 2 per cent over the previous month and recorded but slight change from a year ago. Stocks of newsprint at mills in the United States, although showing but small change from the month of June, were 24 per cent greater than those held at the end of July, last year.

### BUILDING CONSTRUCTION

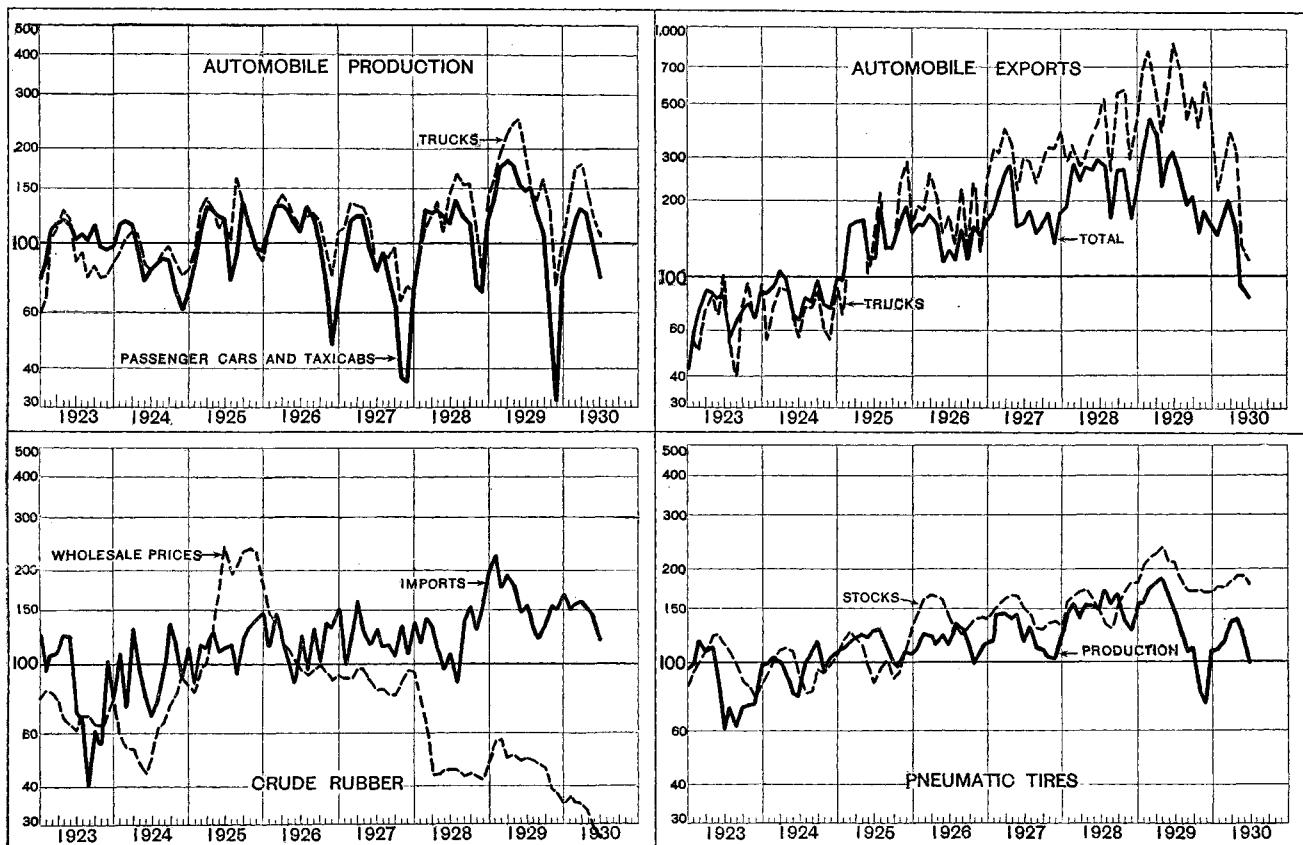
Building contracts awarded for new construction and engineering projects declined from June in both value and floor space except for the floor space of industrial buildings which showed a gain of 22 per cent and other public and semipublic buildings which showed a gain of 16 per cent over the preceding period. As compared with a year ago, new building declined in all cases, both in floor space and value with the exception of public and semipublic buildings, which showed an increase of 5 per cent in the amount of floor space. Construction costs showed but little change from June but were lower in general than a

### STONE, CLAY, AND GLASS PRODUCTS

Portland cement output showed little change from either the previous month or a year ago. Face brick production, shipments, stocks and unfilled orders all showed declines from both periods. Terra cotta orders declined from both periods but as measured in value was greater than the month of June. Porcelain plumbing fixtures showed gains in net new orders and shipments over June but decreases in unfilled orders and stocks. Unfilled orders at the end of July were 14 per cent greater than a year ago. Fewer concrete pavement contracts were let in July than in the previous month or a year ago. Road contracts, however, were 12 per cent greater than

### THE AUTOMOBILE AND RUBBER INDUSTRIES

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



year ago. Fire losses in the United States in July were 10 per cent greater than in June and 9 per cent larger than in July, 1929. Canadian fire losses were smaller in July by 22 per cent from June and 49 per cent from July last year.

### LUMBER

Lumber production was seasonally lower than during June, most species of northern hardwoods showing considerable decline. The production shipments and new orders of walnut lumber during June all receded from levels of the preceding month and were materially below a year ago.

last year in July. Construction of Federal-aid highways was considerably less than in either prior period. The production of polished plate glass, reflecting the falling off in building and automobile output, declined 9 per cent from the month of June and 36 per cent from July a year ago.

### CHEMICALS

Exports of sulphuric acid increased 39 per cent during July over the preceding month and 13 per cent over a year ago. Imports of nitrate of soda also increased over June but were lower than a year ago. Imports of potash salts increased considerably in July and were higher than a year ago.

### FOODSTUFFS

The visible supply of wheat as well as receipts at the principal centers increased considerably over both the preceding month and a year ago. Exports of wheat likewise registered large gains over comparative periods. Flour output was 9 per cent higher than in June and 1 per cent greater than a year ago. Exports of flour both from the United States and Canada were greater than during June, but less in each case as compared with a year ago. Receipts, stocks, and shipments of corn were lower than either period. Total grain ex-

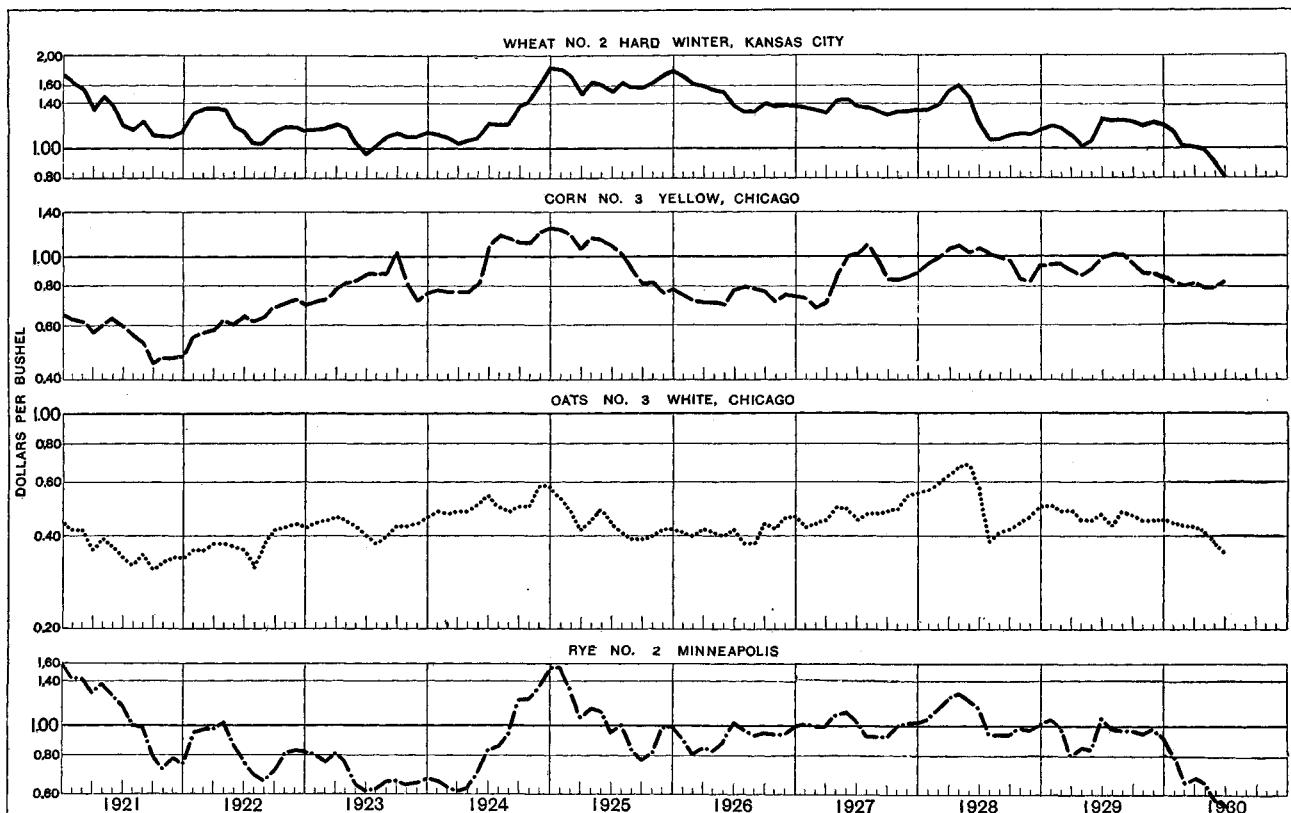
of pork products declined 4 per cent from the month of June and 24 per cent from a year ago. Prices for live hogs and pork products were generally lower than during either prior period.

Receipts of butter at leading markets were smaller than during either the preceding month or July, last year. Cold-storage holdings showed a gain of 36 per cent over those held at the end of June, but were smaller than a year ago.

Imports of raw sugar from foreign countries were less in July than a year ago but meltings at 8 ports

### MOVEMENT OF GRAIN PRICES

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



ports were 30 per cent greater in July than the preceding period but declined by 6 per cent from July, 1929.

Receipts, shipments, and local slaughter increased over the month of June, while shipments of stocker and feeder animals declined. The production of Federal inspected beef and veal was greater by 10 per cent than the output of a month ago and 2 per cent more than during July, 1929. Cold-storage holdings of these products at the end of July, although declining 3 per cent from the preceding month were 41 per cent greater than last year. Exports of beef and veal were greater than the month of June but were less when compared with the month of July, a year ago. Production of pork products also declined from comparative periods, while total cold storage holdings

registered a gain of 35 per cent over the preceding month and 13 per cent over a year ago.

Coffee imports and also the visible supply were smaller than a month ago. As compared with July, 1929 increases were noted in the stocks of coffee in the United States and total receipts in Brazil. The wholesale price of Rio No. 7, Brazil grades at New York showed declines, 18 and 53 per cent from June and July, a year ago. Imports of tea were higher in July than in June and July a year ago.

Car-lot shipments of apples were almost three times as much as they were a month ago and increased 70 per cent over shipments during July, 1929. Onions and citrus fruits in car-lot shipments were also substantially larger than the previous month while potato shipments declined.

#### TRANSPORTATION

Transportation on inland waterways and canals was considerably larger than in June as was traffic on Canadian canals. However, on the Sault Ste. Marie canals, a loss in traffic of 2 per cent occurred. Clearances of vessels in foreign trade increased over both the previous month and a year ago. Carloadings on the railroads as a whole were smaller than during the month of June and July of last year, although grain loadings increased noticeably during the past month. Orders for locomotives declined from both prior periods, although the number of locomotives on order in railroad shops were greater than a year ago. Orders for new freight cars were also smaller than either period.

#### BANKING AND FINANCE

Bank debits, outside New York City, were 6 per cent lower than the preceding month and 19 per cent lower than last year. Total loans and discounts of Federal Reserve member banks at the end of July showed but slight change from either prior period. The value of new life insurance written during July registered on a decline of 2 per cent from the preceding period and was fractionally lower than a year ago. Dividend and interest payments paid during July by street railways, show railroads and miscellaneous groups were 27 per cent larger than the month of June and 2 per cent more than the corresponding month in 1929.

Interest rates in general were lower than in June, call loan renewals showing a particularly large

decline. Business failures were only slightly more numerous than during the preceding month. Compared with July, 1929, both the number of defaulting firms and the amount of liabilities were greater.

#### GOLD, SILVER, AND FOREIGN EXCHANGE

Gold receipts at the United States mint were substantially greater than for either the preceding month and July, last year. Gold exports likewise showed considerable gains over comparative periods. Imports of gold, however, although much larger than the preceding period, fell off from a year ago. Silver production in the United States during July registered declines from the preceding month of June and the corresponding period of last year. Canadian production of the metal, on the other hand, showed gains over both prior periods. Gains were noted in both imports and exports of silver during July but were below the level of last year.

Foreign exchange quotations on the principal countries in July were generally the same as in the preceding month and the corresponding period of 1929, the only exception being slight declines in rates with Belgium, Argentina, and Brazil. As compared with July a year ago, rates with England, the Netherlands, Sweden, Switzerland, Japan, India, Canada, and Chile showed increases, while rates with Argentina and Brazil declined. Rates with France and Italy showed no change from the preceding month and July, 1929.

## 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		PER CENT INCREASE (+) OR DE- CREASE (-) OF JULY, 1930, FROM—				
			June	July	June	July	June	July	June, 1930	July, 1929	July, 1928		
<b>PRODUCTION</b>													
<b>TOTAL INDUSTRIAL</b>													
Unadjusted, except for working days-----	125	81	108	105	125	119	99	91	-8.1	-23.5	-13.3		
Adjusted for seasonal variations-----	127	83	109	110	127	124	100	95	-5.0	-23.4	-13.6		
<b>MANUFACTURING</b>													
Total (adjusted for working days only)-----	127	79	109	106	126	119	99	89	-10.1	-25.2	-16.0		
Total (adjusted for seasonal variations)-----	129	82	111	111	129	126	101	94	-6.9	-25.4	-15.3		
Iron and steel-----	155	59	115	124	155	152	110	93	-15.5	-38.8	-25.0		
Textiles-----	121	77	108	100	121	118	84	85	+1.2	-28.0	-15.0		
Food products-----	110	89	93	89	96	96	93	91	-2.2	-5.2	+2.2		
Paper and printing-----	129	91	118	118	128	125	117	-----	-----	-----	-----		
Lumber-----	110	78	91	94	85	87	-----	-----	-----	-----	-----		
Automobiles-----	166	47	114	116	162	142	98	75	-23.5	-47.2	-35.3		
Leather and shoes-----	134	86	108	112	113	114	101	97	-4.0	-14.9	-13.4		
Cement-----	126	99	121	119	116	118	119	116	-2.5	-1.7	-2.5		
Glass, plate-----	-----	137	130	130	154	164	114	105	-7.9	-36.0	-19.2		
Nonferrous metals-----	137	87	115	113	126	127	98	97	-1.0	-23.6	-14.2		
Petroleum refining-----	178	84	153	155	170	171	170	-----	-----	-----	-----		
Rubber tires-----	169	66	143	149	162	141	118	-----	-----	-----	-----		
Tobacco manufactures-----	143	93	125	125	139	131	141	137	-2.8	+4.6	+9.6		
<b>MINERALS</b>													
Total (adjusted for working days only)-----	128	84	104	103	116	118	103	100	-2.9	-15.3	-2.9		
Total (adjusted for seasonal variations)-----	120	90	101	101	113	114	100	97	-3.0	-14.9	-4.0		
Bituminous coal-----	125	77	91	93	102	102	89	86	-3.4	-15.7	-7.5		
Anthracite coal-----	133	1	76	67	76	72	78	82	+5.1	+13.9	+22.4		
Crude petroleum-----	147	88	118	119	135	143	124	121	-2.4	-15.4	-1.7		
Iron-ore shipments-----	143	0	107	104	126	119	108	95	-12.0	-20.2	-8.7		
Copper-----	142	82	110	113	124	122	86	83	-3.5	-32.0	-26.5		
Zinc-----	127	91	117	117	120	124	99	92	-7.1	-25.8	-21.4		
Lead-----	125	75	100	97	112	114	-----	-----	-----	-----	-----		
Silver-----	123	76	93	76	94	88	75	71	-5.3	-19.3	-6.6		
<b>ANIMAL PRODUCTS (Marketing)</b>													
Total-----	124	79	116	108	112	116	117	112	-4.3	-3.4	+3.7		
Wool-----	545	14	378	387	306	404	413	545	+32.0	+34.9	+40.8		
Livestock-----	131	76	83	78	76	83	79	77	-2.5	-7.2	-1.3		
Poultry and eggs-----	148	67	106	92	111	96	112	91	-18.8	-5.2	-1.1		
Dairy products-----	164	64	147	138	147	144	149	132	-11.4	-8.3	-4.3		
Fish-----	283	44	168	154	179	243	185	263	+42.2	+8.2	+70.8		
<b>CROPS (Markets)</b>													
Total-----	252	45	52	87	56	91	46	87	+89.1	-4.4	0.0		
Grains *-----	214	38	56	147	75	179	41	180	+339.0	+0.6	+22.4		
Vegetables *-----	199	60	164	107	147	169	151	113	-25.2	-33.1	+5.6		
Fruits *-----	266	43	75	164	89	106	58	124	+113.8	+17.0	-24.4		
Cotton products *-----	373	6	25	28	18	11	14	6	-57.1	-45.5	-78.6		
Miscellaneous crops *-----	344	3	24	23	30	25	3	3	0.0	-88.0	-87.0		

\* 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		PER CENT INCREASE (+) OR DECREASE (-) OF JULY, 1930, FROM—														
			June	July	June	July	June	July	June, 1930	July, 1929	July, 1928												
<b>PRODUCTION—Continued</b>																							
<b>FOREST PRODUCTS</b>																							
Total	112	62	74	70	90	88	73	69	-5.5	-21.6	+1.4												
Lumber	112	59	93	88	87	86	68	66	-2.9	-23.3	-25.0												
Pulpwood	151	54	96	64	99	81	106	64	-39.6	-21.0	0.0												
Gum (rosin and turpentine)*	204	18	172	170	177	204	171	204	+19.3	-30.0	+20.0												
Distilled wood	148	62	84	80	102	97	65	62	-4.6	-36.1	-22.5												
<b>NEW ORDERS</b>																							
Total	138	60	97	95	91	91	60	62	+3.3	-31.9	-34.7												
Textiles	179	66	85	77	91	82	67	66	-1.5	-19.5	-14.3												
Iron and steel	158	71	117	116	125	135	87	89	+2.3	-34.1	-23.3												
Lumber	141	44	101	100	75	83	50	53	+6.0	-36.1	-47.0												
Paper and printing	128	85	104	101	108	112	98	99	+1.0	-11.6	-2.0												
Stone and clay products	129	68	104	97	94	90	75	74	-1.3	-17.8	-23.7												
<b>STOCKS</b>																							
Grand total	158	82	109	106	120	122	125	126	+0.8	+3.3	+18.9												
Total manufactured goods	128	88	118	119	122	121	125	126	+0.8	+4.1	+5.9												
Foodstuffs	144	79	118	126	125	144	118	127	+7.6	-1.6	+0.8												
Textiles	139	78	134	129	124	125	124	117	-5.6	-6.4	-9.3												
Iron and steel	158	78	140	133	145	139	148	154	+4.1	+10.8	+15.8												
Nonferrous metals	205	74	120	119	118	122	200	205	+2.5	+68.0	+72.3												
Lumber	125	78	94	104	99	100	103	107	+3.9	+7.0	+2.9												
Stone, clay, etc.	198	62	160	157	178	162	185	172	-7.0	+6.2	+9.6												
Leather	123	66	71	71	71	71	81	81	+0.0	+14.1	+14.1												
Rubber	199	77	162	145	199	175	156	137	-2.2	-21.7	-5.5												
Paper	156	46	153	155	94	90	113	112	-0.9	+24.4	-27.7												
Chemicals and oils	141	84	103	96	117	111	128	120	-6.3	+8.1	+25.0												
Total raw materials	186	68	102	96	120	123	125	126	+0.8	+2.4	+31.2												
Foodstuffs	230	68	126	123	167	188	153	163	+6.5	-13.3	+32.5												
Textiles	204	43	81	67	80	64	112	105	-6.2	+64.1	+56.7												
Metals	136	54	74	87	94	96	112	119	+6.2	+24.0	+36.8												
Chemicals and oils	146	72	93	91	96	94	94	93	-1.1	-1.1	+2.2												
<b>UNFILLED ORDERS</b>																							
Total	157	67	75	77	83	82	76	75	-1.3	-8.5	-2.6												
Textiles	154	36	67	68	74	71	41	36	-12.2	-49.3	-47.1												
Iron and steel	159	63	75	75	85	84	78	78	0.0	-7.1	+4.0												
Transportation equipment	204	35	69	68	78	73	129	119	-7.8	+63.0	+75.0												
Lumber	142	52	84	91	95	97	80	80	0.0	-17.5	-12.1												
<b>RETAIL TRADE</b>																							
Mail-order houses (2 houses)	275	68	137	123	176	163	166	149	-10.2	-8.6	+21.1												
<b>CHAIN STORES:</b>																							
Ten-cent	308	62	139	128	153	146	141	138	-2.1	-5.5	+7.8												
Restaurant	116	87	96	93	104	105	100	98	-2.0	-6.7	+5.4												
<b>DEPARTMENT STORES:</b>																							
Sales	189	71	104	78	106	80	95	72	-24.2	-10.0	-7.7												
Stocks	117	83	96	93	95	92	93	87	-6.5	-5.4	-6.5												
<b>COST OF LIVING</b>																							
<b>National Industrial Conference Board Indexes</b>																							
(Relative to July, 1914)																							
All items weighted	172	152	161	161	160	162	155	152	-1.9	-6.2	-5.6												
Food (Department of Labor)	167	141	153	153	155	159	148	144	-2.7	-9.4	-5.9												
Shelter	186	154	162	161	159	159	156	154	-1.3	-3.1	-4.3												
Clothing	177	155	171	174	167	166	157	155	-1.3	-6.6	-10.9												
Fuel and light (combined)	179	156	158	158	157	157	156	156	0.0	-0.6	-1.3												
Fuel	208	174	176	177	175	176	174	175	+0.6	-0.6	-1.1												
Light	123	118	122	121	120	120	121	119	-1.7	-0.8	-1.7												
Sundries	176	166	171	171	168	169	167	166	-0.6	-1.8	-2.9												

\* 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		PER CENT INCREASE (+) OR DECREASE (-) JULY, 1930, FROM—				
			June	July	June	July	June	July	June, 1930	July, 1929	July, 1928		
<b>EMPLOYMENT</b>													
(Relative to 1923-1925 monthly average as 100)													
Number employed, by industries:													
Total, all classes	106	85	96	96	101	101	88	85	-3.4	-5.8	-11.5		
Iron and steel	108	86	96	94	101	100	90	86	-4.4	-14.0	-8.5		
Machinery	122	88	98	98	121	122	100	95	-5.0	-22.1	-3.1		
Textiles	111	77	92	88	96	92	84	77	-8.3	-16.3	-12.5		
Food products	109	93	98	98	99	100	96	95	-1.0	-5.0	-3.1		
Paper and printing	107	96	101	101	103	104	102	101	-1.0	-2.9	0.0		
Lumber and products	104	68	88	88	90	91	72	68	-5.6	-25.3	-22.7		
Transportation equipment—													
Group	110	75	92	92	98	96	80	75	-6.2	-21.9	-18.5		
Automobiles	131	79	111	111	121	118	89	81	-9.0	-31.4	-17.0		
Leather and products	112	85	90	94	89	95	85	87	+2.4	-8.4	-7.4		
Cement, clay, and glass	107	75	96	95	94	92	80	76	-5.0	-17.4	-20.0		
Nonferrous metals	113	78	96	95	103	101	80	78	-2.5	-22.8	-17.9		
Chemicals—													
Group	119	90	101	100	108	109	102	101	-1.0	-7.3	+1.0		
Petroleum refining	125	95	102	103	116	120	114	114	0.0	-5.0	+10.7		
Rubber products	117	83	105	110	115	114	88	83	-5.7	-27.2	-24.5		
Tobacco products	109	84	93	88	91	91	89	88	-1.1	-3.3	0.0		
Amount of pay roll, by industries:													
Total, all classes	112	82	101	98	109	105	90	82	-8.9	-21.9	-16.3		
Iron and steel	114	77	100	94	110	104	91	79	-13.2	-24.0	-16.0		
Machinery	132	83	106	103	132	128	103	91	-11.7	-28.9	-11.7		
Textiles	111	69	91	86	98	90	78	69	-11.5	-23.3	-19.8		
Food products	109	94	103	103	106	106	102	100	-2.0	-5.7	-2.9		
Paper and printing	118	92	109	107	90	111	112	107	-4.5	-3.6	0.0		
Lumber and products	107	63	91	88	93	94	71	63	-11.3	-33.0	-28.4		
Transportation equipment—													
Group	117	72	99	95	108	97	84	72	-14.3	-25.8	-24.2		
Automobiles	152	66	118	115	131	110	89	72	-19.1	-34.5	-37.4		
Leather and products	116	79	87	944	90	98	74	79	+6.8	-19.4	-16.0		
Cement, clay, and glass	108	66	94	91	93	86	76	66	-13.2	-23.3	-27.5		
Nonferrous metals	128	76	105	101	117	113	85	76	-10.6	-32.7	-24.8		
Chemicals—													
Group	118	90	103	103	111	111	105	101	-3.8	-9.0	-1.9		
Petroleum refining	129	90	104	107	120	123	122	118	-3.3	-4.1	+10.3		
Rubber products	150	81	113	115	121	115	88	81	-8.0	-29.6	-29.6		
Tobacco products	111	76	90	85	89	88	84	82	-2.4	-6.8	-3.5		
<b>WHOLESALE PRICES</b>													
Department of Labor Indexes													
(Realtive to 1926 monthly average as 100)													
All commodities	105	84	98	98	96	98	87	84	-3.4	-14.3	-14.3		
Farm products	114	83	107	107	103	108	89	83	-6.7	-23.1	-22.4		
Food, etc.	107	86	100	102	99	103	91	86	-5.5	-16.5	-15.7		
Hides and leather products	127	98	124	124	108	109	102	101	-1.0	-7.3	-18.5		
Textile products	114	80	96	97	93	93	82	80	-2.4	-14.0	-17.5		
Fuel and lighting	112	75	82	83	83	82	76	75	-1.3	-8.5	-9.6		
Metals and metal products	113	94	99	99	105	105	95	94	-1.1	-10.5	-5.1		
Building materials	116	89	94	94	96	97	90	89	-1.1	-8.2	-5.3		
Chemicals	104	88	95	95	93	93	89	88	-1.1	-5.4	-7.4		
House-furnishing goods	111	96	97	97	97	97	96	96	0.0	-1.0	-1.0		
Miscellaneous	127	72	82	81	80	81	75	72	-4.0	-11.1	-11.1		
Classified by condition of manufacture:													
Semimanufactured articles	128	80	98	98	94	96	82	80	-2.4	-16.7	-18.4		
Finished products	103	87	97	98	97	98	89	87	-2.2	-11.2	-11.2		
Raw materials	109	81	99	100	97	99	85	81	-4.7	-18.2	-19.0		
All commodities except farm and food products	111	84	93	93	93	93	86	84	-2.3	-9.7	-9.7		
Commercial Indexes													
(Relative to 1926 monthly average as 100)													
Dun's	106	85	104	103	100	102	91	90	-1.1	-11.8	-12.6		
Bradstreet's	112	81	102	102	97	98	82	81	-1.2	-17.3	-20.6		

## INDEXES OF BUSINESS—Continued

<b>Relative to monthly average indicated</b>	<b>Maximum since Jan. 1, 1923</b>	<b>Minimum since Jan. 1, 1923</b>	<b>1928</b>		<b>1929</b>		<b>1930</b>		<b>PER CENT INCREASE (+) OR DECREASE (-) JULY, 1930, FROM—</b>				
			<b>June</b>	<b>July</b>	<b>June</b>	<b>July</b>	<b>June</b>	<b>July</b>	<b>June, 1930</b>	<b>July, 1929</b>	<b>July, 1928</b>		
<b>PRICE INDEX NUMBERS</b>													
<b>FARM PRICES</b>													
(Relative to 1909-1914 average as 100)													
All groups	152	111	145	145	135	140	123	111	-9.8	-20.7	-23.4		
Grains	178	92	152	142	111	122	106	92	-13.2	-24.6	-35.2		
Fruits and vegetables	253	108	168	156	120	136	193	173	-10.4	+27.2	+10.9		
Meat animals	167	98	150	157	163	167	141	127	-9.9	-24.0	-19.1		
Dairy and poultry	166	120	132	134	137	137	114	111	-2.6	-19.0	-17.2		
Cotton and cottonseed	252	81	162	170	146	145	115	99	-13.9	-31.7	-41.8		
Unclassified	108	75	87	88	85	85	79	75	-5.1	-11.8	-14.8		

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

<b>YEAR AND MONTH</b>	<b>SALES</b> (Thousands of dollars)			<b>TONNAGE SALES</b>		<b>YEAR AND MONTH</b>	<b>SALES</b> (Thousands of dollars)			<b>TONNAGE SALES</b>	
	<b>Total</b>	<b>Number of weeks</b>	<b>Weekly average</b>	<b>Total</b>	<b>Weekly average</b>		<b>Total</b>	<b>Number of weeks</b>	<b>Weekly average</b>	<b>Total</b>	<b>Weekly average</b>
<b>1928</b>											
September	\$69,336	4	\$17,334	309,451	77,363	September	\$75,246	4	\$18,811	336,309	84,077
October	93,429	5	18,686	419,079	83,816	October	105,995	5	21,199	472,644	94,529
November	73,844	4	18,461	338,704	84,676	November	83,714	4	20,928	381,106	95,276
December	74,911	4	18,728	345,595	86,399	December	87,260	4	21,815	407,339	101,835
<b>1929</b>											
January	91,983	5	18,397	425,590	85,118	January	104,271	5	20,854	492,425	98,485
February	85,846	4	21,462	396,225	99,056	February	86,122	4	21,530	400,568	100,146
March	77,712	4	19,428	363,786	90,947	March	83,976	4	20,994	395,331	98,834
April	77,324	4	19,331	359,129	89,782	April	86,138	4	21,534	404,319	101,080
May	97,319	5	19,464	451,680	90,336	May	104,671	5	20,934	503,976	100,795
June	76,653	4	19,163	355,289	88,322	June	82,882	4	20,721	407,085	101,771
July	93,671	5	18,734	427,431	85,486	July	96,724	5	19,345	488,682	97,736

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

LUMBER CUT, BY REGIONS, FOR 732 IDENTICAL MILLS: 1929 AND 1928<sup>1</sup>

<b>Region</b>	<b>Number of mills reporting</b>	<b>Quantity (M ft. b. m.)</b>		<b>Per cent of increase or decrease (-)</b>	<b>Region</b>	<b>Number of mills reporting</b>	<b>Quantity (M ft. b. m.)</b>		<b>Per cent of increase or decrease (-)</b>
		<b>1929</b>	<b>1928</b>				<b>1929</b>	<b>1928</b>	
United States	732	17,498,274	17,579,968	-0.5	Lake States <sup>6</sup>	52	854,654	932,368	-8.3
Northeastern States <sup>2</sup>	10	108,614	105,873	2.6	North Pacific States <sup>7</sup>	234	8,353,526	8,327,573	0.2
Central States <sup>3</sup>	49	661,622	625,923	5.7	South Pacific States <sup>8</sup>	42	1,650,345	1,642,505	0.5
Southern States <sup>4</sup>	248	4,233,228	4,262,033	-0.7	North Rocky Mountain States <sup>9</sup>	21	568,190	563,886	0.8
North Carolina Pine States <sup>5</sup>	66	776,905	798,394	-2.7	South Rocky Mountain States <sup>10</sup>	8	257,986	281,855	-8.5
					Other States <sup>11</sup>	2	33,204	29,558	12.3

<sup>1</sup> Compiled by the *Bureau of the Census, Department of Commerce*, in cooperation with the *Forest Service, U. S. Department of Agriculture*, and represents lumber cut of 732 identical mills—each mill having sawed 5,000,000 feet board measure, or more, either in 1929 or 1928—amounted to 17,498,274,000 feet in 1929, a decrease of one-half of 1 per cent as compared with 17,579,968,000 feet in 1928. These mills contributed 51.5 per cent of the total cut of all mills which reported for 1928.

<sup>2</sup> Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

<sup>3</sup> Illinois, Indiana, Kentucky, Missouri, Ohio, Tennessee, and West Virginia.

<sup>4</sup> Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Oklahoma, and Texas.

<sup>5</sup> North Carolina, South Carolina, and Virginia.

<sup>6</sup> Michigan, Minnesota, and Wisconsin.

<sup>7</sup> Oregon and Washington.

<sup>8</sup> California and Nevada.

<sup>9</sup> Idaho and Montana.

<sup>10</sup> Arizona, Colorado, New Mexico, Utah, and Wyoming.

<sup>11</sup> Iowa, Kansas, Nebraska, South Dakota, North Dakota, and District of Columbia.

