

UNITED STATES  
DEPARTMENT OF COMMERCE  
WASHINGTON

SURVEY OF  
CURRENT BUSINESS

JULY, 1929

No. 95



ISSUED BY  
BUREAU OF THE CENSUS

IMPORTANT NOTICE

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

## INTRODUCTION

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

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

### WEEKLY SUPPLEMENT

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

### RELATIVE AND INDEX NUMBERS

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

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

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

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

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

### RATIO CHARTS

In most instances the charts used in the SURVEY OF CURRENT BUSINESS are of the type termed "Ratio Charts" (logarithmic scale), notably the Business Indicator charts on page 2. These charts show the percentage increase and allow direct comparisons between the slope of one curve and that of any other curve regardless of its location on the diagram; that is, a 10 per cent increase in an item is given the same vertical movement whether its curve is near the bottom or near the top of the chart. The difference between this and the ordinary arithmetic form of chart can be made clear by an example. If a certain item having a relative number of 400 in one month increases 10 per cent in the following month, its relative number will be 440, and on an ordinary chart would be plotted 40 equidistant scale points higher than the preceding 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 May and contains text covering the early weeks of June (page 1), for which the basic figures in table and chart form are presented regularly in the weekly supplements. As most data covering a particular month's business are not available until from 15 to 30 days after the close of the month, a complete picture of that month's operations can not be presented at an early date, but the weekly supplements give every week the latest data available.*



# SURVEY OF CURRENT BUSINESS

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UNITED STATES DEPARTMENT OF COMMERCE



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No. 95

WASHINGTON

July, 1929

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## PRELIMINARY SUMMARY FOR JUNE

Commercial and industrial activity in June, as seen from data covering the early weeks of the month, were on a higher plane of activity than at this time last year. Check payments, indicative of the volume of trade, were running substantially greater than a year ago. Operations in steel plants, usually considered a measure of industrial conditions, were more than 25 per cent more active than in June a year ago. Distribution of commodities through primary channels, as indicated by figures on car loadings, was likewise greater than in the early weeks of June, 1928.

The general level of wholesale prices averaged higher than in May, but were still below the level of last year. Prices for iron and steel averaged lower than in the preceding month, but were higher than a year ago. Cotton prices showed lower averages than in either period, while prices for copper showed no appreciable change from the preceding month, but were substantially higher than a year ago.

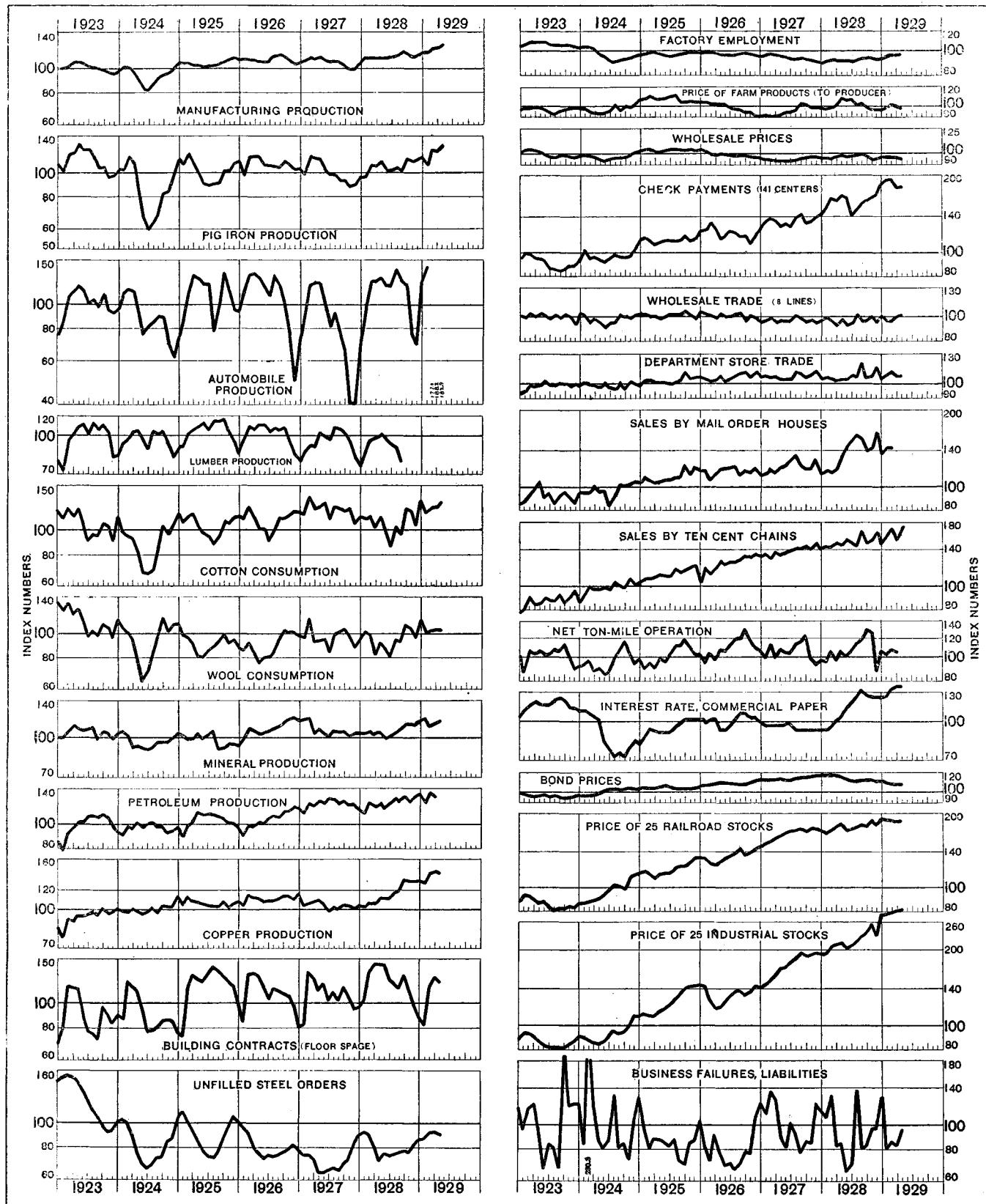
The output of bituminous coal was considerably larger than a year ago. Petroleum production was greater than in either the preceding month or June, 1928. The volume of building contracts awarded during the month was smaller than in June of last year.

Loans and discounts of Federal reserve member banks were higher at the end of the month than at the end of the preceding month, and showed an increase over a year ago. Loans to brokers and dealers in New York City were higher than at the end of May, showing an increase also over a year ago. Prices for stocks showed only slight change from the average for May, but were higher than a year ago. Bond prices averaged lower than in either period.

Interest rates on both time and call funds averaged lower than in May, each showing higher averages than a year ago. Business failures were less numerous than in either the preceding month or the corresponding period of last year.

## MONTHLY BUSINESS INDICATORS, 1923-1929

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



## MONTHLY BUSINESS INDICATORS

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

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

ITEM	MONTHLY AVERAGE						1928						1929							
	1923	1924	1925	1926	1927	1928	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
<b>1923 1925 monthly average=100</b>																				
<b>Industrial production:</b>																				
• Total manufacturing.....	101.0	94.0	105.0	108.0	106.0	111.0	110.0	110.0	110.0	111.0	113.0	116.0	114.0	111.0	113.0	117.0	117.0	120.0	123.0	124.0
• Total minerals.....	105.0	96.0	99.0	107.0	107.0	106.0	103.0	105.0	99.0	101.0	105.0	108.0	114.0	113.0	112.0	117.0	120.0	107.0	115.0	116.0
Pig iron.....	111.7	86.7	101.5	109.0	101.0	105.5	106.6	109.9	103.1	102.8	105.0	102.5	112.9	110.5	112.8	115.2	107.3	124.3	122.6	130.5
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	120.2	124.5	121.6	108.3	110.3	120.9	120.0	134.5	123.2	116.3	129.9	125.1	146.3	142.8	152.5
Automobiles.....	101.7	90.8	107.5	108.4	85.7	109.8	124.2	129.0	120.2	118.7	139.7	125.8	120.3	77.9	70.9	121.5	141.2	177.2	188.2	182.9
Cement.....	92.1	99.8	108.1	110.0	115.3	118.0	108.4	139.3	140.8	140.6	150.9	143.9	141.1	124.5	98.1	79.5	68.6	80.2	110.6	129.9
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.2	106.8	102.3	112.5	99.5	85.7	102.6	95.9	120.6	119.0	104.1	130.2	116.5	123.3	123.1	130.2
Wool (consumption).....	112.8	94.6	92.6	86.7	97.0	94.7	82.0	92.7	87.1	80.4	95.2	91.8	108.6	105.7	96.8	114.0	101.3	102.7	103.8	102.9
<b>Raw material output:</b>																				
Animal products.....	100.0	104.0	96.0	96.0	97.0	99.0	95.0	108.0	116.0	108.0	97.0	92.0	102.0	93.0	92.0	96.0	80.0	88.0	99.7	110.2
Crops.....	92.0	104.0	104.0	109.0	113.0	119.0	81.0	72.0	52.0	87.0	114.0	178.0	251.0	179.0	152.0	112.0	82.0	72.0	57.2	51.0
Forest products.....	99.0	97.0	104.0	98.0	93.0	88.2	96.0	101.0	97.0	88.0	90.0	78.0	84.0	84.0	76.0	82.0	74.0	86.0	90.2	98.7
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.2	117.5	122.5	118.1	122.9	126.8	124.5	129.5	123.8	129.4	133.5	123.3	134.4	130.5	137.5
Bituminous coal.....	108.0	92.5	99.5	109.7	99.0	94.3	73.9	84.1	82.6	83.3	94.4	94.8	115.6	105.7	99.6	118.1	108.5	90.3	84.7	92.0
Copper.....	93.4	100.2	106.4	110.2	104.0	114.9	105.7	111.8	111.0	111.3	116.7	118.8	131.1	129.5	129.8	130.9	128.5	142.1	143.9	141.1
<b>Power and construction:</b>																				
Electric power.....	92.5	98.1	109.5	122.6	133.8	146.0	136.7	142.2	139.8	142.4	149.8	145.2	158.0	154.6	157.8	164.3	148.1	159.3	157.2	161.4
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	121.4	142.4	143.5	142.2	123.7	118.8	114.2	129.1	111.1	98.2	88.6	81.9	117.1	128.0	122.4
<b>Unfilled orders:</b>																				
General index.....	121.7	87.0	91.3	84.6	74.0	76.2	76.8	73.9	75.2	77.1	74.7	74.7	71.5	72.7	71.0	75.0	80.0	86.0	93.0	86.0
U. S. Steel Corporation.....	125.8	83.6	90.6	82.1	71.1	80.7	81.1	71.6	76.2	74.8	75.9	77.4	78.6	76.9	83.3	86.1	86.8	92.4	92.7	90.1
<b>Stocks:</b>																				
General index.....	94.5	102.0	103.5	114.6	120.8	122.7	122.5	116.5	108.4	105.4	107.5	116.0	132.9	137.0	141.5	138.4	136.4	133.0	127.0	121.0
Manfd. commodities (28).....	93.8	103.2	103.0	106.3	112.5	116.7	118.5	120.2	117.3	118.3	115.4	111.3	110.7	113.7	120.4	125.2	124.8	121.0	119.0	116.0
Cotton.....	102.5	91.4	106.2	145.5	153.1	123.8	117.7	95.5	74.7	58.6	52.4	89.5	155.1	181.4	187.7	169.8	149.5	130.5	109.9	88.4
Copper (refined).....	106.4	113.9	73.1	64.8	85.4	58.4	64.4	68.6	52.0	48.5	48.4	45.8	40.3	46.1	57.8	55.4	48.8	46.8	50.8	62.2
<b>Employment:</b>																				
Factories.....	106.6	96.2	97.2	97.9	94.4	91.9	91.4	91.1	91.2	90.3	91.7	93.0	93.9	93.4	93.5	93.2	95.4	96.6	97.1	97.2
<b>Prices:</b>																				
Farm products, to producers.....	97.8	97.1	106.5	98.6	94.9	100.7	101.4	107.2	105.1	105.1	100.7	102.2	99.3	97.1	97.1	96.4	98.6	101.4	100.0	98.6
Wholesale, all commodities.....	99.9	97.4	102.8	99.3	94.7	97.0	96.7	97.9	96.9	97.6	98.2	99.4	97.1	96.0	96.0	96.5	96.0	96.8	96.1	95.1
Retail food.....	97.6	97.6	104.0	107.6	103.6	102.9	101.6	102.8	102.0	102.1	103.0	105.4	104.8	105.1	104.1	103.3	103.2	102.2	101.3	102.4
Cost of living (including food).....	98.1	99.9	102.3	102.3	99.9	98.7	97.9	98.4	98.0	98.0	99.3	99.3	98.7	98.0	98.0	97.4	96.8	96.8	96.8	96.8
<b>Distribution (values):</b>																				
• Bank debits, 141 cities.....	91.2	96.7	111.9	119.6	132.5	158.2	161.8	188.8	165.4	140.4	149.9	156.9	161.0	165.1	172.3	187.2	194.3	195.1	180.6	180.5
• Wholesale trade.....	101.0	98.0	102.0	101.0	97.0	96.0	91.6	98.7	92.5	94.2	100.6	96.4	97.4	100.0	94.9	101.1	96.3	96.3	100.0	102.0
• Department stores, sales.....	98.0	99.0	103.0	106.0	106.0	108.0	103.0	103.0	105.0	107.0	105.0	119.0	105.0	106.0	116.0	104.0	110.0	113.0	105.0	107.0
Mail-order sales, 2 houses.....	89.2	98.1	112.7	120.2	126.2	147.6	122.6	122.5	137.1	123.1	140.6	155.4	194.4	188.4	227.4	144.9	141.8	163.3	170.0	168.2
• 10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	150.0	147.0	144.0	153.0	148.0	144.0	165.0	148.0	151.0	163.6	145.8	156.9	167.4	153.0	172.0
Imports.....	97.8	93.1	109.0	114.3	108.5	105.5	106.9	109.6	98.2	98.4	107.3	99.0	110.0	101.1	105.0	114.2	118.8	127.1	124.1	124.1
Exports.....	91.5	100.8	107.8	105.5	106.8	112.6	95.9	111.1	102.3	99.8	100.1	111.1	145.1	143.5	125.3	128.5	116.4	129.0	112.2	101.9
<b>Transportation:</b>																				
Freight, net ton-miles.....	102.2	95.9	101.9	109.1	106.0	106.5	98.2	105.8	100.0	105.0	113.6	117.3	129.2	124.6	88.4	104.8	102.2	107.8	102.7	-----
<b>Finance:</b>																				
Member bank loans and discounts.....	94.1	98.6	107.4	112.9	117.3	126.8	127.3	126.9	128.4	126.6	125.6	127.3	128.3	129.8	135.4	128.7	130.6	132.4	131.3	129.3
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	112.8	101.6	104.4	113.2	110.0	124.8	130.6	127.6	124.8	124.8	127.6	136.4	139.2	139.2	139.2
Federal reserve ratio.....	99.0	104.1	96.6	96.0	99.1	89.1	90.9	89.2	84.7	88.9	90.0	86.5	87.0	84.5	80.2	89.9	90.5	92.6	94.9	96.5
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	113.0	116.0	115.0	112.3	110.9	109.8	111.0	111.3	112.0	110.7	110.8	109.6	108.0	107.6	106.7
Price, railroad stocks.....	86.0	96.1	117.9	133.4	162.7	174.5	176.0	178.9	169.6	170.3	173.8	178.5	176.4	186.0	180.3	189.3	188.3	184.9	183.7	184.4
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	214.8	210.4	213.6	202.1	206.1	213.4	226.9	234.5	252.6	229.0	275.0	280.3	283.7	285.8	290.3
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.2	95.6	82.5	85.2	70.3	69.8	137.3	80.1	82.5	95.8	96.2	127.1	80.3	85.7	83.2	97.2

\* Seasonal adjustments.

## BUSINESS CONDITIONS IN MAY

### PRODUCTION

Industrial output in May, after adjustments for seasonal variations, was greater than in either the previous month or May, 1928. The principal gains over last year occurred in the output of automobiles, iron and steel, and nonferrous metals, where the increase in each case is more than 20 per cent. Mineral output, after adjustment for seasonal variations, also showed gains over both periods.

### COMMODITY STOCKS

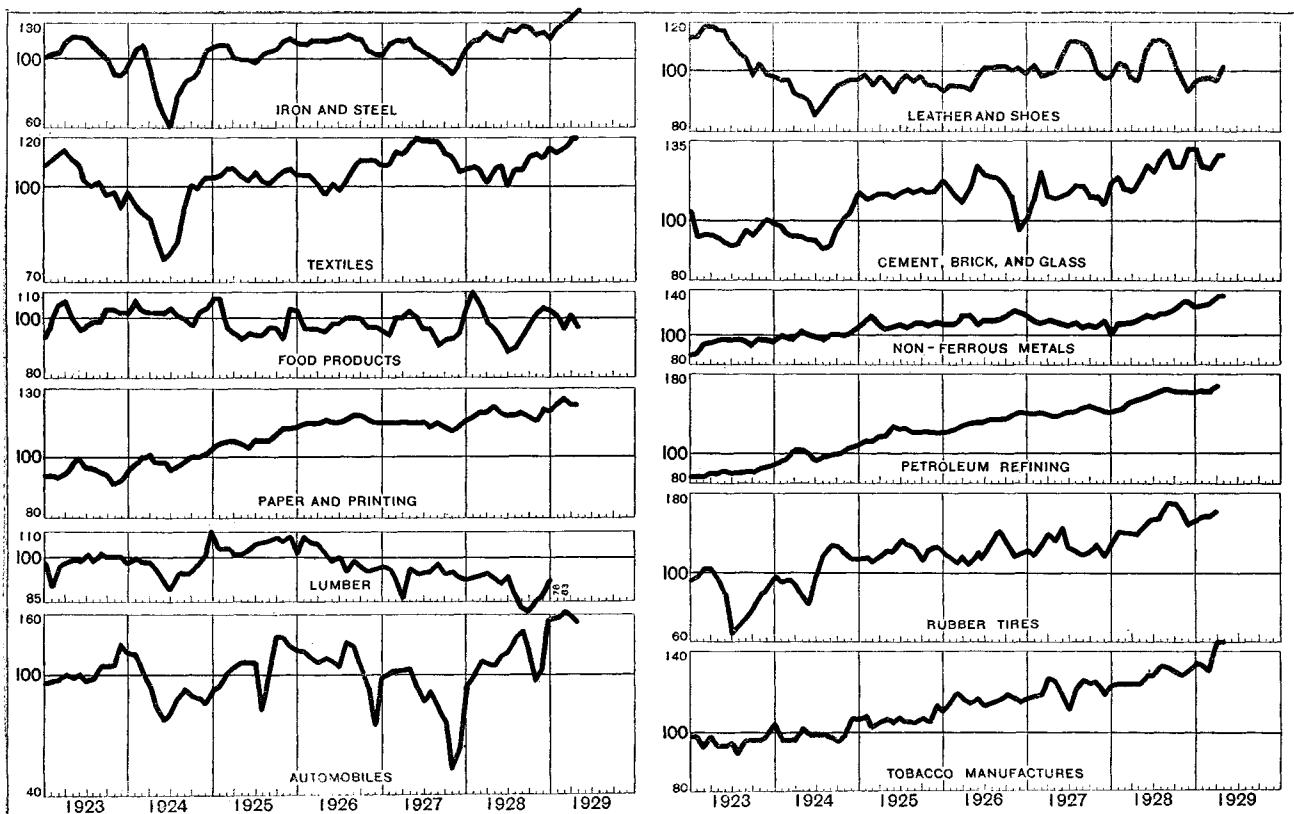
Stocks of commodities, making no allowance for seasonal conditions, were smaller at the end of May

within the index, were higher. The largest increase was in transportation equipment, principally railroads.

Wholesale trade showed no change in the general index from the preceding month, but was higher than a year ago. As compared with the previous month, increased sales by wholesale grocers, meat dealers, and dealers in boots and shoes, were sufficient to offset declines in the sales of dry goods, men's clothing, hardware, drugs, and furniture. As compared with a year ago, the wholesale trade in groceries showed no change, while sales of meats, dry goods, men's clothing, hardware, drugs, and furniture registered increases, and boots and shoes showed a small decline.

### MANUFACTURING PRODUCTION BY MAJOR GROUPS

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



than at the end of the preceding month, but showed a gain over a year ago. Contrasted with last year, declines in stocks of manufactured foodstuffs, textiles, iron and steel, nonferrous metals, lumber, paper, and raw textiles and minerals were insufficient to offset gains in stocks of stone, clay and glass products, leather, rubber, chemicals and oils, and in raw foodstuffs.

### SALES

The general index of unfilled orders showed a decline from the preceding month, but was 16 per cent higher than at the end of May, 1928. As compared with a year ago, unfilled orders for all groups included

Sales by department stores registered gains over both the preceding month and May, 1928. Merchandise stocks, held by department stores at the end of May, were smaller than at the end of April, but showed no change from the corresponding period of 1928. Sales by mail-order houses were larger than a year ago, the increased volume being in part due to the establishment of retail selling outlets by the two principal leaders in this field. The volume of business transacted by 10-cent chain store systems was greater than in either the preceding month or the corresponding period of a year ago. Sales by shoe chains, not only registered an increase over the previous month, but showed a substantial gain also over May, 1928.

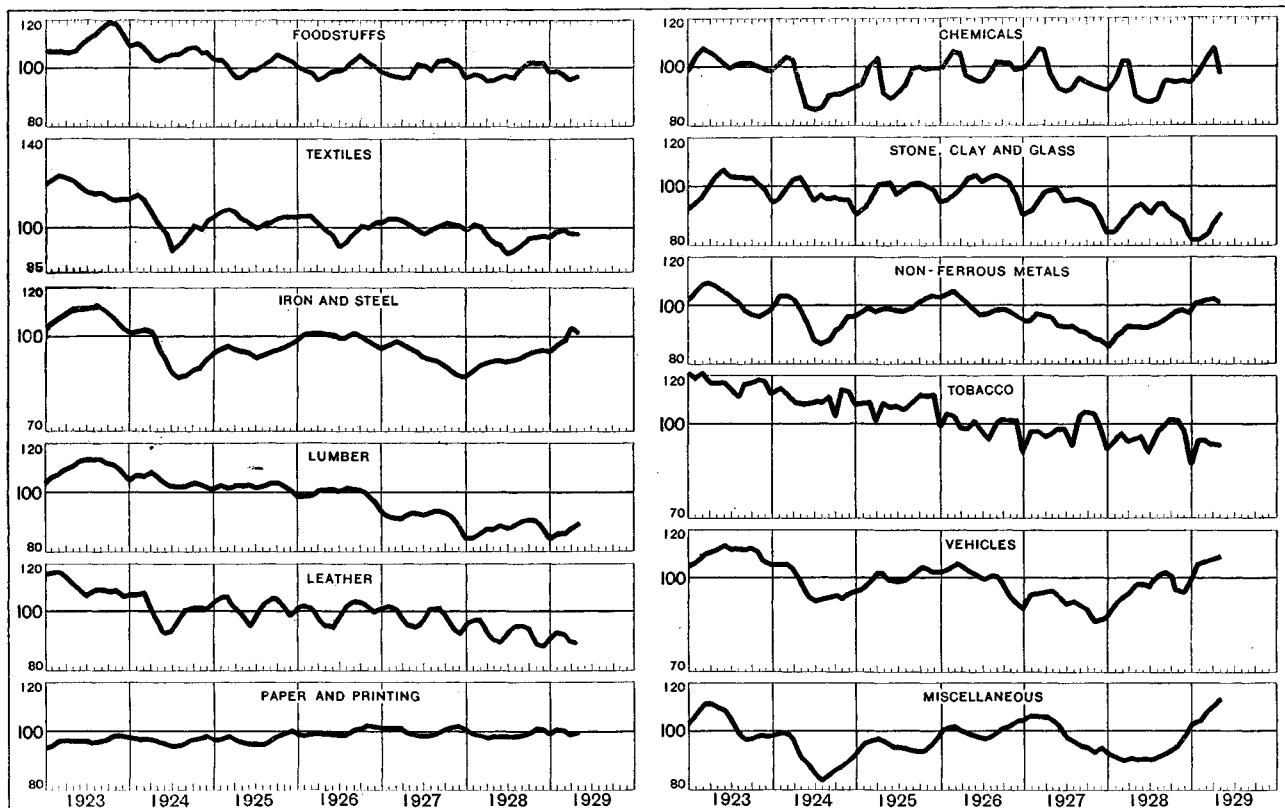
### PRICES

Wholesale prices averaged lower than in either the previous month or May of last year. As compared with the preceding month, all groups either declined or showed no change, except the miscellaneous group, which includes rubber. Contrasted with last year, increased prices for metals and metal products and building materials were insufficient to offset declines in farm products, foods, hides and leather, textiles, fuel and lighting, chemicals and house furnishings. Classified by the state of manufacture, prices for all groups showed lower averages than in either the preceding month or May a year ago, the principal declines from last year, occurring in the prices for raw materials, where the decrease was 6 per cent.

7 per cent higher than in May, 1928. As compared with the previous month, increased employment was registered in factories producing foods, iron and steel, lumber, stone, clay and glass products, and certain miscellaneous commodities, including rubber tires. The principal increases over the preceding month were registered in iron and steel, and stone, clay, and glass factories, where the increase was 2 per cent in each case. Declines from the preceding month were recorded in textiles, leather, nonferrous metals, and tobacco products, with the principal decrease registered in nonferrous metals, where the decline was 2 per cent. As compared with a year ago, all industrial groups showed larger employment except leather, stone, clay, and glass, and tobacco products, the principal declines from

### FACTORY EMPLOYMENT, BY GROUPS

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



The index of prices received by farmers for their produce was 1 per cent lower than in April and 8 per cent lower than in May, 1928. As compared with the preceding month, an increase of 8 per cent in prices for fruits and vegetables was insufficient to offset declines which were registered in grains, dairy and poultry products, and cotton and cottonseed. Compared with a year ago, grains showed a decline of 29 per cent; fruits and vegetables declined 34 per cent; and cotton and cottonseed registered a decrease of 11 per cent.

### EMPLOYMENT

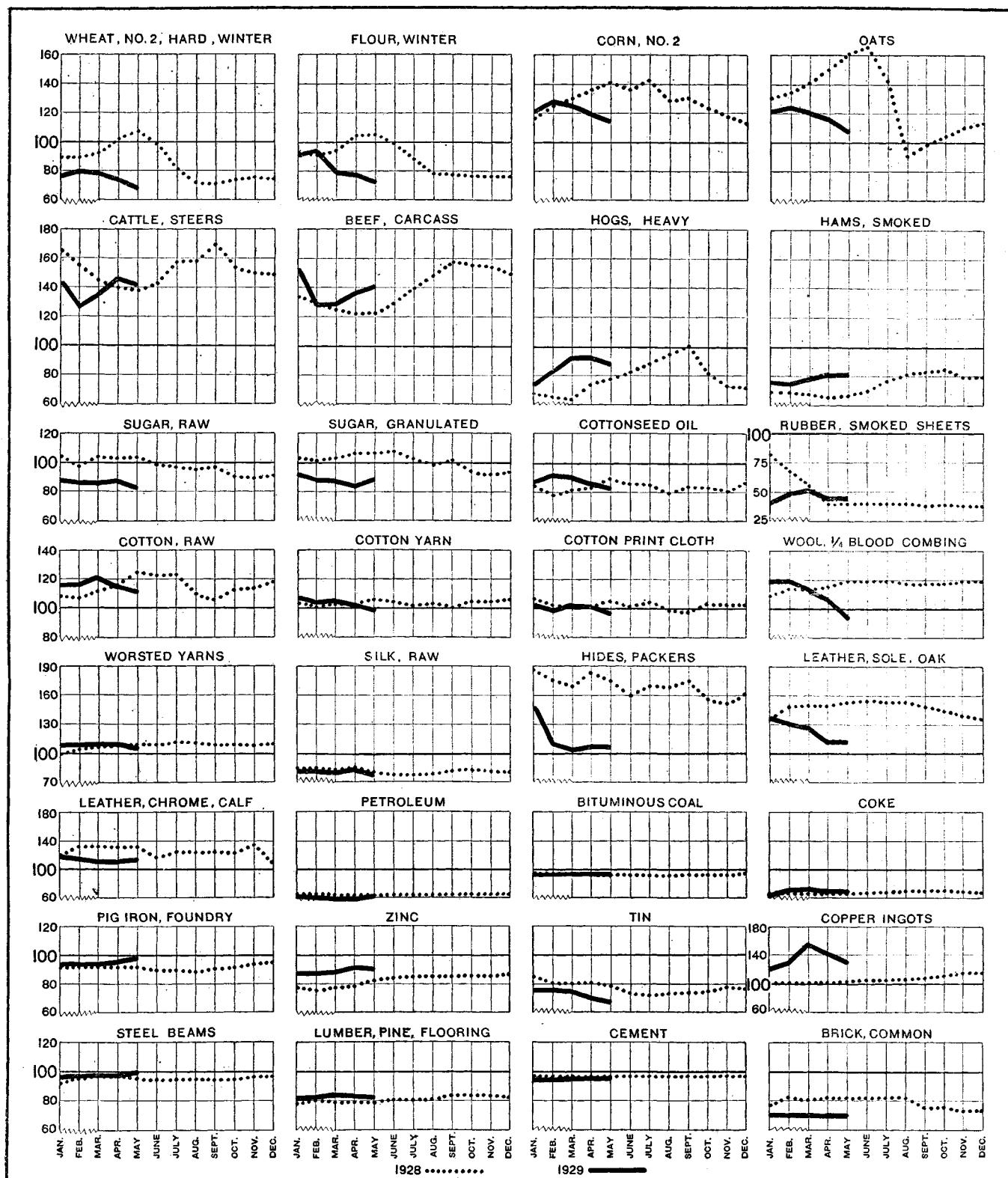
The general index of factory employment showed no change from the preceding month, but was almost

last year occurring in the two later groupings, where the decrease was 3 per cent.

Factory pay-roll payments showed no change from the preceding month, but were almost 12 per cent higher than a year ago. As compared with April, increased pay-roll payments in factories producing foods, iron and steel, lumber, paper and printing, and stone, clay, and glass products were just sufficient to offset declines in pay-roll payments in textiles, chemicals, nonferrous metals, and vehicles. As compared with last year, all groups showed larger pay-roll payments, except stone, clay, and glass, where the decline was 3 per cent.

## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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



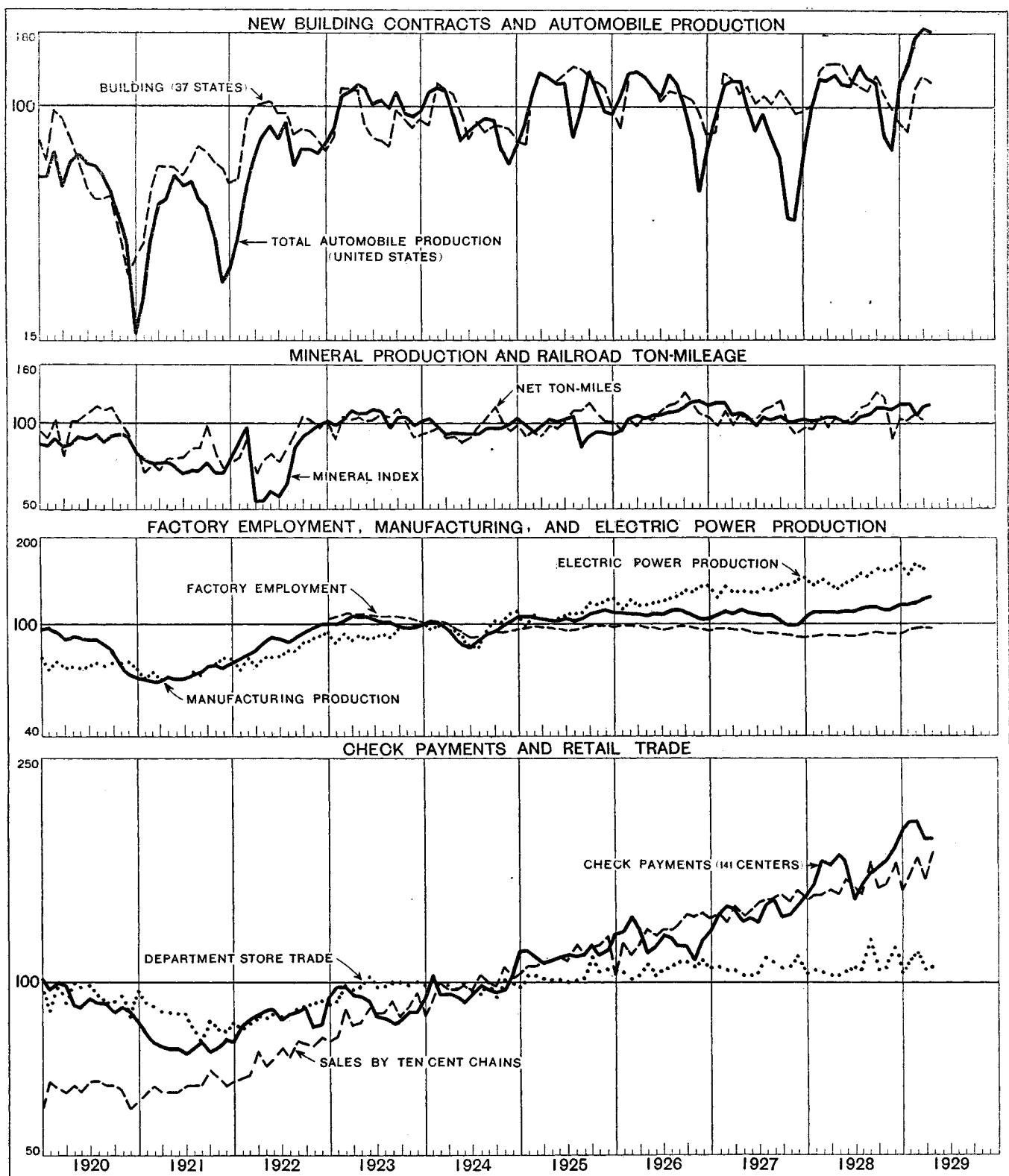
## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

NOTE.—Prices to producer on farm products and market price of wool are from U. S. Department of Agriculture, Bureau of Agricultural 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				
		April, 1929	May, 1929	May, 1928	March, 1929	April, 1929	May, 1929	April, 1928	May, 1928
<b>FARM PRODUCTS—AVERAGE PRICE TO PRODUCER</b>									
Wheat.....	Bushel.....	.998	.901	1.443	78	74	67	96	107
Corn.....	Bushel.....	.875	.862	1.025	127	125	123	132	147
Potatoes.....	Bushel.....	.553	.593	1.033	31	30	32	63	56
Cotton.....	Pound.....	.185	.180	.201	125	123	119	124	133
Cottonseed.....	Ton.....	38.94	37.78	43.00	145	143	139	145	158
Cattle, beef.....	Pound.....	.0953	.0972	.0909	142	148	151	138	141
Hogs.....	Pound.....	.1020	.996	.882	85	86	84	66	75
Lambs.....	Pound.....	.1336	.1279	.1303	113	116	111	110	113
<b>FARM PRODUCTS—MARKET PRICE</b>									
Wheat, No. 1, northern spring (Minneapolis).....	Bushel.....	1,210	1,107	1,502	82	78	72	92	97
Wheat, No. 2, red, winter (Chicago).....	Bushel.....	1,273	1,193	1,898	87	83	77	118	123
Corn, contract grade No. 2, cash (Chicago).....	Bushel.....	.905	.864	1,072	125	119	114	136	141
Oats, contract grades, cash (Chicago).....	Bushel.....	.497	.460	.692	129	116	107	150	161
Barley, feeding (Chicago).....	Bushel.....	.550	.548	1,041	85	79	79	146	150
Rye, No. 2, cash (Chicago).....	Bushel.....	.998	.902	1,362	114	105	95	133	143
Tobacco, leaf, average sales, warehouse (Kentucky).....	Cwt.....	11.783	11.692	11.643	263	139	138	150	137
Cotton, middling upland (New York).....	Pound.....	.201	.195	.217	121	115	111	116	124
Wool, 1/4 blood combing, Ohio and Pennsylvania fleeces (Boston).....	Pound.....	.49	.43	.55	113	107	94	115	120
Cattle, steer, good to choice, corn fed (Chicago).....	Cwt.....	13.875	13.438	13.181	135	146	141	140	138
Hogs, heavy (Chicago).....	Cwt.....	11.460	10.750	9.613	92	93	87	74	78
Sheep, ewes (Chicago).....	Cwt.....	9.175	5.906	7.313	128	139	90	135	111
Sheep, lambs (Chicago).....	Cwt.....	16.450	12.781	15.188	118	120	93	117	111
<b>FOOD</b>									
Flour, standard patents (Minneapolis).....	Barrel.....	6.405	6.119	8.490	79	76	73	96	101
Flour, winter straight (Kansas City).....	Barrel.....	5.581	5.213	7.631	79	77	72	104	105
Sugar, 96° centrifugal (New York).....	Pound.....	.037	.036	.045	85	84	82	103	104
Sugar, granulated, in barrels (New York).....	Pound.....	.048	.049	.059	88	88	89	106	107
Cottonseed oil, prime yellow (New York).....	Pound.....	.102	.097	.106	90	86	82	84	89
Beef, fresh, carcass, good native steers (Chicago).....	Pound.....	.224	.230	.201	129	136	140	122	122
Beef, fresh, carcass, steers (New York).....	Pound.....	.225	.231	.229	127	132	135	130	134
Pork, smoked hams (Chicago).....	Pound.....	.248	.249	.206	77	81	81	65	67
Butter, creamery, 92 score (New York).....	Pound.....	.45	.44	.45	107	100	98	100	100
Oleomargarine, standard, uncolored (Chicago).....	Pound.....	.235	.235	.215	103	103	103	94	94
<b>TEXTILES</b>									
Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston).....	Pound.....	.363	.353	.380	105	101	99	102	106
Cotton-print cloth, 64 x 60-38 1/2"-5.35—yards to pound.....	Yard.....	.076	.073	.079	102	100	97	101	105
Cotton sheeting, brown 4/4 Trion (New York).....	Yard.....	.089	.087	.092	96	96	94	97	99
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....	Pound.....	1.550	1.500	1.575	110	108	105	103	110
Woman's dress goods, French, 39 inches at mills, serge.....	Yard.....	.975	.975	1.025	94	94	94	99	99
Suitings, unfinished worsted—13-ounce, mill.....	Yard.....	2.008	2.008	2.008	100	100	100	100	100
Suitings, serge, 11-ounce, 56-58 inch.....	Yard.....	1.959	1.959	2.095	90	90	90	97	97
Silk, Japan, 13-15.....	Pound.....	5.145	4.777	4.998	81	83	77	87	81
Hosiery, women's, pure silk, mill.....	Dozen pair.....	9.500	9.500	10.000	82	82	82	86	86
<b>LEATHER</b>									
Hides, green salted, packers' heavy native steers (Chicago).....	Pound.....	.149	.149	.246	103	107	106	183	175
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....	Pound.....	.187	.179	.295	105	108	103	170	170
Leather, chrome calf, dull or bright "B" grades (Boston).....	Square foot.....	.495	.510	.600	108	109	113	132	132
Leather, sole, oak, scoured backs, heavy (Boston).....	Pound.....	.490	.490	.670	120	112	112	149	153
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.....	4.85	4.850	4.900	100	100	100	101	101
<b>FUEL</b>									
Coal, bituminous, mine-run (composite price).....	Net ton.....	3.912	3.908	4.014	93	91	91	94	93
Coal, bituminous, prepared sizes (composite price).....	Net ton.....	4.113	4.124	4.324	92	86	86	91	90
Coal, anthracite, chestnut (composite price).....	Long ton.....	12.654	12.539	12.752	95	92	91	93	93
Coke, Connellsburg (range of prompt and future) furnace—at ovens.....	Short ton.....	2.810	2.800	2.695	73	68	68	67	66
Petroleum, crude, Kansas-Oklahoma—at wells.....	Barrel.....	1.110	1.158	1.190	59	59	61	63	63
<b>METALS</b>									
Pig iron, foundry No. 2, northern (Pittsburgh).....	Long ton.....	19.760	20.260	18.960	95	96	98	92	92
Pig iron, basic, valley furnace.....	Long ton.....	17.900	18.375	16.300	94	97	99	92	88
Steel billets, Bessemer (Pittsburgh).....	Long ton.....	34.800	36.000	33.000	97	99	103	94	94
Copper ingots, electrolytic, early delivery (New York).....	Pound.....	.1950	.1778	.1420	154	141	129	101	103
Brass, sheets, mill.....	Pound.....	.244	.233	.189	132	128	122	99	100
Lead, pig, desilverized, for early delivery (New York).....	Pound.....	.0719	.0700	.0612	88	85	83	72	73
Tin, Straits (New York).....	Pound.....	.4597	.4392	.5154	75	70	67	80	79
Zinc, slab, western (St. Louis).....	Pound.....	.0666	.0662	.0603	88	91	90	79	82
<b>BUILDING MATERIAL AND MISCELLANEOUS</b>									
Lumber, pine, southern, yellow flooring, mill.....	M feet.....	37.35	37.000	35.880	83	83	82	79	80
Brick, common red, domestic building (New York).....	Thousand.....	11.50	11.500	13.500	70	70	70	82	82
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district).....	Barrel.....	1.650	1.650	1.683	95	95	95	97	97
Steel beams, mill (Pittsburgh).....	Cwt.....	1.900	1.950	1.875	97	97	100	97	96
Rubber, smoked sheets (New York).....	Pound.....	.211	.214	.188	50	44	44	39	39
Sulphuric acid, 66° (New York).....	Ton.....	15.500	15.500	15.500	107	107	107	107	107
Wood pulp, sulphite, domestic, unbleached, news grade (New York).....	Cwt.....	2.450	2.488	2.525	86	86	87	88	88
Newsprint, rolls, contract, mill.....	Cwt.....	3.250	3.250	3.250	94	94	94	94	94

### MEASURES OF INDUSTRIAL AND COMMERCIAL ACTIVITY

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



## REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

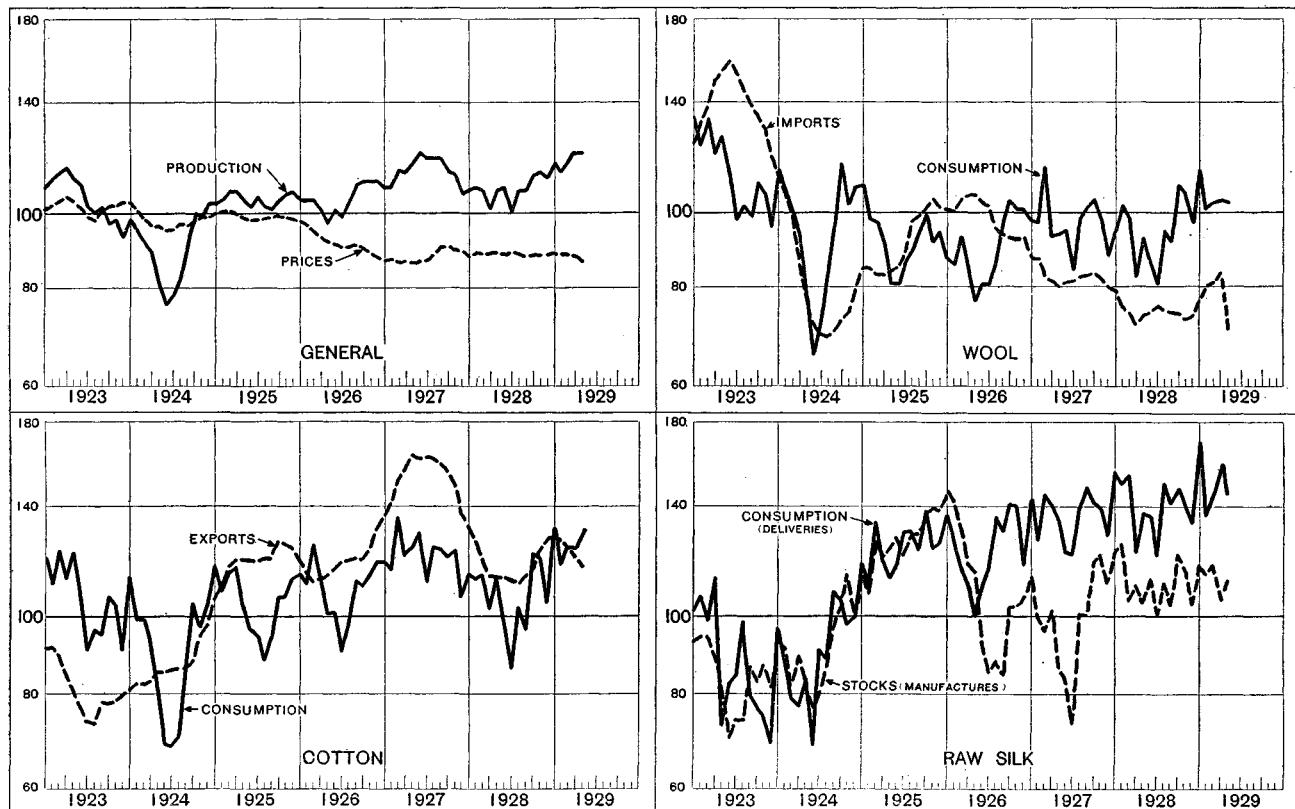
### TEXTILES

Imports of raw wools in May were smaller than in either the preceding month or May of last year, but for the first five months wool imports were substantially greater. Consumption of wool by textile mills was greater than a year ago, while machinery activity also showed gains over last year.

