

UNITED STATES
DEPARTMENT OF COMMERCE
WASHINGTON

SURVEY OF
CURRENT BUSINESS

OCTOBER, 1928

No. 86



COMPILED BY
BUREAU OF THE CENSUS
IN COOPERATION WITH
BUREAU OF FOREIGN AND DOMESTIC COMMERCE
AND
BUREAU OF STANDARDS

IMPORTANT NOTICE

In addition to figures given from Government sources, there are also incorporated for completeness of service figures from other sources generally accepted by the trades, the authority and responsibility for which are noted in the "Sources of Data" on pages 139-142 of the August, 1928, semiannual issue

Subscription price of the SURVEY OF CURRENT BUSINESS is \$1.50 a year; single copies (monthly), 10 cents; semiannual issues, 25 cents. Foreign subscriptions, \$2.25; single copies (monthly issues), including postage, 14 cents; semiannual issues, 36 cents. Subscription price of COMMERCE REPORTS is \$4 a year; with the SURVEY, \$5.50 a year. Make remittances only to Superintendent of Documents, Washington, D. C., by postal money order, express order, or New York draft. Currency at sender's risk. Postage stamps or foreign money not accepted

INTRODUCTION

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

At semiannual intervals detailed tables are published giving, for each item, monthly figures for the past two years and yearly comparisons, where available, back to 1913; also blank lines sufficient for six months have been left at the bottom of each table, enabling those who care to do so to enter new figures as soon as they appear (see August, 1928, issue). In the intervening months the more important comparisons only are given in the table entitled "Trend of business movements."

WEEKLY SUPPLEMENT

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

RELATIVE AND INDEX NUMBERS

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

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

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

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

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

RATIO CHARTS

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

RECORD BOOK

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

METHODS OF USE

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

This issue presents practically complete data for the month of August and contains text covering the early weeks of September (page 1), for which the basic figures in table and chart form are 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.



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PRELIMINARY SUMMARY FOR SEPTEMBER

The volume of business during the early weeks of September, as reflected by check payments, was greater than in the same period of last year. Early figures covering the value of new building contracts also show larger activity than a year ago. Operations at steel plants averaged higher than in either the preceding month or the same period of last year. Employment in Detroit factories, indicating in large measure conditions in the automobile industry, continued to increase, both over the preceding month and the corresponding period of 1927. Loans and discounts of Federal reserve member banks were somewhat higher than in the preceding month, being above the level of a year ago, as well. Interest rates on both time and call funds averaged higher than in either the previous month or the same month of last year.

The wholesale price index continued to rise, being higher also than in September a year ago. Prices for wheat showed but little change from the preceding

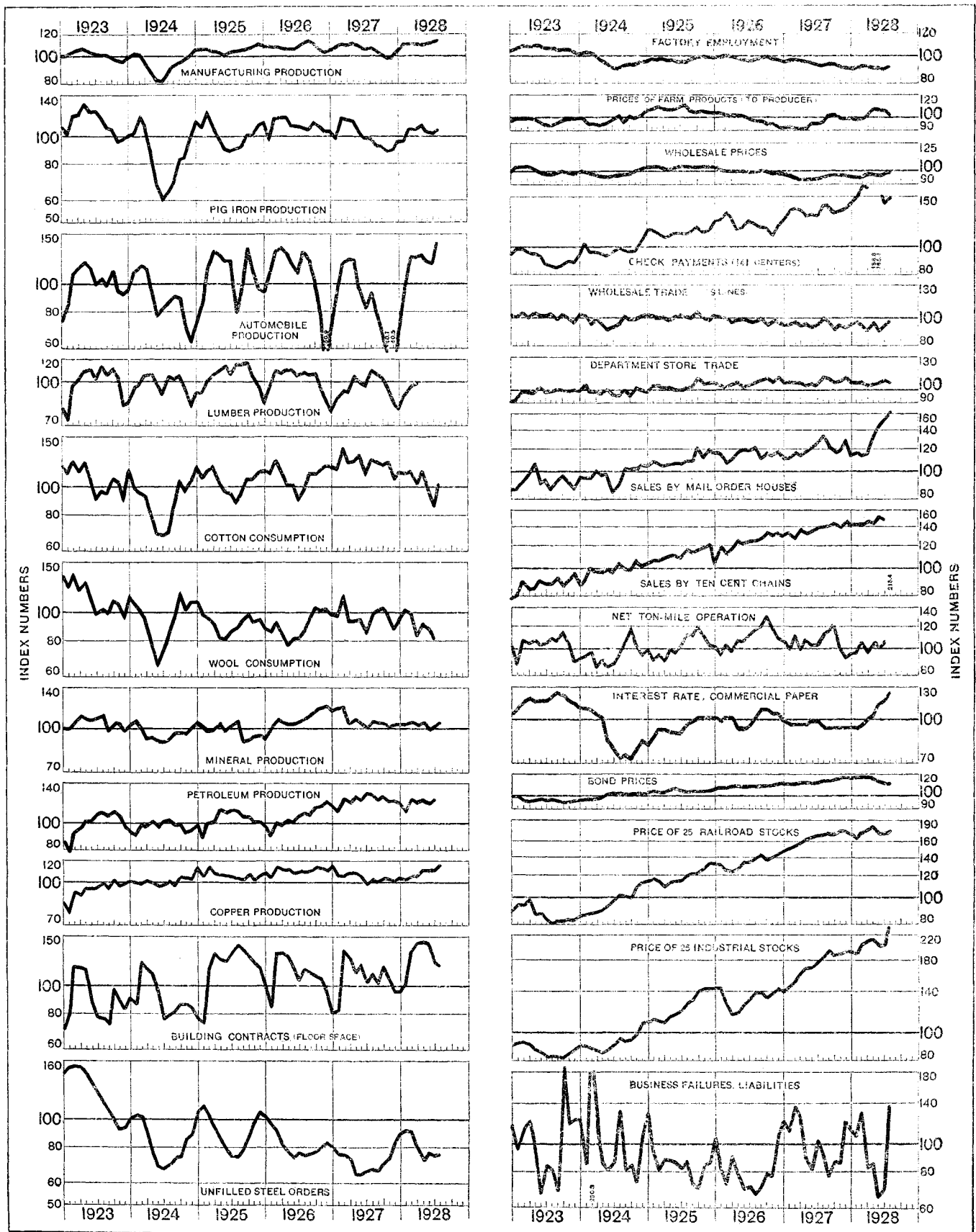
week but cotton prices were lower. Prices for iron and steel showed continued slight recovery but were still below a year ago. Copper prices averaged higher than in either the previous month or September of last year.

Stock prices averaged higher than in either the previous month or the same period of 1927, while bond prices, though showing some recovery from August were lower than a year ago reflecting higher interest rates. Brokers' loans were higher than in the previous month, being above a year ago, as well. The Federal reserve ratio averaged somewhat lower than in August and was considerably lower than in September of last year. Business failures were less numerous than in August and showed but little change from a year ago.

The output of lumber fell behind a year ago, while bituminous-coal production made similar comparisons. Carloadings of freight were running at about the level of last year.

MONTHLY BUSINESS INDICATORS, 1923-1928

[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					1927								1928							
	1923	1924	1925	1926	1927	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	
	1923-1925 monthly average=100																				
Industrial production:																					
Total manufacturing.....	101.0	94.0	105.0	108.0	106.0	108.0	106.0	107.0	105.0	102.0	98.0	99.0	107.0	111.0	110.0	110.0	110.0	111.0	114.0		
Total minerals.....	105.0	96.0	99.0	107.0	107.0	104.0	100.0	106.0	105.0	105.0	101.0	103.0	103.0	103.0	105.0	103.0	105.0	99.0	101.0	105.0	
Pig iron.....	111.7	86.7	101.5	109.0	101.0	103.4	98.8	98.6	92.9	93.2	88.6	90.2	96.1	97.1	107.1	106.6	109.9	103.1	102.8	105.0	
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	101.1	92.7	101.2	94.6	95.9	90.5	91.9	115.4	117.0	130.4	124.5	121.6	108.3	110.3	120.9	
Automobiles.....	101.5	90.9	107.7	108.5	85.7	97.5	81.3	93.5	78.9	66.5	40.7	40.4	70.2	98.1	125.2	124.2	129.0	120.1	118.5	138.9	
Cement.....	92.1	99.8	108.1	110.0	115.3	138.6	140.1	147.4	140.8	138.2	116.3	96.5	78.6	70.8	82.3	108.4	139.0	140.6	140.4	150.7	
Lumber (5 species).....	98.6	96.2	105.2	101.5	94.9	99.9	96.5	107.5	105.8	101.5	94.4	82.9	76.1	87.2	97.1	98.7					
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.3	129.1	110.9	123.4	122.2	119.4	121.9	105.9	113.5	111.8	113.3	102.3	112.6	99.5	85.5	102.6	
Wool (consumption).....	112.8	94.6	92.6	89.7	97.0	95.0	84.1	98.1	101.6	103.7	97.8	88.0	95.2	102.0	98.7	82.0	92.7	87.1	80.4	95.2	
Raw material output:																					
Animal products.....	100.0	104.0	96.0	96.0	97.0	123.0	109.0	105.0	87.0	95.0	92.0	88.0	96.0	94.0	97.0	95.0	108.0	116.0	108.0	97.0	
Crops.....	92.0	104.0	104.0	109.0	113.0	60.0	65.0	115.0	183.0	219.0	166.0	120.0	98.0	81.0	77.0	81.0	72.0	52.0	87.0	114.0	
Forest products.....	99.0	97.0	104.0	98.0	93.0	96.0	89.0	99.0	98.0	96.0	93.0	86.0	81.0	87.0	96.0	96.0	101.0	97.0	88.0	96.0	
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.7	128.3	128.3	123.6	126.3	121.3	122.1	117.8	110.9	122.2	117.5	122.5	118.1	122.9	126.8	
Bituminous coal.....	108.0	92.5	99.5	109.7	99.4	84.1	77.2	95.7	96.2	101.0	93.3	94.8	101.5	94.9	100.9	73.9	84.1	82.6	83.3	94.4	
Copper.....	93.4	100.2	106.4	110.2	104.9	105.4	99.4	102.0	100.0	106.1	103.2	101.9	103.8	102.2	106.6	105.7	111.8	111.0	111.3	116.8	
Power and construction:																					
Electric power.....	92.5	98.1	109.5	122.6	133.3	129.5	129.2	133.5	131.7	138.2	137.1	143.8	144.9	137.0	144.5	136.7	142.2	139.8	142.4	149.3	
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	118.6	102.4	110.1	101.9	115.0	105.2	95.2	96.0	103.7	132.7	142.4	143.5	142.2	123.7	118.8	
Unfilled orders:																					
General index.....	121.7	87.0	91.3	84.6	74.0	72.2	72.1	71.5	69.9	67.0	67.1	71.5	81.2	81.6	81.4	76.8	73.9	75.2	77.1	69.3	
U. S. Steel Corporation.....	125.8	83.6	90.6	82.1	71.1	63.9	65.8	66.9	65.9	70.0	72.4	83.2	89.5	92.1	90.8	81.1	71.6	76.2	74.8	75.9	
Stocks:																					
* General index.....	94.5	102.0	103.5	114.6	120.5	106.1	104.1	108.2	119.0	131.7	134.2	133.4	129.0	130.0	127.0	122.0	116.0	109.0	104.0	107.0	
* Manfd. commodities (28).....	93.8	103.2	103.0	106.3	111.5	113.6	115.7	114.1	112.8	108.6	109.6	111.4	115.0	120.0	120.0	119.0	118.0	119.0	117.0	113.0	
Cotton.....	102.5	91.4	106.2	145.5	153.2	100.3	85.8	87.6	135.2	179.8	200.0	195.8	178.8	159.1	135.7	117.8	96.7	74.6	58.4	52.4	
Copper (refined).....	106.4	113.9	73.1	64.8	85.4	85.1	92.2	82.7	76.4	74.1	80.3	84.2	85.2	76.8	77.1	64.4	58.6	52.0	48.5	48.4	
Employment:																					
Factories.....	106.6	96.3	97.2	98.0	94.3	95.0	93.1	93.2	93.8	93.4	91.6	90.7	89.8	91.2	91.8	91.4	91.2	91.3	90.3	91.7	
Prices:																					
Farm products, to producers.....	97.8	97.1	106.5	98.6	94.9	94.2	94.2	95.7	101.4	100.7	99.3	99.3	99.3	97.8	99.3	101.4	107.2	105.1	105.1	100.7	
Wholesale, all commodities.....	99.7	97.2	102.6	99.1	95.4	93.0	93.3	94.4	95.6	96.1	95.8	95.9	95.4	95.5	95.1	96.5	97.7	96.7	97.4	98.0	
Retail food.....	97.6	97.6	104.9	107.6	103.6	106.2	102.9	101.6	102.9	104.3	104.9	104.2	103.6	101.3	101.2	101.6	102.8	102.0	102.1	103.0	
Cost of living (including food).....	98.1	99.9	102.3	102.3	99.9	100.5	95.7	98.7	99.3	99.9	99.9	99.9	99.2	98.4	98.1	97.9	98.4	98.0	98.0	98.0	
Distribution (values):																					
* Bank debits, 141 cities.....	91.2	96.7	111.9	119.6	132.5	129.7	127.8	137.6	141.0	130.7	132.1	136.9	142.1	149.6	164.8	161.8	168.8	165.4	140.4	149.9	
* Wholesale trade.....	101.0	98.0	101.0	98.0	95.0	93.0	95.0	100.0	96.0	91.0	93.0	93.0	95.1	97.0	92.8	89.2	96.2	89.2	93.7	98.8	
* Department stores, sales.....	98.0	99.0	103.0	106.0	106.0	104.0	103.0	111.0	109.0	105.0	107.0	111.0	105.0	105.0	105.0	103.0	104.0	104.0	108.0	106.0	
* Mail-order houses, sales.....	92.0	98.0	110.0	115.0	120.0	121.0	127.0	133.0	122.0	117.0	119.0	128.0	113.0	116.0	113.0	117.0	132.0	144.0	153.0	160.0	
* 10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	135.0	139.0	140.0	141.0	144.0	140.0	147.0	140.0	142.0	142.0	147.0	144.0	153.0	148.0	144.0	
Imports.....	97.8	93.1	109.0	114.3	107.9	109.9	98.9	114.2	105.9	110.1	106.6	102.5	104.6	108.7	117.8	166.9	109.6	98.2	98.4	107.4	
Exports.....	91.5	100.8	107.8	105.5	108.8	94.0	90.1	98.7	112.0	128.7	121.4	107.4	108.2	97.8	110.8	95.9	111.1	102.3	99.8	100.3	
Transportation:																					
* Car loadings.....	99.8	97.6	102.8	106.8	104.0	128.9	81.4	103.3	103.3	101.3	95.2	96.8	98.0	101.8	129.0	83.0	106.4	127.0	82.0	102.9	
Freight, net ton-miles.....	102.2	95.9	101.9	109.1	101.6	103.1	102.9	112.5	115.1	122.1	99.8	92.7	97.2	95.7	105.8	96.1	105.2	100.0	105.0	-----	
Finance:																					
Member bank loans and discounts.....	94.1	98.5	107.4	112.9	117.3	117.5	115.7	117.3	119.3	120.0	121.4	123.2	121.9	120.9	123.3	127.3	126.9	128.4	126.6	125.6	
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	98.6	98.6	92.8	92.8	92.8	92.8	92.8	92.8	92.8	95.8	101.6	104.4	113.2	119.0	124.8	
Federal reserve ratio.....	99.0	104.1	96.9	96.0	99.1	100.5	103.2	101.4	98.8	96.4	92.2	86.5	95.5	96.0	95.6	90.9	89.2	84.7	88.9	90.0	
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	111.2	111.4	112.9	113.4	114.4	114.9	115.6	115.9	115.8	115.7	116.0	115.0	112.3	110.9	109.8	
Price, railroad stocks.....	86.0	96.1	117.9	133.4	162.7	165.3	167.3	167.9	171.5	168.5	171.6	171.1	169.1	164.7	170.1	176.0	178.9	169.5	170.3	173.8	
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	168.8	177.3	183.7	193.9	186.4	190.0	193.7	193.5	191.2	204.8	210.4	213.2	202.1	206.1	213.4	
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.3	81.3	101.8	92.4	77.3	85.6	85.3	120.9	112.3	106.3	129.3	82.5	85.2	66.0	69.8	137.3	

* Seasonal adjustments.

BUSINESS CONDITIONS IN AUGUST

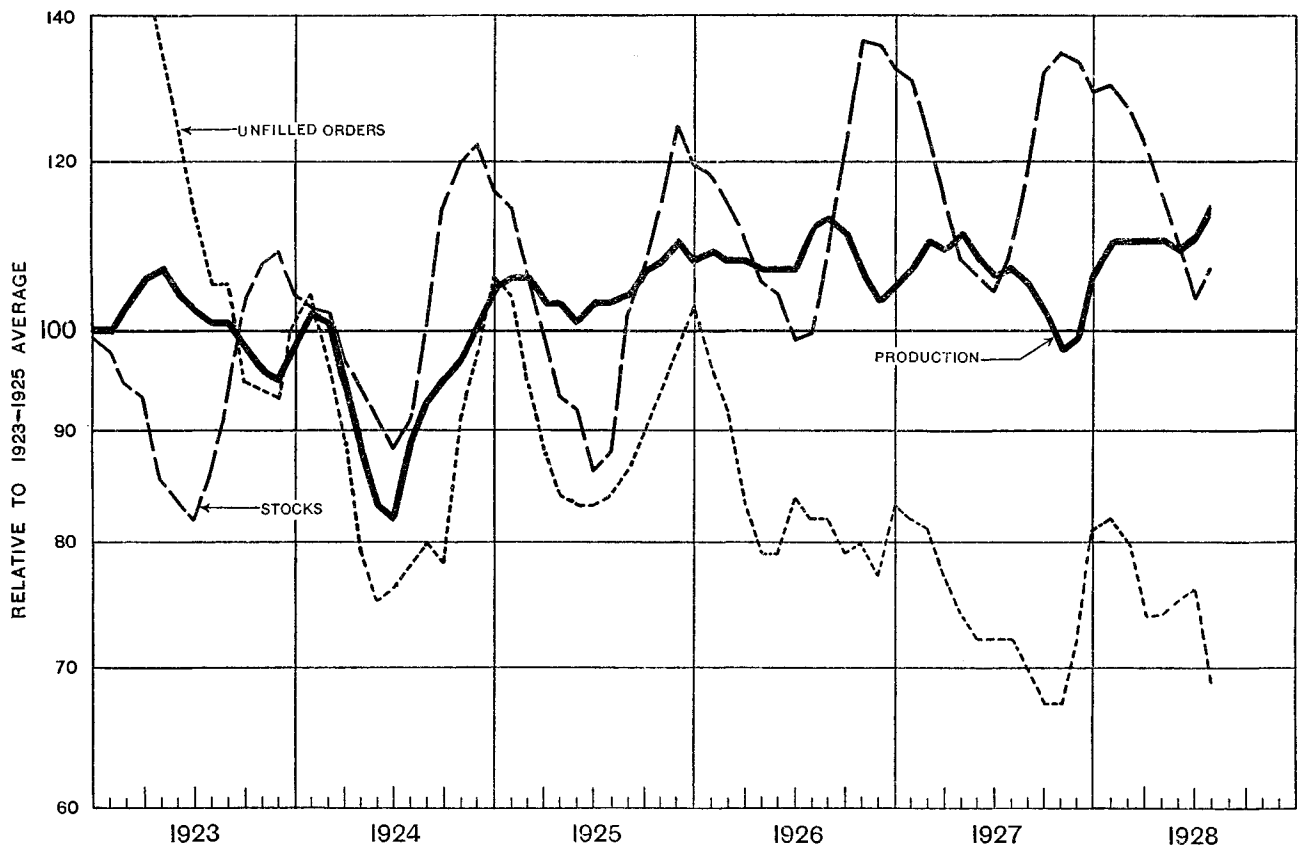
PRODUCTION

Manufacturing production, after adjustment for seasonal conditions, was greater than in either the previous month or the same month of last year. The principal gains over a year ago occurred in iron and steel, automobiles, rubber tires, and nonferrous metals. Declines from last year were noted in textiles and food products. The output of minerals, although greater than in the previous month, was smaller than a year ago, while marketings

month but was lower than a year ago. Compared with last year, with no adjustments, wholesale trade in groceries, meats, furniture, and drugs was larger in August, while as compared with the previous month, wholesale trade in all lines was larger. Sales by department stores, after adjustment for seasonal conditions, were smaller than in July. The unadjusted index, however, showed a gain over the previous month. Merchandise stocks of department stores held at the end of the month without adjustment for

PRODUCTION, STOCKS, AND UNFILLED ORDERS FOR MANUFACTURED COMMODITIES

[1923-1925 monthly average=100. Adjustment has been made for the seasonal movement and relative number of working days for production. Unfilled orders are principally those of iron, steel, building materials, and textiles. August, 1928, is latest month plotted]



of animal products and crops were lower than in August, 1927.

COMMODITY STOCKS

The index of commodity stocks showed a gain over the previous month but was lower than a year ago. As compared with last year both raw materials and manufactured goods were held in smaller quantities.

SALES

The general index of unfilled orders showed declines from both the previous month and August, 1927. As compared with July, declines were registered in unfilled orders for textiles, transportation equipment, and lumber, the iron and steel group remaining unchanged. Compared with a year ago, textiles and transportation equipment showed smaller orders, while iron and steel and lumber manufacturers had larger orders on their books.

Wholesale trade in August, after adjustments for seasonal changes, showed a gain over the previous

seasonal, were larger than at the end of the previous month.

Sales by mail-order houses were larger than in either the previous month or August of last year. The volume of business transacted by 10-cent chains was greater also than in either the preceding month or the same period of last year. Grocery chains showed larger dollar volume in August than in either prior period. Reports from other chains including wearing apparel, drugs, cigars, and candy indicate larger business volume than in the previous month. Shoe chains, however, showed smaller sales than in July.

New orders for manufactured goods, covering structural steel, steel castings, various species of lumber, and enameled ware were larger than in the previous month. As compared with a year ago, however, new orders for steel castings, lumber, and enameled ware were generally smaller.

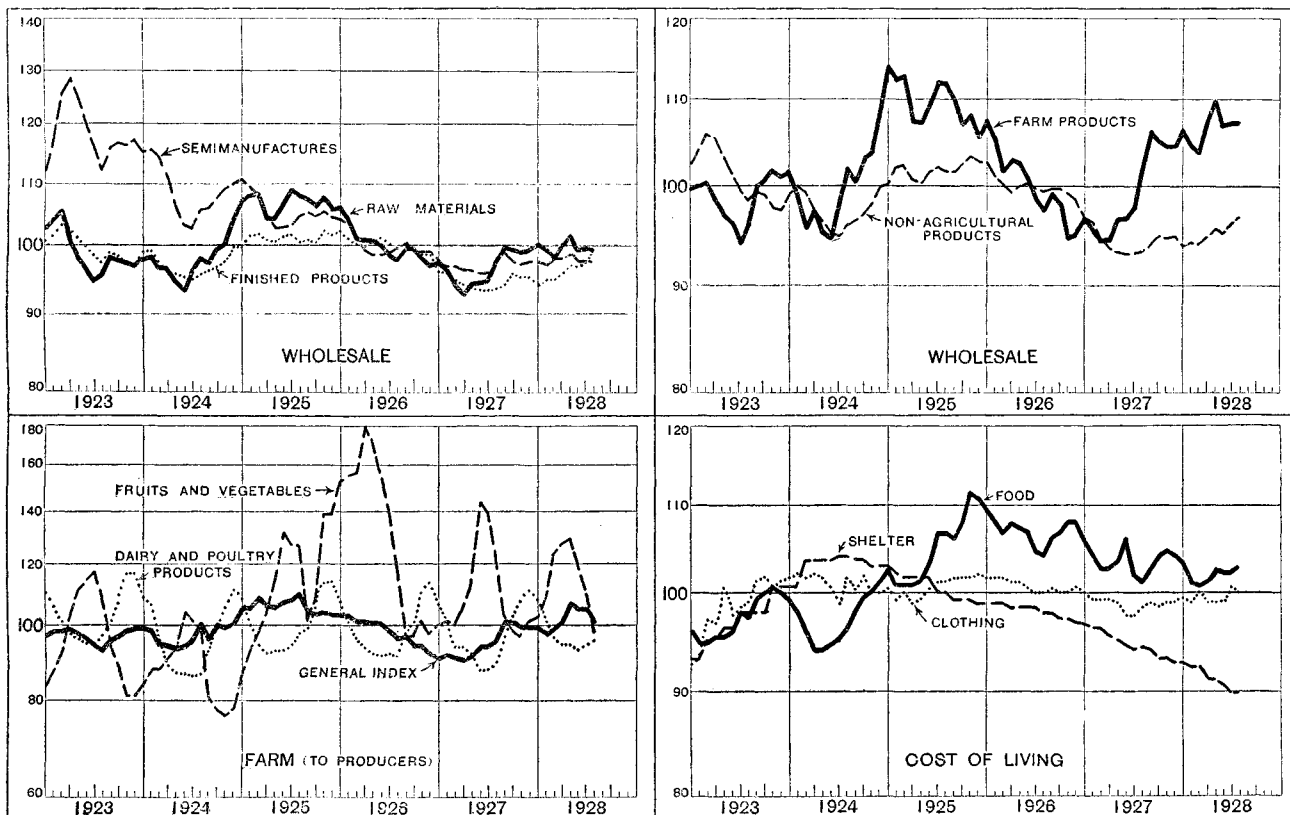
PRICES

The general index of wholesale prices averaged higher than in either the previous month or in August of last year. Increases in food, fuel and lighting, metals and metal products, and building materials were more than sufficient to offset declines from the previous month in hides and leather products, textile products and house-furnishing goods. As compared with a year ago, all groups were generally higher except house furnishings, which declined, and textile products, which showed no change. Prices for certain miscellaneous items averaged lower in August than in either the previous month or August of last year. Classified by state of manufacture, raw materials and semimanufactured

larger employment except food products, which declined slightly, and paper and printing, which showed no change. Compared with August, 1927, all groups showed smaller employment except nonferrous metals, tobacco products, and vehicles, which averaged higher, and iron and steel, which showed no change. The principal recovery in factory employment from a year ago was noted in vehicle and tobacco manufacturing plants. Factory pay-roll payments in August showed a considerable gain over the previous month and were only slightly lower than in the corresponding month of last year. As compared with the previous month, all industrial groups showed larger pay-roll payments except food products, which declined somewhat, and

PRICE COMPARISONS

[Prices at wholesale are relative to 1926; farm prices and the cost of living are relative to the average for 1923-1925. August, 1928, is latest month plotted]



articles showed lower average prices than in July, while the prices for nonagricultural commodities and finished products averaged higher.

The index of prices received by farmers for their produce showed a decline from the previous month but was higher than a year ago. Declines from July in prices for grains, fruits and vegetables, and cotton were more than sufficient to offset increased prices for meat, animals, and dairy and poultry products.

EMPLOYMENT

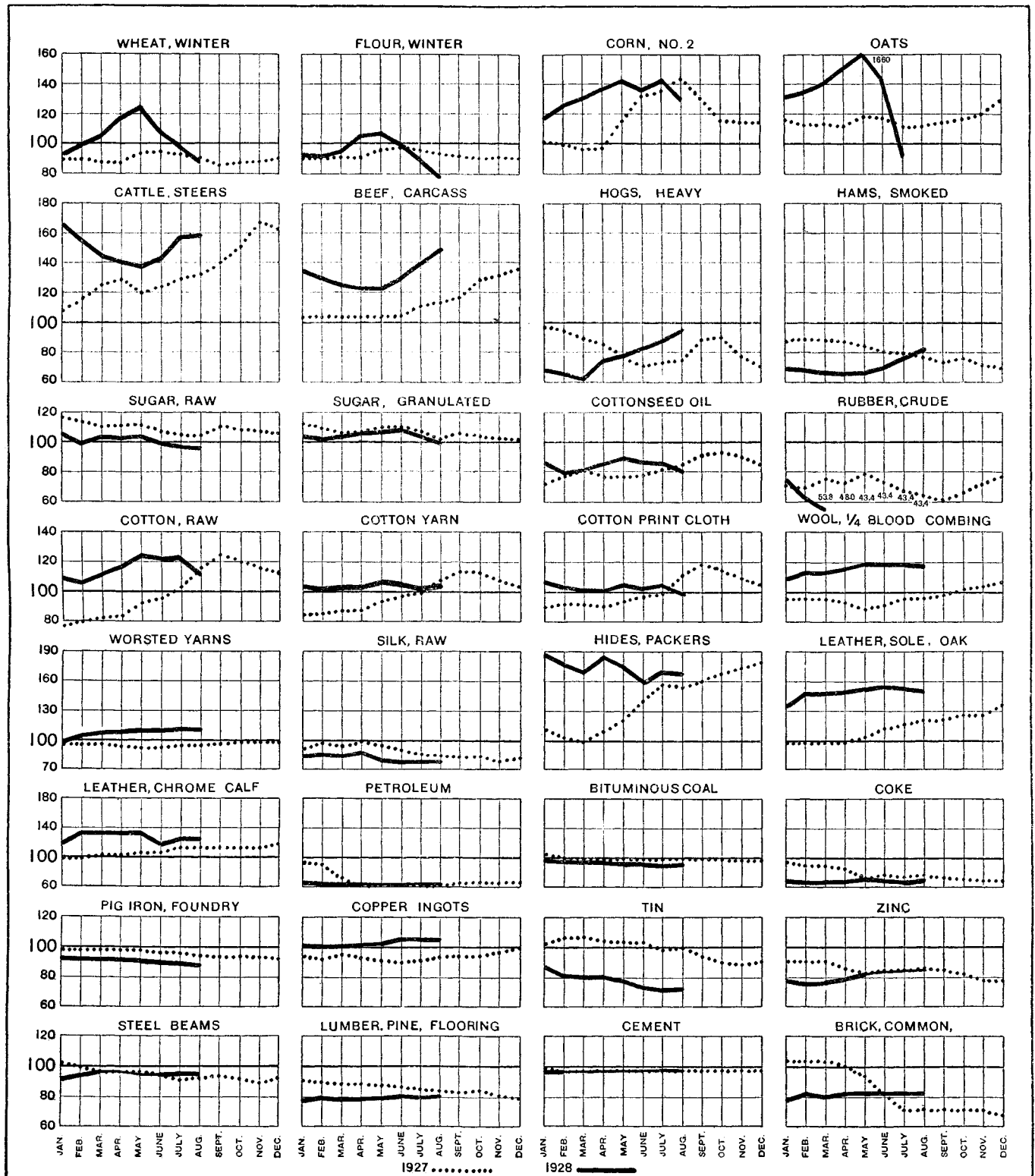
The general index of factory employment showed a gain over the preceding month but was still somewhat lower than in the corresponding month of last year. Compared with the preceding month, all groups showed

paper and printing, which showed no change. Contrasted with last year, increased pay-roll payments in iron and steel, nonferrous metal, tobacco, and vehicle factories were not quite sufficient to offset declines in food products, textiles, lumber, leather, chemical, and stone, clay, and glass plants. The indexes covering both factory employment and factory pay roll, it is to be noted, do not include any of the newer industries, such as aircraft, rayon, radio, etc., where employment conditions are known to be good.

Reports from State and city agencies show generally better labor conditions than in either the previous month or the corresponding month of last year. Employment in trade-unions showed a considerable recovery from the preceding month.