## WHEAT GROUND AND WHEAT-MILLING PRODUCTS, BY STATES, CROP YEARS 1930 AND 1929<sup>1</sup>

State	Wheat ground		Production of wheat flour		Production of offal		Average daily (24-hour) capacity	
	Crop year ending June 30—				Crop year ending June 30—			
	1930	1929	1930	1929	1930	1929	1930	1929
United States.....	Bushels 527,342,860	Bushels 527,756,864	Barrels 114,557,861	Barrels 115,292,522	Pounds 9,294,289,761	Pounds 9,128,555,395	Barrels 656,303	Barrels 657,500
Minnesota.....	87,565,687	95,663,783	18,875,545	20,710,923	1,594,051,121	1,708,425,280	102,176	104,638
Kansas.....	78,374,809	81,977,373	17,006,060	18,006,514	1,367,542,983	1,384,767,698	94,914	96,201
New York.....	61,170,407	60,369,138	13,334,773	13,173,710	1,087,910,586	1,060,948,502	59,861	58,966
Missouri.....	47,663,186	46,858,719	10,341,279	10,242,451	836,708,857	804,755,180	56,040	56,812
Washington.....	21,978,945	24,137,233	4,922,399	5,460,636	357,298,914	357,104,904	25,972	25,892
Texas.....	25,392,487	22,431,130	5,568,479	4,940,771	446,095,604	388,895,058	32,514	31,062
Illinois.....	21,579,225	19,877,189	4,710,362	4,363,319	370,900,229	334,315,544	33,616	34,395
Oklahoma.....	19,682,638	15,760,398	4,271,302	3,470,445	350,922,828	270,215,353	20,276	18,701
Ohio.....	18,124,305	15,988,794	3,968,020	3,540,756	304,551,278	280,572,210	24,697	25,118
Oregon.....	12,831,502	13,791,764	2,892,408	3,087,434	204,168,270	220,431,277	17,524	17,226
Nebraska.....	14,361,890	14,781,826	3,074,823	3,221,169	261,622,890	257,257,857	16,753	16,456
Indiana.....	13,752,548	12,432,932	2,786,224	2,549,440	276,905,923	246,894,725	19,275	20,882
California.....	8,899,911	9,392,607	1,959,535	2,067,781	153,330,477	159,986,130	8,932	9,003
Iowa.....	8,697,102	8,585,827	1,896,326	1,869,230	153,574,539	150,673,255	8,988	9,053
Montana.....	8,114,637	8,111,107	1,819,865	1,824,827	131,046,673	129,899,946	10,305	11,080
Colorado.....	7,942,652	7,749,493	1,768,210	1,727,773	132,978,022	128,526,797	8,808	8,547
Michigan.....	8,508,019	8,663,331	1,752,166	1,768,696	168,491,526	170,043,397	12,115	11,992
Tennessee.....	8,172,729	7,863,715	1,747,564	1,707,818	147,928,233	138,298,979	14,761	14,425
Utah.....	7,169,604	6,156,548	1,593,458	1,378,439	118,946,866	101,536,615	8,196	6,766
Kentucky.....	6,715,970	6,122,490	1,462,279	1,347,887	118,295,036	105,630,465	10,972	11,300
Pennsylvania.....	6,613,389	6,089,859	1,414,673	1,305,370	117,257,556	107,484,605	11,580	11,580
North Dakota.....	5,489,366	5,962,863	1,194,101	1,295,540	96,859,842	102,522,025	10,095	11,114
Wisconsin.....	5,411,021	5,829,874	1,170,039	1,267,122	95,582,476	101,470,919	7,770	7,387
North Carolina.....	5,337,737	5,791,349	1,146,363	1,246,288	94,823,224	103,437,243	7,917	7,786
Virginia.....	4,903,052	4,606,926	1,055,141	996,559	85,804,781	80,321,945	8,120	8,096
Idaho.....	3,243,197	3,891,843	721,666	866,109	54,221,738	65,514,050	5,570	5,216
Maryland.....	3,036,600	2,441,834	659,471	523,220	51,815,485	42,293,479	5,617	5,426
South Dakota.....	795,603	630,514	168,049	134,524	14,635,238	11,084,969	2,396	2,258
All other <sup>2</sup> .....	5,814,042	5,476,355	1,278,840	1,197,771	100,018,566	95,243,989	10,543	10,122

<sup>1</sup> Compiled by the Bureau of the Census, Department of Commerce, and represents more than 93 per cent of the total wheat flour production in the United States at the biennial census of manufactures, 1927. The States are arranged according to the wheat flour output reported for 12 months of the calendar year 1929 which was shown in the April, 1930, issue of the Survey of Current Business No. 104.

<sup>2</sup> Includes Alabama, Arizona, Arkansas, Delaware, District of Columbia, Georgia, New Hampshire, New Jersey, New Mexico, South Carolina, West Virginia, and Wyoming.

## UNEMPLOYMENT BY STATES<sup>1</sup>

State	Population, 1930 (pre- liminary)	Persons out of a job, able to work, and look- ing for a job	Per cent of popu- lation	State	Population, 1930 (pre- liminary)	Persons out of a job, able to work, and look- ing for a job	Per cent of popu- lation				
				Total.....	122,698,190	2,508,151	2.0	South Atlantic—Continued.	2,419,471	30,355	1.3
New England:				Virginia.....	1,728,510	21,396	1.2				
Maine.....	800,056	13,244	1.7	West Virginia.....	3,170,287	29,114	.9				
New Hampshire.....	465,293	8,493	1.8	North Carolina.....	1,732,567	12,226	.7				
Vermont.....	359,092	5,419	1.5	Georgia.....	2,902,443	27,406	.9				
Massachusetts.....	4,253,646	115,987	2.7	Florida.....	1,466,625	33,887	2.3				
Rhode Island.....	687,232	22,193	3.2	East South Central:							
Connecticut.....	1,604,711	32,192	2.0	Kentucky.....	2,623,668	31,153	1.2				
Middle Atlantic:				Tennessee.....	2,608,759	21,402	.8				
New York.....	12,619,503	364,617	2.9	Alabama.....	2,645,297	21,400	.8				
New Jersey.....	4,028,027	127,615	3.2	Mississippi.....	2,007,979	10,758	.5				
Pennsylvania.....	9,640,802	211,877	2.2	West South Central:							
East North Central:				Arkansas.....	1,853,981	12,591	.7				
Ohio.....	6,630,837	168,277	2.5	Louisiana.....	2,094,496	31,444	1.5				
Indiana.....	3,225,600	66,390	2.1	Oklahoma.....	2,391,777	42,392	1.8				
Illinois.....	7,607,684	236,926	3.1	Texas.....	5,821,272	79,552	1.4				
Michigan.....	4,842,280	160,506	3.3	Mountain:							
Wisconsin.....	2,930,282	49,780	1.7	Montana.....	536,332	11,808	2.2				
West North Central:				Idaho.....	445,837	6,367	1.4				
Minnesota.....	2,566,445	47,987	1.9	Wyoming.....	224,597	4,245	1.9				
Iowa.....	2,467,900	22,633	.9	Colorado.....	1,035,043	22,793	2.2				
Missouri.....	3,620,961	62,031	1.7	New Mexico.....	427,216	5,436	1.3				
North Dakota.....	682,448	5,937	.9	Arizona.....	435,833	7,232	1.7				
South Dakota.....	690,755	3,600	.5	Utah.....	502,582	9,886	2.0				
Nebraska.....	1,378,900	15,440	1.1	Nevada.....	90,981	2,850	3.1				
Kansas.....	1,879,946	22,236	1.2	Pacific:							
South Atlantic:				Washington.....	1,561,967	36,089	2.3				
Delaware.....	238,380	2,741	1.1	Oregon.....	952,691	24,849	2.6				
Maryland.....	1,629,321	23,973	1.5	California.....	5,672,009	172,556	3.0				
District of Columbia.....	486,869	8,870	1.8								

<sup>1</sup> Compiled by the Bureau of the Census, Department of Commerce, and represents preliminary information on employment as compared with the population on the States shown. The figures in the column headed "Persons out of a job," etc., represent persons usually working at a gainful occupation who were returned on the unemployment schedule as out of a job, able to work, and looking for a job. Returns were also made for other classes of persons not at work on the day preceding the enumeration, such as those having a job but sick or temporarily laid off; data for these other classes will be given out later. All figures are preliminary and subject to correction.

**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 <sup>141</sup> CEN- TERS	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	Scranton	Tren- ton
		37,446	1,769	1,245	92	144	72	20,917	87	263	120	20,354	1,625	1,373	53
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
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
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
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
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
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
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	128.1	138.9	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
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
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
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
1929															
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
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	216.3
March.....	223.2	171.4	178.4	267.4	134.0	172.2	270.0	232.3	180.2	165.8	272.3	175.1	177.7	143.4	181.4
April.....	199.7	166.0	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
May.....	204.5	167.4	173.7	254.4	133.3	160.7	244.4	282.7	176.0	149.2	245.9	166.7	167.1	141.5	183.8
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
July.....	207.4	182.1	189.8	300.0	140.2	180.6	240.8	204.5	217.1	176.7	241.8	175.5	175.3	139.6	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	152.2	135.9	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
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
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	204.7
December.....	178.4	171.4	180.2	238.1	136.8	161.1	195.3	202.2	176.4	155.8	195.8	175.5	171.1	147.2	230.3
1930															
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
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
March.....	175.6	147.8	150.3	257.6	118.7	175.0	199.4	263.1	161.2	136.7	200.2	154.2	153.9	128.3	162.8
April.....	168.2	152.5	158.6	249.8	116.6	163.9	180.3	237.8	161.6	140.8	189.8	139.9	137.4	130.2	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	138.8	138.4	120.8	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
July.....	141.1	140.0	145.9	209.8	101.4	162.5	146.1	228.7	146.8	143.3	131.4	129.1	129.1	126.4	172.1
August.....															
September.....															
October.....															
November.....															
December.....															
ATLANTA DISTRICT															
YEAR AND MONTH	Total, 15 centers	Atlanta	Bir- ming- ham	New Or- leans	Jack- son- ville	Nash- ville	Au- gusta	CHICAGO DISTRICT							
								Total, 21 centers	Chi- cago	Detroit	Indian- apolis	Mil- waukee	Des Moines	Grand Rapids	Sioux City
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
1920 monthly average....	115.8	108.9	128.8	115.4	125.0	120.4	110.8	116.0	113.0	125.2	123.5	124.0	114.5	128.0	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
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
1923 monthly average....	100.0	108.9	183.1	97.4	112.5	78.5	83.8	108.8	105.0	120.3	115.4	115.6	97.6	89.3	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	103.2	89.2	123.4
1925 monthly average....	125.0	129.2	226.6	118.2	206.2	87.6	78.2	124.9	120.4	158.3	115.4	119.4	89.8	114.1	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
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
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
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
1929															
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
February.....	120.2	169.9	215.3	105.6	158.3	119.3	64.9	153.3	154.9	201.4	140.4	115.2	86.8	104.0	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
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
May.....	126.3	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
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
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
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
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
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
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
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
1930															
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
February.....	108.8	129.3	196.6	103.3	166.6	91.4	56.								

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	Cincin- nati	Cleve- land	Pitts- burgh	Yngs- town	Toledo	Colum- bus	Dayton	Total, 7 centers	Balti- more	Norfolk	Rich- mond	Green- ville <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	67.6	
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	67.6	
1923 monthly average	110.9	80.0	133.6	99.2	112.7	103.4	153.5	128.5	138.0	98.6	93.3	88.1	112.9	78.4	
1924 monthly average	109.4	81.4	128.0	96.8	113.2	101.6	155.7	116.0	126.0	96.3	93.4	82.2	109.1	69.4	
1925 monthly average	122.0	100.0	142.7	106.5	126.4	117.0	179.2	126.9	156.0	106.7	104.6	85.8	122.9	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	64.2	
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	
1929															
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	147.4	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	128.7	189.5	154.9	143.0	148.4	194.8	176.7	212.0	110.9	107.2	90.4	134.5	59.5	
1930															
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	162.1	184.0	107.4	111.9	77.4	114.7	51.4	
June	146.3	117.8	166.4	131.7	159.6	123.4	153.5	167.2	194.0	103.4	108.9	75.0	116.4	43.2	
July	140.8	107.8	159.9	129.4	146.7	113.4	175.9	161.2	194.0	103.2	110.4	72.6	115.5	40.5	
August															
September															
October															
November															
December															
YEAR AND MONTH	DALLAS DISTRICT				ST. LOUIS DISTRICT				MINNEAPOLIS DISTRICT						
	Total, 11 centers	Dallas	Hous- ton	Fort Worth	Sum- mary for 5 centers	Louis- ville	St. Louis	Mem- phis	Little Rock	Total, 9 centers	Duluth	Minne- apolis	St. Paul	Hele- na	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	115.1	226.4	104.9	88.3	110.3	102.2	82.6	88.0
1927 monthly average	135.6	131.9	139.1	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
1929															
January	154.7	178.3	149.3	132.6	148.6	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	135.6	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	113.8	77.7	122.2	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	228.4	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
1930															
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	107.4	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	131.9	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	114.8	116.0	114.1	90.4	197.2						

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, 18 centers	Los Angeles	Port- land, Oreg.	San Fran- cisco	Seattle	Oak- land, Calif.
1919 average, millions of dollars.	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	112.1	89.5	128.9	236.7	89.4	107.1	87.7	196.3
1925 monthly average	95.5	121.5	90.1	76.9	72.7	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	73.4	139.1	136.0	155.7	278.1	101.0	138.2	103.2	235.0
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	103.0	167.4	125.7	385.6
July	140.4	137.7	145.3	96.6	78.8	216.2	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	208.3	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	109.5	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	56.4	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	93.4	162.3	106.8	206.3
August													
September													
October													
November													
December													

## DISTRICT TOTALS—SEASONAL VARIATIONS ELIMINATED

YEAR AND MONTH	U. S. total	Boston	New York	Phila- delphia	Clev- eland	Rich- mond	Atlanta	Chiago	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	89.7	84.4	92.0	89.1	82.9	82.1	94.3	105.4	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	101.2	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	161.3	203.1	155.9	141.3	105.6	122.3	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	161.4	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	142.4	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													
September													
October													
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.

## 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.

	1930					1929		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31														
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930												
<b>TEXTILES</b>																								
<b>Wool</b>																								
Receipts at Boston:																								
Total	14,986	17,163	28,649	57,665	76,915	47,795	56,981	+33.4	+35.0	225,497	204,445	223,372												
Domestic	5,628	8,501	18,937	54,729	72,313	40,596	53,652	+32.1	+34.8	156,350	128,904	171,620												
Foreign	9,358	8,662	9,712	2,936	4,602	7,199	3,329	+56.7	+38.2	69,147	75,541	51,752												
Imports:																								
In condition imported	20,049	17,816	15,484	8,896	8,900	16,592	18,815	0.0	-32.7	159,006	186,022	116,107												
Grease equivalent	21,463	19,384	16,810	10,223	10,084	17,903	21,931	-1.4	-54.0	177,076	207,050	127,608												
Consumption by textile mills, grease equivalent	37,195	36,794	32,641	32,772	34,682	44,066	47,296	+5.8	-26.7	302,315	339,311	256,041												
Stocks, grease equivalent, end of quarter:																								
Total	2,249,564					2,348,496																		
Held by manufacturers	2,145,458					2,156,796																		
Held by dealers	2,104,106					2,191,700																		
Machinery activity, hourly:																								
Looms—																								
Wide per ct. of hours active	46	45	51	53	48	65	62	-9.4	-22.6															
Narrow per ct. of hours active	39	41	39	48	42	61	60	-1.2	-30.0															
Carpet and rug per ct. of hours active	49	49	44	36	31	69	61	-13.9	-49.2															
Sets of cards per ct. of hours active	61	61	60	60	51	85	80	-15.0	-36.2															
Combs per ct. of hours active	64	60	68	72	71	78	86	-1.4	-17.4															
Spinning spindles—																								
Woolen per ct. of hours active	58	58	60	62	52	82	78	-16.1	-33.3															
Worsted per ct. of hours active	50	43	52	56	53	65	62	-5.4	-14.5															
Prices:																								
Raw, territory, fine, scoured, dolls. per lb.	.77	.76	.77	.76	.76	.97	.93	0.0	-18.3															
Raw, Ohio and Pa. fleeces,																								
1/4 blood, combing, grease, dolls. per lb.	.33	.31	.29	.31	.31	.42	.42	0.0	-26.2															
Worsted, yarn dolls. per lb.	1.30	1.25	1.23	1.20	1.20	1.45	1.45	0.0	-17.2															
Women's dress goods, French																								
serve, 39-in. dolls. per yd.	.93	.90	.90	.90	.90	.98	.98	0.0	-8.2															
Suiting, 13-oz. dolls. per yd.	1.756	1.756	1.756	1.756	1.696	2.008	1.998	-3.4	-15.1															
<b>Cotton</b>																								
Production, crop estimate thous. of bales						14,362																		
Ginnings						573																		
Receipts into sight thous. of bales	466	457	343	160	64	222	126	-60.0	-49.2	3,650	3,746	2,747												
Imports, unmanufactured bales	28,279	67,397	53,328	9,551	4,161	26,113	21,369	-56.4	-80.5	192,547	306,277	237,833												
Exports, unmanufactured (excl. linters) bales	477,678	349,762	208,796	185,053	176,435	299,136	237,507	-4.7	-25.7	3,755,826	3,255,459	2,528,535												
Consumption by textile mills bales	508,576	532,382	473,917	405,181	378,835	569,414	547,165	-6.5	-30.8	3,792,711	4,311,706	3,371,330												
Stocks, domestic, end of month:																								
Totals, mills and w'houses thous. of bales	5,952	5,304	4,869	4,462	4,061	2,664	2,037	-9.0	+99.4															
Mills	1,763	1,667	1,531	1,357	1,183	1,288	1,052	-12.8	+12.5															
Warehouses	4,189	3,636	3,337	3,105	2,877	1,377	985	-7.3	+192.1															
Stocks, world visible, end of month:																								
Total	7,339	6,659	6,335	5,951	5,230	4,476	3,651	-12.1	+43.2															
American	4,612	3,975	3,688	3,352	2,917	2,302	1,693	-13.0	+72.3															
Machinery activity of spindles:																								
Active spindles thousands	28,898	28,860	28,374	27,642	26,464	30,632	30,397	-4.3	-12.9															
Total activity millions of hours	7,350	7,503	6,729	5,779	5,297	8,160	7,757	-8.3	-31.7															
Activity per spindle hours	214	219	197	169	156	232	222	-7.7	-29.7															
Ratio to capacity per cent	92.8	96.3	83.6	76.3	67.4	104.8	100.3	-11.7	-32.8															
Prices:																								
To producer dolls. per lb.	.138	.147	.145	.140	.119	.179	.178	-15.0	-33.1															
In New York, middling dolls. per lb.	.151	.163	.164	.145	.132	.188	.186	-9.0	-29.0															
<b>Cotton Yarn</b>																								
Carded sales yarn:																								
Production thous. of lbs.	13,707	15,485	11,678	10,968	11,049	20,272	13,211	+0.7	-16.4	125,206	130,095	93,544												
Stocks, end of month thous. of lbs.	12,487	13,116	13,439	13,559	13,742	8,785	8,901	+1.3	+54.4															
Unfilled orders, end of month thous. of lbs.	39,072	34,457	30,186	27,632	26,469	32,472	-4.2	-18.5																
Prices:																								
22/1 cones, Boston dolls. per lb.	.297	.302	.290	.273	.262	.348	.348	-4.0	-24.7															
40/1s, southern spinning dolls. per lb.	.477	.480	.473	.461	.447	.499	.505	-3.0	-11.5															
<b>Cotton Goods</b>																								
Cotton textiles:																								
Production thous. of yds.	261,403	257,243	275,801	198,539	165,850	285,928	234,439	-16.5	-29.3	2,100,991	2,079,288	1,748,972												
New orders thous. of yds.	292,249	223,225	184,473	129,947	180,147	228,244	262,889	+38.6	-31.5	1,859,723	1,988,108	1,545,936												
Shipments thous. of yds.	265,675	253,360	270,056	182,652	176,689	252,008	252,779	-3.3	-30.1	1,974,222	2,088,111	1,754,456												
Stocks, end of month thous. of yds.	440,833	444,736	450,481	466,368	455,529	401,260	382,920	-2.3	+19.0															
Unfilled orders, end of mo. thous. of yds.	387,463	357,328	271,745	219,040	222,498	358,748	368,858	+1.6	-39.7															
Cotton cloth:																								
Imports thous. of sq. yds.	3,781	5,076	4,299	3,019	2,434	4,880	5,175	-19.4	-53.0	40,496	37,747	26,569												
Exports thous. of sq. yds.	36,171	36,821	38,523	35,868	35,397	44,730	50,412	-1.3	-29.8	294,928	355,788	253,978												
Fabric for tire manufacture:																								
Consumption thous. of lbs.	14,656	17,264	17,437	15,034	13,399	20,350	18,126	-10.9	-26.1	129,889	146,751	106,116												
Elastic webbing, shipments thous. of dolls.	1,496	1,347	1,300	1,169	1,088	1,473	1,357	-6.9	-19.8	9,502	11,174	9,263												
Print cloth, 64 x 60 dolls. per yd.	.062	.061	.061	.056	.054	.072	.073	-3.6	-26.0															
Sheeting, brown dolls. per yd.	.078	.076	.078	.075	.070	.084	.083	-6.7	-15.7															
Cotton goods (Fairchild), rel. to 1911-1913.	140	138	137	134		159	159																	

<sup>2</sup> Quarter ended in month indicated.

<sup>3</sup> As of Aug. 1.

\* Final estimate for 1929.

<sup>4</sup> As of Aug. 16.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) IN-DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31					
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930	
											1928	1929	1930	
<b>TEXTILES—Continued</b>														
<b>Cotton Finishing</b>														
White, dyed, and printed (outside mills):														
Billings, finished goods—thous. of yds.	66,246	65,364	59,384	50,933	41,473	78,964	75,582	-18.6	-45.1	514,894	601,549	411,128		
New orders, gray yardage—thous. of yds.	60,526	56,641	48,699	39,249	37,349	65,462	69,475	-4.8	-46.2	501,111	574,268	372,021		
Shipments, finished goods—cases	39,459	34,308	39,307	32,986	28,559	43,674	44,809	-13.4	-36.3	318,993	374,459	253,428		
Stocks, finished goods, end mo.—cases	32,528	40,741	34,571	34,477	31,901	35,487	37,299	-7.5	-14.5					
Operating activity—per ct. of capacity	59	56	47	41	34	60	57	-17.1	-40.4					
Unfilled orders, end of month—days	4.2	2.9	2.6	2.0	1.9	5.1	4.9	-5.0	-61.2					
Printed only (mills and outside):														
Production—thous. of yds.	72,634	72,721	58,588	47,608	38,799	72,808	60,902	-18.5	-36.3	446,256	561,349	411,380		
Stocks, end of month—thous. of yds.	77,763	84,808	85,381	82,856	82,297	78,492	87,397	-0.7	-5.8					
<b>Silk</b>														
Imports, raw—thous. of lbs.	6,103	6,047	3,622	4,642	5,712	7,596	7,858	+23.1	-27.3	48,381	52,946	40,116		
Deliveries (consumption)—bales	50,863	41,584	40,823	29,396	39,948	46,504	51,624	+35.9	-22.6	329,717	354,559	310,149		
Stocks, end of month:														
At warehouses—bales	57,773	53,704	35,477	28,450	35,565	47,425	42,596	+25.0	-16.5					
At manufacturing plants—bales	24,728	25,280	23,200	22,489	20,734	23,162	20,985	-7.8	-1.2					
Silk machinery activity:														
Broad looms—per cent of normal	111.1	101.3	87.9	79.0	79.2	100.7	99.7	+0.3	-20.6					
Narrow looms—per cent of normal	57.7	57.2	52.8	61.1	29.7	67.8	65.1	-51.4	-54.4					
Spinning spindles—per cent of normal	69.2	68.8	59.1	58.0	52.1	63.1	63.8	-10.2	-18.3					
Prices:														
Raw, Japanese, 13-15, N. Y.—dolls. per lb.	4.531	4.186	3.940	3.251	2.955	4.925	4.876	-9.1	-39.4					
Silk goods, composite—dollars. per yd.	1.16	1.14	1.11	1.09	1.08	1.19	1.18	-0.9	-8.5					
<b>Rayon</b>														
Imports—thous. of lbs.	928	901	487	383	133	1,582	858	-65.3	-84.5	6,817	10,587	4,945		
Stocks, bonded, end of month—thous. of lbs.	3,093	3,111	2,956	1.15	1.15	2,902	2,802							
Price, 150 denier, A grade, N. Y.—dollars. per lb.	1.15	1.15	1.15	1.15	.95	1.23	1.15	-17.4	-17.4					
<b>Clothing</b>														
Men's and boys' garments cut:														
Suits—thous. of garments	2,294	1,981	1,923	1,792	1,811	2,560	2,645	+1.1	-31.5					
Separate trousers—thous. of garments	2,363	2,247	2,218	1,976	1,926	2,691	2,647	-2.5	-27.2					
Overcoats—thous. of garments	352	216	203	329	441	591	756	+34.0	-41.7					
Overalls:														
Cut—thous. of dozen garments	326	285	7260	231	244	313	335	+5.6	-27.2	2,209	2,393	1,986		
Net shipments—thous. of dozen garments	297	273	7248	218	223	285	317	+2.3	-29.7	2,042	2,173	1,852		
Unfilled orders,														
end of mo.—thous. of dozen garments	116	112	789	67	60	120	185	-10.4	-67.6					
Hosiery:														
Production—thous. of dozen pairs	3,046	2,935	2,840	2,811	2,227	3,548	3,245	-20.8	-31.4	23,833	24,849	20,522		
Net shipments—thous. of dozen pairs	2,886	2,865	2,838	2,810	2,268	3,571	3,234	-19.3	-29.9	22,998	24,023	19,120		
Stocks, end of month—thous. of dozen pairs	8,993	8,724	9,205	10,400	8,845	8,434	8,420	-15.0	+5.0					
New orders—thous. of dozen pairs	2,747	2,920	2,993	2,935	2,140	3,516	2,974	-27.1	-28.0	23,118	23,659	18,995		
Unfilled orders, end of month—thous. of dozen pairs	2,642	2,470	2,683	2,776	2,317	4,847	4,480	-16.5	-48.3					
Knit underwear:														
Production—thous. of dozen garments	1,192	1,148	1,025	1,023	853	1,187	1,091	-16.6	-21.8	7,662	8,245	7,478		
Net shipments—thous. of dozen garments	1,044	998	1,003	1,875	871	1,126	1,064	-0.5	-18.1	7,077	7,579	6,716		
Stocks, end of month—thous. of dozen garments	1,590	1,731	1,759	1,846	1,876	1,735	1,797	+1.6	+4.4					
New orders—thous. of dozen garments	1,036	896	1,070	911	776	1,157	891	-14.8	-12.9	7,250	8,340	6,929		
Unfilled orders, end of month—thous. of dozen garments	1,658	1,549	1,607	1,634	1,519	2,293	2,103	-7.0	-27.8					
<b>Burlaps and Fibers</b>														
Imports:														
Burlaps—thous. of lbs.	52,854	54,863	47,699	43,235	57,553	51,216	41,526	+33.1	+38.6	414,559	405,572	400,355		
Fibers (unmanufactured)—long tons	33,312	23,126	19,322	24,163	16,857	21,182	20,469	-30.2	-17.6	183,430	202,628	170,682		
<b>Pyroxylin-Coated Textiles</b>														
Pyroxylin spread—thous. of lbs.	3,474	4,033	3,693	3,932	2,840	4,615	4,331	-27.8	-34.4	34,853	37,836	24,163		
Shipments billed—thous. of linear yards	3,111	3,445	3,227	2,820	2,212	4,007	3,509	-21.6	-37.0	27,047	31,445	20,309		
Unfilled orders, end of month—thous. of linear yards	2,332	2,421	2,370	2,323	1,779	2,910	2,805	-23.4	-36.6					
<b>Fur</b>														
Sales by dealers—thous. of dollars	8,327	8,362	7,692	5,455	4,348	8,546	8,135	-20.3	-46.6	85,645	87,770	44,819		
<b>Cotton Mill Dividends (Quarterly)</b>														
Fall River mills—thous. of dollars	2,348	—	—	2,330	—	2,225	—	-5.2	+46.7	487	460	678		
New Bedford mills—thous. of dollars	2,254	—	—	2,254	—	2,280	—	0.0	-9.3	943	529	508		
<b>Buttons</b>														
Fresh-water pearl buttons:														
Production—ratio to capacity	48.3	47.1	42.4	41.1	231	50.3	40.9	-43.8	-43.5					
Stocks, end of month—thous. of gross	9,838	9,878	9,790	10,056	9,781	11,336	11,170	-2.7	-12.4					
Imports:														
Buttons—														
Product of Philippines—thous. of gross	63	59	44	107	63	51	50	-41.1	+26.0	632	366	471		
All other—thous. of gross	5	6	16	18	12	13	16	-33.3	-25.0	86	261	323		
Shells—														
Mother of pearl—thous. of pounds	531	171	570	271	476	390	832	+75.6	-42.8	3,168	3,800	3,328		
All other—thous. of pounds	69	104	925	377	72	506	86	-80.9	-16.3	1,728	1,235	2,091		
Tagua nuts—thous. of pounds	1,186	1,607	1,317	1,242	1,213	1,407	1,537	-2.3	-21.1	13,950	14,621	8,159		

\* Quarter ended in month indicated.

† Revised.

**TREND OF BUSINESS MOVEMENTS—Continued**

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found in pages 27 to 139 of the August, 1930, "Survey"	1930					1929		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<b>IRON AND STEEL</b>												
<b>Iron</b>												
Manganese ore, imports... thous. of long tons..	30	26	30	31	16	51	48	-48.4	-66.7	104	213	193
Iron ore:												
Imports.....thous. of long tons..	301	313	291	292	251	244	301	-14.0	-16.6	1,418	1,770	1,944
Shipments from mines.thous. of long tons..	None.	108	6,979	8,650	8,587	10,174	10,671	-0.7	-19.5	23,275	32,910	24,324
Receipts—												
Lake Erie ports and furnaces.....thous. of long tons..	None.	10	3,987	5,755	6,346	6,985	7,509	+10.3	-15.5	15,125	22,438	16,098
Other ports.....thous. of long tons..	None.	2,100	2,697	2,515	2,805	3,127	-6.7	-19.6	6,791	8,845	7,312	
Consumption.....thous. of long tons..	4,628	4,576	4,715	4,288	3,838	5,677	5,808	-10.5	-33.9	32,535	38,361	30,208
Stocks, end of month—												
Total.....thous. of long tons..	24,877	20,285	21,325	25,700	30,515	23,701	28,697	+18.7	+6.3			
At furnaces.....thous. of long tons..	19,785	15,950	17,072	21,087	25,493	19,619	24,245	+20.9	+5.1			
On Lake Erie docks.thous.of long tons..	5,092	4,335	4,253	4,613	5,022	4,082	4,452	+8.9	+12.8			
Pig-iron production:												
Total, United States.....thous. of long tons..	3,246	3,182	3,233	2,934	2,640	3,717	3,785	-10.0	-30.3	21,593	25,426	20,901
Merchant furnaces.....thous. of long tons..	645	617	619	630	564	717	746	-10.5	-24.4	4,452	5,346	4,243
Canada.....thous. of long tons..	75	72	81	66	65	90	100	-1.5	-35.0	503	618	517
Furnaces in blast, end of month:												
Furnaces.....number..	185	183	180	160	144	218	216	-10.0	-33.3			
Capacity.....long tons per day..	106,080	104,770	103,425	92,590	83,645	122,590	121,965	-9.7	-31.4			
Ohio gray-iron foundries:												
Meltings—												
Actual.....long tons..	15,778	20,101	16,703			21,214	19,508					
Normal.....long tons..	16,633	20,188	19,501			19,164	18,535					
Ratio to normal..per cent of normal..	94.8	99.0	85.2			110.6	105.3					
Stocks, end of month..per cent of normal..	126	125	131			131	131					
Receipts.....per cent of normal..	87	96	91			105	99					
Malleable castings:												
Production.....short tons..	63,464	61,898	62,035	39,526	31,099	72,232	70,600	-21.3	-56.0	455,164	538,582	385,345
Operating activity.....per ct. of capacity..	64.6	63.1	53.6	40.2	31.1	74.9	73.5	-22.6	-57.7			
Shipments.....short tons..	65,164	60,749	60,884	43,966	32,422	72,346	69,618	-26.3	-53.4	445,312	532,846	380,976
New orders.....short tons..	60,915	54,564	54,685	33,961	34,731	65,315	61,358	+2.3	-43.4	444,973	525,906	358,471
Wholesale prices:												
Foundry, No. 2,												
northern.....dollars. per long ton..	20.26	20.26	20.26	20.26	19.86	20.26	20.26	-2.0	-2.0			
Basic (valley furnace).dollars. per long ton..	18.50	18.50	18.50	18.50	18.10	18.50	18.50	-2.2	-2.2			
Composite pig iron.....dollars. per long ton..	18.77	18.75	18.66	18.55	18.22	19.35	19.27	-1.8	-5.4			
<b>Cast-Iron Boilers and Radiators</b>												
Round boilers:												
Production.....thous. of lbs..	9,858	9,934	8,398	7,103	4,703	10,578	8,997	-33.8	-47.7	87,368	76,955	61,011
Shipments.....thous. of lbs..	4,935	5,853	5,898	6,342	7,266	10,171	13,553	+14.6	-46.4	78,855	66,498	43,114
New orders.....thous. of lbs..	4,805	4,988	5,368	6,874	6,975	14,490	14,510	+1.5	-51.9	85,472	62,058	40,534
Stocks, end of month.....thous. of lbs..	78,737	76,232	78,908	79,605	76,865	89,437	84,027	-3.4	-8.5			
Square boilers:												
Production.....thous. of lbs..	21,008	21,988	15,567	14,493	11,376	16,119	11,598	-21.5	-1.9	204,918	160,139	125,820
Shipments.....thous. of lbs..	8,854	9,493	11,249	14,384	18,269	17,458	22,927	+27.0	-20.3	143,332	111,228	86,216
New orders.....thous. of lbs..	10,163	8,923	11,047	16,044	17,496	18,421	26,039	+9.1	-32.8	161,248	113,931	87,433
Stocks, end of month.....thous. of lbs..	155,335	173,605	177,674	177,376	170,941	179,900	169,044	-3.6	+1.1			
Radiators:												
Production.....sq. ft. heating surface..	8,518	7,898	7,639	5,873	4,997	9,364	6,756	-14.9	-26.0	100,309	79,462	53,400
Shipments.....sq. ft. heating surface..	3,912	4,259	5,047	6,154	7,447	9,226	11,729	+21.0	-36.5	70,233	58,137	37,299
New orders.....sq. ft. heating surface..	5,085	4,411	5,331	7,296	7,232	9,603	13,621	+4.6	-46.9	80,659	62,015	40,476
Stocks, end of month.....thous. sq. ft. heating surface..	59,064	62,747	65,309	65,034	62,662	74,189	69,277	-3.6	-9.5			
Gas-fired boilers:												
Shipments.....dollars..	175,912	323,434	184,795	312,950	185,484	285,223	315,696	-40.7	-41.2	1,224,292	1,539,073	1,412,394
Shipments.....thous. B. t. u..	151,380	259,442	155,282	260,123	160,347	213,780	254,856	-38.4	-37.1	986,477	1,180,948	1,178,248
Production.....thous. B. t. u..	182,837	169,086	251,027	367,022	283,750	271,330	248,993	-22.7	+14.0	1,102,481	1,735,746	1,657,851
Stocks, end of month.....thous. B. t. u..	856,070	715,889	840,004	933,478	1,031,838	1,197,768	1,115,865	+10.5	-7.5			
<b>Crude Steel</b>												
Steel ingots, production:												
United States, total.....thous. of long tons..	4,300	4,154	4,025	3,440	2,933	4,903	4,851	-14.7	-39.5	28,603	33,887	26,726
Ratio to capacity.....per cent..	83	80	74	69	56	100	95	-18.8	-41.1			
Canada.....thous. of long tons..	117	103	92	95	68	120	130	-28.4	-47.7	732	868	697
U. S. Steel Corporation:												
Unfilled orders, end of month.....thous. of long tons..	4,571	4,354	4,059	3,968	4,022	4,257	4,088	+1.4	-1.6			
Earnings.....thous. of dollars..	18,104	16,114	16,571	14,377		24,029	24,303			6 87,866	6 132,101	6 96,768
Steel castings:												
Production—												
Total.....short tons..	113,737	110,903	105,242	90,985	79,029	116,221	118,100	-13.1	-33.1	605,913	789,595	717,089
Ratio to capacity.....per cent..	79	77	73	63	55	80	81	-12.7	-32.1			
Railroad specialties.....short tons..	47,813	45,463	43,341	32,793	26,060	54,154	51,989	-20.5	-49.9	232,342	343,770	288,414
Miscellaneous.....short tons..	65,924	65,440	61,901	58,192	52,969	62,067	66,111	-9.0	-19.9	373,571	445,825	428,675
New orders—												
Total.....short tons..	122,658	93,200	91,307	61,358	57,923	95,201	103,356	-5.6	-44.0	576,260	827,290	642,901
Ratio to capacity.....per cent..	85	65	63	43	40	65	71	-7.0	-43.7			
Railroad specialties.....short tons..	54,063	35,457	42,051	13,714	14,708	34,947	37,731	+7.2	-61.0	224,249	377,677	257,805
Miscellaneous.....short tons..	68,595	57,743	49,256	47,644	43,248	60,254	65,625	-9.2	-34.1	352,011	449,613	388,129
Sheets, black, blue, galvanized, and full finished:												
Production—												
Total.....net tons..	259,658	308,988	274,220	205,675	186,206	337,841	323,905	-9.5	-42.5	2,269,823	2,512,506	1,802,228
Ratio to capacity.....per cent..	73.7	84.0	73.3	58.8	50.4	110.4	98.1	-14.3	-48.6			
Stocks, end of month—												
Total.....net tons..	192,317	208,374	204,702	200,589	202,682	163,607	154,854	+1.0	+30.9			
Unsold.....net tons..	75,847	81,671	85,585	83,988	82,708	52,274	47,103	-1.5	+75.6			
Shipments.....net tons..	275,235	291,601	266,436	212,930	194,767	347,959	344,676	-8.5	-43.5	2,173,127	2,514,000	1,724,087
New orders.....net tons..	299,764	300,086	204,589	187,412	207,400	307,911	337,222	+10.7	-38.5	2,155,217	2,615,305	1,784,688
Unfilled orders, end of month.....net tons..	524,230	526,827	461,756	431,324	432,298	676,568	658,155	+0.2	-34.3			
Wholesale prices:												
Steel billets, Bessemer.dollars. per long ton..	33.00	33.00	32.50	31.00	31.00	35.25	35.00	-0.0	-11.4			
Iron and steel comp....dollars. per long ton..	35.01	34.48	33.84	33.53	33.25	37.01	36.72	-0.8	-9.4			
Structural steel beams....dollars. per 100 lbs..	1.80	1.80	1.80	1.70	1.65	1.95	1.95	-2.9	-15.4			
Composite finished steel....dollars. per 100 lbs..	2.43	2.39	2.35	2.33	2.29	2.56	2.56	-1.7	-10.5			