The consumption of cotton was considerably larger than in either the preceding month or May a year ago, while for the first five months of the year cotton consumption showed a gain of 13 per cent over last year.

### THE TEXTILE INDUSTRIES

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



Stocks of cotton held at mills and in public storage at the end of May was 7 per cent smaller than a year ago. Prices paid for cotton to producers averaged lower than in either the preceding month or May, 1928, with wholesale prices also showing declines from both periods. Spindle activity at cotton mills, reduced to a ratio to plant capacity, was greater than in either prior period.

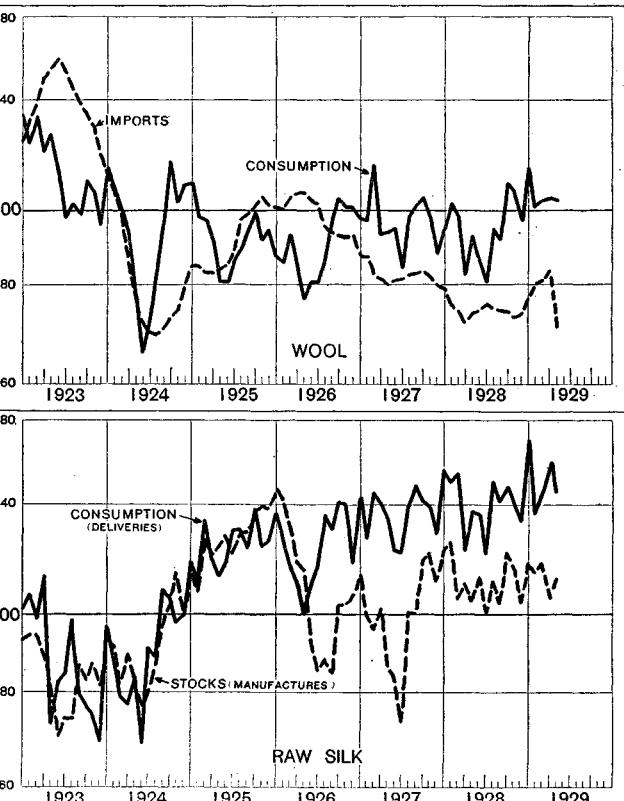
Imports of silk were substantially greater than in the preceding month, but showed a decline from the preceding year. For the first five months of the year silk imports showed a gain of 3 per cent over the same period of 1928. Deliveries of silk to consuming establishments, though declining from the preceding

month, showed a gain over a year ago. Silk machinery activity was greater than last year. Prices for silk averaged lower than in either the previous month or May, 1928.

Imports of rayon, though declining from the preceding month, were considerably larger than a year ago. For the year to date rayon imports showed a gain of more than 50 per cent over the first five months of 1928. Rayon prices, though showing no change from the previous month, averaged 13 per cent lower than a year ago.

### THE TEXTILE INDUSTRIES

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



Fewer men's and boys' garments were cut in April than in March. As compared with last year, however gains were registered in the number of suits, individual trousers, and overcoats cut.

The output of hosiery in April showed a decline from the preceding month, but a gain over a year ago. Shipments showed similar comparisons. Stocks of hosiery at the end of April were lower than a year ago, while unfilled orders showed a gain.

Imports of burlaps were greater in May than in either the preceding month or May a year ago. Imports of unmanufactured fibers showed a decline from the previous month but were considerably larger than a year ago.

### METALS

The consumption of iron ore was greater than in either the preceding month or May a year ago. Pig-iron production likewise showed gains over both periods. For the first five months of the year the output of pig iron showed an increase of 16 per cent over the same period of last year. Wholesale prices for iron averaged higher than in either the previous month or May a year ago.

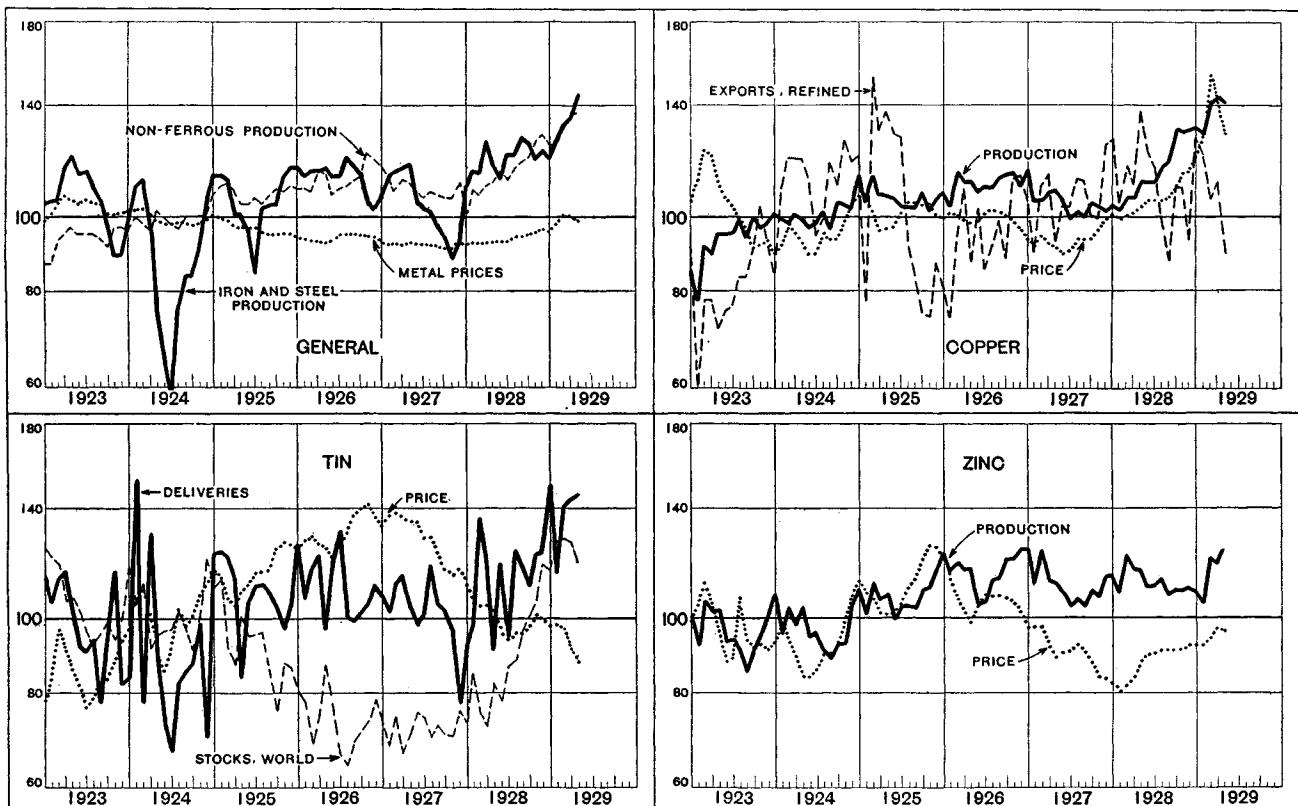
The output of steel ingots showed gains over both prior periods. For the year to date steel-ingot production was 14 per cent larger than in the first five months of 1928. Unfilled steel orders at the end of May were lower than at the end of the previous month, but showed a gain of 26 per cent over last year. The output of steel sheets by independent manufacturers

New orders for machine tools were greater than in either the preceding month or May of last year, while unfilled orders at the end of May were more than twice as large as a year ago. New orders and shipments of electric hoists and electric overhead cranes were larger than in either the preceding month or May, 1928. Sales of mechanical stokers were likewise greater than in either the previous period. Shipments of foundry equipment were more than twice as large as a year ago. Shipments of wood-working machinery showed a gain over last year. Shipments of electric industrial trucks and tractors were larger than in either the preceding month or a year ago.

New orders and shipments of enameled sanitary ware showed declines from both the preceding month

### THE METAL INDUSTRIES

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



also showed gains over May from both the preceding month and the corresponding month of last year. Reduced to a ratio to capacity, production of steel sheets in May was also greater than in either period. Unfilled orders for sheets at the end of May showed a gain of 35 per cent over a year ago.

Production and new orders of steel castings were considerably larger than a year ago. New orders and shipments for fabricated structural steel showed gains for both the preceding month and May, 1928. New orders for fabricated steel plate were likewise greater than in either period. New orders for steel boilers showed a gain over both the previous month and May a year ago, when measured in horsepower.

and the corresponding period of last year for most types. Shipments of water softeners also showed declines from both periods.

The mine production of copper showed a decline from May, but was greater than a year ago. Stocks of copper at the end of May held in North and South America were greater than last year. The wholesale price of copper averaged lower than in April, but was 25 per cent higher than a year ago.

Tin deliveries to consuming establishments were greater than in either the preceding month or May a year ago. Imports of tin were likewise larger than in either period. Tin prices averaged lower than in either the previous month or May, 1928.

### FUELS

The production of bituminous coal showed a gain over last year. Anthracite production was smaller than a year ago. Prices for coal were generally lower than last year. The output of crude petroleum continued to show a gain over the corresponding period of the previous year.

### AUTOMOBILES AND RUBBER

The production of automobiles showed a decline from the preceding month, but was 42 per cent greater than a year ago. For the first five months of the year the output of automobiles showed a gain of 48 per cent over the corresponding period of 1928. Exports of automobiles from the United States in May were

ago. The wholesale price of rubber averaged higher than in either the preceding month or May, 1928.

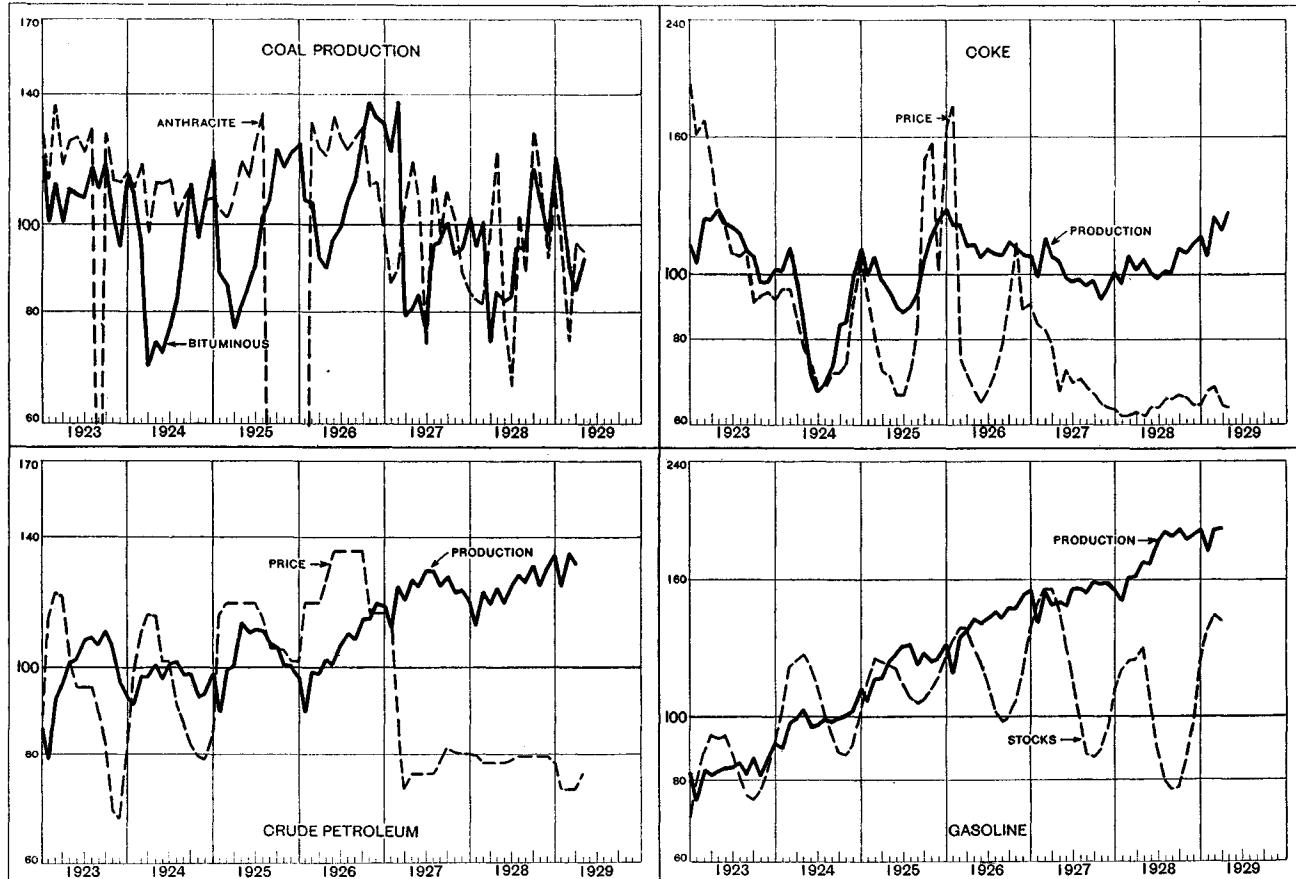
### HIDES AND LEATHER

Imports of hides and skins were smaller than during either the previous month or May a year ago. Imports during the first five months were 19 per cent lower than in the same period of last year. Stocks of hides and skins at the end of April were larger than a year ago. Prices for cattle hides showed no change from the preceding month but were lower than last year. Prices for calf skins, however, averaged lower than in either period.

Inspected slaughter of cattle, swine, and sheep was

### THE FUEL INDUSTRIES

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



lower than in either the preceding month or May of last year, but for the year to date showed a gain of 33 per cent over the same period of last year. Canadian production of automobiles during the first five months of 1929 showed a gain of 73 per cent over the same period of last year, while Canadian exports were considerably larger than double the size of the preceding year. Imports of crude rubber in May were 65 per cent larger than a year ago, while for the first five months rubber imports showed a gain of more than 50 per cent over the same period of 1928.

Production and shipments of pneumatic tires by manufacturers were considerably greater than a year

larger than in April, sheep slaughter showing an increase also over a year ago. Slaughter of calves was smaller than in either prior period. Production of sole and belting leather in April was smaller than a year ago. Stocks of finished sole and belting leather at the end of April were substantially larger than a year ago. Exports in May showed a gain over both the preceding month and May, 1928. The price of sole leather showed no change from that for April, but was considerably lower than last year. Upper-leather production showed a gain over April, 1928. Stocks of upper at the end of the month were smaller than a year ago.

### BUILDING AND CONSTRUCTION

Construction costs showed only a slight change from either the preceding month or May of last year. Building contracts awarded during May, measured both in floor space and in value, showed a decline from both the preceding month and May of last year. For the first five months of the year, building contracts, measured in floor space, showed a decline of 13 per cent, and, measured in value, 11 per cent from the corresponding period of 1928. All construction types showed declines from last year, except commercial and industrial buildings which showed substantial gains. The principal decline from a year ago occurred in residential construction.

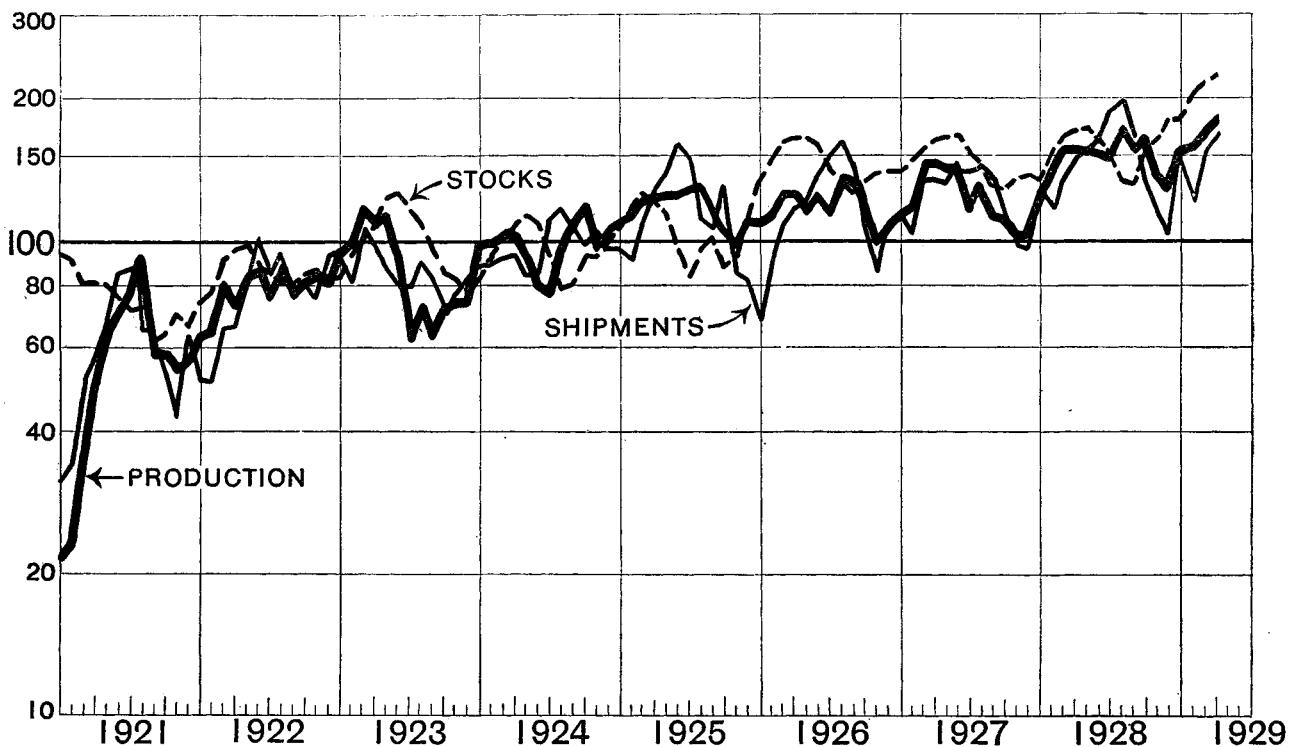
both types at the end of May showed gains over last year.

### STONE AND CLAY PRODUCTS

The production and shipments of Portland cement, while larger than in April, was smaller than a year ago. Stocks at the end of the month were 14 per cent greater than last year. Wholesale prices, showing no changes from the previous month, were 2 per cent lower than a year ago. New contracts awarded for concrete paving showed gains in May over both the previous month and May, 1928. For the first five months of the year, concrete paving awards, however, were 11 per cent smaller than in the same period of last year.

### PRODUCTION, SHIPMENTS, AND STOCKS OF PNEUMATIC TIRES

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



### LUMBER AND LUMBER PRODUCTS

The output of Southern pine lumber showed a gain over the previous month, but was smaller than a year ago. For the first five months of the year Southern pine output showed a loss of 7 per cent from the same period of 1928. Unfilled orders for Southern pine at the end of May were eight per cent lower than a year ago. The production of California redwood showed a gain over May of last year, while the output of California white pine showed a decline. Unfilled orders for both types at the end of May were lower than a year ago. Production of walnut lumber showed gains in May over both the previous month and May of last year.

The production of flooring, both oak and maple, showed declines from a year ago. Unfilled orders for

The production of face brick was greater than a year ago. The price of brick averaged lower than last year. New orders for porcelain plumbing fixtures showed a substantial decline from a year ago. New orders for terra cotta showed a gain over last year, but for the first five months of the year showed a decline of 5 per cent from the same period of 1928. The production of polished plate glass in May was greater than in either the previous month or May of last year. For the first five months of the year polished plate-glass output was 16 per cent greater than in the same period of 1928. The production and new orders of illuminating glassware showed gains in May over both the previous month and the corresponding period of last year.

#### FOODSTUFFS AND TOBACCO

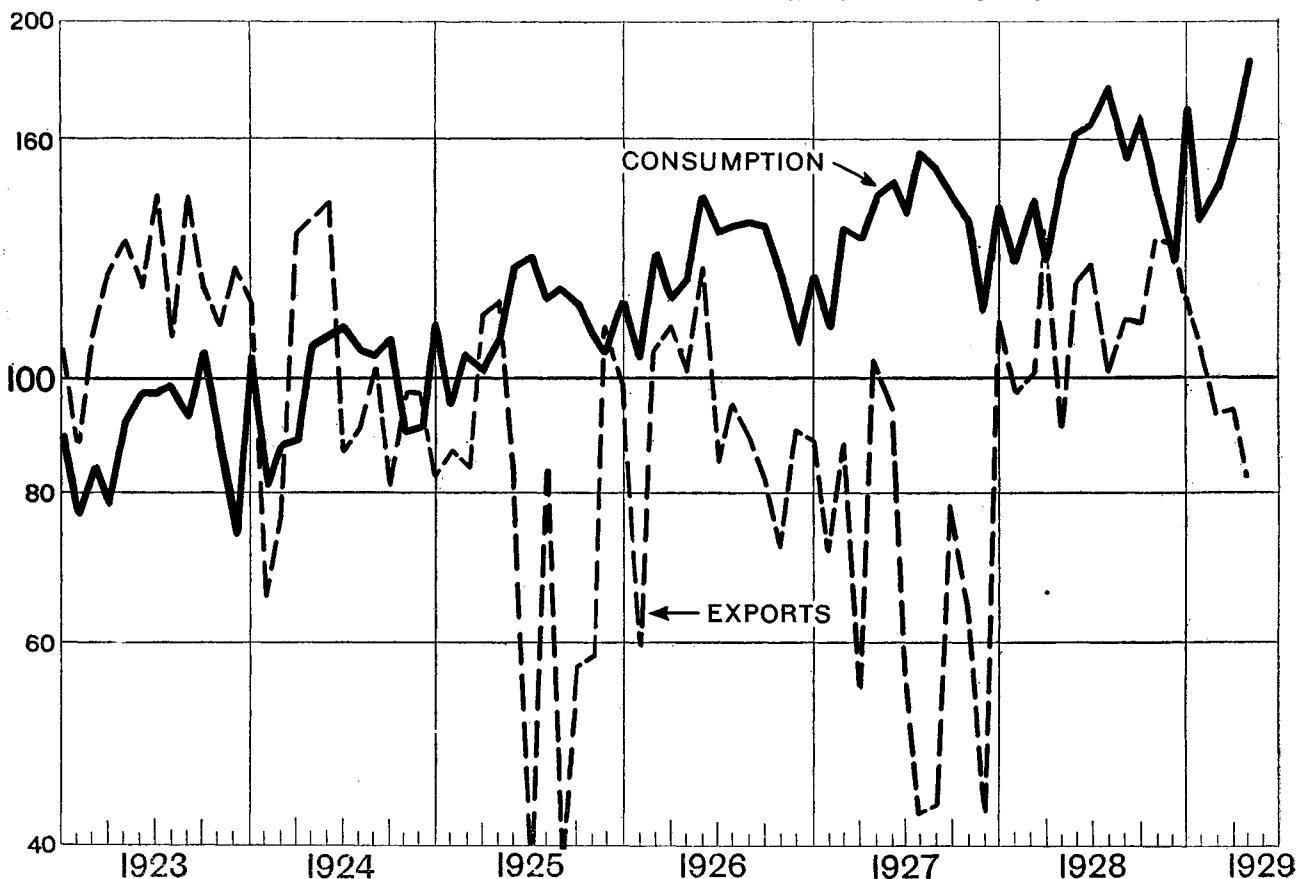
The visible supply of wheat at the end of May was almost twice as large as a year ago. The Canadian visible supply showed a gain of more than 25 per cent over last year. Receipts and shipments of wheat at primary markets showed declines from a year ago. The latest estimate for winter wheat indicates a larger crop than last year.

The visible supply of corn at the end of May was substantially lower than a year ago. Receipts of shipments of corn at principal domestic markets were likewise lower than last year. Corn exports showed a decline from last year.

Receipts of butter at the principal markets were greater than in May, 1928. For the first five months of the year, butter receipts showed a gain of 7 per cent over the same period of 1928. Storage holdings at the end of May were substantially larger than a year ago. Wholesale prices for butter averaged lower in either the previous month or May a year ago. Receipts of cheese showed a gain over May of last year, but for the first five months total receipts were 7 per cent lower than in the same period of 1928. Storage holdings of cheese at the end of May were 25 per cent greater than a year ago. Prices for cheese averaged lower than in either the previous month or

#### CONSUMPTION AND EXPORTS OF CIGARETTES

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



Receipts and shipments of cattle at primary markets were lower than last year. The production of inspected slaughter of beef showed a decline from a year ago. Cold-storage holdings at the end of May of beef products were considerably larger than last year. Prices for cattle and beef averaged higher than a year ago. Receipts of hogs at primary markets were lower than last year, while shipments were larger. The output of pork products in May showed a decline from May, 1929. Cold-storage holdings of pork products at the end of May were 21 per cent smaller than a year ago. Prices for hogs and pork averaged higher than last year.

the same period a year ago. Receipts of eggs were lower than in May of last year. Storage holdings of case eggs at the end of the month were considerably lower than a year ago.

Imports of raw sugar showed a gain over a year ago. Meltings at refineries also showed a gain over last year. Stocks of raw sugar at refineries at the end of May were 30 per cent greater than a year ago. Prices for sugar were lower than in May of last year.

Consumption of cigars and cigarettes in May showed gains over both the preceding month and the corresponding period of 1928.

### TRANSPORTATION

Freight-car loadings showed a gain of 5 per cent over May, 1928. For the first five months of the current year loadings were 4 per cent heavier than in the same period of last year. Unfilled orders for railway locomotives at the end of May, although declining from the previous month, were more than double those of a year ago. Shipments and new orders of freight cars also greatly exceeded last year's total.

### DISTRIBUTION

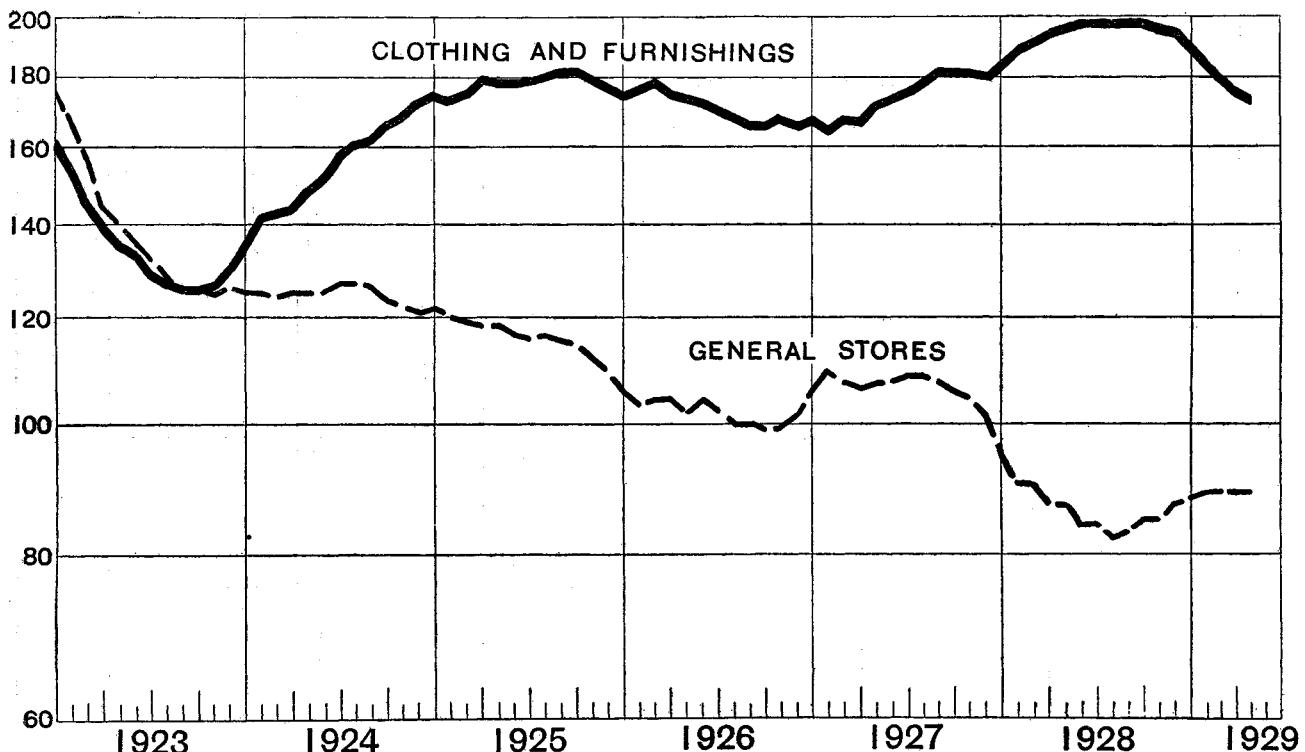
Sales by the principal mail-order houses, while slightly less than in April, greatly exceeded those of a year ago, sales for the first five months of the current year exceeding by 30 per cent those for the

2 per cent larger than a year ago. The Federal reserve ratio continued to show gains as compared to both prior periods. Interest rates showed few changes from the previous month, although the general tendency was upward. Check payments in New York City were substantially larger than in either prior period; for the banks outside New York City check payments were lower than in April but higher than a year ago.

Dividend and interest payments were uniformly less than in April but substantially greater than a year ago, the total for such payments for the first five months of the current year being 11 per cent greater than for the corresponding period of 1928. Prices for stocks generally averaged slightly above those for the previous

### BUSINESS FAILURES AMONG MERCHANTS

[Actual number of failures, plotted as 12 months' moving monthly averages on the end month]



corresponding months of 1928. Sales by 10-cent chain stores showed, almost without exception, substantial increases over both the previous month and the corresponding month of 1928, the four principal systems showing a 9 per cent gain for the first five months of the current year over the corresponding period of 1928. Magazine advertising, although less than in April, was 7 per cent greater than for the same period of 1928. Newspaper advertising, on the other hand, showed substantial gains over both prior periods, the total for the first five months of the current year being 5 per cent greater than for the corresponding period of 1928.

### BANKING AND FINANCE

Bank loans and discounts at the end of May receded from those at the end of the previous month but were

month and almost uniformly higher than a year ago.

New sales of life insurance were slightly less in number than during the previous month although greater than a year ago. The amount of new insurance, however, was greater than during the previous month and slightly less than in May, 1928, and the value of new accounts created by life insurance written during the first five months of the current year showed a gain of more than 5 per cent over the same period of last year.

### GOLD, SILVER, AND FOREIGN EXCHANGE

Domestic rates of gold at the mint were greater than in April but 7 per cent smaller than a year ago. Silver production in the United States, while slightly less than for the previous month, was 17 per cent greater than a year ago.

## INDEXES OF BUSINESS

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

Relative to 1923-1925 monthly average as 100	Maxi-mum since Jan. 1, 1923	Mini-mum since Jan. 1, 1923	1928			1929			PER CENT INCREASE (+) OR DECREASE (-)				
			March	April	May	March	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928			
<b>PRODUCTION</b>													
<b>TOTAL INDUSTRIAL</b>													
Unadjusted, except for working days-----	125	81	111	110	110	121	123	125	+1.6	+13.6			
Adjusted for seasonal variations-----	123	83	109	109	109	119	122	123	+0.8	+12.8			
<b>MANUFACTURING</b>													
Total (adjusted for working days only)-----	127	79	114	113	111	125	127	126	-0.8	+13.5			
Total (adjusted for seasonal variations)-----	124	82	110	110	110	120	123	124	+0.8	+12.7			
Iron and steel-----	145	59	114	122	116	132	135	145	+7.4	+25.0			
Textiles-----	121	77	107	101	107	116	120	120	0.0	+12.1			
Food products-----	110	92	105	98	96	96	102	97	-4.9	+1.0			
Paper and printing-----	122	91	118	118	121	125	122	122	0.0	+0.8			
Lumber-----	110	78	94	95	93	83	86						
Automobiles-----	163	47	111	108	107	163	157	151	-3.8	+41.1			
Leather and shoes-----	134	86	102	97	96	98	97	102	+3.0	+6.3			
Cement, brick, and glass-----	135	92	112	111	116	135	127	128	+0.8	+10.3			
Nonferrous metals-----	137	87	108	109	111	129	137	137	0.0	+23.4			
Petroleum refining-----	166	84	141	147	150	160	166						
Rubber tires-----	166	66	134	134	133	152	161						
Tobacco manufactures-----	142	93	120	120	120	126	142		0.0	+18.3			
<b>MINERALS</b>													
Total (adjusted for working days only)-----	124	84	97	93	110	100	103	115	+11.7	+4.5			
Total (adjusted for seasonal variations)-----	120	90	103	105	105	107	115	116	+0.9	+10.5			
Bituminous coal-----	125	77	95	91	93	89	100	102	+2.0	+9.7			
Anthracite coal-----	133	1	80	107	112	77	95	86	-9.5	-23.2			
Crude petroleum-----	138	88	121	120	120	134	133	133	0.0	+10.8			
Iron-ore shipments-----	143	0			80		143			+78.8			
Copper-----	139	82	102	103	110	135	141	139	-1.4	+26.4			
Zinc-----	124	93	112	113	113	112	116	120	+3.4	+6.2			
Lead-----	125	75	109	100	101	112	122						
Silver-----	123	85	94	89	85	93	103	100	-2.9	+17.6			
<b>ANIMAL PRODUCTS (Marketings)</b>													
Total-----	124	79	97	95	108	88	100	110	+10.0	+1.9			
Wool-----	421	14	49	61	195	43	49	121	+146.9	-37.9			
Livestock-----	131	76	92	83	90	77	87	84	-3.4	-6.7			
Poultry and eggs-----	148	67	118	130	139	106	141	136	-3.5	-2.2			
Dairy products-----	160	64	97	101	115	98	103	134	+27.1	+16.5			
Fish-----	161	44	160	137	156	156	164	161	-1.8	+3.2			
<b>CROPS (Marketings)</b>													
Total-----	251	45	78	59	72	72	57	51	-10.5	-41.2			
Grains *-----	205	38	112	66	84	80	59	53	-10.2	-36.9			
Vegetables *-----	199	60	106	91	136	102	104	118	+13.5	-13.2			
Fruits *-----	266	43	44	47	94	67	86	111	+29.1	+18.1			
Cotton products *-----	353	11	61	59	57	62	46	27	-41.3	-52.6			
Miscellaneous crops *-----	266	22	39	24	23	67	32	22	-31.3	-4.3			

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

## INDEXES OF BUSINESS—Continued

Relative to 1923-1925 monthly average as 100	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			Per cent increase (+) or decrease (-)			
			March	April	May	March	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928		
<b>PRODUCTION—Continued</b>												
<b>FOREST PRODUCTS</b>												
Total	112	74	96	96	101	86	91	99	+8.8	-2.0		
Lumber	112	71	97	95	98	85	87	94	+8.0	-4.1		
Pulpwood	151	54	102	111	120	108	127	132	+3.9	+10.0		
Gum (rosin and turpentine) *	161	18	25	77	140	37	115	158	+37.4	+12.9		
Distilled wood	148	65	103	91	85	104	104	108	+3.8	+27.1		
<b>NEW ORDERS</b>												
Total	138	73	103	99	104	115	—	—	—	—		
Textiles	179	70	98	87	94	111	—	—	—	—		
Iron and steel	148	71	129	118	116	148	—	—	—	—		
Lumber	141	67	101	100	113	97	—	—	—	—		
Paper and printing	127	85	114	108	104	127	—	—	—	—		
Stone and clay products	129	75	102	94	94	95	—	—	—	—		
<b>STOCKS</b>												
Grand total	138	82	127	123	117	133	127	121	-4.7	+3.4		
Total manufactured goods	125	88	120	119	120	121	119	116	-2.5	-3.3		
Foodstuffs	129	79	104	103	103	95	98	97	-1.0	-5.8		
Textiles	138	78	137	138	137	123	120	116	-3.3	-15.3		
Iron and steel	157	78	152	147	147	157	147	142	-3.4	-3.4		
Nonferrous metals	133	74	113	116	118	114	114	115	+0.9	-2.5		
Lumber	125	78	106	104	109	105	102	101	-1.0	-7.3		
Stone, clay, etc	192	64	172	167	155	181	182	180	-1.1	+16.1		
Leather	123	66	66	67	69	72	72	74	+2.3	+7.2		
Rubber	190	77	155	162	170	186	190	181	-4.7	+6.5		
Paper	155	46	133	129	142	117	104	99	-4.8	-30.3		
Chemicals and oils	125	84	115	110	103	122	119	114	-4.2	+10.7		
Total raw materials	157	69	132	125	114	141	133	125	-6.0	+9.6		
Foodstuffs	187	68	152	154	141	181	187	172	-8.0	+22.0		
Textiles	202	43	130	114	98	128	99	92	-7.1	-6.1		
Metals	136	54	90	75	82	66	68	80	+17.6	-2.4		
Chemicals and oils	153	73	107	101	95	105	99	96	-3.0	+1.1		
<b>UNFILLED ORDERS</b>												
Total	167	67	81	77	74	86	93	86	-7.5	+16.2		
Textiles	154	62	75	71	72	82	84	83	-1.2	+15.3		
Iron and steel	157	66	90	82	72	93	92	87	-5.4	+20.8		
Transportation equipment	204	49	71	73	73	81	104	96	-7.7	+31.5		
Lumber	142	56	72	70	79	82	102	104	+2.0	+31.6		
<b>WHOLESALE TRADE</b>												
Grand total, all classes	124	82	100	88	93	101	96	96	0.0	+3.2		
Groceries	119	83	95	88	96	89	92	96	+4.3	0.0		
Meats	130	87	105	105	109	117	115	121	+5.2	+11.0		
Dry goods	128	70	87	70	75	92	80	78	-2.5	+4.0		
Men's clothing	167	43	131	75	57	136	85	59	-30.6	+3.5		
Boots and shoes	128	68	111	99	114	110	100	113	+13.0	-0.9		
Hardware	118	76	95	88	97	95	99	98	-1.0	+1.0		
Drugs	131	88	121	113	110	119	118	111	-5.9	+0.9		
Furniture	131	72	107	88	87	105	101	99	-2.0	+13.8		
<b>RETAIL TRADE</b>												
<b>CHAIN STORES:</b>												
Ten-cent	305	62	133	135	139	156	142	166	+16.9	+19.4		
Grocery	237	77	224	202	214	237	232	234	+0.9	+9.3		
Wearing apparel	413	47	200	195	221	241	220	—	—	—		
Drug	224	82	163	154	164	196	186	195	+4.8	+18.9		
Candy	170	70	119	130	127	152	121	—	—	—		
Shoe	184	55	117	130	130	159	123	144	+17.1	+10.8		
<b>DEPARTMENT STORES:</b>												
Sales	187	71	103	102	107	110	104	110	+5.8	+2.8		
Stocks	117	83	103	104	101	102	103	101	-1.9	0.0		

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

## INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			Per cent increase (+) or decrease (-)											
			March	April	May	March	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928										
<b>EMPLOYMENT *</b>																				
(Relative to 1926 monthly average as 100)																				
Number employed, by industries:																				
Total, all classes	111	92	94	93	93	99	99	99	0.0	+6.5										
Food products	119	95	97	95	96	97	96	97	+1.0	+1.0										
Textiles	122	92	100	97	95	100	99	98	-1.0	+3.2										
Iron and steel	113	86	90	91	92	99	100	102	+2.0	+10.9										
Lumber	113	85	86	87	87	86	88	89	+1.1	+2.3										
Leather	117	88	97	92	90	92	90	89	-1.1	-1.1										
Paper and printing	103	94	99	98	98	100	100	100	0.0	+2.0										
Chemicals	108	85	102	102	89	103	108	97	-10.2	+9.0										
Stone, clay, and glass	106	82	87	89	93	84	88	90	+2.3	-3.2										
Metal products other than iron and steel	109	86	91	93	93	102	103	101	-2.0	+8.6										
Tobacco products	120	86	96	94	95	94	93	92	-1.1	-3.2										
Vehicles	113	84	93	95	98	107	108	108	0.0	+10.2										
Miscellaneous	113	83	90	90	90	107	111	113	+1.8	+25.6										
Amount of pay roll, by industries:																				
Total, all classes	109	84	95	94	94	104	105	105	0.0	+11.7										
Food products	114	93	99	95	97	99	98	100	+2.0	+3.1										
Textiles	124	87	101	94	92	104	101	99	-2.0	+7.6										
Iron and steel	111	75	93	92	94	105	107	108	+0.9	+14.9										
Lumber	108	82	88	88	90	87	89	91	+2.2	+1.1										
Leather	123	79	97	84	82	88	85	85	0.0	+3.7										
Paper and printing	106	86	101	101	101	106	105	106	+1.0	+5.0										
Chemicals	108	86	101	101	93	103	107	102	-4.7	+9.7										
Stone, clay, and glass	106	78	87	90	93	83	88	90	+2.3	-3.2										
Metal products other than iron and steel	112	81	92	93	95	112	112	109	-2.7	+14.7										
Tobacco products	119	81	91	85	89	89	91	91	0.0	+2.2										
Vehicles	120	84	99	100	102	117	120	119	-0.8	+16.7										
Miscellaneous	118	81	90	92	90	113	115	118	+2.6	+31.1										
<b>PRICE INDEX NUMBERS</b>																				
FARM PRICES																				
(Relative to 1909-1914 average as 100)																				
All groups	152	125	137	140	148	140	138	136	-1.4	-8.1										
Grains	178	108	136	144	160	124	120	113	-5.8	-29.4										
Fruits and vegetables	253	108	174	179	181	112	110	119	+8.2	-34.3										
Meat animals	164	98	139	142	151	160	164	164	0.0	+8.6										
Dairy and poultry	166	122	137	134	134	144	138	137	-0.7	+2.2										
Cotton and cottonseed	252	81	147	154	166	155	152	148	-2.6	-10.8										
Unclassified	108	79	89	85	86	90	88	86	-2.3	0.0										
WHOLESALE PRICES																				
Department of Labor Indexes																				
(Relative to 1926 monthly average as 100)																				
All commodities	105	94	96	97	99	98	97	96	-1.0	-3.0										
Farm products	114	94	104	108	110	107	105	102	-2.9	-7.3										
Food, etc.	107	85	98	100	101	98	98	98	0.0	-3.0										
Hides and leather products	127	98	124	127	126	108	108	107	-0.9	-15.1										
Textile products	114	94	97	97	97	97	96	94	-2.1	-3.1										
Fuel and lighting	112	81	81	81	82	81	81	81	0.0	-1.2										
Metals and metal products	113	97	98	98	99	106	106	105	-0.9	+6.1										
Building materials	116	90	91	93	94	98	98	97	-1.0	+3.2										
Chemicals	104	94	96	96	95	96	95	94	-1.1	-1.1										
House-furnishing goods	111	97	98	98	98	97	97	97	0.0	-1.0										
Miscellaneous	127	79	87	85	85	80	79	80	+1.3	-5.9										
Classified by state of manufacture:																				
Semimanufactured articles	128	95	98	98	99	99	97	95	-2.1	-4.0										
Finished products	103	93	95	96	97	97	97	96	-1.0	-1.0										
Raw materials	109	93	98	100	101	99	97	95	-2.1	-5.9										
Nonagricultural commodities	106	93	94	95	96	95	95	94	-1.1	-2.1										
Commercial Indexes																				
(Relative to 1926 monthly average as 100)																				
Dun's	106	85	104	106	104	102	100	99	-1.0	-3.8										
Bradstreet's	112	95	104	104	102	100	98	96	-2.0	-5.9										

\* See table on pp. 21 and 22 of the June, 1929, issue for earlier data.

## INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			Per cent increase (+) or decrease (-)											
			March	April	May	March	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928										
<b>PRICE INDEX NUMBERS—Contd.</b>																				
<b>COST OF LIVING</b>																				
<b>National Industrial Conference Board Indexes</b>																				
(Relative to July, 1914)																				
All items weighted	172	158	161	161	162	160	159	159	0.0	-1.9										
Food (Department of Labor)	167	141	151	152	154	153	152	153	+0.7	-0.6										
Shelter	186	159	165	163	163	159	160	160	0.0	-1.8										
Clothing	177	160	173	171	171	166	168	167	-0.6	-2.3										
Fuel and light (combined)	179	156	163	160	158	162	160	157	-1.9	-0.6										
Fuel	208	174	184	179	176	184	180	175	-2.8	-0.6										
Light	123	118	122	122	122	120	120	120	0.0	-1.6										
Sundries	176	168	171	171	171	170	170	168	-1.2	-1.8										

PASSENGER-CAR AND MOTOR-TRUCK REGISTRATIONS<sup>1</sup>

STATE	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Alabama	8,672	11,634	21,636	32,873	46,171	58,898	74,637	82,366	90,052	126,642	157,262	194,580	225,930	243,539	269,519
Arizona	5,040	7,753	12,300	19,890	23,905	28,979	34,801	35,611	38,034	49,175	57,828	68,029	73,682	81,047	94,372
Arkansas	5,642	8,021	15,000	28,693	41,458	49,450	59,082	67,408	84,596	113,300	141,983	183,589	209,419	206,568	214,931
California	123,504	163,797	232,440	306,916	407,761	477,450	583,623	680,614	861,807	1,100,283	1,319,394	1,440,541	1,600,475	1,693,195	1,799,890
Colorado	17,756	28,894	43,298	87,460	104,865	129,255	145,739	162,328	188,956	213,247	240,097	248,613	268,492	284,867	
Connecticut	27,756	41,121	56,048	74,645	86,067	102,410	119,134	134,141	152,977	181,748	217,236	250,669	263,235	281,521	309,792
Delaware	3,050	5,052	7,102	10,700	12,955	16,152	18,300	21,413	24,560	29,977	35,136	40,140	44,834	47,124	51,210
Dist. Columbia	4,833	8,009	13,118	15,493	30,490	35,400	34,161	40,625	52,792	74,811	88,762	103,092	111,497	111,680	126,556
Florida	3,308	10,850	20,718	27,000	54,186	55,400	73,914	97,957	116,170	151,990	195,128	286,388	401,562	394,734	352,961
Georgia	20,915	25,000	46,025	70,324	104,676	137,000	146,000	131,976	143,423	173,889	207,688	248,093	277,468	300,635	318,856
Idaho	3,346	7,071	12,999	24,731	32,289	42,220	50,861	51,294	53,874	62,379	69,227	81,506	94,760	101,336	108,154
Illinois	131,140	180,832	248,429	340,292	389,620	478,438	568,924	663,349	781,974	969,331	1,119,236	1,261,277	1,370,503	1,438,985	1,504,369
Indiana	66,500	96,915	139,065	192,194	227,160	227,255	338,067	400,342	469,939	583,342	651,705	725,410	772,326	813,637	823,806
Iowa	106,087	145,109	198,587	254,462	278,313	364,043	437,378	461,084	500,158	571,061	616,128	659,202	698,998	704,203	733,466
Kansas	49,374	72,620	112,122	159,343	189,163	228,600	294,159	289,539	327,194	375,594	410,891	457,033	491,276	501,901	533,799
Kentucky	11,766	19,500	31,500	47,420	65,884	90,008	112,683	126,802	154,021	198,377	229,804	261,647	281,557	285,621	304,231
Louisiana	12,000	11,380	17,000	28,394	40,000	51,000	73,000	77,885	102,284	136,622	178,000	207,000	239,500	255,000	264,293
Maine	15,700	21,545	30,972	41,499	44,572	53,425	62,907	77,527	92,539	108,609	127,598	140,499	151,486	163,623	172,638
Maryland	20,213	31,047	44,245	60,943	74,666	95,634	102,841	136,249	165,624	169,351	198,465	234,247	232,852	276,863	285,311
Massachusetts	77,246	102,638	136,809	174,274	193,497	247,182	274,498	360,732	385,231	481,150	570,578	646,153	690,190	694,107	726,295
Michigan	76,389	114,845	160,052	247,006	262,125	325,813	412,717	476,452	578,210	730,658	867,545	989,010	1,118,785	1,154,773	1,249,221
Minnesota	67,862	93,269	46,000	54,000	204,458	259,741	324,166	323,475	380,557	448,187	503,437	569,694	630,285	646,682	673,573
Mississippi	5,694	9,669	25,000	36,000	48,400	59,000	68,486	65,039	77,571	104,286	134,680	177,262	205,200	218,043	246,242
Missouri	54,468	76,462	103,587	147,528	188,040	244,363	297,008	346,437	392,523	476,598	540,500	604,166	654,554	682,419	712,965
Montana	10,200	14,540	25,105	42,749	51,053	59,324	60,650	58,785	62,650	73,828	79,695	94,656	103,953	112,735	126,035
Nebraska	16,385	59,000	101,200	148,101	173,374	200,000	219,000	238,704	256,654	286,053	308,715	338,719	366,773	373,912	391,355
Nevada	1,487	2,009	4,919	7,160	8,159	9,305	10,464	10,821	12,116	15,699	18,118	21,169	24,014	25,776	
New Hampshire	9,571	13,449	17,508	22,267	24,817	31,625	34,680	42,039	48,406	59,604	71,149	81,498	89,001	96,009	102,644
New Jersey	62,961	81,848	109,414	141,918	155,519	190,873	227,737	272,994	342,286	430,958	504,470	580,554	651,415	712,396	758,430
New Mexico	3,090	5,100	8,228	14,086	17,647	18,082	22,100	22,559	25,473	32,032	41,680	49,111	54,996	59,291	65,737
New York	168,223	255,242	314,222	406,016	459,288	566,511	676,205	812,031	1,002,293	1,204,213	1,412,879	1,625,583	1,815,434	1,927,918	2,083,942
North Carolina	14,677	21,000	33,904	55,950	72,313	109,017	140,860	148,627	182,550	246,812	302,232	340,287	385,047	430,499	464,376
North Dakota	17,347	24,908	40,446	62,993	71,678	82,885	90,840	92,644	99,052	109,266	117,346	144,972	157,822	160,701	173,525
Ohio	122,504	181,332	252,431	346,772	412,775	511,031	621,390	720,634	858,716	1,069,100	1,241,600	1,346,400	1,480,246	1,570,733	1,649,699
Oklahoma	13,500	25,032	52,718	100,199	121,500	144,500	212,880	221,300	249,659	307,000	369,903	424,345	499,938	503,126	529,843
Oregon	16,447	23,585	33,917	48,632	63,324	83,332	103,790	118,198	134,125	165,962	192,615	216,553	233,568	244,572	248,118
Pennsylvania	112,854	160,137	230,578	325,153	394,186	482,177	570,164	689,589	829,737	1,043,770	1,228,345	1,330,433	1,455,184	1,554,915	1,642,207
Rhode Island	12,331	16,362	21,406	37,046	36,218	44,833	50,477	54,608	66,083	76,312	95,482	101,756	110,746	118,014	125,698
South Carolina	14,000	15,000	25,000	38,332	55,492	70,143	93,843	89,836	95,239	127,467	161,753	168,496	181,189	199,635	216,805
South Dakota	20,929	28,724	44,271	67,158	90,521	104,628	120,395	119,274	125,241	131,700	142,396	168,028	168,230	169,552	191,374
Tennessee	19,769	7,618	30,000	48,000	63,000	80,422	101,852	117,025	135,716	173,365	204,680	244,626	279,639	294,567	322,137
Texas	40,000	40,000	125,000	192,961	251,118	331,310	427,693	467,616	526,238	688,223	801,833	975,083	1,049,369	1,111,407	1,214,297
Utah	2,253	9,177	13,507	24,076	32,273	35,236	42,616	47,485	49,184	59,625	68,316	73,427	85,380	93,974	98,541
Vermont	8,475	11,499	15,671	21,633	22,553	26,807	31,625	37,265	43,881	52,776	61,179	69,576	74,063	78,727	86,231
Virginia	13,984	21,357	35,426	55,661	72,228	94,100	115,470	139,200	168,000	218,896	261,945	282,650	322,614	337,607	360,545
Washington	30,253	38,823	60,734	91,337	117,278	148,775	173,920	185,359	210,716	258,264	295,443	322,442	363,279	384,583	402,875
West Virginia	6,159	13,279	20												

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

[Table continued on p. 20]

YEAR AND MONTH	U. S. TOTAL 1st 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	Scran- ton	Tren- ton
1919 av. mills. dolls....	37,446	1,769	1,245	92	144	72	20,917	87	263	120	20,354	1,625	1,373	53	43
1919 monthly average....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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
<b>1927</b>															
May.....	144.6	154.0	165.8	180.4	111.1	141.7	153.6	205.7	135.0	136.7	153.6	138.5	137.4	145.3	172.1
June.....	161.8	161.0	171.5	219.6	112.5	145.8	162.0	170.1	144.5	164.2	162.2	141.2	140.7	145.3	162.8
July.....	143.4	152.5	160.1	222.8	107.6	152.8	151.2	168.9	146.0	152.5	151.1	136.1	133.9	139.6	197.7
August.....	143.4	137.2	142.1	207.6	100.0	138.8	151.5	156.3	133.5	139.2	155.5	128.4	126.5	134.0	158.2
September.....	151.6	148.2	156.0	216.3	102.8	151.4	163.6	143.6	147.5	150.0	163.9	136.8	133.9	164.2	167.5
October.....	158.1	174.3	186.0	226.1	122.9	166.7	167.3	163.2	151.7	162.5	167.5	144.8	141.7	154.7	176.8
November.....	152.5	170.7	183.6	210.9	124.3	148.6	163.0	147.1	139.5	137.5	163.5	139.4	139.3	141.5	167.5
December.....	174.8	181.8	192.9	266.3	130.5	166.7	190.7	162.0	161.6	173.3	191.3	159.8	159.3	149.1	214.0
<b>1928</b>															
January.....	108.0	176.8	186.4	258.7	150.0	159.7	185.5	137.9	164.6	160.0	186.1	151.3	149.7	137.8	195.4
February.....	145.6	135.7	139.2	206.5	116.6	143.1	160.3	160.9	131.5	125.8	160.9	125.7	122.9	128.3	195.4
March.....	188.7	167.3	176.1	243.5	122.9	163.3	218.7	255.1	148.7	150.0	220.0	157.4	154.8	217.0	172.1
April.....	179.0	169.3	179.3	257.6	125.7	161.1	204.0	162.0	159.2	205.3	155.3	155.5	141.5	167.5	
May.....	191.3	170.0	177.0	272.8	129.1	175.0	221.4	265.4	167.7	160.8	222.4	163.5	164.0	154.7	186.1
June.....	193.6	163.5	168.6	245.7	134.0	175.0	222.4	202.2	173.0	196.7	223.3	175.8	177.8	151.0	202.4
July.....	157.5	149.1	157.4	200.0	111.1	161.1	172.1	152.8	160.4	153.3	172.4	143.8	142.9	130.2	172.1
August.....	156.3	143.4	152.2	188.1	106.9	147.2	172.0	142.5	162.0	139.2	172.5	132.8	131.1	126.4	172.1
September.....	168.7	142.4	148.8	210.9	110.4	152.8	189.4	139.0	162.7	148.3	190.3	146.6	146.1	134.0	172.1
October.....	194.7	172.2	180.4	231.5	142.3	176.4	220.9	156.3	190.5	165.0	222.0	169.7	169.4	145.3	195.4
November.....	190.6	166.8	176.5	217.4	124.3	159.7	220.0	157.4	180.2	155.0	223.4	163.6	164.7	137.8	188.4
December.....	220.1	178.5	187.5	259.8	137.5	172.2	257.2	198.8	196.6	180.0	259.0	189.3	191.2	154.7	230.3
<b>1929</b>															
January.....	221.3	181.3	187.9	295.7	143.7	195.8	266.7	186.1	191.2	175.0	268.8	179.1	178.9	151.0	200.0
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	233.2	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	166.7	244.4	282.7	176.0	149.2	245.9	166.7	167.1	141.5	183.8
June.....															
<b>ATLANTA DISTRICT</b>															
YEAR AND MONTH	Total, 15 centers	Atlanta	Bir- ming- ham	New Or- leans	Jack- son- ville	Nash- ville	Au- gusta	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....	115.1	108.9	128.8	115.4	125.0	120.4	110.8	116.0	113.0	125.2	123.5	124.0	114.5	128.3	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	125.7	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	226.7	118.2	206.2	87.6	78.2	124.9	120.4	158.3	119.4	119.4	89.8	88.9	136.9
1926 monthly average....	128.1	132.7	243.8	113.7	232.6	89.7	72.6	132.0	127.5	166.4	135.2	127.3	98.1	115.5	129.1
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	189.7	139.6	131.5	100.2	118.0	92.5
<b>1927</b>															
May.....	116.6	124.4	245.8	99.7	183.3	92.5	70.3	140.4	141.2	157.4	137.5	131.6	102.4	112.0	111.1
June.....	115.9	118.7	235.6	103.3	177.1	98.9	64.9	142.8	141.1	176.2	137.5	128.7	108.5	113.3	117.4
July.....	116.4	123.6	239.0	103.6	164.6	102.1	64.9	134.8	130.4	172.2	141.2	126.6	96.4	110.6	114.3
August.....	113.9	115.4	240.7	105.2	156.2	93.5	64.9	136.7	136.2	164.0	125.7	125.7	89.2	108.0	
September.....	130.9	130.1	278.0	127.9	154.1	94.6	100.0	138.0	137.3	165.2	130.1	124.5	97.6	108.6	112.7
October.....	137.7	146.3	300.0	130.6	160.4	110.7	97.3	142.6	142.4	170.4	135.3	133.3	101.2	108.0	128.5
November.....	121.4	121.1	257.6	116.1	160.4	96.8	73.0	135.0	135.9	151.4	134.6	127.0	98.8	104.0	95.2
December.....	136.9	137.4	272.9	137.5	181.2	106.4	86.5	153.6	155.1	185.7	139.7	135.9	104.8	118.6	87.3
<b>1928</b>															
January.....	127.6	130.1	271.2	123.0	164.6	102.1	83.8	148.0	149.3	178.1	138.2	133.3	87.6	112.0	84.1
February.....	122.4	125.4	225.4	103.6	166.6	97.8	78.4	128.7	126.6	160.8	136.0	120.7	86.8	98.6	87.3
March.....	127.0	135.0	245.8	115.4	175.0	116.1	81.1	157.6	156.9	197.9	146.3	138.0	106.0	114.6	101.6
April.....	118.5	126.0	240.7	106.6	158.3	104.3	75.7	155.1	158.9	184.0	131.6				

**RELATIVE DEBITS TO INDIVIDUAL ACCOUNTS AT CLEARING-HOUSE CENTERS—Continued**  
**GROUPED BY FEDERAL RESERVE DISTRICTS**  
*[Table continued on p. 21]*

YEAR AND MONTH	CLEVELAND DISTRICT									RICHMOND DISTRICT					
	Total, 13 centers	Akron	Cincin- nati	Clev- eland	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	116	37	
1919 monthly average...	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	
1920 monthly average...	116.4	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	132.8	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	136.0	96.3	93.4	82.2	109.1	69.4	
1925 monthly average...	122.0	100.0	142.7	106.6	126.4	117.0	179.2	126.9	156.0	106.7	104.6	85.8	122.9	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	
<b>1927</b>															
May...	131.9	114.4	158.7	116.7	132.7	113.4	209.5	141.4	192.0	99.7	95.5	89.3	109.5	73.0	
June...	152.1	121.1	168.0	131.2	169.8	125.0	205.2	145.7	202.0	106.7	104.4	90.4	82.1	75.7	
July...	141.4	128.9	176.5	131.4	141.4	131.7	198.3	142.2	200.0	102.9	103.0	86.9	111.2	67.6	
August...	125.8	113.3	163.2	115.1	120.6	111.7	199.1	138.8	178.0	104.2	104.9	82.1	115.5	67.6	
September...	128.4	120.0	163.2	122.3	120.3	113.4	195.7	141.4	184.0	105.9	103.5	78.5	128.5	78.4	
October...	134.8	117.8	170.9	133.8	128.2	120.0	194.0	147.4	182.0	117.8	114.3	92.8	137.1	83.8	
November...	125.6	104.4	159.9	114.1	121.9	118.4	208.6	135.3	164.0	111.0	102.2	96.4	143.1	75.7	
December...	150.0	126.7	197.6	147.6	136.5	111.7	257.8	165.5	204.0	120.6	116.1	97.6	143.1	75.7	
<b>1928</b>															
January...	142.4	117.8	201.2	136.6	133.5	118.4	237.9	150.7	202.0	108.7	105.2	84.5	130.2	73.0	
February...	121.0	107.8	171.3	110.5	117.9	100.0	198.3	127.6	164.0	95.0	92.1	76.2	110.3	67.6	
March...	135.0	113.3	175.3	120.9	129.6	111.7	238.8	150.9	214.0	109.4	106.4	83.3	123.3	75.7	
April...	139.7	130.0	192.7	128.1	133.3	121.7	242.3	154.3	190.0	105.7	102.2	84.5	110.3	73.0	
May...	137.8	118.9	174.1	122.0	134.8	123.4	244.8	146.6	190.0	105.0	103.7	90.4	111.2	67.6	
June...	151.8	132.2	198.8	136.4	150.5	135.0	260.4	151.7	206.0	114.2	119.0	84.5	119.0	56.8	
July...	137.5	132.2	171.7	126.2	130.1	126.7	238.8	137.9	202.0	101.4	102.7	80.9	112.1	54.1	
August...	130.0	117.8	158.3	119.4	125.2	121.7	210.4	136.2	186.0	96.5	93.3	82.1	117.2	48.7	
September...	135.3	125.5	159.1	124.3	129.6	123.4	230.2	138.8	182.0	93.6	86.4	72.6	128.5	51.4	
October...	156.1	141.1	188.3	150.0	147.1	136.7	271.6	151.7	202.0	112.7	104.0	94.0	146.6	70.3	
November...	140.5	116.7	169.7	123.4	142.3	118.4	240.5	146.6	168.0	102.8	95.8	83.3	130.2	64.9	
December...	169.9	141.1	214.2	162.1	159.6	151.7	277.6	186.2	228.0	120.1	112.6	107.1	144.8	67.6	
<b>1929</b>															
January...	154.2	136.7	202.5	138.9	147.1	138.4	244.0	174.1	242.0	113.3	106.2	94.0	133.6	73.0	
February...	139.6	125.5	176.5	134.1	139.9	115.0	170.7	150.0	190.0	96.4	93.3	73.8	114.7	62.2	
March...	150.0	133.3	184.2	140.4	148.7	135.0	199.1	158.6	232.0	108.4	104.4	85.7	125.0	64.9	
April...	158.5	140.0	201.2	153.1	154.0	138.4	219.0	173.3	216.0	110.3	109.1	80.9	121.6	59.5	
May...	145.7	134.4	172.5	135.8	147.7	120.0	185.4	159.5	198.0	104.9	101.2	82.1	115.5	59.5	
<b>DALLAS DISTRICT</b>															
<b>ST. LOUIS DISTRICT</b>															
<b>MINNEAPOLIS DISTRICT</b>															
YEAR AND MONTH	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...	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	
1920 monthly average...	117.4	114.3	115.2	109.6	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	160.5	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	122.7	111.5	226.4	104.9	88.3	110.3	102.2	82.6	88.0	88.0
1927 monthly average...	124.5	135.6	131.9	103.2	127.4	123.6	120.9	119.6	220.8	110.0	103.0	113.9	106.7	88.3	92.6
<b>1927</b>															
May...	110.5	112.4	119.6	95.7	124.5	118.6	120.9	114.7	183.3	99.1	88.9	104.8	94.4	72.7	77.8
June...	111.5	116.8	114.5	100.0	128.8	126.9	124.8	107.4	197.2	100.9	96.7	103.1	100.0	72.7	77.8
July...	111.5	115.5	115.2	102.2	120.3	123.7	116.4	94.1	200.0	102.7	80.0	107.4	104.9	90.9	88.9
August...	110.9	117.4	123.2	90.2	115.5	114.1	118.8	93.4	197.2	101.3	75.5	110.2	95.7	90.9	77.8
September...	134.5	151.5	152.9	98.9	124.0	119.2	113.6	132.4	227.8	138.4	156.7	150.6	101.9	90.9	111.1
October...	145.1	166.5	154.3	133.0	138.0	125.0	124.8	161.0	277.8	153.8	203.3	155.7	124.7	109.1	144.4
November...	136.2	160.9	133.3	115.2	134.1	118.6	123.4	147.1	280.6	130.3	153.3	128.0	124.7	81.8	111.1
December...	149.7	167.1	157.2	130.4	145.1	139.1	143.4	143.4	258.4	117.9	95.5	120.9	124.1	90.9	111.1
<b>1928</b>															
January...	132.0	147.2	134.8	113.0	135.4	129.5	130.8	123.5	227.8	101.2	71.1	105.9	109.3	72.7	88.9
February...	118.0	132.9	118.8	97.8	119.7	119.9	115.4	99.3	208.4	91.8	61.1	95.2	101.9	63.6	88.9
March...	129.7	142.9	136.2	108.7	132.9	131.4	127.6	115.4	230.6	111.5	80.0	116.4	118.5	81.8	111.1
April...	121.3	129.8	123.9	105.4	128.2	130.1	125.0	103.7	211.1	107.6	75.5	118.4	102.5	72.7	100.0
May...	123.8	132.9	124.6	112.0	138.2	135.3	137.6	102.9	222.2	115.3	107.8	125.1	100.6	72.7	100.0
June...	1														

**RELATIVE DEBITS TO INDIVIDUAL ACCOUNTS AT CLEARING-HOUSE CENTERS—Continued**  
**GROUPED BY FEDERAL RESERVE DISTRICTS**

**DISTRICT TOTALS—SEASONAL VARIATIONS ELIMINATED**

<sup>1</sup> Compiled from data collected by the *Federal Reserve Board*, this table supplements similar data published in Nos. 26, 35, 56, 62, 67, 75, and 87 of this publication. The district total table represents the data of 141 identical centers.

<sup>2</sup> Greenville, S. C., substituted for Charleston, S. C., since May, 1928.

**INDEXES OF MARKET VALUES OF COMMON STOCKS<sup>1</sup>**  
(1926=100)

MONTH	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Total, 406 stocks												
January.....	58.1	63.2	71.0	57.2	58.7	71.6	71.1	85.1	101.8	105.6	134.4	185.2
February.....	59.8	63.4	65.1	56.8	60.1	74.8	71.4	85.9	101.8	107.9	132.3	186.5
March.....	58.6	65.4	69.8	55.4	62.3	75.8	70.0	83.6	95.8	109.1	137.9	189.1
April.....	58.1	67.6	69.3	55.6	66.1	73.2	68.4	82.8	92.9	111.1	145.9	186.6
May.....	59.8	72.2	64.9	57.3	68.6	69.8	68.2	85.4	93.2	114.2	152.1	187.8
June.....	60.0	74.2	63.8	52.8	68.0	67.2	69.4	86.9	97.2	115.4	145.3	-----
July.....	60.4	76.6	63.7	52.5	68.5	64.9	72.7	89.3	100.0	117.2	144.2	-----
August.....	61.0	71.4	61.2	51.9	71.0	65.2	75.2	90.5	102.9	122.0	148.3	-----
September.....	60.7	72.6	63.4	53.2	73.0	65.7	74.4	92.6	104.3	127.7	156.6	-----
October.....	63.2	76.2	63.4	53.9	74.5	64.6	73.5	95.6	101.6	126.7	159.1	-----
November.....	64.8	74.0	60.2	56.8	70.9	66.6	77.6	98.7	103.1	129.6	171.1	-----
December.....	63.5	71.8	54.8	58.8	70.6	68.9	81.7	100.3	105.4	133.1	171.4	-----
Monthly average.....	60.7	70.7	64.2	55.2	67.7	69.0	72.8	89.7	100.0	118.3	149.9	-----
Total, 338 industrial stocks												
January.....	53.4	60.3	76.9	51.5	55.6	69.9	69.7	82.7	102.2	105.6	137.4	192.5
February.....	55.6	60.6	68.8	54.0	56.7	73.4	70.0	83.9	102.4	107.5	134.8	192.3
March.....	54.1	63.2	74.4	52.6	58.9	75.3	67.9	80.9	96.3	108.6	141.1	196.0
April.....	54.1	66.9	74.6	53.3	63.1	72.0	65.3	80.4	92.6	110.0	149.5	193.4
May.....	56.2	72.2	69.0	54.9	66.3	67.5	64.7	83.0	92.6	113.1	154.9	192.6
June.....	56.3	75.8	67.5	49.1	65.8	63.7	65.6	85.1	96.9	114.4	148.2	-----
July.....	57.3	79.9	66.7	48.1	65.4	61.2	68.9	88.2	99.9	116.7	147.8	-----
August.....	57.6	74.7	61.7	46.5	67.1	61.8	71.7	89.0	103.1	112.3	152.6	-----
September.....	56.7	76.8	63.5	48.0	69.5	62.2	70.7	91.8	104.2	128.9	162.2	-----
October.....	58.9	82.5	61.5	49.4	71.5	61.0	69.7	96.0	101.5	127.5	166.2	-----
November.....	60.1	80.0	57.4	53.2	67.9	63.6	73.6	99.6	102.9	131.3	178.9	-----
December.....	59.5	78.0	51.7	56.0	68.4	67.1	78.0	100.4	105.4	135.5	178.4	-----
Monthly average.....	56.7	72.6	66.1	51.4	64.7	66.6	69.7	88.4	100.0	117.6	154.3	-----
Total, 33 railroad stocks												
January.....	65.8	67.5	64.0	64.3	63.4	73.6	71.2	88.6	98.6	107.1	125.3	141.8
February.....	66.8	70.0	61.2	63.7	65.0	76.6	71.8	88.8	97.1	111.6	121.6	141.6
March.....	66.7	70.6	65.4	61.1	67.5	76.4	71.4	86.8	94.7	112.2	125.9	140.4
April.....	65.1	70.9	63.1	59.2	71.0	74.4	72.0	84.8	93.6	115.7	130.7	138.3
May.....	67.3	75.3	60.5	61.9	72.5	72.7	72.7	86.2	94.7	118.1	133.2	138.7
June.....	67.5	74.6	60.0	58.8	71.3	72.3	74.3	86.3	98.4	119.2	126.7	-----
July.....	67.6	74.6	61.3	60.5	74.1	69.6	78.3	87.4	100.2	120.7	124.6	-----
August.....	69.2	68.5	63.4	61.5	78.2	69.0	80.3	89.9	103.1	123.1	126.5	-----
September.....	69.5	68.3	67.0	62.6	79.2	69.3	79.3	91.1	105.9	125.2	129.6	-----
October.....	71.7	69.1	70.6	61.5	80.3	68.7	78.1	91.5	102.7	124.3	128.2	-----
November.....	74.4	67.4	68.3	62.8	75.7	70.0	82.6	94.4	104.2	124.9	134.9	-----
December.....	72.2	64.4	62.6	63.2	73.7	70.0	87.5	98.6	106.4	126.8	134.9	-----
Monthly average.....	68.7	70.1	64.0	61.8	72.7	71.9	76.7	89.5	100.0	119.1	128.5	-----
Total, 35 utility stocks												
January.....	60.7	59.9	56.1	54.6	63.6	73.9	76.4	87.8	103.2	104.4	129.5	192.7
February.....	62.0	60.3	54.9	55.0	65.2	76.0	76.6	88.2	103.8	105.3	130.9	202.4
March.....	60.1	61.5	56.0	56.1	67.6	76.1	76.0	88.7	94.9	107.3	134.4	203.7
April.....	59.2	61.1	55.2	58.1	69.3	74.9	75.0	88.2	93.3	110.5	142.5	201.4
May.....	58.6	62.7	53.3	58.4	70.7	73.7	75.2	93.6	94.3	114.2	155.3	212.3
June.....	58.5	63.4	52.9	57.0	70.4	72.7	76.7	95.5	97.7	115.6	148.1	-----
July.....	57.3	62.6	52.5	57.0	70.6	71.9	78.3	97.2	100.2	114.9	145.3	-----
August.....	56.8	60.2	59.9	57.4	73.7	72.8	80.0	97.5	102.0	118.5	147.9	-----
September.....	58.2	59.6	54.2	58.1	75.7	73.7	81.3	98.4	103.1	124.1	155.8	-----
October.....	62.5	59.9	56.4	58.9	75.8	72.7	81.0	100.6	100.9	124.5	154.5	-----
November.....	63.8	57.6	56.0	60.9	74.3	73.4	83.2	101.2	103.1	125.6	168.6	-----
December.....	61.2	56.0	53.1	62.3	73.9	74.0	86.5	101.1	104.0	127.2	173.4	-----
Monthly average.....	59.9	60.3	54.5	57.8	70.9	73.8	78.9	94.9	100.0	116.0	148.9	-----

<sup>1</sup> Compiled by Standard Statistics Co. (Inc.). The indexes are weighted by the number of shares of each stock outstanding and are corrected for the value of rights, stock dividends, changes in par value, and consolidations. Weekly indexes have been averaged to give monthly data which are presented in these tables. These data displace all similar information previously appearing in the Survey of Current Business.

**TRADING IN FOREIGN BONDS<sup>1</sup>**

[Thousands of dollars]

MONTH	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	
Jan.....	\$325	\$791	\$398	\$309	\$14,585	\$37,868	\$20,819	\$66,448	\$24,613	\$21,437	\$35,820	\$44,736	\$35,478	\$57,016	\$41,075	\$80,858	\$69,018	
Feb.....	288	245	416	392	15,144	26,093	20,112	28,488	25,651	17,929	56,438	39,110	37,102	46,682	36,991	59,693	47,912	
Mar.....	371	344	204	539	24,735	27,540	13,815	19,576	30,302	22,498	62,049	36,643	35,960	49,938	44,613	61,570	52,932	
Apr.....	265	214	275	505	24,450	13,443	16,999	24,628	19,186	56,712	40,566	37,509	54,079	45,995	50,875	58,380	-----	
May.....	286	350	288	424	24,988	29,489	16,246	16,946	18,626	36,744	45,061	32,149	32,259	69,310	44,603	54,739	58,118	
June.....	366	259	399	381	16,833	22,442	14,969	13,422	25,045	29,956	47,320	45,352	51,903	66,570	50,172	42,599	50,509	
July.....	219	275	144	340	19,670	16,563	14,046	19,256	19,265	27,483	40,928	26,546	49,596	48,966	32,163	37,266	47,226	
Aug.....	311	179	(2)	114	33,383	18,048	23,419	10,254	14,074	25,476	39,869	23,513	66,512	39,594	32,953	52,623	30,808	
Sept.....	219	113	(2)	428	24,168	13,403	25,937	10,879	35,472	30,716	42,237	30,028	43,639	58,349	46,688	49,968	32,271	-----
Oct.....	165	191	(2)	574	45,721	15,393	28,405	12,579	25,701	33,568	34,787	29,750	66,034	54,719	50,858	51,016	43,556	-----
Nov.....	236	202	(2)	1,978	20,375	16,314	34,449	28,086	21,832	45,721	39,681	31,899	65,468	45,085	61,725	55,694	32,342	-----
Dec.....	134	296	129	24,004	26,124	24,589	29,636	31,656	19,372	42,009	35,160	25,696	76,544	47,322	73,139	42,991	36,362	-----
Total.....	3,185	3,459	2,253	20,988	290,146	297,192	255,206	274,589	284,581	353,023	536,062	405,988	598,024	637,630	560,975	633,892	559,434	-----
Mo. av.....	265	288	188	2,499	24,179	24,766	21,275	22,882	23,715	29,419	44,672	33,832	49,835	53,136	46,748	52,824	46,620	-----

<sup>1</sup> Compiled by the Dow, Jones & Co. and represent the sales of foreign government, State, provincial, controlled banks and municipal bonds on the New York Stock Exchange.

<sup>2</sup> Closed from July 30 to Nov. 28, 1914, on opening of European war.

## 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 (February, 1929) in which monthly figures for 1928 and 1929 may be found, together with explanations as to the sources and exact extent of the figures quoted. The figures given below should always be read in connection with those explanations. Data on stocks, unfilled orders, etc., are given as of the end of the month referred to. For explanations of relative numbers, including base periods, see introduction on inside front cover.

<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"</i>	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928													
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929														
<b>TEXTILES</b>																									
<b>Wool</b>																									
Receipts at Boston:																									
Total	19,673	17,202	23,189	15,390	24,215	21,346	33,331	+57.3	-27.3	114,748	99,669	-13.1													
Domestic	4,532	1,836	5,738	6,442	16,108	8,138	25,843	+150.0	-37.7	54,921	34,656	-36.9													
Foreign	15,141	15,366	17,451	8,948	8,107	13,208	7,488	-0.4	+8.3	59,827	65,013	+8.7													
Imports:																									
In condition imported	36,523	33,398	32,743	28,165	19,786	20,474	25,040	-29.7	-21.0	121,051	150,615	+24.4													
Grease equivalent	38,835	37,386	37,682	30,941	22,372	23,600	28,163	-27.7	-20.6	136,882	167,216	+22.2													
Consumption by textile mills, grease equivalent	54,031	47,993	48,656	49,205	48,765	38,855	43,911	-0.9	+11.1	222,934	248,650	+11.5													
Machinery, activity, hourly:																									
Looms—																									
Wide	69	69	67	70	67	58	60	-4.3	+11.7																
Narrow	63	59	60	64	61	51	53	-4.7	+15.1																
Carpet and rug	65	67	69	70	72	71	66	+2.9	+10.8																
Sets of cards	84	85	86	87	86	78	80	-1.1	+7.5																
Combs	83	84	82	81	84	64	64	+3.7	+31.3																
Spinning spindles—																									
Woolen	82	82	83	84	82	75	79	-2.4	+3.8																
Worsted	69	69	68	70	66	56	55	-5.7	+20.0																
Prices:																									
Raw, territory, fine, scoured	dolls. per lb.	1.12	1.09	1.05	1.04	1.00	1.19	1.18	-3.8	-15.3															
Raw, Ohio and Pa. fleeces,																									
1/4 blood, combing, grease	dolls. per lb.	.55	.55	.52	.49	.43	.53	.55	-12.2	-21.8															
Worsted yarn	dolls. per lb.	1.58	1.58	1.58	1.55	1.50	1.55	1.58	-3.2	-5.1															
Women's dress goods, French																									
serge, 30-in.	dolls. per yd.	.98	.98	.98	.98	.98	1.03	1.03	0.0	-4.9															
Suiting, 13-oz.	dolls. per yd.	2.008	2.008	2.008	2.008	2.008	2.008	2.008	0.0	0.0															
<b>Cotton</b>																									
Receipts into sight	thous. of bales	1,112	631	736	555	328	728	705	-40.9	-52.5	3,721	3,363	-9.6												
Imports, unmanufactured	bales	54,939	39,720	37,124	84,621	42,486	18,149	19,842	-49.8	+114.1	159,487	258,89	+0+23.3												
Exports, unmanufactured	(including linters)	bales	815,871	629,521	569,653	472,304	328,068	485,219	591,345	-30.5	-44.5	3,066,521	2,815,417	-8.2											
Consumption by textile mills	bales	668,389	598,098	632,808	631,710	668,229	524,765	577,384	+5.8	+15.7	2,842,491	3,199,234	+12.6												
Stocks, domestic, end of month:																									
Total, mills and w'houses	thous. of bales	6,383	5,623	4,908	4,130	3,325	4,427	3,590	-19.5	-7.4															
Mills	thous. of bales	1,768	1,747	1,731	1,607	1,477	1,508	1,331	-8.1	+11.0															
Warehouses	thous. of bales	4,615	3,876	3,177	2,524	1,848	2,919	2,259	-26.8	-18.2															
Stocks, world visible, end of month:																									
Total	thous. of bales	7,607	7,226	6,749	6,053	5,268	6,023	5,630	-13.0	-6.4															
American	thous. of bales	5,510	5,043	4,469	3,680	3,000	4,102	3,533	-18.5	-15.1															
Prices:																									
To producer	dolls. per lb.	.179	.180	.188	.185	.180	.187	.201	-2.7	-10.4															
In New York, middling	dolls. per lb.	.202	.202	.212	.201	.195	.203	.217	-3.0	-10.1															
<b>Cotton Yarn</b>																									
Machinery activity of spindles:																									
Active spindles	thousands	30,758	31,008	31,104	30,924	30,910	30,950	28,948	0.0	+6.8															
Total activity	millions of hours	9,225	8,221	8,910	8,861	9,165	7,415	7,966	+3.4	+15.1															
Activity per spindle	hours	261	233	252	251	261	206	222	+4.0	+17.6															
Ratio to capacity	per cent	111.6	110.7	108.3	110.3	110.9	94.8	95.1	+0.5	+16.6															
Carded sales yarn:																									
Production	thous. of lbs	18,311	18,718	23,373	18,269	17,941	16,737	16,358	-1.8	+9.7	93,260	96,612	+3.6												
Stocks, end of month	thous. of lbs	8,836	8,765	8,328	8,446	8,760	13,390	13,427	+3.7	-34.8															
Unfilled orders, end of month	thous. of lbs	43,246	42,722	43,476	40,345	37,609	31,925	28,484	-6.8	+32.0															
Prices:																									
22/1 cones, Boston	dolls. per lb.	.382	.372	.377	.363	.353	.366	.380	-2.8	-7.1															
40/ls, southern spinning	dolls. per lb.	.510	.512	.527	.510	.493	.480	.480	-2.2	+4.0															
<b>Cotton Goods</b>																									
Cotton textiles:																									
Production	thous. of yds	342,806	292,873	297,994	283,878	341,370	286,005	349,325	+20.3	-2.3	1,591,347	1,558,921	-2.0												
New orders	thous. of yds	317,078	340,709	355,333	202,520	278,335	335,117	260,845	+37.4	+3.1	1,405,259	1,496,975	+6.5												
Shipments	thous. of yds	345,354	309,118	325,633	277,098	326,121	270,172	326,244	+17.7	0.0	1,486,340	1,583,324	+6.5												
Stocks, end of month	thous. of yds	389,195	372,950	345,311	352,091	367,340	418,427	441,508	+4.3	-16.8															
Unfilled orders, end of month	thous. of yds	440,585	472,176	504,876	430,298	382,512	362,044	305,645	-11.1	+25.1															
Fine cotton goods, production	pieces	403,300	410,372	464,539	425,925	526,971	255,945	128,604	+23.7	+309.8	1,676,753	2,231,107	+33.1												
Cotton cloth:																									
Imports	thous. of sq. yds	6,069	4,400	5,362	5,334	6,527	6,418	5,722	+22.4	+14.1	32,346	27,692	-14.4												
Exports	thous. of sq. yds	55,186	51,492	58,474	49,233	46,261	39,831	43,011	-6.0	+7.6	193,422	260,646	+34.8												
Fabric for tire manufacture, consumption	thous. of lbs	19,779	20,327	21,238	23,620		18,310	19,168			* 70,128	* 84,964	+21.2												
Elastic webbing, shipments	thous. of dolls.	1,412	1,572	1,869	1,766	1,725	1,332	1,415	-2.3	+21.9	6,907	8,344	+20.8												
Prices:																									
Print cloth, 64 x 60	dolls. per yd.	.076	.075	.077	.076	.073	.076	.079	-3.9	-7.6															
Sheeting, brown	dolls. per yd.	.090	.089	.089	.089	.087	.091	.092	-2.2	-5.4															
Cotton goods (Fairchild), rel. to 1911-1913		165	163	164	164	162	161	164	-1.2	-1.2															

\* Cumulative through Apr. 30.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929	
<b>TEXTILES—Continued</b>												
<b>Cotton Finishing</b>												
White, dyed and printed (outside mills):												
Billings, finished goods.....thous. of yds.	81,676	81,418	98,495	96,707	88,707	75,378	73,539	-8.3	+20.6	386,180	447,003	+15.7
New orders, gray yardage.....thous. of yds.	86,302	88,460	94,872	90,469	79,228	68,316	72,961	-12.4	+8.6	377,454	439,331	+16.4
Shipments, finished goods.....cases	53,196	54,391	65,112	57,030	54,247	43,378	47,555	-4.9	+14.1	236,136	283,976	+20.3
Stocks, finished goods, end mo.....cases	36,374	37,153	35,478	34,920	35,618	40,876	40,449	+2.0	-11.9	.....	.....	.....
Operating activity.....per cent of capacity	65	74	77	74	71	64	62	-4.1	+14.5	.....	.....	.....
Unfilled orders, end of month.....days	5.6	6.4	6.3	6.4	5.2	4.5	4.3	-18.7	+20.9	.....	.....	.....
Printed only (mills and outside):												
Production.....thous. of yds.	82,259	78,307	92,544	88,635	85,894	69,378	73,520	-3.1	+16.8	332,464	427,639	+28.6
Stocks, end of month.....thous. of yds.	80,212	81,206	79,361	82,106	78,184	78,151	76,149	-4.8	+2.7	.....	.....	.....
<b>Silk</b>												
Imports, raw.....thous. of lbs.	9,105	7,092	6,476	6,220	8,599	6,561	9,133	+38.2	-5.8	36,481	37,492	+2.8
Deliveries (consumption).....bales	57,349	46,228	49,878	53,855	49,121	41,258	46,367	-8.8	+5.9	242,735	256,431	+5.6
Stocks, end of month:												
At warehouses.....bales	49,943	46,993	45,218	39,125	39,898	35,483	42,088	+2.0	-5.2	.....	.....	.....
At manufacturing plants.....bales	25,778	25,026	25,892	23,108	24,623	24,369	23,523	+6.6	+4.7	.....	.....	.....
Silk machinery activity:												
Broad looms.....per cent of normal	94.7	99.8	100.2	101.1	101.0	88.5	90.8	-0.1	+11.2	.....	.....	.....
Narrow looms.....per cent of normal	48.0	53.6	66.3	68.8	74.2	49.8	56.7	+7.8	+30.9	.....	.....	.....
Spinning spindles.....per cent of normal	61.0	66.5	66.3	66.9	65.3	64.2	56.9	-2.4	+14.8	.....	.....	.....
Prices:												
Raw, Japanese, 13-15, N. Y. ....dollars. per lb.	4.998	5.096	4.998	5.145	4.777	5.390	4.998	-7.2	-4.4	.....	.....	.....
Silk goods, composite.....dollars. per yd.	1.16	1.18	1.19	1.18	1.18	1.20	1.19	0.0	-0.8	.....	.....	.....
<b>Rayon</b>												
Imports.....thous. of lbs.	1,707	1,267	1,901	1,683	1,589	844	902	-5.6	+76.2	5,338	8,147	+52.6
Stocks, bonded, end of month.....thous. of lbs.	3,036	2,889	2,863	2,736	3,164	3,128	1,50	0.0	-13.3	.....	.....	.....
Price, 150 denier, A grade, N. Y. ....dollars. per lb.	1.50	1.30	1.30	1.30	1.50	1.50	1.50	.....	.....	.....	.....	.....
<b>Clothing</b>												
Men's and boys' garments cut.*												
Suits.....thous. of garments	2,440	2,434	2,411	1,885	.....	1,707	1,889	.....	.....	29,145	29,170	+0.3
Separate trousers.....thous. of garments	2,134	2,080	2,312	2,295	.....	1,920	1,933	.....	.....	28,559	28,821	+3.1
Overcoats.....thous. of garments	350	374	475	235	.....	221	340	.....	.....	21,173	21,434	+22.3
Overalls:												
Cut.....thous. of dozen garments	374	363	3402	3394	361	341	370	-8.4	-2.4	1,814	1,894	+4.4
Net shipments.....thous. of dozen garments	311	327	3376	3348	354	308	323	+1.7	+9.6	1,532	1,716	+12.0
Unfilled orders, end of mo.....thous. of dozen garments	261	238	3241	229	194	125	163	-15.3	+19.0	.....	.....	.....
<b>Hosiery</b>												
Production.....thous. of dozen pairs	3,606	3,203	3,741	3,639	.....	3,304	3,462	.....	.....	214,293	214,189	-0.7
Net shipments.....thous. of dozen pairs	3,240	3,075	3,713	3,493	.....	3,217	3,312	.....	.....	213,337	213,521	+1.4
Stocks, end of month.....thous. of dozen pairs	7,550	6,952	8,178	7,985	.....	8,618	9,030	.....	.....	213,027	214,018	+7.6
New orders.....thous. of dozen pairs	3,337	2,928	3,776	3,977	.....	3,418	3,682	.....	.....	.....	.....	.....
Unfilled orders, end of month.....thous. of dozen pairs	4,229	4,183	4,254	4,665	.....	4,520	4,794	.....	.....	.....	.....	.....
<b>Knit Underwear</b>												
Production.....thous. of dozen garments	1,049	1,077	3,1,251	1,274	1,316	1,151	1,148	+3.3	+14.6	5,668	5,967	+5.3
Net shipments.....thous. of dozen garments	948	995	3,1,166	1,112	1,168	965	1,019	+5.0	+14.6	5,137	5,389	+4.9
Stocks, end of mo.....thous. of dozen garments	1,271	1,310	3,1,368	1,523	1,679	1,520	1,700	+10.2	-1.8	.....	.....	.....
New orders.....thous. of dozen garments	1,447	1,356	3,1,330	1,071	1,088	934	1,028	+1.6	+5.8	5,504	6,292	+14.3
Unfilled orders, end of month.....thous. of dozen garments	2,009	2,358	3,2,501	2,444	2,349	2,245	2,164	-3.9	+8.5	.....	.....	.....
<b>Burlaps and Fibers</b>												
Imports:												
Burlaps.....thous. of lbs.	57,109	61,735	52,550	69,787	71,649	62,050	58,124	+2.7	+23.3	299,099	312,830	+4.6
Fibers (unmanufactured).....long tons	34,109	43,524	26,655	30,389	26,300	23,682	21,846	-13.5	+20.4	146,171	160,977	+10.1
<b>Pyroxylin Coated Textiles</b>												
Pyroxylin spread.....thous. of lbs.	5,389	6,073	6,629	5,554	5,245	4,629	5,459	-5.6	-3.9	24,663	28,890	+17.1
Shipments billed.....thous. of linear yards	4,303	4,603	5,638	4,822	4,563	3,703	4,015	-5.4	+13.6	18,973	23,929	+26.1
Unfilled orders, end mo. thous. of linear yards	4,286	4,099	4,302	4,061	3,531	3,811	4,007	-13.1	-11.9	.....	.....	.....
<b>Fur</b>												
Sales by dealers.....thous. of dollars	10,188	14,157	21,228	12,994	12,522	11,113	12,905	-3.6	-3.0	59,590	71,089	+19.3
<b>Buttons</b>												
Fresh-water pearl buttons:												
Production.....ratio to capacity	42.2	52.1	52.9	52.6	51.6	50.7	48.8	-1.9	+5.7	.....	.....	.....
Stocks, end of month.....thous. of gross	11,306	11,249	11,034	11,114	11,226	10,949	11,098	+1.0	+1.2	.....	.....	.....
<b>IRON AND STEEL</b>												
<b>Iron</b>												
Manganese ore, imports.....thous. of long tons	15	21	18	31	29	14	16	-6.5	+81.3	70	114	+62.9
Iron ore:												
Imports.....thous. of long tons	180	241	244	284	276	225	211	-2.8	+30.8	1,080	1,225	+13.4
Shipments from mines.....thous. of long tons	None.	None.	None.	2,516	9,549	6	5,363	+279.5	+78.1	5,369	12,065	+124.7
Receipts—												
Lake Erie ports and furnaces.....thous. of long tons	None.	None.	None.	1,191	6,753	None.	2,848	+467.0	+137.1	2,848	7,944	+178.9
Other ports.....thous. of long tons	None.	None.	None.	1,387	2,527	6	1,517	+553.0	+66.6	1,523	2,914	+91.3

2 Cumulative through Apr. 30

3 Revised.

\* See table on p. 18 of the June, 1929, issue for earlier data.