WHOLESALE PRICES FOR SPECIFIED COMMODITIES

Relative numbers, 1926 monthly average taken as 100. August, 1928, is latest month plotted. Data from which these charts are drawn are given on the opposite page



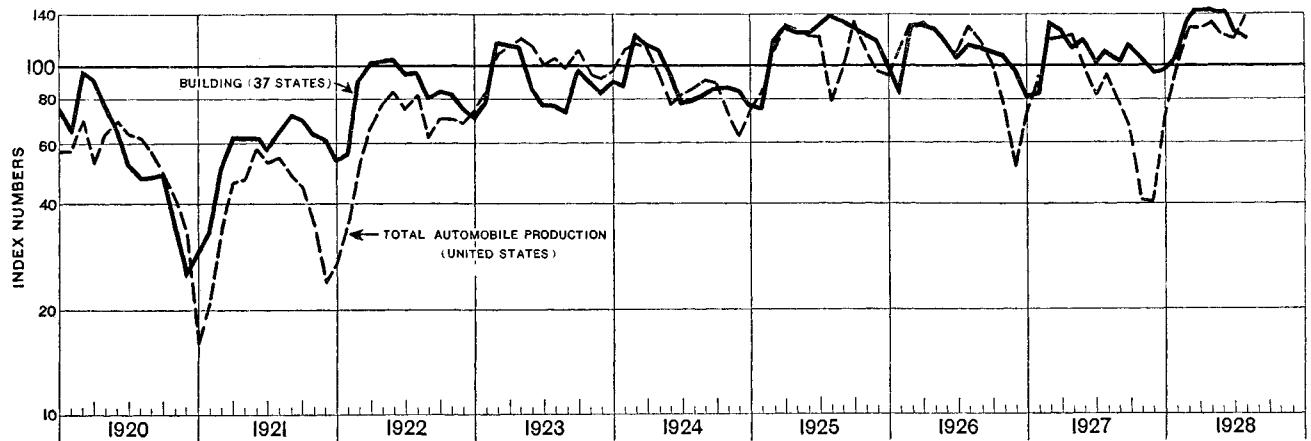
WHOLESALE PRICES FOR SPECIFIED COMMODITIES

* 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				
		July, 1928	August, 1928	August, 1927	June, 1928	July, 1928	August, 1928	July, 1927	August, 1927
FARM PRODUCTS—AVERAGE PRICE TO PRODUCER									
Wheat.....	Bushel.....	1.181	0.952	1.235	98	87	71	94	91
Corn.....	Bushel.....	1.024	.982	.977	146	147	141	132	140
Potatoes.....	Bushel.....	.779	.731	1.463	45	42	39	99	79
Cotton.....	Pound.....	.210	.188	.171	131	139	125	103	113
Cottonseed.....	Ton.....	39.27	36.87	25.95	152	144	136	98	95
Cattle, beef.....	Pound.....	.0919	.0951	.0721	141	142	147	110	112
Hogs.....	Pound.....	.0964	.1001	.0924	74	82	85	73	78
Lambs.....	Pound.....	.1225	.1188	.1115	114	106	103	99	96
FARM PRODUCTS—MARKET PRICE									
Wheat, No. 1, northern spring (Minneapolis).....	Bushel.....	1.300	1.188	1.427	89	84	77	93	92
Wheat, No. 2, red, winter (Chicago).....	Bushel.....	1.521	1.332	1.395	107	99	86	93	91
Corn, contract grade No. 2, cash (Chicago).....	Bushel.....	1.080	.974	1.085	136	142	128	135	143
Oats, contract grades, cash (Chicago).....	Bushel.....	.614	.390	.478	166	143	91	111	111
Barley, feeding (Chicago).....	Bushel.....	.832	.730	.803	139	120	105	112	116
Rye, No. 2, cash (Chicago).....	Bushel.....	1.125	.984	.968	132	118	103	115	102
Tobacco, leaf, average sales, warehouse (Kentucky).....	Cwt.....	9.069	11.580	15.730	77	107	137	104	136
Cotton, middling upland (New York).....	Pound.....	.215	.193	.203	122	123	110	103	116
Wool, $\frac{1}{4}$ blood combing, Ohio and Pennsylvania fleeces (Boston).....	Pound.....	.55	.54	.44	120	120	117	96	96
Cattle, steers, good to choice, corn fed (Chicago).....	Cwt.....	11.990	15.106	12.575	142	157	159	129	132
Hogs, heavy (Chicago).....	Cwt.....	10.855	11.706	9.185	82	88	95	73	75
Sheep, ewes (Chicago).....	Cwt.....	5.375	5.719	5.575	89	82	87	81	85
Sheep, lambs (Chicago).....	Cwt.....	15.175	14.313	13.575	95	111	105	104	99
FOOD									
Flour, standard patents (Minneapolis).....	Barrel.....	7.355	6.619	7.600	94	87	79	93	90
Flour, winter straights (Kansas City).....	Barrel.....	6.444	5.656	6.769	99	89	78	95	93
Sugar, 96° centrifugal (New York).....	Pound.....	.012	.041	.045	100	97	95	104	104
Sugar, granulated, in barrels (New York).....	Pound.....	.057	.055	.056	108	104	100	107	102
Cottonseed oil, prime yellow (New York).....	Pound.....	.101	.094	.100	86	85	80	81	84
Beef, fresh, carcass, good native steers (Chicago).....	Pound.....	.229	.243	.185	129	139	149	111	113
Beef, fresh, carcass, steers (New York).....	Pound.....	.249	.260	.209	132	146	152	117	117
Pork, smoked hams (Chicago).....	Pound.....	.236	.249	.235	70	77	81	79	76
Butter, creamery, 92 score (New York).....	Pound.....	.45	.47	.42	98	100	104	93	93
Oleomargarine, standard, uncolored (Chicago).....	Pound.....	.215	.215	.215	94	94	94	94	94
TEXTILES									
Cotton yarns, carded, white, northern, mule spun, 22-1 cones (Boston).....	Pound.....	.384	.369	.387	104	107	103	99	108
Cotton-print cloth, 64 x 60-33 $\frac{1}{2}$ "-5.35-yards to pound.....	Yard.....	.079	.075	.084	102	105	99	99	111
Cotton sheeting, brown 4/4 Trion (New York).....	Yard.....	.092	.091	.098	98	99	98	94	106
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....	Pound.....	1.600	1.600	1.350	110	112	112	94	94
Woman's dress goods, French, 39 inches at mills, serge.....	Yard.....	1.025	1.025	.975	99	99	99	91	94
Suitings, unfinished worsted—13-ounce, mill.....	Yard.....	2.008	2.008	1.913	100	100	109	95	95
Suitings, serge, 11-ounce, 56-58 inch.....	Yard.....	2.064	1.998	2.048	97	95	92	95	95
Silk, Japan, 13-15.....	Pound.....	4.851	4.851	5.145	78	78	78	85	83
Hosiery, women's, pure silk, mill.....	Dozen pair.....	10.290	10.290	10.780	85	85	85	89	89
LEATHER									
Hides, green salted, packers' heavy native steers (Chicago).....	Pound.....	.239	.236	.215	160	170	168	156	153
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....	Pound.....	.278	.275	.212	154	160	159	131	122
Leather, chrome calf, dull or bright "B" grades (Boston).....	Square foot.....	.565	.565	.510	117	125	125	113	113
Leather, sole, oak, scoured backs, heavy (Boston).....	Pound.....	.670	.670	.530	155	153	153	116	121
Boots and shoes, men's black calf, blucher (Massachusetts).....	Pair.....	6.750	6.750	6.400	106	106	106	100	100
Boots and shoes, men's dress wait tan calf (St. Louis).....	Pair.....	5.000	5.000	5.000	102	102	102	102	102
FUEL									
Coal, bituminous, mine-run (composite price).....	Net ton.....	3.956	4.009	4.275	92	92	93	99	99
Coal, bituminous, prepared sizes (composite price).....	Net ton.....	4.306	4.388	4.904	90	90	92	99	102
Coal, anthracite, chestnut (composite price).....	Long ton.....	12.965	12.853	13.209	94	94	93	96	96
Coke, Connellsville (range of prompt and future) furnace—at ovens.....	Short ton.....	2.785	2.875	3.075	68	68	70	74	75
Petroleum, crude, Kansas-Oklahoma—at wells.....	Barrel.....	1.195	1.310	1.155	63	63	64	61	61
METALS									
Pig iron, foundry No. 2, northern (Pittsburgh).....	Long ton.....	18.410	18.260	19.360	90	89	89	96	94
Pig iron, basic, valley furnace.....	Long ton.....	16.000	16.000	17.300	83	86	86	94	93
Steel billets, Bessemer (Pittsburgh).....	Long ton.....	32.000	32.000	32.000	92	91	91	94	94
Copper ingots, electrolytic, early delivery (New York).....	Pound.....	.1453	.1453	.1297	105	105	105	91	94
Brass, sheets, mill.....	Pound.....	.193	.193	.182	101	101	101	93	96
Lead, pig, desilverized, for early delivery (New York).....	Pound.....	.0622	.0615	.0668	75	74	74	75	79
Tin, Straits (New York).....	Pound.....	.4704	.4801	.6447	73	72	74	98	99
Zinc, slab, western (St. Louis).....	Pound.....	.0620	.0625	.0634	84	85	85	85	86
BUILDING MATERIAL AND MISCELLANEOUS									
Lumber, pine, southern, yellow flooring, mill.....	M feet.....	36.16	36.34	37.68	81	80	81	85	84
Brick, common red, domestic building (New York).....	Thousand.....	13.50	13.50	11.75	82	82	82	71	71
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district).....	Barrel.....	1.600	1.600	1.600	97	97	97	97	97
Steel beams, mill (Pittsburgh).....	Cwt.....	1.850	1.850	1.800	95	95	95	91	92
Rubber, smoked sheets, New York.....	Pound.....	.193	.192	.351	40	40	40	72	72
Sulphuric acid, 66° (New York).....	Ton.....	15.500	15.500	15.000	107	107	107	103	103
Wood pulp, sulphite, domestic, unbleached, news grade (New York).....	Cwt.....	2.525	2.525	2.600	88	88	88	91	91
Newsprint, rolls, contract, mill.....	Cwt.....	3.250	3.250	3.250	94	94	94	94	94

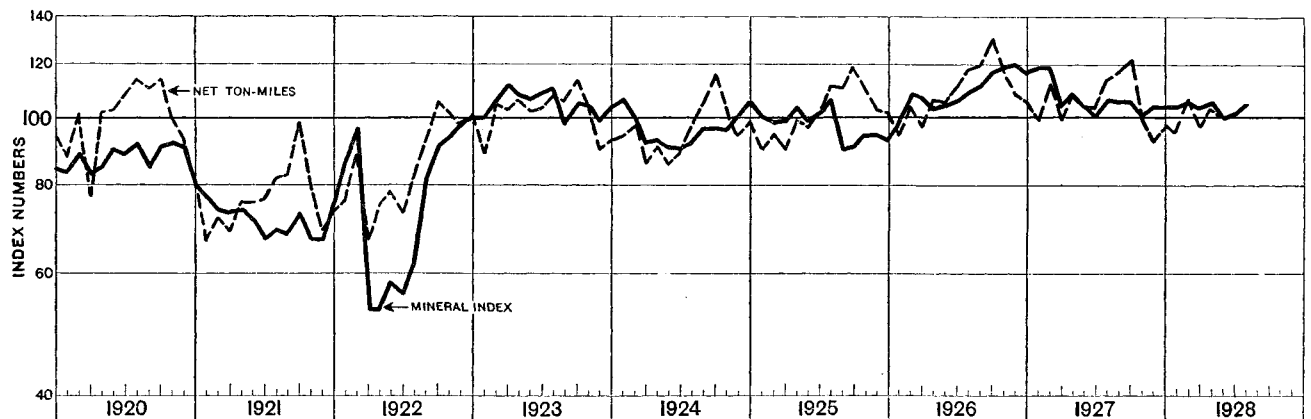
NEW BUILDING CONTRACTS AND AUTOMOBILE PRODUCTION

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



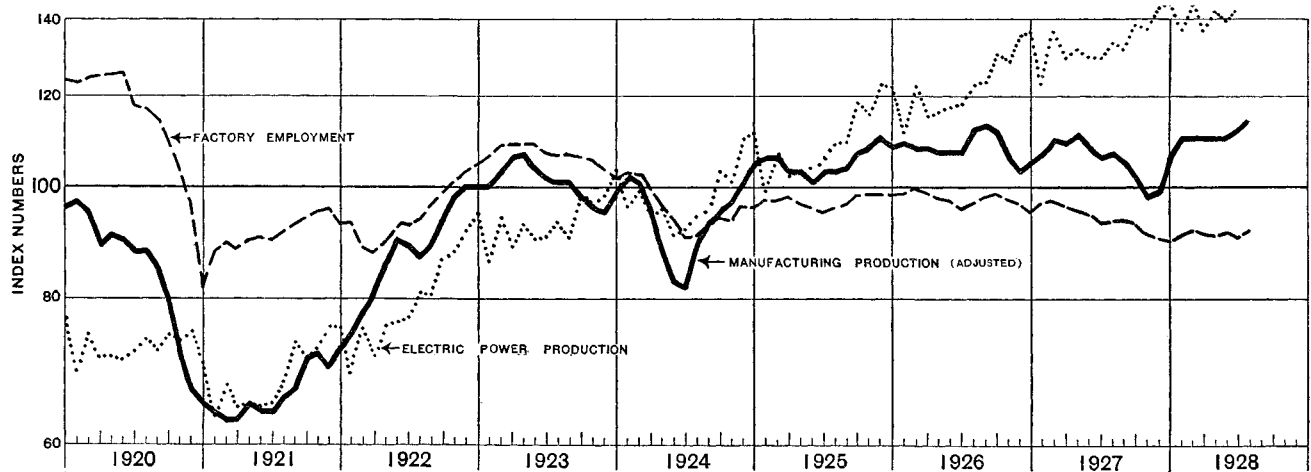
MINERAL PRODUCTION AND RAILROAD TON-MILEAGE

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



FACTORY EMPLOYMENT, MANUFACTURING, AND ELECTRIC POWER PRODUCTION

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



REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

TEXTILES

Receipts of wool at Boston showed a considerable decline from both the previous month and August of last year. Imports of wool were likewise smaller than in either period. Consumption of wool was greater than in July, but smaller than a year ago. Likewise machinery activity in wool-consuming establishments was more active than in July. Prices of wool were generally lower than in July, but higher than a year ago, while prices for woollen goods showed no change from the previous month, but were higher than a year ago.

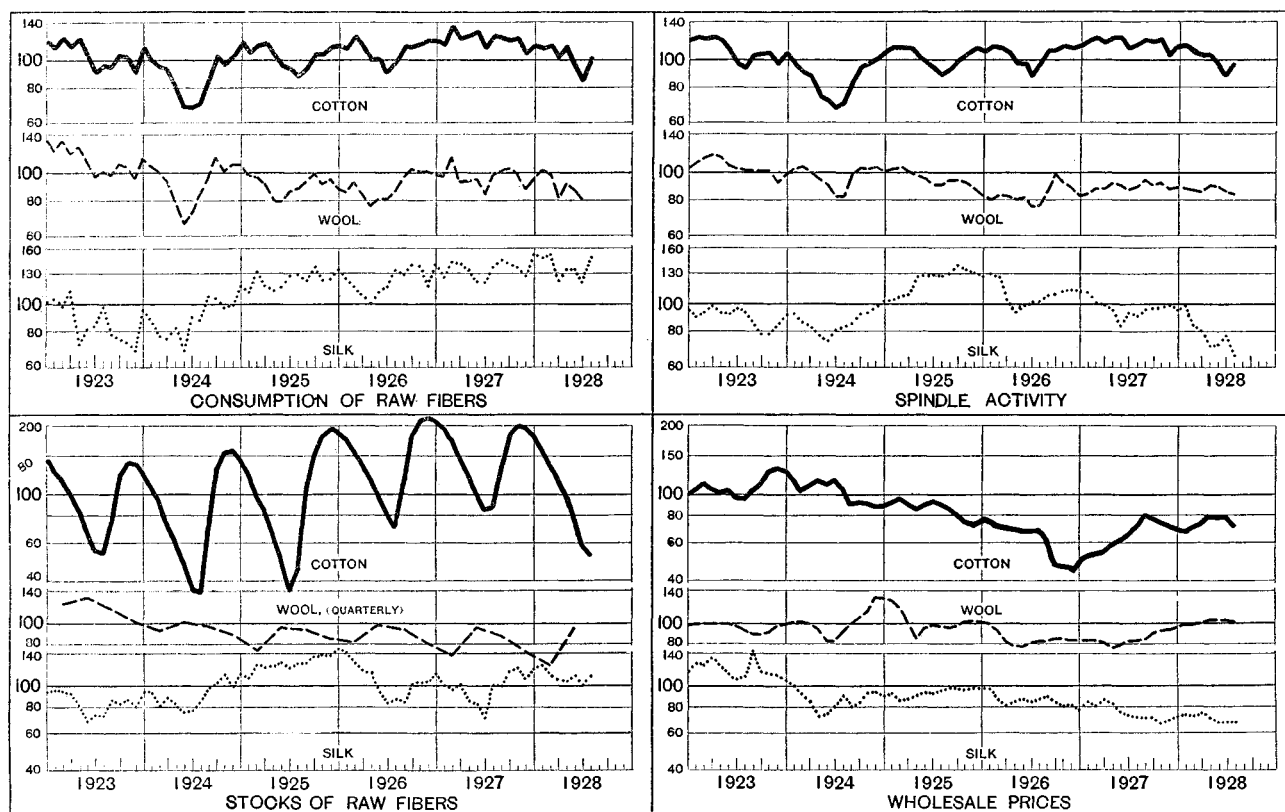
Ginnings of cotton as of September 16 were considerably smaller than a year ago. Consumption of

of cotton goods were generally lower than in the previous month, showing declines also from a year ago. Reports of cotton finishers showed lower new orders than a year ago.

Imports of silk were considerably greater than in July, but were smaller than a year ago. Silk deliveries to consuming establishments showed gains over both periods. Stocks of silk held at warehouses at the end of August were lower than a year ago, while stocks at manufacturing plants were larger. Silk machinery activity showed a decline from the previous month in broad looms and spinning spindles and a gain in narrow looms. Compared with a year

THE TEXTILE INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. Where available, August, 1928, is latest month plotted]



cotton by textile mills was greater than in July, but smaller than a year ago. For the first eight months of the calendar year consumption was 14 per cent lower than in the corresponding period of 1927. Stocks of cotton held at the end of August, both at mills and in public storage, were considerably lower than a year ago. Exports of cotton showed declines from both the previous month and August, 1927. Cotton prices averaged lower than in the preceding month.

The activity of cotton spindles was greater than in the previous month, but smaller than a year ago. Production of cotton textiles was greater than in either the previous month or of August of last year. Prices

ago, however, looms, both broad and narrow, showed greater activity while spindles declined. The price of raw silk showed no change from the previous month, but was lower than a year ago. Prices for silk goods were generally lower than in either the previous month or August, 1927. Imports of rayon were larger than in July, but smaller than a year ago.

Textiles spread with pyroxylin showed a gain over both the previous month and the corresponding month of last year. Unfilled orders for pyroxylin-coated textiles at the end of the month were considerably greater than a year ago. Production of ocean-pearl buttons showed a gain over the previous month, but a

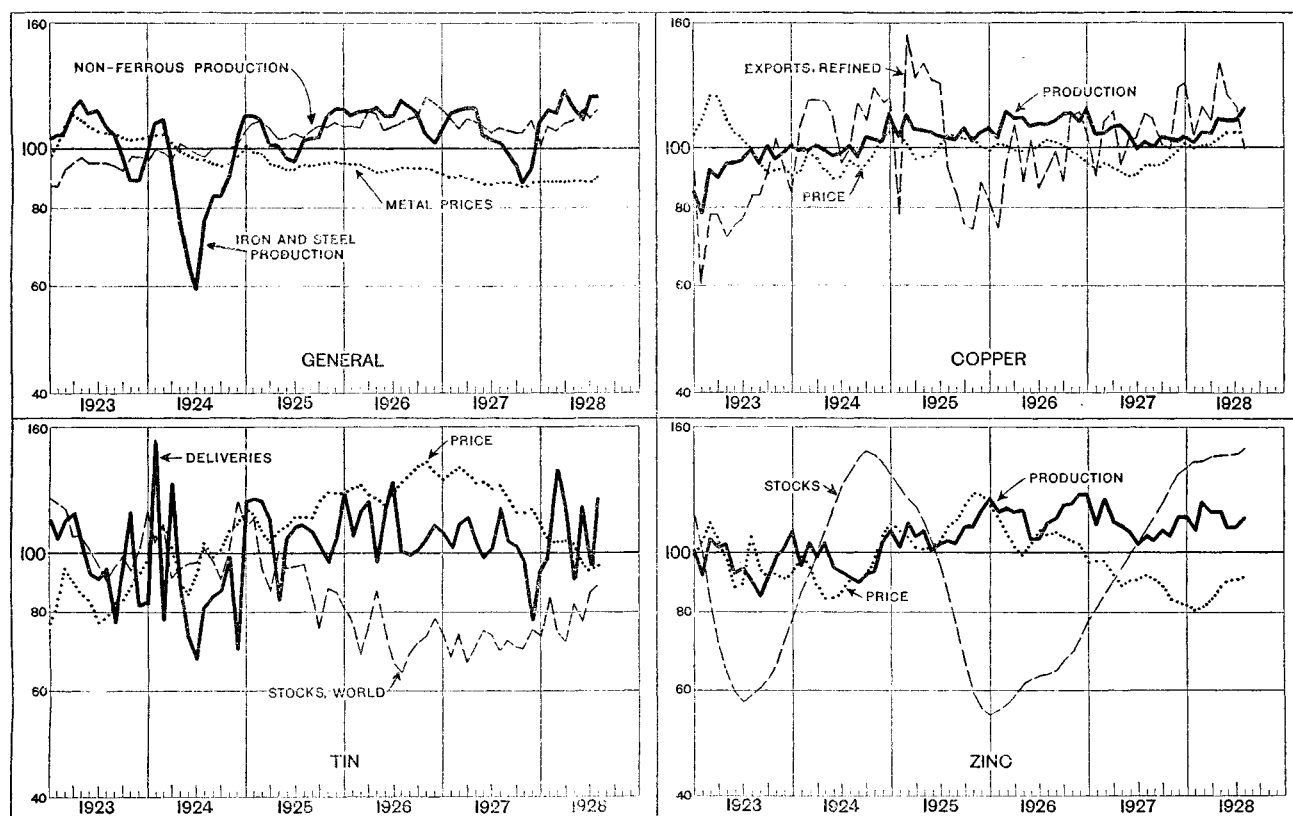
decline from a year ago, but the cumulative total through August was higher than during the same period of 1927. Production of fresh-water pearl buttons was greater than in July and showed practically no change from a year ago. Imports of burlaps showed a decline from both the previous month and August of last year, but the cumulative total through August was greater than during the same period of last year. Imports of unmanufactured fibers were larger than in July, but smaller than a year ago, with the cumulative total also showing a decline from 1927.

Production of steel castings were larger than in July, but slightly smaller than a year ago, but new orders for castings were considerably larger than in either period. Production of steel barrels showed gains over both periods, while the output of track work showed declines from both the previous month and August, 1927. Steel prices showed practically no change from the previous month, but were generally lower than a year ago.

Structural steel orders in August, on a computed basis, were larger than in any other single month on

THE METAL INDUSTRIES

Relative numbers, monthly average 1923-1925, taken as 100. August, 1928, is latest month plotted. Curve covering zinc stocks is plotted from 12 months' moving monthly averages plotted on the end month]



METALS

Shipments of iron ore in August were larger than in either the previous month or August last year. Pig-iron production also showed gains over both periods despite a decline in the number of furnaces in blast. Pig-iron prices were somewhat lower than in July, continuing the decline from a year ago.

Steel-ingot production was greater than in either the previous month or August of last year, while for the first eight months of the current year the output of steel was about 8 per cent larger than in the same period of last year. Unfilled steel orders showed gains over both the previous month and the same month of a year ago. Production of steel sheets by independent manufacturers also showed gains over both periods.

record, while reduced to a ratio basis new orders showed a higher percentage to plant capacity than any time since February, 1920, when the capacity of the industry to produce structural steel was only 72 per cent as large as at the present time.

New orders for machine tools were larger than in either the previous month or August a year ago. New orders for electric overhead cranes were likewise greater than in either period.

Production of copper in August was larger than in either the previous month or August, a year ago. For the calendar year to date, copper production was also larger than in the corresponding period of 1927. Exports of refined copper were greater than a year ago.

FUELS

Production of bituminous coal in August was greater than in July but smaller than a year ago. Bituminous output during the first eight months showed a decline of 11 per cent from the corresponding period of last year. The production of anthracite coal was larger than in the previous month but substantially lower than a year ago. The total output of coke showed a gain over both the preceding month and the corresponding period last year.

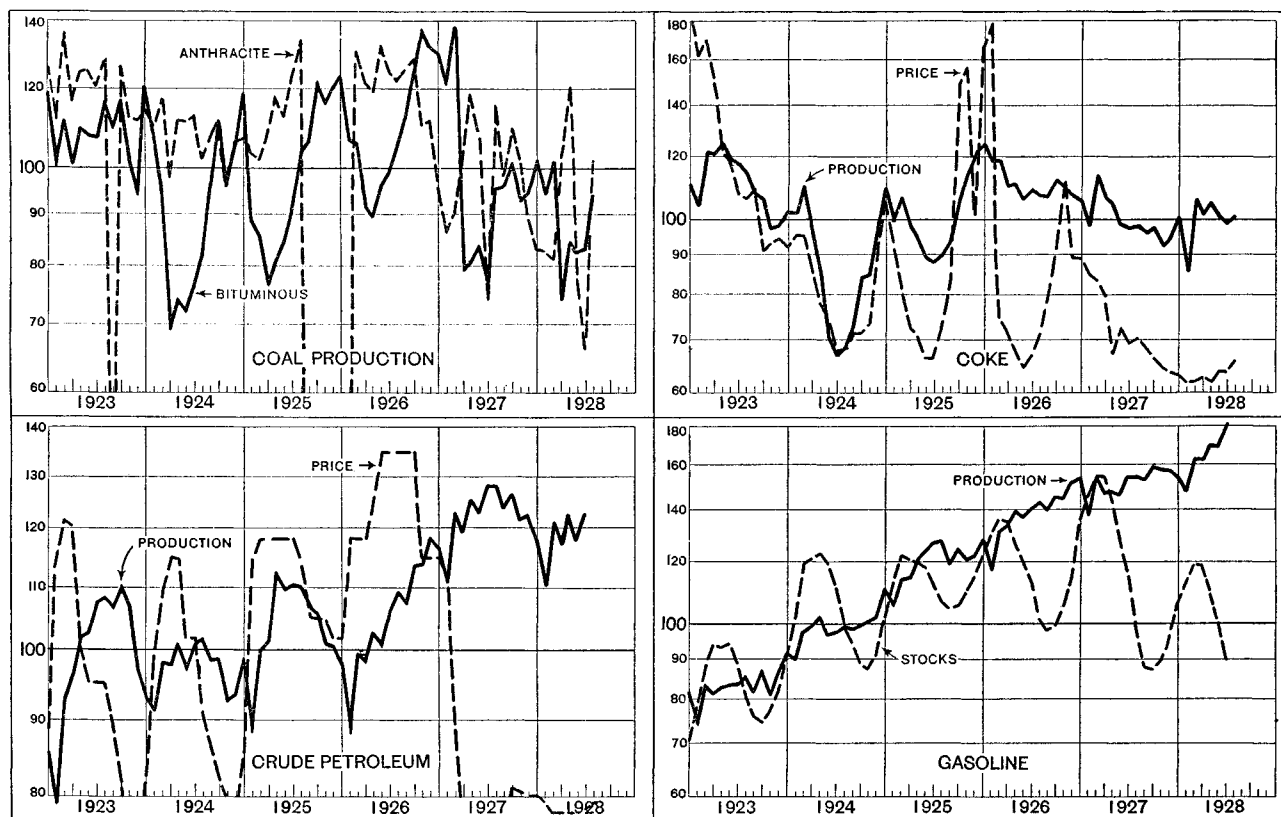
siderably greater than in either the previous month or July of last year. For the first seven months of the year, domestic shipments of pneumatic tires by manufacturers were 14 per cent greater than a year ago.

HIDES AND LEATHER

Imports of hides and skins were smaller than in either the previous month or August a year ago, but for the first eight months of the current year total imports were 31 per cent greater than during the same period

THE FUEL INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. August, 1928, is latest month plotted where data were available]



AUTOMOBILES AND RUBBER

The total production of automobiles, both passenger cars and trucks, was larger in August than in any other month on record. For the first eight months of the current year the production of more than three million vehicles represents an increase of somewhat over 15 per cent from the corresponding period of last year. The Canadian production of automobiles was greater than in either the previous month or August a year ago, while the total for the first eight months of the year showed a gain of 21 per cent over the same period of last year. Shipments of accessories and parts were considerably greater than in either the previous month or the corresponding period a year ago. Imports of rubber during August were greater than in the previous month but smaller than a year ago. Shipments of pneumatic tires and tubes in July were con-

of 1927. Fewer cattle and calves were slaughtered in the United States than a year ago. Prices of cattle hides and calfskins averaged substantially higher than a year ago. The production of sole leather was greater than in either the previous month or August, 1927. Exports of sole and belting leather were likewise greater than in either period. Prices for leather showed practically no change from the previous month, but averaged higher than year ago. The production of shoes was greater than a year ago. For the calendar year to date, the production of shoes was about 2 per cent greater than in the same period of 1927.

PAPER

Imports of chemical wood pulp showed a decline from the previous month, while mechanical pulp imports showed a gain.

BUILDING CONSTRUCTION

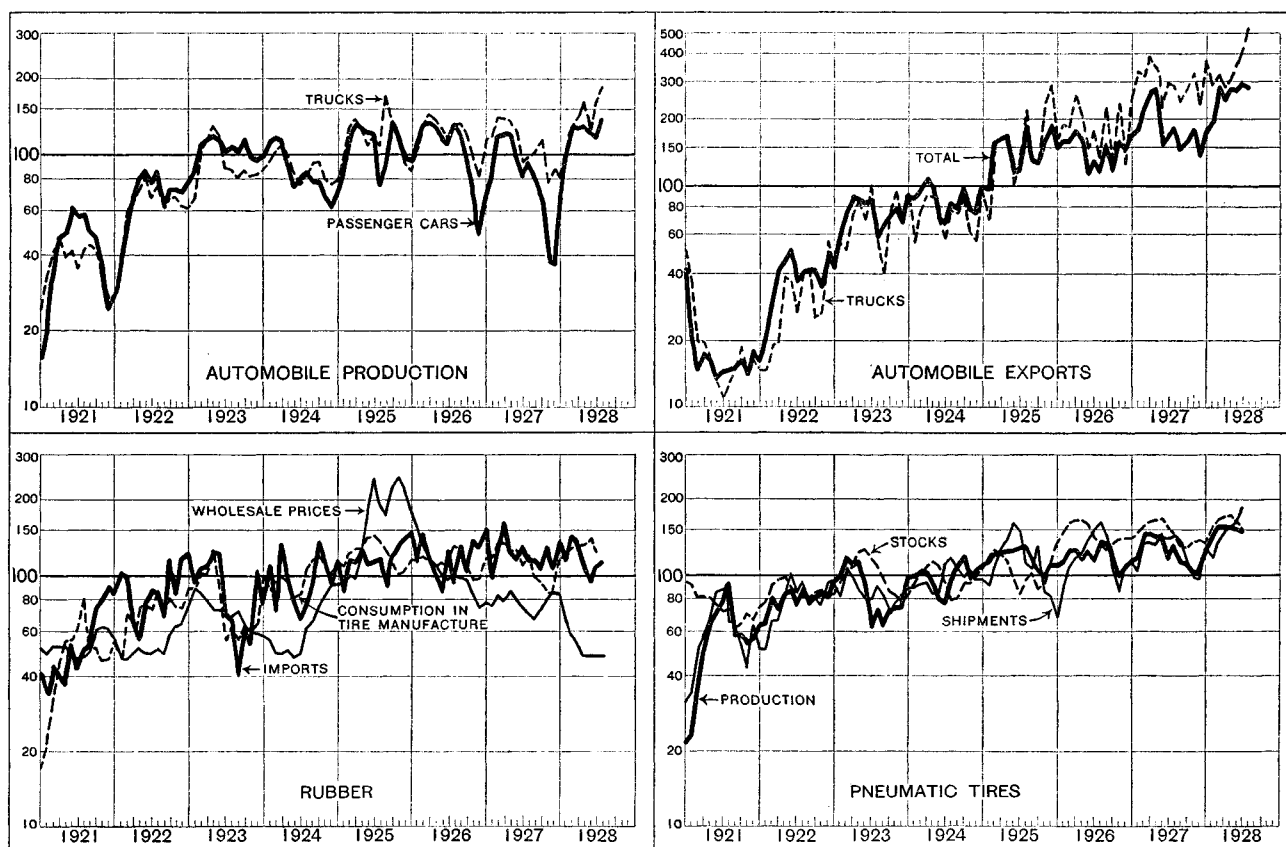
Building costs were somewhat higher in August than in either the previous month or August of last year. The value of new building contracts awarded during the month showed a decline from both the previous month and the corresponding month of last year, but for the first eight months of the current year the value of new building awards was 6 per cent larger than in the same period of last year. Measured in

southern pine and Douglas fir production showed small declines from the same period of last year, while California white pine showed a gain.

The production of oak flooring was greater than in either the preceding month or August a year ago, with the total for the calendar year to date showing an increase of 14 per cent over the same period of last year. Shipments of doors, both white pine and fir, were greater than in July.

THE AUTOMOBILE AND RUBBER INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. Where available, August, 1928, is latest month plotted]



floor space, new building awards in August, though somewhat smaller than in July, were considerably greater than a year ago, while for the first eight months the total was 17 per cent larger than in the same period of 1927. Fire losses in the United States and Canada, although greater than in the previous month, were substantially lower than a year ago, with the total for the first eight months of the year recording a decline of 11 per cent from the same period of 1927.

LUMBER AND LUMBER PRODUCTS

The output of southern pine lumber was greater than in July but smaller than a year ago. Douglas fir production showed similar comparisons with both periods. The production of California white pine was greater than in either the previous month or August a year ago. For the first eight months of the year

STONE AND CLAY PRODUCTS

The output of face brick was greater than in either the preceding month or August a year ago, with shipments showing similar comparisons. Shipments of porcelain plumbing fixtures showed a substantial gain over the preceding month. New orders for terra cotta were lower than in either the previous month or August a year ago. The output of polished plate glass also showed gains over both the preceding month and August a year ago. The production of glass containers, as well as shipments, showed increases over both prior periods.

Production of Portland cement was greater than in either the preceding month or August a year ago. For the first eight months of 1928 production was larger than a year ago.

FOODSTUFFS AND TOBACCO

The latest official estimate indicates a larger wheat crop than a year ago. The visible supply of wheat, both in the United States and Canada, was greater than a year ago. Wheat receipts at principal markets were larger while shipments were smaller than in August, 1927. Exports of wheat and flour were lower than last year. Prices for wheat were generally lower than in either the previous month or a year ago.

A larger corn crop is indicated than a year ago by the latest official estimate. The visible supply of corn was considerably smaller than at this time last year. Receipts and shipments at primary markets, however,

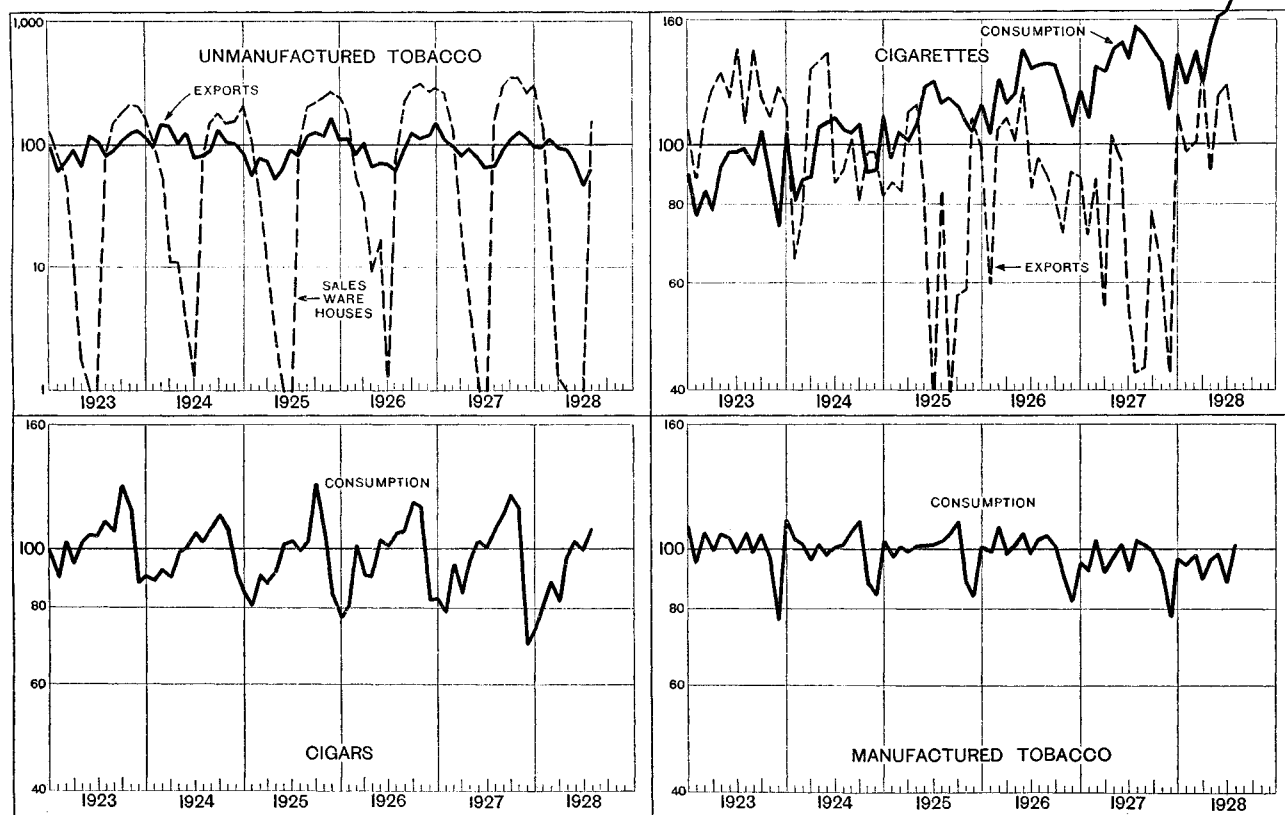
beef products were smaller than in either the previous month or August of last year. Prices of beef averaged higher than in either period.

Receipts and shipments of hogs at primary markets were smaller in August than in either the previous month or August, 1927. The inspected slaughter of pork was smaller than a year ago. Cold-storage holdings of pork products at the end of the month showed a decline from both the previous month and the same month of last year. Prices for hogs and pork products averaged higher than in either period.

Receipts and shipments of sheep at primary markets were also larger than in either prior period. The pro-

THE TOBACCO INDUSTRIES

[Relative numbers, monthly average, 1923-1925, taken as 100. Where available, August, 1928, is latest month plotted]



were greater. Corn prices were generally lower than in either the previous month or August a year ago.

The visible supply of oats was smaller than a year ago, but for barley was considerably greater. Receipts of oats at principal markets were larger than last year. Exports of oats and barley were each greater than a year ago. Prices for oats and barley averaged lower than in either prior period.

Receipts and shipments of cattle at primary markets were larger than in July, while receipts were smaller and shipments greater than in August of last year. The output of inspected slaughter of beef was smaller than a year ago. Cold-storage holdings of

duction of lamb and mutton under Federal inspection was greater than a year ago. Storage holdings at the end of the month were considerably larger than last year. Prices for sheep and lamb also averaged higher than last year.

Receipts of poultry at principal markets were somewhat smaller than a year ago, while storage holdings were larger. Cold-storage holdings of fish were also larger than last year. Storage holdings of creamery butter at the end of August were substantially lower than a year ago. Wholesale prices for butter averaged higher than in either the previous month or last year. Receipts of cheese at primary markets were lower than

in either the previous month or the same month a year earlier.