§ Cumulative through June 30

## TREND OF BUSINESS MOVEMENTS—Continued

	1930					1929		PER CENT INCREASE (+) IN-DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"</i>												
<b>IRON AND STEEL—Continued</b>												
<b>Fabricated Steel Products</b>												
Steel barrels:												
Production.....barrels..	842,186	769,061	731,087	651,559	617,420	774,853	790,175	-5.2	-21.9	4,356,436	5,041,199	4,910,786
Ratio to capacity.....per cent.	58.0	57.4	53.2	46.4	46.5	61.8	64.2	+0.2	-27.6			
Shipments.....barrels..	856,451	766,617	736,147	638,358	621,145	779,567	782,411	-2.7	-20.6	4,353,211	5,027,678	4,905,162
Stocks, end of month.....barrels..	65,647	68,091	63,031	76,232	72,507	52,222	59,986	-4.9	+20.9			
Unfilled orders, end of month.....barrels..	1,897,913	1,691,461	1,454,601	71,288,612	1,295,854	1,548,999	1,372,697	+0.6	-5.6			
Track work, production.....short tons	13,096	13,508	12,799	10,553	8,774	14,838	13,844	-16.9	-36.6	88,905	99,281	83,084
Iron, steel, and heavy hardware												
Sales.....rel. to Jan., 1921..	177	183	180	167	162	220	223	-3.0	-27.4			
Lock washers, shipments.....thous. of dollars..	315	310	290	228	161	397	391	-29.4	-58.8	1,844	2,491	1,886
Steel plate, fabricated, new orders:												
Total.....short tons..	38,051	39,437	30,306	7,34,073	30,862	45,918	48,968	-9.4	-37.0	206,442	333,781	251,137
Ratio to capacity.....per cent..	48	50	38	46		58	62					
Oil storage tanks.....short tons..	6,593	8,460	9,222	7,8,841	10,850	6,890	14,963	+22.7	-27.5	127,891	91,023	59,263
Steel bars, cold finished, shipments.....short tons..	36,487	38,557	33,010	27,388	19,241	51,181	49,910	-29.7	-61.4	280,208	385,734	228,273
Steel boilers, new orders:												
Quantity.....number..	972	1,017	1,283	7,1,360	1,309	1,685	2,052	-3.7	-36.2	11,099	10,777	7,756
Area.....thous. of sq. ft..	1,262	1,070	1,330	7,1,589	1,410	1,823	2,075	-11.3	-32.0	10,273	11,818	8,682
Iron and steel:												
Exports.....long tons..	238,333	208,640	196,120	159,392	131,772	247,811	270,532	-17.3	-51.3	1,612,078	1,862,371	1,356,773
Imports.....long tons..	49,284	45,358	46,081	34,755	31,849	46,397	51,275	-8.4	-37.9	345,615	326,847	277,807
<b>Machinery</b>												
Water softeners, shipments.....units..	1,391	1,554	1,279	7,752	782	1,228	1,177	+4.0	-33.6	10,042	9,549	8,139
Water systems, shipments.....units..	8,930	10,104	11,598	7,10,953	10,189	13,031	12,268	-7.0	-16.9	67,152	72,384	67,962
Pumps:												
Domestic shipments—												
Pitcher, hand, etc.....units..	42,936	35,986	38,958	7,29,820	41,439	39,898	39,586	+39.0	+4.7	333,813	312,260	282,555
Power, horizontal type.....units..	2,562	2,396	2,628	7,3,040	2,535	2,989	2,768	-16.6	-8.4	14,993	17,464	16,575
Steam, power, and centrifugal—												
New orders.....thous. of dollars..	1,465	1,467	1,535	1,291	1,359	2,014	1,778	+5.3	-23.6	9,798	12,744	9,916
Shipments.....thous. of dollars..	1,433	1,558	1,641	1,644	1,338	1,715	1,849	-18.6	-27.6	9,754	11,857	10,404
Unfilled orders, end mo.thous. of dollars..	3,825	3,722	3,605	3,250	3,257	4,364	4,282	+0.2	-23.9			
Foundry equipment:												
New orders.....rel. to 1922-24..	164.1	122.8	92.7	102.1	90.6	177.3	219.3	-11.3	-58.7			
Shipments.....rel. to 1922-24..	194.5	217.4	149.4	160.5	116.1	172.7	182.1	-27.7	-36.2			
Unfilled orders, end of mo..rel. to 1922-24..	411.1	291.0	179.3	166.7	139.1	300.8	368.7	-16.6	-62.3			
Stokers, mechanical, sales:												
Quantity.....number..	89	108	96	151	150	203	186	-0.7	-19.4	849	998	720
Power.....horsepower..	32,403	35,903	31,956	47,803	37,761	67,322	65,197	-21.0	-42.1	284,687	358,418	221,672
Machine tools:												
New orders.....rel. to 1922-24..	181	179	135	126	91	292	259	-27.8	-64.9			
Shipments.....rel. to 1922-24..	227	234	197	176	128	296	278	-27.3	-54.0			
Unfilled orders, end of mo..rel. to 1922-24..	434	407	355	282	235	722	694	-16.7	-66.1			
Electric hoists:												
New orders—												
Quantity.....number..	402	432	337	265	217	600	504	-18.1	-56.9	2,994	4,031	2,409
Value.....dollars..	200,167	220,132	179,103	128,197	122,978	283,170	240,447	-4.1	-50.7	1,381,941	1,932,802	1,229,911
Shipments.....dollars..	232,968	206,013	191,655	181,049	147,503	269,973	290,141	-18.5	-49.2	1,267,194	1,717,658	1,402,003
Electric overhead cranes:												
Shipments.....thous. of dollars..	1,059	825	880	956	1,005	1,091	1,148	+5.1	-12.3	3,968	6,318	6,475
New orders.....thous. of dollars..	851	882	596	741	601	1,189	1,157	-18.9	-48.1	4,005	9,472	4,909
Unfilled orders, end of mo.thous. of dollars..	3,525	3,739	3,490	3,249	2,706	5,047	5,118	-16.7	-47.1			
Woodworking machinery:												
New orders.....thous. of dollars..	950	716	779	836		1,678	1,691			6,8,194	6,10,711	6,5,512
Shipments.....thous. of dollars..	1,290	1,028	723	913		1,612	1,767			6,7,582	6,10,010	6,5,853
Shipments.....number of machines..	833	603	577	615		1,056	1,232			6,5,758	6,6,889	6,3,923
Cancellations.....thous. of dollars..	46	31	11	10		27	18			6,163	6,233	6,174
Unfilled orders, end of mo.thous. of dollars..	1,101	763	785	705		2,445	2,369					
Electric industrial trucks and tractors:												
Shipments, domestic—												
Total.....number of vehicles..	109	101	125	63	99	185	163	+57.1	-39.3	742	1,196	726
Exports.....number of vehicles..	14	5	19	32	9	16	5	-71.9	+80.0	91	75	103
Fire-extinguishing equipment, shipments:												
Motor vehicles.....number..	796	94	95	7,106	118	120	131	+11.3	-9.9	682	750	671
Hand types.....number..	44,168	57,862	7,50,865	7,49,763	43,911	51,929	62,266	-11.8	-29.5	334,956	375,598	346,316
Oil burners:												
Shipments, total.....number of burners..	3,376	3,923	5,901	7,5,174	7,241	5,146	6,520	+39.9	+11.1			
Stocks, end of mo.....number of burners..	6,568	6,386	6,883	7,5,520	10,171	6,496	7,739	+19.4	+31.4			
New orders.....number of burners..	3,182	3,718	7,294	7,5,170	6,790	6,962	6,854	+31.3	-0.9			
Unfilled orders, end of mo.....number of burners..	1,262	1,057	2,450	7,2,446	1,995	4,347	4,681	-18.4	-57.4			
Pulverized fuel equipment:												
New orders, central system—												
Water-tube boilers.no. of pulverizers..	2		3	1	2					+100.0		
Furnaces and kilns.no. of pulverizers..	2	1	2	3								
New orders, unit system—												
Water-tube boilers.no. of pulverizers..	16	31	30	15	12					-20.0		
Fire-tube boilers...no. of pulverizers..	3	3										
Marine boilers...no. of pulverizers..												
Furnaces and kilns.no. of pulverizers..	6	8	2	5	1					-80.0		
Patents issued:												
Total, all classes.....number..	3,349	4,645	3,932	7,670	3,452	3,591	4,054	-55.0	-14.8	24,820	26,092	29,803
Agricultural implements.....number..	56	60	49	109	51	51	53	-53.2	-3.8	295	358	403
Internal-combustion engines.....number..	81	73	59	144	52	39	92	-63.9	-43.5	371	384	508

\* Cumulative through June 30.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<b>NONFERROUS METALS</b>												
<b>Copper</b>												
Production:												
Mines.....short tons..	61,216	60,450	60,238	7 56,743	54,249	82,354	79,229	-4.4	-31.5	496,319	614,635	419,930
Smelter.....short tons..	78,514	76,777	75,936	69,155	67,638	95,339	91,690	-2.2	-28.6	578,539	712,941	526,565
Refined (N. and S. America).....short tons..	127,064	121,531	132,183	124,821	123,179	156,447	153,513	-1.3	-19.8	894,719	1,092,447	885,347
World production, blister.....short tons..	148,944	145,595	148,788	7 145,797	143,615	174,586	171,507	-1.5	-17.7	1,057,439	1,277,167	1,028,670
Domestic shipments, refined.....short tons..	73,644	50,017	75,760	71,887	75,436	95,258	98,720	+4.9	-23.6	526,273	691,538	478,555
Exports.....short tons..	20,031	24,796	10,186	34,960	32,421	40,852	33,876	-7.3	-4.3	343,836	303,683	201,632
Stocks (North and South America), end mo.:												
Refined.....short tons..	256,020	301,338	308,646	316,762	322,039	83,140	97,729	+1.7	+229.5	-----	-----	-----
Blister.....short tons..	266,561	269,623	265,106	258,834	242,212	251,481	239,470	-4.6	+1.1	-----	-----	-----
Wholesale price, electrolytic.....dolls. per lb..	.1778	.1562	.1276	.1205	.1102	.1778	.1778	-8.5	-38.0	-----	-----	-----
<b>Tin</b>												
Deliveries (consumption).....long tons..	8,675	6,780	5,710	5,886	6,130	7,455	6,865	+4.2	-10.7	44,005	54,955	43,935
Stocks end of month:												
World visible supply.....long tons..	32,972	36,595	39,771	42,611	41,950	23,751	23,789	-1.6	+76.3	-----	-----	-----
United States.....long tons..	3,566	5,687	6,767	7,728	6,786	3,820	3,087	-12.2	+119.8	-----	-----	-----
Imports.....long tons..	8,589	8,209	8,829	6,793	5,259	7,150	5,521	-22.6	-4.7	43,645	51,669	50,218
Wholesale price, Straits, N. Y.....dolls. per lb..	.3681	.3607	.3213	.3030	.2981	.4426	.4640	-1.6	-35.8	-----	-----	-----
<b>Zinc</b>												
Retorts in operation, end of month.....number..	51,300	50,038	52,072	52,428	46,030	69,703	69,911	-12.2	-34.2	-----	-----	-----
Production.....short tons..	48,136	44,150	44,578	43,473	40,038	52,532	51,447	-7.9	-26.5	366,967	372,899	317,346
Stocks, end of month.....short tons..	93,475	97,086	102,775	109,578	117,381	38,832	45,336	+7.1	+159.0	-----	-----	-----
Ore, Joplin district:												
Shipments.....short tons..	51,611	27,214	52,454	41,819	21,974	60,119	48,995	-40.3	-49.0	342,768	373,727	271,198
Stocks, mines, end of month.....short tons..	21,950	28,486	20,602	19,553	28,729	47,458	39,813	+46.9	-27.8	-----	-----	-----
Price, slab, prime western.....dollars. per lb..	.0493	.0484	.0464	.0444	.0435	.0669	.0677	-2.0	-35.7	-----	-----	-----
<b>Lead</b>												
Production.....short tons..	56,541	51,765	53,656	-----	-----	57,579	56,924	-----	-----	-----	-----	-----
Ore shipments:												
Joplin district.....short tons..	6,770	2,450	5,100	5,975	2,570	8,491	5,373	-57.0	-52.2	53,242	62,258	29,189
Utah.....short tons..	66,473	64,966	77,372	55,801	45,194	76,003	66,083	-19.0	-31.6	478,833	559,166	466,864
Receipts in U. S. ore.....short tons..	57,441	49,388	49,530	47,692	-----	53,452	54,865	-----	-----	*318,256	*331,163	*300,922
Price, pig desilverized, N. Y.....dollars. per lb..	.0566	.0554	.0552	.0541	.0525	.0700	.0680	-3.0	-22.8	-----	-----	-----
<b>Other Metal Products</b>												
Babbitt metal, consumption:												
Total apparent.....thous. of lbs..	5,052	3,868	3,933	3,703	2,908	5,928	5,361	-21.5	-45.8	33,201	41,093	27,299
Direct by producers.....thous. of lbs..	1,012	1,030	707	1,156	503	1,107	1,313	-56.5	-61.7	7,098	8,427	6,312
Sale to consumers.....thous. of lbs..	4,039	2,839	3,225	2,517	2,105	4,821	4,048	-5.6	-40.6	26,102	32,667	20,986
Copper wire cloth:												
Production.....thous. of sq. ft..	421	418	101	370	373	456	438	+0.8	-14.8	3,079	3,284	2,892
Shipments.....thous. of sq. ft..	395	395	359	395	347	404	461	-12.2	-24.7	2,871	2,980	2,679
Stocks, end of month.....thous. of sq. ft..	1,108	1,130	1,145	1,107	1,118	1,084	1,049	+1.0	+6.6	2,039	3,056	2,769
New orders.....thous. of sq. ft..	342	153	378	360	378	244	345	+5.0	+9.6	-----	-----	-----
Unfilled orders, end of mo. ....thous. of sq. ft..	243	220	252	232	279	249	405	+20.3	-31.1	-----	-----	-----
Make and hold orders, end of month.....thous. of sq. ft..	564	555	540	565	525	568	507	-7.1	+3.6	-----	-----	-----
Pails and tubs, galvanized:												
Production.....dozens..	135,178	131,015	113,645	7 89,982	91,879	98,857	105,454	+2.1	-12.9	1,118,455	1,059,465	827,026
Shipments.....dozens..	135,602	120,552	107,496	82,956	104,096	104,762	109,841	+25.5	-5.2	1,123,361	1,084,900	835,286
Other galvanized ware:												
Production.....dozens..	37,963	44,058	44,045	40,646	42,056	37,479	42,384	+3.5	-0.8	295,668	330,186	278,231
Shipments.....dozens..	38,160	44,276	43,483	33,140	33,874	35,334	41,117	+2.2	-23.2	274,263	303,454	253,634
Enamelled sheet-metal ware:												
Shipments.....dozen pieces..	341,372	318,431	290,617	247,861	213,420	337,375	290,532	-13.9	-26.5	2,411,865	2,712,242	2,075,762
<b>Electrical Equipment</b>												
Electrical mfrs., new orders (quarterly).....thous. of dolls..	2 298,733	-----	-----	2 276,756	-----	2 340,863	-----	-7.4	-18.8	483,029	663,288	575,489
Electrical porcelain, shipments:												
Standard.....dollars..	69,511	69,308	80,368	72,825	68,483	101,013	139,240	-6.0	-50.8	494,621	809,465	583,860
Special.....dollars..	136,901	127,295	111,941	116,935	133,654	172,704	168,066	+14.3	-20.5	868,584	1,107,067	871,310
Glazed nail knobs.....thous. of pieces..	3,146	2,930	3,292	2,464	2,243	3,794	8,301	-9.0	-73.0	18,156	31,873	21,230
Unglazed nail knobs.....thous. of pieces..	1,232	1,400	2,211	1,524	1,120	1,998	2,426	-26.5	-53.8	9,466	17,669	11,659
Tubes.....thous. of pieces..	1,093	928	1,266	1,140	782	1,746	3,330	-31.4	-76.5	9,693	13,205	8,127
Laminated phenolic products, shipments:												
Shipments.....dollars..	959,513	910,651	868,399	925,006	721,807	1,456,335	1,732,023	-22.0	-58.3	6,115,455	9,995,248	5,978,210
Motors (direct current):												
New orders.....dollars..	942,556	931,822	633,088	935,040	677,348	1,098,864	811,575	-27.6	-16.5	5,464,294	6,715,086	5,908,767
Billings (shipments).....dollars..	833,183	875,083	776,078	673,415	644,252	883,821	854,986	-4.3	-24.6	5,125,488	5,907,241	5,357,742
Power switching equipment, new orders:												
Indoor.....dollars..	155,095	191,277	128,303	-----	-----	133,418	208,495	-----	-----	-----	-----	-----
Outdoor.....dollars..	465,117	476,943	448,802	-----	-----	598,645	520,058	-----	-----	-----	-----	-----
Outlet boxes and covers, shipments.....pieces..	1,949,055	2,217,558	1,512,111	1,702,958	1,516,689	2,114,582	2,587,786	-10.9	-41.4	18,850,700	18,770,007	13,268,592
Vulcanized fiber:												
Shipments, total.....thous. of dolls..	614	622	517	541	450	814	878	-16.8	-48.7	4,480	5,685	4,080
Consumption.....thous. of lbs..	2,405	2,759	2,144	1,967	2,121	3,470	3,489	+7.8	-39.2	19,258	23,307	16,658
Industrial reflectors, sales.....units..	108,210	107,040	109,977	134,783	135,687	130,413	124,466	+0.7	+9.0	843,520	956,631	832,087
Welding sets, new orders:												
Single operator.....units..	251	261	274	228	207	296	282	-9.2	-26.6	1,562	2,388	1,757
Multiple operator.....units..	5	9	1	7	10	9	5	+42.9	+100.0	110	51	38
Panel boards and cabinets, shipments (quarterly).....thous. of dolls..	2 1,285	-----	2 1,219	-----	2 1,192	-----	-----	-5.1	+2.3	*6 2,122	*6 2,480	*6 2,504
Nonmetallic conduits, shipments.....thous. of ft..	8,505	7,660	4,021	4,021	3,564	6,684	7,320	-11.4	-51.3	53,927	47,995	38,264
Electric furnaces, new orders.....kilowatts..	2,620	12,458	16,062	3,665	5,899	6,237	6,932	+61.0	-14.9	33,414	64,352	53,349
Manufactured mica:												
Shipments.....thous. of dolls..	199	241	195	162	156	252	254	-3.7	-38.6	-----	2,010	1,386
Unfilled orders, end of mo. ....thous. of dolls..	196	178	166	137	88	294	326	-35.8	-73.0	-----	-----	-----
Delinquent accounts, electrical trade:												
Amount.....dollars..	223,048	203,572	215,001	157,821	141,162	168,724	146,166	-10.6	-3.4	-----	-----	-----
Delinquent firms.....number..	1											

## TREND OF BUSINESS MOVEMENTS—Continued

	1930					1929		PER CENT INCREASE (+) IN-DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey."</i>												
<b>AUTOMOBILES</b>												
Production:												
United States—												
Total.....number of cars..	401,313	443,038	417,406	7 335,477	262,363	545,932	500,840	-21.8	-47.6	2,593,607	3,726,283	2,481,911
Passenger cars.....number of cars..	335,720	374,913	362,522	289,245	222,459	451,371	424,944	-23.1	-47.6	2,301,199	3,188,241	2,117,461
Taxicabs.....number of cars..	1,389	565	514	459	241	1,378	1,054	-47.5	-77.1	3,573	11,657	4,762
Trucks.....number of cars..	64,204	67,560	54,370	7 45,773	39,663	93,183	74,842	-13.3	-47.0	288,835	526,355	359,684
Canada—												
Total.....number of cars..	20,730	24,257	24,672	15,090	10,188	21,492	17,461	-32.5	-41.7	150,214	205,822	120,873
Passenger cars.....number of cars..	17,165	20,872	21,251	12,194	8,556	16,511	13,600	-29.8	-37.1	127,991	165,213	101,915
Trucks.....number of cars..	3,565	3,385	3,421	2,896	1,632	4,981	3,861	-43.6	-57.7	22,223	40,609	18,958
Exports (assembled):												
From United States—												
Total.....number of cars..	31,090	35,238	26,542	15,437	11,870	50,976	55,545	-23.1	-78.6	305,008	379,976	173,828
Passenger cars.....number of cars..	22,129	23,777	16,876	10,101	7,828	34,106	29,082	-22.5	-73.1	233,184	250,725	114,736
Trucks.....number of cars..	8,961	11,461	9,666	5,336	4,042	16,870	26,463	-24.3	-84.7	71,824	120,251	59,092
From Canada—												
Total.....number of cars..	6,308	3,272	3,024	3,670	3,521	8,219	7,319	-4.1	-51.9	34,933	67,033	26,985
Passenger cars.....number of cars..	5,029	2,304	2,131	2,240	2,471	5,346	4,732	+10.3	-47.8	25,596	43,497	17,990
Trucks.....number of cars..	1,279	968	893	1,430	1,050	2,873	2,587	-26.6	-59.4	9,337	23,536	8,995
Sales (General Motors Co.):												
Total to dealers, incl. Canadian and overseas.....number of cars..	135,930	150,661	147,483	97,440	79,976	200,754	189,428	-17.9	-57.8	1,252,789	1,361,296	844,195
To consumers, U. S.....number of cars..	123,781	142,004	131,817	97,318	80,147	154,437	147,079	-17.6	-45.5	994,830	737,976	
To dealers, U. S.....number of cars..	118,081	132,365	136,169	87,595	70,716	163,704	157,111	-19.3	-55.0	1,086,495	750,288	
Accessories and parts, shipments:												
Original equipment.....rel. to Jan., 1925	167	175	153	119	83	231	205	-30.3	-59.5			
Replacement parts.....rel. to Jan., 1925	139	150	137	131	127	150	152	-3.1	-16.4			
Accessories.....rel. to Jan., 1925	67	74	78	71	65	90	92	-8.5	-29.3			
Service parts.....rel. to Jan., 1925	175	180	165	128	115	186	170	-10.2	-32.4			
Rim production.....thous. of rims..	2,062	2,340	2,010	1,338	1,449	2,184	1,897	+8.3	-23.6	15,180	16,099	12,453
New passenger-car registrations:												
Total.....number of cars..	298,904	357,064	345,031	260,861	254,098	386,398	7 432,503	-2.6	-41.2	1,880,517	2,587,860	1,907,697
Automobile financing:												
Wholesale, dealers.....thous. of dolls..	76,574	84,229	7 82,803	64,915		63,217				6 354,936	6 422,048	
Total, consumers.....thous. of dolls..	120,873	144,891	7 145,346	141,889		178,984	180,205			6 839,229	6 710,753	
New cars.....thous. of dolls..	76,292	93,405	7 93,507	89,939		121,842	125,005			6 570,805	6 450,919	
Used cars.....thous. of dolls..	41,474	48,461	7 48,488	48,488		50,206	49,078			6 231,431	6 241,733	
Unclassified.....thous. of dolls..	3,107	3,026	7 3,298	3,261		6,936	6,122			6 36,993	6 18,047	
<b>FUELS</b>												
<b>Coal and Coke</b>												
Bituminous:												
Production:												
United States.....thous. of short tons..	35,773	35,860	35,954	33,714	34,715	35,580	41,175	+3.0	-15.7	274,953	294,067	265,349
Canada.....thous. of short tons..	1,130	907	1,115	1,128	1,061	1,348	1,290	-5.9	-17.8	9,610	9,937	8,156
Exports.....thous. of long tons..	726	858	1,488	1,394	1,586	1,721	1,735	+13.8	-8.6	7,040	8,503	7,840
Consumption:												
By vessels.....thous. of long tons..	278	292	278	276	284	314	352	+2.9	-19.3	2,197	2,199	1,954
By electric-power plants.....thous. of short tons..	3,442	3,255	7 3,296	7 3,200	7 3,443	3,403	3,603	+7.6	-4.4	23,060	25,226	24,060
By railroads.....thous. of short tons..	7,376	6,804	6,690	6,177		7,073	7,155			6 46,260	6 47,169	6 42,374
By coke plants—												
United States.....thous. of short tons..	6,841	6,645	6,572	6,155	5,824	7,442	7,588	-5.4	-23.2	43,612	50,944	44,873
Canada.....thous. of short tons..	309	295	290	268	284	308	317	-7.5	-21.8	1,800	2,143	2,003
Stocks, end of month, held by consumers.....thous. of short tons..	33,100			32,200		33,100						
Prices:												
Mine aver. (spot)....dolls. per short ton..	1.74	1.71	1.67	1.67	1.71	1.67	1.70	+2.4	+0.6			
Wholesale, comp. ....dolls. per short ton..	3,911	3,901	3,902	3,892	3,891	3,905	3,906	0.0	-0.4			
Retail, composite....dolls. per short ton..	9,32	8,84	8,53	8,54	8,65	8,50	8,62	+1.3	+0.3			
Anthracite:												
Production.....thous. of short tons..	4,551	4,916	5,947	5,183	5,658	5,069	4,993	+0.2	+13.3	40,826	41,862	39,450
Exports.....thous. of long tons..	149	123	186	144	129	189	203	-10.4	-36.5	1,468	1,521	1,264
Stocks, end of mo. in yards of dealers.....no. of days..	31	36		57		59	57					
Prices:												
Wholesale, comp. ....dolls. per long ton..	13,033	12,887	12,441	12,251	12,366	12,628	12,754	+0.9	-3.0			
Retail, composite....dolls. per short ton..	15.00	14.99	14.33	14.32	14.53	14.48	14.63	+1.5	-0.7			
Coke:												
Production, U. S.—												
Beehive.....thous. of short tons..	291	302	241	262	215	602	600	-17.9	-64.2	2,608	3,720	1,901
By-product.....thous. of short tons..	4,394	4,246	4,266	3,954	3,770	4,510	4,614	-4.7	-18.3	27,644	31,308	28,830
Production, Canada.....thous. of short tons..	224	213	210	193	182	221	225	-5.7	-19.1	1,295	1,548	1,451
Exports.....thous. of long tons..	58	73	78	68	93	92	84	+36.8	+10.7	514	586	546
Price, furnace, Connellsburg.....dolls. per short ton..	2.60	2.60	2.53	2.50	2.52	2.80	2.80	+0.8	-10.0			
<b>Petroleum</b>												
Crude petroleum:												
Production.....thous. of bbls..	77,384	77,175	80,176	76,513	76,743	83,403	91,327	+0.3	-16.0	511,816	579,442	541,871
Stocks at end of month—												
Total (comparable).....thous. of bbls..	380,007	379,875	378,919	377,822	378,264	379,089	383,343	+0.1	-1.3			
Tank farms and pipe lines.....thous. of bbls..	334,082	332,487	331,429	331,050	331,024	331,572	335,232	-0.01	-1.3			
Refineries.....thous. of bbls..	45,925	47,388	47,490	46,772	47,140	47,517	48,111	+0.8	-2.0			
California—												
Light.....thous. of bbls..	44,710	44,166	42,912	41,045	41,071	33,169	34,430	+0.1	+19.3			
Heavy.....thous. of bbls..	107,414	105,636	105,560	105,276	104,550	103,732	105,646	-0.7	-1.0			
Imports.....thous. of bbls..	4,827	5,781	4,984	5,767	5,877	6,591	6,122	+1.9	-4.0			
Consumption (run to stills).....thous. of bbls..	80,233	80,434	83,647	80,747	78,644	84,400	85,919	-2.6	-8.5	46,069	49,974	37,007
Refinery operations.....per cent. of capacity..	71	73	73	73	69	83	81	-5.5	-14.8	515,488	566,762	556,302
Price, Kansas-Oklahoma.....dolls. per bbl..	1.110	1.163	1.178	1.178	1.178	1.300	1.300	0.0	-9.4			
Oil wells completed.....number..	1,090	1,151	1,233	1,197	1,051	1,316	1,426	-12.2	-26.3	6,645	8,389	7,751

\* Cumulative through June 30.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found in pages 27 to 139 of the August, 1930, "Survey"	1930					1929		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<b>FUELS—Continued</b>												
<b>Petroleum—Continued</b>												
Mexico—												
Production—thous. of bbls.	3,491	3,319	3,350			3,648	3,906					
Exports—thous. of bbls.	2,085	1,902	2,429			2,961	2,483					
Venezuela—												
Production—thous. of bbls.	11,920	10,724	10,918	11,361	11,624	12,101	10,793	+2.3	+7.7	55,509	78,824	98,964
Exports—thous. of bbls.	10,821	11,018	11,133	11,221		10,564	10,731			45,308	58,952	65,240
Gasoline:												
Production—												
Raw (at refineries)—thous. of bbls.	37,727	38,157	39,293	37,537	38,061	35,606	37,855	+1.4	+0.5	207,924	244,795	261,378
Natural gas (at plants)—thous. of bbls.	4,576	4,429	4,521	4,269	4,231	4,250	4,417	-0.9	-4.2	20,535	29,417	30,679
Exports—thous. of bbls.	5,735	5,662	4,864	6,955	5,497	5,699	5,975	-21.0	-8.0	30,403	34,321	38,813
Consumption—thous. of bbls.	31,029	34,549	36,497	35,902	38,352	33,163	36,860	+6.8	+4.0	182,337	209,357	228,569
Stocks, end of month—												
Raw (at refineries)—thous. of bbls.	55,239	54,435	54,046	50,225	46,077	44,991	37,880	-8.3	-17.8			
Natural gas (plants)—thous. of bbls.	673	709	920	928	741	1,356	1,156	-21.2	-35.9			
Retail distribution, 41 States, thous. of gals.	859,042	997,944	1,006,694			974,409	1,092,910					
Prices—												
Wholesale, New York—dollars per gal.	.143	.151	.163	.163	.163	.190	.190	0.0	-14.2			
Retail, wagon, 50 cities—dollars per gal.	.143	.155	.153			.160	.158					
Kerosene:												
Production—thous. of bbls.	4,752	4,435	4,317	4,026	3,929	4,928	4,406	+2.4	-10.8	34,206	32,320	30,346
Exports—thous. of bbls.	1,730	1,520	816	1,782	1,021	1,761	1,281	-42.7	-20.3	13,066	11,466	10,014
Consumption—thous. of bbls.	3,118	3,240	3,181	2,323	2,933	2,547	2,684	+26.3	+15.6	20,392	21,038	20,997
Stocks at refineries, end mo.—thous. of bbls.	8,455	8,068	8,384	8,352	8,319	8,348	8,797	-0.4	-5.4			
Price, 150° water white—dollars per gal.	.064	.063	.060	.055	.052	.074	.069	-5.5	-24.6			
Gas and fuel oils:												
Production—thous. of bbls.	32,111	32,236	33,961	31,092	31,023	37,338	37,980	-0.2	-18.3	242,223	260,046	224,821
Consumption—												
By vessels—thous. of bbls.	4,077	4,234	4,657	4,011	4,316	4,544	4,593	+7.6	-6.0	29,628	30,370	29,583
By electric pow. plants—thous. of bbls.	633	591	607	615	706	616	794	+14.8	-11.1	3,835	5,199	4,953
By railroads—thous. of bbls.	4,328	4,025	4,064	3,750		4,170	4,477			23,987	25,851	24,788
Stocks at refineries, end mo.—thous. of bbls.	32,998	33,650	36,664	38,302	39,027	37,332	40,075	+1.9	-2.6			
Price, Okla. 24-26, refineries—dollars per bbl.	.805	.788	.744	.675	.625	.675	.695	-7.4	-10.1			
Lubricating oil:												
Production—thous. of bbls.	3,120	3,193	3,185	2,920	3,018	2,928	2,936	+3.4	+2.8	20,215	20,159	21,043
Consumption—thous. of bbls.	2,122	2,116	2,394	1,772	1,887	2,446	2,167	+6.5	-12.9	13,323	14,230	13,104
Stocks at refineries, end mo.—thous. of bbls.	9,561	9,649	9,578	9,742	9,953	7,869	7,524	+2.2	+32.3			
Price, cylinder oil—dollars per gal.	.345	.343	.340	.284	.210	.400	.388	-26.1	-45.9			
Asphalt:												
Production—thous. of short tons.	210	273	337	337	334	327	386	-1.0	-13.5	1,942	1,935	1,863
Stocks, end of month—thous. of short tons.	288	293	317	312	311	247	243	-0.3	+28.0			
Imports—thous. of short tons.	7	1	4	6	6	14	3	0.0	+100.0	65	52	32
Coke:												
Production—thous. of short tons.	161	151	170	163	161	154	158	-0.2	+2.0	782	979	1,092
Stocks, end of month—thous. of short tons.	786	817	866	891	942	498	564	+5.7	+67.0			
Wax:												
Production—thous. of lbs.	61,320	54,040	45,920	43,680	45,640	52,714	46,171	+4.5	-1.1	359,391	375,928	353,920
Stocks, end of mo.—thous. of lbs.	232,241	241,853	248,524	249,748	254,999	188,764	191,298	+2.1	+33.3			
<b>RUBBER</b>												
<b>Crude Rubber</b>												
World shipments, plantation—long tons.	70,347	63,127	72,485	53,494		61,390	71,562			264,530	426,414	411,653
Imports (including latex)—long tons.	45,254	45,648	42,994	40,382	35,424	41,828	44,338	-12.3	-20.1	241,399	365,564	300,604
Consumption by tire mfrs.—thous. of lbs.	43,911	51,152	52,130	45,706	39,365	56,861	52,249	-13.9	-24.7	334,123	413,866	314,769
World stocks, end of month:												
World total—long tons.	373,097	378,052	378,972	383,677		245,553	255,247					
United States—long tons.	141,843	148,272	146,179	151,485		92,062	95,536					
Europe—long tons.	93,232	100,725	105,035	109,892		37,135	37,168					
Producing countries—long tons.	41,725	43,176	41,923	39,300		36,336	39,131					
Afloat—long tons.	96,297	85,875	85,835	77,299		80,020	83,412					
Wholesale price, smoked sheets, New York—dollars per pound.	.153	.150	.142	.124	.115	.206	.213	-7.3	-46.0			
<b>Tires and Tubes</b>												
Pneumatic tires:												
Production—thousands.	3,891	4,518	4,574	4,098	3,193	5,478	4,856	-22.1	-34.2	33,576	38,221	27,508
Stocks, end of month—thousands.	10,010	10,461	10,745	10,622	9,449	13,468	11,872	-11.0	-20.4			
Shipments—												
Domestic—thousands.	3,587	3,886	3,960	4,050	4,229	5,288	5,723	+4.4	-26.1	31,623	34,713	26,210
Export—thousands.	186	186	213	185	129	153	168	-30.3	-23.2	1,033	1,441	1,283
Inner tubes:												
Production—thousands.	3,953	4,408	4,428	3,960	3,151	5,234	4,634	-20.4	-32.0	35,301	36,904	27,292
Stocks, end of month—thousands.	10,543	11,028	11,082	10,889	9,326	14,056	12,249	-14.4	-23.9			
Shipments—												
Domestic—thousands.	3,682	3,769	3,940	4,082	4,594	5,115	5,993	+12.5	-23.3	33,221	35,449	27,189
Export—thousands.	99	109	119	131	90	98	91	-31.3	-1.1	643	942	781
Solid and cushion:												
Production—thousands.	19	17	17	17	13	40	39	-23.5	-66.7	304	256	130
Stocks, end of month—thousands.	123	117	108	107	101	133	129	-5.6	-21.7			
Shipments—												
Domestic—thousands.	22	23	23	18	19	38	39	+5.6	-51.3	282	256	144
Export—thousands.	2	2	1	2	1	3	2	-50.0	-50.0	27	17	12
Rubber-proofed fabrics, production:												
Total—thous. of yds.	3,570	4,029	3,597	3,379	2,940	4,409	4,260	-13.0	-31.0	19,455	27,337	24,237
Auto fabrics—thous. of yds.	727	1,368	1,239	851	608	1,199	1,188	-28.6	-48.8	5,670	6,598	6,644
All other—thous. of yds.	1,211	1,071	1,025	1,042	917	1,262	1,208	-12.0	-24.1	5,370	8,814	7,423
Raincoat fabrics—thous. of yds.	1,632	1,590	1,333	1,486	1,415	1,948	1,864	-4.8	-4.1	8,415	11,925	10,170