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929	
	IRON AND STEEL—Continued											
The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey."												
Iron ore—Continued.												
Consumption—thous. of long tons	5,195	4,819	5,465	5,417	6,002	4,781	4,948	+10.8	+21.3	23,235	26,898	+15.8
Stocks, end of month—												
Total—thous. of long tons	30,189	25,414	20,005	15,930	19,146	19,570	18,877	+20.2	+1.4			
At furnaces—thous. of long tons	24,878	20,475	15,782	12,283	15,275	14,388	13,942	+24.4	+9.6			
On Lake Erie docks—thous. of long tons	5,311	4,939	4,223	3,647	3,871	5,182	4,935	+6.1	-21.6			
Pig-iron production:												
Total, United States—thous. of long tons	3,442	3,206	3,714	3,663	3,898	3,185	3,284	+6.4	+18.7	15,439	17,923	+16.1
Merchant furnaces—thous. of long tons	791	707	755	837	793	630	631	-5.3	+25.7	3,212	3,883	+20.9
Canada—thous. of long tons	88	94	86	79	81	75	88	+2.5	-8.0	371	428	+15.4
Furnaces in blast, end of month:												
Furnaces—number	202	207	212	215	219	195	198	+1.9	+10.6			
Capacity—long tons per day	111,985	115,770	120,740	122,980	126,150	104,015	106,145	+2.6	+18.8			
Per cent of total—per cent	62.2	64.7	66.5	67.4	68.7	56.9	57.7	+1.9	+19.1			
Ohio gray-iron foundries:												
Meltings—												
Actual—long tons	19,710	23,037	20,662	23,703	23,588	19,039	13,887	-0.5	+69.9	75,528	110,700	+46.6
Normal—long tons	18,917	22,288	18,985	20,949	20,568	17,579	13,434	-1.8	+53.1	74,478	101,707	+36.6
Ratio to normal—per cent of normal	104.2	103.3	108.8	113.1	114.6	108.0	103.3	+1.3	+10.9			
Stocks, end of month—per cent of normal	126	121	133	122	118	143	150	-3.3	-21.3			
Receipts—per cent of normal	105	107	107	102	112	115	106	+0.8	+5.7			
Malleable castings:*												
Production—short tons	73,364	73,679	83,733	83,838	79,805	63,380	67,903	-4.8	+17.5	327,784	394,419	+20.3
Operating activity—per ct. of capacity	77.7	77.2	87.8	87.6	81.6	66.0	70.7	-6.8	+15.4			
Shipments—short tons	77,424	70,914	81,425	81,062	78,925	65,001	65,823	-2.6	+19.9	318,491	359,750	+22.4
New orders—short tons	77,047	77,849	87,261	80,670	77,262	62,056	63,847	-4.2	+21.0	322,938	400,098	+23.9
Wholesale prices:												
Foundry, No. 2												
northern—dollars per long ton	19.26	19.26	19.51	19.76	20.26	19.01	18.96	+2.5	+6.9			
Basic (valley furnace)—dollars per long ton	17.50	17.50	17.90	18.38	17.00	16.30	17.30	+2.7	+12.8			
Composite pig iron—dollars per long ton	19.05	19.07	19.11	19.25	18.40	18.40	18.18	+0.1	+6.0			
Cast-iron Boilers and Radiators												
Round boilers:												
Production—thous. of lbs	11,248	12,488	12,248	10,184	11,212	12,452	14,232	+10.1	-21.2	64,693	57,380	-11.3
Shipments—thous. of lbs	9,605	7,676	7,208	8,603	9,682	9,280	12,166	+12.5	-20.4	53,490	42,774	-20.0
New orders—thous. of lbs	8,224	7,071	6,151	7,920	9,143	9,554	14,888	+15.4	-38.6	57,757	38,509	-33.3
Stocks, end of month—thous. of lbs	77,015	80,880	86,526	87,971	89,104	90,529	91,098	+1.3	-2.2			
Square boilers:												
Production—thous. of lbs	32,938	31,631	28,429	20,014	19,410	28,994	34,790	-3.0	-44.2	154,139	132,422	-14.1
Shipments—thous. of lbs	17,888	14,269	11,476	12,264	14,946	15,787	20,268	+21.9	-26.3	89,920	70,843	-21.2
New orders—thous. of lbs	15,866	13,111	11,844	13,616	15,034	15,582	29,021	+10.4	-48.2	99,305	69,471	-30.0
Stocks, end of month—thous. of lbs	136,986	153,759	170,212	177,755	181,998	164,514	181,972	+2.4	0.0			
Radiators:												
Production—thous. sq. ft. heating surface	14,512	14,354	13,182	10,653	10,641	13,651	16,513	-0.1	-35.6	75,558	63,342	-3.4
Shipments—thous. sq. ft. heating surface	9,407	7,316	6,116	6,443	7,900	7,541	9,730	+22.6	-18.8	45,283	37,182	-17.9
New orders—thous. sq. ft. heating surface	8,998	7,315	6,062	8,238	8,178	8,928	13,572	-0.7	-39.7	53,421	38,791	-27.4
Stocks, end of month—thous. sq. ft. heating surface	52,599	59,721	66,903	71,284	74,067	70,845	77,926	+3.9	-5.0			
Gas-fired boilers:												
Shipments—dollars	115,100	129,966	239,879	262,914	190,295	161,976	162,167	-27.6	+17.3	727,415	938,154	+29.0
Production—thous. B. t. u.	88,463	100,888	171,048	202,358	149,309	119,354	122,843	-26.1	+21.7	580,184	712,312	+22.8
Shipments—thous. B. t. u.	202,075	186,770	177,375	350,409	298,794	161,317	164,434	-14.7	+81.7	841,770	1,215,423	+44.4
Stocks, end of month—thous. B. t. u.	704,041	706,569	825,707	916,004	939,481	983,786	993,425	+2.6	-5.4			
Crude Steel												
Steel ingots, production:												
United States, total—thous. of long tons	4,490	4,326	5,058	4,938	5,273	4,305	4,207	+6.8	+25.3	21,053	24,085	+14.4
Ratio to capacity—per cent	85	92	99	97	100	91	83	+3.1	+20.5			
Canada—thous. of long tons	116	117	137	122	126	113	118	+3.3	+6.8	532	618	+16.2
U. S. Steel Corporation, unfilled orders, end mo.—thous. of long tons	4,109	4,144	4,411	4,428	4,304	3,872	3,417	-2.8	+26.0			
Steel castings:*												
Production—short tons	93,413	97,568	115,163	121,941	127,079	86,016	93,333	+4.2	+36.2	435,519	555,164	+27.5
Ratio to capacity—per cent	64	67	79	84	87	58	63	+3.6	+38.1			
Railroad specialties—short tons	35,689	40,282	49,562	53,458	58,636	32,619	36,599	+9.7	+60.2	174,099	237,627	+36.5
Miscellaneous—short tons	57,724	57,286	65,601	68,483	68,443	53,397	56,734	-0.1	+20.6	261,420	317,537	+21.5
New orders—												
Total—short tons	124,313	115,639	130,836	144,616	113,219	84,086	86,796	-21.7	+30.4	437,161	628,623	+43.8
Ratio to capacity—per cent	85	79	90	78	57	59	59	-21.2	+32.2			
Railroad specialties—short tons	64,809	58,903	60,743	75,625	44,919	32,810	34,995	-40.6	+28.4	181,169	304,999	+68.4
Miscellaneous—short tons	59,504	56,736	70,093	68,991	68,300	51,276	51,801	-1.0	+31.9	255,992	323,624	+26.4
Sheets, black, blue, galvanized, and full finished:												
Production—												
Total—net tons	391,404	326,468	364,202	375,256	393,430	327,900	349,367	+4.8	+12.6	1,690,509	1,850,760	+9.5
Ratio to capacity—per cent	109.9	109.7	115.2	115.2	115.8	97.8	95.6	+0.5	+21.1			
Stocks, end of month—												
Total—net tons	198,874	188,441	189,050	175,306	167,869	163,053	166,711	-4.2	+0.7			
Unsold—net tons	63,739	61,058	63,397	54,142	48,334	53,853	54,047	-10.7	-10.6			
Shipments—net tons	362,229	325,848	363,648	377,274	392,336	327,674	326,324	+4.0	+20.2	1,586,076	1,821,335	+14.8
New orders—net tons	438,390	389,496	464,297	398,206	279,783	284,070	250,316	-29.7	+11.8	1,502,958	1,970,172	+31.1
Unfilled orders, end of month—net tons	652,602	706,955	791,615	835,801	713,568	571,761	527,477	-14.6	+35.3			
Steel barrels:												
Production—barrels	558,492	567,398	742,165	771,584	836,532	667,827	696,281	+8.4	+20.1	2,995,813	3,476,171	+16.0
Ratio to capacity—per cent	48.4	47.6	61.0	64.8	72.0	57.5	59.8	+11.1	+20.4			
Shipments—barrels	548,581	563,532	743,407	775,481	834,699	661,949	694,843	+7.6	-20.1	2,989,834	3,465,700	+15.9
Stocks, end of month—barrels	56,376	60,242	59,000	55,103	56,936	57,147	58,585	+3.3	-2.8			
Unfilled orders, end of month—barrels	1,061,710	1,543,846	1,470,258	1,269,044	1,215,972	1,276,904	1,257,117	-4.2	-3.3			

\* Revised.

See table on p. 20 of the March 1929, issue for earlier data.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929	
<b>IRON AND STEEL—Continued</b>												
<b>Crude Steel—Continued</b>												
Track work, production.....short tons..	10,344	12,180	14,927	16,815	16,333	13,511	14,141	-2.9	+15.5	63,413	70,599	+11.3
Iron, steel, and heavy hardware sales.....rel. to Jan., 1921..	192	175	217	226	230	187	204	+1.8	+12.7			
Lock washers, shipments.....thous. of dolls..	290	317	353	370	373	270	282	+0.8	+32.3	1,300	1,703	+31.0
Wholesale prices:												
Steel billets, Bessemer.....dolls. per long ton..	33.00	33.25	34.00	34.80	36.00	33.00	33.00	+3.4	+9.1			
Iron and steel comp.....dolls. per long ton..	36.24	36.25	36.37	36.81	37.10	35.67	35.55	+0.8	+4.4			
Structural steel beams.....dolls. per 100 lbs..	1.90	1.90	1.90	1.90	1.95	1.90	1.88	+2.6	+3.7			
Composite finished steel.....dolls. per 100 lbs..	2.55	2.55	2.55	2.56	2.56	2.51	2.49	0.0	+2.8			
<b>Fabricated Steel Products</b>												
Structural steel, fabricated: ¶												
New orders (prorated).....short tons..	273,350	269,500	358,050	334,950	346,500	234,850	308,000	+3.4	+12.5	1,274,350	1,582,351	+24.2
Ratio to capacity.....per cent..	71	70	93	87	90	61	80	+3.4	+12.5			
Shipments (prorated).....short tons..	281,050	238,700	277,200	304,150	311,850	238,700	261,800	+2.5	+19.1	1,162,700	1,412,950	+21.5
Ratio to capacity.....per cent..	73	62	72	79	81	62	68	+2.5	+10.1			
Steel plate, fabricated, new orders:												
Total.....short tons..	32,705	58,684	57,869	40,675	47,108	50,347	42,487	+15.8	+10.9	225,281	237,041	+5.2
Ratio to capacity.....per cent..	41	74	72	51	59	63	53	+15.7	+11.3			
Oil storage tanks.....short tons..	11,055	16,093	22,045	9,984	10,087	22,095	14,852	+1.0	-32.1	98,806	69,264	-29.9
Steel bars, cold finished, shipments.....short tons..	50,276	52,934	62,179	60,486	58,768	35,971	39,431	-2.8	+49.0	200,723	284,643	+41.8
Steel boilers, new orders: †												
Quantity.....number..	1,075	1,042	1,466	1,706	1,749	1,567	1,836	+2.5	-4.7	7,280	7,038	-3.3
Area.....thous. of sq. ft..	1,252	1,196	1,558	1,769	2,143	1,460	1,661	+21.1	+29.0	6,869	7,918	+15.3
<b>Fabricated Steel Products</b>												
Steel furniture:												
Business group—												
Shipments.....thous. of dolls..	3,615	3,243	2,923	2,845	2,791	3,066	3,213	-1.9	-13.1	15,070	15,417	+2.3
New orders.....thous. of dolls..	3,893	3,060	2,884	2,880	2,915	3,086	3,086	-1.2	-7.8	15,823	15,563	-1.7
Unfilled orders, end mo. thous. of dolls..	2,581	2,408	2,344	2,379	2,435	2,360	2,233	+2.4	+9.0			
Shelving—												
Shipments.....thous. of dolls..	902	974	1,110	1,131	991	716	769	-12.4	+28.9	3,679	5,108	+38.8
New orders.....thous. of dolls..	1,100	920	1,146	1,095	1,127	741	733	+2.9	+53.8	3,826	5,388	+40.9
Unfilled orders, end mo. thous. of dolls..	819	766	802	765	902	794	753	+17.9	+19.8			
Iron and steel:												
Exports.....long tons..	274,296	259,711	270,925	277,580	261,516	215,184	267,890	-5.8	-2.4	1,096,690	1,344,028	+22.6
Imports.....long tons..	45,573	45,333	39,888	43,936	54,445	55,567	55,092	+23.9	-1.2	256,089	229,175	-10.5
<b>Enameling Ware</b>												
Baths:												
Shipments.....pieces..	69,415	66,221	82,897	93,894	94,452	105,718	125,522	+0.6	-24.8	475,386	406,879	-14.4
Stocks, end of month.....pieces..	188,733	207,324	215,000	208,512	197,472	159,892	135,793	-5.3	+45.4			
New orders.....pieces..	66,991	73,997	99,039	99,070	89,944	191,571	127,780	-9.2	-29.6	606,132	429,041	-29.2
Unfilled orders, end of month.....pieces..	35,073	42,556	54,746	58,015	49,870	130,801	136,238	-14.0	-63.4			
Lavatories:												
Shipments.....pieces..	81,701	80,420	94,321	104,199	104,469	124,027	141,458	+0.3	-26.1	554,469	465,110	-16.1
Stocks, end of month.....pieces..	230,527	255,596	278,137	273,284	257,100	212,325	183,173	-5.9	+40.4			
New orders.....pieces..	80,614	88,671	107,878	114,819	102,163	209,744	139,110	-11.0	-26.6	694,076	494,145	-28.8
Sinks:												
Shipments.....pieces..	93,321	79,162	97,429	109,748	108,146	125,479	143,791	-1.5	-24.8	573,326	487,806	-14.9
Stocks, end of month.....pieces..	276,037	304,051	318,069	312,209	312,999	263,699	239,678	+0.3	+30.6			
New orders.....pieces..	86,866	88,647	107,127	128,629	111,726	216,182	145,004	-13.1	-22.9	707,567	522,995	-26.1
Miscellaneous sanitary ware:												
Shipments.....pieces..	41,197	33,974	36,152	30,544	34,860	51,510	53,353	-14.0	-34.7	237,728	186,727	-21.5
Stocks, end of month.....pieces..	137,588	141,960	149,013	147,990	158,093	125,325	113,088	+6.8	+39.8			
New orders.....pieces..	42,036	37,136	40,050	45,588	32,234	73,455	55,012	-29.3	-41.4	276,833	197,044	-28.8
Small ware (all except baths):												
Unfilled orders, end of month.....pieces..	111,258	171,204	151,113	183,072	174,953	351,374	342,397	-4.4	-48.9			
Enameling sheet-metal ware:												
Shipments.....dozen pieces..	427,871	390,577	449,425	463,577	352,885	351,034	348,661	-23.9	+1.2	1,835,103	2,034,335	+13.6
<b>Machinery</b>												
Vacuum cleaners, shipments.....number..	71,335	86,507	123,650	124,882	116,192	89,587	89,661	-7.0	+89.6	430,514	522,566	+21.4
Water softeners, shipments.....units..	1,080	31,506	1,510	1,604	1,444	1,489	1,480	-10.0	-2.4	7,589	7,144	-5.9
Water systems, shipments.....units..	7,935	6,450	9,322	11,030	12,348	9,563	10,583	+11.9	+16.7	44,730	47,085	+5.3
Pumps:												
Domestic shipments—												
Pitcher, hand, etc.....units..	50,723	48,135	48,081	44,922	40,915	44,736	41,701	-8.9	-1.9	247,216	232,776	-5.8
Power, horizontal type.....units..	2,265	2,085	1,988	2,841	2,528	2,302	2,311	-11.0	+9.4	10,384	11,707	+12.7
Steam, power, and centrifugal—												
New orders.....thous. of dolls..	1,695	1,432	1,878	2,175	1,772	1,504	1,428	-18.5	+24.1	6,833	8,952	+31.0
Shipments.....thous. of dolls..	1,481	1,578	1,608	1,740	1,886	1,376	1,518	+8.4	+24.2	6,561	8,293	+26.4
Unfilled orders, end mo. thous. of dolls..	3,800	3,658	3,912	4,343	4,058	3,383	3,239	-6.6	+25.3			
Agricultural machinery and equipment:												
Shipments—												
Total.....rel. to 1923-25..	156,0	210.2	255.0	261.7	234.0	187.2	186.6	-10.6	+25.4			
Domestic.....rel. to 1923-25..	136,2	172.8	246.7	264.3	229.5	184.4	186.2	-13.2	+23.3			
Foreign.....rel. to 1923-25..	259,5	405.0	298.3	247.9	255.2	201.8	188.3	+2.9	+35.5			
Production.....rel. to 1923-25..	168,3	177.3	185.1	187.2	181.6	148.3	146.0	-3.0	+24.4			
Foundry equipment:												
New orders.....rel. to 1922-24..	180.5	197.0	209.4	172.6	177.7	107.7	335.6	+3.0	-47.1			
Shipments.....rel. to 1922-24..	177.3	214.8	197.5	220.3	217.0	112.5	104.7	-1.5	+107.3			
Unfilled orders, end of mo. rel. to 1922-24..	336.1	321.2	414.4	363.4	323.8	126.1	344.5	-10.9	-6.0			
Stokers, mechanical, sales:												
Quantity.....number..	97	80	117	141	174	88	130	+23.4	+33.8	501	609	+21.6
Power.....horsepower..	42,392	31,554	42,432	48,749	60,772	31,043	38,706	+24.7	+57.0	183,389	225,899	+23.2

\* Revised.

\* See table on p. 19 of the March, 1929, issue for earlier data.

† See table on page 18 of the March, 1929, issue for earlier data.

‡ See table on p. 20 of the March, 1929, issue for earlier data.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929	
<b>IRON AND STEEL—Continued</b>												
<b>Machinery—Continued</b>												
Machine tools:												
New orders—rel. to 1922-24—	292	336	334	320	334	222	205	+4.4	+62.9			
Shipments—rel. to 1922-24—	255	303	329	311	301	219	204	-3.2	+47.5			
Unfilled orders, end of mo.—rel. to 1922-24—	676	702	687	718	721	371	345	+0.4	+109.0			
Electric hoists:												
New orders—												
Quantity—number—	533	750	595	508	541	394	462	+6.5	+17.1	2,158	2,927	+35.6
Value—dollars—	253,194	346,810	285,465	246,673	268,043	198,004	204,550	+8.7	+31.0	996,100	1,400,185	+40.6
Shipments—dollars—	213,663	201,404	247,348	232,483	262,641	188,967	190,174	+13.0	+38.1	893,983	1,157,539	+29.5
Electric overhead cranes:												
Shipments—thous. of dollars—	852	586	773	748	1,122	659	547	+50.0	+105.1	2,905	4,081	+40.5
New orders—thous. of dollars—	1,383	1,173	1,919	1,194	1,457	410	708	+22.0	+105.8	2,699	7,126	+164.0
Unfilled orders, end of mo.—thous. of dollars—	2,547	3,285	4,300	4,587	4,786	1,520	1,671	+4.3	+186.4			
Woodworking machinery:												
New orders—thous. of dollars—	1,949	1,893	1,850	1,718	1,620	1,329	1,985	-5.7	-18.4	7,021	9,030	+28.6
Shipments—thous. of dollars—	1,420	1,490	1,560	2,130	1,786	1,150	1,490	-16.2	+19.9	6,263	8,386	+33.9
Shipments—number of machines—	998	1,003	1,179	1,420	1,231	931	1,082	-13.3	+13.8	4,887	5,831	+19.3
Cancellations—thous. of dollars—	50	57	29	30	40	42	324	+33.3	+66.7	119	206	+73.1
Unfilled orders, end of mo.—thous. of dollars—	2,367	2,579	2,839	2,582	2,406	1,577	2,058	-6.8	+16.9			
Electric industrial trucks and tractors:												
Shipments, domestic—												
Tractors—number of vehicles—	4	10	14	12	28	9	8	+133.3	+250.0	55	68	+23.6
All other types—number of vehicles—	129	121	187	169	174	121	93	+3.0	+57.1	493	780	+58.2
Exports—number of vehicles—	19	3	10	13	9	6	13	-30.8	-30.8	62	54	-12.9
Fire-extinguishing equipment, shipments:												
Motor vehicles—number—	90	76	107	109	113	101	107	+3.7	+5.6	480	495	+3.1
Hand types—number—	45,608	47,376	55,303	*58,775	54,345	46,643	55,033	-7.5	-1.3	237,936	261,407	+9.9
Patents issued:												
Total, all classes—number—	3,835	3,127	3,357	4,267	3,861	3,321	4,248	-9.5	-9.1	17,438	18,447	+5.8
Agricultural implements—number—	47	41	42	62	62	45	56	0.0	+10.7	227	254	+11.9
Internal-combustion engines—number—	51	48	50	54	50	43	63	-7.4	-20.6	270	253	-6.3
<b>NONFERROUS METALS</b>												
<b>Copper</b>												
Production:												
Mines—short tons—	86,325	84,735	93,698	*94,902	93,026	69,721	73,729	-2.0	+26.2	349,669	452,686	+29.5
Smelter—short tons—	101,151	95,234	107,253	110,313	108,961	82,087	85,745	-1.2	+27.1	406,266	522,912	+28.7
Refined (N. and S. America)—short tons—	154,472	141,385	163,561	161,285	161,784	122,824	129,236	+0.3	+25.2	628,603	782,487	+24.5
World production, blister—short tons—	178,793	167,090	192,792	*196,820	193,089	146,427	*156,414	-1.9	+23.4	741,775	928,574	+25.2
Domestic shipments, refined—short tons—	100,135	98,771	105,860	99,051	93,743	72,234	79,103	-5.4	+18.5	362,592	497,560	+37.2
Exports—short tons—	52,523	49,896	43,745	45,842	36,949	45,550	56,667	-19.4	-34.8	245,614	228,955	-6.8
Stocks (North and South America), end mo.: Refined—short tons—	62,749	55,213	52,968	57,494	70,412	72,803	66,288	+22.5	+6.2			
Blister—short tons—	245,210	241,085	242,341	*253,509	261,243	220,206	225,462	+3.1	+15.9			
Wholesale price, electrolytic—dollars per lb.—	.1660	.1773	.2126	.1950	.1778	.1399	.1420	-8.8	+25.2			
<b>Wire Cloth</b>												
Production—thous. of sq. ft.—	461	411	473	500	536	413	431	+5.3	+24.4	2,312	2,390	+3.4
Shipments—thous. of sq. ft.—	412	305	439	441	518	405	407	+17.5	+27.3	2,142	2,115	-1.3
Stocks, end of month—thous. of sq. ft.—	1,064	1,077	1,085	1,137	1,120	1,147	1,134	-1.5	-1.2			
New orders—thous. of sq. ft.—	376	410	1,172	247	262	399	371	+6.1	+29.4	1,983	2,467	+24.4
Unfilled orders, end of mo.—thous. of sq. ft.—	302	325	789	497	495	283	258	-0.4	+91.9			
Make and hold orders, end of month—thous. of sq. ft.—	486	494	743	689	618	438	402	-10.3	+53.7			
<b>Tin</b>												
Deliveries (consumption)—long tons—	8,795	6,750	8,175	8,435	8,480	7,010	5,335	+0.5	+59.0	31,510	40,635	+29.0
Stocks, end of month:												
World visible supply—long tons—	24,237	26,402	26,632	26,353	24,765	15,001	17,064	-6.0	+45.1			
United States—long tons—	2,611	3,307	2,550	3,603	3,464	1,973	3,708	-3.9	-6.6			
Imports—long tons—	9,498	7,325	7,435	8,838	8,902	9,404	7,045	+0.7	+26.4	36,396	41,998	+15.4
Wholesale price, Straits, N. Y.—dollars per lb.—	.4916	.4937	.4885	.4597	.4392	.5236	.5164	-4.5	-14.8			
<b>Zinc</b>												
Retorts in operation, end of month—number—	63,314	67,631	67,519	73,319	73,231	72,522	70,260	-0.1	+4.2			
Per cent of total—per cent—	54.5	56.4	56.3	61.2	61.1	59.0	57.2	-0.2	+6.8			
Production—short tons—	49,709	48,154	55,471	54,653	56,958	53,493	53,422	+4.2	+6.6	265,252	264,945	-0.1
Stocks, end of month—short tons—	45,418	40,620	37,962	34,588	33,826	44,759	45,225	-2.2	-25.2			
Ore, Joplin district: Shipments—short tons—	48,777	50,848	72,206	54,821	37,961	51,579	50,630	-30.8	-25.0	235,010	264,613	+12.6
Stocks, mines, end of month—short tons—	27,309	24,535	20,969	26,448	40,957	49,097	41,747	+54.9	-1.9			
Price, slab, prime western—dollars per lb.—	.0635	.0635	.0646	.0666	.0662	.0576	.0603	-0.6	+9.8			
<b>Lead</b>												
Production—short tons—	58,607	48,254	59,298	*62,476	64,070	50,115	51,481	+2.6	+24.5	269,024	292,705	+8.8
Ore shipments: Joplin district—short tons—	6,097	8,929	13,329	11,615	8,424	6,438	6,352	-27.5	+32.6	33,342	48,394	+45.1
Utah—short tons—	71,412	71,282	101,763	55,935	96,688	58,401	61,790	+27.3	+56.5	264,071	417,080	+20.8
Receipts in U. S. ore—short tons—	53,881	50,954	57,197	57,449	58,140	47,939	53,991	+1.2	+7.7	345,364	277,621	+5.1
Stocks, U. S. and Mexico, end mo.—short tons—	156,182	160,597	158,149	*156,888	162,155	161,207	159,375	+3.4	+1.7			
Price, pig, desilverized, N. Y.—dollars per lb.—	.0665	.0685	.0745	.0719	.0700	.0610	.0612	-2.6	+14.4			
<b>Other Metal Products</b>												
Babbitt metal, consumption:												
Total apparent—thous. of lbs.—	6,093	5,720	6,466	6,046	5,472	4,843	4,607	-9.5	+18.8	23,777	29,797	+25.2
Direct by producers—thous. of lbs.—	1,217	1,025	1,346	1,189	1,240	1,118	1,028	+20.6	5,092	6,017	+18.3	
Sale to consumers—thous. of lbs.—	4,877	4,696	5,120	4,837	4,232	3,725	3,578	-12.9	+18.3	18,684	23,782	+27.3

\*Revised

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929	
<b>NONFERROUS METALS—Continued</b>												
<b>Other Metal Products—Continued</b>												
Band instruments, shipments:												
Total	322,284	340,522	396,445	313,462	336,794	367,687	350,366	+7.4	-3.9	1,858,789	1,709,507	-8.0
Cup mouthpieces	135,704	135,619	167,302	143,123	156,939	143,424	149,901	+9.7	+4.7	728,146	738,687	+1.4
Saxophones	145,252	170,625	192,739	138,110	151,008	202,208	174,561	+9.3	-13.5	1,005,233	797,734	-20.6
Wood wind	41,328	34,278	36,424	32,229	28,847	22,055	25,904	-10.5	+11.4	125,410	173,106	+38.0
Pails and tubs, galvanized:												
Production	151,106	151,019	211,252	165,155	176,622	208,544	177,170	+6.9	-0.3	862,664	855,154	-0.9
Shipments	165,745	170,813	211,516	171,722	150,501	201,119	155,561	-12.4	-3.3	857,581	870,297	+1.5
Other galvanized ware:												
Production	40,649	60,471	50,055	55,778	43,370	31,545	39,206	-22.2	+10.6	185,942	250,323	+34.6
Shipments	36,896	43,329	49,549	55,632	38,597	36,452	35,143	-30.6	+9.8	181,574	224,003	+23.4
<b>Electrical Equipment</b>												
Electrical porcelain, shipments:												
Standard	141,065	102,547	105,716	109,558	110,326	57,919	70,674	+0.7	+56.1	321,150	569,212	+77.2
Special	128,299	144,025	185,908	148,280	159,785	116,516	133,524	+7.8	+19.7	607,579	766,297	+26.1
High tension	485,502	652,211	735,865	632,025	679,579	521,682	540,212	+7.5	+25.8	2,353,683	3,185,182	+35.3
Glazed nail knobs	4,383	3,731	3,683	3,821	4,160	2,207	2,172	+8.9	+91.5	11,480	19,778	+72.3
Unglazed nail knobs	2,906	2,103	2,576	2,458	3,202	953	1,557	+30.3	+105.7	6,052	13,245	+118.9
Tubes	1,911	1,468	1,380	1,345	2,025	1,155	873	+50.6	+132.0	5,217	8,129	+55.8
Laminated phenolic products, shipments	1,247,653	1,372,745	1,299,437	1,409,532	1,477,523	872,336	857,478	+4.8	+72.3	3,968,740	6,806,890	+71.5
Outlet boxes and covers, shipments	3,273,963	2,168,723	2,688,191	3,005,179	2,931,583	2,518,077	2,763,094	+2.4	+6.1	13,301,802	14,067,639	+5.8
Vulcanized fiber:												
Shipments, total	767	759	828	812	827	621	662	+1.8	+24.9	3,293	3,993	+21.3
Consumption	3,531	2,974	3,006	3,144	3,693	2,700	3,092	+17.5	+19.4	13,554	16,348	+20.6
Industrial reflectors, sales	149,046	137,291	134,751	126,948	153,716	107,801	109,804	+21.1	+40.0	610,487	701,752	+14.9
Power cables, shipments	1,995	1,711	2,320	1,954	1,986	1,860	2,130	+1.6	-6.8	9,081	9,966	+9.7
Flexible cords:												
Shipments	49,909	45,973	47,932	49,221	37,853	41,357	-----	-----	-----	2,152,604	2,193,035	+26.5
Stocks, end of month	41,757	45,238	45,109	50,286	44,751	45,145	-----	-----	-----	-----	-----	-----
Welding sets, new orders:												
Single operator	281	328	443	371	387	239	238	+4.3	+62.6	1,062	1,810	+70.4
Multiple operator	11	4	7	7	8	28	11	+14.3	-27.3	98	37	-62.2
Nonmetallic conduits, shipments	7,475	5,048	6,397	6,829	8,242	7,860	8,939	+20.7	-7.8	39,909	33,991	-14.8
Electric furnaces, new orders	10,769	12,092	7,218	14,542	6,562	5,131	5,668	-54.9	+15.8	23,595	51,183	+116.9
Manufactured mica:												
Shipments	285	289	335	292	303	246	279	+3.8	+8.6	-----	1,504	-----
Unfilled orders, end of mo.	305	338	308	332	302	335	196	-9.0	+54.1	-----	-----	-----
Radio equipment, dealers' stocks, end quarter:												
Receiving sets	468,214	574,817	-----	-----	-----	680,751	-----	+9.7	-7.3	-----	-----	-----
Loud speakers	57,504	57,651	-----	-----	-----	671,078	-----	+31.6	+6.4	-----	-----	-----
Batteries	196,123	203,193	-----	-----	-----	309,682	-----	+3.6	-34.4	-----	-----	-----
Socket-power units	13,490	7,282	-----	-----	-----	639,912	-----	-46.0	-81.8	-----	-----	-----
Tubes, receiving	654,748	576,008	-----	-----	-----	643,539	-----	+15.5	+17.5	-----	-----	-----
Tubes, rectifying	41,561	570,956	-----	-----	-----	60,646	-----	+70.7	+74.6	-----	-----	-----
Delinquent accounts, electrical trade:												
Amount	131,447	162,875	209,002	199,949	189,067	172,514	193,432	-5.4	-2.3	-----	-----	-----
Delinquent firms	1,056	1,137	1,363	1,279	1,285	1,468	1,470	+0.5	-12.6	-----	-----	-----
<b>AUTOMOBILES</b>												
Production:												
United States—												
Total	3,401,036	3,466,352	3,585,093	3,621,331	603,969	410,104	425,783	-2.8	+41.8	1,804,725	2,677,781	+48.4
Passenger cars	349,446	407,816	515,345	538,911	517,373	364,877	375,863	-4.0	+37.6	1,609,358	2,328,891	+44.7
Trucks	3,51,590	3,58,536	3,69,748	3,82,420	86,596	45,227	49,920	+5.1	+73.5	195,367	348,890	+73.6
Canada—												
Total	21,501	31,287	40,621	41,901	31,559	24,211	33,942	-24.7	-7.0	96,589	166,869	+72.8
Passenger cars	17,164	25,584	32,833	34,392	25,129	20,517	29,764	-26.9	-15.6	82,528	135,102	+63.7
Trucks	4,337	5,703	7,788	7,509	6,430	3,694	4,178	-14.4	+53.9	14,061	31,767	+125.9
Exports (assembled):												
From United States—												
Total	37,665	55,058	76,382	64,437	39,913	42,269	47,912	-38.1	-16.7	206,167	273,455	+32.6
Passenger cars	24,631	35,253	51,504	47,732	28,417	33,644	38,851	-40.5	-26.9	158,266	187,537	+18.5
Trucks	13,034	19,805	24,878	16,705	11,496	8,625	9,061	-31.2	+26.9	47,901	85,918	+79.4
From Canada—												
Total	8,971	10,849	15,528	6,586	9,581	3,996	6,157	+45.2	+55.3	21,323	51,495	+141.5
Passenger cars	5,640	7,694	10,194	4,164	5,727	2,957	4,511	+37.5	+27.0	14,620	33,419	+128.6
Trucks	3,331	3,155	5,334	2,422	3,834	1,039	1,646	+58.3	+132.9	6,703	18,076	+169.7
Shipments (General Motors Co.):												
To dealers	127,580	175,148	220,391	227,718	220,277	197,597	207,325	+3.3	+6.2	897,156	971,114	+8.2
To users	104,488	188,570	205,118	223,303	214,870	209,367	224,094	-3.8	-4.1	856,474	886,349	+3.5
Accessories and parts:												
Shipments												
Original shipment	212	243	275	287	278	213	215	-3.1	+20.3	-----	-----	-----
Replacement parts	141	136	148	174	169	151	183	-2.9	-7.7	-----	-----	-----
Accessories	77	69	85	91	91	107	113	0.0	-19.5	-----	-----	-----
Service parts	173	192	224	227	200	164	157	-11.9	+27.4	-----	-----	-----
Rim production	1,835	2,265	2,613	2,730	2,574	2,317	2,186	-5.7	+17.7	10,541	12,017	+14.0
New passenger-car registrations:												
Total	219,694	235,266	378,069	481,750	453,981	332,056	351,459	-5.8	+29.2	1,239,337	1,768,760	+42.7
Highest price group	7,096	6,187	11,392	16,276	14,977	14,705	14,643	-8.0	+2.3	54,971	55,928	+1.7
Second highest group	35,473	34,437	58,623	74,944	67,815	370,288	372,243	-9.5	-6.1	261,580	271,292	+3.7
Third highest group	48,714	50,192	84,932	112,183	103,889	304,217	307,413	-7.4	-3.3	359,926	399,880	+2.6
Lowest price group	127,800	144,006	222,646	277,854	266,891	314,266	355,527	-3.9	+71.6	525,311	1,039,197	+97.8
Miscellaneous	611	444	476	493	439	1,580	1,633	-11.0	-73.1	6,549	2,463	-62.4

<sup>2</sup> Cumulative through Apr. 30.<sup>3</sup> Revised.<sup>4</sup> Quarter ending Dec. 31, 1928.<sup>5</sup> Quarter ending Mar. 31, 1929.<sup>6</sup> Quarter ending Mar. 31, 1928.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929	
<b>FUELS</b>												
<b>Coal and Coke</b>												
Bituminous:												
Production:												
United States—thous. of short tons—	51,456	47,271	39,347	36,888	40,172	32,188	36,624	+8.9	+9.7	198,326	215,134	+8.5
Canada—thous. of short tons—	1,537	1,611	1,370	1,393	851	1,402	1,446	+2.6	+2.6	2,5,654	2,5,911	+4.5
Exports—thous. of long tons—	917	999	878	851	1,402	711	1,144	+64.7	+22.6	4,257	5,047	+18.6
Consumption—												
By vessels—thous. of long tons—	284	267	283	361	338	306	364	-6.4	-7.1	1,561	1,533	-1.8
By electric-power plants—thous. of short tons—	4,146	3,713	3,576	3,415	3,372	3,115	3,117	-1.3	+8.2	16,854	18,222	+8.1
By railroads—thous. of short tons—	8,631	8,241	8,180	7,393	—	3,442	7,400	—	—	2,31,915	2,32,445	+1.7
By coke plants—												
U. S.—thous. of short tons—	7,028	6,586	7,486	7,156	7,658	6,235	6,484	+7.0	+18.1	31,399	35,914	+14.4
Canada—thous. of short tons—	300	279	315	306	—	243	266	—	—	2,984	2,1,200	+22.0
Prices—												
Mine aver. (spot) dollars per short ton—	1.85	1.87	1.79	1.69	1.68	1.74	1.73	-0.6	-2.9	—	—	—
Wholesale, comp. dollars per short ton—	4,035	4,029	4,000	3,902	3,908	4,044	3,986	+0.1	-2.0	—	—	—
Retail, composite dollars per short ton—	9.09	9.07	9.06	8.76	8.52	9.20	8.18	-2.7	+4.2	—	—	—
Anthracite:												
Production—thous. of short tons—	7,337	6,670	5,044	6,441	6,308	6,909	8,124	-2.1	-22.4	31,802	31,800	0.0
Exports—thous. of long tons—	298	274	151	160	246	182	266	+53.8	-7.5	1,094	1,129	+3.2
Prices—												
Wholesale, comp. dollars per long ton—	13.107	13.107	13.077	12.654	12.539	12.761	12.752	-0.9	-1.7	—	—	—
Retail, composite dollars per short ton—	15.06	15.07	15.07	14.71	14.40	14.64	14.46	-2.1	-0.4	—	—	—
Coke:												
Production, U. S.—												
Beehive—thous. of short tons—	479	440	534	468	597	377	376	+27.6	+58.8	1,968	2,518	+27.9
By-product—thous. of short tons—	4,370	4,090	4,613	4,457	4,664	3,925	4,100	+4.6	+13.8	19,710	22,184	+12.6
Production, Canada—thous. of short tons—	221	202	228	220	—	174	193	—	—	2,707	2,871	+23.2
Exports—thous. of long tons—	104	76	87	60	83	62	89	+38.3	-6.7	366	410	+12.0
Price, furnace, Connellsburg—dollars per short ton—	2.75	2.96	2.99	2.81	2.80	2.74	2.70	-0.4	+3.7	—	—	—
<b>Petroleum</b>												
Crude petroleum:												
Production—thous. of bbls—	81,979	75,693	82,515	80,110	84,415	72,127	75,218	+5.4	+12.2	363,038	404,712	+11.5
Stocks at end of month—												
Total (comparable)—thous. of bbls—	372,913	376,939	379,659	380,706	379,542	371,898	371,969	-0.3	+2.0	—	—	—
Tank farms and pipe lines—thous. of bbls—	330,395	332,349	333,402	332,976	330,984	328,296	328,556	-0.6	+0.7	—	—	—
Refineries—thous. of bbls—	42,518	44,590	46,257	47,730	48,558	343,602	343,413	+1.7	+11.9	—	—	—
California—												
Light—thous. of bbls—	19,196	21,810	24,067	26,500	29,038	18,752	19,170	+9.6	+51.5	—	—	—
Heavy—thous. of bbls—	98,682	99,284	100,504	100,332	101,681	94,301	93,941	+1.3	+8.2	—	—	—
Imports—thous. of bbls—	8,075	7,016	6,790	7,828	7,552	5,661	6,766	+3.5	+11.6	31,453	37,261	+18.6
Consumption (run to stills)—thous. of bbls—	78,825	72,031	80,708	80,450	84,420	372,988	377,311	+4.9	+9.2	358,419	366,443	+10.6
Refinery operation—per ct. of capacity—	76	76	78	80	81	79	80	+1.3	+1.3	—	—	—
Price, Kansas-Oklahoma—dollars per bbl—	1,185	1,110	1,110	1,110	1,158	1,190	1,190	+4.3	-2.7	—	—	—
Oil wells completed—number—	1,205	1,086	1,074	1,207	1,191	961	961	-1.3	+23.9	4,471	5,763	+28.9
Mexico—												
Production—thous. of bbls—	3,515	3,130	3,526	3,504	—	4,596	4,347	—	—	2,18,569	2,13,675	-26.4
Exports—thous. of bbls—	1,895	1,208	2,169	2,150	—	3,940	3,065	—	—	2,13,306	2,7,422	-44.2
Venezuela—												
Production—thous. of bbls—	11,521	10,326	10,694	11,351	12,038	7,594	8,784	+6.1	+37.0	37,772	55,930	+48.1
Exports—thous. of bbls—	9,982	9,032	9,438	9,661	10,275	7,582	8,511	+6.4	+20.7	37,077	48,388	+30.5
Gasoline:												
Production—												
Raw (at refineries)—thous. of bbls—	34,335	31,264	34,467	34,636	36,270	30,317	30,825	+4.7	+17.7	144,255	170,972	+18.5
Natural gas (at plants)—thous. of bbls—	3,983	3,736	4,324	4,264	4,343	3,467	3,471	+4.3	+25.1	17,141	29,650	+20.5
Exports—thous. of bbls—	4,506	3,797	4,594	4,443	5,207	4,044	6,535	+17.2	-20.3	21,374	22,547	+5.5
Consumption—												
Stocks, end of month—	22,602	22,776	37,495	32,019	34,117	32,567	32,346	+6.6	+20.4	120,387	139,009	+15.5
Raw (at refineries)—thous. of bbls—	40,648	45,704	38,205	47,015	44,648	41,189	38,224	-5.0	+16.8	—	—	—
Natural gas (at plants)—thous. of bbls—	744	821	995	1,166	1,391	831	810	+19.3	+71.7	—	—	—
Retail distribution, 41 States—thous. of gals—	684,445	629,586	769,490	842,858	—	759,507	863,336	—	—	2,926,379	2,721,733	-7.0
Prices—												
Wholesale, New York—dollars per gal—	.178	.170	.170	.170	.190	.170	.170	+11.8	+11.8	—	—	—
Retail, wagon, 50 cities—dollars per gal—	.151	.147	.149	.150	.157	.152	.152	+4.7	+3.3	—	—	—
Kerosene:												
Production—thous. of bbls—	4,700	4,435	4,515	4,434	4,902	5,033	5,243	+10.6	-6.5	24,798	22,986	-7.3
Exports—thous. of bbls—	1,896	1,582	1,872	1,620	1,454	1,903	2,035	-10.3	-28.6	9,685	8,454	-12.7
Consumption—thous. of bbls—	2,956	3,519	2,976	3,156	3,200	3,168	3,383	+1.4	-5.4	15,338	15,807	+3.1
Stocks at refineries, end mo.—thous. of bbls—	8,865	8,210	7,855	7,497	7,742	7,733	7,537	+3.3	+2.7	—	—	—
Retail distribution, 13 States—thous. of bbls—	30,673	30,023	30,844	33,404	35,636	34,412	33,046	—	—	—	—	—
Price, 150° water white—dollars per gal—	.077	.075	.077	.084	.080	.069	.074	-4.8	+8.1	—	—	—
Gas and fuel oils:												
Production—thous. of bbls—	36,838	34,331	37,456	37,533	38,570	33,870	35,620	+2.8	+8.3	168,837	184,728	+9.4
Consumption—												
By vessels—thous. of bbls—	3,915	4,252	4,213	4,179	4,704	4,275	5,013	+12.6	-6.2	21,058	21,263	+1.0
By electric power plants—thous. of bbls—	939	860	743	651	607	532	483	-6.8	+25.7	2,754	3,800	+38.0
By railroads—thous. of bbls—	4,499	4,235	4,484	4,266	4,085	4,067	4,067	—	—	2,16,072	2,17,484	+8.8
Stocks at refineries, end mo.—thous. of bbls—	32,522	30,118	30,195	33,404	35,636	32,699	32,887	+6.7	+8.4	—	—	—
Price, Okla. 24-26, refineries—dollars per bbl—	.625	.638	.675	.665	.631	.840	.763	-5.1	-17.3	—	—	—
Lubricating oil:												
Production—thous. of bbls—	2,945	2,503	2,943	2,899	3,005	3,027	3,091	+3.7	-3.8	14,378	14,295	-0.6
Consumption—												
By vessels—thous. of bbls—	1,521	1,751	1,581	2,442	2,322	2,334	1,989	+4.9	+16.7	9,448	9,617	+1.8
Stocks at refineries, end mo.—thous. of bbls—	8,649	8,534	8,853	8,527	8,370	8,018	8,060	-1.8	+3.8	—	—	—
Price, cylinder oil—dollars per gal—	.299	.289	.293	.363	.405	.221	.228	+11.6	+77.6	—	—	—
Asphalt:												
Production—thous. of short tons—	188	208	228	283	315	274	331	+11.3	-4.8	1,279	1,222	-4.5
Stocks, end of month—thous. of short tons—	229	236	250	249	236	274	262	-5.2	-9.9	—	—	—
Imports—thous. of short tons—	12	8	2	6	4	6	13	-33.3	-69.2	38	32	-15.8

\* Cumulative through Apr. 30.