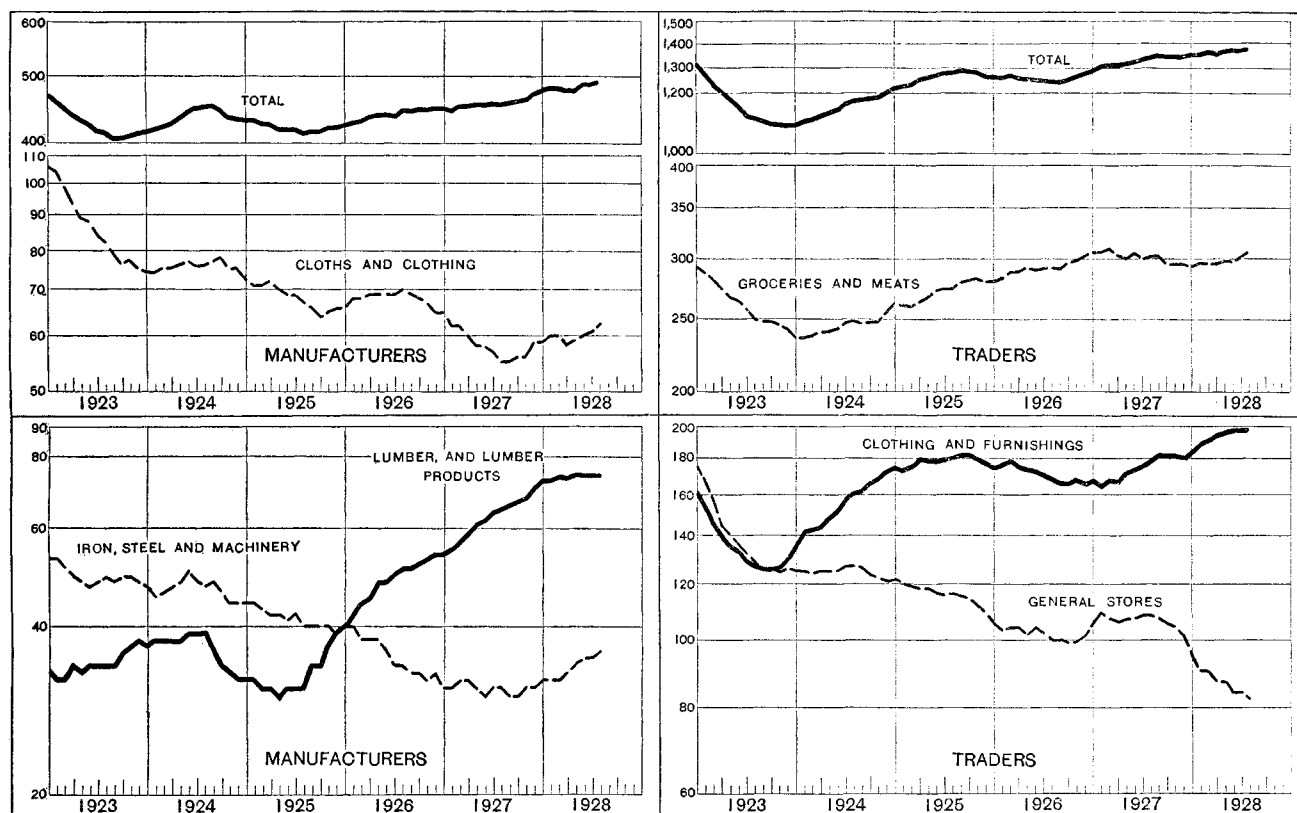
Consumption of cigarettes was greater than in either the previous month or the same month of last year. For the first eight months of the year cigarette consumption was 10 per cent larger than in the same period of 1927.

TRANSPORTATION

Car loadings, although greater than in July, were smaller than a year ago. Compared with last year, however, loadings of grains, ores, and miscellaneous items were larger in August, the decline in the total being due to smaller loadings of livestock, coal and coke, and merchandise in less than carload lots.

BUSINESS FAILURES

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



BANKING AND FINANCE

Check payments outside of New York, although smaller than in July, were greater than a year ago, with the total for the first eight months of the year showing a gain of over 8 per cent over the same period of last year. Loans and discounts of Federal reserve member banks, though declining somewhat from the previous month, were 7 per cent greater than a year ago. Bills discounted with reserve banks, though showing some contraction from the previous month, were more than twice as great as a year ago. The Federal reserve ratio was higher than in July, but lower than in August of last year. Interest rates on both time and call funds averaged higher than in either prior period.

DISTRIBUTION MOVEMENT

Sales of mail-order houses and 10-cent stores showed larger dollar volumes than in either the previous month or August a year ago. Magazine advertising was greater than in either period, with newspaper advertising making similar comparisons. Postal receipts were larger than in July. Air mail continued to show growth, larger weights being dispatched than in either the previous month or the same month of 1927. More domestic money orders were issued in the principal cities than in either the previous month or August a year ago, while the value of money orders so issued was likewise larger than in either the previous month or the same month of last year.

GOLD, SILVER, AND FOREIGN EXCHANGE

Domestic receipts of gold at the mint were greater than in either the preceding month or August a year ago, with the Rand output showing similar comparisons. Although gold exports were larger than a year ago, they were smaller than in July, leaving for the first time in several months an import balance in contrast with an export balance. Silver production, although greater than in July, was smaller than a year ago. Silver prices averaged lower than in the previous month, but were higher than last year.

Exchange on the principal currencies showed but little change from the previous month, but slight declines were registered in the English pound, the Dutch guilder, the Japanese yen, and the Argentine peso.

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	1927			1928			PER CENT INCREASE (+) OR DECREASE (-)	
			June	July	August	June	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927
PRODUCTION										
TOTAL INDUSTRIAL										
Unadjusted, except for working days.....	114	81	107	102	105	108	105	109	+ 0.4	+ 0.4
Adjusted for seasonal variations.....	112	83	108	106	107	108	109	113	+ 0.4	+ 5.6
MANUFACTURING										
Total (adjusted for working days only).....	114	79	107	101	104	108	106	109	+ 2.8	+ 4.8
Total (adjusted for seasonal variations).....	113	82	108	106	107	110	111	114	+ 2.7	+ 6.5
Iron and steel.....	121	59	105	103	102	112	121	121	0.0	+ 18.6
Textiles.....	121	77	121	118	119	109	100	109	+ 9.0	- 8.4
Food products.....	106	92	102	96	97	93	89	90	+ 1.1	- 7.2
Paper and printing.....	118	91	112	114	112	117	117			
Lumber.....	110	90	93	95	95	92	95			
Automobiles.....	134	47	95	84	89	119	120	132	+ 10.0	+ 48.3
Leather and shoes.....	117	86	105	113	112	105	111	110	- 0.9	
Cement, brick, and glass.....	122	92	109	111	115	112	117	118	+ 0.9	+ 1.8
Nonferrous metals.....	121	87	108	106	108	115	112	116	+ 3.6	+ 7.4
Petroleum refining.....	153	84	134	136	136	153	155			
Rubber tires.....	156	66	131	124	119	145	155	155	0.0	+ 30.3
Tobacco manufactures.....	126	93	116	109	119	126	125	131	+ 4.8	+ 10.1
MINERALS										
Total (adjusted for working days only).....	124	84	108	103	111	104	103	105	+ 1.9	- 5.4
Total (adjusted for seasonal variations).....	120	90	104	100	106	99	101	105	+ 4.0	- 0.9
Bituminous coal.....	125	77	91	87	92	89	94	91	- 3.2	- 1.1
Anthracite coal.....	133	1	102	75	107	74	66	95	+ 43.9	- 11.2
Crude petroleum.....	124	88	120	124	123	117	119	122	+ 2.5	- 0.8
Iron-ore shipments.....	134	0	101	99	99	107	103	105	+ 1.9	+ 6.1
Copper.....	116	82	105	101	101	110	113	115	+ 1.8	+ 13.9
Zinc.....	124	93	114	109	114	117	117	121	+ 3.4	+ 6.1
Lead.....	125	75	112	116	112	99	97	108	+ 11.3	- 3.6
Silver.....	123	85	93	94	94	93	76	82	+ 7.9	- 12.8
ANIMAL PRODUCTS (marketings)										
Total.....	124	79	123	109	105	116	108	97	- 10.2	- 7.6
Wool.....	421	26	348	421	225	378	387	195	- 49.6	- 13.3
Livestock.....	131	76	89	76	89	83	78	79	+ 1.3	- 13.0
Poultry and eggs.....	148	68	110	81	77	106	92	80	- 8.7	+ 3.9
Dairy products.....	160	64	160	142	123	147	138	117	- 15.2	- 4.9
Fish.....	187	44	153	154	187	168	154	170	10.4	- 10.0
CROPS (marketings)										
Total.....	231	45	60	65	115	52	87	114	+ 31.0	- 0.9
Grains*.....	205	38	76	116	169	56	147	185	+ 20.1	+ 9.5
Vegetables*.....	199	60	130	99	86	164	107	83	- 22.4	- 3.5
Fruits*.....	251	55	91	114	124	75	164	165	+ 0.6	+ 33.1
Cotton products*.....	346	11	31	12	74	24	28	45	+ 60.7	- 39.2
Miscellaneous crops*.....	266	22	28	25	106	24	22	114	+ 418.2	+ 7.5
FOREST PRODUCTS										
Total.....	112	80	96	89	99	96	88	95	+ 8.0	- 4.0
Lumber.....	112	80	96	91	102	95	88	97	+ 10.2	- 4.9
Pulpwood.....	151	54	88	64	63	96	64	72	+ 12.5	+ 14.3
Gum (rosin and turpentine)*.....	161	18	133	124	119	172	170	161	- 5.3	+ 35.3
Distilled wood.....	148	66	92	90	116	81	75	72	- 4.0	- 37.9

INDEXES OF BUSINESS—Continued

Relative to 1923-1925 monthly average as 100	Maxi- mum since Jan. 1, 1923	Mini- mum since Jan. 1, 1923	1927			1928			PER CENT INCREASE (+) OR DECREASE (-)	
			June	July	August	June	July	August	August, 1928 from July, 1928	August, 1928 from August, 1927
PRODUCTION—Continued										
NEW ORDERS										
Total.....	139	25	93	86	94	98	96			
Textiles.....	153	30	103	84	108	85	77			
Iron and steel.....	144	24	97	111	96	117	115			
Lumber.....	141	22	89	83	99	104	101			
Paper and printing.....	128	14	106	99	102	104	101			
Stone and clay products.....	129	19	95	93	98	104	97			
STOCKS										
Grand total.....	134	82	106	104	108	109	104	107	+2.9	-0.9
Total manufactured goods.....	120	88	114	116	114	119	117	113	-3.4	-0.9
Foodstuffs.....	129	79	113	128	129	118	124	121	-2.6	-6.2
Textiles.....	138	78	105	111	95	134	129	116	-10.1	+22.1
Iron and steel.....	152	78	120	118	117	140	133	131	-1.5	+12.0
Nonferrous metals.....	125	74	125	118	114	124	124	125	+0.8	+9.6
Lumber.....	125	78	111	117	118	99	97	98	+1.0	-16.9
Stone, clay, etc.....	178	64	137	132	123	153	149	137	-8.1	+11.4
Leather.....	123	66	68	68	69	71	71	70	-1.4	+1.4
Rubber.....	185	77	166	150	140	162	145	132	-9.0	-5.7
Paper.....	155	46	102	106	116	153	155	156	+0.6	+34.5
Chemicals and oils.....	125	84	101	98	94	95	91	86	-5.5	+8.5
Total raw materials.....	150	69	101	95	104	102	95	103	+8.4	-1.0
Foodstuffs.....	159	68	112	108	119	126	121	136	+12.4	+14.3
Textiles.....	202	43	99	88	96	81	67	66	-1.5	-31.2
Metals.....	136	54	79	89	96	74	87	100	+14.9	+4.2
Chemicals and oils.....	153	73	87	85	89	94	94	91	-9.3	+2.2
UNFILLED ORDERS										
Total.....	157	67	72	72	72	75	77	74	-3.9	+2.8
Textiles.....	154	62	86	85	85	67	69	63	-8.7	-25.9
Iron and steel.....	157	66	63	65	66	75	75	75	0.0	+13.6
Transportation equipment.....	204	53	69	72	66	69	68	60	-11.8	-9.1
Lumber.....	142	56	81	74	72	84	91	88	-3.3	+22.2
WHOLESALE TRADE										
Grand total, all classes.....	124	82	87	88	111	84	87	108	+24.1	-2.7
Groceries.....	119	86	101	92	97	97	92	100	+8.7	+3.1
Meats.....	125	87	106	104	111	114	113	117	+3.5	+5.4
Dry goods.....	128	71	78	81	125	71	74	109	+47.3	-12.8
Men's clothing.....	167	43	46	78	165	39	68	148	+117.6	-10.3
Women's clothing.....	188	26	28	43	98	21	46	92	+100.0	-6.1
Boots and shoes.....	128	68	85	107	122	77	98	119	+21.4	-2.5
Hardware.....	118	82	96	90	98	95	90	96	+6.7	-2.0
Drugs.....	125	88	99	100	110	103	102	115	+12.7	+4.5
Furniture.....	129	72	90	84	111	83	78	109	+39.7	-1.8
RETAIL TRADE										
MAIL-ORDER HOUSES (4 houses).....	156	64	107	93	105	127	112	127	+13.4	+21.0
CHAIN STORES:										
Ten-cent.....	250	62	123	121	130	139	128	133	+3.9	+2.3
Grocery.....	224	77	178	166	170	208	198	205	+3.5	+20.6
Wearing apparel.....	350	47	172	157	165	216	180	197	+9.4	+19.4
Drug.....	169	82	136	141	140	162	164	169	+3.0	+20.7
Cigar.....	160	79	109	111	106	108	100	104	+4.0	-1.9
Candy.....	161	70	114	112	110	122	117	123	+5.1	+11.8
Shoe.....	163	55	118	109	101	147	116	109	-6.0	+7.9
DEPARTMENT STORES:										
Sales.....	186	71	101	75	89	103	78	85	+9.0	-4.5
Stocks.....	117	83	97	94	97	95	92	96	+4.3	-1.0

INDEXES OF BUSINESS—Continued

Relative to 1923-1925 monthly average as 100	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1927			1928			PER CENT INCREASE (+) OR DECREASE (-)	
			June	July	August	June	July	August	August, 1928 from July, 1928	August, 1928 from August, 1927
EMPLOYMENT										
Number employed, by industries:										
Total, all classes.....	109	90	95	93	93	91	90	92	+2.2	-1.1
Food products.....	112	90	95	94	93	91	92	91	-1.1	-2.2
Textiles.....	114	85	93	91	92	88	85	86	+1.2	-6.5
Iron and steel.....	114	87	95	93	93	93	92	93	+1.1	0.0
Lumber.....	107	80	88	87	88	84	83	85	+2.4	-3.4
Leather.....	112	86	90	94	97	86	89	91	+2.2	-6.2
Paper and printing.....	106	97	102	102	102	101	101	101	0.0	-1.0
Chemicals.....	111	88	95	94	94	90	90	91	+1.1	-3.2
Stone, clay, and glass.....	107	85	101	96	97	95	92	95	+3.3	-2.1
Metal products other than iron and steel.....	110	87	94	93	93	93	93	94	+1.1	+1.1
Tobacco products.....	108	82	89	89	82	86	81	87	+7.4	+6.1
Vehicles.....	110	82	91	88	89	96	95	98	+3.2	+10.1
Miscellaneous.....	115	86	106	101	100	94	93	94	+1.1	-6.0
Amount of pay roll, by industries:										
Total, all classes.....	111	85	99	94	96	95	92	95	+3.3	-1.0
Food products.....	108	90	99	98	97	96	97	95	-2.1	-2.1
Textiles.....	115	78	94	91	94	86	82	84	+2.4	-10.6
Iron and steel.....	117	79	100	92	94	98	94	98	+4.3	+4.3
Lumber.....	107	84	94	91	94	89	87	89	+2.3	-5.3
Leather.....	117	77	89	94	101	81	87	92	+5.7	-8.9
Paper and printing.....	114	94	108	106	108	110	108	108	0.0	0.0
Chemicals.....	114	89	104	99	100	97	97	98	+1.0	-2.0
Stone, clay, and glass.....	111	84	104	96	99	97	92	98	+6.5	-1.0
Metal products other than iron and steel.....	114	81	95	90	92	96	92	99	+7.6	+7.6
Tobacco products.....	111	81	91	90	84	87	82	86	+4.9	+2.4
Vehicles.....	114	79	92	87	92	99	95	101	+6.3	+9.8
Miscellaneous.....	119	86	110	105	102	99	96	96	0.0	-5.9
PRICE INDEX NUMBERS										
FARM PRICES										
(Relative to 1909-1914 average as 100)										
All groups.....	152	125	130	130	132	145	145	139	-4.1	+5.3
Grains.....	178	108	140	139	138	152	142	120	-15.5	-13.0
Fruits and vegetables.....	253	108	201	195	172	168	156	137	-12.2	-20.3
Meat animals.....	162	98	129	131	136	150	157	162	+3.2	+19.1
Dairy and poultry.....	166	122	124	125	127	132	134	136	+1.5	+7.1
Cotton and cottonseed.....	252	81	119	125	136	162	170	153	-10.0	+12.5
Unclassified.....	108	79	82	81	81	87	88	87	-1.1	+7.4
WHOLESALE PRICES										
Department of Labor Indexes										
(Relative to 1926 monthly average as 100)										
All commodities.....	105	94	94	94	95	98	98	99	+1.0	+4.2
Farm products.....	114	94	97	98	102	107	107	107	0.0	+4.9
Food, etc.....	106	85	94	94	94	100	102	104	+2.0	+10.6
Hides and leather products.....	127	98	107	112	112	124	124	121	-2.4	+8.0
Textile products.....	114	94	94	94	96	96	97	96	-1.0	0.0
Fuel and lighting.....	112	81	84	84	84	82	83	85	+2.4	+1.2
Metals and metal products.....	113	97	98	98	98	99	99	100	+1.0	+2.0
Building materials.....	116	90	95	94	93	94	94	95	+1.1	+2.2
Chemicals.....	104	95	96	95	95	95	95	95	0.0	0.0
House-furnishing goods.....	111	97	98	98	99	97	97	97	0.0	-2.0
Miscellaneous.....	127	79	90	89	90	82	81	79	-2.5	-12.2
Classified by state of manufacture:										
Semimanufactured articles.....	128	96	96	96	97	98	98	97	-1.0	0.0
Finished products.....	103	93	93	94	93	97	98	99	+1.0	+6.5
Raw materials.....	109	93	94	95	98	99	100	99	-1.0	+1.0
Nonagricultural commodities.....	106	93	93	93	93	95	96	97	+1.0	+4.3
Commercial Indexes										
(Relative to 1926 monthly average as 100)										
Dun's.....	106	85	98	99	100	104	103	103	0.0	+3.0
Bradstreet's.....	112	95	96	97	100	102	102	103	+1.0	+3.0

INDEXES OF BUSINESS—Continued

Relative to 1923-1925 monthly average as 100	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1927			1928			PER CENT INCREASE (+) OR DECREASE (-)	
			June	July	August	June	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927
PRICE INDEX NUMBERS—Contd.										
COST OF LIVING										
National Industrial Conference Board Indexes										
(Relative to July, 1914)										
All items weighted.....	172	158	165	162	162	161	161	161	0.0	-0.6
Food (Department of Labor).....	167	141	159	153	152	153	153	154	+0.7	+1.3
Shelter.....	186	161	169	168	169	162	161	161	0.0	-4.7
Clothing.....	177	160	169	169	170	171	174	173	-0.6	+1.8
Fuel and light (combined).....	179	156	160	160	161	158	158	159	+0.6	-1.2
Fuel.....	208	174	180	180	181	176	177	178	+0.6	-1.7
Light.....	123	118	122	122	122	122	121	121	0.0	-0.8
Sundries.....	176	171	172	173	172	171	171	171	0.0	-0.6

COMMERCIAL PRICE INDEX NUMBERS, AS OF END OF MONTH ¹

(Relative to 1926 as 100)

MONTH	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
DUN'S																
January.....	63.5	64.5	66.6	75.4	93.5	120.4	116.7	134.5	98.5	87.5	98.8	101.3	108.5	103.4	98.3	101.7
February.....	63.9	64.6	65.8	75.3	98.7	120.9	115.1	134.2	96.5	90.0	101.4	101.1	107.1	102.2	97.2	102.7
March.....	63.2	63.5	66.3	77.2	100.7	122.1	116.6	136.7	92.5	88.2	102.4	99.0	103.1	101.0	97.1	103.6
April.....	62.7	62.7	67.2	77.5	110.5	120.2	117.8	139.6	88.4	89.1	102.3	97.9	102.5	100.4	96.9	105.6
May.....	63.7	64.2	66.8	77.1	112.7	119.2	120.9	139.0	88.0	90.1	101.5	97.5	103.5	99.7	99.3	103.8
June.....	61.7	63.5	66.3	77.0	112.4	123.3	123.9	138.1	84.7	92.1	100.1	98.3	103.9	98.6	98.4	103.5
July.....	62.8	64.0	66.3	76.3	116.0	123.0	128.1	133.8	86.8	92.0	99.0	99.7	105.1	98.2	98.8	102.9
August.....	64.7	67.3	66.1	80.6	114.0	123.5	126.4	131.6	86.2	91.5	99.7	100.1	103.8	98.5	99.8	102.8
September.....	65.7	65.5	67.2	80.8	116.5	123.7	125.1	125.8	85.8	93.1	101.2	101.2	103.3	99.3	100.9	-----
October.....	66.5	65.9	69.2	87.1	117.0	122.2	126.5	120.5	86.8	96.7	101.7	102.7	104.5	99.6	101.6	-----
November.....	66.7	65.8	70.6	89.1	116.7	122.1	129.7	112.2	87.2	98.3	101.2	105.0	105.2	99.5	102.5	-----
December.....	66.0	65.8	73.0	89.9	117.8	122.0	131.2	105.3	87.2	98.4	100.7	107.4	104.6	99.6	102.3	-----
Monthly average.....	64.3	64.8	67.6	80.3	110.5	121.9	123.2	129.3	89.1	92.3	100.8	100.9	104.6	100.0	99.4	-----
BRADSTREET'S																
January.....	73.2	66.7	74.8	86.2	107.9	139.7	136.5	161.5	95.7	88.4	106.2	102.1	107.5	106.2	96.9	104.7
February.....	72.8	68.4	74.4	88.0	109.4	139.7	133.3	160.9	91.8	89.8	107.8	99.8	107.1	103.7	97.2	103.2
March.....	72.0	67.8	75.7	91.0	112.8	142.7	133.7	160.3	88.0	89.2	107.8	98.0	105.9	101.4	97.0	103.8
April.....	70.7	66.7	75.8	90.9	117.0	146.2	133.4	160.5	83.7	90.6	105.8	97.2	103.1	99.5	96.3	104.0
May.....	70.2	66.7	75.4	90.5	119.7	146.9	140.0	153.8	82.2	92.1	103.6	95.1	105.4	98.7	96.2	102.1
June.....	69.3	67.0	76.4	89.2	124.4	148.3	146.2	149.8	83.0	93.7	101.3	94.6	107.2	98.6	95.8	101.7
July.....	69.7	67.4	76.0	88.5	126.9	147.8	154.8	145.7	85.6	93.4	99.2	97.7	110.2	97.9	97.4	102.1
August.....	70.4	75.5	75.9	91.2	128.8	147.2	150.7	139.1	85.8	93.5	99.9	99.1	109.0	98.3	99.8	102.8
September.....	70.8	71.5	77.2	93.2	130.9	147.0	151.1	130.9	86.6	96.8	101.4	100.6	109.5	99.0	102.7	-----
October.....	71.4	68.6	80.3	99.1	132.1	146.2	154.0	121.3	87.9	103.3	101.7	103.3	110.8	98.6	103.7	-----
November.....	71.4	69.9	82.4	105.7	136.2	147.2	156.1	105.5	87.6	106.7	104.0	104.7	111.5	98.9	104.7	-----
December.....	68.8	70.8	84.5	106.2	138.9	143.4	157.6	98.0	88.0	106.0	102.7	107.8	108.5	99.2	105.0	-----
Monthly average.....	70.9	68.9	77.4	93.3	123.8	145.2	145.6	140.6	87.2	95.3	103.5	100.0	108.0	100.0	99.4	-----

¹ Data compiled respectively by *Dun's Review* and *Bradstreet's* and recomputed to a 1926 base for comparison with Department of Labor index; the data are shown as of the end of the month, instead of at the first of the month, as formerly. In its original form, *Dun's* price index is an aggregate of 300 quotations, each weighted by the amount "annually consumed by each inhabitant". About half of the aggregate is represented by food products. *Bradstreet's* index is the aggregate of prices per pound of 96 commodities. Details by commodity groups are shown for each index in their respective journals.

BUSINESS FAILURES BY GROUPS ¹

(Number of firms)

MONTH	MANUFACTURERS										TRADERS						
	Metals	Textiles	Lumber	Chemicals	Printing and engraving	Foodstuffs	Leather, etc.	Liquors and tobacco	Stone, clay, and glass	All other	General stores	Foods and tobacco	Clothing	Household furniture	Chemicals and paints	Books and paper	All other
1913																	
January.....	30	74	47	10	17	31	13	14	13	146	215	445	243	223	53	5	167
February.....	25	75	37	9	15	25	11	7	10	126	170	374	182	164	42	7	125
March.....	30	50	44	6	20	21	9	18	12	107	155	308	97	131	30	6	91
April.....	33	58	46	1	9	22	11	13	15	133	163	346	120	141	33	8	95
May.....	19	71	42	12	16	15	8	3	14	113	140	309	136	136	44	7	106
June.....	30	80	41	9	15	20	11	7	9	121	85	299	132	108	36	9	87
July.....	27	54	36	7	12	20	7	7	15	105	95	330	123	119	47	12	103
August.....	34	61	33	5	25	19	7	7	7	133	87	320	93	108	35	9	129
September.....	37	80	35	3	7	16	20	5	12	137	97	339	111	99	21	7	149
October.....	44	97	56	5	12	27	11	8	12	150	146	374	115	122	41	5	151
November.....	40	69	47	4	14	25	13	11	16	143	110	349	146	150	43	8	131
December.....	33	106	41	2	16	21	5	5	12	174	152	323	195	179	64	4	121
Total.....	382	875	505	73	178	262	126	105	147	1,588	1,615	4,116	1,693	1,680	489	87	1,455
Monthly average.....	32	73	42	6	15	22	11	9	12	132	135	343	141	140	41	7	121
1914																	
January.....	17	109	42	3	20	20	15	11	18	152	189	415	282	273	53	9	169
February.....	30	57	43	12	15	24	9	9	11	164	166	357	184	178	48	10	125
March.....	27	77	36	10	23	20	9	2	5	157	144	365	165	191	38	7	121
April.....	27	67	55	5	18	21	6	14	15	117	141	339	133	146	45	9	105
May.....	21	79	27	5	15	16	19	4	7	129	123	303	124	127	44	8	104
June.....	29	75	32	4	15	15	4	5	7	111	92	304	147	141	30	11	101
July.....	35	80	50	6	22	17	9	8	6	127	101	409	171	122	37	11	138
August.....	30	66	26	9	9	21	10	11	14	131	83	343	133	128	48	6	127
September.....	41	93	45	7	16	31	11	10	10	157	115	451	167	176	46	7	144
October.....	43	62	52	1	27	39	16	11	9	175	166	451	165	158	50	6	180
November.....	43	124	39	8	20	37	7	22	9	171	222	436	199	173	72	7	155
December.....	34	153	37	4	21	28	10	15	12	170	247	439	264	201	60	11	158
Total.....	377	1,042	484	74	221	289	125	120	123	1,761	1,789	4,612	2,134	2,014	571	102	1,627
Monthly average.....	31	87	40	6	18	24	10	10	10	147	149	384	178	168	48	9	136
1915																	
January.....	54	138	62	14	26	13	10	11	14	189	384	624	393	422	86	14	261
February.....	34	131	37	8	27	44	7	14	8	215	307	550	261	295	62	7	181
March.....	34	103	51	5	31	31	17	16	14	202	267	482	233	283	48	5	183
April.....	36	101	50	2	23	38	16	20	18	186	221	506	228	263	67	10	189
May.....	21	77	43	3	29	34	7	18	14	144	164	441	192	216	46	18	154
June.....	34	74	36	4	19	36	10	17	10	154	153	463	195	232	61	8	162
July.....	26	78	39	1	25	30	8	12	10	154	141	503	188	183	56	13	199
August.....	29	67	32	10	11	23	9	7	10	154	98	413	124	146	43	12	135
September.....	23	55	20	4	25	23	8	17	13	110	125	383	146	149	64	15	171
October.....	32	74	31	5	21	33	9	17	8	177	146	412	127	168	55	8	178
November.....	22	94	43	5	21	24	9	17	7	177	164	431	142	128	60	6	149
December.....	36	63	40	6	18	26	16	16	11	161	164	459	204	176	61	7	141
Total.....	381	1,055	484	67	276	355	126	182	137	2,023	2,334	5,667	2,433	2,661	709	123	2,103
Monthly average.....	32	88	40	6	23	30	11	15	11	169	195	472	203	222	59	10	175
1916																	
January.....	24	77	40	1	18	50	10	16	13	168	192	522	258	278	61	8	175
February.....	24	63	35	6	20	45	16	10	11	188	171	449	159	194	45	9	159
March.....	21	67	43	7	19	34	11	18	9	179	155	466	165	196	46	8	144
April.....	20	47	37	5	15	45	3	7	9	147	137	409	113	138	57	10	112
May.....	25	65	39	4	21	39	11	11	6	163	112	470	133	115	47	10	130
June.....	20	55	27	2	13	32	10	8	9	109	97	412	122	113	45	11	94
July.....	22	44	46	1	13	43	6	12	8	133	72	384	97	103	39	9	111
August.....	23	54	42	3	18	40	9	7	5	134	95	508	104	103	55	11	121
September.....	24	52	25	4	25	41	9	8	7	121	84	383	89	90	32	6	102
October.....	14	40	34	4	15	30	4	14	7	123	93	382	86	114	51	10	150
November.....	17	62	49	1	12	51	10	7	3	150	78	399	80	95	30	4	134
December.....	16	52	38	5	15	45	4	15	6	127	105	401	110	102	36	3	115
Total.....	250	678	455	43	204	495	103	133	93	1,742	1,391	5,185	1,516	1,641	544	99	1,547
Monthly average.....	21	57	38	4	17	41	9	11	8	145	116	432	126	137	45	8	129
1917																	
January.....	19	58	52	4	13	45	6	11	6	147	131	461	155	179	38	7	153
February.....	15	39	41	5	10	26	3	10	8	105	114	366	94	113	45	3	106
March.....	17	35	50	5	12	23	11	14	10	137	110	388	91	125	32	4	106
April.....	17	51	37	7	6	38	6	5	10	104	97	352	78	69	30	6	92
May.....	22	81	42	8	15	39	6	7	13	110	89	470	89	110	29	5	103
June.....	28	58	52	5	11	19	10	3	7	134	72	379	105	119	32	6	86
July.....	22	46	52	6	17	21	7	12	8	121	77	362	100	86	32	5	106
August.....	27	59	40	2	16	21	11	4	7	126	63	349	86	85	35	2	128
September.....	19	50	40	5	9	23	6	4	4	97	53	326	56	72	43	7	101
October.....	36	52	41	9	9	15	2	8	7	132	52	348	75	70	44	-----	133
November.....	16	55	36	5	15	20	7	13	6	128	54	294	75	58	31	2	94
December.....	24	59	34	4	12	15	6	10	10	135	63	296	98	71	34	4	119
Total.....	262	643	517	65	145	305	81	101	96	1,476	975	4,391	1,102	1,157	425	51	1,327
Monthly average.....	22	54	43	5	12	25	7	8	8	123	81	366	92	96	35	4	111

¹ Compiled by *Dun's Review*. These tables give in greater detail the information usually presented in the *SURVEY*, by combining a still more detailed classification, as presented in *Dun's Review*, into groups fairly comparable with the classification used for other data.