\* Cumulative through June 30.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1930					1929		PER CENT INCREASE (+) IN-DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey."</i>												
<b>RUBBER—Continued</b>												
<b>Other Rubber Products</b>												
Rubber heels:												
Production.....thous. of pairs..	15,439	17,762	15,603	15,795	15,117	20,007	19,315	-4.3	-21.7	136,001	132,299	109,358
Shipments—												
To shoe manufacturers.....thous. of pairs..	8,458	9,201	7,432	10,287	11,668	12,282	13,785	-13.4	-15.4	70,443	81,488	66,872
To repair trade.....thous. of pairs..	7,189	4,641	5,221	5,186	5,053	8,256	6,337	-0.1	-20.3	52,601	50,174	38,817
For export.....thous. of pairs..	956	1,096	776	829	938	926	794	+13.1	+18.1	6,113	7,556	6,675
Stocks, end of month.....thous. of pairs..	36,541	37,618	38,595	38,852	35,424	44,581	44,243	-8.8	-19.0			
Rubber soles:												
Production.....thous. of pairs..	2,582	2,593	1,939	2,734	2,663	2,502	1,295	-2.6	+105.6	23,742	18,805	18,345
Shipments—												
To shoe manufacturers.....thous. of pairs..	2,055	1,956	1,506	2,549	2,627	2,185	1,272	+3.1	+106.5	13,275	14,798	15,927
To repair trade.....thous. of pairs..	407	380	332	309	364	522	163	+17.7	+123.1	6,532	4,264	2,675
For export.....thous. of pairs..	54	28	27	31	34	17	70	+10.0	-52.0	1,843	356	368
Stocks, end of month.....thous. of pairs..	3,349	3,272	3,019	3,307	2,876	3,843	2,895	-13.0	-0.6			
Mechanical rubber goods:												
Shipments—												
Total.....thous. of dolls..	5,981	5,989	6,163	5,318	4,910	6,792	6,306	-7.7	-22.1	41,096	46,502	38,906
Beiting.....thous. of dolls..	1,379	1,309	1,310	1,238	1,364	1,613	1,645	+10.2	-17.1	9,790	10,988	9,031
Hose.....thous. of dolls..	2,500	2,593	2,703	2,199	1,856	2,658	2,355	-15.6	-21.2	15,973	17,768	16,075
All other.....thous. of dolls..	2,101	2,087	2,150	1,881	1,690	2,521	2,305	-10.2	-26.7	15,342	17,747	13,798
Rubber bands, shipments.....thous. of lbs..	248	197	211	177	174	187	192	-1.7	-9.4	1,340	1,562	1,463
Rubber flooring, shipments.....thous. of sq. ft..	533	570	615	634	525	566				3,446	3,307	3,341
Calendered rubber clothing:												
Production.....no. coats and sundries..	78,858	86,471	75,719	55,411	-----	87,530	89,871			685,557	6475,124	6418,342
Net orders.....no. coats and sundries..	97,612	89,862	110,520	21,249	-----	98,444	60,921			423,193	374,596	390,449
<b>HIDES AND LEATHER</b>												
<b>Hides</b>												
Imports:												
Total hides and skins.....thous. of lbs..	40,097	50,966	54,900	37,407	27,960	41,509	49,910	-25.3	-44.0	333,316	274,228	285,540
Calfskins.....thous. of lbs..	2,408	2,815	5,720	3,505	1,295	6,559	5,636	-63.1	-77.0	27,281	26,691	21,014
Cattle hides.....thous. of lbs..	21,169	31,007	26,839	13,992	11,504	17,450	24,259	-17.8	-52.6	189,333	125,798	131,037
Goatskins.....thous. of lbs..	9,670	7,827	12,270	10,016	7,455	8,309	9,361	-25.6	-20.4	55,788	60,941	60,054
Sheepskins.....thous. of lbs..	2,971	6,186	6,284	7,626	6,219	6,824	6,849	-18.5	-9.2	39,172	40,117	38,474
Stocks, end of month:												
Total hides and skins.....thous. of lbs..	268,158	270,286	281,523	286,666	279,114	250,025	248,549	-2.6	+12.3			
Cattle hides.....thous. of lbs..	218,308	218,530	223,025	224,209	217,302	196,202	194,453	-3.1	+11.8			
Calf and kip skins.....thous. of lbs..	25,478	25,538	30,006	30,034	27,725	32,525	30,951	-7.6	-10.4			
Sheep and lamb skins.....thous. of lbs..	24,372	26,218	28,492	32,423	34,087	21,298	23,145	+5.1	+47.3			
Prices:												
Green salted, packers' heavy												
native steers.....dolls. per lb..	.142	.140	.143	.152	.141	.168	.181	-7.2	-22.1			
Calfskins, country, No. 1.....dolls. per lb..	.156	.159	.169	.175	.165	.186	.199	-5.7	-17.1			
Inspected slaughter of livestock:												
United States—												
Cattle.....thous. of animals..	615	635	690	654	710	636	706	+8.6	+0.6	4,756	4,617	4,578
Calves.....thous. of animals..	388	455	421	356	375	344	363	+5.3	+3.3	2,835	2,683	2,698
Swine.....thous. of animals..	3,392	3,480	3,823	3,689	3,187	3,756	3,597	-13.6	-11.4	30,710	28,773	26,606
Sheep.....thous. of animals..	1,358	1,387	1,370	1,295	1,411	1,108	1,255	+9.0	+12.4	7,333	7,793	9,233
Canada—												
Cattle and calves.....thous. of animals..	74	100	108	81	81	93	105	0.0	-22.9	626	615	569
Swine.....thous. of animals..	168	162	174	159	127	161	159	-20.1	-20.1	1,576	1,387	1,165
Sheep.....thous. of animals..	24	27	23	36	56	25	55	+55.6	+1.8	164	193	217
<b>Leather</b>												
Sole and belting leather:												
Production—												
Sole only.....thous. of backs, bends, sides..	1,292	1,332	1,340	7,1,310	1,348	1,244	1,176	+2.9	+14.6	9,426	8,275	9,220
Sole and belting.....thous. of lbs..	24,551	24,854	24,355	23,542	23,894	25,103	24,161	+1.5	-1.1	171,691	162,333	170,192
Stocks, end of month—												
In process of tanning.....thous. of lbs..	84,300	85,760	85,495	74,799	76,863	79,153	80,641	+2.8	-4.7			
Finished.....thous. of lbs..	69,876	69,805	72,724	77,946	85,953	70,616	68,588	+10.3	+25.4			
Exports.....thous. of sq. ft..	579	450	669	849	640	758	832	+24.6	-23.1	5,702	6,938	4,374
Price oak, scoured backs.....dolls. per lb..	.49	.47	.46	.44	.49	.49	.51	+4.5	-9.8			
Upper leather:												
Production.....thous. of sq. ft..	68,997	63,027	60,699	60,514	62,016	66,425	71,323	+2.4	-13.1	473,284	462,063	446,799
Stocks, end of month—												
In process of tanning.....thous. of sq. ft..	139,865	138,975	141,190	141,506	150,297	135,198	141,207	+6.2	+6.4			
Finished.....thous. of sq. ft..	256,867	256,155	255,738	262,621	259,561	235,156	230,871	-1.2	+12.4			
Exports.....thous. of lbs..	10,375	8,684	11,481	8,765	7,287	8,491	9,267	-16.9	-21.4	84,994	71,137	63,675
Price, chrome calf black "B" grade composite price, 6 cents.....dolls. per sq. ft..	.379	.372	.371	.371	.393	.388	.393	+5.9	0.0			
<b>Leather Products</b>												
Shoes:												
Production.....thous. of pairs..	28,625	29,001	24,512	7,23,904	23,958	28,120	30,223	+0.2	-20.7	196,633	202,737	182,432
Exports.....thous. of pairs..	293	175	302	257	256	357	320	-0.4	-20.0	2,627	2,607	1,762
Wholesale prices:												
Men's black calf blucher, Boston												
dolls. per pair..	6.75	6.75	6.75	6.75	6.75	6.75	6.75	0.0	0.0			
Men's dress welt, tan calf oxford, St. Louis												
dolls. per pair..	4.85	4.85	4.85	4.85	4.85	4.85	4.85	0.0	0.0			
Women's black kid, dress												
welt lace oxford.....dolls. per pair..	4.25	4.25	4.25	4.25	4.25	4.25	4.25	0.0	0.0			
Gloves, cut.....dozen pairs..	264,372	251,140	240,495	237,377	209,873	252,703	255,711	-11.6	-17.9	1,461,175	1,742,281	1,748,807

\* Cumulative through June 30.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<b>PAPER AND PRINTING</b>												
<b>Wood Pulp</b>												
Groundwood:												
Production	163,392	158,709	162,911	140,603	106,463	142,915	122,946	-24.3	-13.4	970,622	1,017,861	1,011,593
Consumption and shipments	135,389	132,728	136,293	124,903	119,315	136,669	136,695	-4.5	-12.7	958,673	971,218	924,515
Stocks, end of month	99,218	123,002	147,710	160,766	144,993	185,269	171,535	-9.8	-15.5			
Imports	27,329	20,634	17,432	17,534	17,186	24,014	18,724	-7.3	-8.2	139,330	143,637	168,643
Sulphite, unbleached:												
Production	21,638	22,090	21,200	19,464	18,860	19,962	20,726	-3.1	-9.0	70,820	140,016	208,406
Consumption and shipments	22,160	21,382	20,488	19,398	18,530	20,462	20,368	-4.5	-9.0	70,446	141,552	144,512
Stocks, end of month	3,528	4,236	2,948	4,976	5,306	2,216	2,574	+6.6	+106.1			
Imports	45,624	41,621	47,042	64,686	57,317	71,450	83,101	-11.4	-31.0	391,189	448,034	439,023
Sulphite, bleached:												
Production	57,088	54,122	52,738	50,096	42,136	48,540	49,030	-15.9	-14.1	174,150	362,526	366,264
Consumption and shipments	56,620	53,672	52,652	47,892	42,986	48,632	48,764	-10.2	-11.9	174,101	362,324	364,248
Stocks, end of month	6,436	6,886	6,972	9,200	8,250	5,514	5,780	-10.3	+42.7			
Imports	32,545	30,153	25,548	30,956	28,255	33,382	31,151	-8.7	-9.3	190,116	219,341	213,049
Total sulphite:												
Production	156,194	146,790	146,280	137,768	123,718	145,246	143,250	-10.2	-13.6	119,291	1,041,724	1,014,700
Consumption and shipments	153,332	144,104	146,014	136,578	124,326	145,172	143,790	-9.0	-13.5	120,196	1,046,282	1,009,952
Stocks, end of month	25,680	28,366	28,632	29,858	29,250	23,078	22,538	-2.0	+29.8			
Sulphate:												
Production	44,100	46,790	46,134	41,290	40,562	76,656	50,084	-1.8	-31.4	261,727	333,898	300,716
Consumption and shipments	41,822	44,122	43,504	39,066	38,754	75,592	57,542	-0.8	-32.7	263,017	334,378	288,988
Stocks, end of month	10,666	10,484	10,296	9,998	9,088	79,022	10,564	-9.1	-14.0			
Soda:												
Production	38,158	37,814	38,532	32,366	30,326	750,418	48,600	-6.3	-37.6	123,377	288,424	251,582
Consumption and shipments	34,872	34,976	35,676	30,004	28,984	748,968	49,488	-3.4	-41.4	123,280	283,760	234,636
Stocks, end of month	6,006	5,538	5,632	5,426	79,436	8,548	-0.1	-36.6				
Other grades:												
Production	126	110	188	196	160	72	58	-18.4	+175.9	363	436	1,008
Consumption and shipments	118	152	168	214	160	150	38	-25.2	+321.1	402	500	1,028
Stocks, end of month	64	22	42	24	24	18	38	0.0	-36.9			
Total (all grades):												
Production	238,578	231,504	231,134	211,620	194,766	7256,392	7250,992	-8.0	-22.4	1,499,432	1,664,382	1,604,424
Consumption and shipments	230,144	223,354	225,362	205,862	192,224	7253,496	7250,858	-6.6	-23.4	1,504,116	1,664,920	1,603,900
Stocks, end of month	42,416	44,710	44,622	45,306	43,782	741,554	741,688	-3.4	+5.0			
<b>Newsprint Paper</b>												
Production:												
United States, total	113,328	109,967	118,093	108,398	102,840	113,407	111,578	-5.1	-7.8	828,661	809,220	789,871
Ratio to capacity	\$0	78	80	80	73	81	77	-8.8	-5.2			
Canada	207,485	228,048	237,681	213,634	216,978	225,055	229,045	+1.6	-5.3	1,345,687	1,539,066	1,499,285
Consumption by publishers:												
United States	109,686	109,346	114,702	106,883	103,018	114,558	112,616	-3.6	-8.5	809,028	822,203	778,611
Canada	208,629	221,050	239,034	212,670	209,511	233,920	227,502	-1.5	-7.9	1,333,667	1,444,295	1,471,593
Shipments:												
United States	187,513	186,025	207,605	206,927	193,595	202,398	210,497	-6.5	-8.0	1,206,905	1,342,014	1,334,423
Exports, Canada	225,252	159,802	225,251	194,322	199,060	219,895	199,692	+2.4	-0.3	1,232,836	1,409,993	1,366,664
<b>Newsprint</b>												
Stocks, end of month:												
At mills—												
United States	24,004	24,546	27,924	29,507	29,284	24,602	23,603	-0.8	+24.1			
Canada	38,661	45,948	44,409	45,229	52,862	24,199	28,993	+16.9	+82.3			
At publishers	210,054	197,621	199,363	200,651	221,368	161,318	191,647	+10.3	+15.5			
In transit to publishers	42,915	44,690	46,702	36,274	32,422	48,716	44,781	-10.6	-27.6			
<b>Box-Board</b>												
Operation:												
Inch-hours	8,643	8,581	8,378	7,842	7,956	9,013	9,228	+1.5	-13.8	58,051	65,229	59,144
Capacity	73.3	72.7	71.5	69.1	67.4	76.9	75.7	-2.5	-11.0			
Production	230,679	245,167	240,187	221,525	221,696	233,164	244,318	+0.1	-9.3	1,573,275	1,754,716	1,617,912
New orders	226,770	249,848	234,405	221,526	216,391	223,723	244,510	-2.3	-11.5	1,572,454	1,726,114	1,606,727
Unfilled orders, end of month	58,591	66,886	63,237	58,866	66,562	73,330	76,101	+13.1	-12.5			
Consumption of waste paper	229,909	230,993	232,581	210,793	207,047	232,060	214,574	-1.8	-3.5	1,455,110	1,644,747	1,551,328
Shipments	229,625	241,458	238,070	225,336	222,335	236,147	242,696	-1.3	-8.4	1,565,177	1,743,283	1,612,092
Stocks, end of month	67,492	72,071	74,908	70,904	72,412	61,747	62,779	+2.1	+15.3			
Stocks of waste paper, end of month:												
On hand	192,957	181,125	185,972	184,451	173,386	156,352	170,745	-6.0	+1.5			
In transit and unshipped purchases	54,629	51,950	34,919	38,241	43,393	55,543	62,967	+13.5	-31.1			
<b>Other Paper</b>												
Book paper:												
Production	132,883	136,869	124,551	711,096	105,370	129,743	130,768	-6.0	-19.4	878,289	927,230	882,352
Ratio to capacity	98	101	93	87	78	94	91	-10.4	-14.3			
Shipments	125,574	126,604	122,094	107,612	110,737	130,132	130,245	+2.9	-15.0	865,000	935,145	861,479
Stocks, end of month	98,309	110,106	117,813	120,169	117,766	74,255	74,998	-2.0	+57.0			
New orders—												
Coated p. ct. of normal production	93	89	67	81	71	84	82	-12.3	-13.4			
Uncoated p. ct. of normal production	83	86	73	87	78	82	81	-10.3	-3.7			
Unfilled orders, end of month—												
Coated p. ct. of normal production	10	11	10	10	7	9	10	-30.0	-30.0			
Uncoated p. ct. of normal production	8	7	6	6	6	8	9	0.0	-33.3			
Wrapping paper:												
Production	86,561	88,639	85,346	77,138	73,915	87,191	84,093	-4.2	-12.1	659,681	637,304	573,513
Ratio to capacity	90	88	86	84	77	85	79	-8.3	-2.5			
Shipments	86,732	87,080	84,322	79,375	87,914	86,406	85,775	+10.8	+2.5	650,567	639,473	590,327
Stocks, end of month	80,311	80,421	81,414	79,207	73,149	88,091	86,233	-7.7	-15.2			
Fine paper:												
Production	42,560	41,133	38,689	33,854	33,290	38,513	37,624	-1.7	-11.5	272,141	276,981	269,930
Ratio to capacity	97	87	79	74	70	90	85	-5.4	-17.7			
Shipments	40,006	38,088	38,031	29,995	32,657	37,897	36,608	+8.9	-10.8	269,144	280,632	250,223
Stocks, end of month	57,930											

## TREND OF BUSINESS MOVEMENTS—Continued

	1930					1929		PER CENT INCREASE (+) IN-DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey."</i>												
<b>PAPER AND PRINTING—Continued</b>												
<b>Other Paper—Continued</b>												
All other grades:												
Production.....short tons..	90,489	96,160	92,442	93,149	78,272	100,807	100,503	-16.0	-22.1	709,126	727,937	644,519
Shipments.....short tons..	87,437	92,072	92,528	88,119	82,814	100,098	101,783	-6.0	-18.6	703,127	618,973	640,707
Stocks, end of month.....short tons..	62,771	66,858	66,773	71,803	66,367	59,875	57,592	-7.6	+15.2			
Total paper (inc. newsprint and box board):												
Production.....short tons..	698,578	715,857	699,308	746,160	615,383	710,713	751,102	-4.8	-13.4	4,921,173	5,121,989	4,800,158
Ratio to capacity.....per cent..	92	81	77	78	71	83	83	-9.0	-14.5			
Shipments.....short tons..	679,060	694,648	689,756	641,370	639,475	705,288	709,723	-0.3	-9.9	4,873,974	5,141,800	4,748,538
Stocks, end of month.....short tons..	390,817	412,339	429,058	435,681	423,708	358,673	352,788	-0.5	+22.9			
<b>Paper-board Shipping Boxes</b>												
Operating activity:												
Total.....per cent of normal..	77	75	74	73	72	85	80	-1.4	-10.0			
Corrugated.....per cent of normal..	80	78	76	74	73	87	82	-1.4	-11.0			
Solid fiber.....per cent of normal..	69	65	68	69	68	74	82	-1.5	-17.1			
Production:												
Total.....thous. of sq. ft..	486,475	487,482	483,965	498,165	461,148	506,830	481,762	-7.4	-4.3	2,916,623	3,426,938	3,380,754
Corrugated.....thous. of sq. ft..	401,160	395,832	390,884	393,130	374,709	406,908	384,885	-7.7	-4.3	1,895,144	2,699,619	2,716,930
Solid fiber.....thous. of sq. ft..	85,315	91,650	93,081	97,474	86,439	99,922	96,877	-11.3	-10.8	655,747	727,319	646,263
Rope paper sacks, shipments.....rel. to 1921-22..	92	90	80	87	85	96	85	-2.3	0.0			
<b>Printing</b>												
Sales books:												
New orders.....thous. of books..	12,347	11,664	11,730	12,688	10,903	12,332	11,476	-14.1	-5.0	86,618	86,214	84,044
Shipments.....thous. of books..	12,176	12,237	10,967	12,540	10,572	12,445	13,737	-15.7	-23.0	82,087	87,077	82,072
Book publication:												
American manufacture.....no. of titles..	790	646	621	440	418	695	501	-5.0	-16.6	4,610	4,618	3,878
Imported.....no. of titles..	338	241	147	71	74	125	131	+4.2	-43.5	905	963	1,278
Blank forms, new orders.....thous. of sets..	72,340	54,901	68,630	64,544	59,152	58,687	57,225	-8.4	+3.4	312,207	419,259	438,681
Printing activity.....relative to 1924..	108	107	104	96		101	103					
<b>BUILDING CONSTRUCTION AND HOUSING</b>												
<b>Building Costs</b>												
Building materials:												
Frame house, 6-rm, 1st of mo.....rel. to 1913..	177	173	177	175		176	177					
Brick house, 6-rm, 1st of mo.....rel. to 1913..	181	176	181	179		181	182					
Bld. costs, 1st of mo.....rel. to 1913..	206.8	207.2	205.9	203.4	201.0	205.7	204.8	-1.2	-1.9			
Bldg. costs (A. G. C.), 1st of mo.....rel. to 1913..	203	201	201	200	199	203	202	-0.5	-1.5			
Construction costs (Am. Appraisal):												
Frame.....rel. to 1913..	202	202	201	198	197	204	204	-0.5	-3.4			
Brick, steel frame.....rel. to 1913..	196	196	196	193	193	197	197	0.0	-2.0			
Brick, wood frame.....rel. to 1913..	213	213	213	212	211	214	214	-0.5	-1.4			
Reinforced concrete.....rel. to 1913..	201	200	200	198	197	201	200	-0.5	-1.5			
<b>Contracts and Fire Losses</b>												
Contracts awarded (37 States):												
Commercial buildings.....thous. of sq. ft..	12,723	10,510	9,897	9,897	7,331	13,934	14,420	-25.9	-49.2	95,313	101,588	69,263
Industrial buildings.....thous. of sq. ft..	6,191	5,119	8,023	4,359	5,300	8,434	9,651	+21.6	-45.1	52,806	60,699	36,653
Residential buildings.....thous. of sq. ft..	20,713	25,402	23,462	20,782	18,231	36,485	37,759	-12.3	-51.7	354,138	264,595	137,623
Educational buildings.....thous. of sq. ft..	6,135	5,842	6,213	6,730	6,514	6,663	6,944	-3.2	-6.2	37,552	37,312	38,389
Other public and semi-public buildings.....thous. of sq. ft..	7,451	8,253	5,546	5,586	6,509	5,439	6,212	+16.5	+4.8	43,463	35,265	40,283
Grand total.....thous. of sq. ft..	53,505	56,603	53,732	48,214	44,604	71,826	75,464	-7.5	-40.9	586,677	504,308	327,819
Contracts awarded, value (37 States):												
Commercial buildings.....thous. of dolls..	77,002	73,241	73,340	59,080	46,941	80,884	91,348	-20.6	-48.6	563,219	580,918	456,559
Industrial buildings.....thous. of dolls..	74,333	38,121	54,566	93,619	35,167	70,036	66,604	-62.4	-47.2	338,831	460,677	367,571
Residential buildings.....thous. of dolls..	101,492	123,142	116,569	96,816	84,333	173,809	199,925	-12.9	-57.8	1,759,564	1,286,996	663,747
Educational buildings.....thous. of dolls..	35,350	35,156	36,890	48,919	42,748	43,417	47,979	-12.6	-10.9	237,797	237,296	239,311
Other public and semi-public buildings.....thous. of dolls..	62,593	63,548	41,138	50,225	43,473	40,904	52,032	-13.5	-16.5	350,979	299,570	323,756
Public works and utilities.....thous. of dolls..	105,350	149,670	134,913	251,916	114,866	120,841	194,547	-54.4	-41.0	777,908	702,526	934,605
Grand total.....thous. of dolls..	456,119	482,877	457,416	600,573	367,528	529,891	652,436	-38.8	-43.7	4,028,300	3,667,984	3,005,541
Contracts awarded, Canada.....thous. of dolls..	24,263	48,779	46,862	54,728	37,374	72,420	57,941	-31.7	-35.5	294,617	336,063	278,000
Building volume (A. G. C.).....rel. to 1913..	131	146	176	191	199	231	218	+4.2	-8.7			
Fire losses:												
United States.....thous. of dolls..	42,964	43,551	38,415	31,818	34,848	33,606	31,986	+9.5	+8.9	192,155	262,079	277,147
Canada (Monetary Times).....thous. of dolls..	3,783	2,331	3,941	3,266	2,560	3,079	5,027	-21.6	-49.1	15,081	20,824	23,393
<b>BUILDING MATERIALS</b>												
<b>Softwood Lumber</b>												
Southern pine:												
Exports, lumber.....M ft. b. m..	49,870	44,788	45,109	47,429	34,276	59,263	57,275	-27.7	-40.2	425,283	420,835	317,750
Exports, timber.....M ft. b. m..	17,445	12,412	11,375	14,970	10,500	9,311	17,474	-29.9	-39.9	110,290	71,110	88,254
Price, flooring.....dolls. per M ft. b. m..	37.20	36.39	36.53	33.06	33.89	37.04	37.27	+2.5	-9.1			
Douglas fir:												
Production (computed).....M ft. b. m..	329,021	329,021	307,982			334,841	302,162					
Shipments (computed).....M ft. b. m..	297,238	286,495	294,552			371,995	319,621					
New orders (computed).....M ft. b. m..	290,076	292,314	291,419			354,537	306,639					
Unfilled orders, end of month.....M ft. b. m..	216,662	265,903	201,889			278,437	328,574					
Exports, lumber.....M ft. b. m..	45,184	70,343	60,420	35,004	61,813	83,966	98,179	-27.3	-37.1	458,309	562,111	408,357
Exports, timber.....M ft. b. m..	37,143	41,142	46,979	41,849	22,369	51,571	43,932	-46.6	-49.1	342,256	332,240	254,233
Price, No. 1 common, dolls. per M ft. b. m..	16.75	16.26	15.16	14.30	14.47	18.74	18.72	+1.2	-22.7			
Price, flooring, 1 x 4, "B" and better, V. G. dolls. per M ft. b. m..	41.12	38.87	38.19	36.94	36.57	42.69	42.73	-1.0	-14.4			

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1930					1929		PER CENT INCREASE (+) IN-DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July		1928	1929	1930
<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"</i>											
<b>BUILDING MATERIAL</b> —Continued											
<b>Softwood Lumber</b> —Continued											
California redwood:											
Production (computed) M ft. b. m.	34,959	39,146	29,650	31,095	28,335	37,866	28,435	-8.9	-0.4	280,111	259,822
Shipments (computed) M ft. b. m.	31,097	38,576	29,566	28,384	31,305	41,507	28,672	+10.3	+9.2	267,780	259,487
New orders (computed) M ft. b. m.	29,768	36,401	30,052	26,092	30,574	38,776	35,657	+17.2	-14.3	277,112	282,594
Unfilled orders, end of month (computed) M ft. b. m.	32,403	31,080	30,880	25,815	26,254	40,257	47,235	+1.7	-44.4	—	—
California white pine:											
Production M ft. b. m.	38,096	62,446	102,977	100,203	—	118,422	120,968	—	—	—	—
Shipments M ft. b. m.	81,599	79,924	79,984	64,825	—	98,779	97,302	—	—	—	—
Stocks, end of month M ft. b. m.	457,060	507,578	527,755	539,495	—	463,175	486,416	—	—	—	—
New orders M ft. b. m.	72,947	75,243	76,836	64,689	—	105,832	88,208	—	—	—	—
Unfilled orders, end of month M ft. b. m.	155,699	145,217	145,312	141,944	—	156,475	150,643	—	—	—	—
Northern pine:											
Lumber:											
Production M ft. b. m.	15,549	30,690	34,543	41,891	37,849	50,537	50,733	-9.7	-25.4	287,033	268,190
Shipments M ft. b. m.	28,127	26,548	27,422	25,160	22,101	44,197	44,825	-12.2	-50.7	282,118	286,234
New orders M ft. b. m.	23,858	25,629	21,076	19,962	—	37,142	40,012	-17.8	-50.1	268,767	263,504
Lath:											
Production thousands	571	3,215	4,770	4,558	5,214	6,918	8,822	+14.4	-40.9	59,517	43,979
Shipments thousands	3,524	4,861	3,815	4,001	4,473	10,256	10,083	+11.8	-55.6	56,630	57,427
North Carolina pine:											
Production (computed) M ft. b. m.	43,526	41,979	38,346	35,917	26,803	58,270	47,831	-25.4	-44.0	358,428	409,444
Shipments (computed) M ft. b. m.	39,683	39,627	36,666	38,164	30,730	59,080	50,946	-19.5	-39.7	371,706	399,875
Northern hemlock:											
Production M ft. b. m.	11,213	10,700	10,595	9,555	13,245	13,527	15,359	+38.6	-13.8	114,523	105,041
Shipments M ft. b. m.	8,919	8,616	9,539	8,455	8,033	16,262	18,614	-5.0	-56.9	108,086	94,437
<b>Hardwood Lumber</b>											
Walnut lumber:											
Production M ft. b. m.	2,599	2,654	1,786	1,850	1,312	4,532	3,839	-29.1	-65.8	20,714	25,350
Shipments M ft. b. m.	1,860	2,069	1,717	1,696	1,123	3,699	3,570	-33.8	-68.6	20,267	25,617
Stocks, end of month M ft. b. m.	18,905	19,503	19,634	20,281	20,454	12,960	12,640	+0.9	+61.8	—	12,306
New orders M ft. b. m.	1,732	1,638	1,476	1,989	1,031	3,625	3,627	-48.2	-71.6	20,371	26,523
Unfilled orders, end of month M ft. b. m.	3,886	3,408	3,389	3,970	4,016	7,636	6,474	+1.2	-38.0	—	11,382
Walnut logs:											
Purchased M ft. log measure	1,788	1,820	1,008	712	598	3,711	2,951	-16.0	-79.7	17,097	19,815
Made into lumber and veneer M ft. log measure	2,138	2,011	1,588	1,268	943	3,241	3,217	-25.6	-70.7	17,481	19,465
Stocks, end of month M ft. log measure	2,364	2,093	1,649	1,198	885	2,253	2,773	-26.1	-68.1	—	11,787
Northern hardwoods:											
Production M ft. b. m.	25,788	23,851	19,560	16,321	14,363	31,348	24,961	-12.0	-42.5	247,651	242,100
Shipments M ft. b. m.	18,513	18,201	18,479	13,345	12,649	24,444	24,413	-5.2	-48.2	192,059	191,643
Lower Michigan hardwoods:											
Production M ft. b. m.	—	—	—	—	—	—	—	—	—	—	—
Shipments M ft. b. m.	—	—	—	—	—	—	—	—	—	—	—
Stocks, end of month M ft. b. m.	—	—	—	—	—	—	—	—	—	—	—
Gum:											
Stocks, total, end of month mill. ft. b. m.	552	573	587	598	609	475	465	+1.8	+31.0	—	—
Stocks, unsold, end of month mill. ft. b. m.	422	442	456	470	488	325	318	+3.8	+53.4	—	—
Unfilled order, end of month mill. ft. b. m.	130	130	131	128	120	150	147	-6.0	-18.3	—	—
Oak:											
Stocks, total, end of month mill. ft. b. m.	1,055	1,051	1,038	1,049	1,044	923	955	-0.5	+9.3	—	—
Stocks, unsold, end of month mill. ft. b. m.	865	870	885	917	929	747	785	+1.3	+15.3	—	—
Unfilled orders, end of month mill. ft. b. m.	189	181	153	132	115	176	169	-13.0	-32.0	—	—
All hardwoods:											
Production mill. ft. b. m.	270	255	240	214	172	300	311	-19.8	-44.8	1,835	2,168
Shipments mill. ft. b. m.	221	218	203	165	150	285	278	-9.0	-46.0	1,842	2,139
New orders mill. ft. b. m.	203	199	195	143	128	277	278	-10.8	-54.0	1,913	2,176
Stocks, total, end of month mill. ft. b. m.	3,141	3,182	3,217	3,294	3,323	2,681	2,731	+0.9	+21.7	—	—
Stocks, unsold, end of month mill. ft. b. m.	2,500	2,555	2,614	2,737	2,795	2,030	2,088	+2.1	+33.9	—	—
Unfilled orders, end of month mill. ft. b. m.	641	627	603	557	526	657	643	-5.6	-18.4	—	—
<b>Flooring</b>											
Maple flooring:											
Production M ft. b. m.	5,382	5,719	5,271	3,968	3,755	5,418	6,450	-5.4	-41.8	52,520	44,839
Shipments M ft. b. m.	4,761	4,768	5,357	4,469	5,175	6,420	7,883	+15.8	-34.4	55,123	46,042
Stocks, end of month M ft. b. m.	31,017	31,122	30,674	30,170	28,786	20,964	21,913	-4.6	+31.4	—	32,926
New orders M ft. b. m.	3,953	4,204	4,604	4,083	3,881	3,822	6,159	-5.0	-37.0	54,650	45,853
Unfilled orders, end of month M ft. b. m.	5,418	5,353	5,224	5,430	4,388	10,600	10,431	-19.2	-57.9	—	28,666
<b>Fabricated Structural Steel</b>											
New orders (prorated) short tons	248,000	236,000	296,000	276,000	284,000	346,500	350,350	+2.9	-18.9	1,867,250	2,271,500
Ratio to capacity per cent	62	59	74	69	71	90	91	+2.9	-22.0	—	1,876,000
Shipments (prorated) short tons	280,000	304,000	280,000	300,000	304,000	288,750	304,150	+1.3	-0.1	1,690,150	2,005,850
Ratio to capacity per cent	70	75	70	75	76	75	79	+1.3	-3.8	—	2,000,000
<b>Portland Cement</b>											
Production thous. of bbls.	11,225	13,521	17,249	7,17,239	17,080	16,803	17,315	-0.9	-1.4	94,535	92,391
Operation per ct. of capacity	51.5	64.0	78.9	81.4	77.8	80.9	80.4	-4.4	-3.2	—	92,944
Shipments thous. of bbls.	8,826	13,340	17,224	7,18,781	20,147	18,949	20,319	+7.3	-0.9	93,854	90,567
Stocks, end of month thous. of bbls.	30,648	30,867	30,891	7,29,364	26,298	27,505	24,525	-10.5	+7.2	—	90,285
Stocks, clinker, end of month thous. of bbls.	13,503	15,165	14,668	7,13,452	15,069	13,587	11,619	+12.2	+29.7	—	—
Wholesale prices, composite dollars per bbl.	1,617	1,617	1,608	1,600	1,600	1,617	1,650	0.0	-3.0	—	—
Common brick:											
Stocks, end of month thousands	368,833	327,657	303,971	7,390,782	341,993	308,257	290,044	-12.5	+17.9	—	—
Burned thousands	193,430	177,704	171,867	7,213,848	197,069	154,185	95,756	-7.9	+105.8	—	—
Shipments thousands	91,903	104,192	98,833	7,123,694	82,429	154,021	118,834	-33.4	-30.6	1,406,772	946,114
Unfilled orders, end of month thousands	150,396	172,113	137,980	7,182,680	95,101	163,126	148,289	-48.0	-35.9	634,692	—