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929	
<b>FUELS—Continued</b>												
<b>Petroleum—Continued</b>												
Coke:												
Production.....thous. of short tons..	138	127	129	131	142	100	118	+8.4	+20.3	537	667	+24.2
Stocks, end of month.....thous. of short tons..	404	388	402	445	471	342	348	+5.8	+35.3	-----	-----	-----
Wax:												
Production.....thous. of lbs..	58,885	5,027	56,372	57,976	53,783	57,548	51,072	-7.2	+5.3	263,326	277,043	+5.2
Stocks, end of month.....thous. of lbs..	123,521	140,053	158,404	170,687	179,139	109,709	103,639	+5.0	+72.8	-----	-----	-----
<b>RUBBER</b>												
<b>Crude Rubber</b>												
World shipments, plantation.....long tons..	79,177	74,311	72,072	72,911	36,114	43,889	-----	-----	-----	179,714	298,471	+66.1
Imports (including latex).....long tons..	57,586	64,286	50,610	55,730	51,186	37,958	31,014	-8.2	+65.0	182,160	279,398	+53.4
Consumption (quarterly):												
Total.....long tons..	108,189	118,280	-----	-----	-----	95,273	-----	+9.3	+24.1	-----	-----	-----
For tires.....long tons..	92,972	102,091	-----	-----	-----	80,871	-----	+9.8	+28.2	-----	-----	-----
Consumption by tire mfrs.....thous. of lbs..	54,161	57,559	61,335	65,673	43,701	51,061	-----	-----	-----	182,775	238,728	+30.6
Stocks, end of quarter.....												
Total.....long tons..	63,871	95,110	-----	-----	-----	112,103	-----	+48.9	-15.2	-----	-----	-----
Manufacturers.....long tons..	49,302	65,615	-----	-----	-----	91,700	-----	+33.1	-28.4	-----	-----	-----
Dealers.....long tons..	14,560	29,495	-----	-----	-----	20,403	-----	+102.5	+44.6	-----	-----	-----
Afloat.....long tons..	70,672	51,336	-----	-----	-----	35,572	-----	-27.4	+44.3	-----	-----	-----
World stocks, end of month:												
World total.....long tons..	228,343	231,035	244,440	252,776	266,479	245,185	227,536	+6.4	+17.1	-----	-----	-----
United States.....long tons..	76,342	90,058	100,537	107,659	97,192	113,083	105,357	-9.7	-7.8	-----	-----	-----
Europe.....long tons..	30,355	30,878	33,584	36,889	37,174	48,243	-----	-----	-----	-----	-----	-----
Producing countries.....long tons..	33,038	36,254	32,955	30,731	35,242	19,223	20,116	+14.7	+75.2	-----	-----	-----
Afloat.....long tons..	91,300	87,250	85,700	91,200	55,700	53,820	-----	-----	-----	-----	-----	-----
Wholesale price, Para, N. Y.....dollars. per lb..	.201	.239	.244	.211	.214	.188	.188	+1.4	+13.8	-----	-----	-----
<b>Tires and Tubes</b>												
Pneumatic tires:												
Production.....thousands..	5,042	5,184	5,639	5,913	4,645	5,082	-----	-----	-----	23,665	-----	-----
Stocks, end of month.....thousands..	10,284	11,621	12,264	12,697	9,561	9,794	-----	-----	-----	-----	-----	-----
Shipments—												
Domestic.....thousands..	4,721	3,750	4,804	5,242	4,229	4,707	-----	-----	-----	20,650	-----	-----
Export.....thousands..	248	212	227	228	143	146	-----	-----	-----	728	-----	-----
Inner tubes:												
Production.....thousands..	4,888	5,077	5,600	5,726	4,999	5,382	-----	-----	-----	25,070	-----	-----
Stocks, end of month.....thousands..	11,539	12,749	13,313	13,601	12,500	13,298	-----	-----	-----	-----	-----	-----
Shipments—												
Domestic.....thousands..	5,271	3,815	4,889	5,220	4,196	4,631	-----	-----	-----	21,498	-----	455
Export.....thousands..	160	143	164	153	86	100	-----	-----	-----	-----	-----	-----
Solid and cushion:												
Production.....thousands..	32	30	38	39	44	47	-----	-----	-----	209	-----	-----
Stocks, end of month.....thousands..	151	147	143	139	157	156	-----	-----	-----	-----	-----	-----
Shipments—												
Domestic.....thousands..	31	30	38	40	40	44	-----	-----	-----	192	-----	-----
Exports.....thousands..	2	2	2	3	3	4	-----	-----	-----	18	-----	-----
<b>Other Rubber Products</b>												
Reclaimed rubber (quarterly):												
Production.....long tons..	452,825	53,552	-----	-----	51,112	-----	+1.4	+4.8	-----	-----	-----	-----
Stocks, end of quarter.....long tons..	421,724	17,727	-----	-----	16,317	-----	-18.4	+8.6	-----	-----	-----	-----
Scrap rubber (quarterly):												
Stocks at reclaimers.....long tons..	468,869	59,135	-----	-----	61,299	-----	-14.1	-3.5	-----	-----	-----	-----
Consumption by reclaimers.....long tons..	466,567	71,001	-----	-----	64,069	-----	+6.7	+10.8	-----	-----	-----	-----
Rubber-proofed fabrics:												
Production—												
Total.....thous. of yds..	2,828	3,095	4,123	-----	2,416	3,034	-----	-----	-----	2,997	3,400	+13.4
Auto fabrics.....thous. of yds..	686	878	917	919	835	1,015	-----	-----	-----	-----	-----	-----
Raincoat fabrics.....thous. of yds..	989	1,118	1,862	-----	874	1,110	-----	-----	-----	-----	-----	-----
All other.....thous. of yds..	1,153	1,099	1,344	-----	707	909	-----	-----	-----	-----	-----	-----
Rubber heels:												
Production.....thous. of pairs..	19,975	18,979	17,226	17,256	18,575	21,597	-----	-----	-----	78,021	73,436	-5.9
Shipments—												
To shoe manufacturers.....thous. of pairs..	12,867	10,196	8,798	11,028	8,639	8,897	-----	-----	-----	31,310	42,889	+37.0
To repair trade.....thous. of pairs..	6,809	6,737	7,925	6,506	6,173	7,559	-----	-----	-----	28,648	27,977	-2.3
For export.....thous. of pairs..	1,001	1,479	1,230	1,072	819	884	-----	-----	-----	3,908	4,782	+22.4
Stocks, end of month.....thous. of pairs..	50,649	50,010	49,571	47,209	48,892	52,387	-----	-----	-----	-----	-----	-----
Rubber soles:												
Production.....thous. of pairs..	3,876	2,869	2,746	2,601	2,928	3,519	-----	-----	-----	13,734	12,092	-11.0
Shipments—												
To repair trade.....thous. of pairs..	861	755	705	623	884	894	-----	-----	-----	3,792	2,944	-22.4
To shoe manufacturers.....thous. of pairs..	2,934	2,217	1,862	1,967	1,524	1,855	-----	-----	-----	7,546	8,980	+19.0
For export.....thous. of pairs..	156	24	34	23	141	120	-----	-----	-----	1,627	1,237	-28.4
Stocks, end of month.....thous. of pairs..	4,274	4,077	4,243	4,184	4,084	4,558	-----	-----	-----	-----	-----	-----
Mechanical rubber goods, shipments:												
Total.....thous. of dolls..	6,033	6,135	7,013	-----	5,406	6,274	-----	-----	-----	-----	-----	-----
Belting.....thous. of dolls..	1,305	1,413	1,546	-----	1,211	1,352	-----	-----	-----	-----	-----	-----
Hose.....thous. of dolls..	2,378	2,271	2,733	-----	2,078	2,667	-----	-----	-----	-----	-----	-----
All other.....thous. of dolls..	2,350	2,452	2,735	-----	2,117	2,255	-----	-----	-----	-----	-----	-----
Rubber bands, shipments.....thous. of lbs..	219	240	288	231	169	177	-----	-----	-----	798	978	+22.6
Rubber flooring, shipments.....thous. of sq. ft..	418	432	603	596	475	661	-----	-----	-----	2,068	2,049	-0.9
Calendered rubber clothing:												
Production.....no. coats and sundries..	58,130	59,825	77,740	91,193	137,239	129,413	-----	-----	-----	446,342	286,888	-35.7
Net orders.....no. coats and sundries..	31,437	30,286	32,967	102,490	117,427	28,720	-----	-----	-----	305,328	197,180	-35.4
Cancellations.....no. coats and sundries..	618	1,387	215	589	829	1,424	-----	-----	-----	17,600	2,809	-84.0

<sup>2</sup> Cumulative through Apr. 30.<sup>3</sup> Revised.<sup>4</sup> Quarter ending Dec. 31, 1928.<sup>5</sup> Quarter ending Mar. 31, 1929.<sup>6</sup> Quarter ending Mar. 31, 1928.<sup>7</sup> See table on p. 22 of the April, 1929, issue for earlier data.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928	
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929		
<b>HIDES AND LEATHER</b>													
<b>Hides</b>													
Imports:													
Total hides and skins	thous. of lbs.	38,679	31,919	34,063	30,505	38,643	45,443	61,288	-2.2	-36.9	225,050	182,809	-18.8
Calfskins	thous. of lbs.	2,608	1,951	1,462	3,379	5,006	2,836	5,485	+50.8	-7.1	17,610	14,496	-7.7
Cattle hides	thous. of lbs.	21,456	16,195	16,161	16,155	14,122	26,101	36,913	-12.6	-61.7	126,972	84,089	-33.8
Goatskins	thous. of lbs.	5,911	7,841	8,768	10,899	9,882	8,182	10,082	-9.1	-2.0	39,527	43,271	+9.5
Sheepskins	thous. of lbs.	5,060	3,785	4,892	6,406	6,301	5,428	6,016	-1.6	+4.7	25,678	26,444	+3.0
Stocks, end of month:													
Total hides and skins	thous. of lbs.	262,326	249,563	240,740	245,359		228,037	241,264					
Cattle hides	thous. of lbs.	219,274	210,760	202,947	206,248		190,492	197,775					
Calf and kip skins	thous. of lbs.	23,636	21,595	20,285	22,058		22,687	25,961					
Sheep and lamb skins	thous. of lbs.	19,416	17,208	16,528	18,053		14,858	17,528					
Prices:													
Green salted, packers' heavy native steers	dolls. per lb.	.205	.153	.145	.149	.149	.256	.246	0.0	-39.4			
Calfskins, country, No. 1	dolls. per lb.	.219	.171	.183	.187	.179	.295	.295	-4.3	-39.3			
Inspected slaughter of livestock:													
United States—													
Cattle	thous. of animals	736	569	632	662	676	623	723	+2.1	-6.5	3,388	3,275	-3.3
Calves	thous. of animals	369	311	409	460	427	438	473	-7.2	-9.7	2,075	1,976	-4.8
Swine	thous. of animals	5,738	4,478	3,645	3,761	3,798	3,446	3,804	+1.0	-0.2	23,649	21,420	-9.4
Sheep	thous. of animals	1,150	953	1,006	1,119	1,202	918	1,015	+7.4	+18.4	5,148	5,430	+5.5
Canada—													
Cattle and calves	thous. of animals	71	57	74	105	110	96	123	+4.8	-10.6	427	417	-2.3
Swine	thous. of animals	249	208	215	208	187	222	219	-10.1	-14.6	1,207	1,067	-11.6
Sheep	thous. of animals	35	21	21	19	17	16	17	-10.5	0.0	94	113	+20.2
<b>Leather</b>													
Sole and belting leather:													
Production:													
Sole only	thous. of backs, bends, sides	1,284	1,102	1,140	1,185	1,151	1,358	1,407	-2.9	-18.2	6,591	5,862	-11.1
Sole and belting	thous. of lbs.	23,391	20,989	22,191	22,939		24,761	25,140			96,510	90,010	-6.7
Stocks, end of month—													
In process of tanning	thous. of lbs.	77,989	81,482	79,524	79,487		89,181	90,734					
Finished	thous. of lbs.	81,518	78,607	78,772	76,444		57,335	59,614					
Exports	thous. of lbs.	1,054	729	1,336	1,080	1,149	753	650	+6.4	+76.8	4,715	5,313	+12.7
Price oak, scoured backs	dolls. per lb.	.59	.57	.55	.49	.49	.66	.67	0.0	-20.9			
Upper leather:													
Production	thous. of sq. ft.	66,424	62,954	66,132	65,152		63,730	62,074			278,699	260,662	-6.5
Stocks, end of month—													
In process of tanning	thous. of sq. ft.	138,500	136,749	133,335	130,430		140,713	141,068					
Finished	thous. of sq. ft.	249,468	249,739	249,373	246,992		253,557	255,397					
Exports	thous. of sq. ft.	10,998	9,364	11,991	10,818	9,563	10,846	11,400	-11.6	-16.1	67,642	52,734	+22.0
Chrome calf, "B" grades	dolls. per sq. ft.	.53	.51	.49	.50	.51	.60	.60	+2.0	-15.0			
<b>Leather Products</b>													
Shoes:													
Production	thous. of pairs	27,245	27,707	30,900	29,161		26,629	26,427			114,768	115,013	+0.2
Exports	thous. of pairs	423	367	435	372	333	394	409	-10.5	-18.6	1,965	1,930	-1.8
Wholesale prices—													
Men's black calf blucher, Mass.	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	4.90	4.90	0.0	-1.0			
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		214,826	240,116	256,691	258,301	263,933	210,420	224,636	+2.2	+17.5	1,031,085	1,233,867	+19.7
<b>PAPER AND PRINTING</b>													
<b>Wood Pulp</b>													
Mechanical:													
Production	short tons	149,772	126,171	147,640	162,042	166,375	149,652	156,258	+2.7	+6.5	724,365	752,000	+3.8
Consumption and shipments	short tons	144,205	125,598	136,880	142,920	143,838	133,702	143,015	-0.1	-0.1	697,291	692,441	-0.7
Stocks, end of month	short tons	130,209	130,797	141,557	160,875	178,963	173,174	186,377	+11.2	-4.0			
Imports	short tons	25,832	14,228	16,481	23,314	21,044	18,649	24,024	-9.7	-12.4	105,930	100,899	-4.7
Chemical:													
Production	short tons	236,636	213,582	231,836	233,742	241,314	210,780	222,924	+3.2	+8.2	1,081,322	1,157,110	+7.0
Consumption and shipments	short tons	235,170	216,544	231,526	234,638	242,292	211,400	225,710	+3.3	+7.3	1,085,536	1,161,170	+7.0
Stocks, end of month	short tons	41,366	38,134	37,638	36,150	34,106	43,872	42,120	-5.7	-19.0			
Imports	short tons	161,240	118,246	185,074	123,757	121,989	80,592	90,736	-1.4	+34.4	540,996	600,306	+11.0
Price, sulphite	dolls. per 100 lbs.	2.45	2.45	2.45	2.45	2.49	2.53	2.53	+1.6	-1.6			
<b>Newsprint Paper</b>													
Production:													
United States, total	short tons	123,822	103,644	114,586	118,679	123,504	117,553	128,065	+4.1	-3.6	599,127	584,235	-2.5
Ratio to capacity	per cent	85	77	79	81	84	84	84					
Canada	short tons	212,191	187,200	218,147	221,784	245,644	191,594	202,596	+10.8	+21.2	967,496	1,084,966	+12.1
Consumption by publishers	short tons	183,502	170,864	198,722	189,986	200,826	181,112	186,641	+5.7	+7.6	889,510	943,900	+6.1
Shipments:													
United States	short tons	120,263	108,375	120,003	121,548	124,840	118,583	124,316	+2.7	+0.4	582,278	595,029	+2.2
Canada	short tons	209,020	186,395	119,739	220,270	247,449	193,860	203,836	+12.3	+21.4	963,512	1,082,873	+12.4
Imports:													
Canada	short tons	196,882	165,331	132,994	178,076	206,036	163,179	181,913	+15.7	+13.3	868,431	929,319	+7.0
Exports:													
Canada	short tons	195,047	174,469	244,167	162,381	214,342	140,011	194,298	+32.0	+10.3	891,349	990,406	+11.1
Stocks, end of month:													
At mills—													
United States	short tons	38,003	35,642	30,534	27,102	25,778	33,734	37,207	-4.9	-30.7			
Canada	short tons	21,406	25,536	24,045	25,741	23,893	46,641	46,290	-7.2	-48.4			
At publishers	short tons	197,480	188,595	174,750	166,089	154,948	188,384	184,580	-6.7	-16.1			
In transit to publishers	short tons	45,982	48,050	45,673	46,724	51,425	43,363	46,627	+10.1	+10.3			
Price, roll, f. o. b. mill	dolls. per 100 lbs.	3.25	3.25	3.25	3.25	3.25	3.25	3.25	0.0	0.0			

\* Cumulative through Apr. 30.

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928													
	January	Febr-	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929														
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey."</i>																									
<b>PAPER AND PRINTING—Continued</b>																									
<b>Printing</b>																									
Book publication:																									
American manufacture	no. of titles	508	681	914	718	601	697	599	-16.3	+0.3	3,310	3,422	+3.4												
Imported	no. of titles	150	113	201	108	135	123	119	+25.0	+13.4	664	707	+6.5												
Sales books:																									
New orders	thous. of books	12,861	11,762	12,317	12,718	12,748	11,796	12,162	+0.2	+4.8	61,809	62,406	+1.0												
Shipments	thous. of books	12,167	11,984	12,414	12,176	12,154	11,807	11,645	-0.2	+4.4	59,001	60,895	+3.2												
Printing activity	weighted index number	8,117	126	124	123			111	111																
Cash checks, shipments	thous. of checks	90,616	71,043	91,723			71,715	80,116																	
Blank forms, new orders	thous. of sets	54,165	53,306	63,633	62,074	70,169	40,880	48,024	+13.0	+46.1	209,470	303,347	+44.8												
<b>Box Board</b>																									
Operation	thous. of inch hours	9,297	8,436	9,417	9,279	9,533	8,312	8,734	+2.8	+9.1	41,860	45,936	+9.7												
Operation	per ct. of capacity	81.4	80.0	82.5	81.3	83.5	79.4	80.2	+2.7	+4.1															
Production	short tons	248,290	228,034	256,118	251,147	270,754	221,074	242,394	+7.8	+11.7	1,106,556	1,254,343	+13.4												
New orders	short tons	241,086	227,595	266,895	250,366	242,596	211,304	224,366	-3.1	+8.1	1,100,002	1,228,538	+11.7												
Shipments	short tons	247,498	227,206	258,604	247,773	262,604	220,315	235,794	+6.0	+11.4	1,100,191	1,243,685	+13.0												
Stocks, end of month	short tons	56,804	57,398	54,982	57,881	62,292	40,319	49,107	+7.6	+26.8															
Stocks of waste paper, end of month:																									
On hand	short tons	137,251	126,212	137,008	142,666	150,021	132,621	127,217	+5.2	+17.9															
In transit and unshipped purchases	tons	49,104	54,121	51,520	68,005	54,433	47,551	46,375	-20.0	+17.4															
Unfilled orders, end of month	short tons	87,974	87,726	96,209	98,162	89,390	84,513	73,157	-8.9	+22.0															
Consumption of waste paper	short tons	238,652	217,442	242,073	231,089	250,245	211,898	220,750	+8.3	+13.4	1,026,007	1,179,501	+15.0												
<b>Other Paper</b>																									
Binder's board, production	short tons	3,172	2,581	2,917	2,994	3,491	3,450	3,720	+16.6	-6.2	17,725	15,155	-14.5												
Book paper:																									
Production	short tons	131,999	122,015	136,657			125,191	130,199			638,410														
Ratio to capacity	per cent	95	92	93			91	90																	
Shipments	short tons	132,791	126,286	139,253			117,304	124,861			626,135														
Stocks, end of month	short tons	79,099	74,353	71,399			81,105	86,782																	
New orders:																									
Coated	p. ct. of normal production	81	94	104	89	86	97	74	-1.1	+16.2															
Uncoated	p. ct. of normal production	82	87	91	84	80	84	77	-4.8	+3.9															
Unfilled orders, end of month:																									
Coated	p. ct. of normal production	10	9	10	10	10	12	11	0.0	-9.1															
Uncoated	p. ct. of normal production	8	9	9	10	9	9	7	-10.0	+28.6															
Wrapping paper:																									
Production	short tons	101,604	87,082	91,746	91,286	94,302	91,744	97,793	+3.3	-3.6	480,627	466,020	-3.0												
Ratio to capacity	per cent	81	89	86	85	85	86	87	0.0	-2.3															
Shipments	short tons	100,690	86,298	96,700	91,377	92,227	89,542	94,761	+0.9	-2.7	467,030	467,292	+0.1												
Stocks, end of month	short tons	95,288	93,107	86,596	86,075	87,733	93,975	96,802	+1.9	-9.4															
Fine paper:																									
Production	short tons	38,228	37,789	41,348	41,819	41,660	40,288	40,904	-0.4	+1.8	199,932	200,844	+0.5												
Ratio to capacity	per cent	92	90	86	93	90	92	87	-3.2	+3.4															
Shipments	short tons	40,522	38,885	43,788	40,564	42,368	37,548	40,863	+4.4	+3.7	195,707	206,127	+5.3												
Stocks, end of month	short tons	50,954	49,849	47,373	50,213	49,488	53,741	53,791	-1.4	-8.0															
All other grades:																									
Production	short tons	106,157	100,337	104,355	104,506	111,182	99,266	107,475	+6.4	+3.4	508,932	526,557	+3.5												
Shipments	short tons	104,445	102,634	102,091	102,278	107,735	97,858	105,705	+5.3	+1.9	502,094	519,183	+3.4												
Stocks, end of month	short tons	62,802	60,605	53,205	55,486	58,932	69,798	71,569	+6.2	-17.7															
Total paper (inc. newsprint and box board):											3,533,584														
Production	short tons	748,700	677,801	743,073			695,116	746,830																	
Ratio to capacity	per cent	71	86	86	87		85	83																	
Shipments	short tons	744,809	688,584	762,714			681,150	726,300			3,473,435														
Stocks, end of month	short tons	383,030	370,954	349,673			372,672	395,258																	
<b>Paper Board Shipping Boxes</b>																									
Production:																									
Total	thous. of sq. ft.	451,172	494,105	510,680	492,272	490,117	405,319	402,956	-0.4	+21.6	1,983,441	2,438,346	+22.9												
Corrugated	thous. of sq. ft.	352,021	383,191	398,777	387,596	386,241	327,815	323,493	-0.3	+19.4	1,553,855	1,907,826	+22.8												
Solid fiber	thous. of sq. ft.	99,151	110,914	111,903	104,676	103,876	78,845	79,463	-0.8	+30.7	380,929	530,520	+39.3												
Operating activity:																									
Total	per cent of normal	78	84	86	82	82	74	72	0.0	+13.9															
Corrugated	per cent of normal	78	85	86	83	83	72	69	0.0	+20.3															
Solid fiber	per cent of normal	77	80	85	79	79	80	80	0.0	-1.2															
Rope paper sacks, shipments	index number	103	96	90	83	81	92	87	-2.4	-6.9															
Abrasive paper and cloth:																									
Domestic shipments	reams	96,056	86,037	101,845	98,394	95,224	81,782	94,309	-3.2	+1.0	437,436	477,556	+9.2												
Foreign shipments	reams	17,753	21,457	22,194	24,642	26,040	19,635	18,944	+5.7	+37.5	92,418	112,086	+21.3												
<b>BUILDING CONSTRUCTION AND HOUSING</b>																									
Rental advertisements, Minneapolis	number	2,672	2,395	3,981	5,609	5,522	5,561	5,212	-1.6	+5.9	19,531	20,179	+3.3												
Building Costs																									
Building materials:																									
Frame house, 6-rm. 1st of mo. rel. to 1913		177	175	176	176	177	179	177	+0.6	0.0															
Brick house, 6-rm. 1st of mo. rel. to 1913		183	180	181	181	182	184	183	+0.6	-0.5															
Bldg. costs, 1st of mo. rel. to 1913		209.4	210.4	207.8	203.4	205.2	206.4	207.1	+0.9	-0.9															
Bldg. costs (A. G. C.), 1st of mo. rel. to 1913		203	204	204	203	203	197	197	-0.5	+3.0															
Plumbing fixtures, 6 pieces	dollars	100.30	98.41	98.51	97.90	98.16	100.76	101.11	+0.3	-2.9															
Construction costs (Am. Appraisal):																									
Frame	rel. to 1913	204	204	204	204	204	203	203	0.0	+0.5															
Brick, wood frame	rel. to 1913	212	213	213	214	214	212	212	0.0	+0.9															
Brick, steel frame	rel. to 1913	197	197	197	197	197	197	197	0.0	0.0															
Reinforced concrete	rel. to 1913	201	201	201	201	201	200	200	0.0	+0.5															

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928	
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929		
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey."</i>													
<b>BUILDING CONSTRUCTION AND HOUSING—Continued</b>													
Contracts and Losses													
Contracts awarded (36 States):													
Commercial buildings—thous. of sq. ft.	15,250	11,077	12,204	14,506	15,789	13,896	14,316	+8.8	+10.3	58,925	68,826	+16.8	
Industrial buildings—thous. of sq. ft.	7,085	7,892	9,342	6,844	10,325	10,834	6,020	+50.9	+71.5	33,590	41,488	+23.5	
Residential buildings—thous. of sq. ft.	27,898	25,659	39,849	49,908	38,740	55,281	56,655	-22.4	-31.6	246,582	182,054	-26.2	
Educational buildings—thous. of sq. ft.	2,631	3,400	6,241	4,627	6,050	5,071	6,960	+30.8	-13.1	23,691	22,949	-3.1	
Other public and semi-public buildings—thous. of sq. ft.	2,863	2,845	5,191	5,071	5,866	5,941	6,063	+15.7	-3.2	27,199	21,836	-19.7	
Grand total—thous. of sq. ft.	56,331	51,696	73,849	81,407	77,586	91,222	91,693	-4.7	-15.4	392,589	340,869	-13.2	
Contracts awarded, value (36 States):													
Commerical buildings—thous. of dollars	98,644	65,926	69,064	73,527	82,681	80,514	87,162	+12.4	-5.1	354,711	389,842	+9.0	
Industrial buildings—thous. of dollars	60,439	52,305	55,204	67,515	79,915	83,208	31,627	+18.4	+152.7	229,452	315,468	+37.5	
Residential buildings—thous. of dollars	132,862	123,757	160,146	249,896	185,658	269,325	280,262	-25.7	-33.8	1,235,164	882,319	-28.6	
Educational buildings—thous. of dollars	17,171	22,095	36,992	28,730	36,690	31,829	46,073	+27.7	-20.4	152,243	141,678	-6.9	
Other public and semi-public buildings—thous. of dollars	23,242	26,470	44,843	54,962	47,387	45,900	51,503	-13.8	-8.0	230,947	196,804	-14.8	
Public works and utilities—thous. of dollars	61,811	49,096	67,661	148,543	132,383	113,746	144,738	-10.9	-8.5	490,805	459,494	-6.4	
Grand total—thous. of dollars	394,069	339,739	463,911	623,174	566,010	624,523	641,395	-9.2	-11.8	2,693,323	2,386,903	-11.4	
Contracts awarded, Canada—thous. of dollars	41,963	28,426	27,125	43,328	64,860	56,346	70,684	+49.7	-8.2	196,331	205,702	+4.8	
Building volume (A. G. C.)—rel. to 1913—	148	122	116	178	211	164	185	+18.5	+14.1				
Fire losses:													
United States and Canada (Journal of Commerce)—thous. of dollars	36,225	26,872	29,662	22,647	21,637	25,981	23,202	-4.5	-6.7	163,926	137,043	-16.4	
Canada (Monetary Times)—thous. of dollars	2,664	3,078	2,453	1,972	2,551	2,101	2,860	+29.4	-10.8	11,681	12,718	+8.9	
<b>LUMBER PRODUCTS</b>													
Softwood Lumber													
Southern pine:													
Production (computed)—M ft. b. m.	425,000	373,118	392,771	409,423	414,166	421,911	440,306	+1.2	-5.9	2,165,805	2,014,487	-7.0	
Operation—per cent of full time	87	85	83	88	87	99	99	-1.1	-12.1				
Shipments (computed)—M ft. b. m.	398,047	357,918	409,229	432,754	409,616	447,083	489,100	-5.3	-16.3	2,261,700	2,007,560	-11.2	
New orders (computed)—M ft. b. m.	417,700	382,654	443,936	408,793	388,317	464,896	420,169	-5.0	-7.6	2,287,112	2,041,300	-10.7	
Stocks, end of mo. (computed)—M ft. b. m.	1,005,916	1,021,116	1,004,658	981,327	985,877	1,160,433	1,101,740	+0.5	-10.5				
Unfilled orders, end mo. (comp.)—M ft. b. m.	306,168	330,904	365,611	341,650	320,351	399,459	349,362	-6.2	-8.3				
Exports, lumber—M ft. b. m.	61,693	57,815	57,116	68,289	59,384	53,952	75,054	-13.0	-20.9	308,876	304,297	-1.5	
Exports, timber—M ft. b. m.	11,507	5,580	6,255	10,261	10,722	13,771	21,081	+4.5	-49.9	85,055	44,325	-47.9	
Price, flooring—dollars per M ft. b. m.	36.55	31.89	37.55	37.35	37.00	35.74	35.88	-0.9	+3.1				
Douglas fir:													
Exports, lumber—M ft. b. m.	84,299	57,167	77,443	65,953	95,104	58,862	71,427	+44.2	+33.1	318,954	379,966	+19.1	
Exports, timber—M ft. b. m.	59,984	36,999	56,238	60,207	23,309	43,226	60,797	-61.3	-61.7	193,952	236,737	+22.1	
Price, No. 1 common, dollars per M ft. b. m.	17.77	18.43	19.15	18.76	18.89	15.99	16.70	-0.7	+13.1				
Price, flooring, 1 x 4, "B" and better, V. G. dollars per M ft. b. m.	44.44	40.85	42.26	42.60	42.95	33.97	34.47	+0.8	+24.6				
California redwood:													
Production (computed)—M ft. b. m.	29,560	32,789	43,797	39,292	48,083	38,489	41,400	+22.4	+16.1	213,829	193,521	-9.5	
Shipments (computed)—M ft. b. m.	30,944	31,000	42,315	36,307	48,742	38,820	47,772	+34.2	+2.0	199,340	189,308	-5.0	
New orders (computed)—M ft. b. m.	34,801	33,430	47,059	43,363	49,507	36,741	49,351	+14.2	+0.3	207,470	208,161	+0.3	
Unfilled orders, end of month (computed)—M ft. b. m.	35,756	37,636	37,898	45,871	45,062	47,916	47,281	-1.8	-4.7				
California white pine:													
Production—M ft. b. m.	69,920	44,382	67,401	87,238	127,672	97,096	134,273	+46.3	-4.9	392,527	306,623	+1.0	
Shipments—M ft. b. m.	100,924	97,671	102,908	106,018	109,599	98,924	107,267	+3.4	+2.2	474,589	516,829	+8.9	
Stocks, end of month—M ft. b. m.	535,998	483,998	437,089	427,396	442,929	493,696	473,560	+3.5	-6.5				
New orders—M ft. b. m.	95,905	84,899	95,848	101,387	105,597	83,965	102,659	+4.2	+2.9	424,589	483,636	+13.9	
Unfilled orders, end of month—M ft. b. m.	176,506	168,766	161,865	195,268	143,950	167,582	104,921	-26.3	-12.7				
North Carolina pine:													
Production (computed)—M ft. b. m.	45,143	65,506	71,610	64,841	61,243	57,155	60,039	-5.5	+2.0	256,053	308,343	+20.4	
Shipments (computed)—M ft. b. m.	39,976	60,347	67,543	57,029	65,954	62,978	62,125	+15.6	+6.2	263,745	289,849	+9.9	
New orders—M ft. b. m.	48,440	74,200	83,300	80,710	-----	64,610	55,790	-----	-----	265,410			
Northern pine:													
Lumber:													
Production—M ft. b. m.	23,818	22,054	22,654	42,363	56,031	36,412	45,687	+32.3	+22.6	182,893	166,920	-8.7	
Shipments—M ft. b. m.	33,167	32,302	40,159	44,043	47,541	37,914	44,152	+7.9	+7.7	186,575	197,212	+5.7	
New orders—M ft. b. m.	35,363	29,398	39,732	44,379	37,478	35,926	35,974	-15.6	+4.2	179,929	186,350	+3.6	
Lath:													
Production—thousands—	4,692	2,986	2,938	7,722	10,001	6,184	9,967	+29.5	+0.3	34,335	28,339	-17.5	
Shipments—thousands—	6,952	5,185	7,316	8,003	9,632	5,927	9,316	+20.4	+3.4	35,745	37,088	+3.8	
Northern hemlock:													
Production—M ft. b. m.	18,877	14,802	14,876	13,112	14,488	14,871	22,004	+10.5	-34.2	79,749	76,155	-4.5	
Shipments—M ft. b. m.	9,855	13,020	9,814	12,625	14,247	16,153	20,410	+12.8	-30.2	66,823	59,561	-10.9	
Hardwood Lumber													
Walnut lumber:													
Production—M ft. b. m.	2,974	2,780	2,903	3,724	4,508	2,955	2,894	+21.1	+55.8	14,765	16,979	+15.0	
Shipments—M ft. b. m.	3,163	3,433	3,926	4,003	3,823	2,646	3,388	-4.5	+12.8	14,525	18,348	+26.3	
Stocks, end of month—M ft. b. m.	12,305	11,654	10,711	10,540	11,970	13,635	13,264	+13.6	-9.8				
New orders—M ft. b. m.	3,307	3,662	4,104	4,078	4,120	2,652	4,180	+1.0	-1.4	15,102	19,271	+27.6	
Unfilled orders, end of month—M ft. b. m.	5,664	5,833	6,804	7,126	7,563	4,491	5,540	+6.1	+36.5				
Walnut logs:													
Purchased—M ft. log measure—	2,285	2,021	2,213	2,899	3,735	2,402	2,972	+28.8	+25.7	11,945	12,284	+2.8	
Made into lumber and veneer—M ft. log measure—	2,538	2,126	2,539	2,799	3,005	2,678	2,769	+7.4	+8.5	13,153	13,007	-1.1	
Stocks, end of month—M ft. log measure—	1,557	1,261	1,048	1,152	1,897	2,806	3,009	+64.7	-37.0				
Northern hardwoods:													
Production—M ft. b. m.	37,916	44,370	42,865	29,755	30,885	38,404	33,193	+3.8	-7.0	195,273	185,791	-4.9	
Shipments—M ft. b. m.	29,093	30,515	32,605	26,755	23,818	28,491	28,827	-11.0	-17.4	137,367	142,786	+3.9	

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928	
	January	Febr-	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929		
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey."</i>													
<b>LUMBER PRODUCTS—Continued</b>													
<b>Hardwood Lumber—Continued</b>													
Lower Michigan hardwoods:													
Production.....M ft. b. m.	5,456	6,237	6,795	5,961	.....	8,625	9,116	.....	.....	4 34,930	4 24,449	-30.0	
Shipments.....M ft. b. m.	4,950	6,223	6,732	5,053	.....	6,548	7,277	.....	.....	2 28,314	1 22,958	-18.9	
Stocks, end of month.....M ft. b. m.	27,126	26,912	27,443	28,286	.....	50,925	29,784	.....	.....	.....	.....	.....	
Gum:													
Stocks, total, end of month.....mill. ft. b. m.	516	504	489	468	464	547	540	-0.9	-14.1	.....	.....	.....	
Stocks, unsold, end of month.....mill. ft. b. m.	369	344	332	318	328	428	420	+3.1	-21.9	.....	.....	.....	
Unfilled orders, end of month.....mill. ft. b. m.	147	160	157	151	136	119	123	+9.9	+10.6	.....	.....	.....	
Oak:													
Stocks, total, end of month.....mill. ft. b. m.	919	930	914	909	918	1,020	1,005	+1.0	-8.7	.....	.....	.....	
Stocks, unsold, end of month.....mill. ft. b. m.	751	757	751	739	748	871	844	+1.2	-11.4	.....	.....	.....	
Unfilled orders, end of month.....mill. ft. b. m.	167	173	163	170	169	149	162	-0.6	+4.9	.....	.....	.....	
All hardwoods:													
Production.....M ft. b. m.	308	319	315	319	296	252	244	-7.2	+21.3	1,355	1,557	+14.9	
Shipments.....M ft. b. m.	293	319	341	330	293	251	255	+11.2	+14.9	1,331	1,576	+18.4	
New orders.....M ft. b. m.	319	334	334	323	311	263	244	-3.7	+27.5	1,388	1,621	+16.8	
Stocks, total, end of month.....mill. ft. b. m.	2,717	2,707	2,672	2,670	2,638	2,839	2,843	-1.2	-7.2	.....	.....	.....	
Stocks, unsold, end of month.....mill. ft. b. m.	2,102	2,057	2,024	1,982	2,015	2,319	2,305	+1.7	-12.6	.....	.....	.....	
Unfilled orders, end of month.....mill. ft. b. m.	615	651	648	648	617	520	538	-4.8	+14.7	.....	.....	.....	
Production, 10 species.....M ft. b. m.	1,973,102	1,875,385	2,127,346	2,184,890	2,367,642	2,392,894	2,474,885	+8.4	-4.3	11,541,922	10,528,265	-8.8	
Exports, planks, joists, etc.....M ft. b. m.	240,384	177,682	200,790	201,858	220,153	179,352	223,649	+9.1	-1.6	987,596	1,040,867	+5.4	
Retail yards, Minneapolis district:													
Sales.....M ft. b. m.	5,489	3,285	6,564	11,076	14,111	9,438	14,323	+27.4	-1.5	39,893	40,525	+1.6	
Stocks, end of month.....M ft. b. m.	79,400	86,453	88,605	89,615	90,474	93,983	92,084	+1.0	-1.7	.....	.....	.....	
Retail yards, Kansas City district:													
Sales.....M ft. b. m.	4,333	3,411	6,622	7,276	6,682	5,802	6,140	-8.2	+8.8	27,945	28,324	+1.4	
Stocks, end of month.....M ft. b. m.	45,364	46,217	47,564	48,447	48,038	45,919	44,758	-0.8	+7.3	.....	.....	.....	
<b>Flooring</b>													
Maple flooring:													
Production.....M ft. b. m.	7,771	7,022	6,794	5,759	5,625	7,331	7,070	-2.3	-20.4	37,128	32,971	-11.2	
Shipments.....M ft. b. m.	5,114	6,053	6,141	5,583	6,848	7,545	8,256	-9.7	-17.1	38,126	31,739	-16.8	
Stocks, end of month.....M ft. b. m.	24,733	25,466	25,494	24,443	22,230	28,326	27,514	-9.1	-19.2	.....	.....	.....	
New orders.....M ft. b. m.	5,999	8,317	6,604	8,016	6,336	7,036	9,197	-26.5	-31.1	39,317	35,872	-8.8	
Unfilled orders, end of month.....M ft. b. m.	8,019	10,443	11,106	13,337	13,104	9,963	11,423	-1.7	+14.7	.....	.....	.....	
Oak flooring:													
Production.....M ft. b. m.	41,204	24,865	23,497	36,578	41,353	42,924	47,785	+13.1	-13.5	207,699	172,497	-16.9	
Shipments.....M ft. b. m.	31,999	28,551	40,902	41,837	41,558	46,105	50,256	-0.7	-17.3	222,272	184,847	-16.8	
Stocks, end of month.....M ft. b. m.	97,000	91,987	80,603	75,744	74,013	77,491	75,948	-2.3	-2.5	.....	.....	.....	
New orders.....M ft. b. m.	29,736	31,761	52,642	40,244	33,809	46,071	50,295	-15.7	-32.6	235,232	188,292	-20.0	
Unfilled orders, end of month.....M ft. b. m.	44,626	46,666	54,644	68,925	57,496	48,004	48,681	-16.6	+18.1	.....	.....	.....	
<b>Doors at Wholesale</b>													
Fr., manufacturing plants:													
Production.....number.	253,005	222,495	298,206	309,192	371,162	.....	.....	+20.0	.....	.....	.....	.....	
Shipments.....number.	268,826	235,139	275,775	287,222	357,900	.....	.....	+24.6	.....	.....	.....	.....	
Stocks, end of month.....number.	216,207	210,186	232,170	260,160	217,204	262,431	317,109	-16.5	-31.5	.....	.....	.....	
New orders.....number.	311,347	398,587	460,074	349,579	222,746	.....	.....	-36.3	.....	.....	.....	.....	
Unfilled orders, end of month.....number.	219,981	409,034	585,652	632,744	476,215	476,630	709,500	-24.7	-32.9	.....	.....	.....	
<b>Wooden Furniture</b>													
Household furniture and case goods:													
Shipments.....dolls, average per firm.	51,553	56,778	64,527	57,081	57,605	44,347	43,203	+0.9	+33.3	241,302	287,544	+19.2	
Unfilled orders.....dolls, average per firm.	58,756	51,676	40,469	32,776	38,713	25,439	27,763	+18.1	+39.4	.....	.....	.....	
Grand Rapids district:													
Unfilled orders, end of month.....No. of days' production.	40	36	37	34	60	30	39	+76.5	+53.8	.....	.....	.....	
New orders.....No. of days' production.	24	23	27	18	49	19	32	+172.2	+53.1	.....	.....	.....	
Shipments.....No. of days' production.	24	23	24	19	23	20	20	+21.1	+15.0	.....	.....	.....	
Outstanding accounts, end of month.....No. of days' sales.	56	52	49	42	43	47	46	+2.4	-6.5	.....	.....	.....	
Cancellations.....per cent of new orders.	10.0	9.0	6.0	14.0	40	12.0	7.0	-71.4	-42.9	.....	.....	.....	
Plant operation.....per cent of full time.	97.0	95.0	93.0	94.0	890	90.0	90.0	-5.3	-1.1	.....	.....	.....	
<b>Plywood and Veneer</b>													
Douglas-fir plywood:													
Production.....thous. of sq. ft. of surface.	12,743	10,244	11,823	11,655	15,652	.....	.....	+34.3	.....	.....	.....	.....	
Shipments.....thous. of sq. ft. of surface.	13,530	11,366	13,295	11,406	15,906	.....	.....	+39.5	.....	.....	.....	.....	
New orders (sales).....thous. of sq. ft. of surface.	16,030	13,357	20,529	14,084	14,342	.....	.....	+1.8	.....	.....	.....	.....	
Unfilled orders, end of month.....thous. of sq. ft. of surface.	9,001	10,606	16,904	19,105	17,222	.....	.....	-9.9	.....	.....	.....	.....	
Stocks, end of month.....thous. of sq. ft. of surface.	7,316	6,194	4,722	5,306	5,185	.....	.....	-2.3	.....	.....	.....	.....	
Other plywood:													
New orders.....thous. of sq. ft. of surface.	3,426	5,339	5,428	5,953	2,450	3,350	.....	.....	.....	2 10,078	2 20,146	+99.9	
Shipments.....thous. of sq. ft. of surface.	3,746	4,277	4,876	4,067	2,680	2,578	.....	.....	.....	2 11,276	2 16,966	+50.5	
Unfilled orders, end of month.....thous. of sq. ft. of surface.	5,791	6,190	6,053	7,237	2,582	3,154	.....	.....	.....	.....	.....	.....	
Rotary-cut veneer:													
Receipts.....number of carloads.	175	140	143	307	220	173	165	-28.3	+33.3	606	985	+62.5	
Purchases.....number of carloads.	241	186	451	256	157	185	229	-38.7	-31.4	834	1,291	+54.8	
Bushel baskets:													
Production.....dozens.	135,000	134,581	187,881	224,835	186,244	261,355	.....	.....	.....	2 719,950	2 682,887	-5.2	
Shipments.....dozens.	126,602	68,655	140,205	149,055	152,876	198,592	.....	.....	.....	2 595,314	2 484,512	-18.6	
Stocks, end of month.....dozens.	331,992	394,453	480,769	565,598	537,033	600,882	.....	.....	.....	.....	.....	.....	