BUSINESS FAILURES BY GROUPS—Continued

MONTH	MANUFACTURERS										TRADERS						
	Metals	Textiles	Lumber	Chemicals	Printing and engraving	Foodstuffs	Leather, etc.	Liquors and tobacco	Stone, clay, and glass	All other	General stores	Food and tobacco	Clothing	Household furniture	Chemicals and paints	Books and paper	All other
1918																	
January.....	21	54	35	3	13	24	3	9	9	128	45	290	133	134	36	4	159
February.....	16	38	26	5	13	25	7	5	8	112	59	253	88	94	35	6	128
March.....	25	43	43	7	19	19	6	5	6	124	66	303	101	104	31	2	97
April.....	20	31	26	4	20	12	13	9	6	101	60	266	73	71	44	4	87
May.....	13	33	24	7	12	19	11	5	11	108	43	281	82	55	23	4	84
June.....	18	35	25	5	11	18	7	8	5	109	46	255	66	56	19	1	65
July.....	13	23	38	8	10	16	5	8	3	96	48	251	56	49	26	5	74
August.....	20	25	19	4	15	8	9	1	6	90	35	235	48	48	23	4	72
September.....	18	27	29	2	9	10	6	7	4	77	36	216	55	49	17	3	69
October.....	22	39	22	6	6	12	5	6	7	76	40	175	49	40	29	3	70
November.....	19	29	23	2	11	3	7	7	7	74	42	159	38	28	16	2	56
December.....	26	26	27	3	7	9	7	9	5	86	52	180	56	44	18	4	63
Total.....	231	403	337	50	146	175	86	79	77	1,181	572	2,864	845	772	317	42	1,024
Monthly average.....	19	34	28	4	12	15	7	7	6	98	48	239	70	64	26	4	85
1919																	
January.....	13	31	29	4	10	4	2	6	5	76	45	193	60	60	16	4	60
February.....	22	29	12	6	6	9	3	2	6	66	62	137	45	47	24	3	66
March.....	24	26	31	6	8	11	4	6	3	77	48	157	37	36	16	4	70
April.....	19	19	23	3	4	13	7	5	6	75	43	151	39	35	9	1	41
May.....	18	24	22	7	3	10	5	4	5	67	39	156	44	22	14	1	34
June.....	11	13	10	2	4	6	8	4	3	69	32	161	29	26	15	1	29
July.....	10	12	23	5	4	16	6	4	3	56	22	148	26	35	10	1	38
August.....	17	12	14	1	4	14	2	3	3	63	25	164	30	31	9	2	38
September.....	16	15	19	4	4	11	4	1	2	61	21	144	30	28	14	1	58
October.....	10	7	19	3	6	21	2	3	3	47	21	167	32	27	8	2	48
November.....	20	17	22	4	1	17	3	3	4	59	39	160	48	36	9	2	60
December.....	20	22	16	1	5	30	7	8	2	58	28	159	46	55	7	1	73
Total.....	200	227	240	46	59	172	53	49	45	774	425	1,897	466	438	151	21	615
Monthly average.....	17	19	20	4	5	14	4	4	4	65	35	158	39	37	13	2	51
1920																	
January.....	20	19	13	3	5	24	2	4	3	47	32	182	56	47	10	1	54
February.....	13	16	10	5	1	29	5	4	1	49	44	150	26	24	15	1	53
March.....	19	19	19	2	2	24	11	3	2	59	47	151	39	44	6	2	61
April.....	10	28	11	2	2	18	3	3	1	59	34	153	42	25	3	1	54
May.....	13	25	13	2	5	20	6	2	4	45	30	183	47	37	4	1	61
June.....	19	41	14	8	5	17	4	4	2	83	41	175	76	51	9	1	69
July.....	22	46	15	4	3	33	2	9	1	83	24	190	66	40	3	2	84
August.....	26	48	12	4	2	24	10	4	3	102	25	171	60	36	13	3	69
September.....	30	46	21	4	3	14	7	8	2	88	47	146	61	38	11	3	92
October.....	31	102	24	7	3	24	10	3	2	121	48	198	89	61	18	2	118
November.....	36	77	17	3	12	27	13	9	3	113	77	199	110	109	16	4	151
December.....	44	109	38	12	7	28	18	8	3	154	109	344	191	125	20	2	156
Total.....	283	576	207	56	50	282	91	61	26	1,003	618	2,242	863	637	128	21	1,022
Monthly average.....	24	48	17	5	4	24	8	5	2	84	52	187	72	53	11	2	85
1921																	
January.....	46	108	39	15	14	31	19	9	9	125	232	344	288	260	46	6	212
February.....	45	71	25	5	14	26	17	6	4	135	218	322	216	203	35	1	192
March.....	32	65	27	8	9	23	11	4	3	116	199	273	151	151	24	4	149
April.....	29	84	27	10	7	35	15	4	5	121	182	284	234	165	36	3	159
May.....	37	57	21	13	11	32	20	6	4	93	187	286	152	106	34	1	163
June.....	48	85	35	6	12	24	14	11	1	102	150	276	159	141	26	5	160
July.....	53	72	28	11	7	31	14	7	2	117	156	280	183	163	32	4	203
August.....	44	71	42	7	7	35	17	9	4	137	140	323	173	156	42	7	244
September.....	46	119	24	12	14	29	9	7	4	101	131	298	173	171	36	3	202
October.....	51	118	29	3	14	35	10	11	4	151	165	333	228	161	49	9	230
November.....	49	121	27	9	16	44	20	15	1	143	240	372	238	262	51	4	218
December.....	61	175	30	10	18	40	19	8	6	164	277	430	390	334	70	6	288
Total.....	541	1,146	354	109	143	385	185	97	46	1,505	2,277	3,821	2,585	2,333	481	52	2,420
Monthly average.....	45	96	30	9	12	32	15	8	4	125	190	318	215	194	40	4	202
1922																	
January.....	51	137	38	10	13	49	28	5	10	192	334	466	438	381	66	5	343
February.....	55	92	38	9	17	38	21	19	7	185	270	418	287	359	54	13	313
March.....	75	128	41	10	11	51	23	11	6	207	259	432	347	315	59	11	338
April.....	58	129	19	17	14	37	25	15	9	165	268	415	282	251	43	4	309
May.....	49	130	42	8	14	47	21	6	16	175	175	390	262	240	48	9	253
June.....	49	76	26	6	9	53	18	9	9	154	156	357	215	200	42	10	279
July.....	46	124	25	13	15	43	13	13	6	169	135	356	184	193	39	9	302
August.....	29	94	34	6	12	39	17	16	4	169	134	369	172	170	66	14	366
September.....	51	104	34	12	14	33	20	13	6	157	107	309	165	165	43	4	256
October.....	60	88	33	9	14	46	16	13	9	176	127	347	187	155	41	14	307
November.....	56	89	35	11	20	47	19	10	5	164	159	381	171	168	50	7	294
December.....	52	117	35	6	18	35	20	10	6	150	139	365	244	214	52	9	278
Total.....	631	1,308	400	117	171	518	241	140	93	2,063	2,263	4,005	2,954	2,811	603	109	3,578
Monthly average.....	53	108	33	10	14	43	20	12	8	172	189	384	246	234	50	9	298

BUSINESS FAILURES BY GROUPS—Continued

MONTH	MANUFACTURERS										TRADERS						
	Metals	Textiles	Lumber	Chemicals	Printing and engraving	Foodstuffs	Leather, etc.	Liquors and tobacco	Stone, clay, and glass	All other	General stores	Food and tobacco	Clothing	Household furniture	Chemicals and paints	Books and paper	All other
1923																	
January.....	54	106	33	10	18	53	24	12	8	181	176	429	302	288	55	14	305
February.....	57	61	29	5	13	38	17	9	3	116	155	337	186	193	42	7	195
March.....	50	67	40	10	18	53	19	11	7	102	149	337	196	177	56	10	254
April.....	39	67	41	6	11	44	13	8	4	155	126	323	177	175	40	9	238
May.....	31	73	35	7	12	44	22	8	6	163	117	320	199	150	51	12	220
June.....	40	71	30	8	13	26	19	5	3	133	109	293	165	165	35	10	193
July.....	56	72	30	7	8	38	6	5	7	121	83	274	136	113	38	10	174
August.....	46	67	35	4	14	33	13	5	9	159	89	276	134	139	47	11	192
September.....	35	54	37	4	8	27	11	11	5	132	81	298	132	107	52	6	187
October.....	67	73	54	11	19	39	14	15	11	195	130	340	189	133	43	12	263
November.....	60	96	41	7	17	51	19	11	5	188	140	375	199	155	50	9	203
December.....	39	90	48	6	14	39	28	10	5	216	157	321	301	169	50	6	250
Total.....	574	830	453	85	165	485	205	105	73	1,921	1,512	3,923	2,316	1,964	559	116	2,674
Monthly average.....	48	69	38	7	14	40	17	9	6	160	126	327	193	164	47	10	223
1924																	
January.....	40	94	28	6	15	53	26	17	11	215	162	360	379	254	70	12	301
February.....	33	68	34	4	11	41	12	7	8	180	156	342	268	203	43	10	228
March.....	66	70	44	10	15	42	24	8	6	199	139	377	215	205	49	9	260
April.....	53	66	35	2	25	29	14	11	9	194	138	358	232	171	48	4	227
May.....	44	91	44	12	18	31	28	9	8	222	113	334	256	181	42	7	282
June.....	60	80	35	10	17	28	16	4	5	184	114	322	214	201	32	9	192
July.....	32	60	33	11	11	30	20	12	5	202	103	376	213	159	49	6	218
August.....	40	69	29	11	21	38	17	6	5	178	87	335	184	131	39	5	243
September.....	46	64	12	9	12	23	10	8	4	172	68	264	160	144	41	11	195
October.....	34	87	29	2	18	38	6	9	11	177	104	377	213	176	52	6	258
November.....	37	58	27	4	12	41	14	6	8	154	120	362	228	199	55	8	221
December.....	46	87	28	13	16	55	13	11	12	194	148	423	355	228	65	9	236
Total.....	531	894	378	94	191	449	200	108	92	2,271	1,452	4,230	2,917	2,252	585	96	2,861
Monthly average.....	44	75	32	8	16	37	17	9	8	189	121	353	243	188	49	8	238
1925																	
January.....	41	68	35	6	13	65	20	11	5	216	179	472	407	360	64	12	263
February.....	33	54	33	9	18	52	12	5	8	185	129	332	262	258	50	7	247
March.....	49	71	31	12	15	45	9	7	3	187	128	378	258	246	43	8	284
April.....	46	74	35	8	11	42	18	8	5	183	126	438	293	247	51	10	262
May.....	36	66	30	8	23	44	14	9	8	162	105	393	242	237	47	9	253
June.....	53	55	53	5	18	29	16	8	7	187	91	404	234	178	42	8	272
July.....	37	64	28	2	20	42	9	6	7	203	95	400	219	203	37	14	216
August.....	26	52	31	5	18	41	21	4	7	160	94	344	190	155	35	8	243
September.....	37	55	45	12	16	31	8	3	3	178	65	376	180	137	39	11	207
October.....	41	66	34	9	17	37	9	10	10	175	92	392	192	152	53	6	224
November.....	32	73	56	10	16	48	14	11	2	180	97	421	184	157	48	9	230
December.....	38	91	55	15	13	42	13	7	-----	216	104	405	303	194	58	10	233
Total.....	469	789	466	101	198	518	163	89	65	2,232	1,305	4,755	2,964	2,524	567	112	2,934
Monthly average.....	39	66	39	8	17	43	14	7	5	186	109	396	247	210	47	9	245
1926																	
January.....	49	73	51	8	14	58	15	6	2	234	136	475	343	328	80	18	316
February.....	37	73	52	6	18	34	17	5	7	198	106	363	276	219	67	9	242
March.....	28	69	60	8	25	45	13	5	9	207	133	423	246	246	63	11	302
April.....	36	87	50	7	21	44	13	6	1	229	129	451	245	235	55	12	251
May.....	38	73	57	5	22	40	12	9	5	176	81	434	195	195	48	12	251
June.....	30	56	51	6	20	46	10	6	6	204	110	380	188	189	52	5	236
July.....	15	58	53	6	21	42	5	13	6	177	78	374	170	168	46	10	276
August.....	27	63	43	3	24	39	12	4	4	230	67	345	169	174	47	10	259
September.....	30	45	46	12	21	38	4	4	3	171	64	353	141	120	50	6	224
October.....	35	53	55	7	14	42	8	10	10	216	86	442	198	160	63	6	250
November.....	24	59	66	5	19	34	10	10	7	206	97	411	214	192	70	12	289
December.....	43	66	60	5	11	38	14	11	5	241	130	467	281	237	74	11	269
Total.....	392	775	644	78	230	500	133	89	65	2,489	1,217	4,918	2,666	2,463	715	122	3,165
Monthly average.....	33	65	54	7	19	42	11	7	5	207	101	410	222	205	60	10	264
1927																	
January.....	30	72	57	5	27	44	14	12	10	230	176	500	402	362	63	19	320
February.....	35	42	67	7	28	42	9	5	1	174	162	359	269	280	97	13	328
March.....	39	68	78	8	19	52	16	5	13	271	106	435	276	266	77	18	290
April.....	32	64	79	4	22	41	14	8	2	226	119	398	229	246	63	15	272
May.....	28	47	72	6	19	23	8	4	10	227	85	389	268	229	56	12	253
June.....	21	54	70	6	21	34	7	11	3	200	119	427	237	206	51	6	264
July.....	31	55	69	7	26	38	9	4	9	200	80	351	216	213	56	15	256
August.....	23	36	64	4	19	29	16	13	10	224	69	371	206	179	68	4	277
September.....	20	47	52	2	20	27	9	17	3	192	58	335	187	160	58	8	277
October.....	32	59	75	9	22	39	8	6	7	231	57	384	192	183	60	11	283
November.....	38	67	72	8	19	37	13	9	10	205	89	420	214	208	71	11	263
December.....	45	92	95	9	22	55	17	9	13	240	94	452	282	226	79	10	287
Total.....	374	703	850	75	264	461	140	104	91	2,620	1,214	4,437	2,978	2,758	799	142	3,370
Monthly average.....	31	59	71	6	22	38	12	9	8	218	101	370	248	230	67	12	281
1928																	
January.....	35	74	81	3	21	43	14	7	10	265	100	521	446	368	99	23	389
February.....	35	54	65	10	8	48	14	5	9	220	101	423	356	303	86	10	302
March.....	42	65	93	12	13	43	16	7	10	245	103	440	320	283	71	14	335
April.....	44	49	70	11	19	42	7	8	9	173	85	393	263	220	56	9	250
May.....	36	57	77	6	11	31	14	6	9	223	93	408	265	263	60	14	295
June.....	40	67	76	7	18	45	11	5	9	235	78	426	248	228	57	7	281
July.....	31	61	69	5	16	47	18	3	5	195	77	387	202	179	55	14	247

TREND OF BUSINESS MOVEMENTS

The following table contains a summary of the monthly figures, designed to show the trend in important industrial and commercial movements. These data represent continuations of the figures presented in the latest semiannual number (August, 1928), in which monthly figures for 1927 and 1928 may be found, together with explanations as to the sources and exact extent of the figures quoted. The figures given below should always be read in connection with those explanations. Data on stocks, unfilled orders, etc., are given as of the end of the month referred to. For explanations of relative numbers, including base periods, see introduction on inside front cover.

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
TEXTILES												
Wool												
Receipts at Boston:												
Total.....thous. of lbs.	21,346	33,331	55,841	54,907	29,720	60,980	36,499	-45.9	-18.6	279,368	255,217	-8.6
Domestic.....thous. of lbs.	8,138	25,843	50,082	51,346	25,802	55,877	29,891	-49.7	-13.7	180,591	182,152	+ .9
Foreign.....thous. of lbs.	13,208	7,488	5,759	3,561	3,918	5,103	6,608	+10.0	-40.7	98,777	73,065	-26.0
Imports:												
In condition imported.....thous. of lbs.	20,474	25,040	19,671	18,289	14,472	13,464	18,425	-20.9	-21.5	191,671	173,483	-9.5
Grease equivalent.....thous. of lbs.	23,600	28,163	21,383	19,805	16,078	15,079	21,754	-18.8	-26.1	216,855	194,148	-10.5
Consumption by textile mills, grease equivalent.....thous. of lbs.	38,855	43,911	41,282	38,099	45,103	39,833	46,504	+18.4	-3.0	366,241	347,418	-5.1
Machinery activity, hourly:												
Looms.....												
Wide.....per ct. of hours active.	58	60	59	53	55	56	59	+3.8	-6.8			
Narrow.....per ct. of hours active.	51	53	58	49	48	58	65	-2.0	-26.2			
Carpet and rug.....per ct. of hours active.	71	65	62	55	63	56	57	+14.5	+10.5			
Sets of cards.....per ct. of hours active.	78	80	81	78	77	77	79	-1.3	-2.5			
Combs.....per ct. of hours active.	64	64	63	59	65	75	83	+10.2	-21.7			
Spinning spindles.....												
Woolen.....per ct. of hours active.	75	79	78	75	74	76	78	-1.3	-5.1			
Worsted.....per ct. of hours active.	56	55	49	50	58	59	65	+16.0	-10.8			
Prices:												
Raw, territory, fine, scoured.....dolls. per lb.	1.19	1.18	1.18	1.17	1.14	1.13	1.12	-2.6	+1.8			
Raw, Ohio and Pa. fleeces.....dolls. per lb.												
1/4 blood, combing, grease.....dolls. per lb.	.53	.55	.55	.55	.54	.44	.44	-1.8	+22.7			
Worsted yarn.....dolls. per lb.	1.55	1.58	1.58	1.60	1.60	1.35	1.35	0.0	+18.5			
Women's dress goods, French serge, 39-in.....dolls. per yd.	1.03	1.03	1.03	1.03	1.03	.98	.98	0.0	+5.1			
Suinting, 13-oz.....dolls. per yd.	2.008	2.008	2.008	2.008	2.008	1.913	1.913	0.0	+5.0			
Cotton												
Production, crop estimate.....thous. of bales					¹ 14,439		² 12,789					
Ginnings.....thous. of bales					³ 2,498		³ 3,505					
Receipts into sight.....thous. of bales	714	693	297	339	509	129	832	+50.1	-38.8	6,969	4,799	-31.1
Imports, unmanufactured.....bales	18,196	19,842	14,587	18,473	25,258	31,147	28,041	+36.7	-10.9	293,579	217,434	-25.9
Exports, unmanufactured (incl. linters).....bales	485,219	591,345	457,781	341,849	259,489	389,358	340,311	-24.1	-23.7	5,951,029	4,213,936	-30.9
Consumption by textile mills.....bales	525,158	577,710	510,565	438,743	526,729	569,765	⁴ 634,520	+20.1	-17.0	4,998,189	4,310,450	-13.6
Stocks, domestic, end of month:												
Total, mills and w'houses.....thous. of bales	4,429	3,637	2,905	2,197	1,971	3,227	⁴ 3,294	-10.3	-40.2			
Mills.....thous. of bales	1,508	1,331	1,159	1,007	782	1,405	⁴ 1,121	-22.3	-30.2			
Warehouses.....thous. of bales	2,921	2,305	1,646	1,190	1,189	1,823	2,173	-1	-45.3			
Stocks, world visible, end of month:												
Total.....thous. of bales	6,023	5,630	4,962	4,056	3,480	4,988	4,480	-14.2	-22.3			
American.....thous. of bales	4,102	3,533	2,910	2,165	1,790	3,417	3,131	-17.3	-42.8			
Prices:												
To producer, all grades.....dolls. per lb.	.187	.201	.197	.210	.188	.155	.171	-10.5	+9.9			
In New York, middling.....dolls. per lb.	.203	.217	.214	.215	.193	.180	.203	-10.2	-4.9			
Cotton Yarn												
Machinery activity of spindles:												
Active spindles.....thousands	30,965	29,060	28,624	28,228	28,244	32,324	⁴ 32,292	+1	-12.5			
Total activity.....millions of hours	7,416	7,959	7,248	6,259	7,431	8,033	8,973	+18.7	-17.2			
Activity per spindle.....hours	206	222	203	176	209	219	245	+18.8	-14.7			
Ratio to capacity.....per cent.	94.8	95.0	88.3	79.8	87.7	99.1	103.5	+9.9	-15.3			
Carded sales yarn:												
Production.....thous. of lbs.	16,737	16,358	19,415	12,522	14,046	10,792	13,286	+12.2	+5.7		139,252	
Stocks, end of month.....thous. of lbs.	13,390	13,427	12,539	12,350	11,574	8,538	9,393	-6.3	+23.2			
Unfilled orders, end of mo.....thous. of lbs.	31,925	28,484	25,435	24,619	27,044	22,665	24,415	+9.9	+10.8			
Prices:												
22/1 cones, Boston.....dolls. per lb.	.366	.380	.374	.384	.369	.354	.387	-3.9	-4.7			
40/18, southern spinning.....dolls. per lb.	.480	.480	.489	.515	.514	.481	.512	-2	+4			
Cotton Goods												
Cotton textiles:												
Production.....thous. of yds.	286,005	349,325	287,818	221,826	302,470	229,097	245,005	+36.4	+23.2		2,403,461	
New orders.....thous. of yds.	335,117	269,845	267,025	187,439	340,810	215,730	255,992	+81.8	+33.1		2,200,533	
Shipments.....thous. of yds.	270,172	326,244	270,342	217,540	324,073	239,193	221,915	+49.0	+46.0		2,298,295	
Stocks, end of month.....thous. of yds.	418,427	441,508	458,984	463,270	441,667	177,527	201,217	-4.7	+119.5			
Unfilled orders, end month.....thous. of yds.	362,044	305,645	302,328	272,227	288,964	457,883	491,960	+6.1	-41.3			
Fine cotton goods, production.....pieces	255,949	128,604	134,158	80,358	136,237	460,260	486,395	+69.5	-72.0	3,866,072	2,927,506	-47.6
Cotton cloth:												
Imports.....thous. of sq. yds.	6,418	5,722	4,615	3,490	3,753	3,821	4,996	+7.5	-24.9	43,204	44,204	+2.3
Exports.....thous. of sq. yds.	39,831	43,011	46,534	44,951	43,928	50,387	46,387	-2.3	-5.3	371,641	328,835	-11.5
Fabrics for tire manufacture, consumption.....thous. of lbs.	18,310	19,168	19,646	20,947		14,010	16,323			⁵ 109,338	⁵ 129,889	+18.8
Elastic webbing, shipments.....thous. of dolls.	1,332	1,415	1,384	1,211	1,399			+15.5			10,901	
Prices:												
Print cloth, 64 x 60.....dolls. per yd.	.076	.079	.077	.079	.075	.075	.084	-5.1	-10.7			
Sheeting, brown.....dolls. per yd.	.091	.092	.091	.092	.091	.087	.098	-1.1	-7.1			
Cotton goods (Fairchild), rel. to 1911-1913.....	161	164	162	165	163	152	162	-1.2	+6			

¹ As of Sept. 1, 1928.² Final estimate for 1927.³ As of Sept. 16.⁴ Revised.⁵ Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
TEXTILES—Continued												
Cotton Finishing												
White, dyed and printed (outside mills):												
Billings, finished goods.....thous. of yds.	75,378	73,539	70,029	58,685	70,748	72,334	84,780	+20.6	-16.6	687,980	585,642	-14.9
New orders, gray yardage.....thous. of yds.	68,316	72,961	61,347	62,310	71,743	71,959	82,407	+15.1	-12.9	676,934	572,854	-15.4
Shipments, finished goods.....cases	43,378	47,555	42,357	40,500	46,283	43,154	52,399	+14.3	-11.7	402,689	365,276	-9.3
Stocks, finished goods, end mo.....cases	40,876	40,449	38,907	37,958	35,819	40,390	37,092	-5.6	-3.4			
Operating activity.....per ct. of capacity	64	62	53	51	54	63	68	+5.9	-20.6			
Unfilled orders, end of month.....days	4.5	4.3	3.6	3.8	4.4	5.9	5.8	+15.8	-24.1			
Printed only (mills and outside):												
Production.....thous. of yds.	69,378	73,520	63,796	49,996	54,495		51,688	+9.0	+5.4		500,751	
Stocks, end of month.....thous. of yds.	78,151	76,149	79,416	75,977	74,682			-1.7				
Silk												
Imports, raw.....thous. of lbs.	6,561	9,133	6,174	5,832	9,320	6,225	9,347	+59.8	-3	57,372	57,807	+8
Deliveries (consumption).....bales	41,258	46,367	46,051	40,931	50,821	41,039	47,042	+24.2	+8.0	363,141	382,678	+5.4
Stocks, end of month:												
At warehouses.....bales	35,483	42,088	41,127	38,866	50,975	43,841	56,618	+31.2	-10.0			
At manufacturing plants.....bales	24,369	23,523	24,746	22,188	24,429	16,002	22,218	+10.1	+10.0			
Silk machinery activity:												
Broad looms.....per cent of normal	88.5	90.8	97.4	93.0	89.8	89.7	86.8	-3.4	+3.5			
Narrow looms.....per cent of normal	49.8	56.7	55.4	52.1	54.1	53.8	51.9	+3.8	+4.2			
Spinning spindles.....per cent of normal	64.2	56.9	57.1	62.7	52.1	74.9	73.4	-16.9	-29.0			
Prices:												
Raw, Japanese, 13-15, N. Y.dolls. per lb.	5.390	4.998	4.851	4.851	4.851	5.292	5.145	0.0	-5.7			
Silk goods, composite.....dolls. per yd.	1.20	1.19	1.18	1.17	1.16	1.23	1.23	-9	-5.7			
Rayon												
Imports.....thous. of lbs.	844	902	710	659	1,248	1,220	1,528	+89.4	-18.3	10,646	7,955	-25.3
Stocks, bonded, end month.....thous. of lbs.	3,164	3,128	3,157	2,949		1,654	1,052					
Price, 150 denier, A grade, N. Y.dolls. per lb.	1.50	1.50	1.50	1.50	1.50	1.50	1.50	0.0	0.0			
Clothing												
Men's and boys' garments cut:												
Suits.....thous. of garments	1,584	1,806	1,902	1,911		1,902	2,151			\$ 14,799	\$ 14,083	-4.8
Separate trousers.....thous. of garments	1,662	1,658	1,818	1,638		1,950	2,199			\$ 14,852	\$ 13,169	-11.3
Overcoats.....thous. of garments	199	330	463	535		614	710			\$ 2,740	\$ 2,356	-14.0
Overalls:												
Cut.....thous. of dozen garments	341	370	436	343							\$ 2,524	
Net shipments.....thous. of dozen garments	308	323	432	332							\$ 2,186	
Unfilled orders												
end of mo.....thous. of dozen garments	125	163	159	169								
Hosiery												
Production.....thous. of dozen pairs	3,304	3,462	3,246	2,786		3,113	3,807			\$ 25,937	\$ 23,787	-8.3
Net shipments.....thous. of dozen pairs	3,217	3,312	3,343	2,963		3,226	4,016			\$ 25,119	\$ 22,955	-8.6
Stocks, end of month.....thous. of dozen pairs	8,618	9,030	8,980	8,916		8,390	8,093					
New orders.....thous. of dozen pairs	3,418	3,682	3,539	2,836		3,095	3,892			\$ 26,853	\$ 23,084	-14.0
Unfilled orders, end of mo.....thous. of dozen pairs	4,520	4,794	4,743	4,711		6,046	6,018					
Knit Underwear												
Production.....thous. of dozen garments	1,151	1,148	1,113	1,881	1,049	880	1,082	+19.1	-3.0	8,348	8,711	+4.3
Net shipments.....thous. of dozen garments	965	1,019	998	1,942	1,273	950	1,369	+35.1	-7.0	8,233	8,350	+1.4
Stocks, end of mo.....thous. of dozen garments	1,520	1,709	1,761	1,658	1,563	1,617	1,434	-5.7	+9.0			
New orders.....thous. of dozen garments	934	1,028	894	1,852	1,155	803	1,434	+35.6	-19.5	9,124	8,405	-7.9
Unfilled orders, end of month.....thous. of dozen garments	2,245	2,164	2,053	1,947	1,815	2,458	2,543	-6.8	-28.6			
Burlaps and Fibers												
Imports:												
Burlaps.....thous. of lbs.	62,050	58,124	56,913	58,541	47,766	35,236	71,417	-18.4	-33.1	417,918	462,319	+10.6
Fibers (unmanufactured).....long tons	23,682	21,846	19,672	18,449	20,657	19,030	23,768	+12.0	-13.1	219,658	204,949	-6.7
Pyroxylin Coated Textiles												
Pyroxylin spread.....thous. of lbs.	4,636	5,422	5,123	5,038	5,562	3,246	3,581	+10.4	+55.3	29,477	40,271	+36.6
Shipments billed.....thous. of linear yards	3,705	3,991	4,274	3,814	4,201	2,545	2,749	+10.1	+52.8	21,965	31,159	+41.9
Unfilled orders, end mo.....thous. of linear yards	3,817	4,005	4,226	4,194	3,855	2,415	2,387	-8.1	+61.5			
Fur												
Sales by dealers.....thous. of dollars	11,113	12,905	13,840	12,215		10,959	13,694			117,714	85,645	-27.2
Buttons												
Fresh-water pearl buttons:												
Production.....ratio to capacity	50.7	48.8	46.8	29.7	43.6	33.4	43.6	+46.8	0.0			
Stocks, end of month.....thous. of gross	10,949	11,098	11,202	10,847	10,746	9,705	9,555	-9	+12.5			
Ocean pearl buttons:												
Production.....thous. of gross	220	206	158	110	153	140	171	+39.1	-10.5	1,440	1,495	+3.8
Shipments.....thous. of gross	217	204	187	197	169	162	192	-14.2	-12.0	1,643	1,684	+2.5
New orders.....thous. of gross	216	199	165	163	177	146	208	+8.6	-14.9	1,899	1,794	-5.5
Stocks, end of month.....thous. of gross	584	532	636	646	600	568	533	-7.1	+12.6			

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
IRON AND STEEL												
Iron												
Manganese ore, imports.....thous. of long tons	14	16	13	22	26	28	23	+18.2	+13.0	199	131	-34.2
Iron ore:												
Imports.....thous. of long tons	225	211	189	183	226	252	304	+23.5	-25.7	1,837	1,678	-8.7
Shipments from mines.....thous. of long tons	6	5,363	8,926	8,981	9,243	8,609	8,776	+2.9	+5.3	35,156	32,519	-7.2
Receipts—												
Lake Erie ports and furnaces.....thous. of long tons	None	2,848	6,199	6,078	6,390	6,136	6,451	+5.1	-9	24,299	21,515	-11.5
Other ports.....thous. of long tons	6	1,517	2,613	2,655	2,819	2,282	2,274	+6.2	+24.0	9,473	9,610	+1.4
Consumption.....thous. of long tons	4,781	4,948	4,667	4,633	4,761	4,294	4,368	+2.8	+9.0	37,014	38,253	+3.3
Stocks, end of month—												
Total.....thous. of long tons	17,570	18,877	22,981	27,209	31,734	31,331	35,803	+16.7	-11.3			
At furnaces.....thous. of long tons	14,388	13,942	17,913	21,824	26,036	25,872	29,728	+19.3	-12.4			
On Lake Erie docks.....thous. of long tons	5,182	4,935	5,068	5,385	5,718	5,459	6,075	+6.2	-5.9			
Pig-iron production:												
Total, United States.....thous. of long tons	3,186	3,284	3,082	3,072	3,137	2,951	2,947	+2.1	+6.4	25,329	24,731	-2.4
Merchant furnaces.....thous. of long tons	630	631	633	607	575	788	733	-5.3	-21.6	6,075	5,028	-17.2
Canada.....thous. of long tons	75	88	97	95	92	51	63	-3.2	+46.0	518	655	+26.1
Furnaces in blast, end of month:												
Furnaces.....number	195	198	189	185	183	190	187	-1.1	-2.1			
Capacity.....long tons per day	104,015	106,145	100,855	98,445	98,730	93,700	93,800	+1.3	+5.3			
Per cent of total.....per cent	56.9	57.7	55.3	54.6	54.3	52.5	51.7	-1.5	+5.0			
Ohio gray-iron foundries:												
Meltings—												
Actual.....long tons	19,039	13,887	19,382	19,967	12,932	10,761	17,559	-35.2	-26.4	130,620	127,809	-2.2
Normal.....long tons	17,579	13,434	18,454	19,365	12,497	14,864	20,217	-35.5	-38.2	153,878	124,794	-18.9
Ratio to normal.....per cent of normal	108.0	103.3	105.0	103.0	103.4	72.3	86.8	+1.4	+19.1			
Stocks, end of month.....per cent of normal	143	150	146	127	129	94	82	+1.6	+57.3			
Receipts.....per cent of normal	115	106	99	107	99	64	71	-7.5	+39.4			
Malleable castings:												
Production.....short tons	52,004	56,412	56,259	49,991	56,507	44,142	47,166	+13.0	+19.8	422,448	432,949	+2.5
Operating activity.....per ct. of capacity	61.0	66.0	63.3	58.6	66.9	45.0	47.4	+14.2	+41.1			
Shipments.....short tons	52,383	53,222	54,937	50,035	54,020	44,347	46,306	+8.0	+16.7	407,399	416,562	+2.2
New orders.....short tons	50,206	50,489	48,132	49,564	52,214	43,136	39,897	+5.3	+30.9	376,204	407,994	+8.5
Wholesale prices:												
Foundry, No. 2,												
northern.....dolls. per long ton	19.01	18.95	18.51	18.41	18.26	19.76	19.36	-8	-5.7			
Basic (valley furnace).....dolls. per long ton	17.00	16.30	15.45	16.00	16.00	17.50	17.30	0.0	-7.5			
Composite pig iron.....dolls. per long ton	18.40	18.18	17.97	17.79	17.78	19.31	19.00	-1	-6.4			
Cast-iron Boilers and Radiators												
Round boilers:												
Production.....thous. of lbs.	12,452	14,232	12,094	10,581	12,881	19,011	22,311	+21.7	-42.3	178,282	100,249	-43.8
Shipments.....thous. of lbs.	9,280	12,166	13,071	12,302	14,422	18,911	22,588	+17.2	-36.2	145,593	93,277	-35.9
New orders.....thous. of lbs.	9,554	14,888	14,765	12,950	12,551	20,412	20,781	-3.1	-39.6	150,788	98,023	-35.6
Stocks, end of month.....thous. of lbs.	90,529	91,098	89,728	87,993	85,141	114,224	113,776	-2.1	-24.3			
Square boilers:												
Production.....thous. of lbs.	28,994	34,790	31,238	19,541	38,693	21,225	26,966	+98.0	+43.5	182,987	243,611	+33.1
Shipments.....thous. of lbs.	15,787	20,268	25,165	28,247	36,212	22,581	29,268	+28.2	+23.7	144,825	179,544	+24.0
New orders.....thous. of lbs.	15,582	29,021	29,779	32,164	31,809	25,999	26,518	-1.1	+20.0	154,674	193,057	+24.9
Stocks, end of month.....thous. of lbs.	164,514	181,972	188,078	179,539	182,367	113,905	111,962	+1.6	+62.9			
Radiators:												
Production.....thous. sq. ft. heating surface	13,651	16,513	13,363	11,388	15,914	13,577	16,828	+39.7	-5.4	123,099	116,223	-5.6
Shipments.....thous. sq. ft. heating surface	7,541	9,730	11,665	13,285	16,951	14,300	17,904	+27.6	-5.3	95,848	87,184	-9.0
New orders.....thous. sq. ft. heating surface	8,928	13,572	12,394	14,844	15,753	15,775	18,606	+6.1	-15.3	101,231	96,412	-4.8
Stocks, end of month.....thous. sq. ft. heating surface	70,845	77,926	79,549	78,279	77,267	59,692	58,610	-1.3	+31.8			
Gas-fired boilers:												
Shipments.....dollars	161,976	162,167	230,250	266,627						\$1,224,292		
Shipments.....thous. B. t. u.	119,354	122,843	182,195	224,098						\$986,477		
Production.....thous. B. t. u.	161,317	164,434	135,711	125,000						\$1,102,481		
Stocks, end of month.....thous. B. t. u.	983,786	993,425	960,656	852,822								
Crude Steel												
Steel ingots, production:												
United States, total.....thous. of long tons	4,303	4,203	3,743	3,812	4,178	3,204	3,499	+9.6	+19.4	30,510	32,783	+7.5
Ratio to capacity.....per cent	91	83	76	81	82	70	70	+1.2	+17.1			
Canada.....thous. of long tons	113	118	117	83	89	55	77	+7.2	+15.6	620	821	+32.4
U. S. Steel Corporation, unfilled orders, end mo.....thous. of long tons	3,873	3,417	3,637	3,571	3,624	3,142	3,196	+1.5	+13.4			
Steel castings:												
Production—												
Total.....short tons	85,669	92,948	91,387	78,324	86,809	79,726	87,004	+10.8	-2	714,953	690,063	-3.5
Ratio to capacity.....per cent	59	64	63	54	60	55	60	+11.1	0.0			
Railroad specialties.....short tons	32,619	36,599	30,742	27,501	27,157	32,576	32,397	-1.3	-16.2	284,585	259,499	-8.8
Miscellaneous.....short tons	53,050	56,349	60,645	50,823	59,652	47,150	54,607	+17.4	+9.2	430,368	430,564	0.0
New orders—												
Total.....short tons	83,737	86,414	71,745	46,667	80,932	74,246	63,528	+21.4	+27.4	674,963	654,529	-3.0
Ratio to capacity.....per cent	58	60	50	46	56	52	44	+21.7	+27.3			
Railroad specialties.....short tons	32,810	34,995	22,597	20,483	25,171	31,011	21,144	+22.9	+19.0	282,331	249,420	-11.7
Miscellaneous.....short tons	50,927	51,419	49,148	46,184	55,761	43,235	42,384	+20.7	+31.6	392,632	405,109	+3.2
Sheets, black, blue, galvanized, and full finished:												
Production—												
Total.....net tons	327,906	349,367	311,629	267,685	320,396	237,243	266,615	+23.1	+23.5	2,328,421	2,509,219	+11.6
Ratio to capacity.....per cent	97.8	95.6	94.3	82.2	92.8	80.2	80.3	+12.9	+15.6			
Stocks, end of month—												
Total.....net tons	163,053	166,711	151,606	161,933	154,461	154,374	160,315	-4.6	-8.8			
Unsold.....net tons	53,853	54,047	50,702	55,280	51,636	44,538	54,553	-6.6	-5.3			
Shipments.....net tons	327,674	326,324	308,741	278,310	324,691	252,034	266,713	+16.7	+21.7	2,242,626	2,497,818	+11.4
New orders.....net tons	284,070	250,316	318,902	333,357	254,397	230,715	177,647	-23.7	+43.2	1,987,193	2,653,240	+33.5
Unfilled orders, end of month.....net tons	571,761	527,477	526,798	559,468	498,023	353,413	312,662	-9.5	+59.3			