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<b>BUILDING MATERIALS—Continued</b>												
<b>Portland Cement—Continued</b>												
Plants closed down.....number.....	83	78	69	69	67	50	17	-2.9	+294.1	263	298	618
Price, red, New York.....dolls. per thous..	11.00	11.25	10.50	10.00	10.00	11.00	10.13	0.0	-1.3			
Sand-lime brick:												
Production.....thousands.....	7,406	9,802	12,708	10,317	10,415	17,587	16,061	+0.9	-35.2	110,235	92,176	62,061
Shipments by rail.....thousands.....	2,846	3,910	3,272	2,929	3,102	5,412	4,263	+5.9	-27.2	36,712	28,266	20,904
Shipments by truck.....thousands.....	4,990	5,624	7,559	6,809	6,781	13,757	12,266	-0.4	-44.7	76,239	74,336	39,025
Stocks, end of month.....thousands.....	11,959	11,505	12,975	13,191	14,328	10,447	8,854	+8.6	+61.8			
Unfilled orders, end of month.....thousands.....	12,793	9,229	10,706	9,314	9,797	14,968	14,739	+5.2	-33.5			
Floor and wall tile:												
Production.....thous. of sq. ft.....	3,803	3,579	3,859	3,889	-----	6,247	6,244			631,883	636,583	621,997
Shipments, quantity.....thous. of sq. ft.....	3,030	3,997	4,411	4,301	-----	6,424	6,459			631,825	632,880	622,199
Shipments, value.....thous. of dolls.....	1,175	1,503	1,622	1,541	-----	2,412	2,505			612,046	612,639	68,425
Terra cotta, new orders:												
Quantity.....net tons.....	5,656	7,502	6,990	8,326	7,829	10,798	11,756	-6.0	-33.4	91,079	80,103	50,251
Value.....thous. of dolls.....	579	743	719	734	741	1,178	1,183	+1.0	-37.4	8,652	8,780	4,991
Plate glass:												
Production, polished.....thous. of sq. ft.....	10,416	11,430	12,571	9,128	8,326	12,278	13,057	-8.8	-36.2	74,227	73,976	71,693
<b>Roofing</b>												
Roofing, felt:												
Production, dry felt.....tons.....	21,170	23,543	22,458	20,470	-----	29,981	28,188			175,674	192,605	144,839
Stocks, end of month, dry felt.....tons.....	6,811	6,838	6,322	7,391	-----	3,077	2,846					
Prepared roofing, shipments:												
Total.....thous. of sqs.....	2,240	2,727	2,714	2,384	-----	3,756	3,324			619,790	622,954	613,804
Smooth roll.....thous. of sqs.....	1,062	1,191	1,088	924	-----	1,452	1,338			68,572	610,638	66,199
Grit roll.....thous. of sqs.....	581	676	731	653	-----	988	983			65,401	65,475	63,472
Shingles—												
Strip, patented, and hexagon.....thous. of sqs.....	484	715	730	656	-----	1,107	801			64,827	65,778	63,437
Individual and single thickness.....thous. of sqs.....	113	144	164	151	-----	209	202			6990	61,064	6696
<b>BUILDING EQUIPMENT</b>												
<b>Enamel Ware</b>												
Baths:												
Shipments.....pieces.....	59,887	60,072	59,554	752,189	53,259	89,388	99,705	+2.1	-46.6	705,750	595,972	372,123
Stocks, end of month.....pieces.....	179,910	182,616	180,903	7181,746	173,860	181,677	162,694	-4.3	+6.9			
New orders.....pieces.....	68,672	55,366	49,226	754,829	48,706	82,349	119,670	-11.2	-59.3	820,752	631,060	374,089
Unfilled orders, end of month.....pieces.....	56,420	51,740	41,412	74,050	39,497	61,644	61,118	-10.3	-35.4			
Lavatories:												
Shipments.....pieces.....	81,171	74,526	72,124	762,124	63,876	101,000	108,077	+2.8	-40.9	806,692	675,089	467,760
Stocks, end of month.....pieces.....	170,666	176,181	192,197	7197,117	188,136	246,575	223,675	-4.6	-15.9	936,451	726,987	476,161
New orders.....pieces.....	85,929	66,605	59,961	764,711	56,850	92,709	140,109	-12.2	-59.4			
Sinks:												
Shipments.....pieces.....	79,997	75,176	75,123	761,329	64,516	102,709	114,051	+5.2	-43.4	824,217	704,501	477,015
Stocks, end of month.....pieces.....	248,198	260,237	261,556	7261,633	256,914	298,739	273,463	-1.8	-6.1			
New orders.....pieces.....	83,357	70,101	62,189	62,424	61,913	94,446	138,064	-0.8	-55.2	952,171	755,359	481,177
Miscellaneous sanitary ware:												
Shipments.....pieces.....	33,284	34,212	35,096	727,283	28,520	42,061	44,762	+4.5	-36.3	334,499	274,306	208,202
Stocks, end of month.....pieces.....	145,345	145,544	132,146	7125,505	114,644	142,411	133,265	-8.7	-14.0			
New orders.....pieces.....	36,638	33,791	31,456	727,159	25,419	41,817	54,131	-6.4	-53.1	365,635	294,539	206,585
Small ware (all except baths):												
Unfilled orders, end of month.....pieces.....	167,528	152,304	122,626	7126,062	114,079	154,243	214,996	-9.5	-46.9			
Vitreous china plumbing fixtures:												
New orders.....pieces.....	170,325	133,179	130,784	130,739	-----	196,707	244,351			2,006,076	1,817,293	
Shipments.....pieces.....	211,637	209,366	194,948	159,018	-----	246,071	271,411			1,924,861	1,794,764	
Unfilled orders, end of month.....pieces.....	474,028	397,841	342,677	314,398	-----	438,715	41,655					
Stocks, end of month.....pieces.....	646,235	635,501	626,429	648,820	-----	591,633	582,314					
Porcelain plumbing fixtures:												
Net new orders.....pieces.....	9,044	6,469	7,879	7,367	7,480	9,669	13,153	+1.5	-43.1	186,954	84,634	55,290
Shipments.....pieces.....	5,378	6,502	7,101	6,336	7,448	10,807	11,845	+17.6	+54.0	109,293	75,182	42,332
Unfilled orders, end of month.....pieces.....	35,017	35,078	35,674	34,171	31,234	30,088	-4.2	+13.6				
Stocks, end of month.....pieces.....	39,198	38,240	36,920	37,410	34,259	45,848	37,947	-8.4	-9.7			
Plumbing fixtures, 6 pieces.....dollars.....	104.51	105.46	105.99	99.25	98.18	97.54	97.94	-1.1	+0.2			
<b>Illuminating Glassware</b>												
Production:												
Total.....number of turns.....	2,667	2,532	3,180	2,262	1,663	3,239	1,818	-26.5	-8.5	20,482	22,406	17,788
Ratio to capacity.....per ct. of capacity.....	34.4	37.8	36.6	36.5	28.8	46.3	18.7	-21.1	+54.0			
New Orders.....per ct. of capacity.....	38.6	41.5	38.2	36.1	26.8	44.6	40.1	-25.8	+3.9			
Shipments.....per ct. of capacity.....	37.1	38.8	33.6	36.2	28.0	45.1	35.3	-22.7	-20.7			
Unfilled orders, end of month.....number of weeks' supply.....	1.0	1.0	1.0	1.1	.8	1.6	1.5	-27.3	-46.7			
Stocks, end of month.....number of weeks' supply.....	6.0	5.8	5.8	5.9	4.5	6.0	5.4	-23.7	-81.0			
<b>Furniture</b>												
Household furniture and case goods:												
Shipments.....dolls., average per firm.....	54,203	47,092	41,015	32,956	45,686	47,831	53,748	+38.6	-15.0			
Unfilled orders.....dolls., average per firm.....	30,837	22,976	22,028	33,951	35,903	36,232	64,573	+5.7	-44.4			
Grand Rapids district:												
Unfilled orders, end of month.....No. of days' production.....	24	18	26	24	27	58	68	+12.5	-60.3			
New orders.....No. of days' production.....	15	13	23	10	18	20	36	+80.0	-50.0			
Shipments.....No. of days' production.....	16	16	12	12	13	22	24	+8.3	-45.8			
Outstanding accounts, end of month.....No. of days' sales.....	42	39	37	36	37	44	46	+2.8	-19.6			
Cancelled.....per cent of new orders.....	13.0	22.0	13.0	23.0	7.0	11.0	5.0	-69.6	+40.0			
Plant operation.....per cent of full time.....	70.0	69.0	61.0	70.0	67.0	88.0	90.0	-4.3	-25.6			

\* Cumulative.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) INCREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31					
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930	
<b>BUILDING EQUIPMENT—Continued</b>														
<b>Furniture—Continued</b>														
Steel furniture:														
Business group—														
Shipments.....thous. of dolls.	2,727	2,427	2,342	2,123	1,807	2,544	2,659	-14.9	-32.1	20,594	20,846	16,867		
New orders.....thous. of dolls.	2,637	2,524	2,310	2,006	2,249	2,553	2,590	+12.1	-13.2	21,186	20,998	16,982		
Unfilled orders, end mo.thous. of dolls.	1,390	1,680	1,651	1,265	1,328	2,325	2,241	+20.8	-31.8	.....	.....	.....		
Shelving—														
Shipments.....thous. of dolls.	812	815	752	705	610	920	867	-13.5	-29.7	5,122	6,893	5,052		
New orders.....thous. of dolls.	839	796	725	699	601	959	939	-14.0	-36.0	5,275	7,279	5,144		
Unfilled orders, end mo.thous. of dolls.	808	782	754	746	636	934	999	-14.8	-36.3	.....	.....	.....		
<b>PLYWOOD AND VENEER</b>								"						
Rotary-cut veneer:														
Receipts.....number of carloads	203	181	93	115	118	169	272	+2.6	-56.6	.....	1,426	1,068		
Purchases.....number of carloads	120	122	73	133	116	181	260	-12.8	-55.4	.....	1,732	982		
Bushel baskets:														
Production.....dozens	249,069	226,929	209,063	217,381	298,282	202,426	232,860	+37.2	+28.1	1,398,668	1,362,455	1,495,053		
Shipments.....dozens	241,595	164,795	141,710	163,639	309,135	200,814	232,154	+88.9	+33.2	1,343,000	1,069,759	1,206,807		
Stocks, end of month.....dozens	454,811	524,771	592,124	648,255	637,419	665,881	674,339	-1.7	-5.5	.....	.....	.....		
<b>GLASS CONTAINERS</b>														
Actual production:														
= <sup>1/4</sup> Quantity.....gross	2,527	2,419	2,633	2,528	2,406	2,561	2,396	-4.8	+0.4	16,934	17,361	16,923		
Relation to capacity.....per cent	75.8	71.9	75.4	78.1	71.5	81.5	73.3	-8.5	-2.5	.....	.....	.....		
New orders.....gross	2,165	2,550	2,236	3,249	1,980	2,023	2,224	-39.1	-11.0	17,016	17,637	18,599		
Shipments.....gross	2,437	2,564	2,788	2,451	2,368	2,679	2,507	-3.4	-5.6	16,800	17,493	16,729		
Unfilled orders, end of month.....gross	12,111	11,922	10,924	11,147	10,152	9,278	8,824	-8.9	+15.0	.....	.....	.....		
Stock, end of month.....gross	6,962	6,809	6,662	6,750	6,799	6,500	6,388	+0.7	+6.4	.....	.....	.....		
<b>CHEMICALS AND OILS</b>														
<b>Chemicals</b>														
Sulphuric acid:														
Exports.....pounds	335,773	327,918	507,011	409,748	570,683	693,027	506,758	+39.3	+12.6	4,731,568	3,882,832	3,377,575		
Price, wholesale.....dols. per 100 lbs	.78	.78	.78	.78	.78	.78	.78	0.0	0.0	.....	.....	.....		
Nitrate of soda:														
Imports.....long tons	106,521	69,788	42,308	18,737	28,644	64,733	40,501	+52.9	-29.3	741,596	683,798	441,256		
Production in Chile.....metric tons	244,000	205,200	215,400	205,900	.....	252,600	272,300	.....	.....	.....	.....	.....		
Potash salts:														
Imports (commercial).....long tons	39,947	21,036	12,568	17,644	50,965	9,895	37,126	+188.9	+37.3	181,770	168,345	227,048		
Production in France (K <sub>2</sub> O content).....metric tons	48,650	.....	.....	.....	.....	39,700	41,000	.....	.....	.....	.....	.....		
Sales in Germany (K <sub>2</sub> O content).....metric tons	180,000	.....	.....	.....	.....	97,723	89,190	.....	.....	.....	.....	.....		
Superphosphate (acid phosphate):														
Production.....short tons	324,632	334,467	326,566	290,615	308,241	270,447	296,629	+6.1	+3.9	2,241,817	2,044,183	2,385,464		
Stocks, end of month.....short tons	1,614,863	885,002	882,078	71,317,132	1,079,061	916,847	71,171,912	-18.1	-7.9	1,079,061	1,276,494	1,455,365		
Shipments.....short tons	403,435	469,184	149,343	54,488	73,134	54,862	71,165,162	+34.2	+12.2	1,419,632	1,276,494	1,455,365		
Fertilizer:														
Exports.....long tons	153,539	188,044	143,347	113,538	143,620	140,090	123,515	+26.5	+16.3	766,318	881,630	1,010,085		
Consumption, Southern States.....short tons	1,877,961	1,279,874	216,458	79,171	18,468	99,407	20,047	-76.7	-7.9	5,007,788	4,926,869	5,047,376		
Crude arsenic:														
Production.....short tons	1,692	1,350	1,652	2,168	1,428	2,452	1,444	-34.1	-1.1	9,245	10,871	11,302		
Stocks, end of month.....short tons	4,514	4,159	3,935	3,654	3,495	2,161	1,998	-4.4	+74.9	.....	.....	.....		
Refined arsenic:														
Production.....short tons	864	1,084	963	1,081	1,032	917	812	-4.5	+27.1	5,025	6,102	6,574		
Stocks, end of month.....short tons	3,131	2,889	2,726	2,024	1,897	3,709	3,305	-6.3	-42.6	.....	.....	.....		
Dyes and dyestuffs, exports:														
Vegetable.....thous. of lbs	119	218	232	194	110	264	126	-43.3	-12.7	1,869	1,189	1,206		
Coal tar.....thous. of lbs	3,347	3,349	2,334	2,612	1,153	21	3,180	-55.9	-63.7	20,050	11,584	17,167		
Price index numbers:														
Crude drugs.....rel. to Aug., 1914	167	166	161	154	148	184	183	-3.9	-19.1	.....	.....	.....		
Essential oils.....rel. to Aug., 1914	118	115	113	111	108	190	191	-2.7	-43.5	.....	.....	.....		
Drugs and pharmaceuticals.....rel. to Aug., 1914	176	176	176	176	176	163	173	0.0	+1.7	.....	.....	.....		
Chemicals.....rel. to 1927	98	97	97	96	95	100	100	-1.0	-5.0	.....	.....	.....		
Oils and fats.....rel. to 1927	92	94	92	89	88	92	92	-1.1	-4.3	.....	.....	.....		
<b>Wood Chemicals</b>														
Acetate of lime:														
Production—														
United States.....thous. of lbs	11,162	9,771	7,8,177	6,297	.....	10,658	11,025	.....	.....	6 69,329	6 72,501	6 56,888		
Canada.....thous. of lbs	1,077	1,104	791	456	.....	677	720	.....	.....	6 5,721	6 5,962	6 6,139		
Shipments—														
United States.....thous. of lbs	8,087	6,734	7,6,787	5,682	.....	11,772	11,072	.....	.....	6 70,418	6 71,451	6 35,826		
Canada.....thous. of lbs	413	668	7,692	275	.....	676	716	.....	.....	6 5,032	6 5,919	6 2,819		
Stocks, end of month—														
United States.....thous. of lbs	24,098	27,146	7,28,393	28,033	.....	1,755	1,206	.....	.....	.....	.....	.....		
Canada.....thous. of lbs	3,705	3,845	3,772	3,952	.....	102	179	.....	.....	9,503	208	.....		
Exports.....thous. of lbs	.....	.....	.....	.....	.....	120	120	.....	.....	.....	.....	.....		
Price, wholesale.....dolls. per cwt	4.50	4.50	4.50	4.29	3.11	4.50	4.50	-27.5	-30.9	.....	.....	.....		
Methanol, crude:														
Production—														
United States.....gallons	651,438	616,350	7,520,754	410,363	.....	676,193	633,731	.....	.....	6 3,844,752	6 4,277,674	6 3,529,797		
Canada.....gallons	46,844	50,498	34,266	15,306	.....	28,291	28,688	.....	.....	6 232,284	6 253,383	6 265,591		
Stocks at crude plants, end of month—														
United States.....gallons	646,181	709,763	7,711,673	634,138	.....	227,513	252,749	.....	.....	.....	.....	.....		
Canada.....gallons	30,261	14,681	9,075	3,337	.....	11,533	21,863	.....	.....	.....	.....	.....		
Stocks at refineries and in transit—														
United States.....gallons	864,600	807,754	766,004	691,984	.....	277,376	475,698	.....	.....	.....	.....	.....		
Canada.....gallons	17,239	10,763	45,449	49,331	.....	66,870	78,120	.....	.....	.....	.....	.....		
Exports.....gallons	56,113	101,033	77,028	126,813	61,240	16,613	95,755	-51.7	-36.0	357,074	323,710	485,489		

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found in pages 27 to 139 of the August, 1930, "Survey"	1930					1929		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31			
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929
											1928	1929
<b>CHEMICALS AND OILS—Continued</b>												
<b>Wood Chemicals—Continued</b>												
Wood at chemical plants:												
Consumption—												
United States—cords—	68,045	62,036	754,225	43,391	-----	72,217	68,428	-----	-----	6387,618	6442,557	6361,582
Canada—cords—	5,308	5,426	3,700	1,923	-----	3,509	3,587	-----	-----	628,983	631,327	629,302
Stocks, end of month—												
United States—cords—	477,011	514,851	7530,964	552,263	-----	530,111	530,264	-----	-----	-----	-----	-----
Canada—cords—	79,267	70,767	70,750	70,000	-----	72,586	72,126	-----	-----	-----	-----	-----
Daily capacity—												
Total—cords—	3,246	3,258	3,172	3,152	-----	3,336	2,376	-----	-----	-----	-----	-----
Shutdown—cords—	535	612	756	1,064	-----	361	468	-----	-----	-----	-----	-----
Methanol, refined:												
Production—												
United States—gallons—	398,476	424,295	373,780	376,205	-----	423,811	259,118	-----	-----	62,957,668	62,787,801	62,216,126
Canada—gallons—	44,200	55,600	-----	35,500	-----	36,900	10,400	-----	-----	6214,550	6276,900	6223,900
Stocks, end of month—												
United States—gallons—	632,705	670,764	699,803	702,587	-----	759,740	712,752	-----	-----	-----	-----	-----
Canada—gallons—	40,905	57,414	40,280	38,951	-----	51,787	31,185	-----	-----	-----	-----	-----
Shipments—												
United States—gallons—	522,153	530,584	407,940	441,870	-----	449,245	365,438	-----	-----	62,860,505	62,981,874	62,778,791
Canada—gallons—	33,688	26,760	23,153	24,236	-----	11,650	21,403	-----	-----	6131,112	6196,637	6179,595
Price, wholesale, N. Y.—dollars per gal.	.43	.40	.40	.40	-----	.58	.58	0.0	-31.0	-----	-----	-----
<b>Ethyl Alcohol</b>												
Production—thous. of gals—	10,151	12,221	13,245	13,100	11,617	12,545	16,871	-11.3	-31.1	87,801	103,311	82,878
Withdrawn for denaturation—thous. of gals—	8,881	10,585	11,319	11,100	11,352	12,909	15,982	+2.3	-29.0	78,910	93,520	74,212
Warehouse stocks, end of mo.—thous. of gals—	7,616	8,074	9,143	10,000	9,498	11,860	11,166	+5.0	-14.9	-----	-----	-----
<b>Explosives</b>												
(Black powder, permissible, and other high explosives)												
Production—thous. of lbs—	30,221	30,967	36,147	33,546	30,810	34,383	35,756	-8.2	-13.8	219,215	246,924	226,921
Shipments—thous. of lbs—	30,534	34,071	33,404	33,969	30,649	35,032	36,811	-9.8	-16.7	221,151	250,841	225,910
New orders—thous. of lbs—	30,059	33,204	33,340	33,005	30,424	34,202	35,499	-7.8	-14.3	210,903	241,917	221,444
Stocks, end of month—thous. of lbs—	20,295	18,566	17,699	17,181	17,392	17,225	16,964	+1.2	+2.5	-----	-----	-----
<b>Naval Stores</b>												
Turpentine (gum):												
Net receipts, southern ports—barrels—	9,779	27,999	48,803	46,711	55,822	48,658	54,872	+19.5	+1.7	173,233	200,235	204,426
Stocks at port, end of month—barrels—	40,078	35,053	47,130	42,344	58,491	57,728	65,570	+38.1	-10.8	-----	-----	-----
Price, southern, New York—dollars per gal.	.56	.54	.49	.47	.43	.52	.52	-8.5	-17.3	-----	-----	-----
Rosin (gum):												
Net receipts, southern ports—barrels—	40,401	86,873	150,386	149,880	178,876	154,163	181,433	+19.3	-1.4	579,766	685,659	687,812
Stocks at 3 ports, end of month—barrels—	149,232	135,958	143,684	196,857	242,948	123,505	169,420	+23.4	+43.4	-----	-----	-----
Price, B, New York—dollars per bbl.	7.26	6.78	6.34	6.50	5.90	7.88	8.51	-9.2	-30.7	-----	-----	-----
Rosin (wood):												
Production—barrels—	44,964	43,919	40,933	40,049	39,929	36,123	37,844	-0.3	+5.5	241,077	256,103	290,363
Stocks, end of month—barrels—	91,498	97,168	99,359	109,198	117,318	113,449	104,492	+7.4	+12.3	-----	-----	-----
Turpentine (wood):												
Production—barrels—	8,120	8,303	7,454	6,774	6,406	6,505	6,718	-5.4	-4.6	42,469	47,837	52,054
Stocks, end of month—barrels—	14,126	15,854	13,715	13,762	13,642	4,778	4,623	-0.9	+195.1	-----	-----	-----
Pine oil:												
Production—gallons—	280,560	253,049	234,281	248,777	241,193	215,153	235,892	-3.0	+2.2	1,615,843	1,561,917	1,751,698
Stocks, end of month—gallons—	1,211,827	1,278,382	1,277,099	1,385,850	1,456,415	873,358	882,037	+5.1	+65.1	-----	-----	-----
<b>Fats and Oils</b>												
Total vegetable oils and copra:												
Exports—thous. of lbs—	4,618	3,753	970	2,049	533	1,428	541	-74.0	-1.5	37,161	14,489	20,403
Imports—thous. of lbs—	84,600	67,133	85,173	86,947	74,579	91,375	73,157	+14.2	+1.9	401,391	639,862	550,229
Copra, imports—short tons—	29,748	16,649	21,089	16,106	18,663	23,828	21,693	+15.9	-14.0	127,623	187,671	147,119
Copra or coconut oil:												
Imports—thous. of lbs—	32,771	21,943	34,368	25,590	8,118	32,571	23,669	-68.3	-65.7	146,399	237,089	180,20
Consumption in oleomargarine—thous. of lbs—	14,164	15,370	13,236	11,763	11,455	12,029	12,658	-2.6	-9.5	86,911	100,485	98,843
Oleomargarine:												
Production—thous. of lbs—	26,023	28,627	24,812	21,906	20,976	24,276	24,873	-4.2	-15.7	174,334	194,345	183,286
Consumption—thous. of lbs—	23,890	29,654	22,525	22,175	18,782	23,379	24,972	-15.3	-24.8	172,080	193,246	178,132
Animal glues, shipments—thous. of lbs—	5,165	6,025	5,543	4,788	5,585	6,246	6,376	+16.6	-12.4	45,594	46,474	38,933
<b>Cottonseed</b>												
Cottonseed:												
Receipts at mills—short tons—	203,048	95,981	60,340	45,384	29,559	25,547	30,680	-34.9	-3.7	653,525	802,386	1,043,006
Consumption (crush)—short tons—	400,478	227,517	141,958	85,069	62,248	61,012	54,162	-26.8	+14.9	1,644,506	2,091,914	2,102,852
Stocks at mills, end of month—short tons—	330,560	198,598	116,980	77,295	44,606	65,091	41,606	+42.3	+7.2	-----	-----	-----
Cottonseed oil, crude:												
Production—thous. of lbs—	129,753	76,628	47,137	29,247	19,971	22,004	18,313	-31.7	+9.1	539,946	683,609	673,541
Stocks, end of month—thous. of lbs—	101,922	62,184	39,372	22,750	8,110	28,682	19,182	-64.4	-57.7	-----	-----	-----
Cottonseed oil, refined:												
Production—thous. of lbs—	116,965	107,970	57,041	47,721	29,182	40,430	27,933	-38.8	+4.5	601,545	729,317	691,492
Stocks, end of month—thous. of lbs—	535,891	516,700	463,864	393,306	299,933	431,095	338,620	-23.7	-11.4	-----	-----	-----
Price, yellow, prime, New York—dollars per lb—	.084	.087	.088	.083	.080	.096	.096	-3.6	-16.7	-----	-----	-----
Consumption in oleomargarine—thous. of lbs—	2,567	2,483	2,115	1,882	1,587	2,124	2,051	-15.7	-22.6	14,611	16,039	15,614
Cottonseed cake and meal:												
Production—short tons—	179,864	103,894	61,526	40,890	27,516	28,942	25,774	-32.7	+6.8	757,115	953,249	911,339
Stocks, end of month—short tons—	170,184	120,258	99,580	84,127	54,308	142,737	76,667	-35.4	-29.2	-----	-----	-----
Exports—short tons—	4,852	320	230	248	304	4,777	11,969	+22.6	-74.6	106,784	114,508	35,935

\* Cumulative through June 30.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey."</i>	1930					1929		PER CENT INCREASE (+) INCREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31					
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930	
									1930	1929	1930	1929	1930	
<b>CHEMICALS AND OILS—Continued</b>														
<b>Flaxseed</b>														
Minneapolis and Duluth:														
Receipts.....thous. of bushs..	172	146	712	314	294	492	381	-6.4	-22.8	3,757	2,540	2,008		
Shipments.....thous. of bushs..	133	171	457	267	193	271	340	-27.7	-43.2	3,529	1,964	1,546		
Stocks, end of month.....thous. of bushs..	705	624	523	433	319	764	360	-26.3	-11.4					
Imports.....thous. of bushs..	3,233	2,527	1,454	371	360	2,366	1,293	-3.0	-72.2	11,098	16,765	11,298		
Price No. 1, Minneapolis.....dolls. per bush..	2.92	2.92	2.68	2.71	2.32	2.48	2.76	-14.4	-15.9					
Production, crop estimate.....thous. of bushs..														
Linseed oil:														
Shipments from Minneapolis.thous. of lbs..	6,060	9,141	9,685	6,274	6,436	15,205	14,381	+2.6	-55.2	105,411	102,426	48,287		
Price, New York.....dolls. per lb..	.140	.143	.140	.140	.140	.105	.120	0.0	+16.7					
Linseed cake and meal:														
Shipments from Minneapolis.thous. of lbs..	9,937	8,604	7,485	5,768	5,066	7,632	12,215	-12.2	-58.5	144,849	116,148	71,319		
Exports.....thous. of lbs..	52,082	48,716	41,409	29,066	24,833	60,131	80,855	-14.6	-69.3	327,892	445,744	282,909		
<b>FOODSTUFFS</b>														
<b>Wheat</b>														
Visible supply, end of month:														
United States.....thous. of bushs..	153,290	136,358	119,682	109,985	161,666	94,060	142,855	+47.0	+13.2					
Canada.....thous. of bushs..	192,754	177,424	147,801	132,187	106,544	118,249	103,315	-19.4	+3.1					
Receipts, principal markets.....thous. of bushs..	16,683	13,441	16,535	18,705	98,960	25,694	94,158	+429.1	+5.1	204,326	234,416	201,774		
Shipments, principal markets.....thous. of bushs..	12,160	13,291	24,091	20,575	42,047	18,644	42,577	+104.4	-1.2	132,502	149,358	137,568		
Production, crop estimate:														
Winter wheat.....thous. of bushs..														
Spring wheat.....thous. of bushs..														
Total, wheat.....thous. of bushs..														
Exports:														
United States—														
Wheat only.....thous. of bushs..	2,414	3,050	5,433	8,066	11,934	4,564	8,691	+48.0	+37.3	27,677	39,038	44,327		
Including wheat flour.....thous. of bushs..	7,113	7,252	10,064	12,295	16,188	8,814	13,575	+31.7	+19.2	56,377	74,375	76,087		
Canada—														
Including wheat flour.....thous. of bushs..	14,657	5,458	16,046	21,681	22,834	29,796	20,538	+5.3	+11.2	170,766	164,350	96,832		
<b>Wheat Flour</b>														
Grindings of wheat:														
United States.....thous. of bushs..	43,083	41,854	41,329	7,40,137	43,720	40,833	42,895	+8.9	+1.9	285,353	295,004	294,441		
Canada.....thous. of bushs..	5,475	5,429	6,258	5,218	6,448	7,029	7,247	+23.6	-11.0	47,733	52,148	38,731		
Production:														
United States, actual.....thous. of bbls..	9,347	9,071	8,981	7,8,687	9,466	8,912	9,337	+9.0	+1.4	61,482	64,466	63,845		
United States, prorated.....thous. of bbls..	10,207	9,749	10,507	9,423	10,507	9,838	10,449	+11.5	+0.6	69,231	72,099	69,664		
Canada.....thous. of bbls..	1,219	1,215	1,394	1,161	1,436	1,548	1,603	+23.7	-10.4	10,332	11,435	8,644		
Exports:														
United States.....thous. of bbls..	1,044	934	1,029	940	945	944	1,085	+0.5	-12.9	6,378	7,851	7,057		
Canada.....thous. of bbls..	681	451	573	598	659	935	836	+10.2	-21.2	5,669	6,742	3,946		
Grain offal, production.....thous. of lbs..	763,376	742,542	732,153	7,713,579	774,124	711,357	746,628	+8.5	+3.7	5,046,660	5,118,491	5,216,426		
Capacity operated, flour mills.....per cent.	55	53	53	54	56	54	55	+3.7	+1.8					
Consumption (computed).....thous. of bbls..	9,163	8,615	9,778	7,883	10,012	8,494	8,365	+27.0	+19.7	61,635	62,552	63,357		
Stocks, all positions, end of month (computed).....thous. of bbls..	8,800	9,000	8,700	9,300	8,850	8,000	10,084	-4.8	-12.2					
Wholesale prices:														
Standard patents, Minn.....dolls. per bbl..	6.23	6.09	5.97	5.83	5.51	6.38	7.69	-5.5	-28.3					
Winter, straights, Kansas City.....dolls. per bbl..	5.26	5.40	5.27	4.99	4.64	5.26	6.31	-7.0	-26.5					
<b>Corn</b>														
Exports, including meal.....thous. of bushs..	1,122	1,030	824	776	395	981	850	-49.1	-53.5	15,932	30,875	5,882		
Visible supply, end of month.....thous. of bushs..	25,129	21,452	11,819	7,378	4,012	13,932	9,493	-45.6	-57.7					
Receipts, principal markets.....thous. of bushs..	20,679	22,114	16,213	17,833	16,660	20,644	21,205	-6.6	-21.4	206,966	160,369	154,407		
Shipments, prim. markets.....thous. of bushs..	14,133	18,043	18,687	15,693	11,699	15,160	15,644	-25.5	-25.2	145,262	112,007	108,478		
Grindings (starch, glucose).....thous. of bushs..	6,065	6,615	6,623	6,100	6,103	6,697	6,558	-6.9	-53.380	49,805	45,696			
Production, crop estimate.....thous. of bushs..														
Prices:														
No. 3, Yellow, Chicago.....dolls. per bush..	.80	.82	.79	.79	.82	.91	.99	+3.8	-17.2					
No. 3, Yellow, Kansas City.....dolls. per bush..	.76	.80	.78	.80	.80	.88	.93	0.0	-14.0					
No. 3, White, Chicago.....dolls. per bush..	.81	.84	.80	.81	.84	.94	1.00	+3.7	-16.0					
<b>Oats</b>														
Receipts, principal markets.....thous. of bushs..	8,736	9,544	10,690	7,114	8,725	8,486	10,123	+22.6	-13.8	76,733	66,551	58,886		
Visible supply, end of month.....thous. of bushs..	18,929	16,765	13,102	11,317	9,149	8,114	8,129	-19.2	+12.5	5,933	5,283	2,436		
Exports, including meal.....thous. of bushs..	224	259	266	204	717	488	487	+251.5	+47.2					
Production, crop estimate.....thous. of bushs..														
Price, No. 3, White, Chicago.....dolls. per bush..	.43	.43	.41	.38	.35	.45	.47	-7.9	-25.5					
Grindings, Canada.....thous. of bushs..	798	706	651	719	826	895	854	+14.9	-3.3	6,015	6,099	5,199		
Production, oatmeal and rolled oats, Canada.....thous. of lbs..	9,650	8,106	7,951	9,660	10,893	11,360	12,145	+12.8	-10.3	73,825	77,019	63,841		
<b>Barley</b>														
Receipts, principal markets.....thous. of bushs..	3,153	2,742	2,835	2,537	2,568	3,338	4,849	+1.2	-47.0	26,527	27,722	19,741		
Visible supply, end of month.....thous. of bushs..	7,837	6,511	5,436	4,671	3,997	5,731	5,518	-14.4	-27.6					
Production, crop estimate.....thous. of bushs..														
Exports.....thous. of bushs..	569	778	1,457	550	698	2,783	4,120	+26.9	-83.1	10,234	17,763	5,803		
Price, No. 2, Minneapolis.....dolls. per bush..	.55	.56	.55	.49	.47	.60	.69	-4.1	-31.9					