\* Cumulative through Apr. 30.

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928	
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929		
<b>STONE, CLAY, AND GLASS PRODUCTS</b>													
<b>Clay Products</b>													
Face brick, averages per plant:													
Production	thousands	810	493	732	913	622	796			3,066			
Shipments	thousands	559	362	766	1,018	768	925			3,228			
Stocks, end of month	thousands	3,417	3,896	3,278	3,465	2,757	2,517						
Unfilled orders, end of month	thousands	910	884	987	1,117	958	942						
Common brick:													
Stocks, end of month—													
Burned	thousands	517,120	366,150	341,843	315,607	344,572	297,212						
Unburned	thousands	241,887	184,620	171,545	153,168	96,998	125,650						
Shipments	thousands	115,924	74,537	76,364	284,793	236,433	225,747			2,722,562	2,551,618	-23.7	
Unfilled orders, end of month	thousands	136,014	91,615	102,389	207,649	275,872	273,743						
Plants closed down	number	79	82	36	19	23	5						
Price, red, New York	dolls. per thous.	11.50	11.50	11.50	11.50	13.50	13.50	0.0	-14.8				
Porcelain plumbing fixtures:													
Net new orders	pieces	3 12,565	3 12,381	3 14,479	3 13,417	8,970	60,022	26,775	-33.1	-66.5	160,573	61,812	-61.5
Shipments	pieces	3 11,576	3 9,219	3 9,483	3 12,193	10,059	17,037	15,459	-17.5	-34.9	69,783	52,530	-24.7
Unfilled orders, end of month	pieces	3 34,864	3 36,798	3 40,047	3 37,184	35,045	96,125	103,131	-5.8	-66.0			
Stocks, end of month	pieces	3 44,688	3 45,769	3 46,980	3 47,315	48,228	48,831	50,819	+1.9	-5.1			
Vitreous china plumbing fixtures:													
New orders	pieces	3 227,050	3 485,657	3 207,681	3 205,870	199,242	238,169	234,560	-3.2	-15.1	1,595,599	1,375,500	-13.8
Shipments	pieces	3 261,102	3 253,235	3 256,249	3 251,920	254,661	291,130	288,238	+1.1	-11.6	1,402,147	1,277,167	-8.9
Unfilled orders, end of month	pieces	3 405,574	3 637,996	3 589,428	3 543,378	487,959	569,254	515,576	-10.2	-5.4			
Stocks, end of month	pieces	3 570,749	3 540,639	3 549,410	3 544,899	543,843	445,752	447,596	-0.2	+21.5			
Floor and wall tile:													
Production	thous. of sq. ft.	5,712	5,601	6,162	6,560	5,237	5,729			25,692			
Shipments, quantity	thous. of sq. ft.	4,299	4,373	5,250	6,156	5,688	5,914			25,221			
Shipments, value	thous. of dolls.	1,701	1,669	2,044	2,315	2,060	2,215			9,585			
Stocks, end of month	thous. of sq. ft.	16,010	17,490	18,140	18,630	13,577	14,431						
Terra cotta, new orders:													
Quantity	net tons	10,056	11,270	9,961	12,949	13,313	12,226	10,857	+2.8	+22.6	60,780	57,549	-5.3
Value	thous. of dolls.	1,000	1,196	1,172	1,472	1,487	1,153	1,113	+1.0	+33.6	5,709	6,417	+12.4
Sand-lime brick:													
Production	thousands	10,548	7,432	11,433	16,155	12,970	10,012	22,244	-19.7	-41.7	73,029	58,538	-19.8
Shipments by rail	thousands	1,674	2,955	3,945	4,359	5,658	4,829	7,752	+29.8	-27.0	25,537	18,501	-27.2
Shipments by trucks	thousands	6,206	5,942	9,498	13,580	13,107	9,182	18,229	-3.5	-28.1	50,030	48,333	-3.4
Stocks, end of month	thousands	16,082	16,974	14,256	14,236	10,561	15,121	12,159	-25.8	-13.1			
Unfilled orders, end of month	thousands	7,233	10,665	12,630	11,587	9,188	14,123	14,445	-20.7	-36.4			
Portland Cement													
Production	thous. of bbls.	9,881	8,522	9,969	3 13,750	16,151	13,468	17,308	+17.5	-6.7	59,564	58,273	-2.2
Operation	per ct. of capacity	46.5	44.8	47.4	67.1	76.4	70.0	86.6	+13.9	-11.8			
Stocks, end of month	thous. of bbls.	28,797	29,870	29,724	3 30,151	29,599	27,627	25,984	-1.8	+13.9			
Stocks, clinker, end of month	thous. of bbls.	9,642	12,436	14,948	3 15,472	14,905	15,002	14,320	-3.7	+4.0			
Shipments	thous. of bbls.	5,707	5,448	10,113	3 13,325	16,706	13,307	18,986	+25.4	-12.0	55,532	51,289	-7.6
Wholesale prices, composite	dolls. per bbl.	1,650	1,650	1,650	1,650	1,650	1,683	1,683	0.0	-2.0			
Highways													
Concrete pavements, new contracts:													
Total	thous. of sq. yds.	7,461	3,241	6,000	16,654	23,704	17,788	20,695	+42.3	+14.5	64,290	57,060	-11.2
Road	thous. of sq. yds.	6,089	1,689	2,826	12,315	17,518	12,722	13,246	+42.2	+32.3	44,432	40,437	-9.0
Federal-aid highways:													
Completed													
Cost	thous. of dolls.	16,057	13,188	4,570	7,410	10,309	6,579	16,706	+39.1	-38.3	53,633	51,534	-3.9
Distance	miles	557	373	151	211	335	269	735	+58.8	-54.4	2,197	1,627	-25.9
Under construction, end of month	miles	7,835	7,679	7,665	7,707	7,900	8,347	8,967	+2.5	-11.9	42,393	38,786	-8.5
Plate Glass													
Production, polished	thous. of sq. ft.	11,426	11,289	13,146	12,555	12,782	10,560	10,882	+1.8	+17.5	52,907	61,196	+15
Glass Containers													
Actual production:													
Quantity	gross	2,367	2,261	2,574	2,519	2,683	2,421	2,688	+6.5	-0.2	11,971	12,404	+3.6
Relation to capacity	per cent	73.6	76.1	78.8	79.1	79.1	84.3	86.7	0.0	-8.8			
New orders	gross	3,089	2,797	2,562	2,408	2,584	1,965	2,137	+7.3	+20.9	12,783	13,440	+5.1
Shipments	gross	2,435	2,139	2,330	2,546	2,657	2,491	2,729	+4.4	-2.6	11,937	12,307	+3.1
Stocks, end of month	gross	6,460	6,552	6,595	6,588	6,601	6,239	6,192	+0.2	+6.6			
Unfilled orders, end of month	gross	9,306	10,749	10,518	10,214	9,839	10,705	10,076	-3.5	-2.2			
Illuminating Glassware													
Production:													
Total	number of turns	3,950	2,974	3,256	3,285	3,884	3,243	3,368	+18.2	+15.3	15,369	17,349	+12.9
Ratio to capacity	per ct. of capacity	49.0	42.6	42.9	42.9	46.8	41.8	42.1	+9.1	+11.2			
New orders	per ct. of capacity	41.2	42.8	46.8	45.3	48.1	42.4	44.5	+6.2	+8.1			
Shipments	per ct. of capacity	39.9	42.5	41.8	44.9	42.2	40.1	40.0	-6.0	+5.5			
Unfilled orders, end of month	number of weeks' supply	1.3	1.0	1.1	1.1	1.4	1.1	1.1	+27.3	+27.3			
Stocks, end of month	number of weeks' supply	5.3	5.8	5.5	5.3	5.8	3.7	3.7	+9.4	+56.8			
CHEMICALS AND OILS													
Chemicals													
Sulphuric acid:													
Exports	thous. of lbs.	429,264	626,792	704,726	634,959	287,306	842,460	515,617	-54.8	-44.3	3,225,346	2,683,047	-16.8
Price, wholesale	dolls. per 100 lbs.	.78	.78	.78	.78	.78	.78	.78	0.0	0.0			

\* Cumulative through Apr. 30.

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase. (+) or decrease. (-) cumulative 1929 from 1928	
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929		
<b>CHEMICALS AND OILS—Continued</b>													
<b>Chemicals—Continued</b>													
Nitrate of soda:													
Imports	long tons	83,698	146,304	101,297	119,620	127,645	131,819	113,722	+6.7	+12.2	637,311	578,564	-9.2
Production in Chile	metric tons	274,500	255,500	279,100	272,200	276,600	255,100	262,400	+1.6	+5.4	1,250,700	1,357,900	+8.6
Potash salts:													
Imports (commercial)	long tons	24,724	28,489	22,116	21,299	24,696	28,137	12,997	+15.9	+90.0	128,784	121,324	-5.8
Production in France	metric tons	42,393	37,512	39,693			28,600	32,000					
(K <sub>2</sub> O content)	metric tons												
Sales in Germany													
(K <sub>2</sub> O content)	metric tons	164,736	144,676	233,000	107,588	77,326	67,414	63,746	-28.1	+21.3	703,030	727,326	+3.5
Superphosphate (acid phosphate):													
Production	short tons	370,231	307,300	282,504	286,897	279,978	322,324	285,639	-2.4	-2.0	1,653,581	1,526,910	-7.7
Stocks, end of month	short tons	2,253,708	2,316,451	1,558,588	881,841	828,644	900,499	823,843	-0.4	+0.6			
Shipments	short tons	122,439	179,023	414,243	468,200	117,170	382,561	136,387	-75.0	-14.1	1,294,911	1,301,075	+0.5
Fertilizer:													
Exports	long tons	99,751	100,508	165,551	136,937	114,655	127,111	146,480	-16.3	-21.7	550,810	617,402	+12.1
Consumption, Southern States	short tons	450,600	817,489	2,118,688	1,242,330	219,763	862,878	185,026	-82.3	+18.8	4,973,467	4,848,870	-2.5
Dyes and dyestuffs, exports:													
Vegetable	thous. of lbs	92	188	157	160	202	296	160	+26.3	+26.3	1,461	799	-45.3
Coal tar	thous. of lbs	58	29	2,305	26	27	1,788	1,898	+3.8	-98.6	9,984	2,445	-75.5
<b>Arsenic</b>													
Crude:													
Production	short tons	1,136	1,262	1,307	1,382	1,888	1,098	1,225	+36.6	+54.1	6,157	6,975	+13.3
Stocks, end of month	short tons	3,019	2,782	2,418	2,451	2,073	1,863	1,876	-15.4	+10.5			
Refined:													
Production	short tons	913	900	945	836	779	669	713	-6.8	+9.3	3,565	4,373	+22.7
Stocks, end of month	short tons	3,571	3,643	3,458	3,316	3,236	2,760	2,370	-2.4	+36.5			
Price index numbers:													
Crude drugs	rel. to Aug., 1914	195	195	194	187		210	208					
Essential oils	rel. to Aug., 1914	191	195	206	205		139	159					
Drugs and pharmaceuticals	rel. to Aug., 1914	164	164	164	164		169	169					
Chemicals	rel. to 1913-14	113	113	113	113	113	113	113	0.0	0.0			
Oils and fats	rel. to 1913-14	126	128	127	123	118	125	128	-4.1	-7.8			
<b>Wood Chemicals</b>													
Acetate of lime:													
Production													
United States	thous. of lbs	11,687	11,266	12,082	11,796	12,446	11,693	10,987	+5.5	+113.3	59,939	59,277	-1.1
Canada	thous. of lbs	1,263	1,090	1,150	1,032	751	944	704	-27.2	+6.7	5,001	5,286	+5.7
Shipments													
United States	thous. of lbs	11,266	10,947	11,882	11,986	12,335	13,152	15,386	+2.9	-19.8	60,195	58,416	-3.0
Canada	thous. of lbs	1,214	1,074	1,165	1,066	723	1,636	684	-32.2	+5.7	4,145	5,243	+26.5
Stocks, end of month													
United States	thous. of lbs	1,543	1,765	1,930	1,495	1,828	20,516	16,205	+22.3	-88.7			
Canada	thous. of lbs	174	189	172	96	109	3,084	3,095	+13.5	-97.2			
Exports	thous. of lbs	42	16	17	13	917	1,152	0.0	0.0	-98.9	7,496	88	-98.8
Price, wholesale	dolls. per cwt	4.50	4.50	4.50	4.50	4.50	3.50	3.50	0.0	+28.6			
Methanol, crude:													
Production													
United States	gallons	684,766	676,672	714,266	732,204	730,055	657,253	609,604	-0.3	+19.8	3,316,723	3,537,963	+6.7
Canada	gallons	52,925	46,067	51,303	42,183	32,614	35,768	28,505	-22.7	+14.4	204,543	225,092	+10.0
Stocks at crude plants, end of month													
United States	gallons	227,458	218,563	272,393	185,123	224,665	323,183	299,062	+21.4	-24.9			
Canada	gallons	28,103	35,693	30,003	16,597	14,322	32,773	33,357	-13.7	-57.1			
Stocks at refineries and in transit													
United States	gallons	145,093	153,423	147,531	172,755	262,082	1,120,970	909,620	+51.7	-71.2			
Canada	gallons	48,495	47,832	59,623	66,218	65,965	55,934	57,270	-0.4	+15.2			
Exports	gallons	43,915	37,213	28,478	57,134	44,602	59,244	98,763	-21.9	-54.8	275,494	211,342	-23.3
Wood at chemical plants:													
Consumption													
United States	cords	71,490	68,367	73,073	73,084	76,382	63,973	59,744	+4.5	+27.8	328,659	362,396	+10.3
Canada	cords	6,630	5,824	6,289	5,244	3,831	4,664	3,530	-26.9	+8.5	25,485	27,818	+9.2
Stocks, end of month													
United States	cords	498,301	483,721	456,035	487,881	524,567	515,250	489,388	+7.5	+7.2			
Canada	cords	72,933	74,100	73,976	73,496	73,095	74,749	74,319	-0.5	-1.6			
Daily capacity													
Total	cords	3,336	3,336	3,336	3,336	3,336	3,275	3,266	0.0	+2.1			
Shutdown	cords	372	414	404	463	417	263	299	-9.9	+39.5			
Methanol, refined:													
Production													
United States	gallons	494,501	449,800	494,435	502,010	423,244	468,446	557,780	-15.7	-24.1	2,354,421	2,363,990	+0.4
Canada	gallons	59,800	47,700	47,500	35,300	49,700	46,000	30,400	+40.8	+63.5	208,350	240,000	+15.2
Stocks, end of month													
United States	gallons	503,054	550,702	681,815	695,180	716,762	430,298	505,299	+3.1	+41.8			
Canada	gallons	35,534	38,393	36,149	48,226	43,474	47,311	55,359	-9.9	-21.5			
Shipments													
United States	gallons	506,624	466,621	518,906	568,118	472,360	412,597	492,081	-16.9	-4.0	2,264,003	2,532,629	+11.9
Canada	gallons	47,629	33,623	43,885	14,576	45,274	39,866	14,528	+210.6	+211.6	119,650	184,987	+54.6
Price, wholesale, N. Y.	dolls. per gal.	.58	.58	.58	.58	.58	.46	.46	0.0	+26.1			
<b>Ethyl Alcohol</b>													
Production	thous. of gals.	15,282	13,830	14,858	14,709	15,216	11,784	11,043	+3.4	+37.8	58,147	73,895	+27.1
Withdrawn for denaturation	thous. of gals.	13,911	11,813	13,090	12,003	13,812	9,334	10,468	+15.1	+31.9	47,647	64,629	+35.6
Warehouse stock, end of month	thous. of gals.	8,701	9,662	10,424	11,723	12,341	11,267	10,904	+5.3	+13.2			

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928	
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929		
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"</i>													
<b>CHEMICALS AND OILS—Continued</b>													
<b>Explosives</b>													
(Black powder, permissible, and other high explosives)													
Production	thous. of lbs.	33,596	35,392	34,485	36,077	37,235	32,153	32,850	+3.2	+13.3	156,506	176,785	+13.0
Shipments	thous. of lbs.	35,576	34,322	33,168	36,458	39,474	32,095	33,511	+8.3	+17.8	158,774	178,998	+12.7
New orders	thous. of lbs.	35,733	32,606	32,543	34,786	37,199	30,701	32,163	+6.9	+15.7	151,605	172,867	+14.0
Stocks, end of month	thous. of lbs.	18,071	19,151	20,366	20,119	17,989	17,647	16,990	-10.6	+5.9			
<b>Naval Stores</b>													
Turpentine (gum):													
Net receipts, southern ports	barrels	8,175	4,758	8,440	31,610	43,722	20,765	39,704	+38.3	+10.0	78,485	96,705	+23.2
Stocks at port, end of month	barrels	79,837	67,956	48,396	52,687	53,536	45,458	46,741	+1.6	+14.5			
Price, southern, New York	dolls. per gal.	.61	.58	.58	.54	.54	.58	.54	0.0	0.0			
Rosin (gum):													
Net receipts, southern ports	barrels	45,203	29,284	37,733	100,454	137,384	67,762	118,460	+36.8	+16.0	283,475	350,058	+23.5
Stocks at 3 ports, end of month	barrels	227,409	177,232	100,722	108,335	120,665	140,805	128,789	+11.4	-6.3			
Price, B, New York	dolls. per bbl.	8.87	8.30	7.86	7.41	7.58	8.54	8.15	+2.3	-7.0			
Rosin (wood):													
Production	barrels	37,765	33,152	37,361	36,150	37,708	34,831	36,036	+4.3	+4.6	168,007	182,136	+8.4
Stocks, end of month	barrels	120,956	126,264	128,665	124,192	115,870	108,394	114,160	-6.7	+1.5			
Turpentine (wood):													
Production	barrels	7,347	6,436	7,059	6,917	6,855	6,052	6,350	-0.9	+8.0	30,465	34,614	+13.6
Stocks, end of month	barrels	7,869	7,648	6,773	5,356	4,503	10,963	9,459	-15.9	-52.4			
Pine oil:													
Production	gallons	238,703	204,700	235,445	212,720	219,304	240,845	248,606	+3.1	-11.8	1,185,129	1,110,872	-6.3
Stocks, end of month	gallons	933,737	899,181	888,915	895,099	878,784	727,416	768,195	-1.8	+14.4			
<b>Roofing</b>													
<b>Roofing, felt:</b>													
Production, dry felt	tons	3,19,833	3,21,271	3,28,153	30,177	-----	27,534	27,521	-----	-----	* 93,867	* 102,434	+0.1
Stocks, end of month, dry felt	tons	* 4,630	* 3,274	* 3,102	2,907	-----	2,844	2,366	-----	-----			
<b>Fats and Oils</b>													
Total vegetable oils and copra:													
Exports	thous. of lbs.	2,884	3,637	2,608	* 1,575	1,816	4,618	1,996	+15.3	-9.0	34,364	12,520	-63.6
Imports	thous. of lbs.	74,261	80,225	85,328	106,331	129,285	65,152	57,049	+21.6	+126.6	288,061	475,330	+65.0
Copra-imports	short tons	23,474	22,209	31,587	29,868	34,728	11,334	21,383	+16.3	+62.4	82,728	141,857	+71.5
Copra or coconut oil:													
Imports	thous. of lbs.	35,164	35,264	30,842	30,319	49,260	23,112	15,076	+62.5	+226.7	114,099	180,849	+58.5
Consumption in oleomargarine	thous. of lbs.	15,455	15,221	15,587	14,932	14,603	12,284	11,613	-2.2	+25.7	64,478	75,798	+17.6
Oleomargarine:													
Production	thous. of lbs.	29,474	28,943	29,718	28,704	28,357	24,291	23,744	-1.2	+19.4	129,152	145,196	+12.4
Consumption	thous. of lbs.	27,847	32,713	28,260	27,067	29,008	22,800	23,381	+7.2	+24.1	127,664	144,895	+13.5
Animal glues:													
Shipments	thous. of lbs.	6,109	6,435	6,826	7,259	7,225	6,487	6,489	-0.5	+11.3	33,086	33,854	+2.3
<b>Cottonseed</b>													
Cottonseed:													
Receipts at mills	short tons	420,026	161,745	106,052	40,308	22,007	17,017	7,846	-45.4	+180.5	609,817	750,138	+23.0
Consumption (crush)	short tons	748,093	514,032	364,816	236,246	112,421	165,097	65,241	-52.4	+72.3	1,572,321	1,975,608	+25.6
Stocks at mills, end of month	short tons	999,136	646,849	386,986	191,048	100,634	107,844	50,449	-47.3	+99.5			
Cottonseed oil, crude:													
Production	thous. of lbs.	237,127	165,872	119,825	80,474	39,688	57,429	24,064	-50.7	+64.9	515,189	642,986	+24.8
Stocks, end of month	thous. of lbs.	141,505	125,900	106,955	80,863	51,284	84,474	49,207	-36.6	+4.2			
Cottonseed oil, refined:													
Production	thous. of lbs.	205,804	167,753	126,859	101,475	60,581	84,027	62,915	-40.3	-3.7	553,341	662,472	+19.7
Stocks, end of month	thous. of lbs.	511,162	567,279	584,978	570,889	512,118	516,031	481,749	-10.3	+6.3			
Price, yellow, prime, N. Y.	dolls. per lb.	.103	.109	.106	.102	.097	.099	.106	-4.9	-8.5			
Consumption in oleomarg.	thous. of lbs.	2,283	2,314	2,387	2,362	2,518	* 2,013	2,135	+6.6	+17.9	10,638	11,864	+11.5
Cottonseed cake and meal:													
Production	short tons	337,989	235,477	167,225	107,296	50,278	81,369	30,526	-53.1	+64.7	723,203	898,265	+24.2
Stocks, end of month	short tons	237,067	256,982	239,050	225,362	191,983	84,515	59,552	-14.8	+222.4	106,570	97,762	-8.3
Exports	short tons	34,135	27,011	23,790	6,675	6,151	8,230	4,906	-7.9	+25.4			
<b>Flaxseed</b>													
Minneapolis and Duluth:													
Receipts	thous. of bushels	369	346	369	270	313	398	625	+15.9	-49.9	2,880	1,667	-42.1
Shipments	thous. of bushels	283	399	351	219	101	572	687	-53.9	-85.3	2,865	1,353	-52.8
Stocks, end of month	thous. of bushels	1,063	727	603	478	578	1,627	856	+20.9	-32.5			
Mill receipts at Duluth:													
Superior	thous. of bushels	69	34	13	7	None	25	24	0.0	0.0	271	123	-54.6
Imports	thous. of bushels	1,411	2,529	2,737	3,911	2,518	1,718	2,156	-35.6	+16.8	7,990	13,106	+64.0
Linseed oil:													
Shipments from Minneapolis	thous. of lbs.	12,782	13,214	14,602	14,237	18,005	15,079	17,245	+26.5	+4.4	73,986	72,840	-1.5
Price, New York	dolls. per lb.	.100	.102	.102	.101	.102	.098	.103	+1.0	-1.0			
Linseed cake and meal:													
Shipments from Minneapolis	thous. of lbs.	24,411	23,479	19,427	16,917	12,067	21,607	16,621	-28.7	-27.4	123,371	96,301	-21.9
Exports	thous. of dollars	22,859	22,117	38,874	36,028	32,501	38,582	45,331	-9.8	-28.3	235,498	152,379	-35.3
<b>FOODSTUFFS</b>													
<b>Wheat</b>													
Visible supply, end of month:													
United States	thous. of bushels	130,063	126,503	125,351	117,079	97,962	63,625	50,381	-16.3	+94.4			
Canada	thous. of bushels	188,742	184,467	181,676	167,837	142,108	129,054	112,054	-15.3	+26.9			
Receipts, principal markets	thous. of bushels	22,537	28,698	27,220	17,472	18,637	17,949	25,922	+6.7	-28.1	116,164	114,564	-1.4
Shipments, principal markets	thous. of bushels	16,762	15,192	16,926	15,697	23,560	14,269	27,912	+50.1	-15.6	84,119	88,137	+4.8

\* Cumulative through Apr. 30.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928	
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929		
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"</i>													
<b>FOODSTUFFS—Continued</b>													
<b>Wheat—Continued</b>													
Production, crop estimate:													
Winter wheat.....thous. of bushels						7,622,148		8,578,964					
Exports:													
United States—													
Wheat only.....thous. of bushels	3,399	3,214	3,487	3,942	11,741	2,723	4,823	+197.8	+143.4	18,518	25,783	+39.2	
Including wheat flour.....thous. of bushels	9,559	8,704	9,153	8,930	15,941	7,660	8,624	+78.5	+84.8	41,670	52,287	+25.5	
Canada—													
Including wheat flour.....thous. of bushels	25,030	19,711	27,566	10,554	31,155	11,103	34,268	+195.2*	-9.1	109,640	114,016	+4.0	
Prices:													
No. 1, Northern spring,													
Minneapolis.....dolls. per bushel	1.21	1.28	1.25	1.20	1.11	1.53	1.57	-7.5	-20.3				
No. 2 Red Winter,													
St. Louis.....dolls. per bushel	1.42	1.40	1.35	1.25	1.17	1.96	1.96	-6.4	-40.3				
No. 2 Hard Winter,													
Kansas City.....dolls. per bushel	1.14	1.18	1.16	1.10	1.01	1.52	1.60	-8.2	-36.9				
<b>Wheat Flour</b>													
Grindings of wheat:													
United States.....thous. of bushels	45,767	41,292	42,004	39,475	42,740	39,519	40,449	+8.3	+5.7	209,718	211,278	+0.7	
Canada.....thous. of bushels	7,794	7,286	7,455	7,339	7,908	6,058	7,138	+9.0	+12.0	34,660	37,872	+9.3	
Production:													
United States, actual.....thous. of bushels	10,014	9,026	9,207	8,636	9,335	8,507	8,712	+8.1	+7.2	45,208	46,218	+2.2	
United States, prorated.....thous. of bbls	10,808	10,020	10,360	9,938	9,661	9,960	10,008	+2.4	+1.26	241,126	241,284	+0.3	
Canada.....thous. of bbls	1,698	1,600	1,631	1,606	1,749	1,314	1,541	+8.9	+13.5	7,515	8,284	+10.2	
Production, grain offal.....thous. of lbs.	702,580	716,899	725,848	633,046	741,966	698,267	716,029	+8.6	+3.6	3,704,241	3,660,339	-1.2	
Capacity operated, flour mills.....per cent	58	60	54	51	55	51	50	+7.8	+10.0	236,110	235,846	-0.7	
Consumption (computed).....thous. of bbls.	9,229	8,986	9,101	8,530	8,064	9,515							
Stocks, all positions, end of month (computed).....thous. of bbls.	7,580	7,400	7,400	7,700	7,600	6,700	6,300	-1.3	+20.6				
Exports:													
United States.....thous. of bbls	1,369	1,220	1,259	1,108	933	1,097	845	-15.8	+10.4	5,145	5,889	+14.5	
Canada.....thous. of bbls	933	998	1,413	720	907	609	886	+26.0	+2.4	4,171	4,971	+19.2	
Wholesale prices:													
Standard patents, Minn.....dolls. per bbl	6.34	6.81	6.67	6.41	6.12	8.11	8.49	-4.5	-27.9				
Winter, straight													
Kansas City.....dolls. per bbl	5.52	5.73	5.72	5.58	5.21	7.56	7.63	-6.6	-31.7				
<b>Corn</b>													
Exports, including meal.....thous. of bushels	12,357	8,087	5,021	2,560	1,050	3,355	1,186	-59.0	-11.5	13,996	29,075	+107.7	
Visible supply, end of month.....thous. of bushels	28,012	36,265	37,100	30,991	15,571	36,056	27,554	-49.8	-43.5				
Receipts, principal markets.....thous. of bushels	39,876	29,229	21,502	16,433	11,420	19,579	23,708	-30.5	-51.8	164,453	118,520	-29.9	
Shipments, prin. markets.....thous. of bushels	19,888	13,951	13,461	17,677	16,276	18,849	23,454	-7.9	-30.6	108,961	81,203	-25.5	
Grindings (starch, glucose).....thous. of bushels	8,364	8,719	7,085	6,044	6,338	8,285	6,921	+4.9	-8.4	41,119	36,550	-11.1	
Price, No. 2, Chicago.....dollars per bushel	.92	.97	.95	.91	.86	1.03	1.07	-5.5	-19.6				
<b>Oats</b>													
Receipts, principal markets.....thous. of bushels	9,919	9,562	8,535	9,494	10,432	12,436	14,406	+9.9	-27.6	62,979	47,942	-23.9	
Visible supply, end of month.....thous. of bushels	16,212	16,819	14,071	12,204	10,063	11,452	7,319	-17.5	+37.5				
Exports, including meal.....thous. of bushels	703	451	513	358	513	387	465	+43.3	+10.3	2,264	2,538	+12.1	
Price, contract grades, Chi.....dollars per bushel	.52	.53	.52	.50	.46	.65	.69	-8.0	-33.3				
Grindings, Canada.....thous. of bushels	824	925	925	776	900	846	887	+16.0	+1.5	4,539	4,350	-4.2	
Production, oatmeal and rolled oats, Canada.....thous. of lbs.	9,956	11,710	12,133	8,987	10,728	10,208	11,520	+19.4	-6.9	54,531	53,514	-1.9	
<b>Barley</b>													
Receipts, principal markets.....thous. of bushels	3,970	4,960	3,891	3,450	3,264	2,717	3,031	-5.4	+7.7	21,658	19,535	-9.8	
Visible supply, end of month.....thous. of bushels	8,932	9,293	8,459	6,849	6,022	2,339	1,435	-12.1	+319.7				
Exports.....thous. of bushels	2,277	3,244	2,209	1,862	1,268	876	1,386	-31.9	-8.5	6,082	10,860	+78.6	
Price, fair to good, malting, Chicago.....dollars per bushel	.60	.62	.59	.55	.55	1.01	1.04	0.0	-47.1				
<b>Rye</b>													
Production, crop estimate.....thous. of bushels	1,045	1,119	914	1,064	1,464	1,186	1,593	+37.6	-8.1	7,568	5,606	-25.9	
Receipts, principal markets.....thous. of bushels	5,973	6,239	6,725	6,632	6,325	5,051	1,696	-4.6	+272.9				
Visible supply, end of month.....thous. of bushels	197	126	97	32	368	366	3,345	-89.0	5,001	820	-83.6		
Exports, including flour.....thous. of bushels	146,342	122,455	116,548	131,246	125,528	205,148	203,261	-4.4	-38.2	962,106	642,119	-33.3	
Price, No. 2, Chicago.....dollars per bushel	1.04	1.12	1.08	1.00	.90	1.27	1.32	-10.0	-31.8				
<b>Total Grains</b>													
Total grain exports, incl. flour.....thous. of bushels	25,093	20,613	16,992	13,741	19,140	12,644	15,006	+39.3	+27.5	65,004	95,579	+47.0	
<b>Rice</b>													
Southern paddy, receipts at mills.....bbls.	621,096	591,678	439,439	429,389	231,883	620,032	351,607	-46.0	-34.0	3,572,131	2,313,495	-35.2	
Shipments, total from mills, pockets (100 lbs.)	973,256	816,370	766,365	745,097	714,677	835,992	909,718	-4.1	-21.4	4,730,617	4,015,765	-15.1	
New Orleans.....pockets (100 lbs.)	146,342	122,455	116,548	131,246	125,528	205,148	203,261	-4.4	-38.2	962,106	642,119	-33.3	
Stocks, end of month.....pockets (100 lbs.)	2,515,008	2,354,518	2,057,678	1,763,837	1,311,568	1,957,878	1,455,366	-25.6	-9.9				
Exports.....pockets (100 lbs.)	504,921	368,378	428,450	378,971	343,168	362,919	380,725	-9.4	-9.9	1,853,921	2,023,888	+9.2	
Imports.....pockets (100 lbs.)	76,593	29,251	18,647	21,356	15,257	34,447	27,452	-28.6	-44.4	212,742	161,104	-24.3	
<b>Other Crops</b>													
Apples:													
Cold-storage holdings, end of month.....thous. of bbls.	6,875	4,517	2,718	1,257	391	1,378	3,602	-68.9	-35.0	17,912	25,318	+41.3	
Car-lot shipments.....carloads	7,656	7,697	5,379	2,918	1,668	2,322	1,803	-42.8	-7.5				

\* Cumulative through Apr. 30.

\* Revised.

\* As of June 1.

\* Final estimate for 1928.

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928		
	January	Febr-	March	April	May	April	May		May, 1929, from April, 1929	May, 1929, from May, 1928			
									1928	1929			
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"</i>													
<b>FOODSTUFFS—Continued</b>													
<b>Other Crops—Continued</b>													
Potatoes, car-lot shipments.....carloads.....	19,479	19,868	22,334	19,341	19,683	16,851	22,955	+1.8	-14.3	105,311	100,705	-4.4	
Onions, car-lot shipments.....carloads.....	2,436	1,791	1,497	4,141	3,366	2,993	4,133	-18.7	-18.6	14,453	13,231	-8.5	
Citrus fruits, car-lot shipments.....carloads.....	15,226	13,338	15,144	16,713	15,524	8,803	8,350	-7.1	+85.9	45,229	75,945	+67.9	
Hay, all tame, receipts.....tons.....	65,854	79,449	75,490	57,993	44,197	46,628	42,955	-23.8	+2.9	272,832	322,983	+18.4	
<b>Cattle and Beef</b>													
Cattle movements, primary markets:													
Receipts.....thousands.....	1,635	1,191	1,445	1,748	1,653	1,684	1,799	-5.4	-8.1	8,235	7,672	-6.8	
Shipments, total.....thousands.....	561	405	497	646	678	640	682	+5.0	-0.6	3,056	2,787	-8.8	
Shipments, stocker and feeder.....thousands.....	178	117	162	292	289	254	283	-2.0	+2.1	1,138	1,038	-8.8	
Local slaughter.....thousands.....	1,057	787	923	1,080	979	1,013	1,120	-9.4	-12.6	5,114	4,826	-5.6	
Beef products:													
Production, inspected.....thous. of lbs.....	419,676	328,857	371,942	392,784	392,816	361,660	422,917	0.0	-7.1	1,920,963	1,906,075	-0.8	
Apparent consumption.....thous. of lbs.....	430,985	339,194	389,622	345,184	417,699	380,566	442,363	+0.6	-5.6	1,991,465	1,992,684	+0.1	
Exports.....thous. of lbs.....	1,119	1,273	1,614	1,073	1,293	1,052	1,165	+20.5	+11.0	5,269	6,372	+20.9	
Cold-storage holdings, end of month.....thous. of lbs.....	93,990	88,771	81,607	8,714	57,142	46,194	37,212	-19.2	+53.6	-----	-----	-----	
Prices:													
Cattle, corn-fed, Chicago, dolls. per 100 lbs.....	13.53	12.06	12.84	13.88	13.44	13.34	13.18	-3.2	+2.0	-----	-----	-----	
Steer rounds, No. 2.....dolls. per lb.....	.240	.209	.211	.224	.230	.200	.201	+2.7	+14.4	-----	-----	-----	
Western dressed steers, N. Y., dolls. per lb.....	.245	.215	.217	.225	.231	.222	.229	+2.7	+0.9	-----	-----	-----	
<b>Hogs and Pork</b>													
Hog movements, primary markets:													
Receipts.....thousands.....	5,061	3,922	3,378	3,545	3,375	3,483	3,723	-4.8	-9.3	22,418	19,281	-14.0	
Shipments, total.....thousands.....	1,864	1,502	1,365	1,273	1,299	1,385	1,296	+2.0	+0.2	8,100	7,303	-9.8	
Shipments, stocker and feeder.....thousands.....	47	49	72	73	54	65	66	-26.0	-18.2	361	295	-18.3	
Local slaughter.....thousands.....	3,194	2,406	2,015	2,258	2,083	2,078	2,420	-7.8	-13.9	14,290	11,956	-16.3	
Pork products, total:													
Production, inspected.....thous. of lbs.....	974,060	770,096	635,791	655,418	665,985	585,081	672,640	+1.6	-1.0	4,101,144	3,701,350	-9.7	
Apparent consumption.....thous. of lbs.....	628,505	537,342	551,810	359,351	622,066	528,669	617,034	+11.2	+0.8	3,082,762	2,899,074	-6.0	
Exports.....thous. of lbs.....	122,577	93,681	102,276	89,813	98,080	86,159	85,201	+9.2	+15.1	496,371	506,427	+2.0	
Cold-storage holdings, end of month:													
Total.....thous. of lbs.....	978,806	944,742	921,961	893,558	871,411	1,133,760	1,105,439	-5.6	-21.2	-----	-----	-----	
Fresh and cured.....thous. of lbs.....	938,280	770,878	742,533	738,810	687,723	960,672	919,366	-6.9	-25.2	-----	-----	-----	
Lard:													
Production*.....thous. of lbs.....	213,780	164,915	133,923	137,953	-----	127,075	140,414	-----	-----	729,559	650,571	-10.8	
Exports.....thous. of lbs.....	89,932	65,924	70,572	59,144	64,192	56,554	55,540	+8.5	+15.6	342,555	349,764	+2.1	
Cold-storage holdings, end of month.....thous. of lbs.....	140,526	173,864	179,428	184,748	183,688	173,088	186,073	-0.6	-1.3	-----	-----	-----	
Prices:													
Hogs, heavy, Chicago, dolls. per 100 lbs.....	9.10	10.13	11.39	11.46	10.75	9.09	9.61	-6.2	+11.9	-----	-----	-----	
Hams, smoked, Chicago, dolls. per lb.....	.232	.231	.238	.248	.249	.201	.206	+0.4	+20.9	-----	-----	-----	
Lard, prime contract, N. Y., dolls. per lb.....	.121	.123	.125	.122	.120	.121	.123	-1.6	-2.4	-----	-----	-----	
<b>Sheep and Lambs</b>													
Sheep movement, primary market:													
Receipts.....thousands.....	1,876	1,543	1,526	2,010	2,169	1,591	1,952	+7.9	+11.1	8,437	9,124	+8.1	
Shipments, total.....thousands.....	837	683	699	954	1,073	778	994	+12.5	+7.9	3,911	4,246	+8.6	
Shipments, stocker and feeder.....thousands.....	188	115	122	211	217	133	205	+2.8	+5.9	650	853	+31.2	
Local slaughter.....thousands.....	1,040	839	835	1,049	1,101	814	951	+5.0	+15.8	4,518	4,864	+7.7	
Lamb and mutton:													
Production, inspected.....thous. of lbs.....	45,485	38,424	40,888	44,575	46,397	36,248	38,455	+4.1	+20.7	207,971	215,769	+3.7	
Apparent consumption.....thous. of lbs.....	47,139	39,908	41,330	46,183	46,700	38,149	40,135	+1.1	+16.4	212,819	221,260	+4.0	
Cold-storage holdings, end mo. thous. of lbs.....	4,009	3,252	3,109	3,253	2,458	1,828	1,276	-3.0	+92.6	-----	-----	-----	
Prices:													
Sheep, ewes, Chicago, dolls. per 100 lbs.....	8.39	7.72	8.42	9.18	5.91	8.90	7.31	-35.6	-19.2	-----	-----	-----	
Sheep, lambs, Chicago, dolls. per 100 lbs.....	15.59	15.59	16.19	16.45	12.78	15.98	15.19	-22.3	-15.9	-----	-----	-----	
<b>Miscellaneous Meats</b>													
Cold-storage holdings, end mo. thous. of lbs.....	88,678	91,363	90,129	88,314	82,099	70,438	64,846	-7.0	+26.6	-----	-----	-----	
<b>Total Meats</b>													
Production, inspected.....thous. of lbs.....	1,439,221	1,137,377	1,048,621	1,092,777	1,105,198	982,989	1,134,012	+1.1	-2.5	6,330,077	5,823,104	-8.0	
Cold-storage holdings, end mo. thous. of lbs.....	1,165,483	1,128,128	1,066,806	1,085,119	1,013,110	1,252,220	1,208,773	-6.6	-16.2	5,287,046	5,113,018	-3.3	
Apparent consumption.....thous. of lbs.....	1,106,629	916,444	982,762	1,020,718	1,086,465	947,384	1,099,532	+5.8	-1.2	-----	-----	-----	
<b>Poultry</b>													
Receipts at 5 markets.....thous. of lbs.....	30,969	20,672	17,116	16,846	21,440	16,006	17,862	+27.3	+20.0	102,207	107,043	+4.7	
Cold-storage holdings, end mo. thous. of lbs.....	102,380	89,088	68,728	52,901	41,825	56,832	43,872	-20.9	-4.7	-----	-----	-----	
<b>Fish</b>													
Total catch, prin. ports.....thous. of bbls.....	15,496	24,564	27,759	29,042	28,631	24,387	27,650	-1.4	+3.5	113,513	125,492	+10.6	
Cold-storage holdings, 15th of mo. thous. of lbs.....	62,375	48,347	37,707	31,360	30,119	26,473	26,513	-4.0	+13.6	-----	-----	-----	
Canned salmon:													
Shipments, United States.....cases.....	523,761	428,399	364,414	109,600	116,155	154,788	121,182	-1.1	+115.5	2,142,264	2,142,264	+42.5	
Exports, Canada.....cases.....	205,096	73,556	89,225	49,177	90,775	37,231	42,117	+84.6	+115.5	431,181	507,829	+17.8	
<b>Butter</b>													
Production (factory).....thous. of lbs.....	102,827	97,670	3112,378	126,664	226,180	113,111	148,173	+78.6	+52.6	570,929	704,869	+23.5	
Receipts, 5 markets.....thous. of lbs.....	44,925	41,557	46,186	48,707	63,259	44,721	54,427	+29.9	+16.2	228,307	244,634	+7.2	
Cold-storage holdings, creamery, end of month.....thous. of lbs.....	24,747	11,910	5,532	3,5,883	28,428	5,109	15,952	+383.2	+78.2	-----	-----	-----	
Apparent consumption.....thous. of lbs.....	157,457	143,208	3,157,670	170,745	203,760	163,257	205,973	+45	+19.3	-1.1	829,266	826,698	-0.3
Wholesale price, New York.....dolls. per lb.....	.48	.50	.48	.45	.45	.45	.45	-2.2	-2.2	-----	-----	-----	

\* Cumulative through Apr. 30.