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per cent increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
IRON AND STEEL—Continued												
Crude Steel—Continued												
Steel barrels:												
Production.....barrels	667,827	696,281	712,779	647,844	677,313	578,223	615,152	+4.5	+10.1	4,585,126	5,033,749	+9.8
Ratio to capacity.....per cent	57.5	59.8	61.4	55.5	57.8	51.3	56.2	+4.1	+2.8			
Shipments.....barrels	661,949	694,843	717,496	645,881	675,600	576,602	610,454	+4.6	+10.7	4,574,503	5,028,811	+9.9
Stocks, end of month.....barrels	57,147	58,585	53,898	55,831	57,544	53,715	57,413	+3.1	+1.2			
Unfilled orders, end of month.....barrels	1,276,994	1,257,117	1,159,756	1,243,412	1,064,358	1,346,688	1,106,604	-14.4	-3.8			
Track work, production.....short tons	13,511	14,141	13,716	11,776	11,040	13,217	13,387	-6.2	-17.5	120,873	99,945	-17.3
Iron, steel, and heavy hardware sales.....rel. to Jan., 1921	187	204	204	187	183	200	200					
Lock washers, shipments.....thous. of dolls.	270	282	287	257	282	213	228	+9.7	+23.7	2,023	2,126	+5.1
Wholesale prices:												
Steel billets, Bessemer.....dolls. per long ton	33.00	33.00	32.25	32.00	32.00	33.00	33.00	0.0	-3.0			
Iron and steel, comp.....dolls. per long ton	35.67	35.55	35.34	34.91	34.93	36.43	36.24	+1.1	-3.6			
Structural steel beams.....dolls. per 100 lbs.	1.90	1.88	1.85	1.85	1.85	1.78	1.80	0.0	+2.8			
Composite finished steel.....dolls. per 100 lbs.	2.51	2.49	2.48	2.48	2.48	2.53	2.53	0.0	-2.0			
Fabricated Steel Products												
Structural steel, fabricated:												
New orders (prorated).....short tons	236,250	311,250	303,750	296,250	356,250	345,000	273,750	+20.3	+30.1	2,013,750	2,238,750	+11.2
Ratio to capacity.....per cent	63	83	81	79	95	92	73	+20.3	+30.1			
Shipments (prorated).....short tons	243,750	262,500	262,500	270,000	300,000	258,750	285,000	+11.1	+5.3	1,886,250	2,017,500	+7.0
Ratio to capacity.....per cent	65	70	70	72	80	69	76	+11.1	+5.3			
Steel plate, fabricated, new orders:												
Total.....short tons	50,347	42,376	35,202	35,959	47,245	35,434	48,577	+31.4	-2.7	348,956	343,576	-1.5
Ratio to capacity.....per cent	63	53	44	47	60	44	60	+27.7	0.0			
Oil-storage tanks.....short tons	22,095	14,849	12,204	16,881	21,807	17,199	29,691	+47.0	-16.4	154,618	152,695	-1.2
Steel bars, cold finished, shipments.....tons	35,971	39,431	39,542	39,943	42,993	30,605	30,390	+7.6	+41.9	297,330	323,201	+8.7
Steel boilers, new orders:												
Quantity.....number	1,325	1,571	1,611	1,615	1,649	1,516	1,517	+2.1	+8.7	11,077	11,046	-0.3
Area.....thous. of sq. ft.	1,295	1,456	1,470	1,528	1,460	1,778	1,569	-4.5	-6.9	11,619	10,583	-8.9
Steel furniture:												
Business group—												
Shipments.....thous. of dolls.	3,066	3,213	3,009	2,515	2,565	2,040	2,475	+2.0	+3.6	20,910	23,159	+10.8
New orders.....thous. of dolls.	2,915	3,086	2,764	2,594	2,619	2,092	2,382	+1.0	+9.9	20,655	23,805	+15.3
Unfilled orders, end mo., thous. of dolls.	2,360	2,233	1,993	2,072	2,118	1,507	1,412	+2.2	+50.0			
Shelving—												
Shipments.....thous. of dolls.	716	769	720	723	836	565	604	+15.6	+38.4	4,945	5,958	+20.5
New orders.....thous. of dolls.	741	733	737	713	863	535	592	+21.0	+45.8	4,998	6,138	+22.8
Unfilled orders, end mo., thous. of dolls.	791	753	729	706	734	679	669	+4.0	+9.7			
Iron and steel:												
Exports.....long tons	215,184	267,890	262,052	253,336	287,297	190,502	175,637	+13.4	+63.6	1,498,007	1,899,375	+26.8
Imports.....long tons	55,567	55,092	56,573	33,465	54,062	39,543	51,596	+61.5	+4.8	360,563	400,189	+11.0
Enamelled Ware												
Baths:												
Shipments.....pieces	105,718	125,522	119,297	111,067	104,143	111,294	116,443	-6.2	-10.6	812,663	808,924	-0.5
Stocks, end of month.....pieces	159,892	135,793	120,723	113,430	122,073	128,516	127,324	+7.6	-4.1			
New orders.....pieces	191,571	127,780	113,017	101,603	97,141	117,720	110,916	-4.4	-12.4	821,563	916,924	+11.6
Unfilled orders, end of month.....pieces	139,801	136,238	121,061	101,560	68,263	46,860	41,183	-32.8	+65.8			
Lavatories:												
Shipments.....pieces	124,027	141,458	131,623	120,600	114,031	110,826	126,534	-5.4	-9.9	882,943	919,600	+4.2
Stocks, end of month.....pieces	212,325	183,173	173,808	164,830	161,159	233,466	220,381	-2.2	-26.9			
New orders.....pieces	209,744	139,110	138,113	104,262	102,190	121,276	126,027	-2.0	-18.9	897,987	1,037,527	+15.5
Sinks:												
Shipments.....pieces	125,479	143,791	128,298	122,593	116,665	115,169	131,752	-4.8	-11.5	917,134	939,794	+2.5
Stocks, end of month.....pieces	268,699	239,678	227,929	213,539	216,376	248,458	238,763	+1.3	-9.4			
New orders.....pieces	216,182	145,004	128,368	116,236	96,998	120,538	131,053	-16.6	-26.0	926,181	1,050,782	+13.5
Miscellaneous sanitary ware:												
Shipments.....pieces	51,510	53,353	48,221	48,550	54,096	45,523	55,030	+11.4	-1.7	390,744	388,003	-0.7
Stocks, end of month.....pieces	125,325	113,088	111,141	110,330	95,930	134,133	127,827	-13.1	-25.0			
New orders.....pieces	73,455	55,012	47,197	41,605	41,785	49,560	54,102	+4.4	-22.8	384,383	406,828	+5.8
Small ware (all except baths):												
Unfilled orders, end of month.....pieces	360,858	348,844	315,920	274,135	174,072	123,117	120,949	-36.5	+43.9			
Enamelled sheet-metal ware:												
Shipments.....dozen pieces	351,034	348,661	299,078	277,936		248,599	329,843			2,359,788	2,412,117	+2.2
Porcelain flat ware:												
New orders—												
Total.....thous. of sq. ft.	5,430	5,628	5,477	4,457	6,233	4,668	5,285	+39.8	+17.9	47,198	45,048	-4.6
Ratio to capacity.....per cent	45	47	49	40	55	37	43	+37.5	+27.9			
Shipments—												
Total.....thous. of sq. ft.	6,219	6,924	5,322	4,665	5,495	6,040	5,937	+17.8	-7.4	51,077	46,448	-9.1
Ratio to capacity.....per cent	52	58	47	41	49	48	47	+19.5	+4.3			
Machinery												
Vacuum cleaners, shipments.....number	89,587	89,661	75,631	57,702	65,164		212,829	+12.9				
Washing machines, shipments:												
Total.....number	86,772	88,164	79,962	78,564	92,955	70,260	75,155	+18.3	+23.7	623,422	660,857	+6.0
Electric.....number	69,884	70,922	63,531	62,337	74,253	58,009	63,606	+19.1	+16.7	512,783	534,209	+4.2
Water softeners, shipments.....units	1,489	1,480	1,235	1,218	1,402	1,238	1,595	+15.1	-12.1	12,181	11,444	-6.1
Water systems, shipments.....units	8,182	8,997	9,624	8,815	9,471	7,586	8,601	+7.4	+10.1	54,185	65,784	+21.4
Pumps:												
Domestic shipments—												
Pitcher, hand, etc.....units	42,990	40,190	43,693	43,631	48,729	38,752	39,969	+11.7	+21.9	341,771	376,000	+10.0
Power, horizontal type.....units	2,299	2,305	1,842	2,251	2,528	1,024	994	+12.3	+154.3	6,977	16,992	+143.5
Steam, power, and centrifugal—												
New orders.....thous. of dolls.	1,504	1,428	1,505	1,460	1,579	1,409	1,489	+8.2	+6.0	11,998	11,377	-5.2
Shipments.....thous. of dolls.	1,376	1,518	1,640	1,553	1,520	1,597	1,474	-2.1	+3.1	11,725	11,274	-3.8
Unfilled orders, end mo., thous. of dolls.	3,383	3,239	3,088	2,984	3,023	3,044	3,010	+1.3	-6.6			

* Revised.

* Cumulative through July 31.

* Quarter ending Sept. 30, 1927.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. in crease (+) or de-crease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
IRON AND STEEL—Continued												
Machinery—Continued												
Agricultural machinery and equipment:												
Shipments—												
Total.....rel. to 1923-25.....	187.2	186.6	219.3	213.7	218.4	158.5	177.6	+2.2	+23.0			
Domestic.....rel. to 1923-25.....	184.6	186.2	222.4	202.8	203.9	158.5	166.8	+5	+22.2			
Foreign.....rel. to 1923-25.....	200.6	188.3	202.8	244.7	298.3	158.8	234.0	+21.9	+27.5			
Production.....rel. to 1923-25.....	148.2	145.8	142.4	142.0	145.0	127.8	126.5	+2.1	+14.6			
Foundry equipment:												
New orders.....rel. to 1922-24.....	107.7	335.6	149.1	94.8	278.0	89.9	106.4	+193.2	+161.3			
Shipments.....rel. to 1922-24.....	112.5	104.7	129.4	124.8	154.1			+23.5				
Unfilled orders, end mo.....rel. to 1922-24.....	126.1	344.5	359.3	332.1	467.2			+40.7				
Stokers, mechanical, sales:												
Quantity.....number.....	88	130	166	193	162	136	160	-16.1	+1.3	1,025	1,022	-3
Power.....horsepower.....	31,043	38,705	43,212	59,859	51,512	41,504	60,977	-13.8	-15.4	379,380	338,031	-10.9
Machine tools:												
New orders.....rel. to 1922-24.....	222	205	215	204	241	129	170	+18.1	+41.8			
Shipments.....rel. to 1922-24.....	219	204	193	181	208	100	118	+14.9	+76.3			
Unfilled orders, end of mo.....rel. to 1922-24.....	371	345	348	420	428	216	278	+1.9	+54.0			
Electric hoists:												
New orders—												
Quantity.....number.....	394	462	442	394	402	229	278	+2.0	+44.6	2,228	3,396	+52.4
Value.....dollars.....	198,004	204,550	181,205	204,636	180,365	105,103	162,594	-11.9	+10.9	1,132,723	1,562,306	+37.9
Shipments.....dollars.....	188,967	190,174	195,807	177,404	193,248	98,020	128,331	+8.9	+50.6	1,025,909	1,460,442	+42.4
Electric overhead cranes:												
Shipments.....thous. of dolls.....	659	547	600	463	564	679	729	+21.8	-22.6	6,492	4,532	-30.2
New orders.....thous. of dolls.....	410	708	573	733	821	689	483	+12.0	+70.0	5,615	4,826	-14.1
Unfilled orders, end mo.....thous. of dolls.....	1,520	1,671	1,688	1,800	1,952	2,746	2,278	+8.4	-14.3			
Woodworking machinery:												
New orders.....thous. of dolls.....	1,329	1,985	1,173	1,247	1,641	1,036	1,207	+31.6	+36.0	10,331	11,082	+7.3
Shipments.....thous. of dolls.....	1,150	1,490	1,319	1,264	1,436	1,105	1,214	+13.6	+18.3	10,680	10,282	+3.7
Shipments.....number of machines.....	931	1,082	871	932	1,170	971	1,089	+25.5	+7.4	8,543	7,860	-8.0
Cancellations.....thous. of dolls.....	42	25	44	32	6	13	12	-81.2	-50.0	107	202	+88.8
Unfilled orders, end of mo.....thous. of dolls.....	1,577	2,058	1,873	1,838	2,058	1,167	1,200	+12.0	+71.5			
Electric industrial trucks and tractors:												
Shipments, domestic—												
Tractors.....number of vehicles.....	9	8	6	5	5	12	3	0.0	+66.7	93	71	-23.7
All other types.....number of vehicles.....	122	95	97	87	85	73	87	-2.3	-2.3	706	767	+8.6
Exports.....number of vehicles.....	6	13	14	15	6	5	2	-60.0	+200.0	78	97	+24.4
Fire-extinguishing equipment, shipments:												
Motor vehicles.....number.....	101	107	97	105	122	118	143	+16.2	-14.7	979	804	-17.9
Hand types.....number.....	46,643	55,033	48,123	48,897	47,340	46,285	48,101	-3.2	-1.6	402,263	382,296	-5.0
Patents issued:												
Total, all classes.....number.....	3,321	4,248	4,275	3,107	3,390	3,078	3,815	+9.1	-11.1	28,352	28,210	-5
Agricultural implements.....number.....	45	56	24	44	29	50	46	-34.1	-37.0	419	324	-22.7
Internal-combustion engines.....number.....	43	63	42	59	43	47	67	-27.1	-35.8	577	414	-28.2
NONFERROUS METALS												
Copper												
Production:												
Mines.....short tons.....	69,721	73,729	73,224	73,426	77,047	65,545	67,248	+4.9	+14.6	559,781	573,366	+2.4
Smelter.....short tons.....	82,087	85,745	88,398	83,875	88,517	75,029	78,245	+5.5	+13.1	644,942	667,056	+3.4
Refined (N. and S. America).....short tons.....	122,824	129,236	131,024	135,092	143,560	118,133	119,786	+6.3	+19.8	985,287	1,038,279	+5.4
World production, blister.....short tons.....	143,427	153,414	156,474	153,190	158,838	132,186	135,015	+3.7	+17.6	1,088,841	1,195,277	+9.8
Domestic shipments, refined.....short tons.....	72,234	79,103	81,436	82,245	83,398	61,965	71,736	+1.4	+16.3	564,521	609,671	+8.0
Exports.....short tons.....	45,550	56,667	50,261	47,855	41,186	42,592	46,571	-13.9	-11.6	343,667	384,916	+12.0
Stocks (North and South America), end mo.:												
Refined.....short tons.....	72,893	66,288	58,809	54,871	54,793	104,388	93,654	-1.3	-41.5			
Blister.....short tons.....	235,392	241,755	251,694	257,673	254,433	250,957	253,886	-1.3	+2			
Wholesale price, electrolytic.....dolls. per lb.....	.1399	.1420	.1453	.1453	.1453	.1253	.1297	0.0	+12.0			
Wire Cloth												
Production.....thous. of sq. ft.....	413	431	400	367	430	418	422	+17.2	+1.9	3,666	3,509	-4.3
Shipments.....thous. of sq. ft.....	405	407	364	365	387	391	426	+6.0	-9.2	3,305	3,258	-1.4
Stocks, end of month.....thous. of sq. ft.....	1,147	1,134	1,157	1,124	1,120	1,374	1,320	-4	-15.2			
New orders.....thous. of sq. ft.....	399	371	310	346	408	367	413	+17.9	-1.2		3,047	
Unfilled orders, end of mo.....thous. of sq. ft.....	283	258	185	247	285	245	256	+15.4	+11.3			
Make and hold orders, end of month.....thous. of sq. ft.....	438	402	414	405	457	417	398	+12.8	+14.8			
Tin												
Deliveries (consumption).....long tons.....	7,010	5,335	6,950	5,545	7,200	5,950	6,895	+29.8	+4.4	50,175	51,205	+2.1
Stocks, end of month:												
World visible supply.....long tons.....	15,001	17,064	16,231	18,022	18,456	15,377	14,487	+2.4	+27.4			
United States.....long tons.....	1,973	3,708	2,148	2,878	1,718	1,984	2,201	-40.3	-21.9			
Imports.....long tons.....	9,494	7,045	5,050	4,772	6,584	5,682	8,560	+38.0	-23.1	50,254	52,802	+5.1
Wholesale price, Straits, N. Y.....dolls. per lb.....	.5236	.5154	.4794	.4704	.4801	.6406	.6447	+2.1	-25.5			
Zinc												
Retorts in operation, end of month.....number.....	72,522	70,260	65,680	62,384	66,428	76,519	76,851	+6.5	-13.6			
Per cent of total.....per cent.....	59.0	57.2	53.4	53.9	57.4	58.2	57.1	+6.5	+5			
Production.....short tons.....	53,493	53,422	50,825	50,890	52,157	47,627	49,012	+2.5	+6.4	414,064	419,124	+1.2
Stocks, end of month.....short tons.....	44,759	45,225	44,468	42,210	44,416	39,323	34,587	+5.2	+28.4			
Ore, Joplin district:												
Shipments.....short tons.....	51,579	50,630	64,531	43,227	43,466	59,104	61,749	+6	-29.6	452,882	386,234	-14.7
Stocks, mines, end of month.....short tons.....	49,097	41,747	32,266	31,679	39,303	30,813	24,934	+24.1	+57.6			
Price, slab, prime western.....dolls. per lb.....	.0576	.0603	.0616	.0620	.0625	.0623	.0634	+8	-1.4			

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. in-crease (+) or de-crease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
NONFERROUS METALS—Continued												
Lead												
Production..... short tons.....	50,115	51,481	51,501	48,671	53,986	57,059	55,830	+10.9	-3.3	463,420	423,182	-8.7
Ore shipments:												
Joplin district..... short tons.....	6,438	6,352	13,277	6,623	6,125	6,169	8,540	-7.5	-28.3	68,510	59,367	-13.3
Utah..... short tons.....	58,401	61,790	77,074	56,395	78,811	63,114	63,721	+39.7	+23.7	522,078	557,644	+6.8
Receipts in U. S. ore..... short tons.....	47,939	53,991	54,185	49,305	56,479	49,005	56,479			385,572	367,561	-4.7
Stocks, U. S. and Mexico, end mo..... short tons.....	161,207	159,375	163,709	158,919	165,589	165,589	162,866					
Price, pig, desilverized, N. Y.....dolls. per lb.....	.0610	.0612	.0630	.0622	.0625	.0634	.0668	+5	-6.4			
Other Metal Products												
Babbitt metal, consumption:												
Total apparent..... thous. of lbs.....	4,843	4,607	4,731	4,693	4,756	4,605	5,497	+1.3	-13.5	41,233	37,957	-7.9
Direct by producers..... thous. of lbs.....	1,118	1,028	1,106	900	912	1,442	1,008	+1.3	-9.5	8,695	8,010	-7.9
Sale to consumers..... thous. of lbs.....	3,725	3,578	3,625	3,793	3,844	3,162	4,489	+1.3	-14.4	32,537	29,946	-8.0
Band instruments, shipments:												
Total..... dollars.....	392,146	374,490	345,169	266,219	366,338	366,338	432,571			\$ 3,040,881	\$ 2,610,624	-14.1
Cup mouthpieces..... dollars.....	158,677	163,075	148,148	110,104	142,373	142,373	175,999			\$ 1,127,264	\$ 1,054,929	-6.4
Saxophones..... dollars.....	211,414	185,511	168,420	134,350	204,470	204,470	237,532			\$ 1,754,187	\$ 1,379,919	-21.3
Wood wind..... dollars.....	22,055	25,904	28,601	21,765	19,495	19,495	19,040			\$ 151,430	\$ 175,776	+16.1
Pails and tubs, galvanized:												
Production..... dozens.....	208,544	177,170	141,448	114,343	127,797	124,264	133,309	+11.8	-4.1	1,183,659	1,246,252	+5.3
Shipments..... dozens.....	201,119	155,561	144,385	121,415	142,487	128,816	148,148	+17.4	-3.8	1,219,002	1,265,868	+3.8
Other galvanized ware:												
Production..... dozens.....	31,545	39,206	48,038	61,688	37,846	30,712	44,632	-38.6	-15.2	290,606	333,514	+14.8
Shipments..... dozens.....	36,452	35,143	44,833	47,856	44,377	31,832	48,291	-7.3	-8.1	289,350	318,640	+10.1
Electrical Equipment												
Electrical porcelain, shipments:												
Standard..... dollars.....	57,919	70,674	66,968	106,503	42,402	42,402	62,697			\$ 589,388	\$ 494,621	-16.1
Special..... dollars.....	116,516	133,524	128,243	132,762	131,293	131,293	114,467			\$ 953,431	\$ 868,584	-8.9
High tension..... dollars.....	521,682	540,212	514,307	637,602	400,398	400,398	386,174			\$ 3,505,592	\$ 3,505,592	
Glazed nail knobs..... thous. of pieces.....	2,207	2,172	2,597	4,079	1,864	1,864	2,361				\$ 18,156	
Unglazed nail knobs..... thous. of pieces.....	953	1,557	1,349	2,065	635	635	1,165				\$ 9,466	
Tubes..... thous. of pieces.....	1,155	873	1,239	3,237	1,030	1,030	1,145				\$ 9,693	
Laminated phenolic products, shipments..... dollars.....	872,336	857,478	1,020,948	1,125,767	636,716	636,716	929,872			\$ 3,675,335	\$ 6,115,455	+66.4
Motors:												
New orders..... dollars.....	730,979	805,824	896,638		736,679	736,679	706,219					
Billings (shipments)..... dollars.....	749,534	786,991	761,630		776,866	776,866	823,940					
Outlet boxes and covers, shipments..... pieces.....	2,518,077	2,763,094	2,779,032	2,768,866	1,936,639	1,936,639	2,645,760			\$ 14,922,447	\$ 18,850,700	+26.3
Vulcanized fiber:												
Shipments, total..... thous. of dolls.....	621	662	626	561	719	719	731			\$ 5,431	\$ 4,480	-17.5
Consumption..... thous. of lbs.....	2,700	3,092	3,098	2,606	2,256	2,256	2,461			\$ 18,304	\$ 19,258	+5.2
Industrial reflectors, sales..... thous. of ft.....	107,801	109,804	117,104	115,929	107,384	107,384	120,353			\$ 866,326	\$ 843,520	-2.6
Power cables, shipments..... thous. of ft.....	1,860	2,130	1,947	1,738							\$ 12,766	
Flexible cords:												
Shipments..... thous. of ft.....	37,853	41,357	37,803	37,328	36,660	36,660	36,005				\$ 260,092	
Stocks, end of month..... thous. of ft.....	44,751	45,145	46,882	46,411	60,017	60,017	58,556					
Welding sets, new orders:												
Single operator..... units.....	239	238	206	294	118	118	137			\$ 945	\$ 1,562	+65.3
Multiple operator..... units.....	28	11	2	10	8	8	23			\$ 74	\$ 110	+48.6
Nonmetallic conduits, shipments..... thous. of ft.....	7,860	8,939	7,645	6,373	8,580	8,580	9,713			\$ 69,532	\$ 53,927	-22.4
Electric furnaces, new orders..... kilowatts.....	5,131	5,608	4,958	4,861							\$ 33,414	
Manufactured mica:												
Shipments..... thous. of dolls.....	246	279	270	265								
Unfilled orders, end of mo..... thous. of dolls.....	335	196	305	304								
Delinquent accounts, electrical trade:												
Amount..... dollars.....	173,482	196,243	165,775	151,476	167,136	201,183	166,683	+10.3	+3			
Delinquent firms..... number.....	1,485	1,488	1,291	1,191	1,384	1,427	1,585	+16.2	-12.7			
AUTOMOBILES												
Production:												
United States—												
Total..... number of cars.....	410,191	425,863	439,669	491,180	458,429	268,485	308,826	+17.2	+48.4	2,646,285	3,051,220	+15.3
Passenger cars..... number of cars.....	364,877	375,863	356,439	438,088	400,689	236,868	274,381	+18.5	+40.0	2,313,869	2,704,514	+16.9
Trucks..... number of cars.....	45,314	50,000	40,230	53,092	57,740	31,617	34,445	+8.8	+67.6	332,416	346,706	+4.3
Canada.....												
Total..... number of cars.....	24,211	33,942	28,399	25,226	31,245	10,987	12,526	+23.9	+149.4	150,321	181,459	+20.7
Passenger cars..... number of cars.....	20,517	29,764	25,341	20,122	24,274	8,719	10,139	+20.6	+139.4	124,503	152,261	+22.3
Trucks..... number of cars.....	3,694	4,178	3,058	5,104	6,971	2,268	2,387	+36.6	+192.0	25,818	29,198	+13.1
Exports (assembled):												
From United States—												
Total..... number of cars.....	42,269	47,912	47,171	51,679	49,007	28,604	32,059	-5.2	+52.9	284,933	354,024	+24.2
Passenger cars..... number of cars.....	33,644	38,851	36,038	38,880	32,815	19,398	23,294	-15.6	+40.9	210,351	265,999	+26.5
Trucks..... number of cars.....	8,625	9,061	11,133	12,799	16,192	9,206	8,765	+26.6	+84.7	74,582	88,016	+18.0
From Canada.....												
Total..... number of cars.....	3,996	6,157	5,589	8,021	11,011	3,247	4,634	+37.3	+137.6	43,966	45,944	+4.5
Passenger cars..... number of cars.....	2,957	4,511	4,431	6,545	7,985	2,059	3,020	+22.0	+161.4	30,404	33,581	+10.4
Trucks..... number of cars.....	1,039	1,646	1,158	1,476	3,026	1,188	1,614	+105.0	+87.5	13,562	12,363	-8.8
Shipments (General Motors Co.):												
To dealers..... number of cars.....	197,597	207,325	186,160	169,473	186,653	136,909	155,604	+10.1	+20.0	1,175,990	1,439,442	+22.4
To users..... number of cars.....	209,367	224,094	206,259	177,728	187,463	134,749	158,619	+5.5	+18.2	1,133,849	1,427,924	+25.9
Accessories and parts:												
Shipments—												
Original shipment..... rel. to Jan., 1925.....	213	215	200	203	230	148	155	+13.3	+48.4			
Replacement parts..... rel. to Jan., 1925.....	151	183	150	148	176	142	169	+18.9	+4.1			
Accessories..... rel. to Jan., 1925.....	107	113	110	112	147	97	115	+31.3	+27.8			
Service parts..... rel. to Jan., 1925.....	164	157	140	120	148	136	131	+23.3	+10.4			
Exports..... thous. of dolls.....	12,466	11,491	11,838	12,571	13,558	9,973	9,741	+10.2	+42.6	74,132	91,440	+23.3
Rim production..... thous. of rims.....	2,316	2,186	2,429	2,210	2,319	1,680	1,826	+4.9	+27.0	14,926	17,498	+17.2

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927	
	April	May	June	July	August	July	August		August, 1928, from July, 1928	August, 1928, from August, 1927		1927
AUTOMOBILES—Continued												
New passenger-car registrations:												
Total.....number of cars.....	332,056	351,332	317,032	324,021		251,709	242,031			\$ 1,784,655	\$ 1,880,263	+5.4
Highest price group.....number of cars.....	14,705	14,642	11,648	11,310		9,769	11,514			\$ 66,223	\$ 77,928	+17.7
Second highest group.....number of cars.....	71,050	72,993	64,480	67,902		65,749	73,223			\$ 399,236	\$ 396,943	-.6
Third highest group.....number of cars.....	99,201	102,890	90,176	84,248		67,807	71,704			\$ 412,820	\$ 546,209	+32.3
Lowest price group.....number of cars.....	146,282	159,926	150,028	159,916		107,077	85,071			\$ 895,995	\$ 854,272	-4.7
Miscellaneous.....number of cars.....	818	881	700	645		1,307	519			\$ 10,381	\$ 4,911	-52.7
FUELS												
Coal and Coke												
Bituminous:												
Production—												
United States.....thous. of short tons.....	32,188	36,624	35,963	36,276	41,108	33,637	41,705	+13.3	-1.4	351,971	311,673	-11.4
Canada.....thous. of short tons.....	1,123	1,258	1,338	1,309	1,535	1,230	1,318	+17.3	+16.5	10,975	11,062	+.8
Exports.....thous. of long tons.....	711	1,144	1,277	1,503	1,618	1,531	1,278	+7.7	+26.6	11,577	8,655	-25.2
Consumption—												
By vessels.....thous. of long tons.....	306	364	322	314	356	335	351	+13.4	+1.4	2,722	2,553	-6.2
By electric power plants.....thous. of short tons.....	3,119	3,118	3,039	3,170		3,353	3,518			\$ 23,856	\$ 23,068	-3.3
By railroads.....thous. of short tons.....	7,436	7,400	6,927			7,184	7,558					
By coke plants—												
United States.....thous. of short tons.....	6,235	6,484	6,167	6,046	6,194	5,993	6,034	+2.4	+2.7	50,763	49,836	-1.8
Canada.....thous. of short tons.....	243	266	271	279	269	231	247	-3.6	+8.9	1,952	2,070	+6.0
Prices—												
Mine aver. (spot).....dolls. per short ton.....	1.74	1.73	1.73	1.70	1.73	1.86	2.07	+1.8	-16.4			
Wholesale, comp.....dolls. per short ton.....	4.016	3.986	3.973	3.984	4.009	4.251	4.275	+6	-6.2			
Retail, composite.....dolls. per short ton.....	9.26	8.18	8.72	8.69	8.74	8.91	8.99	+6	-2.8			
Anthracite:												
Production.....thous. of short tons.....	6,909	8,124	5,301	4,175	6,883	4,993	7,694	+53.8	-10.5	53,584	48,465	-9.6
Exports.....thous. of long tons.....	182	266	209	167	278	228	280	+66.5	-7	1,879	1,748	-7.0
Prices—												
Wholesale, comp.....dolls. per long ton.....	12.794	12.752	12.949	12.965	12.853	13.148	13.209	-9	-2.7			
Retail, composite.....dolls. per short ton.....	14.64	14.46	14.61	14.63	14.76	14.81	14.80	+9	-1.3			
Coke:												
Production, U. S.—												
Beehive.....thous. of short tons.....	377	376	302	271	288	467	486	+6.3	-40.7	5,372	2,829	-47.3
By-product.....thous. of short tons.....	3,925	4,100	3,961	3,911	3,995	3,658	3,681	+2.1	+8.5	29,542	31,087	+5.2
Production, Canada.....thous. of short tons.....	174	193	195	200	191	159	169	-4.5	+13.0	1,345	1,486	+10.5
Exports.....thous. of long tons.....	62	89	126	79	70	58	55	-11.4	+27.3	436	641	+47.0
Price, furnace, Connellsville.....dolls. per short ton.....	2.74	2.70	2.80	2.79	2.88	3.04	3.08	+3.2	-6.5			
Petroleum												
Crude petroleum:												
Production.....thous. of bbls.....	72,127	75,218	72,526	75,426	77,829	78,780	78,788	+3.2	-1.2	598,242	588,543	-1.6
Stocks, end of month—												
Total (comparable).....thous. of bbls.....	371,579	371,849	370,751	369,243	368,653	324,378	333,413	-.2	+10.6			
Tank farms and pipe lines.....thous. of bbls.....	328,354	328,556	328,094	336,314	326,399	287,833	295,383	-2.9	+10.5			
Refineries.....thous. of bbls.....	43,225	43,293	42,657	42,929	42,254	36,545	38,030	-1.6	+11.1			
California—												
Light.....thous. of bbls.....	18,752	19,170	19,197	18,215	18,310	25,301	23,262	+5	-21.3			
Heavy.....thous. of bbls.....	94,301	93,941	94,234	95,663	95,057	93,011	93,353	-6	+1.8			
Imports.....thous. of bbls.....	5,661	6,766	6,553	7,878	6,141	4,824	6,261	-22.0	-1.9	37,079	52,025	+40.3
Consumption (run to stills).....thous. of bbls.....	72,979	77,311	75,681	80,700	81,582	71,405	70,957	+1.1	+15.0	547,283	594,171	+8.6
Refinery operation.....per cent. of capacity.....	79	80	81	82	83	80	79	+1.2	+5.1			
Price, Kansas-Oklahoma.....dolls. per bbl.....	1.190	1.190	1.190	1.195	1.210	1.155	1.155	+1.3	+4.8			
Oil wells completed.....number.....	961	961	1,056	1,096	1,247	1,276	1,132	+13.8	+10.2	10,450	7,870	+24.7
Mexico—												
Production.....thous. of bbls.....	4,596	4,347	4,049	4,040		5,488	5,393			\$ 39,372	\$ 31,005	-21.3
Exports.....thous. of bbls.....	3,940	3,065	2,808	3,249		4,548	4,197			\$ 31,558	\$ 22,428	-28.9
Venezuela—												
Production.....thous. of bbls.....	7,594	8,784	8,339	9,398	9,031	5,480	5,291	-3.9	+70.7	38,468	64,540	+67.8
Exports.....thous. of bbls.....	7,582	8,511	8,231	8,808	8,933	4,420	4,488	+1.4	+99.0	30,826	63,049	+104.5
Gasoline:												
Production—												
Raw (at refineries).....thous. of bbls.....	29,332	30,825	30,675	32,884	34,037	28,040	28,008	+3.5	+21.5	216,623	241,652	+11.6
Natural gas (at plants).....thous. of bbls.....	3,469	3,474	3,317	3,410	3,421	3,119	3,214	+3	+6.4	25,167	27,163	+7.9
Exports.....thous. of bbls.....	4,044	6,535	4,614	5,108	4,452	3,097	4,101	-12.8	+8.6	29,214	35,548	+21.7
Consumption.....thous. of bbls.....	25,712	27,353	29,022	31,985	33,148	29,750	29,762	+3.6	+11.4	195,573		
Stocks, end of month—												
Raw (at refineries).....thous. of bbls.....	40,210	37,336	34,393	30,392	27,197	39,106	33,492	-10.5	-18.8			
Natural gas (at plants).....thous. of bbls.....	832	809	648	477	414	992	846	-13.2	-51.1			
Prices—												
Wholesale, New York.....dolls. per gal.....	0.170	0.170	0.170	0.173	0.180	0.190	0.175					
Retail, wagons, 50 cities.....dolls. per gal.....	0.150	0.152	0.153	0.156	0.160	0.149	0.146	+2.6	+9.6			
Retail distribution, 41 States.....thous. of gals.....	754,020	843,845	861,547	945,047		861,547	894,520			\$ 4,791,121	\$ 5,332,791	+11.3
Kerosene:												
Production.....thous. of bbls.....	5,033	5,243	4,849	4,994	5,389	4,484	4,420	+7.9	+21.9	36,851	40,055	+8.7
Exports.....thous. of bbls.....	1,903	2,035	1,632	1,826	1,653	1,360	1,669	-9.5	-1.0	12,392	14,746	+19.0
Consumption.....thous. of bbls.....	3,234	3,383	2,385	3,079	3,261	2,532	3,173	+5.9	+2.8	24,152	24,042	-.5
Stocks at refineries, end mo.....thous. of bbls.....	7,733	7,537	8,370	8,470	8,922	9,143	8,694	+5.3	+2.6			
Retail distribution, 13 States.....thous. of bbls.....	33,201	31,624				29,845	37,609					
Price, 150° water white.....dolls. per gal.....	0.069	0.074	0.073	0.068	0.072	0.070	0.058	+5.9	+5.9			
Gas and fuel oils:												
Production.....thous. of bbls.....	33,857	35,620	35,565	36,941	37,449	33,554	33,975	+1.4	+10.2	260,060	276,718	+6.4
Consumption—												
By vessels.....thous. of bbls.....	4,275	5,013	4,307	4,101	4,564	4,077	4,470	+11.3	+2.1	32,646	34,030	+4.2
By electric pow. plants.....thous. of bbls.....	532	483	498	553	600	474	502	+8.5	+19.5	4,621	4,405	-4.7
By railroads.....thous. of bbls.....	4,085	4,093	3,819	4,071	37,961	3,756	3,921	+1.5	+25.1	\$ 27,607	\$ 28,074	+1.7
Stocks at refineries, end mo.....thous. of bbls.....	29,499	32,887	36,015	37,410		28,890	30,346					
Price, Okla. 24-26, refineries.....dolls. per bbl.....	0.840	.763	0.719	0.670	0.650	0.900	0.870	-3.0	-25.3			