<sup>3</sup> As of Aug. 1.<sup>4</sup> Final estimate for 1929.<sup>5</sup> Cumulative through June 30.<sup>7</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1930					1929		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31					
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930	
<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey."</i>														
<b>FOODSTUFFS—Continued</b>														
<b>Rye</b>														
Receipts, principal markets—thous. of bushels	598	337	1,234	7,445	758	870	880	+70.3	-13.9	8,920	7,356	5,127		
Visible supply, end of month—thous. of bushels	11,175	13,427	11,259	11,248	10,969	6,422	6,447	-2.5	+70.1	6,512	1,221	210		
Exports, including flour—thous. of bushels	64	47	14	3	18	295	106	+500.0	-83.0					
Price, No. 2, Minneapolis—dollars per bushel	.66	.68	.65	.57	.55	.84	1.07	-3.5	-48.6					
Production, crop estimate—thous. of bushels					3 46,655		4 40,533							
<b>Total Grains</b>														
Total grain exports, incl. flour—thous. of bushels	9,093	9,367	12,626	13,829	18,015	13,361	19,138	+30.3	-5.9	92,988	129,849	90,420		
<b>Rice</b>														
Southern paddy, receipts at mills—bbds.	283,753	145,638	182,598	59,690	22,216	191,944	125,737	-62.8	-82.3	3,718,775	2,631,176	2,524,806		
Shipments:														
Total from mills—pockets (100 lbs.)	793,008	686,342	652,662	345,705	267,710	650,414	515,342	-22.6	-48.1	5,546,845	5,181,521	4,824,013		
New Orleans—pockets (100 lbs.)	80,506	63,189	107,430	65,195	56,861	130,369	113,969	-12.8	-50.1	1,112,779	886,457	542,86		
Stocks, end of month—pockets (100 lbs.)	1,899,421	1,394,421	949,561	687,350	450,146	865,117	485,177	-34.5	-7.2					
Exports—pockets (100 lbs.)	209,915	152,572	203,573	202,224	124,181	261,377	231,401	-38.6	-46.3	2,334,680	2,516,666	1,437,700		
Imports—pockets (100 lbs.)	25,889	19,755	10,000	7,5,829	4,951	2,984	6,556	-15.1	-24.5	259,245	170,644	121,031		
Production, crop estimate—thous. of lbs.					3 37,897		4 40,217							
<b>Other Crops</b>														
Apples:														
Production, crop estimates—thous. of bushels														
Cold-storage holdings, end of month—thous. of bbls.	2,596	1,299	463											
Car-lot shipments—carloads	5,166	3,607	1,966	1,083	3,253	1,001	1,903	+200.4	+70.9	22,321	28,222	27,484		
Potatoes:														
Production, crop estimate—thous. of bushels														
Car-lot shipments—carloads	21,681	19,350	22,588	24,614	22,093	24,321	19,359	-10.2	+14.1	155,435	144,385	149,746		
Onions, car-lot shipments—carloads	2,260	2,874	3,975	1,729	2,556	1,700	2,351	+47.8	+8.7	17,305	17,282	19,414		
Citrus fruits, car-lot shipments—carloads	10,705	9,653	2,104	5,478	5,765	11,820	8,152	+5.2	-29.3	55,433	95,917	53,983		
<b>Hay</b>														
Receipts—number of cars	4,624	4,708	3,755	3,881	4,505	4,058	4,682	+16.1	-3.8	41,485	37,654	33,651		
Production, crop estimates—thous. of tons					3 83,460		4 101,786							
<b>Cattle and Beef</b>														
Cattle movements, primary markets:														
Receipts—thousands	1,547	1,644	1,517	1,459	1,512	1,451	1,665	+3.6	-9.2	11,443	10,812	10,648		
Shipments, total—thousands	592	639	569	496	501	530	595	+1.0	-15.8	4,258	3,917	3,923		
Shipments, stocker and feeder—thousands	207	255	199	129	109	176	173	-15.5	-37.0	1,518	1,392	1,333		
Local slaughter—thousands	919	1,016	947	953	1,004	907	1,043	+5.4	-3.7	7,090	6,798	6,640		
Beef products:														
Production, inspected—thous. of lbs.	358,129	373,810	401,989	375,276	411,226	364,470	402,501	+9.6	+2.2	2,703,143	2,673,047	2,656,482		
Apparent consumption—thous. of lbs.	371,113	393,451	423,828	388,956	415,112	388,343	420,212	+7.6	-1.2	2,796,553	2,801,058	2,738,523		
Exports—thous. of lbs.	1,431	1,360	1,610	1,973	1,987	1,494	2,268	+0.7	-12.4	8,171	10,134	10,786		
Cold-storage holdings, end of month—thous. of lbs.														
Prices:														
Cattle, corn-fed, Chicago—dollars per 100 lbs.	12.80	12.56	11.56	10.73	9.28	14.38	14.98	-13.5	-38.1					
Steer rounds, No. 2—dollars per lb.	.240	.239	.215	.195	.174	.234	.238	-10.8	-26.9					
Western dressed steers, N. Y.—dollars per lb.	.215	.220	.220	.218	.177	.238	.255	-18.8	-30.6					
<b>Hogs and Pork</b>														
Hog movements, primary markets:														
Receipts—thousands	3,294	3,255	3,293	3,215	2,918	3,275	3,297	-9.2	-11.5	28,890	26,154	24,486		
Shipments, total—thousands	1,451	1,280	1,216	1,082	1,139	1,151	1,202	+5.3	-5.2	10,592	9,667	9,456		
Shipments, stocker and feeder—thousands	58	57	47	40	30	53	38	-25.0	-21.1	462	389	326		
Local slaughter—thousands	1,853	1,980	2,084	2,123	1,782	2,124	2,092	-16.1	-14.8	18,278	16,463	15,024		
Pork products, total:														
Production, inspected—thous. of lbs.	589,968	603,184	665,124	664,172	603,324	672,947	675,915	-9.2	-10.7	5,344,075	5,050,212	4,705,138		
Apparent consumption—thous. of lbs.	531,873	567,651	598,022	7,573,488	556,636	586,060	604,340	+2.9	-7.9	4,241,376	4,090,090	4,010,466		
Exports—thous. of lbs.	97,898	77,466	93,589	82,054	75,473	7,100,424	7,96,278	-8.0	-21.6	663,671	703,336	629,560		
Cold-storage holdings, end of month—thous. of lbs.														
Total—thous. of lbs.	858,063	816,605	790,437	7,799,543	770,974	1,041,636	1,017,364	-3.6	-24.2					
Fresh and cured—thous. of lbs.	752,996	711,700	675,167	7,679,221	652,051	841,937	814,354	-4.0	-19.9					
Lard (included in pork products):														
Production—thous. of lbs.	124,129	123,565	135,785	133,563		144,272	139,693			1,016,503	936,832	842,018		
Exports—thous. of lbs.	66,533	50,045	62,562	56,666	51,670	67,252	64,274	-8.8	-19.6	448,968	481,495	426,720		
Cold-storage holdings, end of month—thous. of lbs.														
Prices:														
Hogs, heavy, Chicago—dollars per 100 lbs.	9.83	9.98	10.02	9.68	8.94	10.66	11.20	-7.6	-20.2					
Hams, smoked, Chicago—dollars per lb.	.243	.229	.228	.233	.230	.254	.267	-1.3	-13.9					
Lard prime contract, N. Y.—dollars per lb.	.107	.107	.107	.102	.100	.123	.125	-2.0	-20.0					
<b>Sheep and Lambs</b>														
Sheep movement, primary market:														
Receipts—thousands	2,151	2,230	2,334	2,230	2,296	1,752	2,119	+3.0	+8.4	12,248	13,004	14,940		
Shipments, total—thousands	936	975	1,092	955	940	742	883	-1.6	+6.5	5,643	5,875	6,419		
Shipments, stocker and feeder—thousands	99	134	142	216	206	226	231	-4.6	-10.8	1,162	1,310	1,024		
Local slaughter—thousands	1,210	1,278	1,249	1,362	1,362	1,020	1,217	+7.8	+11.9	6,696	7,107	8,514		
Lamb and mutton:														
Production, inspected—thous. of lbs.	56,494	55,602	53,375	48,239	51,861	42,012	46,804	+7.5	+10.8	288,057	304,585	365,424		
Apparent consumption—thous. of lbs.	56,726	55,488	53,781	7,47,774	52,094	41,948	47,563	+9.0	+9.5	292,191	310,765	365,439		
Cold-storage holdings, end of month—thous. of lbs.														
Prices:														
Sheep, ewes, Chicago—dollars per 100 lbs.	5.14	5.13	4.78	3.45	3.06	5.31	5.55	-11.3	-44.9					
Sheep, lambs, Chicago—dollars per 100 lbs.	9.73	8.94	9.04	9.73	8.13	12.75	13.80	-16.4	-41.1					

<sup>3</sup> As of Aug. 1.<sup>4</sup> Final estimate for 1929.<sup>6</sup> Cumulative through June 30.<sup>7</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) IN-DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31											
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929												
										1928	1929	1930									
<b>FOODSTUFFS—Continued</b>																					
<b>Miscellaneous Meats</b>																					
Cold-storage holdings, end of mo. thous. of lbs.	85,868	83,622	83,294	787,980	89,731	81,132	81,068	+2.0	+10.7	-----	-----	-----									
<b>Total Meats</b>																					
Production, inspected thous. of lbs.	1,004,590	1,032,596	1,120,488	1,087,687	1,066,412	1,079,429	1,125,221	-2.0	-5.2	8,335,273	8,027,845	7,727,045									
Cold-storage holdings, end of mo. thous. of lbs.	1,037,548	986,037	949,926	7959,234	929,897	1,177,884	1,147,001	-3.1	-18.9	-----	-----	-----									
Apparent consumption thous. of lbs.	939,712	1,016,590	1,075,631	7,007,218	1,023,842	1,016,351	1,072,115	+1.7	-4.5	7,330,120	7,201,913	7,114,428									
<b>Poultry</b>																					
Receipts at 5 markets thous. of lbs.	16,954	17,847	21,942	23,867	19,858	20,434	22,548	-16.8	-11.9	143,294	146,178	158,654									
Cold-storage holdings, end of mo. thous. of lbs.	105,708	77,420	61,167	754,253	46,890	42,001	40,896	-13.6	+14.7	-----	-----	-----									
<b>Fish</b>																					
Total catch, prin. ports thous. of bbls.	33,166	36,799	34,091	32,886	46,751	31,728	43,185	+42.2	+8.3	170,646	200,405	235,194									
Cold-storage holdings, 15th of mo. thous. of lbs.	35,536	25,186	33,605	47,498	64,847	40,148	751,664	+36.5	+25.5	-----	-----	-----									
Canned salmon:																					
Shipments, United States cases.	371,070	197,482	246,827	357,729	217,781	367,842	-----	-----	-----	1,396,261	1,830,247	6,050,899									
Exports, Canada cases.	85,427	29,183	34,285	22,494	24,942	42,794	38,983	+10.9	-36.0	480,620	589,606	359,439									
<b>Butter</b>																					
Production (factory) thous. of lbs.	108,619	126,255	175,537	182,313	163,318	179,080	172,040	-10.4	-5.1	935,997	930,672	956,197									
Receipts, 5 markets thous. of lbs.	47,179	50,595	63,752	70,529	62,274	69,511	68,104	-11.7	-8.6	363,102	382,249	378,850									
Cold-storage holdings, creamery, end of month thous. of lbs.	30,556	22,957	50,378	7106,522	145,297	91,962	151,621	+36.4	-4.2	-----	-----	-----									
Apparent consumption thous. of lbs.	162,969	177,990	210,504	199,016	191,178	192,045	241,232	-3.9	-20.7	1,226,451	1,266,117	1,243,975									
Wholesale price, New York dollars per lb.	.37	.39	.35	.33	.35	.44	.42	+6.1	-16.7	-----	-----	-----									
<b>Cheese</b>																					
Total, all varieties:																					
Production (factory) thous. of lbs.	25,282	35,380	52,617	57,871	45,120	62,806	54,484	-22.0	-17.2	326,307	303,464	262,370									
Receipts, 5 markets thous. of lbs.	12,903	13,026	15,472	17,895	17,436	18,404	20,348	-2.6	-15.1	115,129	107,954	101,724									
Apparent consumption thous. of lbs.	36,957	44,680	49,921	41,486	29,640	38,625	36,607	-28.6	-19.0	285,863	267,011	247,275									
Cold-storage holdings, end of month thous. of lbs.	55,343	53,025	68,127	790,421	108,835	79,724	95,070	+20.4	+11.0	-----	-----	-----									
Imports thous. of lbs.	5,247	7,125	12,356	6,097	3,106	8,608	6,653	-49.1	-53.3	41,436	45,398	43,687									
Exports, United States thous. of lbs.	171	199	158	159	172	209	285	+8.2	-39.6	1,573	1,656	1,238									
Exports Canada thous. of lbs.	456	229	1,884	5,560	12,092	8,403	15,074	+117.5	-19.8	35,955	28,913	22,053									
American whole milk:																					
Cold-storage holdings, end of month thous. of lbs.	41,922	39,324	49,172	770,186	88,664	62,737	79,907	+26.3	+11.0	-----	-----	-----									
Wholesale price, New York dollars per lb.	.21	.21	.20	.18	.18	.23	.23	0.0	-21.7	-----	-----	-----									
<b>Eggs</b>																					
Receipts, 5 markets thous. of cases.	2,063	2,631	2,366	1,728	1,377	1,813	1,409	-20.3	-2.3	11,477	11,715	12,192									
Cold-storage holdings, end of month:																					
Case thous. of cases.	2,231	5,766	9,178	710,743	11,202	8,510	8,962	+4.3	+25.0	-----	-----	-----									
Frozen thous. of lbs.	49,751	76,664	106,904	7115,134	116,358	84,766	91,488	+1.1	+27.2	-----	-----	-----									
<b>Milk</b>																					
Condensed milk:																					
Total stocks, mfrs., end of mo.—																					
Case goods thous. of lbs.	17,495	20,590	30,124	35,373	35,006	31,459	34,750	-1.0	+0.7	-----	-----	-----									
Bulk goods thous. of lbs.	20,577	20,611	25,203	28,855	29,525	25,803	29,890	+2.3	-1.2	-----	-----	-----									
Unsold stocks, mfrs., end of mo.—																					
Case goods thous. of lbs.	13,235	16,213	25,467	31,222	30,866	25,140	28,883	-1.1	+6.9	-----	-----	-----									
Bulk goods thous. of lbs.	4,773	5,117	7,598	8,176	10,212	9,296	9,221	+24.9	+10.7	-----	-----	-----									
Exports thous. of lbs.	3,477	2,710	2,505	2,682	1,515	3,280	3,365	-43.5	-60.8	23,215	27,872	19,094									
Wholesale price, New York dollars per case.	6.13	6.13	6.13	6.13	6.13	6.13	6.13	0.0	0.0	-----	-----	-----									
Evaporated milk:																					
Manufacturers' stocks, end of mo.—	146,571	162,221	199,334	227,201	258,836	222,956	281,137	+13.9	-7.9	-----	-----	-----									
Unsold, case goods thous. of lbs.	125,623	140,371	166,196	176,439	218,761	173,684	215,878	+24.0	+1.3	48,504	45,358	38,955									
Exports thous. of lbs.	5,369	6,181	6,308	5,417	4,720	7,121	5,929	-12.9	-20.4	-----	-----	-----									
Wholesale price, New York dollars per case.	3.95	3.95	3.95	3.69	3.74	4.30	4.30	+1.4	-13.0	-----	-----	-----									
Production, condensed and evaporated milk thous. of lbs.	153,190	190,551	242,206	249,057	205,641	302,254	246,196	-17.4	-16.5	1,290,381	1,445,319	1,290,553									
Powdered milk:																					
Manufacturers' stocks, end mo. thous. of lbs.	25,674	26,675	28,096	731,820	32,239	31,103	33,921	+1.3	-5.0	-----	-----	-----									
Exports thous. of lbs.	629	636	496	346	376	480	454	+8.7	-17.2	1,990	3,124	3,881									
Net new orders thous. of lbs.	8,832	10,670	11,333	711,913	10,738	9,961	7,9,667	-9.9	+7.7	60,582	71,209	-----									
Fluid milk:																					
Receipts—																					
Boston (includ. cream) thous. of qts.	19,369	19,400	20,906	21,149	20,348	19,920	20,114	-3.8	+1.2	125,607	128,651	137,513									
Greater New York thous. of qts.	117,880	112,955	124,883	122,056	123,165	124,702	122,366	+0.9	+0.7	793,473	815,959	819,790									
Consumption in manufacture of oleomargarine thous. of lbs.	7,103	7,903	6,935	6,074	5,837	6,487	7,045	-3.9	-17.1	51,245	52,897	50,601									
<b>Sugar</b>																					
Raw:																					
Imports—																					
From Hawaii, Porto Rico long tons.	185,704	188,571	123,537	109,920	199,950	112,546	156,633	+81.9	+27.7	985,903	842,461	1,024,842									
From foreign countries long tons.	204,318	272,064	558,190	201,442	195,187	338,905	359,393	-3.1	-45.7	2,171,874	3,063,136	1,790,295									
Meltings, 3 ports long tons.	410,063	432,111	469,484	371,714	501,569	450,035	445,904	+34.9	+12.5	2,711,323	3,027,479	2,839,538									
Stocks at refineries, end month long tons.	529,067	574,224	744,247	622,945	444,415	875,942	864,589	-28.7	-48.6	-----	-----	-----									
Refined:																					
Shipments, 2 ports long tons.	68,838	72,114	80,822	69,423	89,928	81,088	93,673	+29.5	-4.0	409,807	523,160	494,255									
Stocks, 2 ports long tons.	42,405	63,357	61,571	47,827	48,600	50,753	42,889	+1.6	+13.3	58,082	64,124	35,711									
Exports, including maple long tons.	4,487	4,830	7,074	4,742	4,661	6,341	11,631	-1.7	-59.9	-----	-----	-----									

\* Cumulative through June 30.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found in pages 27 to 139 of the August, 1930, "Survey"</i>	1930					1929		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<b>FOODSTUFFS—Continued</b>												
<b>Sugar—Continued</b>												
Prices:												
Wholesale, 96° centrif., N. Y., dolls. per lb.	.036	.035	.032	.032	.033	.035	.038	+3.1	-13.2			
Wholesale, granulated, N. Y., dolls. per lb.	.049	.048	.048	.046	.049	.052	.052	+2.2	-11.5			
Retail, granulated, N. Y., dolls. per lb.	.055	.055	.057	.055	.054	.056	.057	-1.8	-5.3			
Retail average, 51 cities, relative to 1913	116	115	115	111	111	116	116	0.0	-4.3			
Cuban movement (raw):												
Receipts at Cuban ports long tons	793,762	669,252	401,856	164,444	149,333	196,995	153,925	-9.2	-3.0	3,248,035	4,261,334	3,030,437
Exports long tons	153,083	335,529	446,188	236,592	326,074	356,616	428,066	+37.8	-23.8	2,387,260	3,244,271	1,822,087
Stocks, end of month long tons	1,411,983	1,754,746	1,701,274	1,631,332	1,417,997	1,298,387	978,543	-13.1	+44.9			
<b>Candy</b>												
Sales by manufacturers thous. of dolls.	27,312	25,660	22,264	19,774	16,713	20,808	17,963	-15.5	-7.0		175,537	161,154
<b>Coffee</b>												
Imports thous. of bags	1,134	1,065	915	1,010	801	817	864	-20.7	-7.3	6,758	6,649	7,190
Visible supply:												
World thous. of bags	5,264	5,204	5,449	5,572	5,378	5,352	5,448	-3.5	-1.3			
United States thous. of bags	875	851	790	867	861	700	760	-0.7	+13.3			
Receipts, total, Brazil thous. of bags	1,264	1,152	1,247	1,031	1,391	1,069	1,056	+34.9	+31.7	8,420	7,785	9,009
Clearances:												
Total, Brazil, for world thous. of bags	1,169	1,152	1,027	922	1,025	1,020	1,267	+11.2	-19.1	8,117	7,759	8,192
Total, Brazil, for U. S. thous. of bags	590	548	530	441	539	488	634	+22.2	-15.0	4,297	3,999	4,251
Price, Rio No. 7, Brazil grades dolls. per lb.	.103	.099	.092	.093	.076	.168	.163	-18.3	-53.4			
<b>Tea</b>												
Imports thous. of lbs.	6,355	5,796	4,712	6,555	7,007	6,029	6,734	+6.9	+4.1	42,950	45,295	42,564
Price, Formosa fine, New York dolls. per lb.	.300	.300	.300	.300	.292	.325	.310	-2.7	-5.8			
<b>Cocoa</b>												
Shipments from the Gold and Nigerian Coasts, Africa long tons	25,543	13,951	16,124	14,604	20,764	9,889	7,224	+41.3	+187.4	164,840	182,499	164,465
Imports long tons	11,595	12,164	10,721	15,121	20,443	14,486	18,862	+35.2	+8.4	123,199	146,954	110,302
Spot price, Accra, New York dolls.	.0875	.0869	.0850	.0825	.0869	.1069	.1069	+5.3	-18.7			
<b>TOBACCO</b>												
Consumption (tax-paid withdrawals):												
Large cigars thousands	454,766	469,969	523,775	519,599	532,805	556,746	589,282	+2.5	-9.6	3,499,766	3,625,850	3,346,336
Small cigarettes thousands	9,165,175	9,535,460	10,300,768	11,750,525	11,885,840	10,839,673	10,724,403	+0.9	+10.6	60,189,286	69,252,976	71,284,005
Manufac. tobacco and snuff thous. of lbs.	31,458	31,261	32,579	30,939	30,964	32,353	32,694	+0.1	-5.3	226,494	224,263	220,523
Exports:												
Unmanufactured thous. of lbs.	54,887	43,364	28,823	30,351	27,620	28,588	26,266	-9.0	+5.2	264,256	252,369	288,967
Cigarettes thousands	497,814	366,674	446,231	566,015	643,358	799,935	504,565	+13.7	+27.5	6,702,873	5,550,372	3,416,442
<b>TRANSPORTATION</b>												
<b>River and Canal Cargo Traffic</b>												
Panama Canal:												
Total cargo traffic thous. of long tons	2,558	2,457	2,262	2,147	2,402	2,424	2,598	+11.9	-7.5	16,857	18,432	16,816
In American vessels thous. of long tons	1,272	1,120	1,116	1,062	1,221	1,186	1,335	+15.0	-8.5	7,866	8,506	8,047
In British vessels thous. of long tons	611	685	511	556	578	591	583	+4.0	-0.9	4,766	4,953	4,257
Sault Ste. Marie canals thous. of short tons	410	11,320	12,650	12,367	14,076	14,120	-2.2	-12.4	35,178	46,632	36,747	
Cape Cod Canal short tons	151,515	184,002	214,302	208,467	219,574	161,143	175,179	+5.3	+25.3	671,320	1,129,584	1,326,541
Suez Canal thous. of met. tons	2,634	2,475	2,542	2,111	2,111	2,590	2,745			* 16,207	* 17,615	* 14,980
Welland Canal short tons	141,679	805,262	756,563	850,918	760,431	628,041	+12.5	+35.5	3,093,717	2,463,278	2,554,422	
St. Lawrence Canal short tons	110,804	841,348	874,612	928,453	927,933	783,484	+6.2	+18.5	3,464,489	2,836,999	2,755,217	
Mississippi River Govt. barges short tons	71,087	101,122	124,924	140,176	84,200	103,934	94,141	-39.9	-10.6	769,179	802,509	672,405
Ohio River, Pittsburgh, Pa., to Wheeling, W. Va. short tons	838,991	879,401	1,002,040	1,015,299	1,106,423	1,056,795	1,088,912	+9.0	+1.6	5,460,320	6,037,393	6,129,620
Allegheny River short tons	174,445	335,262	310,711	307,823	367,727	345,995	396,514	+19.5	-7.3	1,396,248	1,660,025	1,651,213
Monongahela River short tons	2,363,728	2,112,586	2,265,032	2,151,936	2,154,045	2,460,644	2,396,993	+0.1	-10.1	14,672,911	16,378,084	15,360,793
Ohio River, tonnage originating (quarterly):												
Pittsburgh district thous. of short tons	2,2,112			2,2,882		2,3,070		+36.5	-6.1	4,487	4,902	4,994
Huntington district thous. of short tons	2,1,129			2,1,478		2,1,348		+30.9	+9.6	2,438	2,349	2,607
Cincinnati district thous. of short tons	2,75			2,121		2,133		+61.3	-9.0	223	175	196
Louisville district thous. of short tons	2,544			2,964		2,1,869		+77.2	-48.4	1,864	2,719	1,508
Total thous. of short tons	2,3,860			2,5,445		2,6,420		+41.1	-15.2	9,012	10,145	9,305
<b>Ocean Traffic</b>												
Clearances, vessels in foreign trade:												
Total thous. of net tons	5,834	6,703	7,525	7,509	8,067	7,664	8,099	+7.4	-0.4	42,464	46,426	46,699
American thous. of net tons	2,116	2,966	3,112	2,822	3,371	2,985	3,176	+19.5	+6.1	16,467	17,734	18,387
Foreign thous. of net tons	3,718	3,738	4,412	4,687	4,696	4,679	4,923	+0.2	-4.6	25,997	28,672	28,312
<b>Shipbuilding</b>												
Completed during month:												
Total gross tons	23,840	16,930	45,570	29,806	45,069	37,616	21,585	+51.2	+108.8	107,621	111,508	109,235
Steel seagoing gross tons	13,088	4,166	26,248	17,395	15,974	14,379	15,708	-8.2	+1.7	64,013	52,005	110,581
Building or under contract, end of month:												
Merchant vessels thous. of gross tons	327	366	488	487	465	170	160	-4.5	-190.6	1,684	1,369	2,850

\* Quarter ended in month indicated.

\* Cumulative through June 30.

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) IN-DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31				
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	
												1930	
<b>TRANSPORTATION—Continued</b>													
<b>Freight Cars</b>													
Surplus (daily av. last week of month):													
Total	465,920	427,925	441,503	465,464	454,815	217,657	197,923	-2.3	+129.8	-----	-----	-----	
Box	203,590	203,192	233,664	246,622	232,255	116,657	96,577	-5.8	+140.5	-----	-----	-----	
Coal	206,066	168,930	148,873	163,396	165,499	55,150	58,485	+1.3	+183.0	-----	-----	-----	
Shortage (daily av. last week of month):													
Total	-----	-----	-----	-----	-----	75	3	-----	-----	-----	-----	-----	
Box	-----	-----	-----	-----	-----	11	-----	-----	-----	-----	-----	-----	
Coal	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Car loadings:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Total	4,414,625	3,619,293	4,598,555	3,719,447	3,555,731	4,291,881	7 160,078	-4.5	-14.5	28,405,814	29,777,031	26,763,037	
Grain and grain products	201,047	156,454	188,117	166,012	233,312	178,439	7 246,841	+40.5	-5.5	1,314,674	1,343,025	1,276,587	
Livestock	118,071	96,373	117,224	86,439	80,293	94,308	7 92,030	-7.1	-12.8	830,127	766,303	709,396	
Coal and coke	735,508	571,469	739,739	578,855	556,605	669,448	7 633,584	-3.8	-12.1	5,020,629	5,373,852	4,808,315	
Forest products	294,071	229,747	264,693	198,629	159,618	281,226	7 245,248	-19.6	-34.9	1,942,574	1,940,955	1,545,807	
Ore	45,119	50,805	258,680	250,110	244,908	305,924	7 305,437	-2.0	-19.8	892,367	1,209,036	916,843	
Merchandise and I. c. I.	1,251,013	1,004,425	1,210,252	967,221	899,233	1,042,060	7 995,783	-7.0	-9.7	7,536,929	7,578,003	7,160,745	
Miscellaneous	1,769,796	1,510,020	1,819,850	1,472,151	1,381,652	1,720,476	7 641,155	-6.1	-15.8	10,868,490	11,565,857	10,345,344	
<b>Railroad Operations</b>													
Operating revenues:													
Freight	345,204	345,813	354,326	331,647	347,293	7 391,140	7 417,083	-----	-----	-----	-----	-----	
Passenger	61,788	59,586	60,406	67,146	65,805	7 79,344	7 79,593	-----	-----	-----	-----	-----	
Total operating	452,717	451,203	463,130	444,848	457,025	7 532,621	7 558,386	-----	-----	-----	-----	-----	
Operating expenses	351,279	348,214	351,780	334,638	331,562	7 382,355	7 389,258	-----	-----	-----	-----	-----	
Net operating income	61,074	62,272	69,174	68,883	82,750	7 105,818	7 123,825	-----	-----	-----	-----	-----	
Freight carried	35,310	34,894	36,956	34,419	-----	7 40,740	41,991	-----	-----	-----	-----	-----	
<b>Railway Equipment</b>													
Locomotives (Am. Ry. Assn.):													
Owned, end of month—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Quantity	56,486	56,456	56,410	7 56,380	56,342	57,876	57,635	-0.1	-2.2	-----	-----	-----	
Tractive power	2,528	2,531	2,533	2,535	2,537	2,546	2,541	+0.1	-0.2	-----	-----	-----	
In bad order, end of month—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Quantity	8,274	8,222	7,798	7 8,475	8,007	7 4,453	7 6,681	-5.5	+4.2	-----	-----	-----	
Per cent of total in use	14.8	14.7	14.0	14.3	14.4	13.0	13.4	+0.7	+7.5	-----	-----	-----	
Installed	142	149	177	165	118	158	120	-28.5	-1.7	881	931	1,026	
Retired	310	166	226	193	156	297	369	-19.2	-57.7	1,689	2,000	1,496	
New orders	43	29	18	-----	2	181	36	-----	-----	171	557	271	
Shipments, manufacturers' (Census)—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Total	68	97	58	81	56	78	69	-30.9	-18.8	360	388	475	
Steam, domestic	64	94	56	80	52	58	39	-35.0	+33.3	234	303	454	
Electric, domestic	2	-----	-----	3	1	3	0	-----	-----	81	19	9	
Unfilled orders (railroads), end of mo.—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
From manufacturers	310	239	354	300	242	334	365	-19.3	-33.7	-----	-----	-----	
In railroad shops	132	123	77	64	54	55	45	-15.6	+20.0	-----	-----	-----	
Unfilled orders, manufacturers' (Census)—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Total	535	464	419	343	291	552	539	-15.2	-46.0	-----	-----	-----	
Steam, domestic	485	417	367	291	243	489	490	-16.5	-50.4	-----	-----	-----	
Electric, domestic	44	44	43	44	41	21	18	-6.8	+127.8	-----	-----	-----	
Exports, steam	10	4	9	3	4	14	32	+33.3	-87.5	113	115	40	
Freight cars (Am. Ry. Assn.):	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Owned, end of month—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Quantity	2,268	2,270	2,270	2,272	2,274	2,266	2,267	+0.1	+0.3	-----	-----	-----	
Capacity	210,315	210,726	210,890	7 211,221	211,550	208,867	209,095	+0.2	+1.2	-----	-----	-----	
In bad order, end of month—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Quantity	129,895	129,865	137,386	140,594	144,987	142,064	137,495	+3.1	+5.4	-----	-----	-----	
Per cent of total in use	5.9	5.9	6.2	6.3	6.5	6.4	6.2	+3.2	+4.8	-----	-----	-----	
New orders	4,464	1,543	1,079	794	1,306	5,869	242	+64.5	+439.7	22,633	59,371	31,749	
Shipments—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Total	6,144	9,087	6,785	5,066	5,348	6,517	7,109	+5.6	-24.8	25,135	34,160	50,125	
Domestic	6,066	8,874	6,785	5,059	5,348	6,514	6,963	+5.7	-23.2	24,502	32,128	48,924	
Unfilled orders (railroads)—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Total	35,181	31,846	28,696	22,759	17,230	39,173	36,014	-24.3	-52.2	-----	-----	-----	
From manufacturers	29,058	26,518	25,050	19,161	14,247	34,145	31,590	-25.6	-54.9	-----	-----	-----	
In railroad shops	6,123	5,328	3,646	3,598	2,983	5,028	4,424	-17.1	-32.6	-----	-----	-----	
Passenger cars:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
New orders	169	70	72	13	32	176	89	+146.2	-64.0	1,113	928	548	
Shipments	61	77	72	66	41	94	64	-37.9	-35.9	524	580	490	
Total	51	65	69	66	41	82	53	-37.9	-22.6	460	543	450	
<b>Highways</b>													
Concrete, pavements, new contracts:													
Total	13,700	18,570	18,914	18,156	17,416	16,421	18,022	-4.1	-3.4	92,859	91,503	100,238	
Road	11,294	14,338	14,899	13,860	12,720	10,410	11,344	-8.2	+12.1	60,413	62,191	77,712	
Federal-aid highways: Completed—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Cost	6,185	6,031	9,317	22,939	13,844	15,552	16,445	-39.6	-15.8	81,263	83,531	75,262	
Distance	227	302	445	938	483	520	693	-48.5	-30.3	3,341	2,840	3,026	
Under construction, end of month	6,824	7,230	7,674	7,709	8,055	8,359	8,494	+4.5	-5.2	61,384	55,639	51,389	
<b>Passenger Travel</b>													
National parks:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Visitors	67,306	75,515	121,194	293,931	596,699	273,059	593,324	+103.0	+0.6	1,188,069	1,195,521	1,250,283	
Automobiles entered	12,841	14,322	35,819	77,153	143,049	59,412	131,511	+85.4	+8.8	224,264	249,379	312,445	
Arrivals from abroad:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Immigrants	19,759	22,261	19,414	14,944	-----	22,490	20,068	-----	-----	6 142,590	6 131,971	6 104,730	
United States citizens	40,727	32,115	25,487	32,284	-----	28,119	37,636	-----	-----	6 174,261	6 181,617	6 188,832	
Departures abroad:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Emigrants	2,900	3,947	3,720	4,320	-----	4,881	5,086	-----	-----	6 32,922	6 24,526	6 22,014	
United States citizens	37,930	26,707	27,593	40,103	-----	42,846	56,339	-----	-----	6 208,885	6 188,755	6 198,120	