\* Revised.

\* See table on p. 22 of the April, 1929, issue for earlier data.

## TREND OF BUSINESS MOVEMENTS—Continued

<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"</i>	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per ct. increase (+) or decrease (-) cumulatively 1929 from 1928	
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929		
<b>FOODSTUFFS—Continued</b>													
<b>Cheese</b>													
Total, all varieties:													
Production (factory) . . . . .	thous. of lbs.	21,510	20,796	23,562	31,105	41,083	47,883	51,773	+32.1	-20.6	194,064	138,056	-28.9
Receipts, 5 markets . . . . .	thous. of lbs.	13,781	13,878	12,261	12,331	16,751	15,138	16,254	+35.8	+3.1	74,172	69,002	-7.0
Apparent consumption . . . . .	thous. of lbs.	40,192	36,450	34,612	39,886	40,639	36,670	38,807	+1.9	+4.7	190,993	191,779	+0.4
Cold-storage holdings, end of month . . . . .	thous. of lbs.	74,016	63,968	58,153	54,618	61,041	41,791	48,990	+11.8	+24.6			
Imports . . . . .	thous. of lbs.	7,291	5,687	5,423	5,553	6,183	6,229	6,280	+11.3	-1.5	28,918	30,137	+4.2
Exports, United States . . . . .	thous. of lbs.	244	194	278	242	204	187	303	-15.7	-32.7	1,221	1,162	-4.8
Exports, Canada . . . . .	thous. of lbs.	1,500	714	726	804	1,692	668	4,860	+110.4	-65.2	10,011	5,436	-45.7
American whole milk:													
Cold-storage holdings, end of month . . . . .	thous. of lbs.	57,764	49,546	45,105	54,032	47,600	30,207	36,716	+13.2	+29.6			
Wholesale price, New York . . . . .	dolls. per lb.	.25	.24	.24	.24	.23	.24	.24	-4.2	-4.2			
Eggs													
Receipts, 5 markets . . . . .	thous. of cases	918	832	1,816	2,596	2,331	2,360	2,503	-10.2	-6.9	9,079	8,493	-6.5
Cold-storage holdings, end of month:													
Case . . . . .	thous. of cases	248	11	559	3,952	6,704	4,515	8,168	+69.6	-17.9			
Frozen . . . . .	thous. of lbs.	48,055	38,250	34,918	51,825	71,540	51,532	67,941	+38.0	+5.3			
Milk													
Condensed milk:													
Total stocks, mfrs., end mo.—													
Case goods . . . . .	thous. of lbs.	10,393	8,463	8,677	12,534	22,193	18,496	22,396	+77.1	-0.9			
Bulk goods . . . . .	thous. of lbs.	6,271	5,826	6,633	11,312	18,261	11,757	16,716	+61.4	+9.2			
Unsold stocks, mfrs., end mo.—													
Case goods . . . . .	thous. of lbs.	5,339	3,227	3,841	7,984	17,249	13,169	18,079	+116.0	-4.6			
Bulk goods . . . . .	thous. of lbs.	2,925	2,669	2,799	4,012	6,643	6,453	8,400	+65.6	-20.9			
Exports . . . . .	thous. of lbs.	3,432	3,486	4,510	3,643	2,899	2,700	3,279	-26.2	-18.0	17,150	17,760	+3.6
Wholesale price, New York . . . . .	dolls. per case	6.18	6.18	6.18	6.13	6.13	5.83	5.83	0.0	+5.1			
Evaporated milk:													
Manufacturers' stocks, end of mo.—													
Total, case goods . . . . .	thous. of lbs.	137,163	116,823	111,868	126,314	160,348	94,338	119,210	+26.9	+34.5			
Unsold, case goods . . . . .	thous. of lbs.	112,430	95,925	87,491	89,789	116,138	72,121	95,386	+29.3	+21.8			
Exports . . . . .	thous. of lbs.	6,021	6,606	7,768	5,963	5,917	6,421	7,806	-0.8	-24.2	37,860	32,275	-14.8
Wholesale price, New York . . . . .	dolls. per case	4.58	4.58	4.56	4.30	4.30	4.23	4.28	0.0	+0.5			
Production, condensed and evaporated milk . . . . .	thous. of lbs.	108,812	124,757	147,671	194,810	257,343	178,725	220,328	+32.1	+16.8	799,395	833,393	+4.3
Powdered milk:													
Manuftrs.' stocks, end mo . . . . .	thous. of lbs.	13,450	11,525	14,022	16,659	22,802	12,156	15,985	-17.5	+45.1	1,406	2,190	+55.8
Exports . . . . .	thous. of lbs.	372	488	454	396	303	273	273	-17.5	+45.1			
Net new orders . . . . .	thous. of lbs.	5,496	4,907	6,126	6,019	7,447	6,087	6,590	+23.7	+13.0	28,350	29,995	+5.8
Fluid milk:													
Receipts—													
Boston (includ. cream) . . . . .	thous. of qts.	16,631	15,560	18,443	18,002	19,381	17,697	17,914	+7.7	+8.2	87,241	88,017	+0.9
Greater New York . . . . .	thous. of qts.	111,129	102,039	116,025	110,419	109,613	117,558	117,558	-	-	437,949	439,612	+0.4
Production—													
Minneapolis, St. Paul . . . . .	thous. of lbs.	28,388	27,025	31,248	30,960	35,435	27,522	31,949	+14.5	+10.9	140,583	153,056	+8.9
Consumption in manufacture of oleomargarine . . . . .	thous. of lbs.	8,036	7,835	8,133	7,847	7,514	7,035	7,455	-4.2	+0.8	37,559	39,365	+4.8
Sugar													
Raw:													
Imports—													
From Hawaii, Porto Rico . . . . .	long tons	68,900	101,159	124,704	143,628	134,891	164,551	158,387	-6.1	-14.8	702,689	573,282	-18.4
From foreign countries . . . . .	long tons	255,768	444,157	601,227	605,003	458,193	448,326	271,492	-24.3	+68.8	1,710,020	2,364,838	+38.3
Meltings, 8 ports . . . . .	long tons	332,372	380,899	505,286	502,980	409,503	409,447	378,231	-18.6	+8.3	1,873,836	2,131,540	+13.8
Stocks at refineries, end month . . . . .	long tons	221,334	381,067	559,993	779,091	911,055	666,061	701,624	+16.9	+29.8			
Refined:													
Shipments, 2 ports . . . . .	long tons	50,026	63,778	73,231	87,466	73,898	60,571	58,371	-15.5	+26.6	277,945	348,396	+25.3
Stocks, 2 ports . . . . .	long tons	28,042	37,044	49,451	46,341	47,158	42,092	43,208	+1.8	+9.1	42,405	46,145	+8.8
Exports, including maple . . . . .	long tons	8,243	9,944	10,159	9,265	8,538	8,645	11,869	-7.8	-28.1			
Prices:													
Wholesale, 96° centrif., N. Y. . . . .	dolls. per lb.	.038	.037	.037	.037	.036	.045	.045	-2.7	-20.0			
Wholesale, granulated, N. Y. . . . .	dolls. per lb.	.050	.049	.048	.048	.049	.058	.059	+2.1	-16.9			
Retail, granulated, N. Y. . . . .	dolls. per lb.	.061	.060	.057	.056	.056	.064	.065	0.0	-13.8			
Retail, average, 51 cities . . . . .	relative to 1913 . . . . .	122	120	118	116	116	129	131	0.0	-11.5			
Cuban movement (raw):													
Receipts at Cuban ports . . . . .	long tons	638,996	950,318	1,061,472	809,807	440,821	586,747	237,507	-45.6	+85.6	2,975,013	3,910,414	+31.4
Exports . . . . .	long tons	237,350	468,615	659,501	583,906	510,217	447,097	287,561	-12.6	+77.4	1,857,677	2,459,589	+32.4
Stocks, end of month . . . . .	long tons	457,157	947,380	1,296,744	1,509,795	1,439,050	1,325,601	1,263,287	-4.7	+13.9			
Candy													
Sales by manufacturers . . . . .	thous. of dolls.	26,052	28,045	29,705	25,917	27,047							
Coffee													
Imports . . . . .	thous. of bags	1,033	1,035	1,052	988	860	935	839	-13.0	+2.5	5,031	4,968	-1.3
Visible supply:													
World . . . . .	thous. of bags	5,038	5,022	4,983	5,207	5,335	5,152	5,143	+2.5	+3.7			
United States . . . . .	thous. of bags	732	849	822	788	683	892	775	-13.3	-11.9			
Receipts, total, Brazil . . . . .	thous. of bags	1,139	1,126	1,175	1,141	1,079	1,203	1,158	-5.4	-6.8	5,949	5,660	-4.9
Clearances:													
Total, Brazil, for world . . . . .	thous. of bags	1,176	1,165	1,041	1,119	971	1,052	1,308	-13.2	-25.7	5,912	5,472	-7.4
Total, Brazil, for U. S. . . . .	thous. of bags	678	684	501	511	503	518	649	-1.6	-22.5	3,150	2,877	-8.7
Price, Rio No. 7, Brazil grades . . . . .	dolls. per lb.	.183	.184	.180	.176	.171	.154	.157	-2.8	+8.9			

2 Cumulative through Apr. 30.

Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929	
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"</i>												
<b>FOODSTUFFS—Continued</b>												
<b>Tea</b>												
Imports	10,073	6,802	5,470	5,418	4,760	4,209	4,755	-12.0	+0.3	30,878	32,532	+5.4
Stocks, United Kingd., end mo.	251,387	253,716	259,651	251,299	251,330	220,474	195,988	-----	-----	-----	-----	-----
Price, Formosa, fine, New York	.322	.330	.330	.330	.330	.325	.325	0.0	+1.5	-----	-----	-----
<b>Cocoa</b>												
Shipments from the Gold Coast and Nigeria, Africa	59,863	39,993	35,396	17,670	12,464	14,138	19,753	-29.5	-36.9	150,923	165,386	+9.6
Imports	15,753	28,236	25,041	29,182	15,394	16,750	18,604	-47.2	-17.3	86,802	113,606	+30.7
Spot price, Accra, New York	.1038	.1083	.1088	.1044	.1031	.1475	.1500	-1.2	-31.3	-----	-----	-----
<b>TOBACCO</b>												
Consumption (tax-paid withdrawals):												
Large cigars	427,716	437,476	491,305	550,912	572,413	450,022	541,501	+3.9	+5.7	2,365,564	2,479,822	+4.8
Small cigarettes	10,160,263	8,062,499	8,689,510	9,608,221	11,168,407	7,511,408	8,891,803	+16.2	+25.6	40,774,678	47,688,900	+17.0
Manufac. tobacco and snuff	33,160	29,083	31,663	31,950	33,360	30,602	33,042	+4.4	+1.0	162,538	159,216	-2.0
Exports:												
Unmanufactured	45,804	48,703	30,673	39,634	32,753	42,007	39,681	-17.4	-17.5	213,208	197,567	-7.3
Cigarettes	1,010,368	926,297	799,935	805,777	703,045	1,147,089	781,118	-12.7	-10.0	4,592,243	4,245,422	-7.6
Sales of loose-leaf, warehouses	174,751	80,574	25,726	3,245	441	587	154	-86.4	+186.4	205,771	284,737	+38.4
Price, leaf, Kentucky	.dollars per 100 lbs.		22,270	11,783	11,602	12,735	11,643	-0.8	+0.4	-----	-----	-----
<b>TRANSPORTATION</b>												
<b>River and Canal Cargo Traffic</b>												
Panama Canal:												
Total cargo traffic	2,859	2,550	2,744	2,720	2,537	2,474	2,490	-6.7	+1.9	12,425	13,410	+7.9
In American vessels	1,218	1,138	1,229	1,194	1,206	1,154	1,162	+1.0	+3.8	5,557	5,985	+7.7
In British vessels	806	816	755	735	667	716	726	-9.3	-8.1	3,694	3,779	+2.3
Sault Ste. Marie canals												
New York State canals												
Total	4,406	13,930	60	393	24	409	498	+216.2	+49.8	9,298	533	+108.0
Cape Cod Canal	141,496	137,634	146,483	166,205	201,444	105,857	110,136	+21.2	+82.9	415,357	793,262	+91.0
Suez Canal	2,990	2,682	2,991	2,701	2,991	2,991	2,701	-----	-----	1,049,953	1,074,806	+2.4
Welland Canal												
St. Lawrence Canal												
Total	299,020	775,786	52,469	997,484	997,484	1,049,953	1,074,806	+159.4	+22.2	1,049,953	1,074,806	+2.4
Mississippi River Govt. barges												
Total	131,918	109,419	104,499	134,173	123,000	112,960	117,929	-8.7	-4.3	506,273	480,583	-15.1
Ohio River, Pittsburgh, Pa., to Wheeling, W. Va.												
Total	478,265	525,700	840,604	976,992	1,070,125	772,624	954,357	+9.5	+12.1	3,581,452	3,891,686	+8.7
Allegheny River	88,940	80,683	187,400	232,204	328,289	238,910	344,578	+41.4	-4.7	864,278	917,516	+6.2
Monongahela River	2,287,541	1,960,686	2,382,405	2,438,939	2,450,876	1,764,311	2,215,732	+0.5	+10.6	10,467,413	11,520,447	+10.1
<b>Ocean Traffic</b>												
Clearances, vessels in foreign trade:												
Total	5,484	5,308	5,933	6,661	7,277	5,537	5,996	+9.2	+21.4	27,312	30,663	+12.3
American	1,950	1,909	2,145	2,738	2,851	2,090	2,837	+4.1	+0.5	10,564	11,593	+9.7
Foreign	3,534	3,399	3,788	3,924	4,425	3,447	3,159	+12.8	+40.1	16,748	19,070	+13.9
<b>Shipbuilding</b>												
Completed during month:												
Total	7,413	3,323	11,128	20,668	9,775	9,880	18,428	-52.7	-47.0	71,379	52,307	-26.7
Steel seagoing	3,392	1,335	3,919	9,468	3,804	1,488	12,604	-59.8	-69.8	38,105	21,918	-42.5
Building or under contract, end of month:												
Merchant vessels	126	168	187	290	268	252	259	-7.6	+3.5	-----	-----	-----
<b>Freight Cars</b>												
Surplus (daily av. last week of month):												
Total	278,213	217,400	279,107	220,821	222,626	320,762	304,152	+0.8	-26.8	-----	-----	-----
Box	136,959	98,986	95,429	89,952	109,924	134,069	143,264	+22.2	-23.3	-----	-----	-----
Coal	92,243	72,613	136,452	87,367	64,156	140,091	108,833	-26.6	-41.1	-----	-----	-----
Shortage (daily av. last week of month):												
Total	79	76	40	19	18	None.	None.	-5.3	-----	-----	-----	-----
Box	None.	None.	40	None.	None.	None.	None.	-----	-----	-----	-----	-----
Coal	11	6	None.	18	None.	None.	None.	0.0	0.0	-----	-----	-----
Car loadings:												
Total	3,570,978	3,767,758	4,807,944	3,983,978	4,205,709	3,740,307	4,05,155	+5.6	+5.0	19,537,658	20,336,367	+4.1
Grain and grain products	181,968	188,645	212,988	143,743	152,544	159,136	163,104	+6.1	-6.5	934,914	879,888	-5.9
Livestock	117,998	105,684	121,105	106,894	105,838	105,377	106,669	-1.0	-0.8	613,100	557,519	-9.1
Coal and coke	857,547	901,232	857,217	643,238	690,020	621,002	670,903	+7.3	+2.8	3,640,323	3,949,254	+8.5
Forest products	218,647	241,036	335,479	278,814	277,316	257,323	269,569	-0.5	+2.9	1,374,771	1,351,292	-1.7
Ore	35,671	36,973	57,113	110,678	283,805	41,053	165,196	+156.4	+71.8	314,257	524,240	+66.8
Merchandise and l. c. i.	915,552	969,391	1,305,042	1,060,943	1,053,688	1,041,534	1,046,248	-0.7	+0.7	5,289,129	5,304,616	+0.3
Miscellaneous	1,243,595	1,324,797	1,919,000	1,639,668	1,642,498	1,514,882	1,583,466	+0.2	+3.7	7,371,164	7,769,558	+5.4
<b>Railroad Operations</b>												
Operating revenue:												
Freight	366,838	362,957	393,368	393,058	391,116	356,573	391,116	-----	-----	-----	-----	-----
Passenger	74,987	68,247	71,879	67,509	70,302	71,071	70,302	-----	-----	-----	-----	-----
Total operating	457,027	475,112	516,973	513,955	510,714	475,064	510,714	-----	-----	-----	-----	-----
Operating expenses	369,340	349,684	377,279	376,494	381,836	363,888	381,836	-----	-----	-----	-----	-----
Net operating income	77,262	84,769	97,466	94,204	93,183	70,619	88,183	-----	-----	-----	-----	-----
Freight carried	39,104	38,129	40,213	38,334	39,250	35,887	39,250	-----	-----	-----	-----	-----

\* Revised.

\* Tea duty repealed Apr. 22, 1929.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928		
	January	February	March	April	May	April	May		May, 1929, from April, 1929	May, 1929, from May, 1928			
									1928	1929			
<b>TRANSPORTATION—Continued</b>													
<b>Railway Equipment:</b>													
<i>Locomotive (Am. Ry. Assn.):</i>													
Owned, end of month—													
Quantity.....	number.	58,608	58,508	58,322	58,144	58,052	60,373	60,284	-0.2	-3.7			
Tractive power.....	mills. of lbs.	2,559	2,557	2,553	2,550	2,549	2,595	2,595	-0.1	-1.8			
In bad order, end of month—													
Quantity.....	number.	8,161	8,383	8,042	8,057	7,803	8,563	8,421	-3.2	-7.3			
Per cent of total in use.....	per cent.	14.0	14.4	13.9	14.0	13.4	14.3	14.1	-4.3	-5.0			
Installed.....	number.	111	114	121	130	177	96	139	+36.2	+27.3	670 653 -2.5		
Retired.....	number.	236	214	307	308	269	194	228	-12.7	+18.0	1,170 1,334 +14.0		
New orders.....	number.	28	68	142	58	50	33	52	-13.8	-3.8	132 346 +162.1		
Shipments, manufacturers' (Census)—													
Total.....	number.	23	23	35	61	99	46	41	+62.3	+141.5	263 241 -8.4		
Steam, domestic.....	number.	6	20	31	57	92	38	29	+61.4	+217.2	176 206 +17.0		
Electric, domestic.....	number.	6	1	4	2	2	6	10	0.0	-80.0	65 15 -76.9		
Unfilled orders (railroads), end of mo.—													
From manufacturers.....	number.	236	253	326	308	265	112	83	-14.0	+219.3			
In railroad shops.....	number.	42	38	46	38	59	25	30	+55.3	+96.7			
Unfilled orders, manufacturers' (Census)—													
Total.....	number.	278	339	488	495	444	188	220	-10.3	+101.8			
Steam, domestic.....	number.	251	301	419	419	362	129	138	-13.6	+162.3			
Electric, domestic.....	number.	21	20	24	24	22	41	39	-8.3	-43.6			
Exports, steam.....	number.	18	13	22	10	14	16	5	+40.0	+180.0	66 77 +16.7		
Freight cars (Am. Ry. Assn.):													
Owned, end of month—													
Quantity.....	cars.	2,275,211	2,271,259	2,267,884	2,266,621	2,267,472	2,301,602	2,300,241	0.0	-1.4			
Capacity.....	mills. of lbs.	209,014	208,718	208,507	208,569	208,849	210,234	210,240	+0.1	-0.7			
In bad order, end of month—													
Quantity.....	cars.	136,319	144,620	139,538	142,543	144,634	149,869	151,359	+1.5	-4.4			
Per cent of total in use.....	per cent.	6.2	6.6	6.3	6.5	6.5	6.7	6.7	0.0	-3.0			
New orders.....	cars.	12,452	14,303	11,068	8,983	8,364	5,683	2,354	+19.8	+255.3	20,040 53,260 +165.8		
Shipments—													
Total.....	cars.	1,814	1,152	3,599	5,510	8,459	4,567	5,908	+53.5	+43.2	15,025 20,534 +36.7		
Domestic.....	cars.	525	887	3,589	5,300	8,350	4,324	5,854	+57.5	+42.6	14,479 18,651 +28.8		
Unfilled orders (railroads)—													
Total.....	cars.	28,121	40,539	41,197	43,486	39,843	19,325	17,847	-8.4	+123.2			
From manufacturers.....	cars.	24,109	35,891	35,360	36,674	33,588	17,589	14,168	-8.4	+137.1			
In railroad shops.....	cars.	4,012	4,648	5,837	6,812	6,255	1,736	3,679	-8.2	+70.0			
Passenger cars:													
New orders.....	cars.	228	21	53	250	131	142	153	-47.6	-14.4	1,037 683 -34.1		
Shipments—													
Total.....	cars.	111	90	87	86	48	51	23	-44.2	+108.7	306 422 +37.9		
Domestic.....	cars.	109	90	87	78	44	34	18	-43.6	+144.4	242 408 +68.6		
<b>Passenger Travel</b>													
<i>National parks:</i>													
Visitors.....	number.	46,242	43,505	72,377	64,807	102,207	71,679	125,102	+57.7	-18.3	363,054 329,138 -9.3		
Automobiles entered.....	number.	7,473	10,835	8,498	10,460	21,190	12,426	23,341	+102.6	-9.2	52,298 58,456 +11.8		
<i>Arrivals from abroad:</i>													
Immigrants.....	number.	17,806	17,254	20,145	28,565	30,709	26,158	-----	-----	96,013	83,770 -12.8		
United States citizens.....	number.	23,450	33,216	37,375	32,288	32,586	28,407	-----	-----	118,653	126,329 +6.5		
<i>Departures abroad:</i>													
Emmigrants.....	number.	4,670	4,154	2,449	3,387	-----	4,515	6,240	-----	19,477	14,660 -24.7		
United States citizens.....	number.	28,808	32,347	27,972	25,277	-----	29,506	34,903	-----	120,864	114,404 -5.3		
Passports issued.....	number.	9,513	8,888	17,066	29,995	38,175	27,098	37,648	+27.3	+1.4	99,947 103,637 +3.7		
<i>Pullman company operations:</i>													
Revenue.....	thous. of dollars.	7,033	6,417	6,627	6,404	-----	6,515	6,313	-----	26,002	26,481 +1.8		
Passengers carried.....	thousands.	2,836	2,555	2,726	2,582	-----	2,713	2,614	-----	10,787	10,699 -0.8		
<i>Trend of business in hotels:</i>													
Room occupancy.....	per ct. of capacity.	73	72	69	75	71	73	69	-5.3	+2.9			
Average sale per occupied room.....	dollars.	4.12	4.13	3.98	4.09	3.88	4.05	3.84	-5.1	+1.0			
<b>Warehouses</b>													
Public merchandise warehouses, space occupied.....	per ct. of total.	67.7	68.3	* 69.9	71.9	-----	69.8	68.6	-----	-----			
<b>PUBLIC UTILITIES</b>													
<i>Telephone companies:</i>													
Operating revenue.....	thous. of dollars.	74,788	71,034	74,899	74,830	-----	67,337	69,277	-----	266,050	295,551 +11.1		
Operating income.....	thous. of dollars.	19,821	17,716	17,825	17,776	-----	17,386	17,448	-----	67,152	73,138 +8.9		
<i>Telegraph companies:</i>													
Commercial telegraph tolls, thous. of dollars.		11,180	10,265	11,864	11,328	-----	10,569	11,333	-----	41,214	44,637 +8.3		
Operating revenues.....	thous. of dollars.	14,133	13,060	14,911	14,344	-----	13,205	14,162	-----	51,446	56,448 +9.7		
Operating income.....	thous. of dollars.	1,658	1,396	1,951	1,700	-----	1,805	2,258	-----	6,179	6,705 +8.5		
<i>Gas and electric companies:</i>													
Gross earnings.....	thous. of dollars.	203,000	194,000	195,000	190,000	-----	181,144	180,255	-----	752,828	782,000 +3.9		
Net earnings.....	thous. of dollars.	92,000	86,000	85,000	83,000	-----	68,971	67,733	-----	295,092	346,000 +17.3		
<i>Electric railways (212 companies):</i>													
Passengers carried.....	thous. of persons.	799,843	741,023	820,405	774,517	792,894	771,818	797,279	+2.4	-0.5	3,973,974		
Average fare.....	cents.	8.194	8.198	8.202	8.202	-----	8.041	8.057	-----	1,973	1,577 -20.1		
<b>ELECTRIC POWER</b>													
<i>Electric power production:</i>													
United States—													
Total.....	mills. of kw. hours.	8,241	* 7,429	* 7,984	7,874	-----	6,853	7,130	-----	28,235	31,528 +11.7		
By water power.....	mills. of kw. hours.	2,698	* 2,442	* 3,146	3,280	-----	2,949	3,187	-----	11,133	11,566 +3.9		
By fuels.....	mills. of kw. hours.	5,543	* 4,987	* 4,838	4,594	-----	3,904	3,943	-----	17,103	19,962 +16.7		
In street railways, manfg. plants, etc.....	mills. of kw. hours.	437	383	382	375	-----	428	408	-----	1,973	1,577 -20.1		
In central stations.....	mills. of kw. hours.	7,804	* 7,046	* 7,602	7,499	-----	6,425	6,722	-----	26,262	29,951 +14.0		

\* Cumulative through Apr. 30.

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per ct. increase (+) or decrease (-) cumul. 1929 from 1928
	January	February	March	April	May	April	May		May, 1929, from April, 1929	May, 1929, from May, 1928	
<b>ELECTRIC POWER—Continued</b>											
Electric power production—Continued											
Canada—											
Total mills. of kw. hours—	1,507	1,346	1,471	1,409		1,272	1,281				
By water power mills. of kw. hours—	1,478	1,315	1,441	1,379		1,255	1,265				
Exported mills. of kw. hours—	114	111	127	111		122	135				
Electric power, gross revenue thousand of dollars—	\$184,200	\$174,300	\$167,700	167,900		153,800	150,300				
Consumption of electrical power:											
By geographic divisions—											
United States rel. to 1923-25—	132.5	140.4	135.7	136.4	136.9	119.3	119.0	+0.4	+15.0		
New England rel. to 1923-25—	127.6	132.8	130.8	125.4	123.3	113.8	109.1	-1.7	+13.0		
North Central rel. to 1923-25—	138.8	149.5	141.9	146.5	148.9	129.0	127.2	+1.6	+17.1		
Middle Atlantic rel. to 1923-25—	126.7	130.7	130.5	128.0	130.4	112.0	112.9	+1.9	+15.5		
Southern rel. to 1923-25—	120.5	137.7	125.4	126.3	128.1	115.2	110.6	+1.4	+15.8		
Western rel. to 1923-25—	131.9	140.8	138.2	137.0	144.7	117.8	112.9	+5.6	+28.2		
By industry—											
All industry rel. to 1923-25—	132.5	140.4	135.7	136.4	136.9	119.3	119.0	+0.4	+15.0		
Chemicals and allied products rel. to 1923-25—	129.2	138.7	133.0	131.7	129.2	131.7	126.3	-1.9	+2.3		
Food and kindred products rel. to 1923-25—	128.0	127.5	122.2	121.2	122.6	105.9	103.9	+1.2	+18.0		
Rolling mills and steel plants rel. to 1923-25—	153.5	163.3	160.3	153.3	172.2	125.4	125.0	+12.3	+37.8		
Metal working plants rel. to 1923-25—	135.8	153.7	151.4	148.3	144.2	121.7	122.7	-2.8	+17.5		
Metal groups rel. to 1923-25—	142.6	157.3	154.9	149.9	154.8	123.2	123.6	+3.3	+25.2		
Leather and its products rel. to 1923-25—	94.3	102.1	93.4	82.0	95.2	98.8	98.1	+16.1	-3.0		
Lumber and its products rel. to 1923-25—	107.4	107.6	104.2	108.0	111.1	115.4	110.8	+2.9	+0.2		
Paper and pulp rel. to 1923-25—	126.2	125.2	129.2	136.0	129.9	120.5	136.4	-4.5	-4.8		
Rubber and its products rel. to 1923-25—	148.2	154.7	155.8	155.7	157.6	121.7	128.5	+1.2	+22.6		
Shipbuilding rel. to 1923-25—	108.2	95.5	99.7	116.1	135.2	93.3	84.0	+16.5	+61.0		
Stone, clay and glass rel. to 1923-25—	137.4	148.7	138.0	145.0	145.3	133.6	129.3	-1.0	+11.0		
Textiles rel. to 1923-25—	120.4	133.0	126.6	128.1	129.9	109.8	105.7	+1.4	+22.9		
Automobiles, including repair parts rel. to 1923-25—	149.4	161.5	154.9	170.6	161.8	148.7	141.6	-5.2	+14.3		
<b>EMPLOYMENT AND WAGES</b>											
Employment in factories:											
Massachusetts rel. to 1919-23—	78.1	79.4	79.9	79.0	78.8	80.4	75.4	-0.3	+0.3		
New York State rel. to 1923—	84.8	87.1	88.7	88.3	87.5	82.9	82.0	-0.9	+6.7		
New Jersey rel. to 1923—	97	98	99	100	101	90	90	+1.0	+12.2		
Pennsylvania rel. to 1923—	81	84	84	85	85	80	80	0.0	+6.3		
Delaware rel. to 1923—	75	77	76	79	79	74	75	0.0	+5.3		
Iowa rel. to 1923—	121.8	124.4	125.2	127.4	127.6	120.5	121.5	+0.2	+5.0		
Maryland rel. to 1924—	85.7	88.9	90.9	91.8	91.6	88.5	87.8	-0.2	+4.3		
Illinois rel. to 1923—	87.2	89.1	90.9	91.5	92.1	82.6	83.2	+0.7	+10.7		
Wisconsin rel. to 1923—	94.2	97.2	98.5	99.2	99.1	91.8	91.8	-0.1	+8.0		
Ohio rel. to 1923—	108	112	113	115	115	104	104	0.0	+10.6		
Cleveland rel. to Jan., 1921—	117.9	123.6	123.4	123.1	124.0	110.5	111.1	+0.7	+11.6		
Milwaukee number—	40,707	42,143	43,226	43,891	44,067	36,871	36,777	+0.4	+19.8		
New York State number—	469,125	482,252	490,879	488,390	484,464	458,640	453,633	-0.8	+6.8		
Oklahoma number—	32,618	32,207	32,471	34,809	34,686	26,205	26,553	-0.4	+30.6		
Total pay roll:											
New York State (weekly) thou. of dolls—	13,938	14,465	14,897	14,687	14,549	13,200	13,241	-0.9	+9.9		
Oklahoma (weekly) thou. of dolls—	884	881	871	908	1,039	709	702	+14.4	+48.0		
Wisconsin rel. to 1923—	96.1	110.0	110.7	111.5	110.1	97.6	99.9	-1.3	+10.2		
New York State rel. to 1923—	92.5	96.0	98.8	97.4	96.5	87.6	87.8	-0.9	+9.9		
New Jersey rel. to 1923—	108	111	112	113	114	96	98	+0.9	+16.3		
Pennsylvania rel. to 1923—	82	90	91	92	94	80	83	+2.3	+13.3		
Delaware rel. to 1923—	79	83	83	86	88	75	79	+2.3	+11.4		
Employment, Canada rel. to calendar year 1928—	109.1	110.5	111.4	110.4	116.2	102.3	106.8	+5.3	+8.8		
Ohio, construction rel. to 1923—	89.3	88.1	95.9	*107.8	122.5	103.2	115.6	+13.6	+6.0		
Employment, trade-unions:											
United States per cent of total—	85.0	85.0	86.0	88.0	89.0	84.0	87.0	+1.1	+2.3		
Canada per cent of total—	93.7	93.2	94.0	94.5		94.8	96.3				
Anthracite mines: *											
Employment rel. to 1923-25—	109.8	109.4	101.3	104.1	107.2	116.3	114.0	+3.0	-6.0		
Pay roll rel. to 1923-25—	112.6	107.0	79.5	77.4	85.4	116.8	97.6	+10.3	-12.5		
Federal civilian employees, Washington, D. C., end month number—	62,257	62,388	62,926	63,507	63,841	61,311	61,422	+0.5	+3.9		
Average weekly earnings, factories:											
Illinois dolls—	28.72	28.42	28.92			28.28	28.82				
New York State dolls—	29.71	29.99	30.35	30.07	30.03	28.78	29.19	-0.1	+2.9		
Wisconsin dolls—	24.45	27.15	26.95	26.94	26.64	25.49	24.07	-1.1	+10.7		
Oklahoma dolls—	27.09	27.36	26.81	26.08	29.95	27.04	26.44	+14.8	+13.3		
Massachusetts rel. to 1914—	225.8	231.7	233.8	232.6	232.4	230.4	232.9	-0.1	-0.2		
New York rel. to 1914—	238.1	240.3	243.2	240.9	240.6	230.6	233.9	-0.1	+2.9		
New Jersey rel. to 1923—	112	114	114	114	114	108	110	0.0	+3.6		
Pennsylvania rel. to 1923—	102	108	109	109	110	99	103	0.9	+6.8		
Delaware rel. to 1923—	104	106	108	107	111	99	104	+3.7	+6.7		
Illinois rel. to 1923—	106.1	105.0	106.8			104.5	106.5				
Wisconsin rel. to 1923—	102.0	113.3	112.4	112.4	109.4	106.3	108.8	-2.7	+0.6		
Average weekly earnings (National Industrial Conference Board):											
Grand total (both sexes) dollars—	27.78	28.93	28.88	28.91		27.19	27.23				
Total male dollars—	30.51	31.63	31.68	31.61		30.25	30.07				
Skilled male dollars—	31.97	33.08	33.15	33.09		31.82	31.44				
Unskilled male dollars—	25.07	26.08	26.03	25.91		24.47	24.98				
Total women dollars—	17.16	17.82	17.76	17.85		16.69	16.87				
Average weekly hours:											
Nominal (both sexes) hours—	49.7	49.7	49.8	49.8		49.3	49.4				
Actual (both sexes) hours—	48.5	49.5	49.5	49.6		47.4	47.8				

\* See tables on p. 22 of the April, 1929, issue for earlier data.  
† Cumulative through Apr. 30

\* See table on p. 18 of the June, 1929, issue for earlier data.  
† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928	
	January	Febr-	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929		
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"</i>													
<b>EMPLOYMENT AND WAGES—Con.</b>													
Wages, road labor, by districts:													
New England.....cents per hour..	52	49	51	51	50	50	49	-2.0	+2.0				
Middle Atlantic.....cents per hour..	45	49	44	42	42	46	42	0.0	0.0				
South Atlantic.....cents per hour..	23	22	23	27	30	23	28	+11.1	+7.1				
East South Central.....cents per hour..	26	27	27	27	26	26	27	-3.7	-3.7				
West South Central.....cents per hour..	31	30	33	31	31	27	29	0.0	+6.9				
East North Central.....cents per hour..	45	46	42	38	40	41	38	+5.3	+5.3				
West North Central.....cents per hour..	38	42	37	37	37	36	37	0.0	0.0				
Mountain.....cents per hour..	44	42	43	44	45	46	49	+2.3	-8.2				
Pacific.....cents per hour..	52	52	52	53	53	53	51	0.0	6+7				
United States, average.....cents per hour..	36	37	37	38	40	40	40	+5.3	0.0				
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..	125.5	125.5	125.5	125.5	125.5	125.5	125.5	0.0	0.0				
Applicants per 100 jobs, employment agencies:													
United States.....number..	156	153	142	128	126	137	128	-1.6	-1.6				
Eastern States.....number..	154	152	144	126	126	146	138	0.0	-8.7				
Central States.....number..	164	164	153	134	126	147	135	-6.0	-6.7				
Southern States.....number..	283	267	215	200	198	219	204	-1.0	-3.9				
Western States.....number..	80	81	76	73	93	69	66	+27.4	+40.9				
Illinois*.....number..	182	169	156	134	155	146							
Wisconsin*.....number..	138	142	138	117	131	110							
Canada.....number..	154	146	133		120	114							
<b>Factory Labor Turnover</b>													
(Percentage of number on pay roll)													
Departures:													
Total.....per cent (annual basis)..	36.2	41.7	49.2	55.7	53.3	37.9	42.1	-4.3	+26.6				
Voluntary quits.....per cent (annual basis)..	26.7	31.0	36.8	43.3	41.6	25.4	28.7	-3.9	+44.9				
Lay offs.....per cent (annual basis)..	4.2	4.7	5.7	5.5	5.7	7.5	8.4	+3.6	-32.1				
Discharges.....per cent (annual basis)..	5.3	6.0	6.7	6.9	6.0	5.0	5.0	-13.0	+20.1				
Accessions.....per cent (annual basis)..	58.6	56.9	61.2	70.2	65.2	41.3	47.2	-7.1	+38.1				
Industrial disputes:													
Disputes.....number..	34	34	40	61		48	56						
Workers involved.....number..	39,484	340,385	340,415	51,865		129,708	133,546						
Man-days lost in month.....number..	949,692	921,583	1,078,485	1,385,796		3,406,232	3,455,499						
<b>DISTRIBUTION MOVEMENT</b>													
<b>Retail Sales</b>													
Mail-order houses:													
Total sales, 2 houses.....thous. of dolls..	47,400	46,396	53,413	55,619	55,006	40,100	40,074	-1.1	+37.3	197,818	257,834	+30.3	
Sears, Roebuck & Co.....thous. of dolls..	29,271	27,741	30,796	34,046	35,126	24,159	24,203	+3.2	+45.1	120,430	156,980	+30.3	
Montgomery Ward & Co.....thous. of dolls..	18,129	18,655	22,617	21,573	19,880	15,941	15,871	-7.8	+25.3	77,388	100,854	+30.3	
Ten-cent chain stores:													
Total sales (4 chains).....thous. of dolls..	33,511	36,351	46,138	41,652	49,202	39,763	32,233	+18.1	+16.5	189,696	206,854	+9.0	
Total stores operated (4 chains).....number..	2,639	2,681	2,695	2,711	2,728	2,476	2,488	+0.6	+9.6				
F. W. Woolworth & Co.....thous. of dolls..	17,658	19,374	24,528	22,061	28,578	21,936	32,998	+29.5	+24.3	102,874	112,199	+9.1	
Stores operated.....number..	1,728	1,742	1,750	1,759	1,767	1,624	1,634	+0.5	+8.1				
S. S. Kresge Co.....thous. of dolls..	9,019	9,774	12,567	11,368	12,345	10,784	11,340	+8.6	+8.9	50,957	55,073	+8.1	
Stores operated.....number..	509	515	517	523	531	445	449	+1.5	+18.3				
McCrory Stores Corp.....thous. of dolls..	2,691	2,845	3,735	3,160	3,263	3,059	3,972	+3.3	+9.8	14,392	15,694	+9.0	
Stores operated.....number..	229	231	234	235	236	222	221	+0.4	+6.8				
S. H. Kress & Co.....thous. of dolls..	4,143	4,358	5,308	5,063	5,016	4,984	4,923	-0.9	+1.9	22,473	23,888	+6.3	
Stores operated.....number..	193	193	194	194	194	185	184	0.0	+5.4				
Metropolitan.....thous. of dolls..	798	883	1,138	1,141	1,360	918	971	+19.2	+40.1	4,245	5,320	+25.3	
Stores operated.....number..	109	109	111	112	117	93	93	+4.5	+25.8				
F. & W. Grand.....thous. of dolls..	1,096	1,175	1,712	1,588	1,688	1,172	1,533	+6.3	+46.4	5,154	7,259	+40.8	
Stores operated.....number..	83	83	83	86	88	65	66	+2.3	+33.3				
W. T. Grant Co.....thous. of dolls..	3,328	3,516	5,141	4,421	5,089	3,656	4,096	+15.1	+24.2	16,925	21,495	+27.0	
Stores operated.....number..	218	221	222	226	227	172	175	+0.4	+29.7				
Restaurant chains:													
Total sales (3 chains).....thous. of dolls..	4,707	4,470	5,027	4,944	5,024	4,561	4,629	+1.6	+8.5	23,295	24,172	+3.8	
Childs Co., sales.....thous. of dolls..	2,184	2,095	2,355	2,247	2,261	2,171	2,132	+0.6	+6.1	11,123	11,142	+0.2	
J. R. Thompson Co., sales.....thous. of dolls..	1,224	1,147	1,284	1,359	1,403	1,207	1,256	+3.2	+11.7	6,107	6,417	+5.1	
Waldorf System (Inc.), sales.....thous. of dolls..	1,299	1,228	1,388	1,338	1,361	1,183	1,241	+1.7	+9.7	6,072	6,614	+8.9	
Other chain stores:													
Isaac Silver & Bros.....thous. of dolls..	365	441	615	566	566	466	469	0.0	+20.7	2,115	2,553	+20.7	
Stores operated.....number..	31	32	32	36	37	23	23	+2.8	+60.9				
J. C. Penny Co.....thous. of dolls..	8,621	9,028	15,381	14,406	16,090	12,994	14,831	+11.7	+8.5	57,625	63,526	+10.2	
Stores operated.....number..	1,023	1,026	1,082	1,105	1,109	946	953	+0.4	+16.4				
G. C. Murphy Co.....thous. of dolls..	814	910	1,199	1,112	1,192	930	896	+7.2	+33.0	3,885	5,227	+34.5	
Stores operated.....number..	140	139	140	142	143	111	115	+0.7	+24.3				
Installment sales in New England dept. stores; ratio to total sales.....per cent..	10.4	10.2	7.1	6.3		4.8	5.0						
<b>Advertising</b>													
Magazine advertising.....thous. of lines..	2,093	2,454	2,877	3,282	3,120	3,107	2,918	-4.9	+6.9				
Magazine advertising, total cost.....thous. of dolls*..	12,220	15,706	17,438	20,445	19,310	19,454	18,414	-5.6	+4.9	81,316	85,119	+4.7	
Newspaper advertising.....thous. of lines..	97,443	90,261	112,033	108,401	113,242	106,428	105,114	+4.5	+7.7	498,051	521,380	+4.7	
Radio broadcast*.....Cost of facilities.....thous. of dolls..	1,258	1,372	1,610	1,550	1,563	773	776	+0.8	+101.4	3,813	7,353	+92.8	
National advertising in newspapers:													
Total.....thous. of lines..	52,326	13,731	56,133	55,868	61,548	49,965	49,810	+10.2	+23.6	205,106	239,606	+16.8	
Passenger cars.....thous. of lines..	9,751	1,639	9,228	9,779	8,757	8,193	6,770	-10.5	+29.4	34,531	39,204	+13.5	
Tires, trucks, and accessories.....thous. of lines..	4,229	733	3,781	5,288	7,397	4,712	5,443	+39.9	+35.9	16,299	21,428	+31.5	
Financial.....thous. of lines..	9,736	2,357	8,011	7,653	8,176	6,843	7,130	+6.8	+14.7	31,925	35,933	+12.6	
Building materials.....thous. of lines..	284	83	600	1,261	1,148	944	964	-9.0	+19.1	2,895	3,376	+16.6	

\* Revised.