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
FUELS—Continued												
Petroleum—Continued												
Lubricating oil:												
Production.....thous. of bbls.	3,026	3,091	3,009	2,827	2,891	2,672	2,752	+2.3	+5.1	20,904	23,135	+10.7
Consumption.....thous. of bbls.	2,362	1,989	2,143	1,930	2,035	1,827	2,004	+5.4	+1.6	14,502	15,586	+7.5
Stocks at refineries, end mo. thous. of bbls.	8,018	8,060	7,832	7,667	7,711	7,496	7,491	+6	+2.9			
Price, cylinder oil.....dolls. per gal.	0.221	0.228	0.220	0.226	0.229	0.250	0.251	+1.3	-8.8			
Asphalt:												
Production.....thous. of short tons.	274	331	332	329	316	335	340	-4.0	-7.1	2,200	2,260	+2.7
Stocks, end of month.....thous. of short tons.	274	262	271	251	226	214	192	-10.0	+17.7			
Imports.....thous. of short tons.	6	13	3	11	13	10	12	+18.2	+8.3	110	65	-40.1
Coke:												
Production.....thous. of short tons.	109	118	118	127	136	90	95	+7.1	+43.2	735	918	+24.9
Stocks, end of month.....thous. of short tons.	342	348	344	385	402	306	304	+4.4	+32.2			
Wax:												
Production.....thous. of lbs.	57,548	51,072	50,792	45,273	54,084	47,979	41,576	+19.5	+30.1	384,798	414,020	+7.6
Stocks, end of month.....thous. of lbs.	110,010	103,639	91,989	84,476	79,136	191,501	180,645	-6.3	-56.2			
RUBBER												
Crude Rubber												
World shipments, plantation.....long tons.	36,114	43,889	40,927	49,186		41,938	50,535			\$ 350,225	\$ 313,716	-10.4
Imports (including latex).....long tons.	37,958	31,014	27,764	31,258	32,712	37,677	32,810	+4.7	-3	293,444	273,894	-6.7
Consumption by tire mfrs.....thous. of lbs.	43,701	51,061	53,159	47,128		41,209	45,706			\$ 328,319	\$ 334,123	+1.8
World stocks, end of month:												
World total.....long tons.	245,185	227,597	212,452			249,995	255,684					
United States.....long tons.	113,083	105,357	90,198	83,242	68,995	98,469	96,148	-17.1	-28.2			
Europe.....long tons.	57,174	48,304	42,290			68,226	69,109					
Producing countries.....long tons.	19,223	20,116	20,664	21,578	21,828	24,500	27,427	+1.2	-20.4			
Afloat.....long tons.	55,700	53,820	59,300	64,700		58,800	63,000					
Tires and Tubes												
Pneumatic tires:												
Production.....thousands.	4,645	5,082	5,030	4,881		3,835	4,334			\$ 30,176	\$ 33,576	+11.3
Stocks, end of month.....thousands.	9,561	9,794	9,150	8,396		8,522	8,070					
Shipments—												
Domestic.....thousands.	4,229	4,707	5,162	5,811		4,316	4,666			\$ 27,822	\$ 31,623	+13.7
Export.....thousands.	143	146	184	121		180	144			\$ 1,281	\$ 1,033	-19.4
Inner tubes:												
Production.....thousands.	4,999	5,382	5,222	5,009		3,971	4,871			\$ 32,435	\$ 35,301	+8.8
Stocks, end of month.....thousands.	12,500	13,298	12,892	11,248		12,028	11,023					
Shipments—												
Domestic.....thousands.	4,196	4,631	5,254	6,469		5,205	5,898			\$ 32,124	\$ 33,221	+3.4
Export.....thousands.	86	100	105	83		104	96			\$ 685	\$ 643	-6.1
Solid and cushion:												
Production.....thousands.	44	47	49	46		48	49			\$ 386	\$ 304	-21.2
Stocks, end of month.....thousands.	157	156	156	152		180	183					
Shipments—												
Domestic.....thousands.	40	44	45	45		43	45			\$ 322	\$ 292	-12.4
Exports.....thousands.	3	4	5	4		5	5			\$ 43	\$ 17	-37.2
Other Rubber Products												
Rubber-proofed fabrics:												
Production—												
Total.....thous. of yds.	2,416	2,744	2,953	3,447		3,330	4,077			\$ 18,304	\$ 19,165	+4.7
Auto fabrics.....thous. of yds.	835	725	895	763		712	802			\$ 5,669	\$ 5,380	-5.1
Raincoat fabrics.....thous. of yds.	874	1,110	1,351	1,951	2,598	2,047	2,723	+33.2	-4.6	11,902	11,013	-7.5
All other.....thous. of yds.	707	909	707	733	1,251	571	552	+70.7	+126.6	4,008	6,621	+65.2
New orders, auto fabrics.....thous. of yds.	980	776	884	497		832	876			\$ 5,844	\$ 5,766	-1.3
Production, relative to capacity, per cent.	27.6	27.7	24.5	25.9			30.5					
Rubber heels:												
Production.....thous. of pairs.	18,575	21,597	18,763	17,620		15,907	18,363			\$ 102,583	\$ 136,001	+32.6
Shipments—												
To shoe manufacturers.....thous. of pairs.	8,639	8,897	9,166	12,070		9,598	10,624			\$ 53,484	\$ 70,443	+31.7
To repair trade.....thous. of pairs.	6,173	7,559	9,022	7,372		6,936	8,676			\$ 44,204	\$ 52,601	+19.0
For export.....thous. of pairs.	819	884	864	457		949	908			\$ 5,899	\$ 6,113	+3.6
Stocks, end of month.....thous. of pairs.	48,892	52,387	50,569	49,679		41,056	38,849					
Rubber soles:												
Production.....thous. of pairs.	2,928	3,519	3,321	3,168		2,128	2,333			\$ 11,896	\$ 23,742	+99.6
Shipments—												
To shoe manufacturers.....thous. of pairs.	1,524	1,855	1,977	1,897		1,356	1,768			\$ 8,262	\$ 13,275	+60.7
To repair trade.....thous. of pairs.	884	894	948	808		593	849			\$ 3,054	\$ 6,532	+113.9
For export.....thous. of pairs.	141	120	41	55		177	119			\$ 551	\$ 1,843	+234.5
Stocks, end of month.....thous. of pairs.	4,084	4,558	4,687	5,067		3,564	3,170					
Mechanical rubber goods:												
Shipments—												
Total.....thous. of dolls.	5,406	6,274	6,126			5,477	5,863					
Belting.....thous. of dolls.	1,211	1,352	1,568			1,622	1,778					
Hose.....thous. of dolls.	2,078	2,666	2,298			2,011	1,934					
All other.....thous. of dolls.	2,117	2,255	2,260			1,845	2,151					
Rubber bands, shipments.....thous. of lbs.	169	177	192	173	193			+11.6				
Rubber flooring, shipments.....thous. of sq. ft.	475	661	717									

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
HIDES AND LEATHER												
Hides												
Imports:												
Total hides and skins.....thous. of lbs.	45,443	61,288	58,091	50,175	47,056	37,299	55,397	-6.2	-15.1	290,616	380,372	+30.9
Calfskins.....thous. of lbs.	2,836	4,387	4,457	4,134	4,053	4,025	5,544	-2.0	-26.9	29,070	29,156	+3
Cattle hides.....thous. of lbs.	26,101	36,913	34,168	28,193	26,540	20,506	33,495	-5.9	-20.8	145,190	215,873	+48.7
Goatskins.....thous. of lbs.	8,182	10,082	8,383	7,873	7,951	5,770	6,973	+1.0	+14.0	57,198	63,734	+11.4
Sheepskins.....thous. of lbs.	5,428	6,016	7,323	6,171	6,773	4,654	6,245	+9.8	+8.5	41,186	45,945	+11.6
Stocks, end of month:												
Total hides and skins.....thous. of lbs.	228,037	241,264	244,746	239,877	232,103	239,049	172,008					
Cattle hides.....thous. of lbs.	190,492	197,775	196,561	194,668	194,008	180,700	150,700					
Calf and kip skins.....thous. of lbs.	22,687	25,961	29,159	25,551	38,441	36,321	22,028					
Sheep and lamb skins.....thous. of lbs.	14,858	17,528	19,026	19,658	21,654	22,028						
Prices:												
Green salted, packers' heavy native steers.....dolls. per lb.	.256	.246	.224	.239	.236	.219	.215	-1.3	+9.8			
Calfskins, country No. 1.....dolls. per lb.	.295	.295	.266	.278	.275	.226	.212	-1.1	+29.7			
Inspected slaughter of livestock:												
United States—												
Cattle.....thous. of animals.	623	723	706	662	717	743	838	+8.3	-14.4	6,154	5,473	-11.1
Calves.....thous. of animals.	438	473	398	362	369	355	389	+1.9	-5.1	3,321	3,204	-3.5
Swine.....thous. of animals.	3,446	3,804	4,078	2,984	2,545	3,431	3,050	-14.7	-16.6	29,576	33,256	+12.4
Sheep.....thous. of animals.	918	1,015	1,109	1,076	1,196	1,014	1,168	+11.2	+2.4	8,340	8,529	+2.3
Canada—												
Cattle and calves.....thous. of animals.	96	123	99	100	105	89	109	+5.0	-3.7	722	731	+1.2
Swine.....thous. of animals.	222	219	205	164	140	148	161	-14.6	-13.0	1,656	1,716	+3.6
Sheep.....thous. of animals.	16	17	25	45	62	33	59	+37.8	+5.1	215	226	+5.1
Leather												
Sole and belting leather:												
Production—												
Sole only.....thous. of backs, bends, sides.	1,358	1,407	1,399	1,436	1,459	1,356	1,393	+1.6	+4.7	10,678	10,885	+1.9
Sole and belting.....thous. of lbs.	24,761	25,140	24,971	25,070	25,576	25,576	26,040			\$ 176,347	\$ 171,691	-2.6
Stocks, end of month—												
In process of tanning.....thous. of lbs.	89,181	90,734	91,781	90,949	88,489	84,753	63,571					
Finished.....thous. of lbs.	57,335	59,614	63,921	69,557	65,746	63,571	53,753					
Exports.....thous. of lbs.	753	650	538	531	996	820	753	+87.6	+32.3	6,660	6,780	+1.8
Price oak, scoured backs.....dolls. per lb.	.66	.67	.68	.67	.67	.51	.53	0.0	+26.4			
Upper leather:												
Production.....thous. of sq. ft.	63,730	62,074	66,047	66,464	60,224	72,095	148,821			\$ 459,267	\$ 473,284	+3.1
Stocks, end of month—												
In process of tanning.....thous. of sq. ft.	140,713	141,068	143,099	147,443	150,216	148,821	245,995					
Finished.....thous. of sq. ft.	253,557	255,397	262,667	254,563	248,819	245,995	10,576	+7.1	-14.9	94,543	93,994	-5
Exports.....thous. of sq. ft.	10,846	11,400	8,949	8,403	9,000	11,755	10,576	0.0	+11.8			
Price, chrome calf B grade.....dolls. per sq. ft.	.60	.60	.53	.57	.57	.51	.51					
Leather Products												
Shoes:												
Production.....thous. of pairs.	26,629	26,427	27,284	27,843	27,775	35,061	35,061	-3.8	-1.8	\$ 192,849	\$ 196,322	+1.8
Exports.....thous. of pairs.	394	409	318	344	331	456	337			4,012	2,958	-26.3
Wholesale prices—												
Men's black calf bucher, Mass.....dolls. per pair.	6.75	6.75	6.75	6.75	6.75	6.40	6.40	0.0	+5.5			
Men's dress welt, tan calf, St. Louis.....dolls. per pair.	5.00	5.00	5.00	5.00	5.00	5.00	5.00	0.0	0.0			
Women's black kid, dress welt, lace, oxford.....dolls. per pair.	4.15	4.15	4.15	4.15	4.15	4.00	4.00	0.0	+3.8			
Gloves, cut.....dozen pairs.	210,420	224,636	228,039	202,051	213,773	241,652	241,652			\$ 1,490,250	\$ 1,461,175	-2.0
PAPER AND PRINTING												
Wood Pulp												
Mechanical:												
Production.....short tons.	149,652	156,258	133,854	112,403	116,680	108,322	102,995	+3.7	+13.3	1,105,575	1,087,302	-1.7
Consumption and shipments.....short tons.	133,702	143,015	135,917	125,618	139,757	127,623	136,509	+11.3	+2.3	1,121,073	1,098,583	-2.0
Stocks, end month.....short tons.	173,174	186,377	184,314	171,098	148,022	218,795	185,222	-13.5	-20.1			
Imports.....short tons.	18,549	24,024	20,528	14,553	17,233	13,344	18,597	+18.4	-7.3	142,736	158,244	+10.9
Chemical:												
Production.....short tons.	210,780	222,924	217,456	200,654	221,666	198,988	220,138	+10.5	+0.7	1,739,420	1,721,098	-1.1
Consumption and shipments.....short tons.	211,400	225,710	214,068	204,512	221,212	198,068	220,162	+8.2	+0.5	1,736,062	1,725,328	-0.6
Stocks, end of month.....short tons.	43,872	42,120	45,870	42,580	43,470	40,278	40,254	+2.1	+0.8			
Imports.....short tons.	80,592	90,736	122,474	129,910	120,643	117,734	113,948	-7.1	+5.9	882,410	914,023	+3.6
Price sulphite.....dolls. per 100 lbs.	2.53	2.53	2.53	2.53	2.53	2.60	2.60	0.0	-2.7			
Newsprint Paper												
Production:												
United States, total.....short tons.	117,553	126,010	119,673	110,313	115,940	118,929	127,065	+5.1	-8.8	1,021,037	941,251	-7.8
Ratio to capacity.....per cent.	84	84	83	83	83	83	83					
Canada.....short tons.	192,645	203,811	192,391	184,199	200,656	162,449	180,116	+8.9	+11.4	1,340,234	1,548,221	+15.5
Consumption by publishers.....short tons.	181,112	186,641	170,892	152,763	157,325	157,325	154,167					
Shipments:												
United States.....short tons.	118,453	122,540	116,901	109,611	114,539	119,686	123,926	+4.5	-7.6	1,003,087	919,673	-8.3
Canada.....short tons.	193,443	203,836	190,936	181,834	196,894	159,843	180,666	+8.3	+9.0	1,322,931	1,532,240	+15.8
Imports.....short tons.	163,179	181,913	163,807	174,667	173,872	159,687	167,475	-0.5	+3.8	1,273,657	1,380,777	+8.4
Exports:												
Canada.....short tons.	140,011	194,298	174,031	167,456	179,334	140,543	163,115	+7.1	+9.9	1,204,556	1,412,170	+17.2
Stocks, end of month.												
At mills—												
United States.....short tons.	33,734	37,207	39,979	40,386	40,838	27,764	30,335	+1.1	+34.6			
Canada.....short tons.	46,641	46,290	47,937	48,270	52,108	32,282	31,743	+8.0	+64.2			
At publishers.....short tons.	188,384	184,580	186,307	199,214	205,967	205,967	231,992					
In transit to publishers.....short tons.	43,363	46,627	42,767	44,266	40,476	40,476	40,916					
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			

4 Revised.

5 Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

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	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
PAPER AND PRINTING—Continued												
Printing												
Book publication:												
American manufacture.....no. of titles.....	697	599	745	555	723	626				\$ 4,904	\$ 4,610	-6.0
Imported.....no. of titles.....	123	119	113	128	105	129				\$ 789	\$ 905	+14.7
Sales books:												
New orders.....thous. of books.....	11,796	12,162	12,711	12,098	12,538	12,231	12,739	+3.6	-1.6	96,674	99,156	+2.6
Shipments.....thous. of books.....	11,807	11,645	13,100	9,586	13,738	8,870	13,446	+37.6	+2.2	91,867	93,825	+4.3
Printing activity.....weighted index number.....	111	111	96	99	99	90	93					
Blank forms, new orders.....thous. of sets.....	40,880	48,024	53,774	48,963	58,108	31,237	33,838	+18.7	+71.7	261,073	370,315	+41.8
Cash checks, shipments *.....thous. of checks.....	71,715	80,116	94,668	70,710	68,482	77,741	74,469	-3.2	-8.0	611,966	603,329	-1.1
Box Board												
Operation.....thous. of inch hours.....	8,312	8,734	8,200	7,992	9,102	7,443	8,878	+13.9	+2.5	63,415	67,154	+5.9
Operation.....per ct. of capacity.....	79.4	80.2	75.3	76.3	80.5	71.1	78.5	+5.5	+2.5			
Production.....short tons.....	221,079	242,394	228,646	201,153	240,787	190,406	232,587	+19.7	+3.5	1,626,228	1,777,147	+9.3
New orders.....short tons.....	211,304	224,366	228,252	209,976	240,064	213,649	227,978	+14.3	+5.3	1,655,130	1,778,294	+7.5
Unfilled orders, end of month.....short tons.....	84,513	73,157	77,782	79,492	75,956	109,616	106,076	-4.4	-28.4			
Consumption of waste paper.....short tons.....	211,898	220,750	204,468	190,810	219,012	182,283	227,907	+14.7	-3.9	1,555,785	1,640,297	+5.4
Shipments.....short tons.....	220,315	235,794	223,901	203,741	243,064	194,285	229,722	+19.3	+5.8	1,630,003	1,770,897	+8.6
Stocks, end of month.....short tons.....	40,319	49,107	53,560	49,969	48,055	49,307	52,071	-3.8	-7.7			
Stocks of waste paper, end of month:												
On hand.....short tons.....	132,621	127,217	130,484	132,265	118,507	150,709	128,818	-10.4	-8.0			
In transit and unshipped purchases.....tons.....	47,551	46,375	43,480	62,056	47,969	51,255	70,035	-22.7	-31.5			
Other Paper												
Binder's board, production.....short tons.....	3,450	3,720	2,705	2,153	3,092	2,218	2,112	+43.6	+46.4	20,348	25,675	+26.2
Book paper:												
Production.....short tons.....	125,191	130,199	122,387	117,492	130,416	100,879	112,984	+11.0	+15.4	893,913	1,008,705	+12.8
Ratio to capacity.....per cent.....	91	90	84	80	89			+11.3				
Shipments.....short tons.....	117,304	124,861	120,551	118,314	133,024	100,677	111,176	+12.4	+19.7	884,214	998,024	+12.9
Stocks, end of month.....short tons.....	81,105	86,782	89,385	88,491	85,836	73,543	75,749	-3.0	+13.3			
New orders—												
Coated.....p. ct. of normal production.....	97	74	75	77	77	79	70	0.0	+10.0			
Uncoated.....p. ct. of normal production.....	84	77	73	80		77	76					
Unfilled orders, end of month—												
Coated.....p. ct. of normal production.....	12	11	9	10	8	9	7	-20.0	+14.3			
Uncoated.....p. ct. of normal production.....	9	7	7	8		8						
Wrapping paper:												
Production.....short tons.....	91,744	97,793	90,577	88,477	99,965	85,305	94,193	+13.0	+6.1	722,322	759,646	+5.2
Ratio to capacity.....per cent.....	86	87	84	86	89			+3.5				
Shipments.....short tons.....	89,542	94,761	89,309	97,228	99,565	82,490	92,215	+5.7	+8.0	701,848	750,132	+6.9
Stocks, end of month.....short tons.....	93,975	96,802	98,344	92,467	92,872	76,796	78,626	+0.4	+18.1			
Fine paper:												
Production.....short tons.....	40,288	40,904	38,225	33,984	39,331	33,360	37,098	+15.7	+6.0	295,773	311,472	+5.3
Ratio to capacity.....per cent.....	92	87	84	80	84			+5.0				
Shipments.....short tons.....	37,548	40,863	38,875	34,562	38,938	35,729	35,688	+12.7	+9.1	297,535	308,082	+3.5
Stocks, end of month.....short tons.....	53,741	53,791	53,155	53,156	53,535	48,801	50,199	+0.7	+6.6			
All other grades:												
Production.....short tons.....	99,266	107,475	104,725	95,454	111,003	90,382	103,623	+16.3	+7.1	797,212	820,114	+2.9
Shipments.....short tons.....	97,858	105,705	104,977	96,042	109,406	90,583	102,358	+13.9	+6.9	791,019	812,519	+2.7
Stocks, end of month.....short tons.....	69,798	71,569	71,006	70,575	72,475	72,738	74,302	+2.7	-2.5			
Total paper (inc. newsprint and box board):												
Production.....short tons.....	695,116	744,775	704,413	646,863	737,442	619,261	707,551	+14.0	+4.2	5,356,486	5,618,497	+4.9
Ratio to capacity.....per cent.....	85	83	82	77	78			+1.3				
Shipments.....short tons.....	681,020	724,524	694,514	656,498	738,535	623,450	695,085	+12.5	+6.3	5,307,706	5,559,326	+4.7
Stocks, end of month.....short tons.....	372,672	395,258	405,429	396,044	393,611	348,949	361,282	-0.6	+8.9			
Paper-Board Shipping Boxes												
Production:												
Total.....thous. of sq. ft.....	405,319	402,956	423,282	404,520	441,792	383,565	400,806	+9.2	+10.2	3,169,080	3,253,035	+2.6
Corrugated.....thous. of sq. ft.....	327,815	323,493	341,291	335,732	364,756	308,585	317,529	+8.6	+14.9	2,534,123	2,595,632	+2.4
Solid fiber.....thous. of sq. ft.....	78,845	79,463	81,991	68,788	77,036	74,980	83,277	+12.0	-7.5	634,957	608,744	-4.1
Operating activity:												
Total.....per cent of normal.....	74	72	76	72	79	68	72	+9.7	+9.7			
Corrugated.....per cent of normal.....	72	69	74	71	77	69	76	+8.5	+1.3			
Solid fiber.....per cent of normal.....	80	80	83	75	84	66	82	+12.0	+2.4			
Other Paper Products												
Rope paper sacks, shipments.....rel. to 1921-22.....	92	87	83	89								
Abrasive paper and cloth:												
Domestic sales.....reams.....	81,782	94,309	88,569	81,689	99,723	77,651	89,622	+22.1	+11.3	678,456	707,417	+4.3
Foreign sales.....reams.....	19,634	18,944	18,829	17,657	17,871	16,522	13,584	+1.2	+31.6	127,420	146,774	+15.2
BUILDING CONSTRUCTION AND HOUSING												
Real estate conveyances (41 cities).....number.....	148,496	156,363	151,982		150,492	146,345						
Rental advertisements, Minneapolis.....number.....	5,561	5,212	4,378	4,060	7,712	4,013	8,347	+90.0	-7.6	38,908	35,681	-8.3
Building Costs												
Building materials:												
Frame house, 6-room.....rel. to 1913.....	179	177	176	175	176	190	187	+0.6	-5.9			
Brick house, 6-room.....rel. to 1913.....	184	183	181	181	181	189	188	0.0	-3.7			
Concrete factory costs (Aberthaw).....rel. to 1914.....	191	191	191	191	191	192	192	0.0	-0.5			
Building costs (Eng. News Record).....rel. to 1913.....	207	206	207	207	207	206	204	0.0	+1.5			
Building costs (A. G. C.).....rel. to 1913.....	197	197	198	198	200	199	199	+1.0	-0.5			
Plumbing fixtures, 6 pieces.....dollars.....	100.76	101.11	100.90	100.09	101.20	103.17	104.39	+1.1	-3.1			
Construction costs (Am. Appraisal):												
Frame.....rel. to 1913.....	203	203	203	204	204	205	205	0.0	-0.5			
Brick, wood frame.....rel. to 1913.....	212	212	212	213	213	214	214	0.0	-0.5			
Brick, steel frame.....rel. to 1913.....	197	197	198	198	198	197	197	0.0	+0.5			
Reinforced concrete.....rel. to 1913.....	200	200	201	201	201	200	200	0.0	+0.5			

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. in-crease (+) or de-crease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
<i>The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"</i>												
BUILDING CONSTRUCTION AND HOUSING—Continued												
Contracts and Losses												
Contracts awarded (36 States):												
Commercial buildings.....thous. of sq. ft.	13,896	14,316	13,982	16,835	11,974	12,485	10,880	+28.9	+10.1	94,066	101,715	+8.1
Industrial buildings.....thous. of sq. ft.	10,834	6,020	10,523	6,214	8,548	5,484	5,839	+37.6	+46.4	46,310	58,875	+27.1
Residential buildings.....thous. of sq. ft.	55,281	56,655	52,080	43,093	42,859	34,863	39,354	+0.5	+8.9	310,874	384,564	+23.7
Educational buildings.....thous. of sq. ft.	5,071	6,960	6,978	5,586	5,418	5,207	5,784	+3.0	+6.3	36,787	41,673	+13.3
Other public and semi-public buildings.....thous. of sq. ft.	5,941	6,063	7,192	6,605	6,392	6,465	7,310	+3.2	+12.6	51,374	47,388	+7.8
Grand total.....thous. of sq. ft.	91,222	91,693	90,971	78,778	78,638	65,182	69,863	+0.2	+12.6	546,321	640,976	+17.3
Contracts awarded, value (36 States):												
Commercial buildings.....thous. of dolls.	80,514	87,162	90,914	93,144	57,178	81,130	73,698	+38.6	+22.4	635,329	595,947	+6.2
Industrial buildings.....thous. of dolls.	83,208	31,627	57,464	31,193	41,318	29,043	40,047	+32.5	+3.2	300,051	359,427	+19.8
Residential buildings.....thous. of dolls.	269,325	280,292	250,818	221,345	207,521	180,840	201,743	+6.2	+2.9	1,646,462	1,914,848	+16.3
Educational buildings.....thous. of dolls.	31,829	46,073	43,787	35,315	33,559	35,006	40,144	+5.0	+16.4	257,629	264,901	+2.8
Other public and semi-public buildings.....thous. of dolls.	45,900	33,503	56,605	50,380	45,470	52,326	61,951	+9.7	+26.6	456,655	365,170	+20.0
Public works and utilities.....thous. of dolls.	113,746	144,738	124,636	132,853	114,714	135,581	117,053	+13.7	+2.0	823,156	863,008	+4.8
Grand total.....thous. of dolls.	624,523	641,395	624,224	564,229	499,760	513,926	534,639	+11.4	+6.5	4,121,294	4,381,536	+6.3
Contracts awarded, Canada.....thous. of dolls.	56,346	70,684	59,926	38,360	39,449	50,881	29,881	+2.8	+32.0	272,086	334,066	+22.8
Building volume (A. G. C.).....rel. to 1913.....	164	185	244	237	239	221	238	+0.8	+0.4			
Fire losses:												
United States and Canada (Journal of Commerce).....thous. of dolls.	25,981	23,202	11,123	17,106	17,724	24,249	34,300	+3.6	+48.3	235,468	209,879	+10.9
Canada (Monetary Times).....thous. of dolls.	2,101	2,860	1,909	1,491	2,356	1,462	1,561	+58.0	+50.9	15,844	17,437	+10.1
LUMBER PRODUCTS												
Softwood Lumber												
Southern pine:												
Production (computed).....M ft. b. m.	421,911	440,306	404,679	405,937	425,493	413,634	455,796	+4.8	+6.6	3,418,193	3,401,914	+0.5
Operation.....per cent of full time.....	99	99	96	88	87			+1.1				
Shipments (computed).....M ft. b. m.	447,083	489,100	416,006	435,223	468,672	399,064	473,029	+7.7	+0.9	3,373,985	3,581,601	+6.2
New orders (computed).....M ft. b. m.	464,896	420,169	406,470	434,061	479,370	388,511	487,599	+10.4	+1.3	3,469,778	3,607,013	+4.0
Stocks, end of mo. (computed).....M ft. b. m.	1,160,433	1,101,740	1,090,126	1,063,109	1,019,050	1,255,002	1,220,663	+4.1	+16.5			
Unfilled orders, end mo. (com.)*M ft. b. m.	399,489	349,362	323,985	335,836	339,038	283,243	328,561	+1.0	+3.2			
Exports, timber.....M ft. b. m.	13,771	21,081	12,933	12,302	7,465	19,851	8,254	+39.3	+9.6	122,223	117,755	+3.7
Exports, lumber.....M ft. b. m.	53,952	75,054	54,313	62,094	43,287	72,334	66,790	+30.3	+35.2	518,053	468,570	+9.6
Price, flooring.....dolls. per M ft. b. m.	35.74	35.88	36.40	36.16	36.34	38.31	37.68	+0.5	+3.6			
Douglas fir:												
Production (computed).....M ft. b. m.	520,615	490,175	480,326	451,417	474,955	468,240	529,120	+5.2	+10.2	3,956,311	3,808,142	+3.7
Shipments (computed).....M ft. b. m.	549,264	558,217	583,733	484,803	515,243	499,575	521,958	+6.3	+1.3	4,095,979	4,048,589	+1.2
New orders (computed).....M ft. b. m.	583,733	620,888	508,976	453,467	504,947	489,727	519,719	+11.4	+2.8	4,135,371	4,178,793	+1.1
Exports, lumber.....M ft. b. m.	58,862	71,427	85,174	54,181	59,236	52,837	65,121	+9.3	+9.0	442,863	517,545	+16.9
Exports, timber.....M ft. b. m.	43,226	60,797	43,142	45,471	40,837	58,441	48,864	+10.2	+16.4	345,405	323,402	+6.4
Price, No. 1 common, dolls. per M ft. b. m.	15.99	16.70	16.68	16.99	17.75	16.51	16.51	+4.5	+7.5			
Price, flooring, 1 x 4, "B" and better, V. G.dolls. per M ft. b. m.	33.97	34.47	35.15	36.13	37.19	35.88	35.83	+2.9	+3.8			
Unfilled orders end of month.....M ft. b. m.	468,492	516,714	429,688	456,601	341,108			+25.3				
California redwood:												
Production (computed).....M ft. b. m.	38,489	41,400	36,190	30,092	41,137	35,177	53,977	+36.7	+23.8	312,875	321,248	+2.7
Shipments (computed).....M ft. b. m.	38,820	47,772	38,825	29,615	43,983	36,055	53,022	+48.5	+17.0	356,037	311,763	+12.4
New orders (computed).....M ft. b. m.	36,741	49,351	38,022	31,620	39,855	35,147	42,373	+20.0	+5.9	374,972	316,967	+15.5
Unfilled orders, end mo. (com.)*M ft. b. m.	47,916	47,281	46,519	48,910	45,093	68,290	56,495	+7.8	+20.2			
California white pine:												
Production.....M ft. b. m.	97,096	134,273	133,064	123,923	145,491	125,098	142,196	+17.4	+2.3	688,748	795,065	+15.4
Shipments.....M ft. b. m.	98,924	107,267	107,019	103,482	118,310	96,305	107,248	+12.2	+10.3	738,762	805,406	+9.0
Stocks, end of month.....M ft. b. m.	493,696	473,560	477,079	506,119	516,764	567,809	603,451	+2.1	+14.4			
New orders.....M ft. b. m.	83,965	102,689	89,802	96,433	102,805	81,275	86,322	+6.6	+19.1	695,254	713,629	+2.6
Unfilled orders, end of month.....M ft. b. m.	167,582	164,921	183,610	190,185	180,014	182,648	181,262	+5.3	+7			
North Carolina pine:												
Production (computed).....M ft. b. m.	57,155	60,039	57,904	44,471	45,437	50,190	53,781	+2.2	+15.5	402,766	403,895	+0.3
Shipments (computed).....M ft. b. m.	62,978	62,125	59,528	48,433	48,643	48,727	52,934	+4	+8.1	406,030	420,349	+3.4
New orders.....M ft. b. m.	64,610	55,790	59,360	43,190	49,560	35,910	36,260	+14.7	+36.7	317,180	414,650	+30.7
Northern pine:												
Lumber—												
Production.....M ft. b. m.	36,412	45,087	51,756	52,384	57,335	46,359	51,054	+9.5	+12.3	341,325	344,368	+0.9
Shipments.....M ft. b. m.	37,914	44,152	47,243	48,300	47,755	40,433	42,501	+1.1	+12.4	315,813	329,873	+4.5
New orders.....M ft. b. m.	35,926	35,974	47,018	41,820	41,435	39,203	36,884	+9	+12.3	295,623	310,202	+4.9
Lath—												
Production.....M ft. b. m.	6,184	9,967	11,706	13,476	12,318	13,090	14,272	+8.6	+13.7	87,265	71,835	+17.7
Shipments.....M ft. b. m.	5,927	9,316	11,151	9,734	11,099	15,229	15,612	+14.0	+28.9	90,839	67,729	+25.4
Northern hemlock:												
Production.....M ft. b. m.	14,871	22,004	18,426	16,348		15,395	21,369			\$ 122,869	\$ 114,523	+7.8
Shipments.....M ft. b. m.	16,153	20,410	22,343	18,920		21,324	22,093			\$ 144,005	\$ 108,086	+24.9
Hardwood Lumber												
Walnut lumber:												
Production.....M ft. b. m.	2,955	2,894	3,422	2,527	2,931	2,967	3,314	+16.0	+11.6	23,014	23,645	+2.7
Shipments.....M ft. b. m.	2,646	3,388	3,000	2,742	2,863	2,661	3,127	+4.4	+8.4	23,631	23,730	+0.4
Stocks, end of month.....M ft. b. m.	13,635	13,264	13,530	13,116	13,166	11,436	11,498	+4	+14.5			
New orders.....M ft. b. m.	2,652	4,180	2,538	2,731	2,990	3,060	2,461	+9.5	+21.5	24,116	23,361	+3.1
Unfilled orders, end of month.....M ft. b. m.	4,491	5,540	5,216	5,088	5,270	8,249	7,522	+3.6	+29.9			
Walnut logs:												
Purchased.....M ft. log measure..	2,402	2,972	2,519	2,633	2,736	3,083	3,308	+3.9	+17.3	22,716	19,836	+12.7
Made into lumber and veneer.....M ft. log measure..	2,678	2,769	2,670	2,527	2,579	2,583	2,937	+2.1	+12.2	20,242	20,060	+0.9
Stocks, end of month.....M ft. log measure..	2,806	3,009	2,752	2,996	3,058	3,316	3,687	+2.1	+17.1			

* Revised.

* Cumulative through July 31.