\* Cumulating through June 30.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1930					1929		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found in pages 27 to 139 of the August, 1930, "Survey"</i>												
<b>TRANSPORTATION—Continued</b>												
<b>Passenger Travel—Continued</b>												
Passports issued—number	18,802	33,148	43,227	32,405	15,740	29,508	18,115	-51.4	-13.1	145,397	151,800	161,706
Pullman company operations:												
Revenue—thous. of dollars	6,316	6,247	6,171	7,198	-----	7,763	7,230	-----	-----	6 39,747	6 40,715	6 39,406
Passengers carried—thousands	2,457	2,420	2,351	2,679	-----	3,000	2,939	-----	-----	6 16,496	6 16,289	6 15,046
Trend of business in hotels:												
Room occupancy—per ct. of capacity	67	68	68	62	-----	66	63	-----	-----	-----	-----	-----
Average sale per occupied room—dollars	3.90	4.05	3.76	3.89	-----	3.97	3.94	-----	-----	-----	-----	-----
<b>Warehouses</b>												
Public merchandise warehouses, space occupied—per ct. of total	70.0	69.7	70.3	68.3	-----	71.0	71.2	-----	-----	-----	-----	-----
<b>PUBLIC UTILITIES</b>												
Telephone companies:												
Operating revenues—thous. of dollars	79,200	79,850	80,507	77,815	-----	74,622	75,141	-----	-----	6 404,110	6 446,331	6 470,615
Operating income—thous. of dollars	17,984	18,877	18,141	17,432	-----	18,194	15,905	-----	-----	6 101,541	6 109,687	6 107,733
Telegraph companies:												
Commercial telegraph tolls—thous. of dollars	10,790	11,002	10,957	10,759	-----	11,396	11,679	-----	-----	6 63,716	6 67,886	6 63,870
Operating revenues—thous. of dollars	13,865	13,964	14,059	13,768	-----	14,446	14,843	-----	-----	6 79,644	6 85,910	6 81,762
Operating income—thous. of dollars	1,442	1,673	1,445	1,412	-----	1,516	1,528	-----	-----	6 10,343	6 2,970	6 6,939
Gas and electric companies:												
Gross earnings—thous. of dollars	199,000	198,000	195,000	189,000	-----	183,000	178,000	-----	-----	6 1,121,780	6 1,154,750	6 1,191,500
Net earnings—thous. of dollars	88,000	89,500	86,000	83,000	-----	79,000	71,000	-----	-----	6 430,362	6 507,500	6 528,500
Electric railways (212 companies):												
Passengers carried—thous. of persons	760,269	728,820	736,202	681,788	655,477	744,310	722,289	-3.9	-9.3	5,463,332	5,395,281	5,049,937
<b>ELECTRIC POWER</b>												
Electric power production:												
Total—mills. of kw. hours	8,175	8,000	7,8015	7,753	7,870	7,768	8,072	+1.5	-2.5	49,477	55,471	56,083
By water power—mills. of kw. hours	3,266	3,284	3,194	3,038	2,862	3,068	3,055	-5.8	-6.3	20,451	21,191	21,284
By fuels—mills. of kw. hours	4,909	4,716	4,821	4,715	5,008	4,699	5,017	+6.2	-0.2	29,026	34,281	34,799
In street railways,												
manfg. plants, etc.—mills. of kw. hours	501	7,489	518	541	541	362	368	0.0	+47.0	3,134	2,685	3,528
In central stations—mills. of kw. hours	7,674	7,511	7,497	7,212	7,329	7,406	7,704	+1.6	-4.9	46,384	52,779	52,555
Electric power production (Canada):												
Total—mills. of kw. hours	1,508	1,494	1,536	1,424	-----	1,378	1,411	-----	-----	6 7,747	6 8,569	6 8,899
By water power—mills. of kw. hours	1,484	1,472	1,515	1,404	-----	1,361	1,393	-----	-----	6 7,642	6 8,407	6 8,744
Exported—mills. of kw. hours	127	118	129	136	-----	119	129	-----	-----	6 767	6 694	6 740
Electric power, gross revenue—thous. of dollars	7,176,200	7,176,300	172,900	170,400	-----	162,500	159,500	-----	-----	6 939,899	6 1,038,900	6 1,079,900
Rate of manufacturing operations (based on the consumption of electrical energy for power purposes):												
Activity by geographical divisions—												
United States—rel. to 1923-25	120.2	120.3	119.0	115.3	105.1	135.2	129.0	-8.8	-18.5	-----	-----	-----
New England—rel. to 1923-25	105.0	105.9	101.3	94.2	87.9	123.5	113.4	-6.7	-22.5	-----	-----	-----
North Central—rel. to 1923-25	128.4	125.7	125.8	116.0	109.9	142.0	141.3	-5.3	-22.2	-----	-----	-----
Middle Atlantic—rel. to 1923-25	122.2	117.2	112.3	111.8	102.9	129.5	120.5	-8.0	-14.6	-----	-----	-----
Southern—rel. to 1923-25	121.7	117.3	122.3	119.5	106.5	128.4	114.7	-10.9	-7.1	-----	-----	-----
Western—rel. to 1923-25	117.4	127.6	130.5	-----	-----	134.2	129.4	-----	-----	-----	-----	-----
Activity by industries—												
All industries—rel. to 1923-25	120.2	120.3	119.0	115.3	105.1	135.2	129.0	-8.8	-18.5	-----	-----	-----
Chemical and allied products—rel. to 1923-25	140.0	137.2	146.6	138.6	138.6	133.8	127.0	+1.4	+10.7	-----	-----	-----
Food and kindred products—rel. to 1923-25	129.8	119.4	138.2	145.4	139.2	121.8	129.9	-4.3	+7.2	-----	-----	-----
Rolling mills and steel plants—rel. to 1923-25	136.8	138.3	135.1	115.2	109.7	154.3	144.4	-4.8	-24.0	-----	-----	-----
Metal working plants—rel. to 1923-25	132.0	125.5	116.3	106.8	95.1	143.4	144.4	-11.0	-34.1	-----	-----	-----
Metal groups—rel. to 1923-24	133.7	130.2	123.2	110.0	100.5	147.9	144.2	-8.6	-30.3	-----	-----	-----
Leather and its products—rel. to 1923-25	80.8	91.2	66.3	96.8	97.3	98.7	82.0	+0.5	+18.7	-----	-----	-----
Lumber and its products—rel. to 1923-25	93.7	102.8	102.4	107.3	100.0	113.8	103.2	-6.8	-3.1	-----	-----	-----
Paper and pulp—rel. to 1923-25	135.0	126.7	132.2	137.5	119.9	137.3	122.3	-12.8	-2.0	-----	-----	-----
Rubber and its products—rel. to 1923-25	130.3	138.5	135.3	104.8	103.8	158.1	136.7	-1.0	-24.1	-----	-----	-----
Shipbuilding—rel. to 1923-25	117.7	130.1	113.2	111.8	106.8	106.9	107.7	+4.5	+8.4	-----	-----	-----
Stone, clay, and glass—rel. to 1923-25	117.9	129.9	121.2	136.5	110.8	170.3	154.7	-18.8	-28.4	-----	-----	-----
Textiles—rel. to 1923-25	99.6	102.3	96.0	95.3	79.7	123.0	113.4	-16.4	-29.7	-----	-----	-----
Automobiles, including repair parts—rel. to 1923-25	108.9	112.9	105.8	102.9	75.3	154.0	139.5	-26.8	-46.0	-----	-----	-----
<b>EMPLOYMENT AND WAGES</b>												
Employment in factories:												
New York State—rel. to 1923	81.8	80.3	79.0	77.5	74.6	87.6	87.3	-3.7	-14.5	-----	-----	-----
Maryland—rel. to 1924	87.5	88.6	87.4	86.2	83.3	93.9	93.0	-3.4	-10.4	-----	-----	-----
Iowa—rel. to 1923	123.0	124.3	126.1	122.5	118.1	130.8	129.7	-3.6	-8.9	-----	-----	-----
Massachusetts—rel. to 1925-27	82.0	80.4	78.3	75.6	71.5	88.2	87.9	-5.4	-18.7	-----	-----	-----
Illinois—rel. to 1925-27	96.9	95.0	93.4	91.2	85.7	104.1	103.4	-6.0	-17.1	-----	-----	-----
Wisconsin—rel. to 1923	90.6	-----	-----	-----	-----	98.2	100.3	-----	-----	-----	-----	-----
Ohio—rel. to 1926	93.1	-----	-----	-----	-----	110.4	108.8	-----	-----	-----	-----	-----
Cleveland—rel. to Jan., 1921	106.7	110.5	109.2	99.0	-----	128.2	131.0	-----	-----	-----	-----	-----
Detroit—rel. to 1923-25	108.5	444,133	436,926	428,678	412,693	484,637	483,142	-3.7	-14.6	-----	-----	-----
New York State—number	452,472	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Oklahoma—number	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

<sup>6</sup> Cumulative through June 30.<sup>7</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) IN-DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31				
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<b>EMPLOYMENT AND WAGES—Con.</b>													
Total pay roll:													
New York State (weekly) . . . . . thous. of dollars	13,481	13,030	12,667	12,369	11,717	14,549	14,398	-5.3	-18.6				
Wisconsin . . . . . rel. to 1923	96.9					107.0	100.2						
New York State . . . . . rel. to 1923	89.4	86.4	84.0	82.0	77.7	96.5	95.5	-5.2	-18.6				
Illinois . . . . . rel. to 1925-27	90.1	89.1	86.5	82.2	74.5	107.5	102.7	-9.4	-27.5				
Employment:													
Canada . . . . . rel. to cal. year 1926	110.2	107.8	111.4	116.5	118.9	122.2	124.7	+2.1	-4.7				
Ohio construction . . . . . rel. to 1926	79.1					108.8	115.0						
Employment, trade-unions:													
United States . . . . . per cent of total	79.0	79.0	80.0	80.0	79.0	91.0	91.0	-1.2	-13.2				
Canada . . . . . per cent of total	780.2	791.0	789.7	789.4		97.1	97.0						
Anthracite mines:													
Employment . . . . . rel. to 1923-25	83.3	84.8	94.5	91.5	92.3	95.4	85.6	+0.9	+7.8				
Pay roll . . . . . rel. to 1923-25	67.1	63.9	84.2	74.1	71.6	71.0	56.8	-3.4	+26.1				
Federal civilian employees,													
Washington, D. C., end month . . . . . number	64,954	65,778	67,036	68,510	69,666	63,904	63,372	+1.7	+9.9				
Average weekly earnings, factories:													
Illinois . . . . . dollars	28.25	28.49	28.14	27.49	26.27	29.46	28.16	-4.4	-6.7				
New York State . . . . . dollars	29.80	29.35	29.00	28.86	28.40	30.02	29.80	-1.6	-4.7				
Wisconsin . . . . . dollars	25.75	25.56	24.79	23.96		26.03	23.96						
New York . . . . . rel. to 1923	109.4	107.7	106.5	105.9	104.3	110.2	109.4	-1.5	-4.7				
Illinois . . . . . rel. to 1925-27	99.6	100.4	99.2	96.9	92.6	103.8	99.2	-4.4	-6.7				
Wisconsin . . . . . rel. to 1923	106.4					109.0	100.0						
Average weekly earnings (National Industrial Conference Board):													
Grand total (both sexes) . . . . . dollars	27.59	27.64	27.05	26.48	25.72	28.28	28.09	-2.9	-8.4				
Total male . . . . . dollars	29.37	29.74	29.19	28.56	27.33	31.16	31.01	-4.3	-11.9				
Skilled male . . . . . dollars	30.70	31.09	30.50	29.87	28.55	32.66	32.52	-4.4	-12.2				
Unskilled male . . . . . dollars	24.14	24.41	23.85	23.13	22.26	25.45	25.23	-3.8	-11.8				
Total women . . . . . dollars	16.84	16.59	16.27	16.13	15.88	17.86	17.54	-1.5	-9.5				
Average weekly hours:													
Nominal (both sexes) . . . . . hours	49.0	48.8	48.9	48.6	48.4	49.7	49.6	-0.4	-2.4				
Actual (both sexes) . . . . . hours	46.3	46.1	45.2	44.5	43.3	48.5	48.8	-2.7	-11.3				
Wages, road labor, by districts:													
New England . . . . . cents per hour	52	51	48	49	49	51	49	0.0	0.0				
Middle Atlantic . . . . . cents per hour	44	42	41	43	42	42	42	-2.6	0.0				
South Atlantic . . . . . cents per hour	25	27	26	26	25	29	30	-3.8	-16.7				
East South Central . . . . . cents per hour	27	25	25	25	25	26	25	0.0	0.0				
West South Central . . . . . cents per hour	28	33	28	28	26	32	30	-7.1	-13.3				
East North Central . . . . . cents per hour	38	38	39	38	38	38	40	0.0	-5.0				
West North Central . . . . . cents per hour	37	38	37	37	36	37	36	-2.7	0.0				
Mountain . . . . . cents per hour	46	46	48	48	47	47	47	-2.1	0.0				
Pacific . . . . . cents per hour	53	53	52	54	53	52	53	-1.9	0.0				
United States, average . . . . . cents per hour	39	40	40	40	40	40	39	0.0	+2.6				
Wage rates, U. S. Steel Corp. . . . . cents per hour	50	50	50	50	50	50	50	0.0	0.0				
Wages, steel sheet workers . . . . . per cent of base	127.0	127.0	127.0	127.0	127.0	127.0	127.0	0.0	0.0				
Applicants per 100 jobs, employment agencies:													
United States . . . . . number	180	162	164	186	198	128	131	+6.5	+51.1				
Eastern States . . . . . number	217	177	172	202	231	127	139	+14.4	+66.2				
Central States . . . . . number	189	177	173	209	221	140	141	+5.7	+56.7				
Southern States . . . . . number	254	217	243	240	253	185	174	+5.4	+45.4				
Western States . . . . . number	83	74	93	81	98	71	83	+21.0	+18.1				
Illinois . . . . . number	209	190	196	224	262	139	148	+17.0	+77.0				
Wisconsin . . . . . number	177	159	135	155	150	120	115	-3.2	+30.4				
Canada . . . . . number	157	145	148	156		130	134						
<b>FACTORY LABOR TURNOVER</b>													
(Percentage of number on pay roll)													
Departures:													
Total . . . . . per cent (annual basis)	31.9	35.1	34.7	30.8	29.3	51.1	46.5	-4.9	-37.0				
Voluntary quits . . . . . per cent (annual basis)	16.3	17.7	17.7	14.8	11.8	39.5	35.7	-20.3	-66.9				
Lay offs . . . . . per cent (annual basis)	12.1	14.1	13.9	13.6	15.4	5.4	5.0	+13.2	+208.0				
Discharges . . . . . per cent (annual basis)	3.5	3.3	3.1	2.4	2.1	6.2	5.8	-12.5	-63.8				
Accessions . . . . . per cent (annual basis)	23.0	24.3	24.7	19.7	17.4	60.9	61.4	-11.7	-71.7				
<b>DISTRIBUTION MOVEMENT</b>													
<b>Retail Sales</b>													
Mail-order houses:													
Total sales, 2 houses . . . . . thous. of dolls	47,582	56,561	59,350	54,356	48,790	57,702	53,309	-10.2	-8.5	282,919	368,845	364,604	
Sears, Roebuck & Co. . . . . thous. of dolls	26,950	32,785	34,300	30,367	30,121	35,748	33,501	-0.8	-10.1	172,375	226,229	215,761	
Montgomery Ward & Co. . . . . thous. of dolls	20,632	23,776	25,050	23,989	18,669	21,954	19,808	-22.2	-5.8	110,544	142,616	148,533	
Ten-cent chain stores:													
Total sales (4 chains) . . . . . thous. of dolls	42,325	46,371	47,075	40,548	39,802	44,403	42,603	-1.8	-6.6	270,555	293,855	288,301	
Total stores operated (4 chains) . . . . . number	2,908	2,922	2,935	2,952	2,967	2,744	2,767	+0.5	+7.2				
F. W. Woolworth & Co. . . . . thous. of dolls	22,482	24,369	25,310	20,715	20,737	23,611	22,521	+0.1	-7.9	145,861	158,331	152,051	
Stores operated . . . . . number	1,845	1,853	1,855	1,867	1,871	1,775	1,789	+0.2	+4.6				
S. S. Kresge Co. . . . . thous. of dolls	11,260	12,724	12,778	11,400	10,882	12,572	11,687	-4.5	-6.9	73,374	79,332	78,340	
Stores operated . . . . . number	617	624	632	636	645	537	542	+1.4	+19.0				
McCrory Stores Corp. . . . . thous. of dolls	3,358	3,651	3,588	3,212	3,123	3,335	3,300	-2.8	-5.4	20,442	22,326	22,534	
Stores operated . . . . . number	241	240	241	240	240	238	239	0.0	+0.4				
S. H. Kress & Co. . . . . thous. of dolls	5,225	5,627	5,399	5,221	5,061	4,885	5,095	-3.1	-0.7	31,878	33,868	35,377	
Stores operated . . . . . number	205	205	207	209	211	194	197	+1.0	+7.1				
Metropolitan . . . . . thous. of dolls	1,133	1,348	1,474	1,337	1,258	1,467	1,327	-5.9	-5.9	6,180	8,126	8,516	
Stores operated . . . . . number	148	147	147	148	148	120	123	0.0	+20.3				
W. T. Grant Co. . . . . thous. of dolls	4,962	5,731	6,153	5,469	4,818	5,374	4,524	-11.9	+6.5	25,022	31,394	34,828	
Stores operated . . . . . number	283	287	293	302	305	241	244	+1.0	+25.0				

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## TREND OF BUSINESS MOVEMENTS—Continued

	1930					1929		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31				
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930 ]
<i>The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"</i>													
<b>DISTRIBUTION MOVEMENT—Contd.</b>													
<b>Retail Sales—Continued</b>													
Ten-cent chain stores—Continued.													
F. & W. Grand-----thous. of dolls--	1,603	1,936	1,840	1,869	1,669	1,889	1,635	-10.7	+2.1	7,618	10,783	11,539	
Stores operated-----number--	94	96	98	103	105	89	89	+1.9	+18.0				
Isaac Silver & Bros-----thous. of dolls--	643	751	715	696	598	613	649	-14.1	-7.9	3,094	3,816	4,394	
Stores operated-----number--	45	45	45	45	45	40	41	0.0	+9.8				
J. C. Penny Co-----thous. of dolls--	14,208	17,452	17,170	15,828	13,602	17,104	14,566	-14.1	-6.6	83,488	97,652	100,068	
Stores operated-----number--	1,416	1,428	1,430	1,435	1,438	1,215	1,217	+0.2	+18.2				
G. C. Murphy Co-----thous. of dolls--	1,183	1,291	1,410	1,289	1,319	1,229	1,148	+2.3	+14.9	5,562	7,604	8,420	
Stores operated-----number--	154	155	156	160	163	145	145	+1.9	+12.4				
Restaurant chains:													
Total sales (3 chains)-----thous. of dolls--	5,039	4,962	4,975	4,585	4,501	4,808	4,821	-1.8	-6.6	32,004	33,903	33,631	
Stores operated-----number--	374	377	381	382	379	374	372	-27.0	+1.9				
Childs Co., sales-----thous. of dolls--	2,352	2,330	2,279	2,103	2,050	2,222	2,259	-2.5	-9.3	15,176	15,724	15,569	
Stores operated-----number--	110	112	115	114	113	114	114	-0.9	-0.9				
J. R. Thompson Co., sales-----thous. of dolls--	1,307	1,279	1,314	1,225	1,199	1,313	1,302	-2.1	-7.9	8,479	9,032	8,801	
Stores operated-----number--	121	121	121	121	119	124	124	-1.7	-4.0				
Waldorf System (Inc.), sales-----thous. of dolls--	1,380	1,353	1,382	1,257	1,252	1,273	1,260	-0.4	-0.6	8,357	9,147	9,261	
Stores operated-----number--	143	144	145	147	147	136	134	0.0	+9.7				
Installment sales in New England dept. stores, ratio to total sales----per cent--	9.2	6.6	6.3	5.2	6.6	4.1	6.7	+26.9	-1.5				
<b>Advertising</b>													
Magazine advertising-----thous. of lines--	2,738	3,141	3,022	2,752	1,986	2,884	2,338	-27.8	-15.1				
Magazine advertising, total cost-----thous. of dollars--	18,687	21,861	20,399	19,614	14,316	18,187	15,756	-27.0	-9.1	112,026	121,954	124,096	
Newspaper advertising-----thous. of lines--	97,868	101,259	100,402	88,702	72,007	100,698	87,409	-18.8	-17.6	766,155	706,492	630,813	
Radio broadcast cost, facilities-----thous. of dollars--	2,295	2,199	2,300	2,033	2,074	1,309	1,312	+2.0	+58.1	5,133	9,974	14,763	
National advertising in newspapers:													
Total-----thous. of lines--	54,032	52,867	54,491	47,010	39,911	56,159	74,841	-15.1	-14.8				
Passenger cars-----thous. of lines--	6,841	5,817	5,169	3,781	4,082	6,634	76,278	+8.0	-33.0				
Tires, trucks, and accessories-----thous. of lines--	6,105	6,066	7,697	5,927	5,634	7,867	77,240	-4.9	-22.2				
Financial-----thous. of lines--	6,427	7,617	6,387	6,162	6,446	7,499	78,525	+4.6	-24.4	56,140	47,388		
Building materials-----thous. of lines--	373	615	660	342	117	645	7274	-65.8	-57.3				
Electrical appliances, supplies-----thous. of lines--	1,329	2,016	1,548	1,247	739	1,760	71,052	-40.7	-29.8				
Foods and beverages-----thous. of lines--	7,915	9,220	9,503	7,781	6,428	8,169	76,421	-17.4	+0.1	47,650	8,592	8,158	
Heating and plumbing equipment-----thous. of lines--	377	629	608	479	401	350	7291	-16.3	+37.8				
Medical-----thous. of lines--	5,741	3,635	2,926	2,194	1,853	2,821	72,288	-15.5	-19.0	34,713	34,713	29,011	
Radio-----thous. of lines--	1,399	856	958	649	927	1,895	72,413	+42.8	-61.6	14,692	8,092		
Tobacco-----thous. of lines--	4,497	3,606	4,919	5,413	3,742	4,238	72,416	-30.9	+54.9	25,661	28,699		
Toilet requisites-----thous. of lines--	4,323	3,674	3,404	3,123	2,985	3,113	72,498	-4.4	+19.5	21,854	23,104		
Transportation-----thous. of lines--	2,398	2,719	3,728	4,101	3,130	4,692	73,625	-23.7	-13.7	22,154	20,710		
All other-----thous. of lines--	6,310	6,397	6,987	5,812	3,427	6,477	73,520	-41.0	-2.6	38,579	38,579		
<b>Postal Business</b>													
Postal receipts:													
50 selected cities-----thous. of dollars--	32,475	32,644	31,370	27,956	26,761	29,280	29,069	-4.3	-7.9	214,251	210,132	212,862	
50 industrial cities-----thous. of dollars--	3,562	3,524	3,335	3,062	3,157	3,061	3,189	+3.1	-1.0	23,264	23,372	23,674	
Money orders:													
Domestic issued (50 cities)-----thousands--	4,134	3,828	3,813	3,554	3,436	3,545	3,602	-3.3	-4.6	23,960	25,765	26,167	
Value-----thous. of dollars--	39,827	37,803	38,266	35,395	34,672	36,198	37,120	-2.0	-6.6	240,252	259,003	259,936	
Domestic paid (50 cities)-----thousands--	11,791	11,562	11,191	10,619	10,197	11,223	10,741	-4.0	-5.1	76,196	79,450	76,791	
Value-----thous. of dollars--	88,103	90,646	87,661	82,691	81,800	86,958	86,573	-1.1	-5.5	581,642	608,795	595,560	
Air mail, weight dispatched-----pounds--	625,174	676,255	702,499	680,814	693,627	593,254	645,653	+1.9	+7.4	1,267,533	3,781,114	4,453,680	
<b>BANKING AND FINANCE</b>													
<b>Banking</b>													
Bank debits:													
New York City-----mills. of dollars--	40,740	38,631	37,423	37,690	29,637	43,263	49,215	-21.4	-39.8	282,998	346,933	249,970	
Outside of New York City-----mills. of dollars--	25,014	24,347	24,416	24,647	23,171	26,428	28,444	-6.0	-18.5	175,100	188,967	168,852	
Canada-----mills. of dollars--	1,627	1,556	1,767	1,667	1,613	1,817	2,108	-3.2	-23.5	13,238	13,684	11,350	
Federal reserve banks:													
Bills discounted-----mills. of dollars--	241	233	247	260	197	1,125	1,076	-24.2	+83.1				
Notes in circulation-----mills. of dollars--	1,576	1,507	1,466	1,432	1,335	1,736	1,779	-6.8	-25.0				
Total investments-----mills. of dollars--	840	749	712	761	714	226	232	-6.2	+207.8				
Total reserve-----mills. of dollars--	3,209	3,252	3,221	3,151	3,178	3,041	3,109	+0.9	+2.2				
Total deposits-----mills. of dollars--	2,443	2,434	2,421	2,274	2,469	2,438	2,398	-0.2	+3.0				
Reserve ratio-----per cent--	79.8	82.5	83.9	80.7	83.5	72.9	74.4	+3.5	+12.2				
Federal reserve member banks:													
Total loans and discounts-----mills. of dollars--	16,913	16,964	16,837	16,960	16,945	16,925	17,058	-0.1	-0.7				
Total investments-----mills. of dollars--	5,719	5,789	5,889	6,120	6,291	5,560	5,549	+2.8	+13.4				
Net demand deposits-----mills. of dollars--	13,329	13,581	13,388	13,740	13,798	13,293	13,395	+0.4	+3.0				
Brokers' loans, end of month—To N. Y. Stock Ex. members-----													
Total-----mills. of dollars--	4,656	5,063	4,748	3,728	3,689	7,071	7,474	-1.0	-50.6				
Ratio to market value-----per cent--	6.12	6.72	6.33	5.83	5.49	9.15	9.16	-5.8	-40.1				
By New York F. R. member banks-----													
Deposits, New York State savings banks, end of month-----mills. of dollars--	3,968	4,274	4,022	3,219	3,228	5,769	5,960	+0.3	-45.8				
Interest rates:													
Time loans, 90 days-----per cent--	4.25	4.13	3.50	2.88	2.75	8.13	7.75	-4.5	-64.5				
Call loans, renewal-----per cent--	3.69	4.00	3.12	2.62	2.20	7.70	9.23	-16.0	-76.2				
Prime com. paper (4-6 mos.)-----per cent--	4.25	3.88	3.75	3.50	3.25	6.00	6.00	-7.1	-45.8				
Prime bankers' acceptances-----per cent--	3.13	2.94	2.50	2.13	1.88	5.50	5.13	-11.7	-63.4				
N. Y. Fed. Res. Bank (redis.)-----per cent--	3.50	3.00	3.00	2.50	2.50	5.00	5.00	0.0	-50.0				
Federal land banks-----per cent--	5.58	5.58	5.58	5.58	5.58	5.20	5.29	0.0	+5.5				
Intermediate credit banks-----per cent--	5.10	4.98	4.82	4.55	4.17	5.62	5.67	-8.4	-26.5				

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) IN-DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31			
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929
												1930
<b>BANKING AND FINANCE—Contd.</b>												
<b>Public Finance</b>												
Government debt, gross, end mo. mills of dollars	16,390	16,394	16,399	16,185	16,176	16,931	16,832	-0.1	-3.9	308,313	352,628	310,986
Customs receipts—thous. of dollars	42,610	41,071	51,722	72,170	26,200	52,401	52,144	-63.7	-49.8	2,207,267	2,335,084	2,239,143
Total ordinary receipts—thous. of dollars	674,876	159,053	173,243	803,495	138,741	765,882	169,473	-82.7	-18.1			
Expenditures chargeable to ordinary receipts—thous. of dollars	362,221	414,147	230,997	416,799	284,310	420,473	349,825	-31.8	-18.7	1,997,710	2,162,174	2,292,567
U. S. money in circulation:												
Daily average—mills of dollars	4,533	4,518	4,497	4,489	4,483	4,687	4,764	-0.1	-5.9			
<b>Gold and Silver</b>												
Gold:												
Domestic receipts at mint—fine ounces	73,745	89,694	76,786	90,764	115,119	73,468	92,256	+26.8	+24.8	497,645	483,249	594,072
Rand output—fine ounces	889,370	868,606	916,213	887,000	912,000	856,029	889,480	+2.8	+2.5	5,079,037	6,073,495	6,174,178
Monetary stock of U. S. —												
daily average—mills. of dollars	4,395	4,443	4,505	4,528	4,532	4,311	4,335	+0.1	+4.5			
Imports—thous. of dollars	55,768	65,835	23,552	13,938	21,888	30,762	35,525	+57.0	-38.4	98,308	217,032	264,087
Exports—thous. of dollars	290	110	82	26	42,529	550	807			529,708	7,856	52,192
Silver:												
Production—												
United States—thous. of fine oz.	4,998	4,627	4,293	3,969	3,638	4,976	4,523	-8.3	-19.6	32,905	35,023	31,439
Canada—thous. of fine oz.	1,714	1,705	1,585	1,485	2,100	1,146	1,910	+41.4	+9.9	10,574	10,207	11,530
Stocks, end of month—												
United States—thous. of fine oz.	338	356	348	737	459	1,382	682	-37.7	-32.7			
Canada—thous. of fine oz.	496	690	844	441	312	543	339	-29.3	-8.0			
Imports—thous. of dollars	4,831	3,570	3,486	2,707	3,950	5,022	4,723	+45.9	-16.4	37,997	37,457	27,223
Exports—thous. of dollars	5,818	4,647	4,978	3,336	3,706	5,445	6,795	+11.1	-45.5	48,491	48,150	33,708
Price at New York—dollars per fine oz.	.417	.424	.407	.346	.343	.524	.523	-0.9	-34.7			
<b>Business Failures</b>												
Liabilities (United States):												
Total commercial—thous. of dollars	56,846	49,059	55,541	63,131	39,826	31,375	32,426	-36.9	+22.8	281,035	264,556	376,914
Manufacturers—thous. of dollars	19,414	19,669	23,133	26,273	13,369	12,721	12,767	-49.1	+4.7	104,155	98,447	142,082
Trade establishments—thous. of dollars	24,293	23,427	21,285	22,825	21,572	13,931	14,605	-5.5	+47.7	139,213	132,034	164,125
Agents and brokers—thous. of dollars	13,139	5,964	11,123	14,033	4,887	4,723	5,053	-65.2	-3.3	37,667	33,176	70,710
Banks (quarterly)—thous. of dollars	2,51,579	2,81,712	2,707	2,997	1,534	2,592	2,592	+58.4	+50.1	65,755	91,967	133,291
Liabilities (Canada)—thous. of dollars	3,549	2,006	2,737	2,707	2,997	1,534	2,592	+10.7	+15.6	22,465	18,483	27,709
Firms (United States):												
Total commercial—number	2,347	2,198	2,179	2,026	2,028	1,767	1,752	+0.1	+15.8	14,551	13,924	15,799
Manufacturers—number	621	534	501	425	496	461	461	-16.2	-7.8	3,432	3,575	3,794
Trade establishments—number	1,587	1,500	1,580	1,393	1,481	1,154	1,190	+6.3	+24.5	10,262	9,494	11,059
Agents and brokers—number	139	164	148	126	122	117	101	-3.2	+20.8	857	855	996
Banks (quarterly)—number	2,124	2,134	2,143	2,143	2,143	2,143	2,143	+8.1	-9.5	201	229	258
Firms (Canada)—number	198	177	188	156	183	112	180	+17.3	+1.7	1,072	1,176	1,376
By groups:												
Manufacturers—												
Metals—number	42	42	43	28	45	40	39	+60.7	+15.4	263	253	268
Textiles—number	81	61	57	75	51	47	63	-32.0	-19.0	427	418	489
Lumber—number	111	106	94	85	81	107	88	-4.7	-8.0	531	668	676
Chemicals—number	11	9	5	9	11	6	6	+22.2	+83.3	54	80	70
Printing and engraving—number	16	15	21	22	20	23	15	-1.1	+33.3	106	119	124
Foodstuffs—number	42	38	29	45	37	45	31	-17.8	+19.4	299	289	289
Leather, etc.—number	11	4	14	8	10	12	10	+25.0	0.0	94	95	78
Liquors and tobacco—number	3	3	4	6	1	3	7	-82.0	-85.7	41	50	24
Stone, clay, and glass—number	11	10	13	7	9	6	9	+28.6	0.0	61	59	63
All other—number	293	246	221	222	160	194	193	-27.9	-17.1	1,556	1,544	1,713
Traders—												
General stores—number	124	108	69	73	83	68	68	+13.7	+22.1	637	638	687
Foods and tobacco—number	413	386	395	365	403	373	406	+10.4	-0.7	2,998	2,962	2,791
Clothing—number	317	270	300	264	268	202	201	+1.5	+33.3	2,100	1,689	2,222
Household furniture—number	307	277	286	259	235	200	180	-9.3	+30.6	1,844	1,743	2,030
Chemicals and paints—number	99	80	73	93	73	50	54	-21.5	+35.2	484	429	603
Books and paper—number	13	10	18	13	21	13	5	+61.5	+320.0	91	85	96
All other—number	314	369	389	326	398	248	276	+22.1	+44.2	2,099	1,948	2,580
<b>Life Insurance</b>												
(Association of Life Insurance Presidents)												
Policies and certificates, new (44 companies):												
Ordinary—number of policies	330,337	310,009	294,362	266,801	270,285	277,615	273,099	+1.3	-1.0	1,714,194	1,879,966	1,993,570
Industrial—number of policies	973,698	893,017	847,842	1,162,942	896,318	880,770	809,110	-22.9	+10.8	6,212,820	6,531,204	6,359,617
Group—number of certificates	45,913	61,996	45,832	52,009	74,171	66,353	72,923	+42.6	+1.7	292,340	352,525	355,734
Total policies and certificates—number	1,349,928	1,265,022	1,188,036	1,481,752	1,240,774	1,224,738	1,155,132	-16.3	+7.4	8,219,354	8,763,695	8,710,921
Amount of new insurance (44 companies):												
Ordinary—thous. of dollars	884,535	839,531	776,394	725,725	714,748	750,228	722,451	-1.5	-1.1	4,901,065	5,241,792	5,384,523
Industrial—thous. of dollars	264,415	241,129	230,083	311,925	247,506	242,166	223,680	-20.7	+10.7	1,617,085	1,734,227	1,725,898
Group—thous. of dollars	73,234	113,514	91,263	106,782	130,036	106,539	147,658	+21.8	-11.9	651,441	658,369	639,072
Total insurance—thous. of dollars	1,222,184	1,194,174	1,097,740	1,144,432	1,092,290	1,098,933	1,093,789	-4.6	-0.1	7,175,191	7,634,388	7,749,493
Premium collections (44 companies):												
Ordinary—thous. of dollars	182,605	173,929	175,397	166,190	170,847	158,733	169,773	+2.8	+0.6	1,103,532	1,172,208	1,196,657
Industrial—thous. of dollars	65,605	53,948	58,459	59,522	54,802	55,801	57,932	-8.3	-5.7	361,226	383,640	406,506
Group—thous. of dollars	8,344	7,598	8,003	7,615	8,480	7,345	11,494	+11.4	-26.2	56,434	68,979	57,808
Annuities—thous. of dollars	5,789	5,805	6,036	5,359	7,047			+31.5				49,392
Total—thous. of dollars	262,403	241,230	247,945	238,686	240,976	221,879	239,199	+1.0	+0.7	1,521,192	1,624,827	1,710,363
Admitted life insurance assets (40 companies):												
Grand total—millions of dollars	14,444	14,543	14,648	14,736	14,837	13,469	13,594	+0.7	+0.1			
Mortgage loans—												
Total—millions of dollars	6,116	6,140	6,160	6,171	6,200	5,792	5,849	+0.5	+6.0			
Farm—millions of dollars	1,577	1,576	1,573	1,572	1,599	1,607	-0.1	-2.2				
All other—millions of dollars	4,539	4,564	4,585	4,598	4,628	4,193	4,242	+0.7	+9.1			