\* See tables on p. 18 of the June, 1929, issue for earlier data.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928	1928	1929	
<b>DISTRIBUTION MOVEMENT—Con.</b>												
Advertising—Continued												
National advertising in newspapers—Con.												
Electrical appliances												
supplies—thous. of lines	462	220	1,466	1,495	1,553	1,301	1,236	+3.9	+25.6	3,890	5,196	+33.6
Foods and beverages—thous. of lines	4,021	1,454	7,185	7,556	8,837	7,108	7,851	+17.0	+12.6	26,410	29,053	+10.0
Heating and plumbing												
equipment—thous. of lines	413	135	579	649	650	580	600	+0.2	+8.3	1,886	2,426	+28.6
Medical—thous. of lines	7,996	1,581	6,557	4,266	3,810	3,828	3,392	-10.7	+12.3	21,035	24,210	+14.6
Radio—thous. of lines	2,430	701	2,176	1,390	2,148	637	599	+54.5	+25.6	4,467	8,845	+98.0
Tobacco—thous. of lines	2,709	1,178	3,885	3,161	5,171	3,826	2,580	+63.6	+100.4	15,130	16,104	+6.4
Toilet requisites—thous. of lines	2,705	914	3,574	3,333	2,936	3,323	2,968	-11.9	-1.1	12,229	13,462	+10.1
Transportation—thous. of lines	2,291	526	2,307	2,960	4,263	2,578	3,630	+44.0	+17.4	10,800	12,347	+14.3
All other—thous. of lines	5,300	2,160	6,783	7,078	6,704	6,092	6,646	-5.3	+0.9	23,609	28,025	+18.7
<b>Postal Business</b>												
Postal receipts:												
50 selected cities—thous. of dolls	31,615	29,993	34,375	32,352	32,446	30,758	31,589	+0.3	+2.7	157,753	160,781	+1.9
50 industrial cities—thous. of dolls	3,466	3,326	3,537	3,454	3,339	3,348	3,276	-3.3	+1.9	17,214	17,122	-0.5
Money orders:												
Domestic issued (50 cities)—												
Quantity—thousands	3,626	3,480	3,959	3,851	3,704	3,417	3,461	-3.8	+7.0	17,398	18,620	+7.0
Value—thous. of dolls	36,025	34,621	38,840	38,188	38,037	33,967	35,277	-0.4	+7.8	173,177	185,711	+7.2
Domestic paid (50 cities)—												
Quantity—thousands	10,967	10,377	12,624	11,825	11,691	10,941	11,014	-1.1	+6.1	55,424	57,484	+3.7
Value—thous. of dolls	83,154	77,387	93,937	90,423	90,343	84,068	86,110	-0.1	+4.9	420,035	435,244	+3.6
Air mail, weight dispatched—pounds	488,709	433,941	523,414	508,672	508,672	171,028	199,409	-----	-----	2,642,609	2,195,736	+204.2
<b>BANKING AND FINANCE</b>												
Life Insurance †												
(Association of Life Insurance Presidents)												
Policies and certificates new (44 companies):												
Ordinary—number of policies	220,823	238,684	292,232	284,055	293,458	230,482	280,180	+3.3	+4.7	1,171,232	1,329,252	+13.5
Industrial—number of policies	1,051,983	891,644	1,045,058	964,177	888,462	980,796	839,453	-7.9	+5.8	4,618,735	4,841,324	+4.8
Group—number of certificates	57,921	26,859	35,986	47,028	45,455	36,705	48,839	-3.3	-6.9	201,540	213,249	+5.8
Total policies and certificates—number	1,330,727	1,157,187	1,373,276	1,295,260	1,227,375	1,247,983	1,168,472	-5.2	+5.0	5,991,507	6,383,825	+6.5
Amount of new insurance (44 companies):												
Ordinary—thous. of dolls	659,843	683,542	830,244	793,786	801,698	710,435	757,879	+1.0	+5.8	3,485,304	3,769,113	+8.1
Industrial—thous. of dolls	265,998	230,779	274,824	256,279	240,501	259,962	262,396	-6.2	+11.1	1,208,161	1,268,381	+5.0
Group—thous. of dolls	98,637	58,607	64,813	72,238	109,827	62,007	205,195	+52.0	-46.5	463,534	404,122	-12.8
Total insurance—thous. of dolls	1,024,478	972,928	1,169,881	1,122,303	1,152,026	1,032,404	1,179,470	+2.6	-2.3	5,156,999	5,441,616	+5.5
Premium collections (44 companies):												
Ordinary—thous. of dolls	160,867	160,630	175,645	172,282	174,278	157,836	165,718	+1.2	+5.2	795,754	843,702	+6.0
Industrial—thous. of dolls	53,506	51,956	56,159	55,768	52,218	50,691	52,184	-6.4	+0.1	256,645	269,907	+5.2
Group—thous. of dolls	8,938	17,660	7,515	8,336	7,691	5,928	5,930	-7.7	+29.7	43,564	50,140	+15.1
Total—thous. of dolls	223,611	230,246	239,319	236,386	234,187	214,455	223,832	-0.9	+4.6	1,095,963	1,163,749	+6.2
Admitted life insurance assets (40 companies):												
Grand total—millions of dolls	12,982	13,071	13,173	13,269	-----	12,001	12,107	-----	-----	-----	-----	-----
Mortgage loans—												
Total—millions of dolls	5,619	5,642	5,675	5,710	-----	5,199	5,241	-----	-----	-----	-----	-----
Farm—millions of dolls	1,604	1,601	1,597	1,597	-----	1,602	1,601	-----	-----	-----	-----	-----
All other—millions of dolls	4,015	4,041	4,078	4,113	-----	3,597	3,640	-----	-----	-----	-----	-----
Bonds and stocks (book value):												
Total—millions of dolls	4,912	4,951	5,007	5,037	-----	4,563	4,605	-----	-----	-----	-----	-----
Government—millions of dolls	979	986	1,004	1,017	-----	943	928	-----	-----	-----	-----	-----
Railroad—millions of dolls	2,452	2,462	2,472	2,477	-----	2,359	2,372	-----	-----	-----	-----	-----
Public utility—millions of dolls	1,219	1,231	1,247	1,251	-----	1,064	1,097	-----	-----	-----	-----	-----
All other—millions of dolls	262	272	284	292	-----	197	208	-----	-----	-----	-----	-----
Policy loans and premium notes—millions of dolls	1,554	1,569	1,587	1,608	-----	1,426	1,442	-----	-----	-----	-----	-----
(Life Insurance Sales Research Bureau)												
Sales of ordinary life insurance:												
United States total—thous. of dolls	700,452	744,513	896,333	862,578	873,490	769,263	834,557	+1.3	+4.7	3,776,443	4,086,366	+8.2
Eastern manuf. dist.—thous. of dolls	305,721	321,051	385,309	355,180	352,203	314,944	343,822	-0.8	+2.4	1,582,791	1,719,469	+8.6
Western manuf. dist.—thous. of dolls	161,832	174,226	207,017	196,585	200,638	165,567	180,589	+2.1	+11.1	821,919	940,298	+14.4
Western agric. district—thous. of dolls	100,769	100,163	122,062	125,988	125,715	119,317	128,946	-0.2	-2.5	571,022	574,698	+0.6
Southern district—thous. of dolls	72,892	80,016	97,421	98,246	102,475	94,128	99,513	+4.3	+3.0	440,467	451,050	+2.4
Far western district—thous. of dolls	68,238	69,057	84,524	86,579	92,453	75,307	81,687	+6.8	+13.2	360,244	400,851	+11.3
Canada total, 15 companies—thous. of dolls	50,575	47,443	49,406	53,333	51,283	47,156	49,870	-3.8	+2.8	229,708	252,040	+9.7
<b>Banking</b>												
Check payments:												
New York City—millions of dolls	54,719	46,289	55,425	47,979	50,043	41,778	45,270	+4.3	+10.5	202,458	254,455	+25.7
Outside New York City—millions of dolls	28,126	24,515	28,131	26,803	26,520	25,225	26,346	-1.1	+0.7	124,174	134,085	+8.0
Canada—millions of dolls	2,124	1,723	1,942	1,873	2,097	1,729	2,279	+12.0	-8.0	9,356	9,759	+4.3
Federal reserve banks:												
Bills discounted—millions of dolls	821	952	1,030	986	988	757	944	+0.2	+4.7	-----	-----	-----
Notes in circulation—millions of dolls	1,645	1,654	1,664	1,654	1,591	1,593	-0.6	+3.8	-----	-----	-----	-----
Total investments—millions of dolls	646	511	351	343	270	656	525	-21.3	-48.6	-----	-----	-----
Total reserve—millions of dolls	2,835	2,844	2,893	2,986	2,970	2,868	2,757	-0.5	+7.7	-----	-----	-----
Total deposits—millions of dolls	2,437	2,413	2,382	2,410	2,331	2,494	2,408	-3.3	-3.2	-----	-----	-----
Reserve ratio—per cent	69.4	69.9	71.5	73.3	74.5	70.2	68.9	+1.6	+8.1	-----	-----	-----
Federal reserve member banks:												
Total loans and discounts—millions of dolls	16,121	16,366	16,583	16,451	16,202	15,951	15,893	-1.5	+1.9	-----	-----	-----
Total investments—millions of dolls	6,053	5,972	5,976	5,875	5,799	6,637	6,633	-1.3	-13.2	-----	-----	-----
Net demand deposits—millions of dolls	13,395	13,308	13,157	13,234	12,791	13,946	13,628	-3.3	-6.1	-----	-----	-----
Brokers loans, end of month:												
To N. Y. Stock Ex. members—												
Total—millions of dolls	6,735	6,679	6,804	6,775	6,665	4,908	5,274	-1.6	+26.4	-----	-----	-----
Ratio to market value—per cent	9.48	9.29	9.75	9.19	9.39	8.95	9.46	+2.2	-0.7	-----	-----	-----
By New York F. R. member banks—millions of dolls	5,559	5,507	5,562	5,532	5,288	4,282	4,469	-4.4	+18.3	-----	-----	

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928	
	January	Febr-	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928				
										1928	1929		
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"</i>													
<b>BANKING AND FINANCE—Continued</b>													
<b>Banking—Continued</b>													
Interest rates—Continued.													
Prime com. paper (4-6 mos.) per cent	5.38	5.50	5.88	6.00	6.00	4.38	4.50	0.0	+33.3				
Prime bankers' acceptances per cent	4.88	5.13	5.38	5.50	5.50	3.75	4.00	0.0	+37.5				
N. Y. Fed. Res. Bank (redisc.) per cent	5.00	5.00	5.00	5.00	5.00	4.00	4.50	0.0	+11.1				
Federal land banks per cent	5.05	5.06	5.09	5.10	5.13	5.05	5.04	+0.6	+1.8				
Intermediate credit banks per cent	6.33	5.33	5.36	5.48	5.54	4.52	4.52	+1.1	+22.6				
Deposits, New York State savings banks, end of month mills. of dolls.	4,410	4,423	4,466	4,439	4,418	4,262	4,253	-0.5	+3.9				
<b>Public Finance</b>													
Government debt, gross, end mo. mills. of dolls.	17,379	17,345	17,237	17,196	17,167	17,848	17,756	-0.2	-3.3				
Customs receipts thous. of dolls.	45,549	48,651	55,200	50,404	48,279	45,740	41,438	-4.2	+16.5	219,560	248,083	+13.0	
Total ordinary receipts thous. of dolls.	163,889	158,794	176,816	173,508	166,722	169,965	164,932	-3.9	+1.1	1,373,481	1,399,729	+1.9	
Expenditures chargeable to ordinary receipts thous. of dolls.	371,595	185,494	273,865	335,643	225,269	326,700	217,091	-32.9	+3.8	1,314,483	1,391,866	+5.9	
U. S. money in circulation:													
Daily average mills. of dolls.	4,748	4,686	4,700	4,679	4,684	4,730	4,722	+0.1	-0.8				
<b>Gold and Silver</b>													
Gold:													
Domestic receipts at mint fine ounces	68,042	55,651	57,765	65,547	70,520	65,166	75,983	+7.6	-7.2	354,764	317,525	-10.5	
Rand output fine ounces	876,452	815,284	866,529	872,123	897,598	825,907	886,186	+2.9	+1.3	4,249,463	4,327,986	+1.8	
Monetary stock of U. S.—													
Daily average mills. of dolls.	4,115	4,143	4,166	4,226	4,292	4,287	4,207	+1.6	+2.0				
Imports thous. of dolls.	48,577	26,913	26,470	24,687	24,097	5,319	1,968	-2.4		62,976	150,744	+139.4	
Exports thous. of dolls.	1,378	1,423	1,635	1,594	487	96,469	83,689	-71.1		355,586	6,499		
Silver:													
Production—													
United States thous. of fine oz.	5,023	4,776	5,223	5,422	5,361	4,668	4,574	-1.1	+17.2	24,045	25,805	+7.3	
Canada thous. of fine oz.	1,747	1,124	1,569	1,151	1,638	1,388	1,222	+42.3	+34.0	6,784	7,229	+6.6	
Stocks, end of month—													
United States thous. of fine oz.	595	642	1,374	867	1,105	128	133	+27.5	+730.8				
Canada thous. of fine oz.	334	684	414	1,032	360	550	456	-65.1	-21.1				
Imports thous. of dolls.	8,260	4,458	6,435	3,957	4,597	4,888	4,247	+16.2	+8.2	25,232	27,707	+9.8	
Exports thous. of dolls.	8,264	6,595	7,814	5,752	7,485	6,587	6,712	+30.1	+11.5	34,875	35,910	+3.0	
Price at New York dollars. per fine oz.	.570	.562	.563	.557	.541	.574	.603	-2.9	-10.3				
<b>Business Failures</b>													
Liabilities (United States):													
Total commercial thous. of dolls.	53,877	34,036	36,356	35,270	41,216	37,985	36,117	+16.9	+14.1	221,621	200,755	-9.4	
Manufacturers thous. of dolls.	16,690	11,891	15,001	10,423	18,954	16,236	14,230	+81.8	+33.2	78,500	72,959	-7.1	
Trade establishments thous. of dolls.	32,024	17,891	17,190	19,102	18,191	16,049	18,900	-4.8	-3.8	112,533	104,398	-7.2	
Agents and brokers thous. of dolls.	5,164	4,255	4,165	5,745	4,071	5,700	2,987	-29.1	+36.3	30,588	23,400	-23.5	
Liabilities (Canada):	2,241	2,443	707	2,435	4,416	1,558	3,697	+81.4	+19.4	19,382	12,242	-36.8	
Firms (United States):													
Total commercial number	2,535	1,965	1,987	2,021	1,897	1,818	2,008	-6.1	-5.5	10,881	10,405	-4.4	
Manufacturers number	614	478	512	499	515	432	470	+3.2	+9.6	2,469	2,618	+6.0	
Trade establishments number	1,769	1,378	1,349	1,388	1,266	1,276	1,407	-8.8	-10.0	7,776	7,150	-8.1	
Agents and brokers number	152	109	126	134	116	110	131	-13.4	-11.5	636	637	+0.2	
Firms (Canada):	185	178	183	141	164	125	127	+16.3	+29.1	823	851	+3.4	
By groups:													
Manufacturers—													
Metals number	30	40	40	34	30	44	36	-11.8	-16.7	192	174	-9.4	
Textiles number	75	54	60	52	67	49	57	+28.8	+17.5	299	308	+3.0	
Lumber number	92	88	103	87	103	70	77	+18.4	+33.8	386	473	+22.5	
Chemicals number	11	6	12	15	11	11	6	-26.7	+83.3	42	55	+31.0	
Printing and engraving number	25	15	10	16	15	19	11	-6.2	+36.4	72	81	+12.5	
Foodstuffs number	47	39	44	48	35	42	31	-27.1	+12.9	207	213	+2.9	
Leather, etc. number	24	10	11	13	15	7	14	+15.4	+7.1	65	73	+12.3	
Liquors and tobacco number	9	7	8	4	12	8	6	+200.0	+100.0	33	40	+21.2	
Stone, clay, and glass number	15	4	9	4	12	9	9	+200.0	+33.3	47	44	-6.4	
All other number	286	215	215	226	215	173	223	-4.9	-3.6	1,126	1,157	-2.8	
Traders—													
General stores number	116	111	101	88	86	85	93	-2.3	-7.5	482	502	+4.1	
Foods and tobacco number	499	424	429	446	385	393	408	-13.7	-5.6	2,185	2,183	-0.1	
Clothing number	351	246	233	228	228	263	285	0.0	-14.0	1,650	1,286	-22.1	
Household furniture number	374	266	257	252	214	220	263	-15.1	-18.6	1,437	1,363	-5.1	
Chemicals and paints number	66	51	69	79	60	56	60	-24.1	0.0	372	325	-12.6	
Books and paper number	17	13	9	15	13	9	14	-13.3	-7.1	70	67	-4.3	
All other number	346	267	251	280	280	250	295	0.0	-5.1	1,571	1,424	-9.4	
<b>Dividend and Interest Payments</b>													
Grand total thous. of dolls.	853,575	384,800	462,870	608,100	398,000	562,210	1,344,000	-34.6	+15.7	2,435,010	2,707,345	+11.2	
Interest payments thous. of dolls.	516,375	199,000	264,170	398,100	237,000	372,050	203,500	-40.5	+16.5	1,470,150	1,614,645	+9.8	
Dividend payments:													
Total thous. of dolls.	337,200	185,800	198,700	210,000	161,000	190,160	1,140,500	-23.3	+14.6	964,860	1,092,700	+13.2	
Industrial and misc. thous. of dolls.	215,000	139,800	155,000	167,000	124,500	150,280	1,105,900	-25.4	+17.6	697,380	801,300	+14.9	
Steam railroads thous. of dolls.	39,100	36,900	36,500	32,200	28,900	27,100	10,200	-10.2	+6.6	158,480	173,600	+9.5	
Street railways thous. of dolls.	22,200	9,100	7,200	10,800	7,600	10,500	1,700	-29.6	+1.3	54,000	56,900	+5.4	
<b>New Security Issues</b>													
Foreign loans in the U. S. thous. of dolls.	36,482	57,857	179,691	21,000	66,000	144,100	227,969	+214.3	-71.0	765,800	361,030	-52.9	
Foreign governments thous. of dolls.	15,750	10,000	10,000			87,130	79,885			449,924	35,750	-92.1	
Total corporation thous. of dolls.	970,276	937,253	934,530	725,798	1,313,893	840,472	1,768,977	+81.0	+70.9	3,561,687	4,881,750	+37.1	
Purpose of issue—													
New capital thous. of dolls.	827,729	814,859	876,203	891,626	920,046	491,356	1,594,500	+3.2	+54.8	2,310,479	4,330,463	+87.4	
Refunding thous. of dolls.	142,547	122,394	58,327	134,172	390,847	349,116	174,477	+191.3	+124.0	1,251,208	848,287	-32.2	
Type of security—													
Stocks thous. of dolls.	632,738	634,698	559,139	438,276	869,271	315,529	1,332,400	-1.7	+161.5	1,180,446	3,134,122	+165.5	
Bonds and notes thous. of dolls.	337,538	302,555	375,391	287,522	444,622	524,943	436,577	+54.6	+1.8	2,381,241	1,747,628	-26.6	
Class of industry—													
Railroads thous. of dolls.	61,618	11,695	21,500	158,783	105,308	95,053	28,601	-34.1	+268.2	460,873	359,890	-23.4	
Public utilities thous. of dolls.	202,134	295,561	320,222	127,311	342,919	382,641	242,497	+169.4	+41.4	1,331,251	1,288,147	-3.2	
Industrials thous. of dolls.	234,405	168,397	215,350	148,837	149,215	140,438	153,551	+208.5	+199.1	683,723	1,226,204	+92.0	
Oil thous. of dolls.	134,570	16,597	11,594	35,267	36,102	7,300	22,929	+2.4	+57.5	66,056	234,130	+254.4	
Land and buildings thous. of dolls.	69,009	118,249											

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928	
	January	Febr-	March	April	May	April	May	May, 1929, from April, 1929	May, 1929, from May, 1928				
										1928	1929		
<i>The cumulatives shown are through May, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"</i>													
<b>BANKING AND FINANCE—Continued</b>													
<b>New Security Issues—Continued</b>													
States and municipalities:													
Permanent loans.....thous. of dollars	73,351	88,725	100,006	87,170	177,507	129,861	141,285	+103.6	+25.6	639,907	535,759	-16.3	
Temporary loans.....thous. of dollars	114,695	71,749	55,411	105,141	35,261	78,001	14,896	-66.5	+136.7	354,965	382,257	-7.7	
Bond issues (Canada):													
Govt. and provincial.....thous. of dollars	6,417			10,000	27,616	36	30,000	+176.2	-7.9	39,036	44,033	+12.8	
Municipal.....thous. of dollars	17,022	7,037	5,142	1,002	22,592	2,312	4,347	+419.7	+13,013	52,795	+305.7		
Corporation.....thous. of dollars	13,205	28,725	47,326	2,485	6,550	41,845	57,970	+163.6	-99.9	119,886	98,291	-18.0	
Tax-exempt securities outstanding, end of month.....millions of dollars	17,192	17,232	17,296	17,371		16,659							
<b>Agricultural Finances</b>													
Loans outstanding, end mo.:													
Federal farm loan banks.....thous. of dollars	1,195,089	1,199,766	1,202,571	1,203,724	1,204,128	1,180,420	1,183,672	0.0	+1.7				
Joint-stock land banks.....thous. of dollars	604,375	603,827	604,294	602,421	599,413	610,921	609,363	-0.5	+1.6				
Federal intermediate credit banks.....thous. of dollars	79,462	78,532	80,706	77,609	69,326	72,351	70,899	-10.7	-2.2				
<b>Stocks and Bonds</b>													
Stock prices, average daily closing:													
25 industrials, average.....dollars per share	344.17	350.88	355.10	357.70	363.37	263.34	267.38	+1.6	+35.9				
25 railroads, average.....dollars per share	132.40	131.70	129.30	128.49	128.95	123.09	125.39	+0.4	+2.8				
103 stocks, average.....dollars per share	179.25	189.72	199.27	168.17	155.76	159.16	162.58	-7.4	-4.2				
Southern cotton mills.....dollars per share	101.04	99.76	98.10	98.00	96.77	110.97	110.58	-1.3	-12.5				
Stock prices, average weekly closing:													
Industrials, rails, and utilities													
(406).....rel. to 1926	185.2	186.5	189.1	186.6	187.8	145.9	152.1	+0.6	+23.5				
All industrials (338).....rel. to 1926	192.5	192.3	196.0	193.4	192.6	149.5	154.9	-0.4	+24.3				
All railroads (33).....rel. to 1926	141.8	141.6	140.4	138.3	138.7	130.7	133.2	+0.3	+4.1				
All utilities (35).....rel. to 1926	192.7	202.4	203.7	201.4	212.3	142.5	155.3	+5.4	+36.7				
Automobiles and trucks (13).....rel. to 1926	281.4	277.1	284.2	277.6	260.5	241.4	249.4	-6.2	+4.5				
Automobile tires and rubber goods (7).....rel. to 1926	195.4	188.9	209.8	200.3	194.4	127.4	128.8	-2.9	+50.9				
Airplane (9).....rel. to 1926	903.0	913.6	905.1	923.0	1,147.0	445.5	672.0	+24.3	+70.7				
Agricultural implements (4).....rel. to 1926	384.8	392.5	395.0	389.5	399.8	249.2	264.1	+2.6	+51.4				
Chain stores (17).....rel. to 1926	158.6	152.9	149.6	148.7	148.3	135.6	139.0	-0.3	+6.7				
Copper and brass (10).....rel. to 1926	262.0	256.2	329.3	294.0	279.8	143.7	151.5	-4.8	+84.7				
Food, other than meat (20).....rel. to 1926	180.9	177.4	173.9	171.4	172.0	154.9	158.4	+0.4	+8.6				
Machinery and machine equipment (10).....rel. to 1926	167.7	173.5	167.2	163.1	160.8	133.6	138.0	-1.4	+16.5				
Oil producing and refining (16).....rel. to 1926	137.4	32.6	141.4	147.6	146.3	109.7	118.7	-0.9	+23.3				
Railroad equipment (9).....rel. to 1926	139.2	140.2	144.3	142.4	138.2	137.4	135.2	-2.9	+2.2				
Rayon (5).....rel. to 1926	171.5	155.5	143.7	143.2	143.4	172.0	188.5	+0.1	-23.9				
Steel and iron (10).....rel. to 1926	173.8	178.9	186.6	190.8	185.3	145.5	145.6	-2.9	+27.3				
Textiles (30).....rel. to 1926	143.7	138.3	136.2	131.5	127.0	138.2	138.7	-3.4	-8.4				
Theaters, motion pictures, and amusements (7).....rel. to 1926	150.6	149.3	146.2	135.8	140.1	111.3	115.6	+3.2	+21.2				
Tobacco and tobacco products (10).....rel. to 1926	153.1	146.1	142.5	136.4	139.1	149.1	140.0	+2.0	-0.6				
Traction, motor transportation, etc. (9).....rel. to 1926	101.7	100.6	97.4	90.4	85.8	106.7	105.9	-5.1	-19.0				
Stock yields:													
Total common (90).....per cent	3.35	3.35	3.27	3.30	3.32	4.05	3.93	+0.6	-15.5				
Industrials (50).....per cent	3.31	3.35	3.21	3.25	3.30	4.02	3.93	+1.5	-16.0				
Public utilities (20).....per cent	2.66	2.58	2.59	2.65	2.48	3.46	3.22	-6.4	-23.0				
Railroads (20).....per cent	4.56	4.58	4.62	4.68	4.79	4.86	4.80	+2.4	-0.2				
Preferred, high-grade industrial (20).....per cent	5.42	5.43	5.44	5.45	5.45	5.18	5.21	0.0	+4.6				
Stock sales, N. Y. Stock Exch. (thous. of shares)	110,804	77,960	105,662	82,600	91,279	80,569	82,164	+10.5	+11.1	351,849	468,314	+33.1	
Bond sales:													
Miscellaneous.....thous. of dollars	235,427	174,447	201,566	205,649	225,716	301,084	263,388	+9.8	-14.3	1,361,100	1,042,805	-23.4	
Liberty-Treasury.....thous. of dollars	13,772	9,504	12,149	9,970	8,851	14,489	14,764	+11.2	-40.1	78,638	54,246	-31.0	
Total.....thous. of dollars	249,199	183,951	213,715	215,619	234,567	315,573	278,152	+8.8	-15.7	1,439,738	1,097,051	-23.8	
Bond prices:													
Highest-grade rails p. ct. of par. 4% bond	90.09	88.63	87.87	88.05	87.81	95.33	94.49	-0.3	-7.1				
Second-grade rails p. ct. of par. 4% bond	81.27	80.22	79.13	79.27	79.13	87.89	86.92	-0.2	-9.0				
Public utility p. ct. of par. 4% bond	80.16	79.63	77.68	76.19	75.03	82.17	81.42	-1.5	-7.8				
Industrial p. ct. of par. 4% bond	78.89	78.20	77.49	77.47	76.51	81.09	80.73	-1.2	-5.2				
Comb. price index p. ct. of par. 4% bond	82.39	81.48	80.34	80.00	79.33	86.26	85.54	-0.8	-7.3				
Bond prices, 1st of following month:													
5 Liberty bonds.....p. ct. of par.	102.49	101.36	100.14	101.75	100.24	105.98	105.03	-1.5	-4.6				
16 foreign govt. and city.....p. ct. of par.	104.52	104.07	102.98	103.54	103.49	105.46	105.28	0.0	-1.7				
Comb. price index, 66 bonds.....p. ct. of par.	100.08	99.47	98.36	99.13	97.91	102.44	101.71	-1.2	-3.7				
Bond yields:													
Total, 60 high grade.....per cent	4.60	4.65	4.69	4.69	4.69	4.38	4.42	0.0	+6.1				
Railroads (15).....per cent	4.50	4.56	4.59	4.59	4.58	4.24	4.27	-0.2	+7.3				
Industrials (15).....per cent	4.96	5.01	5.02	5.02	5.06	4.78	4.81	-0.8	+5.2				
Utilities (15).....per cent	4.79	4.79	4.81	4.85	4.85	4.56	4.57	0.0	+6.1				
Municipal (15).....per cent	4.16	4.25	4.32	4.29	4.23	3.93	4.02	-1.4	+5.2				
Municipal bond yield (20).....per cent	4.19	4.22	4.34	4.25	4.30	3.93	4.01	+1.2	+7.2				
U. S. Treasury notes and certificates, 3-6 months.....per cent	4.65	4.64	4.79	4.82	5.04	3.62	3.90	+4.6	+29.2				
Liberty and Treasury bonds.....per cent	3.59	3.66	3.76	3.67	3.67	3.32	3.35	0.0	+9.6				
Long-term real-estate bonds issued:													
Grand total.....thous. of dollars	61,065	34,049	68,431	21,711	22,868	87,748	77,450	+5.3	-70.5	329,167	208,124	-36.8	
Purpose of issue:													
Finance construction.....thous. of dollars	13,610	8,945	23,250	12,962	8,720	29,220	44,515	-32.7	-80.4	134,099	67,487	-49.7	
Real-estate mortgage.....thous. of dollars	11,245	7,824	31,663	4,529	4,148	36,865	20,910	-8.4	-80.2	108,942	59,409	-45.5	
Acquisitions and improvements.....thous. of ls.	26,200	2,870	9,280	2,000	2,275	16,323	2,600	+13.8	-12.5	41,856	42,625	+1.8	
Kind of structure—													
Office and commercial.....thous. of dollars	12,535	6,700	22,340	5,390	4,760	14,605	45,175	-11.7	-89.5	123,160	51,725	-58.0	
Hotels.....thous. of dollars	2,275	375	7,810	2,900	11,395	10,300	-62.9	-71.8	27,055	13,360	-50.6		
Apartments.....thous. of dollars	2,925	2,160	1,375	1,722	1,883	3,635	4,265	+9.5	-55.8	18,179	10,067	-44.6	

## TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JANUARY 1 THROUGH MAY 31	Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	January	February	March	April	May	April	May			
	May, 1929, from April, 1929	May, 1929, from May, 1928								
<b>FOREIGN EXCHANGE RATES</b>										
Europe:										
England.....dolls. per £ sterling..	4.85	4.85	4.85	4.85	4.85	4.88	4.88	0.0	-0.6	
France.....dolls. per franc..	.039	.039	.039	.039	.039	.039	.039	0.0	0.0	
Italy.....dolls. per lira..	.052	.052	.052	.052	.052	.053	.053	0.0	-1.9	
Belgium.....dolls. per franc..	.139	.139	.139	.139	.139	.140	.140	0.0	-0.7	
Netherlands.....dolls. per guilder..	.401	.401	.401	.401	.402	.403	.404	+0.2	-0.5	
Sweden.....dolls. per krona..	.267	.267	.267	.267	.267	.269	.268	0.0	-0.4	
Switzerland.....dolls. per franc..	.192	.192	.192	.193	.193	.193	.193	0.0	0.0	
Asia:										
Japan.....dolls. per yen..	.455	.452	.445	.446	.447	.477	.466	+0.2	-4.1	
India.....dolls. per rupee..	.365	.364	.364	.363	.362	.366	.366	-0.3	-1.1	
America:										
Canadian.....dolls. per Canadian dollar..	.998	.996	.994	.992	.993	1.000	.999	+0.1	-0.6	
Argentina.....dolls. per gold peso..	.958	.958	.956	.956	.955	.972	.972	-0.1	-1.7	
Brazil.....dolls. per milreis..	.119	.119	.118	.118	.119	.120	.120	+0.8	-0.8	
Chile.....dolls. per paper peso..	.121	.121	.121	.121	.120	.120	.122	-0.8	-1.6	
<b>U. S. FOREIGN TRADE</b>										
<b>Imports</b>										
Grand total.....thous. of dolls..	3 368,897	3 369,442	3 383,791	3 410,674	400,149	345,514	353,981	-2.6	+13.0	1,768,910 1,932,953 +9.3
By grand divisions:										
Europe—										
Total.....thous. of dolls..	107,118	104,342	3 109,812	113,960		94,284	104,150			2 402,070 2 435,232 +8.2
France.....thous. of dolls..	13,703	13,799	3 14,522	11,422		10,429	11,169			2 49,070 2 53,446 +8.9
Germany.....thous. of dolls..	19,374	21,487	20,766	24,423		16,726	16,126			2 70,344 2 86,050 +22.3
Italy.....thous. of dolls..	9,022	8,272	3 8,518	9,847		7,899	8,570			2 33,082 2 35,659 +7.8
United Kingdom.....thous. of dolls..	27,527	25,501	3 31,458	29,961		28,087	34,847			2 112,926 2 114,447 +1.3
North America—										
Total.....thous. of dolls..	82,284	79,926	3 92,253	93,650		85,091	86,092			2 329,563 2 348,114 +5.6
Canada.....thous. of dolls..	42,053	36,981	39,938	40,389		35,044	43,183			2 147,859 2 159,361 +7.8
South America—										
Total.....thous. of dolls..	57,889	60,171	3 60,716	61,247		49,772	47,394			2 203,630 2 240,023 +17.9
Argentina.....thous. of dolls..	9,422	10,601	3 12,679	13,061		9,746	10,723			2 35,984 2 45,763 +27.2
Asia and Oceania—										
Total.....thous. of dolls..	113,330	115,310	3 110,470	124,518		109,777	109,728			2 446,663 2 463,627 +3.8
Japan.....thous. of dolls..	38,424	32,158	3 36,020	28,820		29,505	38,536			2 125,847 2 135,421 +7.6
Africa, total.....thous. of dolls..	8,287	9,693	3 10,541	17,300		6,391	6,617			2 32,803 2 45,821 +39.7
By classes and commodities:										
Crude materials.....thous. of dolls..	3 142,251	3 137,791	3 138,618	3 146,934	141,699	127,223	137,999	-3.6	+2.7	675,045 707,293 +4.8
Foodstuffs, crude, and food animals.....thous. of dolls..	47,668	50,176	48,905	52,145	46,553	46,049	47,968	-10.7	-2.9	243,314 245,447 +0.9
Manufactured food-stuffs.....thous. of dolls..	3 28,787	36,772	44,368	45,949	42,298	43,390	34,234	-7.9	+23.6	183,394 198,173 +8.1
Semimanufactures.....thous. of dolls..	3 70,981	3 69,484	3 70,525	3 82,266	85,918	60,672	59,084	+4.4	+45.4	310,303 379,174 +22.2
Finished manufactures.....thous. of dolls..	3 79,211	75,219	81,375	3 83,380	83,681	68,181	74,896	+0.4	+11.7	357,055 402,866 +12.8
<b>Exports</b>										
Grand total, including reexports.....thous. of dolls..	3 488,023	3 441,754	489,911	3 425,872	387,000	363,928	422,557	-9.1	-8.4	1,989,328 2,232,560 +12.2
By grand divisions:										
Europe—										
Total.....thous. of dolls..	235,731	3 200,046	211,907	172,233		161,578	188,847			2 747,883 2 810,917 +9.6
France.....thous. of dolls..	26,268	24,408	24,621	19,444		13,114	18,535			2 68,238 2 94,740 +38.8
Germany.....thous. of dolls..	41,159	34,339	32,993	26,552		29,435	33,102			2 144,565 2 135,042 -6.6
Italy.....thous. of dolls..	3 15,995	12,712	15,057	13,066		11,014	15,149			2 50,509 2 56,829 +12.5
United Kingdom.....thous. of dolls..	90,696	3 69,304	75,659	59,289		56,902	61,834			2 270,723 2 294,947 +8.9
North America—										
Total.....thous. of dolls..	3 110,186	3 107,397	130,734	128,035		101,950	123,466			2 391,068 2 476,352 +21.8
Canada.....thous. of dolls..	70,927	3 70,762	90,642	91,928		70,522	88,956			2 258,425 2 324,260 +25.5
South America—										
Total.....thous. of dolls..	51,949	3 53,075	53,059	44,591		33,825	38,243			2 140,320 2 202,675 +44.4
Argentina.....thous. of dolls..	19,370	19,394	19,122	15,874		11,776	14,082			2 50,401 2 73,761 +46.3
Asia and Oceania—										
Total.....thous. of dolls..	80,364	3 70,221	79,814	69,491		59,154	63,018			2 252,073 2 299,890 +19.0
Japan.....thous. of dolls..	26,114	22,472	23,086	20,517		26,085	22,998			2 78,287 2 92,189 +17.8
Africa, total.....thous. of dolls..	3 9,792	11,015	14,397	11,455		7,420	8,983			2 35,427 2 46,659 +31.7
Total domestic exports only.....thous. of dolls..	3 480,384	3 454,532	3 481,719	3 418,591	377,063	356,057	413,829	-9.9	-8.9	1,944,374 2,192,289 +12.8
By classes of commodities:										
Crude materials.....thous. of dolls..	120,619	3 92,324	3 86,459	71,247	57,752	74,304	89,811	-18.9	-35.7	463,169 428,403 -7.5
Foodstuffs, crude and food animals.....thous. of dolls..	29,666	3 24,082	21,651	15,814	21,212	13,203	19,738	+34.1	+7.5	79,144 112,425 +42.1
Manufactured foodstuffs.....thous. of dolls..	47,535	39,629	34,429	37,451	35,001	33,866	33,123	-4.1	+2.2	192,571 203,513 +5.7
Semimanufactures.....thous. of dolls..	67,703	3 60,961	3 66,892	65,439	59,553	56,320	67,150	-9.0	-11.3	306,067 320,549 +4.7
Finished manufactures.....thous. of dolls..	3 214,860	3 217,535	3 263,720	3 228,639	202,646	179,274	204,007	-11.4	-0.7	904,421 1,127,400 +24.7
Agricultural exports (quantities):										
All commodities.....rel. to 1910-14..	133	107	102	86	79	82	92	-8.1	-14.1	
All commodities except cotton.....rel. to 1910-14..	155	134	129	112	122	99	103	+8.9	+18.4	
<b>CANADIAN FOREIGN</b>										
Total trade:										
Imports.....thous. of dolls..	96,959	97,042	135,287	97,517	125,615	78,490	113,582	+28.8	+10.6	477,928 552,420 +15.6
Exports.....thous. of dolls..	97,296	83,815	117,520	67,154	109,436	60,455	120,154	+63.0	-8.9	464,571 475,218 +2.3

\* Cumulative through Apr. 30.

\* Revised.

# 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

WILLIAM P. McCACKEN, JR., 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; and publication monthly of Survey of Current Business.

## BUREAU OF FOREIGN AND DOMESTIC COMMERCE

, Director

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

The study of the processes of domestic trade and commerce.

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

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

## BUREAU OF NAVIGATION

ARTHUR J. TYRER, Commissioner

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

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

## STEAMBOAT INSPECTION SERVICE

DICKERSON N. HOOVER, Supervising Inspector General

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

## UNITED STATES PATENT OFFICE

THOMAS E. 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.

# PUBLICATIONS OF THE DEPARTMENT OF COMMERCE

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

## OFFICE OF THE SECRETARY

**School Supplement, Air Commerce Regulations.** Aero-nautics Bulletin No. 7-B; ii + 6 pages. Contains regulations governing equipment used, competency of instructors, and adequacy of instruction in civilian aviation schools.

**National Committee on Wood Utilization, its Accomplishments and Aims.** Revised 1929. 11 pages. Gives an account of activities of National Committee on Wood Utilization.

**Radio Service Bulletin, May, 1929.** 30 pages. Issued monthly by the Radio Division of the Department of Commerce. Contains list of radio stations and references to current radio literature. Single copies, 5¢; annual subscription, 25¢.

## BUREAU OF THE CENSUS

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

### CENSUS OF MANUFACTURES, 1927

**Statistics for Industries and States.**—Summary bulletin giving comparative data for earlier census years. Paper, 109 pages, price 15¢.

\* **Industry bulletins giving detailed information for the various industries, by States:**

Furniture, Mattresses and Bed Springs. Paper, 17 pages, price 5¢.

Turpentine and Rosin. Paper, 3 pages, price 5¢.

Wood Distillation and Charcoal Manufacture. Paper, 11 pages, price 5¢.

**Marriage and Divorce, 1927.**—Statistics of marriages, divorces, and annulments of marriage, sixth annual report, presenting data regarding marriages, divorces, and annulments, and causes of separation, for 1926 and 1927. Paper, 90 pages, price 15¢.

## BUREAU OF FOREIGN AND DOMESTIC COMMERCE

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

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

**Directory of Exporters of American Lumber.** vi+16 pages. For the guidance of lumber manufacturers, small mill owners, and producers of logs and rough stock who desire an outlet for their surplus products.

**Fuel and Power in Canada, with Special Reference to Factors Affecting American Coal.** Trade Information Bulletin No. 622; ii + 20 pages. Discusses the coal resources, coal imports, efforts to promote the use of the British product, and power available in Canada. Price, 10¢.

**Petroleum Refineries in Foreign Countries, 1929.** Trade Information Bulletin No. 623; ii + 44 pages. This is a revision of Trade Information Bulletin No. 494 on the same subject, with the addition of information relative to various American cracking processes used in foreign countries. Price, 10¢.

**Marketing of Antimony.** Trade Information Bulletin No. 624; ii + 29 pages. Deals with the sources of antimony, its uses, deposits, and production in various countries, and marketing of this metal. Price, 10¢.

**Balance of International Payments of United States in 1928,** by Ray Hall, with foreword by R. P. Lamont, Secretary of Commerce. Trade Information Bulletin No. 625; viii + 66 pages. This is an analysis of the balance of international payments of the United States as shown by tourist expenditures abroad, American investments in other countries, foreign investments in the United States, immigrant remittances, war-debt payments to United States, and precious-metals trade.

**Free and Dutiable Imports of United States in Calendar Year 1927.** Trade Information Bulletin No. 626; ii + 17 pages. Price, 10¢.

**Credit Extension and Business Failures, Study of Credit Conditions and Causes of Failure Among Grocery Retailers in Louisville, Ky.** Trade Information Bulletin No. 627; ii + 14 pages.

## BUREAU OF STANDARDS

**Bureau of Standards Journal of Research, June, 1929.** Pages 1001-1211, illustrations, plates, charts. This journal contains the papers formerly issued as the Technologic and Scientific Papers series, which series have been discontinued. The articles in the journal are known as the Research Papers series and are issued separately after publication in the journal. Single copies, 25¢; annual subscription, \$2.75.

**Code for Protection Against Lightning.** Miscellaneous Publication No. 92; xiv + 114 pages, 1 illus., 2 pages of plates. Study of the origin, characteristics, and effects of lightning, with data on methods of protection for persons, buildings, and miscellaneous property against these electrical discharges. Price, 25¢.

**United States Government Master Specifications.** These specifications for the purchase of materials for the use of Government departments are promulgated by the Federal Specifications Board and published by the Bureau of Standards. Those listed below by number may be obtained at 5¢ each:

No. 63c. Hose, Oil Suction and Discharge. ii + 4 pages. Supersedes Federal Specifications Board Specification No. 63b and Bureau of Standards Circular No. 269. Price, 5¢.

No. 253b. Cloth, Airplane, Mercerized Cotton, Grade A. ii + 3 pages. Supersedes Federal Specifications Board Specification No. 258a and Bureau of Standards Circular No. 270. Price, 5¢.

No. 34a. General Specification for Textile Materials (Methods of Physical and Chemical Tests). ii + 6 pages. Supersedes Federal Specifications Board Specification No. 345 and Bureau of Standards Circular No. 333. Price, 5¢.

No. 588. Hose, Water, Braided. ii + 3 pages. Price, 5¢.

**Technical News Bulletin, June, 1929.** Pages 49-60. This monthly publication 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¢.

## BUREAU OF MINES

**Inspection and Testing of Mine-Type Electrical Equipment for Permissibility.** Bulletin 305; ii + 26 pages, 6 illus. Describes the methods employed in testing electrical equipment to be used in explosive atmospheres of mines. An inspection outline is given as well as details of apparatus used by the Mines Bureau in making tests. Price, 10¢.

**Mineral Resources of United States, 1926; Part II, Non-metals.** viii + 675 pages, 27 illustrations and charts. Price, \$1.

**Coal in 1927.** (From Mineral Resources of United States, 1927, Pt. II, pp. 327-509, 8 illustrations, 9 charts.) Price, 30¢.

**Fuel Briquets in 1928.** (From Mineral Resources of United States, 1928, Pt. II, pp. 1-11, 1 illustration.) Price, 5¢.

## BUREAU OF FISHERIES

**Fishery Industries of United States, 1927,** by Oscar E. Sette and R. H. Fiedler. Document No. 1050. (Appendix IX to Report of U. S. Commissioner of Fisheries for 1928, pp. 401-547, 2 charts.) Report on the activities of the bureau in collecting fishery statistics and in carrying on investigations into the problems of the fish canning and preserving industries. Price, 25¢.

**Propagation of Pond Fishes,** by M. C. James. Document No. 1056. (Appendix II to Report of U. S. Commissioner of Fisheries for 1929, pp. 19-50, 13 illustrations.) Discusses the essentials to be considered in the location of fish ponds, their construction and operation, and the care of the fish contained therein. Suggestions are given for the utilization of waste lands for this purpose. Price, 10¢.

## BUREAU OF NAVIGATION

**American Documented Seagoing Merchant Vessels of 500 Gross Tons and Over, May, 1929.** ii + 72 pages. Published monthly. Single copies, 10¢; annual subscription, 75¢.

June, 1929. ii + 72 pages.

## COAST AND GEODETIC SURVEY

**Manual of Second and Third Order Triangulation and Traverse.** Special Publication No. 145; vi + 226 pages, 33 illustrations, 23 pages of plates. Issued as an aid to surveyors in conforming to practices of Coast and Geodetic Survey. Price, 60¢.

**Tide Tables, Atlantic Coast, North America, for Year 1930.** Serial 435, 475 pages. Contains tables showing the time of rise and fall of tides at different places and the height to which the water rises. Price, 15¢.