* See table on page 48 of the September, 1928, issue for earlier data.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
LUMBER PRODUCTS—Continued												
Hardwood Lumber—Continued												
Northern hardwoods:												
Production.....M ft. b. m.	38,404	33,193	28,705	23,673	-----	21,879	27,077	-----	-----	\$ 249,959	\$ 247,651	- .9
Shipments.....M ft. b. m.	28,491	28,827	28,498	26,194	-----	28,347	29,750	-----	-----	\$ 201,427	\$ 192,059	-4.7
Lower Michigan hardwoods:												
Production.....M ft. b. m.	8,625	9,116	7,049	5,438	5,502	6,006	4,893	+1.2	+12.4	60,574	62,045	+2.4
Shipments.....M ft. b. m.	6,548	7,277	6,683	7,252	7,349	8,552	7,507	+1.3	-2.1	63,406	56,875	-10.3
Stocks, end of month.....M ft. b. m.	30,925	29,784	23,616	20,605	23,509	43,046	40,552	-----	-----	-----	-----	-----
Gum:												
Stocks, total end of month.....M ft. b. m.	547	540	555	542	-----	414	427	-----	-----	-----	-----	-----
Stocks, unsold, end of month.....M ft. b. m.	428	420	424	419	-----	320	329	-----	-----	-----	-----	-----
Unfilled orders, end of month.....M ft. b. m.	148	150	156	151	-----	120	128	-----	-----	-----	-----	-----
Oak:												
Stocks, total end of month.....M ft. b. m.	1,020	1,005	1,000	974	-----	886	939	-----	-----	-----	-----	-----
Stocks, unsold, end of month.....M ft. b. m.	871	844	854	809	-----	694	737	-----	-----	-----	-----	-----
Unfilled orders, end of month.....M ft. b. m.	165	179	164	182	-----	211	221	-----	-----	-----	-----	-----
All hardwoods:												
Production.....Mill. ft. b. m.	252	244	236	244	-----	315	386	-----	-----	\$ 2,126	\$ 1,835	-13.7
Shipments.....Mill. ft. b. m.	251	255	248	263	-----	274	296	-----	-----	\$ 2,240	\$ 1,842	-17.8
New orders.....Mill. ft. b. m.	263	244	263	262	-----	266	319	-----	-----	\$ 2,251	\$ 1,913	-15.0
Stocks, total, end of month.....Mill. ft. b. m.	2,839	2,843	2,817	2,786	-----	2,465	2,557	-----	-----	-----	-----	-----
Stocks, unsold, end of month.....Mill. ft. b. m.	2,319	2,305	2,289	2,225	-----	1,949	2,014	-----	-----	-----	-----	-----
Unfilled orders, end of month.....Mill. ft. b. m.	620	640	620	652	-----	606	638	-----	-----	-----	-----	-----
Total Lumber												
Production, 10 species.....M ft. b. m.	2,392,894	2,532,948	2,387,154	\$2,213,314	2,428,895	2,283,439	2,577,136	+9.7	-5.8	18,687,267	18,629,348	- .3
Exports, planks, joists, etc.....M ft. b. m.	179,352	223,649	220,961	185,368	162,221	191,145	191,764	-12.5	-15.4	1,463,388	1,556,146	+6.3
Retail yards, Minneapolis district:												
Sales.....M ft. b. m.	9,485	14,364	22,081	15,937	17,645	15,092	16,262	+10.7	+8.5	85,704	96,195	+12.2
Stocks, end of month.....M ft. b. m.	93,983	92,064	88,355	87,345	86,663	88,980	87,699	- .8	-1.2	-----	-----	-----
Retail yards, Kansas City district:												
Sales.....M ft. b. m.	5,802	6,199	5,200	5,679	6,140	5,497	5,971	+8.1	+2.8	45,895	44,964	-2.0
Stocks, end of month.....M ft. b. m.	45,919	44,758	45,540	44,874	45,326	42,831	43,684	+1.0	+3.8	-----	-----	-----
Composite lumber prices:												
Hardwoods.....dolls. per M ft. b. m.	39.77	38.39	38.42	40.06	39.98	42.59	42.40	- .2	-5.7	-----	-----	-----
Softwoods.....dolls. per M ft. b. m.	28.00	28.39	28.74	28.81	29.00	30.57	29.49	+ .7	-1.7	-----	-----	-----
Flooring												
Maple flooring:												
Production.....M ft. b. m.	7,331	7,070	7,608	7,784	8,413	9,691	11,557	+8.1	-27.2	76,691	60,933	-19.9
Shipments.....M ft. b. m.	7,545	8,256	8,686	8,311	9,515	9,536	10,939	+14.5	-13.0	79,272	64,638	-18.5
Stocks, end of month.....M ft. b. m.	28,326	27,514	26,271	24,667	23,232	26,146	26,338	-5.8	11.8	-----	-----	-----
New orders.....M ft. b. m.	7,036	9,197	7,867	7,466	8,851	4,044	7,344	+18.6	+20.5	58,698	63,501	+8.2
Unfilled orders, end of month.....M ft. b. m.	9,963	11,423	10,500	10,076	10,187	9,083	11,027	-3.0	-7.6	-----	-----	-----
Oak flooring:												
Production.....M ft. b. m.	42,924	47,785	44,444	46,065	51,529	38,435	40,426	+11.9	+27.5	308,193	349,737	+13.5
Shipments.....M ft. b. m.	46,105	50,256	49,475	47,832	51,860	30,155	38,932	+8.4	+33.2	305,612	371,439	+21.5
Stock, end of month.....M ft. b. m.	77,491	75,948	71,425	68,851	67,864	66,102	66,253	-1.4	+2.4	-----	-----	-----
New orders.....M ft. b. m.	46,071	50,295	48,873	45,972	49,427	21,699	36,139	+7.5	+36.8	295,971	379,504	+28.2
Unfilled orders, end of month.....M ft. b. m.	48,004	48,681	49,002	49,912	47,026	29,773	27,036	-5.8	+73.9	-----	-----	-----
Doors at Wholesale												
White pine:												
Receipts.....number	16,487	14,130	16,540	11,687	13,245	-----	-----	+13.3	-----	-----	-----	-----
Shipments.....number	20,028	19,146	17,002	13,698	16,814	-----	-----	+22.7	-----	-----	-----	-----
Stocks, end of month.....number	83,908	68,396	59,535	59,231	60,240	-----	-----	+1.7	-----	-----	-----	-----
Unsold stock, end of month.....number	61,048	46,758	45,015	37,900	49,777	-----	-----	+31.3	-----	-----	-----	-----
Fir:												
Receipts.....number	10,006	12,117	17,290	8,182	14,758	-----	-----	+80.4	-----	-----	-----	-----
Shipments.....number	17,218	9,010	10,209	9,720	12,549	-----	-----	+29.1	-----	-----	-----	-----
Stocks, end of month.....number	87,199	47,315	43,658	42,803	48,543	-----	-----	+13.4	-----	-----	-----	-----
Unsold stock, end of month.....number	65,653	16,726	30,215	30,755	40,126	-----	-----	+30.5	-----	-----	-----	-----
Fir, manufacturing plants:												
Production.....number	-----	425,909	393,224	434,299	314,154	-----	-----	-27.7	-----	-----	-----	-----
Shipments.....number	-----	371,220	386,636	431,800	344,643	-----	-----	-20.2	-----	-----	-----	-----
Stocks, end of month.....number	262,431	317,109	293,505	302,990	267,118	-----	-----	-11.8	-----	-----	-----	-----
New orders.....number	-----	606,750	221,896	327,387	227,311	-----	-----	-30.6	-----	-----	-----	-----
Unfilled orders, end of month.....number	476,630	709,500	535,697	470,617	344,094	-----	-----	-26.9	-----	-----	-----	-----
Wooden Furniture												
Grand Rapids district:												
Shipments.....No. of days' production..	20	20	17	22	-----	23	27	-----	-----	-----	-----	-----
New orders.....No. of days' production..	19	32	27	31	-----	25	25	-----	-----	-----	-----	-----
Unfilled orders, end of month.....No. of days' production..	30	39	46	54	-----	55	53	-----	-----	-----	-----	-----
Outstanding accounts, end of month.....No. of days' sales..	47	46	44	48	-----	50	55	-----	-----	-----	-----	-----
Cancellations.....per cent of new orders..	12.0	7.0	10.0	5.0	-----	10.5	9.0	-----	-----	-----	-----	-----
Plant operation.....per cent of full time..	90.0	90.0	95.0	88.0	-----	89.0	98.0	-----	-----	-----	-----	-----
Piano benches and stools:												
New orders (av. per firm).....dollars..	5,626	6,581	5,145	4,662	-----	6,273	9,597	-----	-----	\$ 52,764	\$ 43,315	-17.7
Unfilled orders, end of month (av. per firm).....dollars..	1,650	2,094	1,372	1,183	-----	1,517	2,773	-----	-----	-----	-----	-----
Shipments.....dollars..	5,955	6,136	5,812	4,914	-----	6,322	8,342	-----	-----	\$ 52,034	\$ 43,315	-16.8
Quantity (total).....pieces	7,694	7,958	7,474	6,213	-----	8,191	10,879	-----	-----	\$ 66,523	\$ 55,841	-16.1

4 Revised.

5 Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
LUMBER PRODUCTS—Continued												
Plywood and Veneer												
Plywood:												
New orders.....thous. of sq. ft. of surface.....	2,450	3,350	3,237	2,920	-----	2,251	2,890	-----	-----	\$ 21,072	\$ 19,585	-7.1
Shipments.....thous. of sq. ft. of surface.....	2,680	2,578	2,713	2,523	-----	2,134	2,616	-----	-----	\$ 18,871	\$ 19,090	+1.2
Unfilled orders, end of month.....thous. of sq. ft. of surface.....	2,582	3,154	3,504	3,918	-----	3,059	3,162	-----	-----			
Bushel baskets:												
Production.....dozens.....	186,244	261,355	188,021	229,342	-----	219,638	238,388	-----	-----	\$ 1,545,772	\$ 1,398,668	-9.5
Shipments.....dozens.....	152,876	198,592	254,432	294,662	-----	202,961	332,048	-----	-----	\$ 1,352,918	\$ 1,343,000	-7
Stocks, end of month.....dozens.....	537,033	609,882	602,063	565,911	-----	542,186	448,526	-----	-----			
Rotary-cut veneer:												
Purchases.....number of carloads.....	185	229	244	249	325	116	162	+30.5	+100.6	793	1,652	+108.3
Receipts.....number of carloads.....	173	165	164	181	259	83	122	+43.1	+112.3	765	1,210	+58.2
STONE, CLAY, AND GLASS PRODUCTS												
Clay Products												
Face brick, averages per plant:												
Production.....thousands.....	622	796	844	763	890	776	842	+16.6	+5.7	5,973	5,563	-6.9
Shipments.....thousands.....	768	925	876	815	841	785	825	+3.2	+1.9	5,552	5,760	+3.7
Stocks, end of month.....thousands.....	2,757	2,517	2,495	2,439	2,282	2,513	2,564	-6.4	-11.0			
Unfilled orders, end of month.....thousands.....	958	942	950	1,046	989	1,026	1,069	-5.4	-7.5			
Common brick:												
Stocks, end of month—												
Burned.....thousands.....	344,572	297,212	302,249	408,563	-----	353,428	427,277	-----	-----			
Unburned.....thousands.....	96,998	125,650	130,990	208,202	-----	170,178	178,357	-----	-----			
Shipments.....thousands.....	236,433	225,747	219,522	238,941	-----	211,451	194,971	-----	-----	\$ 1,270,058	\$ 1,406,772	+10.8
Unfilled orders, end of month.....thousands.....	275,872	273,743	260,970	299,457	-----	235,323	231,637	-----	-----			
Plants closed down.....number.....	23	5	3	11	-----	12	10	-----	-----			
Price, red, New York.....dolls. per thous.....	13.50	13.50	13.50	13.50	13.50	11.75	11.75	0.0	+14.9			
Porcelain plumbing fixtures:												
Net new orders.....pieces.....	59,647	22,465	11,372	6,706	6,300	-----	-----	-6.1	-----			
Shipments.....pieces.....	17,037	15,459	19,257	20,253	22,970	-----	-----	+13.4	-----			
Unfilled orders, end of month.....pieces.....	96,125	103,131	95,246	81,699	65,029	-----	-----	-20.4	-----			
Stocks, end of month.....pieces.....	48,831	50,819	40,823	48,690	47,690	-----	-----	-2.1	-----			
Vitreous china plumbing fixtures:												
New orders.....pieces.....	238,169	233,515	227,734	186,428	215,848	229,832	249,169	+15.8	-13.4	1,841,832	2,274,564	+23.5
Shipments.....pieces.....	291,130	288,317	275,292	248,448	267,349	251,946	279,539	+7.6	-4.4	2,082,064	2,193,315	+5.3
Unfilled orders, end of month.....pieces.....	569,254	514,452	466,894	404,874	353,373	368,326	337,956	-12.7	+4.6			
Stocks, end of month.....pieces.....	445,752	448,326	444,884	460,840	478,523	554,022	520,364	+3.8	-8.0			
Terra cotta, new orders:												
Quantity.....net tons.....	12,226	10,857	16,108	14,191	12,058	14,856	15,643	-15.0	-22.9	100,756	103,137	+2.4
Value.....thous. of dolls.....	1,153	1,113	1,558	1,385	1,123	1,268	1,557	-18.9	-27.9	10,245	9,775	-4.6
Sand-line brick:												
Production.....thousands.....	10,012	22,244	19,133	18,072	21,680	16,662	21,300	+20.0	+1.8	130,023	131,914	+1.5
Shipments by rail.....thousands.....	4,829	7,752	5,120	6,055	8,284	5,431	7,375	+36.8	+12.3	51,704	45,996	-11.0
Shipments by trucks.....thousands.....	9,182	18,229	14,437	11,772	13,215	10,751	13,294	+12.3	-6.6	84,796	89,454	+5.5
Stocks, end of month.....thousands.....	15,121	12,159	11,656	12,591	14,446	8,820	12,547	+14.7	+15.1			
Unfilled orders, end of month.....thousands.....	14,123	14,445	11,718	11,762	14,503	14,364	19,800	+23.3	-26.8			
Portland Cement												
Production.....thous. of bbls.....	13,468	17,280	17,469	17,445	18,730	17,408	18,315	+7.4	+2.3	110,781	113,180	+2.2
Operation.....per ct. of capacity.....	70.0	86.6	90.1	87.0	93.1	90.4	94.5	+7.0	-1.5			
Stocks, end of month.....thous. of bbls.....	27,627	25,984	25,029	22,580	19,340	19,397	16,292	-14.3	+18.7			
Stocks, clinkers, end of month.....thous. of bbls.....	15,002	14,329	12,944	11,707	9,347	9,609	7,887	-20.2	+18.5			
Shipments.....thous. of bbls.....	13,307	18,986	18,421	19,901	21,970	18,984	21,411	+10.4	+2.6	115,170	115,824	+6
Wholesale prices, composite.....dolls. per bbl.....	1.683	1.683	1.683	1.683	1.683	1.683	1.683	0.0	0.0			
Highways												
Concrete pavements, new contracts:												
Total.....thous. of sq. yds.....	17,788	20,695	15,446	13,123	16,889	12,615	13,528	+28.7	+24.8	89,861	109,713	+22.1
Road.....thous. of sq. yds.....	12,722	13,246	8,997	6,984	9,254	7,229	7,445	+32.5	+24.3	51,794	69,667	+34.5
Federal-aid highways:												
Completed—												
Cost.....thous. of dolls.....	6,579	16,706	18,802	8,828	12,145	17,150	15,301	+37.6	-20.6	89,191	93,426	+4.7
Distance.....miles.....	269	735	661	483	599	637	750	+24.0	-20.1	4,345	3,940	-9.3
Under construction, end of month.....miles.....	8,347	8,967	9,494	9,497	9,547	10,135	10,005	+0.5	-4.6	79,135	70,931	-10.4
Plate Glass												
Production, polished.....thous. of sq. ft.....	9,953	10,224	10,723	9,346	11,474	8,868	10,616	+22.8	+8.1	77,315	81,315	+5.2
Glass Containers												
Actual production:												
Quantity.....gross.....	2,421	2,688	2,589	2,374	2,686	2,050	2,142	+13.1	+25.4	17,079	19,620	+14.9
Relation to capacity.....per cent.....	84.3	86.7	86.7	77.2	80.9	71.7	69.3	+4.8	+16.7			
New orders.....gross.....	1,965	2,137	2,225	2,008	1,909	1,743	1,850	-4.9	+3.2	17,366	18,925	+9.0
Shipments.....gross.....	2,491	2,729	2,552	2,311	2,654	2,227	2,120	+14.8	+25.2	17,464	19,454	+11.4
Stocks, end of month.....gross.....	6,239	6,192	6,220	6,267	6,297	6,216	6,217	+5	+1.3			
Unfilled orders, end of month.....gross.....	10,705	10,076	9,642	9,166	8,467	9,148	8,765	-7.6	-3.4			
Illuminating Glassware												
Production:												
Total.....number of turns.....	3,243	3,368	3,365	1,748	2,985	2,169	2,410	+70.8	+23.9	21,686	22,230	+2.5
Ratio to capacity.....per ct. of capacity.....	41.8	42.1	44.2	22.3	36.5	33.6	32.0	+63.7	+14.1			
New orders.....per ct. of capacity.....	42.4	44.5	41.6	40.2	44.5	36.3	38.3	+10.7	+16.2			
Shipments.....per ct. of capacity.....	40.1	40.0	42.6	26.8	42.5	35.3	31.4	+58.6	+35.4			
Unfilled orders, end of month.....number of weeks' supply.....	1.1	1.1	1.3	1.6	1.8	1.2	1.3	+12.5	+38.5			
Stocks, end mo.....number of weeks' supply.....	3.7	3.7	4.4	4.6	4.3	4.0	3.5	-6.5	+22.9			

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
CHEMICALS AND OILS												
Chemicals												
Sulphuric acid:												
Exports.....thous. of lbs.	842	516	733	774	291	801	517	-62.4	-43.7	5,624	5,024	-10.7
Price, wholesale.....dolls. per 100 lbs.	0.78	0.78	0.78	0.78	0.78	0.75	0.75	0.0	+4.0			
Nitrate of soda:												
Imports.....long tons.	131,819	113,722	76,135	28,150	75,318	54,867	71,904	+167.6	+4.7	482,481	816,914	+69.3
Production in Chile—												
Quantity.....metric tons.	255,100	262,400	252,300	264,300	275,000	127,060	142,800	+4.0	+92.6	834,593	2,042,300	+144.7
Potash salts:												
Imports.....long tons.	28,137	12,997	14,525	38,461	57,327	36,857	43,572	+49.1	+31.6	179,025	239,097	+33.6
Production in France												
(K ₂ O content).....metric tons.	28,600	32,000	34,000			30,265	32,868					
Sales in Germany—												
(K ₂ O content).....metric tons.	67,414	63,746	99,948			88,420	84,548					
Superphosphate (acid phosphate):												
Production.....short tons.	355,614	284,918	299,444	293,250		236,921	256,980			1,668,545	2,298,033	+37.7
Stocks, end of month.....short tons.	875,207	803,888	1,041,542	1,252,338		1,354,209	1,468,286					
Shipments.....short tons.	390,894	134,970	59,899	64,378		57,404	79,347			1,051,571	1,400,713	+33.2
Fertilizer:												
Exports.....long tons.	127,111	146,480	111,581	98,803	103,575	138,023	100,659	+4.8	+2.9	887,258	864,769	-2.5
Consumption, Southern States.....short tons.	862,878	198,810	47,236	19,251	62,903	35,485	57,485	+226.8	+9.4	4,032,557	5,093,415	+26.3
Dyes and dyestuffs, exports:												
Vegetable.....thous. of lbs.	296	160	272	254	237	165	237	-6.7	0.0	2,384	2,224	-6.7
Coal tar.....thous. of lbs.	1,788	1,898	1,726	8,340	1,325	1,526	2,254	-84.1	-41.2	16,314	21,375	+31.0
Arsenic												
Crude:												
Production.....short tons.	1,098	1,225	1,703	1,385		1,163	972			8,087	9,245	+14.3
Stocks, end of month.....short tons.	1,863	1,876	2,099	2,105		1,363	1,009					
Refined:												
Production.....short tons.	669	713	732	728		765	986			5,915	5,025	-15.0
Stocks, end of month.....short tons.	2,760	2,370	1,916	1,568		789	1,346					
Price index numbers:												
Crude drugs.....rel. to Aug., 1914.	210	208	199	197	193	196	192	-2.0	+0.5			
Essential oils.....rel. to Aug., 1914.	139	159	166	162	161	122	121	-0.6	+33.1			
Drugs and												
pharmaceuticals.....rel. to Aug., 1914.	169	169	169	168	164	156	156	-2.3	+5.1			
Chemicals.....rel. to 1913-14.	113	113	113	113	113	112	112	0.0	+0.9			
Oils and fats.....rel. to 1913-14.	125	128	123	123	121	126	127	-1.6	-4.7			
Wood Chemicals												
Acetate of lime:												
Production—												
United States.....thous. of lbs.	11,693	10,987	9,126	9,340		11,712	13,125			90,544	78,370	-13.4
Canada.....thous. of lbs.	944	704	710	443		353	172			5,719	6,164	+7.8
Shipments—												
United States.....thous. of lbs.	12,092	15,586	10,274	13,302		12,211	13,587			86,190	84,142	-2.4
Canada.....thous. of lbs.	1,636	684	887	882	2,098	801	513	+137.9	+309.0	4,403	8,012	+82.0
Stocks, end of month—												
United States.....thous. of lbs.	20,516	16,292	15,257	11,428		20,553	19,889					
Canada.....thous. of lbs.	3,084	3,095	2,848	2,333	140	2,655	2,222					
Exports.....thous. of lbs.	917	1,152	215	1,792	1,141	1,355	283	-36.3	+303.1	8,465	10,644	+25.7
Price, wholesale.....dolls. per cwt.	3.50	3.50	3.50	3.50	3.88	3.50	3.50	+10.9	+10.9			
Methanol, crude:												
Production—												
United States.....gallons.	657,253	609,604	510,627	518,220		592,368	574,710			4,736,921	4,345,046	-8.3
Canada.....gallons.	35,768	28,505	27,741	14,885		17,283	12,058			239,624	247,169	+3.1
Stocks at crude plants, end of month—												
United States.....gallons.	323,183	299,062	289,433	285,139		295,812	361,657					
Canada.....gallons.	32,773	33,357	34,950	38,485	37,933	29,849	27,057	-1.4	+40.2			
Stocks at refineries and in transit—												
United States.....gallons.	1,120,970	909,620	558,483	277,077	160,156	1,094,775	1,408,637	-42.2	-88.6			
Canada.....gallons.	55,934	57,270	73,955	66,518	64,817	21,227	28,610	-2.6	+126.6			
Exports.....gallons.	59,244	98,763	66,785	54,535	14,000	9,622	18,796	-74.3	-25.5	142,558	410,814	+188.2
Wood at chemical plants:												
Consumption—												
United States.....cords.	63,973	59,744	56,829	53,247		63,714	81,781			487,745	438,573	-10.1
Canada.....cords.	4,664	3,530	3,498	1,938		2,038	1,154			28,773	30,921	+7.5
Stocks, end of month—												
United States.....cords.	515,250	489,388	501,021	502,576		598,209	606,910					
Canada.....cords.	74,749	74,319	73,900	73,699	73,700	60,392	68,093	0.0	+7.3			
Daily capacity—												
Total.....cords.	3,275	3,266	3,266	3,250	3,262	3,535	3,395	+0.4	-3.9			
Shutdown.....cords.	263	299	697	807	1,073	655	455	+33.0	+135.8			
Methanol, refined:												
Production—												
United States.....gallons.	468,446	557,780	603,247	541,113	436,811	347,833	317,521	-19.3	+37.6	3,283,427	3,935,592	+19.9
Canada.....gallons.	46,000	30,400	6,200	10,800	14,700	22,800		+36.1		185,545	240,050	+29.4
Stocks, end of month—												
United States.....gallons.	430,298	505,299	541,083	444,496	396,730	554,809	428,194	-10.7	-7.3			
Canada.....gallons.	47,311	55,359	45,733	39,210	26,715	59,120	50,687	-31.9	-47.3			
Shipments—												
United States.....gallons.	412,597	492,081	596,502	667,549	497,971	411,229	389,033	-25.6	+28.0	3,385,654	4,026,025	+18.9
Canada.....gallons.	39,856	14,528	11,462	12,672	22,076	17,827	8,440	+74.2	+161.6	185,186	165,860	-10.4
Price, wholesale, N. Y.....dolls. per gal.	.46	.46	.46	.47	.48	.66	.58	+2.0	-17.2			
Ethyl Alcohol												
Production.....thous. of gals.	11,784	11,043	13,036	16,618		15,170	15,587			89,777	87,801	-2.2
Withdrawn for denaturation.....thous. of gals.	9,334	10,468	16,336	14,927		14,651	12,212			81,897	78,910	-3.6
Warehouse stocks, end of month.....thous. of gals.	11,267	10,904	6,646	7,351		9,700	11,122					

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
CHEMICALS AND OILS—Continued												
Explosives												
(Black powder, permissible, and other high explosives)												
Production.....thous. of lbs.	32,153	32,850	32,625	30,084	-----	30,954	36,304	-----	-----	\$ 232,623	\$ 219,215	-5.8
Shipments.....thous. of lbs.	32,095	33,511	32,816	29,561	-----	31,136	35,736	-----	-----	\$ 232,690	\$ 221,151	-4.9
New orders.....thous. of lbs.	30,701	32,163	31,305	27,993	-----	30,335	34,680	-----	-----	\$ 224,300	\$ 210,903	-6.0
Stocks, end of month.....thous. of lbs.	17,647	16,990	16,732	17,158	-----	16,794	17,344	-----	-----	-----	-----	-----
Naval Stores												
Turpentine (gum):												
Net receipts, southern ports.....barrels	20,765	39,764	48,111	46,637	42,724	50,466	47,809	-8.4	-10.6	257,675	215,957	-16.2
Stocks at ports, end of month.....barrels	45,458	46,741	61,336	69,245	73,304	58,390	58,915	+5.9	+24.4	-----	-----	-----
Price, southern, New York.....dolls. per gal.	.58	.54	.57	.55	.52	.56	.59	-5.5	+11.9	-----	-----	-----
Rosin (gum):												
Net receipts, southern ports.....barrels	67,762	118,460	148,041	148,250	145,357	169,439	158,514	-2.0	-8.3	863,021	725,123	-16.0
Stocks at 3 ports, end of month.....barrels	140,805	128,789	165,604	178,225	227,517	179,734	198,883	+27.7	+14.4	-----	-----	-----
Price, B, New York.....dolls. per bbl.	8.54	8.15	8.10	9.71	9.59	9.74	10.62	-1.2	-9.7	-----	-----	-----
Rosin (wood):												
Production.....barrels	34,831	36,036	36,054	37,016	37,623	36,038	35,521	+1.6	+5.9	280,386	278,700	-.6
Stocks, end of month.....barrels	108,394	114,160	108,200	112,703	114,074	72,486	71,982	+1.2	+58.5	-----	-----	-----
Turpentine (wood):												
Production.....barrels	6,052	6,350	5,700	6,304	6,274	6,414	6,347	-.5	-1.2	54,204	48,743	-10.1
Stocks, end of month.....barrels	10,963	9,459	8,510	7,786	6,898	6,652	8,256	-11.4	-16.4	-----	-----	-----
Pine oil:												
Production.....gallons	240,845	248,606	191,947	238,767	225,668	231,350	242,050	-5.5	-6.8	1,872,450	1,841,511	-1.7
Stocks, end of month.....gallons	727,416	768,195	829,507	824,671	822,813	458,923	524,246	-.2	+57.0	-----	-----	-----
Roofing												
Roofing, felt:												
Production, dry felt.....tons	27,534	27,521	28,476	25,810	25,574	23,605	27,441	-.1	-6.8	196,364	201,248	+2.5
Stocks, end of month, dry felt.....tons	2,844	2,366	2,153	2,798	3,356	3,272	3,166	+19.9	+6.0	-----	-----	-----
Prepared roofing:												
Shipments.....thous. of roof squares	3,016	3,008	3,236	2,398	2,447	2,637	2,992	+2.0	-18.2	20,822	20,260	-2.7
Fats and Oils												
Total vegetable oils and copra:												
Exports.....thous. of lbs.	4,618	1,996	1,652	1,145	1,444	3,775	1,767	+26.1	-18.3	48,355	38,605	-20.2
Imports.....thous. of lbs.	65,152	57,049	59,951	53,379	56,364	66,828	50,092	+5.6	+12.5	464,394	457,755	-1.4
Copra, imports.....short tons	11,334	21,383	20,488	24,407	19,716	15,215	19,311	-19.2	+2.1	135,161	144,578	+7.0
Copra or coconut oil:												
Imports.....thous. of lbs.	23,112	15,076	12,671	19,629	12,581	16,997	21,409	-35.9	-41.4	185,297	158,980	-14.2
Consump. in oleomargarine.....thous. of lbs.	12,284	11,613	11,791	10,642	11,910	7,248	8,840	+11.5	+34.7	73,931	98,821	+33.7
Oleomargarine:												
Production.....thous. of lbs.	24,291	23,744	23,738	21,444	23,610	17,214	* 20,882	+10.1	+13.1	173,804	197,944	+13.9
Consumption.....thous. of lbs.	22,800	23,381	23,926	20,490	24,965	16,727	19,387	+21.8	+28.8	170,800	197,055	+15.4
Animal glues, shipments.....thous. of lbs.	6,587	6,489	5,887	6,621	-----	5,902	6,076	-----	-----	\$ 43,715	\$ 45,394	+4.3
Cottonseed												
Cottonseed:												
Receipts at mills.....short tons	15,947	5,660	16,798	23,923	169,498	54,038	* 275,505	+608.5	-38.5	1,959,140	843,563	-56.9
Consumption (crush).....short tons	164,872	66,040	39,041	32,336	73,795	67,661	* 159,856	+128.2	-53.8	3,052,577	1,720,626	-43.6
Stocks at mills, end of month.....short tons	113,019	52,437	30,194	21,781	117,484	89,784	* 205,433	+439.4	-42.8	-----	-----	-----
Cottonseed oil, crude:												
Production.....thous. of lbs.	56,945	24,437	13,445	11,285	20,863	22,567	* 46,157	+84.9	-54.8	916,250	561,042	-38.8
Stocks, end of month.....thous. of lbs.	83,371	47,409	33,509	19,457	15,346	16,297	* 25,736	-21.1	-40.4	-----	-----	-----
Cottonseed oil, refined:												
Production.....thous. of lbs.	84,159	61,935	22,779	26,404	19,677	31,789	* 33,253	-25.5	-40.8	916,176	621,411	-32.2
Stocks, end of month.....thous. of lbs.	516,232	480,431	415,428	335,406	236,200	378,613	* 272,955	-29.6	-13.5	-----	-----	-----
Price, yellow, prime, N. Y.....dolls. per lb.	.099	.106	.102	.101	.094	.095	.100	-6.9	-6.0	-----	-----	-----
Consumption in oleomarg.....thous. of lbs.	2,015	2,135	2,106	1,867	2,062	1,559	1,745	+10.4	+18.2	15,866	16,675	+5.1
Cottonseed cake and meal:												
Production.....short tons	82,273	31,376	18,457	13,769	34,700	39,022	* 72,264	+151.5	-51.9	1,384,078	793,158	-42.7
Stocks, end of month.....short tons	84,870	59,745	45,387	32,601	19,794	63,632	* 44,142	-39.3	-51.7	-----	-----	-----
Exports.....short tons	8,230	4,906	143	71	944	23,169	15,122	-----	-3.8	253,293	107,738	-57.5
Flaxseed												
Production, crop estimate.....thous. of bush.												
Minneapolis and Duluth:	1 23,448					2 26,583		-----				
Receipts.....thous. of bush.	474	650	681	320	568	429	717	+77.5	-20.8	4,375	4,873	+11.4
Shipments.....thous. of bush.	584	675	392	272	426	606	496	+56.6	-14.1	3,340	3,994	+19.6
Stocks, end of month.....thous. of bush.	1,627	856	764	411	310	908	589	-24.6	-47.4	-----	-----	-----
Imports.....thous. of bush.	1,718	2,156	1,664	1,484	1,068	1,381	1,123	-28.0	-4.9	15,826	12,206	-22.9
Linseed oil:												
Shipments from Minneapolis.....thous. of lbs.	15,079	17,245	17,196	12,229	13,571	9,379	10,859	+11.0	+25.0	83,104	116,982	+40.8
Price, New York.....dolls. per lb.	.098	.103	.103	.100	.098	.106	.107	-2.0	-8.4	-----	-----	-----
Linseed cake and meal:												
Shipments from Minneapolis.....thous. of lbs.	21,607	16,621	11,421	10,057	16,051	7,281	10,145	+59.6	+58.2	94,907	160,900	+69.5
Exports.....thous. of lbs.	38,582	45,331	45,135	47,258	52,392	52,596	58,947	+10.9	-11.1	449,169	380,283	-15.3
FOODSTUFFS												
Wheat												
Production, monthly estimate:												
Winter.....thous. of bush.	-----	-----	-----	-----	1 578,599	-----	2 552,384	-----	-----	-----	-----	-----
Spring.....thous. of bush.	-----	-----	-----	-----	237,607	-----	319,307	-----	-----	-----	-----	-----
Total.....thous. of bush.	-----	-----	-----	-----	1 901,072	-----	2 871,691	-----	-----	-----	-----	-----
Visible supply, end of month:												
United States.....thous. of bush.	63,625	50,381	40,480	55,362	92,108	36,104	67,273	+66.4	+36.9	-----	-----	-----
Canada.....thous. of bush.	129,552	112,054	99,228	72,891	32,728	44,237	28,264	-55.1	+15.8	-----	-----	-----
Receipts, principal markets.....thous. of bush.	17,949	25,922	15,544	72,618	84,221	58,800	81,632	+16.0	+3.2	256,927	288,547	+12.3
Shipments, principal markets.....thous. of bush.	14,269	27,912	14,840	33,543	46,105	25,489	46,583	+37.5	-1.0	160,273	178,607	+11.1

1 As of Sept. 1.

2 Final estimate for 1927.

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PERCENT INCREASE (+) OR DECREASE (—)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. in-crease (+) or de-crease (—) cumu-lative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
FOODSTUFFS—Continued												
Wheat—Continued												
Exports:												
United States—												
Wheat only.....thous. of bush..	2,723	4,823	5,006	4,153	10,394	8,397	23,418	+150.3	—55.4	77,648	38,071	—51.0
Including wheat flour.....thous. of bush..	7,660	8,624	8,093	7,064	14,588	11,942	28,150	+105.4	—48.2	111,722	71,415	—36.1
Canada—												
Wheat only.....thous. of bush..	8,361	30,282	21,960	32,426	25,057	6,620	12,197	—22.7	+105.4	123,948	170,314	+37.4
Including wheat flour.....thous. of bush..	11,103	34,268	25,182	35,944	29,224	8,641	14,510	—18.7	+101.4	149,058	199,990	+34.2
Prices:												
No. 2, red winter, Chicago.....dolls. per bush..	1.81	1.90	1.65	1.52	1.33	1.43	1.40	—12.5	—5.0			
No. 1, northern spring, cash, Minneapolis.....dolls. per bush..	1.417	1.502	1.376	1.300	1.188	1.440	1.427	—8.6	—16.7			
Wheat Flour												
Grinding of wheat:												
United States.....thous. of bush..	38,986	39,910	35,633	43,077	46,853	38,547	44,099	+19.9	+6.2	315,441	328,650	+4.2
Canada.....thous. of bush..	6,058	7,138	6,304	6,769		4,662	5,276			\$ 41,678	\$ 47,733	+14.5
Production:												
United States, actual.....thous. of bbls..	8,400	8,604	7,665	8,416	10,202	8,388	9,617	+21.2	+6.1	68,922	70,950	+2.9
United States, prorated.....thous. of bbls..	9,661	9,960	8,854	9,409		9,256	10,458			\$ 66,784	\$ 69,231	+3.7
Canada.....thous. of bbls..	1,314	1,541	1,359	1,458		1,019	1,158			\$ 9,124	\$ 10,332	+13.2
Production, gain offal.....thous. of lbs..	688,720	705,781	636,308	688,711	806,734	668,232	761,468	+17.0	+5.8	5,437,582	5,787,156	+6.4
Capacity operated, flour mills.....per cent.	51	50	44	51	58	51	54	+13.7	+7.4			
Consumption (computed).....thous. of bbls..	8,064	9,515	8,269	7,762		7,918	8,906			\$ 60,165	\$ 61,656	+2.5
Stocks, all positions, end of month (computed).....thous. of bbls..	6,700	6,300	6,200	7,847		6,800	6,100					
Exports:												
United States.....thous. of bbls..	1,097	845	686	647	932	788	1,052	+44.0	—11.4	7,568	7,410	—2.1
Canada.....thous. of bbls..	609	886	716	782	925	449	514	+18.3	+80.0	5,580	6,594	+18.2
Wholesale prices:												
Standard patents, Minneapolis.....dolls. per bbl..	8.11	8.49	7.95	7.36	6.62	7.81	7.60	—10.1	—12.9			
Winter straights, Kansas City.....dolls. per bbl..	7.56	7.63	7.18	6.44	5.66	6.92	6.77	—12.1	—16.4			
Corn												
Production, crop estimate.....thous. of bush..					12,930,586		22,786,228					
Exports, including meal.....thous. of bush..	3,355	1,186	1,045	891	1,018	733	459	+14.3	+121.8	11,801	16,950	+43.6
Visible supply, end month.....thous. of bush..	36,056	27,554	17,451	12,479	9,985	31,911	23,805	—20.0	—58.1			
Receipts, principal markets.....thous. of bush..	19,579	23,708	18,771	23,742	21,467	15,125	16,758	—9.6	+28.1	152,789	228,433	+49.4
Shipments, prin. markets.....thous. of bush..	18,849	23,454	20,221	16,080	15,778	12,090	11,762	—1.9	+34.1	88,851	161,040	+81.2
Grindings (starch, glucose).....thous. of bush..	8,285	6,921	6,427	5,833	5,193	6,727	7,309	—11.0	—29.0	55,010	58,571	+6.5
Prices, contract grades, No. 2, Chicago.....dolls. per bush..	1.03	1.07	1.03	1.08	.97	1.02	1.09	—10.2	—11.0			
Oats												
Production, crop estimate.....thous. of bush..					11,453,829		21,195,006					
Receipts, principal markets.....thous. of bush..	12,436	14,406	7,144	6,610	27,271	8,125	21,413	+312.6	+27.4	94,956	104,004	+9.5
Visible supply, end of month.....thous. of bush..	11,453	7,319	3,392	1,954	15,687	12,270	22,501	—19.7	—30.3			
Exports, including meal.....thous. of bush..	387	465	78	104	2,403	534	1,398		+71.9	8,288	4,849	—41.5
Prices, contract grades, Chicago.....dolls. per bush..	.65	.69	.71	.61	.39	.48	.48	—36.1	—18.8			
Grindings, Canada.....thous. of bush..	846	887	753	723		805	791			\$ 49,331	\$ 65,227	+32.2
Production, oatmeal and rolled oats, Canada.....thous. of lbs..	10,208	11,520	9,974	9,320		9,749	9,785			\$ 58,275	\$ 73,824	+26.7
Barley												
Production, crop estimate.....thous. of bush..					1,346,027		2,265,577					
Receipts, principal markets.....thous. of bush..	2,717	3,031	2,652	2,217	23,611	1,871	11,108		+102.6	27,199	50,138	+84.4
Visible supply, end mo.....thous. of bush..	2,339	1,435	711	685	6,313	891	3,532	+821.6	+78.7			
Exports.....thous. of bush..	876	1,386	1,910	2,242	8,758	2,528	4,256	+290.6	+105.8	16,084	18,992	+18.1
Price, fair to good, malting, Chicago.....dolls. per bush..	1.01	1.04	.96	.83	.73	.79	.80	—12.0	—8.7			
Rye												
Production, crop estimate.....thous. of bush..					1,43,274		2,58,572					
Receipts, principal markets.....thous. of bush..	1,186	1,593	781	571	2,636	1,444	4,293	+361.6	—38.6	16,738	11,556	—31.0
Visible supply, end mo.....thous. of bush..	5,051	1,696	1,465	1,146	1,440	1,376	3,083	+25.7	—53.3			
Exports, including flour.....thous. of bush..	366	3,345	1,297	195	709	339	1,325	+263.6	—46.5	17,807	7,202	—59.6
Price, No. 2, Chicago.....dolls. per bush..	1.27	1.32	1.26	1.13	.98	1.10	.97	—13.3	+1.0			
Total Grains												
Total grain exports, incl. flour.....thous. of bush..	12,644	15,006	12,423	10,496	27,476	16,076	35,589	+161.8	—22.8	166,705	115,399	—30.8
Rice												
Production, crop estimate.....thous. of bush..					1,36,545		2,40,231					
Southern paddy, receipts at mills.....bbls..	620,032	351,607	129,752	16,892	338,269	147,176	792,345		—57.3	4,224,503	4,057,044	—4.0
Shipments:												
Total from mills.....pockets (100 lbs.)..	835,992	909,718	531,073	285,155	346,076	345,794	423,559	+21.4	—18.3	5,414,724	5,890,921	+8.8
New Orleans.....pockets (100 lbs.)..	205,148	203,261	115,399	35,274	96,643	96,074	109,951	+174.0	—12.1	1,201,437	1,209,422	+7
Stocks, end of month.....pockets (100 lbs.)..	1,957,878	1,455,366	1,067,092	829,608	695,600	987,310	1,235,674	—16.2	—43.7			
Exports.....pockets (100 lbs.)..	392,919	380,725	291,287	189,472	126,608	74,519	112,232	—33.1	+12.8	2,336,525	2,461,348	+5.3
Imports.....pockets (100 lbs.)..	34,447	27,452	14,815	31,688	6,026	26,248	19,503	—81.0	—69.1	395,435	265,271	—32.3