2 Quarter ended in month indicated.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found in pages 27 to 139 of the August, 1930, "Survey"	1930					1929		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31														
	March	April	May	June	July	June	July		July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930										
<b>BANKING AND FINANCE—Continued</b>																							
<b>Life Insurance—Continued</b>																							
Bonds and stocks (book value):																							
Total mills. of dolls.	5,384	5,420	5,470	5,531	5,582	5,119	5,171	+0.9	+7.9														
Government mills. of dolls.	1,061	1,065	1,064	1,073	1,079	1,048	1,048	+0.6	+3.0														
Railroad mills. of dolls.	2,554	2,572	2,594	2,600	2,617	2,507	2,517	+0.7	+4.0														
Public utility mills. of dolls.	1,389	1,398	1,414	1,441	1,450	1,261	1,267	+0.6	+14.4														
All other mills. of dolls.	380	385	398	417	436	303	330	+4.6	+28.6														
Policy loans and premium notes mills. of dolls.	1,922	1,942	1,965	1,992	2,018	1,652	1,670	+1.3	+20.8														
(Life Insurance Sales Research Bureau)																							
Sales of ordinary life insurance:																							
United States total thous. of dolls.	941,801	897,871	860,068	822,437	779,184	829,202	796,900	-5.3	-2.2	5,283,077	5,722,507	5,855,891											
Eastern manuf. dis. thous. of dolls.	401,432	370,797	350,430	330,948	319,321	334,551	319,437	-3.5	0.0	2,189,874	2,378,925	2,443,943											
Western manuf. dis. thous. of dolls.	215,909	201,268	191,560	188,821	172,695	189,447	182,763	-8.5	-5.5	1,161,734	1,316,963	1,316,953											
Western agric. district thous. of dolls.	131,342	131,635	130,005	121,170	114,929	125,349	121,224	-5.2	-5.2	799,770	821,343	841,989											
Southern district thous. of dolls.	98,391	99,928	99,406	94,384	89,284	97,104	90,954	-5.4	-1.8	622,319	639,508	651,457											
Far western district thous. of dolls.	94,727	94,243	88,667	87,114	82,955	82,751	82,522	-4.8	+0.5	509,380	565,768	601,549											
Canada total, 15 companies thous. of dolls.	50,327	52,708	50,085	55,355	47,829	54,700	56,078	-13.6	-14.7	331,044	363,340	348,591											
<b>Dividend and Interest Payments</b>																							
Grand total thous. of dolls.	608,442	744,881	570,300	721,079	915,900	658,300	897,856	+27.0	+2.0	3,653,814	4,619,101	5,197,670											
Interest payments thous. of dolls.	280,042	419,681	262,000	391,680	542,900	386,400	515,156	+38.6	+5.4	2,253,754	2,516,201	2,677,471											
Dividend payments:																							
Total thous. of dolls.	328,400	325,200	308,300	329,400	373,000	271,900	382,700	+13.2	-2.5	1,400,060	2,102,900	2,520,200											
Industrial and misc. thous. of dolls.	255,000	243,000	219,500	235,000	278,000	185,800	256,500	+18.3	-3.0	1,017,330	1,528,000	1,869,500											
Steam railroads thous. of dolls.	45,500	40,000	35,800	39,500	54,000	33,600	55,000	+36.7	-1.8	229,880	275,600	314,500											
Street railways thous. of dolls.	7,900	10,700	8,000	6,900	12,500	6,500	13,100	+81.2	-4.6	72,800	70,600	73,200											
<b>New Security Issues</b>																							
Foreign loans in the U. S. thous. of dolls.	162,000	165,000	129,751	187,855	69,602	128,226	41,708	-63.0	+66.9	1,095,738	520,042	890,208											
Foreign governments thous. of dolls.	26,000	121,675	79,781	103,250	42,100	6,000	-	-59.2	-	542,870	41,750	416,806											
Total corporation thous. of dolls.	646,326	679,703	927,376	512,678	428,762	641,129	862,847	-16.4	-50.3	4,759,806	6,425,930	4,393,233											
Purpose of issue—																							
New capital thous. of dolls.	630,889	628,444	864,042	445,363	402,281	624,907	803,553	-9.7	-49.9	3,252,627	5,502,127	4,068,676											
Refunding thous. of dolls.	15,437	51,259	63,334	67,315	26,481	16,222	59,294	-60.7	-55.3	1,507,179	923,803	324,557											
Type of security—																							
Stocks thous. of dolls.	123,388	261,380	433,640	154,955	70,430	359,009	650,604	-54.5	-89.2	1,838,955	4,183,939	1,326,749											
Bonds and notes thous. of dolls.	522,938	418,323	493,736	357,723	358,332	282,120	212,243	+0.2	+68.8	2,920,852	2,241,991	3,066,484											
Class of industry:																							
Railroads thous. of dolls.	223,013	178,662	60,435	178,467	62,632	91,350	27,580	-64.9	+127.1	530,905	478,829	881,917											
Public utilities thous. of dolls.	228,481	130,777	604,486	172,091	234,465	139,552	310,796	+36.2	-26.7	1,754,564	1,673,925	2,034,745											
Industrial thous. of dolls.	49,931	169,229	154,845	55,953	45,920	105,205	127,621	-17.9	-64.0	923,889	1,392,811	641,868											
Oil thous. of dolls.	76,000	63,742	23,932	66,000	625	45,641	17,639	-0.1	-96.5	95,027	176,910	239,074											
Land and buildings thous. of dolls.	17,675	64,541	7,599	15,383	22,070	40,843	41,269	+43.5	-46.5	518,728	429,493	172,586											
Shipping and misc. thous. of dolls.	51,226	72,752	31,080	24,785	63,050	218,539	328,944	+154.4	-80.8	910,664	2,158,733	366,646											
States and municipalities:																							
Permanent loans thous. of dolls.	127,028	148,956	142,448	153,699	104,986	162,168	86,745	-31.7	+21.0	853,006	786,871	850,708											
Temporary loans thous. of dolls.	102,040	83,074	24,614	69,742	143,458	48,109	59,321	+105.7	+141.8	456,600	514,524	601,431											
Bond sales (Canada):																							
Govt. and provincial thous. of dolls.	4,165	19,820	46,993	7,300	1,000	2,526	-	-86.3	-	49,770	60,209	91,136											
Municipal thous. of dolls.	10,821	8,861	27,522	4,056	12,930	7,363	1,537	+218.8	+741.2	16,146	62,535	84,484											
Corporation thous. of dolls.	15,975	25,400	12,690	13,900	3,475	16,080	30,525	+75.0	-1.2	206,649	153,953	121,730											
Tax-exempt securities outstanding, end of month mills. of dolls.	19,665	19,735	19,811	7,19,772	19,878	17,501	7,17,531	+0.5	+13.4														
<b>Agricultural Finances</b>																							
Loans outstanding, end mo.:																							
Federal farm loan banks thous. of dolls.	1,194,918	1,194,324	1,194,030	1,192,720	1,191,949	1,204,916	1,204,363	-0.1	-1.0														
Joint-stock land banks thous. of dolls.	577,195	574,392	571,885	569,363	567,010	597,956	596,403	-0.4	-4.9														
Federal intermediate credit banks thous. of dolls.	81,184	89,507	96,248	91,665	111,244	68,101	68,981	+21.4	+61.3														
<b>Stocks and Bonds</b>																							
Stock prices, average daily closing:																							
25 industrials, average dolls. per share	328.24	349.46	327.04	284.36	282.64	372.70	414.04	-0.6	-31.7														
25 railroads, average dolls. per share	131.55	131.18	123.59	113.84	113.69	134.37	149.27	-0.1	-23.8														
Southern cotton mills dolls. per share	82.20	80.70	77.76	74.91	71.92	95.15	92.45	-4.0	-22.2														
103 stocks, average dolls. per share	69.71	64.66	64.73	54.84	56.98	82.50	86.25	+3.9	-33.9														
Stock prices, average weekly closing:																							
Industrials, rails, and utilities (402) rel. to 1926	172.4	181.0	170.5	152.8	149.3	190.7	207.2	-2.3	-27.9														
All industrials (335) rel. to 1926	163.0	170.8	160.1	143.1	139.8	191.0	202.7	-2.3	-31.0														
All railroads (63) rel. to 1926	143.2	141.7	136.0	124.5	124.2	144.8	160.0	-0.2	-22.4														
All utilities (34) rel. to 1926	242.1	263.7	250.0	223.5	215.4	233.0	272.8	-3.6	-21.0														
Automobiles and trucks (13) rel. to 1926	154.9	162.0	151.7	134.0	132.2	241.7	241.0	-1.3	-45.1														
Automobile tires and rubber goods (7) rel. to 1926	111.1	111.1	99.4	84.0	76.8	184.9	184.9	-8.6	-58.2														
Airplane (10) rel. to 1926	536.8	647.1	530.3	418.1	405.7	1,069.0	1,131.0	-3.0	-64.1														
Agricultural implements (4) rel. to 1926	346.5	393.9	374.8	311.1	285.5	380.5	418.6	-8.2	-31.8														
Chain stores (17) rel. to 1926	99.9	101.1	96.5	89.5	88.7	144.5	148.0	-0.9	-40.1														
Copper and brass (9) rel. to 1926	192.8	174.3	151.0	134.6	129.1	270.8	280.8	-4.1	-54.0														
Food, other than meat (20) rel. to 1926	153.4	159.9	159.5	148.7	149.4	175.6	189.1	+0.5	-21.0														
Machinery and machine equipment (10) rel. to 1926	161.4	178.9	169.8	152.1	154.5	159.4	171.8	+1.6	-10.1														
Oil producing and refining (16) rel. to 1926	140.6	155.7	147.9	133.1	132.9	144.1	149.1	-0.2	-10.9														
Railroad equipment (9) rel. to 1926	126.4	119.8	109.7	98.8	94.3	141.7	148.5	-4.6	-36.5														
Rayon (5) rel. to 1926	84.5	88.0	80.9	73.7	72.0	138.0	126.6	-2.3	-43.1														
Steel and iron (9) rel. to 1926	191.9	196.4	174.1	161.1	159.1	188.2	211.5	-1.2	-24.8														

<sup>7</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) IN-DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from July, 1929	1928	1929	1930
<b>BANKING AND FINANCE—Continued</b>												
Stocks and Bonds—Continued												
Stock prices, average weekly closing—Con-												
Textiles (30).....rel. to 1926.....	84.7	83.2	76.7	68.5	67.1	122.4	120.3	-2.0	-44.2			
Theaters, motion pictures, and amusements (7).....rel. to 1926.....	135.5	151.5	144.5	119.4	111.9	133.4	139.0	-6.3	-19.5			
Tobacco and tobacco products (10).....rel. to 1926.....	159.6	157.8	158.9	145.2	146.6	135.1	139.1	+1.0	+5.4			
Traction, motor transportation, etc. (9).....rel. to 1926.....	85.7	85.0	82.1	75.3	74.1	83.7	83.0	-1.6	-10.7			
Stock yields:												
Total common (90).....per cent.....	3.99	3.78	4.02	4.50	4.44	3.38	3.16	-1.3	+40.5			
Industrial (50).....per cent.....	4.36	4.13	4.42	4.91	4.77	3.51	3.36	-2.9	+42.0			
Public utilities (20).....per cent.....	2.55	2.34	2.50	2.92	3.04	2.22	1.90	+4.1	+55.9			
Railroads (20).....per cent.....	4.78	4.84	5.03	5.43	5.41	4.62	4.17	-0.4	+29.7			
Preferred high grade industrial (20).....per cent.....	5.48	5.46	5.48	5.52	5.56	5.49	5.52	+0.7	+0.7			
Stocks sale, N.Y. Stock Exch., thous. of shares.....	96,552	126,910	78,040	76,593	46,753	69,548	93,379	-39.0	-49.9	454,591	631,245	555,879
Bond sales:												
Miscellaneous.....thous. of dolls.....	335,934	264,898	220,131	218,500	183,716	227,676	295,577	-15.9	-37.8	1,791,800	1,566,058	1,619,626
Liberty-Treasury.....thous. of dolls.....	15,222	9,731	7,064	11,789	10,112	9,848	13,330	-14.2	-24.1	118,395	77,424	70,029
Total.....thous. of dolls.....	351,156	274,629	227,195	230,289	193,828	237,524	308,907	-15.8	-37.3	1,910,195	1,643,482	1,689,654
Bond prices:												
Highest-grade rails, p. ct. of par. 4% bond.....	90.52	89.81	90.42	91.36	92.83	86.37	86.06	+1.6	+7.9			
Second-grade rails, p. ct. of par. 4% bond.....	84.73	84.32	84.49	84.91	85.09	78.59	78.55	+0.2	+8.3			
Public utility, p. ct. of par. 4% bond.....	75.63	75.76	75.36	74.78	74.99	74.32	73.25	+0.3	+2.4			
Industrial.....p. ct. of par. 4% bond.....	76.06	76.64	76.35	75.60	75.43	75.29	75.24	-0.2	+0.3			
Comb. price index, p. ct. of par. 4% bond.....	81.27	81.23	81.20	81.10	81.43	78.37	77.99	+0.4	+4.4			
Bond yields:												
Total, 60 high grade.....per cent.....	4.55	4.54	4.54	4.53	4.49	4.73	4.73	-0.9	-5.1			
Railroads (15).....per cent.....	4.43	4.47	4.45	4.41	4.36	4.65	4.67	-1.1	-6.6			
Industrials (15).....per cent.....	4.95	4.91	4.92	4.92	4.92	5.09	5.09	0.0	-3.3			
Utilities (15).....per cent.....	4.71	4.69	4.68	4.67	4.63	4.90	4.90	-0.9	-5.5			
Municipal (15).....per cent.....	4.12	4.11	4.11	4.10	4.05	4.26	4.28	-1.2	-5.4			
Municipal bond yield (20).....per cent.....	4.15	4.17	4.18	4.14	4.03	4.33	4.41	-2.7	-8.6			
Bond prices, 1st of following month:												
5 Liberty bonds.....p. ct. of par.....	104.53	104.16	104.92	105.28	105.44	100.87	100.64	+0.2	+4.8			
50 Domestic bonds.....p. ct. of par.....	99.20	98.87	99.23	99.10	99.81	96.57	96.82	+0.7	+3.1			
40 Representative issues.....p. ct. of par.....	93.88	91.97	92.01	90.62	91.12			+0.6				
U. S. Treasury notes and certificates, 3-6 months.....per cent.....	2.95	3.00	2.41	1.89	1.83	4.80	4.55	-3.2	-59.8			
Liberty and Treasury bonds.....per cent.....	3.40	3.46	3.41	3.37	3.37	3.71	3.68	0.0	-8.4			
Long-term and real-estate bonds issued:												
Grand total.....thous. of dollars.....	11,350	27,435	3,813	11,093	16,425	20,025	36,790	+48.1	-55.4	444,026	264,939	108,769
Purpose of issue:												
Finance construction.....thous. of dollars.....	4,740	8,295	88	6,648	10,725	4,295	24,660	+61.3	-56.5	180,080	96,442	51,046
Real-estate mortgage.....thous. of dollars.....	1,360	180	2,025	1,555	2,590	4,800	4,556	+66.6	-43.2	139,784	68,765	12,990
Acquisitions and improvements.....thous. of dollars.....	850	5,000	100	1,110	480	7,485	2,390	-56.8	-79.9	45,976	52,500	8,490
Kind of structure:												
Office and commercial.....thous. of dollars.....	5,130	7,685	1,943	3,035	3,395	10,845	24,860	+11.9	-86.3	155,376	87,430	47,213
Hotels.....thous. of dollars.....	110	500	198	1,400	700	1,175	+607.1	+19.1	31,960	15,235	2,898	
Apartments.....thous. of dollars.....	385	5,000	5,665	10,050	2,200	1,582	+77.4	+535.3	26,864	13,849	21,335	
Interest rates.....per cent.....	6.00	6.13	5.93	6.20	5.99	6.07	6.09	-3.4	-1.6			
<b>Corporation Stockholders</b>												
(Quarterly)												
Pennsylvania Railroad Co.:												
Domestic.....number.....	207,188			207,869		158,456		+0.3	+31.2			
Foreign.....number.....	2,094			2,087		2,978		-0.2	+3.7			
U. S. Steel Corp. common stock:												
Domestic.....number.....	126,517			131,357		103,805		+3.8	+26.5			
Foreign.....number.....	2,077			2,106		2,187		+1.4	+16.5			
Shares held by brokers.....per cent. of total.....	22.00			18.57		25.27		-15.6	-26.5			
American Telephone & Telegraph Co.:												
Domestic.....number.....	487,390			507,774		453,434		+4.2	+3.7			
Foreign.....number.....	5,370			5,555		5,425		+3.4	+2.4			
<b>FOREIGN EXCHANGE RATES</b>												
Europe:												
England.....dollars, per £ sterling.....	4.86	4.86	4.86	4.86	4.87	4.85	4.85	+0.2	+0.4			
France.....dollars, per franc.....	.039	.039	.039	.039	.039	.039	.039	0.0	0.0			
Italy.....dollars, per lira.....	.052	.052	.052	.052	.052	.052	.052	0.0	0.0			
Belgium.....dollars, per franc.....	.139	.140	.140	.140	.139	.139	.139	-0.7	0.0			
Netherlands.....dollars, per guilder.....	.401	.402	.402	.402	.402	.402	.401	0.0	+0.2			
Sweden.....dollars, per krone.....	.269	.269	.268	.269	.269	.268	.268	0.0	+0.4			
Switzerland.....dollars, per franc.....	.194	.194	.194	.194	.194	.192	.192	0.0	+1.0			
Asia:												
Japan.....dollars, per yen.....	.493	.494	.494	.494	.494	.439	.456	0.0	+8.3			
India.....dollars, per rupee.....	.361	.361	.361	.360	.361	.360	.360	+0.3	+0.3			
America:												
Canada.....dollars, per Canadian dollar.....	.998	1.000	.998	1.000	1.001	.992	.995	+0.1	+0.6			
Argentina.....dollars, per gold peso.....	.856	.886	.872	.845	.821	.953	.954	-2.8	-13.9			
Brazil.....dollars, per milreis.....	.115	.117	.118	.114	.109	.119	.119	-4.4	-8.4			
Chile.....dollars, per paper peso.....	.121	.121	.121	.121	.121	.120	.120	0.0	+0.8			

<sup>2</sup> Quarter ended in month indicated.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, 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		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31														
	March	April	May	June	July	June	July	July, 1930, from June, 1930	July, 1930, from June, 1929	1928	1929	1930												
<b>U. S. FOREIGN TRADE</b>																								
<b>Imports</b>																								
Grand total, . . . . . thous. of dolls..	300,460	307,824	824,683	7 250,236	220,444	353,403	352,981	-11.9	-37.5	2,403,780	2,639,356	1,956,322												
By grand divisions:																								
Europe—																								
Total, . . . . . thous. of dolls..	87,726	93,004	84,137	72,147	-----	106,420	115,113	-----	-----	6 601,725	6 655,448	6 510,413												
France, . . . . . thous. of dolls..	9,852	10,194	10,302	7,484	-----	13,280	14,590	-----	-----	6 72,157	6 80,678	6 89,105												
Germany, . . . . . thous. of dolls..	18,663	17,300	13,046	12,817	-----	19,330	22,806	-----	-----	6 102,263	6 126,023	6 95,522												
Italy, . . . . . thous. of dolls..	6,821	8,698	10,467	6,770	-----	10,608	8,487	-----	-----	6 49,707	6 56,614	6 47,211												
United Kingdom, . . . . . thous. of dolls..	21,194	24,513	21,353	15,511	-----	25,396	27,975	-----	-----	6 175,644	6 169,622	6 120,748												
North America—																								
Total, . . . . . thous. of dolls..	70,636	72,088	81,139	66,181	-----	81,898	79,393	-----	-----	6 489,560	6 522,360	6 420,322												
Canada, . . . . . thous. of dolls..	38,431	36,339	37,358	36,503	-----	44,315	44,092	-----	-----	6 232,069	6 242,012	6 219,314												
South America—																								
Total, . . . . . thous. of dolls..	48,669	47,591	39,180	35,554	-----	50,750	46,630	-----	-----	6 302,126	6 344,438	6 261,517												
Argentina, . . . . . thous. of dolls..	12,175	12,226	9,159	4,109	-----	8,352	7,386	-----	-----	6 57,026	6 63,289	6 53,694												
Asia and Oceania—																								
Total, . . . . . thous. of dolls..	87,154	87,260	74,577	71,194	-----	107,848	104,987	-----	-----	6 643,628	6 701,512	6 501,368												
Japan, . . . . . thous. of dolls..	23,205	24,433	13,874	15,357	-----	32,486	28,885	-----	-----	6 186,700	6 201,735	6 136,085												
Africa, total, . . . . . thous. of dolls..	6,280	7,385	5,611	5,013	-----	6,488	6,857	-----	-----	6 48,892	6 62,617	6 41,663												
By economic classes:																								
Crude materials, . . . . . thous. of dolls..	101,685	105,559	86,589	76,671	69,583	120,734	119,038	-9.2	-41.5	890,376	947,131	648,361												
Foodstuffs, crude and food animals, . . . . . thous. of dolls..	40,136	38,597	34,744	35,372	29,309	40,955	42,957	-17.1	-31.8	334,813	329,453	256,648												
Manufactured foodstuffs, . . . . . thous. of dolls..	26,933	31,178	41,571	24,795	19,692	36,527	32,990	-20.6	-40.3	246,713	267,592	188,286												
Semimanufactures, . . . . . thous. of dolls..	62,692	61,789	53,354	51,612	44,669	75,550	71,833	-13.5	-37.8	427,969	524,508	400,875												
Finished manufactures, . . . . . thous. of dolls..	69,014	70,800	68,424	71,787	57,191	79,637	86,163	-7.4	-33.6	503,910	568,671	462,152												
<b>Exports</b>																								
Grand total, including reexports, . . . . . thous. of dolls..	369,624	331,843	319,592	295,097	269,000	393,177	402,902	-8.8	-33.2	2,756,973	3,025,821	2,345,432												
By grand divisions:																								
Europe—																								
Total, . . . . . thous. of dolls..	174,764	142,159	135,508	122,830	-----	153,966	160,999	-----	-----	6 1,098,278	6 1,119,848	6 951,752												
France, . . . . . thous. of dolls..	21,396	16,855	15,110	11,152	-----	14,587	15,794	-----	-----	6 103,136	6 122,576	6 110,606												
Germany, . . . . . thous. of dolls..	27,129	18,960	17,226	16,456	-----	21,261	24,634	-----	-----	6 206,058	6 180,207	6 133,159												
Italy, . . . . . thous. of dolls..	10,518	8,915	7,719	6,240	-----	12,639	8,666	-----	-----	6 76,912	6 79,239	6 58,898												
United Kingdom, . . . . . thous. of dolls..	58,076	46,713	47,002	47,915	-----	52,837	56,890	-----	-----	6 384,824	6 402,215	6 338,499												
North America—																								
Total, . . . . . thous. of dolls..	100,359	98,486	101,606	92,174	-----	115,609	116,405	-----	-----	6 628,130	6 724,824	6 572,043												
Canada, . . . . . thous. of dolls..	66,565	63,997	69,559	59,715	-----	80,480	79,569	-----	-----	6 428,850	6 502,636	6 371,694												
South America—																								
Total, . . . . . thous. of dolls..	31,292	30,608	29,853	27,636	-----	49,686	49,293	-----	-----	6 217,562	6 288,000	6 185,106												
Argentina, . . . . . thous. of dolls..	11,637	12,012	11,227	12,067	-----	20,464	20,481	-----	-----	6 80,177	6 108,110	6 71,500												
Asia and Oceania—																								
Total, . . . . . thous. of dolls..	53,730	52,780	44,749	43,960	-----	61,686	63,183	-----	-----	6 379,064	6 423,117	6 314,571												
Japan, . . . . . thous. of dolls..	15,637	18,325	11,325	12,709	-----	16,966	15,006	-----	-----	6 122,922	6 126,597	6 97,011												
Africa, total, . . . . . thous. of dolls..	9,479	7,820	7,875	8,497	-----	12,229	13,022	-----	-----	6 54,956	6 67,128	6 52,971												
By economic classes:																								
Total domestic exports only, . . . . . thous. of dolls..	7 363,148	7 326,540	7 312,592	7 290,322	261,919	386,799	393,798	-9.8	-33.5	2,696,150	2,972,354	2,301,842												
Crude materials, . . . . . thous. of dolls..	70,429	7 52,432	7 40,777	37,482	36,599	56,129	50,015	-2.4	-26.8	598,264	534,211	409,338												
Foodstuffs, crude and food animals, . . . . . thous. of dolls..	9,325	9,356	12,448	13,346	16,494	14,518	20,259	+23.6	-18.6	111,361	147,179	91,983												
Manufactured foodstuffs, . . . . . thous. of dolls..	34,373	7 27,704	7 30,378	7 27,325	24,213	34,018	35,840	-11.4	-32.4	252,612	273,406	217,350												
Semimanufactures, . . . . . thous. of dolls..	7 49,414	7 47,782	7 49,967	47,166	39,869	62,119	60,511	-15.5	-34.1	430,379	443,418	330,276												
Finished manufactures, . . . . . thous. of dolls..	7 199,607	7 189,266	7 179,022	7 165,004	144,743	220,016	227,173	-12.3	-36.3	1,303,534	1,574,143	1,252,946												
<b>Agricultural exports (quantities):</b>																								
All commodities, rel. to 1910-1914..	82	65	56	55	57	69	70	+3.6	-18.6	-----	-----	-----												
All commodities except cotton, rel. to 1910-1914..	98	83	90	93	98	102	117	+5.4	-16.2	-----	-----	-----												
<b>CANADIAN FOREIGN TRADE</b>																								
Total trade:																								
Imports, . . . . . thous. of dolls..	112,991	71,402	101,545	7 91,544	84,551	111,949	114,201	-7.6	-26.0	692,028	778,570	627,865												
Exports, . . . . . thous. of dolls..	91,692	52,508	79,464	80,536	77,906	114,492	105,686	-3.3	-26.3	692,079	695,396	525,625												

\* Cumulative through June 30.

7 Revised.



## 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.

**Aviation—Aeronautic Publications.** Revised July 1, 1930. ii+13 pages. (Aeronautics Branch, Aeronautics Bulletin No. 6.) Lists books on all phases of aviation and periodicals, both American and foreign, on this subject. A separate list of Government publications on aeronautics is included.

**Air Commerce Bulletin.** 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.

**Aircraft Engine Testing.** ii+27 pages, 7 illustrations. (Aeronautics Branch, Aeronautics Bulletin No. 12.) Discussion of methods of testing aircraft engines and equipment found best for use in such tests.

**First Report of Liaison Committee on Aeronautics Radio Research.** ii+12 pages. (Aeronautics Branch.) Report on tests of devices to aid air pilots in direction finding and studies of beacon systems and blind-landing systems for airports. There is a statement of the activities of the War and Navy Departments and of commercial laboratories in research work to improve radio facilities for aviation uses.

**Medical Examiners of Aeronautics Branch.** ii+13 pages. (Aeronautics Branch, Aeronautics Bulletin No. 23.) This publication gives the names of all physicians authorized to make the physical examinations of applicants for airplane pilot licenses. The examiners are listed under the State and town where located and each doctor's address is given.

**Ceramics—Method of Measuring Strains Between Glazes and Ceramic Bodies.** by H. G. Schurecht and G. R. Pole. (Bureau of Standards, Research Paper No. 189.) Reprint from Bureau of Standards Journal of Research, vol. 5, July, 1930, pp. 97-104, 5 illustrations. Price, 5 cents.

**Chemicals and drugs—Chemical Industry in Czechoslovakia.** ii+33 pages. (Bureau of Foreign and Domestic Commerce, Trade Information Bulletin No. 708.) This bulletin contains an account of the activities of the chemical industry of Czechoslovakia and statistics of this country's foreign trade in chemicals. An appendix gives a list of the principal chemical enterprises of Czechoslovakia. Price, 10 cents.

**Commercial standards—Staple Vitreous China Plumbing Fixtures.** vi+28 pages, 12 illustrations. (Bureau of Standards, Commercial Standard CS20-30.) This publication describes the types and sizes of plumbing fixtures recommended as standard and gives grading rules for use of manufacturers of such products. Price, 10 cents.

**Cotton—Cotton Production in United States, Crop of 1929.** 40 pages. (Bureau of the Census.) Statistics regarding cotton production showing size of crop, amount ginned, and number of ginneries in operation. The information is arranged alphabetically by States and by counties under each State. Price, 10 cents.

**Fish—Contribution to Biology of Pacific Herring, Clupea Pallasii, and Condition of Fishery in Alaska.** by George A. Rounsefell. (Bureau of Fisheries, Document No. 1080.) From Bulletin of Bureau of Fisheries, vol. XLV, 1929, pp. 227-320, 12 illustrations, 9 pages of plates, 27 charts. Description of the herring fishery of Alaska, showing changes in fishing methods, uses to which the fish are put, location of the different branches of the industry, development of the various phases and present condition of the fishery. There is included a study of the biology of the Pacific herring, and a bibliography of the subject. Price, 35 cents.

**Investigations on Plankton Production in Fish Ponds,** by A. H. Wiebe. (Bureau of Fisheries, Document No. 1082.) From Bulletin of Bureau of Fisheries, vol. XLVI, 1930, pp. 137-176, 1 illustration, 5 charts. Report on experiments in breeding and rearing plankton in ponds. Data are given on the results of treatment of pond waters with different kinds of fertilizers and their effect on the fish. Price, 15 cents.

**Fruit—Canned Grapefruit Production and Trade.** ii+21 pages. (Bureau of Foreign and Domestic Commerce, Trade Information Bulletin No. 706.) Discussion of methods employed in canning grapefruit, United States production of canned grapefruit, United States trade in this product, and markets in various countries. Price, 10 cents.

**Markets for Fruit Juices and Fruit Sirups in Pacific Countries.** ii+16 pages. (Bureau of Foreign and Domestic Commerce, Trade Information Bulletin No. 704.) Discussion of the trends in the markets for fruit juices and sirups in far eastern countries. Price, 10 cents.

**Machinery—Characteristics of Two-Blade Propeller Fans.** by H. L. Dryden and F. S. Ballif. (Bureau of Standards, Research Paper No. 193.) Reprint from Bureau of Standards Journal of Research, vol. 5, July, 1930, pp. 185-211, 9 illustrations, 2 pages of plates, 20 charts. Description of apparatus used and methods employed in testing two-blade propeller fans. Price, 10 cents.

**Manufactures—Biennial Census of Manufactures, 1927.** xiv+1,497 pages. (Bureau of the Census.) This publication gives statistics of factory operations, showing the output of each kind of factory, the comparative magnitude of the various manufacturing establishments and their growth or decline, and the industrial importance of individual States and municipalities and changes in their rank. The statistics also show the number of employees in each industry, the wages paid, the cost of raw materials used, the amount of power used, and the value of the articles produced. Price, \$3.25.

**Metals and minerals—Gold, Silver, Copper, Lead, and Zinc in Idaho and Washington in 1928.** by C. N. Gerry. (Bureau of Mines, Mineral Resources of United States, 1928, Pt. I, pp. 645-703.) Price, 5 cents.

**Lead in 1928.** by Elmer W. Pehrson. (Bureau of Mines, Mineral Resources of United States, 1928, Pt. I, pp. 607-643.) Data on the activities of the lead refineries of the United States, production by principal ore producing countries of the world, amount of lead exported from these countries, trade of the United States in this metal, consumption by various American industries, and average prices of lead in the United States and the United Kingdom. Price, 10 cents.

**Mineral Resources of United States, 1927: Part I, Metals.** viii+A124+782 pages. (Bureau of Mines.) This volume gives a general summary on the production of all metals in the United States during 1927, and contains the papers on this subject previously issued separately. Price, \$1.25.

**Monthly Summary of Foreign Commerce of United States, June, 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 June, 1929 and 1930, and for six months ending June, 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.

**Oils and greases—Animal and Vegetable Fats and Oils, Production, Consumption, Imports, Exports, and Stocks, by Quarters, Calendar Years 1927 to 1929.** ii+20 pages. (Bureau of the Census.) Price, 5 cents.

**Paper—Preparation of Fiber Test Sheets.** by Merle B. Shaw, George W. Bicking and Leo W. Snyder. (Bureau of Standards, Research Paper No. 190.) Reprint from Bureau of Standards Journal of Research, vol. 5, July, 1930, pp. 105-114, 1 illustration, 2 pages of plates, 2 charts. This paper describes the method of preparing fiber test sheets to determine the strength of such fibers for paper making. Price, 10 cents.

**Photography—Comparison of Resolving Power and Sensitivity of Photographic Plates with Varying Development.** by Bert H. Carroll and Donald Hubbard. (Bureau of Standards, Research Paper No. 183.) Reprint from Bureau of Standards Journal of Research, vol. 5, July, 1930, pp. 1-11, 1 plate. Price, 5 cents.

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

**Scientific instruments—New Consistometer and its Application to Greases and to Oils at Low Temperatures.** by Ronald Bulkley and F. G. Bitner. (Bureau of Standards, Research Paper No. 188.) Reprint from Bureau of Standards Journal of Research, vol. 5, July, 1930, pp. 83-96, 1 illustration, 1 plate, 6 charts. Description of new type of consistometer and results which may be obtained by its use in determining the consistence of viscous and plastic materials. Price, 5 cents.

**Technical News Bulletin.** Issued monthly by the Bureau of Standards; contains a brief account of the laboratory activities of the bureau and gives a list of pamphlets issued and magazine articles published during the preceding month. Annual subscription, 25 cents.

**Vital statistics—Fifteenth Census of United States, 1930: Delaware. Number and Distribution of Inhabitants.** 6 pages, 1 illustration. (Bureau of the Census, Population Bulletin, First Series.) Price, 5 cents.

# CHIEF FUNCTIONS OF THE DEPARTMENT OF COMMERCE

R. P. LAMONT, Secretary of Commerce

JULIUS KLEIN, Assistant Secretary of Commerce.

EPHRAIM F. MORGAN, Solicitor

## AERONAUTICS BRANCH

CLARENCE M. YOUNG, Assistant Secretary of Commerce for Aeronautics

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

## BUREAU OF THE CENSUS

WILLIAM M. STEUART, Director

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

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

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

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

## BUREAU OF FOREIGN AND DOMESTIC COMMERCE

WILLIAM L. COOPER, Director

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