¹ As of Sept. 1.² Final estimate for 1927.⁴ Revised.⁵ Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. in-crease (+) or de-crease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
FOODSTUFFS—Continued.												
Other Crops												
Apples:												
Production, crop estimate, thous. of bush.					1 178,949		2 123,455					
Cold-storage holdings, end of month, thous. of bbls.	1,378	599	None.	None.	None.	None.	33					
Car-lot shipment, carloads.	2,322	1,803	1,040	3,369	4,170	1,731	3,352	+23.8	+24.4	33,366	26,491	-20.6
Potatoes:												
Production, crop estimate, thous. of bush.					11,466,815		2 402,149					
Car-lot shipments, carloads.	16,851	22,955	29,152	20,972	15,538	20,709	17,418	-25.9	-10.8	151,543	170,973	+12.8
Onions, car-lot shipments, carloads.	2,993	4,133	1,200	1,652	2,561	1,864	2,313	+55.0	+10.7	16,983	19,866	+17.0
Citrus fruits, car-lot shipments, carloads.	8,893	8,350	5,134	5,070	4,254	5,781	4,492	-16.1	-5.3	76,912	59,687	-22.4
Hay, all tame:												
Production, crop estimate, thous. of tons.					1 87,859		2 106,219					
Receipts, tons.	46,628	42,955	43,622	43,770	59,774	48,005	51,652	+36.6	+15.7	455,368	419,998	-7.8
Cattle and Beef												
Cattle movements, primary markets:												
Receipts, thousands.	1,684	1,799	1,558	1,650	1,829	1,547	2,065	+10.8	-11.4	14,104	13,272	-5.9
Shipments, total, thousands.	640	682	594	608	814	562	802	+33.9	+1.5	5,123	5,072	-1.0
Shipments, stocker and feeder, thousands.	254	283	184	196	336	138	269	+71.4	+24.9	1,596	1,854	+16.2
Local slaughter, thousands.	1,013	1,120	963	1,013	1,007	971	1,231	-6	-18.2	8,863	8,097	-8.6
Beef products:												
Production, inspected, thous. of lbs.	361,718	422,916	406,060	375,745	398,056	417,119	465,597	+5.9	-14.5	3,484,755	3,100,881	-11.0
Apparent consumption, thous. of lbs.	375,381	435,397	412,257	4 381,747	403,383	426,434	470,490	+5.7	-14.3	3,556,311	3,166,370	-11.0
Exports, thous. of lbs.	1,052	1,165	1,392	1,510	1,519	1,920	1,899	+6	-20.0	14,402	9,690	-32.7
Cold-storage holdings, end mo., thous. of lbs.	46,194	37,212	32,238	4 32,442	31,145	35,722	33,446	-4.0	-6.0			
Prices:												
Cattle, corn-fed, Chicago, dolls. per 100 lbs.	13.34	13.18	13.56	14.99	15.11	12.30	12.58	+8	+20.1			
Steer rounds No. 2, dolls. per lb.	.200	.201	.212	.229	.244	.193	.203	+6.6	+20.2			
Western dressed steers, N. Y., dolls. per lb.	.222	.229	.225	.249	.260	.200	.200	+4.4	+30.0			
Hogs and Pork												
Hog movements, primary markets:												
Receipts, thousands.	3,483	3,723	3,548	2,924	2,523	3,046	3,041	-13.7	-17.0	27,931	31,413	+12.5
Shipments, total, thousands.	1,385	1,296	1,299	1,193	1,160	1,110	1,192	-2.8	-2.7	10,088	11,752	+16.5
Shipments, stocker and feeder, thousands.	65	66	56	45	43	38	38	-4.4	+13.2	588	505	-14.1
Local slaughter, thousands.	2,077	2,420	2,269	1,719	1,363	1,939	1,846	-20.7	-26.2	17,823	19,640	+10.2
Pork products, total:												
Production, inspected, thous. of lbs.	585,081	672,640	704,468	537,820	466,696	652,896	580,606	-13.2	-19.6	5,384,083	5,810,128	+7.9
Apparent consumption, thous. of lbs.	528,236	616,624	598,167	4 560,122	549,036	548,008	595,110	-2.0	-7.7	4,316,312	4,787,558	+10.9
Exports, thous. of lbs.	86,159	85,201	82,936	84,290	81,924	76,277	72,958	-2.8	+12.3	666,550	745,521	+11.8
Cold-storage holdings, end of month, thous. of lbs.	1,133,760	1,105,439	1,129,839	1 1,024,124	861,052	1,020,407	933,436	-15.9	-7.8			
Total, Fresh and cured, thous. of lbs.	960,672	919,366	915,366	4 819,185	682,826	841,271	766,418	-16.6	-10.9			
Lard (included in pork products):												
Production, thous. of lbs.	127,075	140,414	146,520	108,522		140,932	117,871			5 990,630	5 1,085,494	+9.6
Exports, thous. of lbs.	56,554	55,540	53,436	52,940	50,658	40,972	50,816	-4.3	-3	458,821	499,589	+8.9
Cold-storage holdings, end of month, thous. of lbs.	173,088	186,070	214,479	4 204,939	178,226	179,136	167,018	-13.0	+6.7			
Prices:												
Hogs, heavy, Chicago, dolls. per 100 lbs.	9.09	9.61	10.12	10.86	11.71	8.98	9.19	+7.8	+27.4			
Hams, smoked, Chicago, dolls. per lb.	.201	.206	.215	.236	.249	.243	.235	+5.5	+6.0			
Lard, prime contract, N. Y., dolls. per lb.	.121	.123	.122	.125	.128	.132	.128	+2.4	0.0			
Sheep and Lambs												
Sheep movement, primary market:												
Receipts, thousands.	1,591	1,952	1,913	1,898	2,362	1,676	2,209	+24.4	+6.9	13,999	14,610	+4.4
Shipments, total, thousands.	778	994	904	828	1,250	760	1,054	+51.0	+18.6	6,624	6,893	+4.1
Shipments, stocker and feeder, thousands.	134	205	278	234	564	216	390	+141.0	+44.6	1,723	1,727	+2
Local slaughter, thousands.	814	951	1,020	1,068	1,097	920	1,137	+2.7	-3.5	7,364	7,703	+4.6
Lamb and mutton:												
Production, inspected, thous. of lbs.	36,248	38,455	40,693	39,394	44,525	37,647	44,865	+13.0	-8	323,126	332,583	+2.9
Apparent consumption, thous. of lbs.	38,039	40,135	39,923	4 39,448	44,359	37,706	44,811	+12.5	-1.0	326,454	336,439	+3.1
Cold-storage holdings, end of month, thous. of lbs.	1,828	1,226	1,947	4 1,822	1,775	1,161	1,302	-2.6	+36.3			
Prices:												
Sheep, ewes, Chicago, dolls. per 100 lbs.	8.90	7.31	5.88	5.38	5.72	5.31	5.58	+6.3	+2.5			
Sheep, lambs, Chicago, dolls. per 100 lbs.	15.98	15.19	13.03	15.18	14.31	14.22	13.58	-5.7	+5.3			
Miscellaneous Meats												
Cold-storage holdings, end mo., thous. of lbs.	70,438	64,438	63,941	4 63,610	56,891	66,457	65,873	-10.6	-13.6			
Total Meats												
Production, inspected, thous. of lbs.	983,046	1,134,010	1,151,221	952,959	909,277	1,107,662	1,091,069	-4.6	-6.7	9,191,977	9,243,589	+6
Cold-storage holdings, end mo., thous. of lbs.	1,252,200	1,208,773	1,227,965	1 1,121,698	950,863	1,123,747	1,034,057	-15.2	-8.0			
Apparent consumption, thous. of lbs.	941,656	1,092,156	1,050,347	4 981,318	996,778	1,012,147	1,110,411	+1.6	-10.8	8,199,068	8,290,384	+1.1
Poultry												
Receipts at 5 markets, thous. of lbs.	16,006	17,862	18,849	22,238	22,361	18,282	22,691	+6	-1.5	158,995	165,655	+4.2
Cold-storage holdings, end of mo., thous. of lbs.	56,892	43,872	38,230	4 40,395	40,700	42,293	39,711	+8	+2.5			
Fish												
Total catch, prin. fishing ports*, thous. of lbs.	24,387	27,650	29,809	27,324	30,130	27,322	33,284	+10.3	-9.5	199,504	200,776	+6
Cold-storage holdings, 15th of mo., thous. of lbs.	26,473	26,358	40,946	4 53,140	66,082	42,118	54,061	+24.4	+22.2			
Canned salmon:												
Shipments, United States, cases.	116,155	154,768	240,311	454,600		508,196	802,320			5 2,700,295	5 1,850,861	-31.5
Exports, Canada, cases.	37,231	42,117	23,106	26,333	121,152	48,190	110,004	+360.1	+10.1	611,354	601,772	-1.5

1 As of Sept. 1.

2 Final estimate for 1927.

4 Revised.

5 Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
FOODSTUFFS—Continued												
Butter												
Production (factory).....thous. of lbs.	117,757	156,020	182,016	167,750	142,688	170,484	146,808	-14.9	-2.8	1,106,245	1,074,756	-2.8
Receipts, 5 markets.....thous. of lbs.	44,721	54,427	69,650	65,145	55,339	67,282	58,310	-15.1	-5.1	434,627	418,441	-3.7
Cold-storage holdings, creamery, end of month.....thous. of lbs.	5,109	15,952	69,750	120,437	136,136	145,147	163,701	+13.0	-16.8			
Apparent consumption.....thous. of lbs.	163,257	205,973	204,173	186,188	186,461	185,532	188,803	+1.1	-1.2	1,410,328	1,406,088	-0.3
Wholesale price, New York.....dolls. per lb.	.45	.45	.44	.45	.47	.42	.42	+4.4	+11.9			
Cheese												
Total, all varieties:												
Production (factory).....thous. of lbs.	28,960	40,305	58,880	48,614	41,578	54,605	46,731	-14.5	-11.0	348,011	297,236	-14.6
Receipts, 5 markets.....thous. of lbs.	15,138	16,251	19,216	21,741	18,727	24,134	22,556	-13.9	-17.0	149,542	133,856	-10.5
Apparent consumption.....thous. of lbs.	36,570	38,807	45,778	32,146	35,189	33,957	41,956	+9.5	-16.1	323,362	304,106	-6.0
Cold-storage holdings, end mo.thous. of lbs.	41,791	48,990	68,613	89,708	101,442	87,937	90,204	+13.1	+12.5			
Imports.....thous. of lbs.	6,229	6,280	6,581	5,937	5,597	6,503	3,430	-5.7	+63.2	49,804	47,033	-5.6
Exports, United States.....thous. of lbs.	187	303	180	172	215	231	251	+25.0	-14.3	2,419	1,788	-26.1
Exports, Canada.....thous. of lbs.	668	4,860	5,849	20,095	15,788	8,977	16,023	-21.4	-1.5	45,600	51,743	+13.5
American whole milk:												
Cold-storage holdings, end mo.thous. of lbs.	30,207	36,716	53,648	73,088	83,823	67,091	69,749	+14.7	+20.2			
Wholesale price, New York.....dolls. per lb.	.24	.24	.26	.26	.26	.24	.25	0.0	+4.0			
Eggs												
Receipts, 5 markets.....thous. of cases	2,360	2,503	1,763	1,335	1,076	1,225	1,005	-19.4	+7.1	13,392	13,253	-1.0
Cold-storage holdings, end of month:												
Cases.....thous. of cases	4,515	8,162	10,002	10,496	9,940	10,746	9,650	-5.3	+3.0			
Frozen.....thous. of lbs.	51,532	67,941	77,744	81,670	89,014	81,418	77,508	+9.0	+14.8			
Milk												
Condensed milk:												
Total stocks, mfrs., end mo.—												
Case goods.....thous. of lbs.	18,496	22,396	31,087	30,397	30,542	44,028	43,559	+5.5	-29.9			
Bulk goods.....thous. of lbs.	11,757	16,716	25,255	20,794	19,610	19,883	20,796	-5.7	-5.7			
Unsold stocks, mfrs., end mo.—												
Case goods.....thous. of lbs.	13,169	18,079	25,081	23,594	24,159	38,140	38,325	+2.4	-37.0			
Bulk goods.....thous. of lbs.	6,453	8,400	13,368	8,611	8,398	7,719	7,600	-2.5	+10.5			
Exports.....thous. of lbs.	2,700	3,279	3,054	3,011	3,246	2,716	3,532	+7.8	-8.1	24,362	26,461	+8.6
Wholesale price, New York.....dolls. per case	5.83	5.83	5.83	5.97	6.18	5.83	5.83	+3.5	+6.0			
Evaporated milk:												
Manufacturers' stocks, end of mo.—												
Total, case goods.....thous. of lbs.	94,338	119,210	187,789	180,377	161,706	213,068	236,173	-10.4	-31.5			
Unsold, case goods.....thous. of lbs.	72,121	95,386	151,769	124,738	101,837	176,763	203,643	-18.4	-50.0			
Exports.....thous. of lbs.	6,421	7,806	5,464	5,180	6,343	6,326	4,240	+22.5	+49.6	49,968	54,847	+9.8
Wholesale price, New York.....dolls. per case	4.23	4.28	4.28	4.34	4.45	4.58	4.58	+2.5	-2.8			
Production, condensed and evaporated milk.....thous. of lbs.	170,884	205,123	269,421	171,065	152,451	200,076	162,875	-10.9	-6.4	1,438,371	1,384,500	-3.7
Powdered milk:												
Manufacturers' stocks, end of month.....thous. of lbs.	12,156	15,985	21,517	22,632	19,857	13,746	13,232	-12.3	+50.1			
Exports.....thous. of lbs.	303	273	225	359	526	241	238	+46.5	+121.0	2,146	2,516	+17.2
Net new orders.....thous. of lbs.	6,037	6,590	6,129	6,264	6,736	5,781	5,683	+7.5	+18.5	41,850	47,478	+13.4
Fluid milk:												
Receipts—												
Boston (incl. cream).....thous. of qts.	17,697	17,914	19,151	19,215		19,366	18,095			124,093	125,607	+1.2
Greater New York.....thous. of qts.	109,613	117,558	115,866	122,100	117,162	118,672	110,694	-4.0	+5.8	887,479	910,635	+2.6
Production—												
Minneapolis, St. Paul.....thous. of lbs.	27,522	31,949	32,686			26,718	21,157					
Consumption in manufacture of oleomargarine.....thous. of lbs.	7,085	7,455	7,034	6,652	7,014	4,817	5,566	+5.4	+26.0	48,094	58,259	+21.1
Sugar												
Raw:												
Imports—												
From Hawaii, Porto Rico.....long tons.	164,551	158,387	180,861	102,353		98,160	93,071					
From foreign countries.....long tons.	448,326	271,492	208,241	253,613	274,366	323,434	346,818	+8.3	-20.9	2,653,166	2,446,240	-7.8
Meltings, 8 ports.....long tons.	409,447	378,231	404,120	433,367	471,175	459,108	457,961	+8.7	+2.9	3,582,414	3,182,498	-11.2
Stocks at refineries, end month.....long tons.	666,061	701,624	682,591	595,214	488,161	308,961	296,012	-18.0	+64.9			
Receipts, domestic, New Orleans.....long tons.	None.	None.	None.	None.	None.	25	34					
Refined:												
Shipments, 2 ports.....long tons.	60,571	58,371	64,224	67,638	82,773	73,507	78,069	+22.4	+6.0	597,355	492,580	-17.5
Stocks, 2 ports.....long tons.	42,092	43,208	34,166	24,930	34,049	46,775	43,230	+30.5	-21.2			
Exports, including maple.....long tons.	8,645	11,869	5,364	10,313	11,329	12,956	17,297	+2.2	-34.5	95,540	69,411	-27.3
Prices:												
Wholesale, 96° centrif., N. Y.dolls. per lb.	.045	.045	.043	.042	.041	.045	.045	-2.4	-8.9			
Wholesale, granulated, N. Y.dolls. per lb.	.058	.059	.057	.055	.055	.059	.056	-3.5	-1.8			
Retail, granulated, N. Y.dolls. per lb.	.064	.065	.067	.066	.063	.067	.066	-4.5	-4.5			
Retail average, 51 cities, relative to 1913.....	129	131	133	133	129	135	133	-3.0	-3.0			
Cuban movement (raw):												
Receipts at Cuban ports.....long tons.	586,747	237,507	123,340	149,682	182,414	157,420	208,474	+21.9	-12.5	3,745,467	3,430,449	-8.4
Exports.....long tons.	447,097	287,561	224,869	299,714	348,808	343,161	403,719	+16.4	-13.6	2,960,525	2,736,068	-7.6
Stocks, end of month.....long tons.	1,325,601	1,263,287	1,127,054	1,017,638	829,437	998,209	783,717	-18.5	+5.8			
Coffee												
Imports.....thous. of bags.	935	839	906	821	925	791	1,007	+15.5	-8.1	6,973	7,083	+10.2
Visible supply:†												
World.....thous. of bags.	5,152	5,143	5,321	5,734	5,515	4,537	4,716	-3.8	+16.9			
United States.....thous. of bags.	892	775	861	850	793	634	825	-6.7	-3.9			
Receipts, total, Brazil.....thous. of bags.	1,203	1,158	1,303	1,168	1,181	1,258	1,505	+1.1	-21.5	9,293	9,601	+3.3
Clearances:†												
Total, Brazil, for world.....thous. of bags.	1,052	1,306	1,100	1,105	1,057	1,235	1,313	-4.3	-19.5	9,005	9,174	+1.9
Total, Brazil, for U. S.thous. of bags.	518	649	549	598	548	666	595	-8.4	-7.9	4,721	4,845	+2.6
Price, Rio No. 7, Brazil grades.....dolls. per lb.	.154	.157	.157	.165	.173	.142	.139	+4.8	+24.5			

† Revised.

‡ Cumulative through July 31.

§ See table on p. 18 of the September, 1928, issue for earlier data.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Perct. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
FOODSTUFFS—Continued												
Tea												
Imports.....thous. of lbs.	4,299	4,755	4,863	7,209	8,086	6,101	9,467	+13.6	-14.6	50,724	51,036	+
Stocks, United King., end mo.....thous. of lbs.	223,464	195,988	179,214	170,519	179,106	136,531	146,631	+5.0	+22.1			
Price, Formosa, fine, New York.....dolls. per lb.	.325	.325	.325	.325	.325	.345	.345	0.0	-5.8			
TOBACCO												
Production, crop estimate.....thous. of lbs.					1,372,000		1,237,832					
Consumption (tax-paid withdrawals):												
Large cigars.....thousands	459,022	541,501	575,996	558,206	601,877	561,199	604,870	+7.8	- .5	4,195,923	4,101,643	-2.2
Small cigarettes.....thousands	7,511,408	8,891,803	9,690,961	9,723,647	10,627,344	8,277,052	9,328,055	+9.3	+13.9	64,665,580	70,816,630	+9.5
Manufac. tobacco and snuff.....thous. of lbs.	30,602	33,042	33,801	30,155	34,981	31,570	35,337	+16.0	-1.0	267,172	261,475	-2.1
Exports:												
Unmanufactured.....thous. of lbs.	42,007	39,681	30,796	20,252	26,833	28,418	28,728	+32.5	-6.6	322,955	291,089	-9.9
Cigarettes.....thousands	1,147,089	781,118	1,032,268	1,078,362	860,791	479,166	365,448	-20.2	+135.5	5,136,405	7,563,664	+47.3
Sales of loose-leaf, warehouses.....thous. of lbs.	587	154	144	227	70,579	72	66,810		+6.0	386,420	276,721	-28.4
Price, leaf, Kentucky.....dolls. per 100 lbs.	12.735	11.643	6.492	9.069	11.580	8.786	15.730	+27.7	-26.4			
TRANSPORTATION												
River and Canal Cargo Traffic												
Panama Canal:												
Total cargo traffic.....thous. of long tons.	2,474	2,498	2,140	2,292	2,425	2,450	2,430	+5.8	- .2	18,925	19,282	+1.9
In American vessels.....thous. of long tons.	1,154	1,162	1,097	1,212		1,341	1,390			9,092	9,786	-13.5
In British vessels.....thous. of long tons.	716	726	537	535		524	514			3,655	4,766	+30.4
Sault Ste. Marie canals.....thous. of short tons.	None	19,298	12,633	13,247	13,680	11,660	11,721	+3.3	+16.7	53,266	48,858	-8.3
New York State canals.....thous. of short tons.	124	409	400	414	517	292	390	+24.9	+32.6	1,517	1,864	+22.9
Cape Cod Canal.....thous. of short tons.	105,857	110,136	120,261	135,702	148,691	65,849	58,685	+9.6	+153.4	467,637	787,686	+68.4
Suez Canal.....thous. of metric tons.	2,991	2,701	2,538			2,548	2,477					
Welland Canal.....thous. of short tons.	52,469	997,484	1,031,051	1,006,713	1,115,601	752,831	1,011,771	+10.8	+10.3	4,118,807	4,203,318	+2.1
St. Lawrence Canal.....thous. of short tons.	56,931	1,038,485	1,143,735	1,225,338	1,359,561	898,273	1,128,517	+11.0	+20.5	4,573,809	4,824,050	+5.5
Mississippi River Govt. barges.....thous. of short tons.	112,960	117,929	90,658	112,248	112,000	96,643	122,300	- .2	-8.4	813,709	880,979	+8.3
Ohio River, Pittsburgh, Pa., to												
Wheeling, W. Va.....thous. of short tons.	772,624	954,357	931,641	947,227	1,034,775	951,562	1,007,373	+9.2	+2.7	6,229,328	6,495,095	+4.3
Allegheny River.....thous. of short tons.	238,970	344,578	225,960	306,010	346,670	316,859	333,279	+13.3	+4.6	1,564,837	1,742,918	+11.4
Monongahela River.....thous. of short tons.	1,964,311	2,215,732	2,109,892	2,095,606	3,304,619	1,990,824	2,132,449	+10.0	+8.1	16,103,703	16,977,530	+5.4
Ocean Traffic												
Clearances, vessels in foreign trade:												
Total.....thous. of net tons.	5,537	5,906	7,371	7,781	8,377	7,142	7,550	+7.7	+11.0	48,981	50,841	+3.8
American.....thous. of net tons.	2,090	2,837	2,847	3,056	3,173	2,649	2,916	+3.8	+8.8	18,825	19,640	+4.3
Foreign.....thous. of net tons.	3,447	3,159	4,524	4,725	5,204	4,493	4,634	+10.1	+12.3	30,156	31,201	+3.5
Shipbuilding												
Completed during month:												
Total.....gross tons.	9,880	18,428	10,719			25,184	24,352					
Steel seagoing.....gross tons.	1,488	12,604	4,458			19,141	21,145					
Building or under contract, end of month:												
Merchant vessels.....thous. of gross tons.	252	259	264	256		219	216					
Freight Cars												
Surplus (daily av. last week of month):												
Total.....cars.	320,762	304,152	336,181	271,017	201,864	273,275	214,985	-25.5	-6.1			
Box.....cars.	134,069	143,264	170,606	137,618	114,355	154,437	123,901	-16.9	-7.7			
Coal.....cars.	140,091	108,833	114,710	90,513	47,615	76,554	53,204	-47.4	-10.5			
Shortage (daily av. last week of month):												
Total.....cars.	None.	None.	None.	32	8	None.	151	-75.0	-94.7			
Box.....cars.	None.	None.	None.	None.	None.	None.	None.					
Coal.....cars.	None.	None.	None.	32	8	None.	147	-75.0	-94.6			
Car loadings:												
Total.....cars.	3,738,295	4,006,058	4,923,304	3,942,931	4,230,809	3,913,761	4,249,846	+7.3	- .4	33,684,647	32,630,845	-3.1
Grain and grain products.....cars.	159,131	163,113	172,234	207,175	231,181	185,907	220,337	+11.6	+4.9	1,462,670	1,544,442	+5.6
Livestock.....cars.	105,146	106,860	125,933	90,919	98,944	101,952	112,294	+8.8	-11.9	950,990	928,848	-2.3
Coal and coke.....cars.	620,985	670,821	773,431	606,884	686,417	615,635	734,713	+13.1	-6.6	6,433,944	5,706,884	-11.3
Forest products.....cars.	257,316	269,769	330,023	239,751	266,137	253,375	275,856	+11.0	-3.5	2,311,115	2,211,058	-4.3
Ore.....cars.	41,055	165,201	327,983	250,069	253,085	252,013	248,751	+1.2	+1.7	1,301,094	1,143,383	-12.1
Merchandise and l. c. l.....cars.	1,040,999	1,046,138	1,260,705	986,115	1,027,132	989,402	1,042,985	+4.2	-1.5	8,663,796	8,562,092	-1.2
Miscellaneous.....cars.	1,513,663	1,584,156	1,932,995	1,562,018	1,667,913	1,515,477	1,614,910	+6.8	+3.3	12,560,998	12,534,238	- .2
Railroad Operations												
Operating revenue:												
Freight.....thous. of dolls.	355,965	391,116	370,268	381,576		370,112	415,179					
Passenger.....thous. of dolls.	70,951	70,302	81,708	82,722		91,657	91,691					
Total operating.....thous. of dolls.	474,310	510,714	502,474	512,953		509,681	557,436					
Operating expenses.....thous. of dolls.	363,381	381,836	375,086	375,490		383,912	393,294					
Net operating income.....thous. of dolls.	70,548	88,183	85,997	95,226		85,139	118,226					
Freight carried.....mills. ton-miles	35,866	39,250	37,304	39,196		38,369	41,973					
Railway Equipment												
Locomotive (Am. Ry. Assn.):												
Owned, end of month—												
Quantity.....number	60,373	60,284	60,094	59,975	59,769	61,765	61,540	-0.3	-2.9			
Tractive power.....mills. of lbs.	2,595	2,595	2,591	2,590	2,585	2,609	2,603	-4.1	-0.7			
In bad order end of month—												
Quantity.....number	8,563	8,421	8,006	8,310	7,954	8,535	8,502	-4.3	-6.4			
Per cent of total in use.....per cent.	14.3	14.1	13.4	14.0	13.4	14.0	13.9	-4.3	-3.6			

¹ As of Sept. 1.² Final estimates for 1927.³ Revised.⁴ Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (—)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. increase (+) or decrease (—) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
TRANSPORTATION—Continued												
Railway Equipment—Continued												
Locomotive—Continued.												
Installed.....number.....	96	139	95	116	114	155	104	—1.7	+9.6	1,299	995	—23.4
Retired.....number.....	194	228	284	235	320	331	329	+36.2	—2.7	2,221	2,009	—9.5
New orders.....number.....	33	52	7	32	70	26	20	+118.8	+250.0	476	241	—49.4
Shipments, manufacturers' (Census)—												
Total.....number.....	46	41	51	46	34	60	81	—26.1	—58.0	711	394	—44.6
Steam, domestic.....number.....	38	29	39	19	23	35	71	+21.1	—67.6	487	257	—47.2
Electric, domestic.....number.....	6	10	11	5	4	18	6	—20.0	—33.3	109	85	—22.0
Unfilled orders (railroads), end of mo.—												
From manufacturers.....number.....	112	83	90	56	81	173	171	+44.6	—52.6			
In railroad shops.....number.....	25	30	30	17	19	36	36	+11.8	—47.2			
Unfilled orders, manufacturers' (Census)—												
Total.....number.....	188	220	201	198	204	309	363	+3.0	—43.8			
Steam, domestic.....number.....	129	138	109	98	135	299	244	+37.8	—44.7			
Electric, domestic.....number.....	41	39	37	59	26	57	68	—55.9	—61.8			
Exports, steam.....number.....	16	5	15	32	20	16	11	—37.5	+81.8	171	133	+668.8
Freight cars (Am. Ry. Assn.):												
Owned, end of month—												
Quantity.....cars.....	2,301,602	2,300,241	2,300,669	2,300,034	2,299,159	2,330,042	2,328,328	—1.1	—1.3			
Capacity.....mills. of lbs.....	210,234	210,240	210,386	210,437	210,482	211,917	211,935	+1.1	—7.7			
In bad order, end of month—												
Quantity.....cars.....	149,869	151,359	145,210	151,867	149,252	145,590	141,038	—1.7	+5.8			
Per cent of total in use.....per cent.....	6.7	6.7	6.5	6.7	6.6	6.3	6.2	—1.5	+6.5			
New orders.....cars.....	5,683	2,354	2,286	307	767	1,459	1,066	+149.8	—28.0	44,465	23,400	—47.4
Shipments.....cars.....												
Total.....cars.....	4,568	5,908	5,147	4,963	5,295	5,544	5,317	+6.7	—4.4	39,249	30,136	—23.2
Domestic.....cars.....	4,324	5,854	5,115	4,908	5,261	5,528	5,270	+7.2	—2.2	38,740	29,761	—23.2
Unfilled orders (railroads)—												
Total.....cars.....	19,325	17,847	12,446	13,531	8,177	18,303	18,096	—39.6	—54.8			
From manufacturers.....cars.....	17,589	14,168	9,316	10,371	5,673	12,385	13,545	—45.3	—58.1			
In railroad shops.....cars.....	1,736	3,679	3,130	3,160	2,504	5,918	4,541	—20.8	—44.9			
Passenger cars:												
New orders.....cars.....	142	153	57	19	589	69	36			996	1,702	+70.9
Shipments.....cars.....												
Total.....cars.....	51	23	95	123	147	119	152	+19.5	—3.3	760	671	—11.7
Domestic.....cars.....	34	18	95	123	144	119	146	+17.1	—1.4	720	604	—16.1
Passenger Travel												
National parks:												
Visitors.....number.....	71,679	125,102	271,621	553,394	499,633	542,544	492,016	—9.7	+1.5	1,665,225	1,687,702	+1.3
Automobiles entered.....number.....	12,426	23,341	60,321	111,642	98,523	113,026	98,449	—11.8	+1.1	321,314	322,787	+5.5
Arrivals from abroad:												
Immigrants.....number.....	30,709	26,158	20,419	20,682		23,420	28,418			\$ 182,640	\$ 163,272	—10.6
United States citizens.....number.....	32,586	28,407	27,201	32,974		29,935	57,701			\$ 185,726	\$ 207,235	+11.6
Departures abroad:												
Emigrants.....number.....	4,515	6,240	7,205	7,804		9,230	6,322			\$ 34,817	\$ 40,726	+17.0
United States citizens.....number.....	29,506	34,993	53,028	68,463		65,686	43,039			\$ 250,985	\$ 277,348	+10.5
Passports issued.....number.....	27,098	37,648	29,674	15,776	9,866	14,831	10,269	—37.5	—3.3	148,910	155,263	+4.3
Pullman company operations:												
Revenue.....thous. of dolls.....	6,515	6,313	7,432	7,279		7,379	7,528			\$ 46,980	\$ 47,026	+1.1
Passengers carried.....thousands.....	2,713	2,614	3,095	3,073		3,234	3,428			\$ 20,194	\$ 19,569	—3.1
Hotel room occupancy.....per ct. of capacity.....	73	69	64	60	63	62	66	+5.0	—4.5			
Warehouses												
Public merchandise warehouses, space occupied.....per ct. of total.....	69.8	68.6	67.2	66.4								
PUBLIC UTILITIES												
Telephone companies:												
Operating revenue.....thous. of dolls.....	67,337	69,277	68,783	67,676		64,573	65,758			\$ 452,907	\$ 471,786	+4.2
Operating income.....thous. of dolls.....	17,386	17,448	16,941	15,019		14,232	14,972			\$ 112,122	\$ 116,560	+4.0
Telegraph companies:												
Commercial telegraph tolls.....thous. of dolls.....	10,569	11,333	11,169	10,618		10,104	11,241			\$ 72,854	\$ 74,334	+2.0
Operating revenue.....thous. of dolls.....	13,205	14,162	14,036	13,375		12,656	13,894			\$ 90,464	\$ 93,019	+2.8
Operating income.....thous. of dolls.....	1,805	2,258	1,906	1,428		1,417	2,000			\$ 12,136	\$ 11,771	—3.0
Gas and electric companies:												
Gross earnings.....thous. of dolls.....	181,144	180,122	178,000	173,000		161,638	162,647			\$ 1,226,216	\$ 1,283,950	+4.7
Net earnings.....thous. of dolls.....	68,971	67,675	66,000	61,000		53,980	53,551			\$ 445,318	\$ 489,767	+10.0
Electric railways (212 companies):												
Passengers carried.....thous. of persons.....	771,816	797,279	760,509	728,849	736,223	733,470	745,769	+1.0	—1.3	6,272,858	6,199,555	—1.2
Average fare.....cents.....	8,041	8,057	8,081	8,097		7,944	7,952					
Electric power production:												
Total.....mills. of kw. hours.....	6,853	7,130	7,009	7,136		6,477	6,693			\$ 45,888	\$ 49,510	+7.9
By water power.....mills. of kw. hours.....	2,949	3,187	3,103	3,072		2,428	2,411			\$ 17,633	\$ 20,495	+16.2
By fuels.....mills. of kw. hours.....	3,904	3,943	3,906	4,064		4,049	4,282			\$ 28,255	\$ 29,016	+2.7
In street railways, manuf. plants, etc.†.....mills. of kw. hours.....	428	408	372	381		452	460			\$ 3,172	\$ 3,134	—1.2
In central stations†.....mills. of kw. hours.....	6,425	6,722	6,637	6,755		6,025	6,233			\$ 42,716	\$ 46,376	+8.6
Electric power production (Canada):												
Total.....mills. of kw. hours.....	1,233	1,271	1,234	1,243		1,104	1,229			\$ 7,785	\$ 8,936	+14.8
By water power.....mills. of kw. hours.....	1,246	1,255	1,220	1,228		1,090	1,214			\$ 7,680	\$ 8,818	+14.8
Exported.....mills. of kw. hours.....	122	135	127	130		138	157			\$ 919	\$ 897	—2.4
Electric power, gross revenue.....thous. of dolls.....	153,800	\$ 150,300	\$ 149,500	146,400		134,300	135,600			\$ 1,013,200	\$ 9,595,400	+847.0

‡ Cumulative through July 31.

† Revised.

† See table on p. 18 of the September, 1928, issue for earlier data.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Perct Increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
EMPLOYMENT AND WAGES												
Employment in factories:												
Massachusetts.....rel. to 1919-23	80.4	75.4	73.6	72.9	74.2	83.9	85.9	+1.8	-13.6			
New York State.....rel. to 1923	82.9	82.0	82.2	81.5	82.5	85.1	85.7	+1.2	-3.7			
New Jersey.....rel. to 1923	90	90	90	90	91	93	93	+1.1	-2.2			
Pennsylvania.....rel. to 1923	80	80	80	79	81	84	84	+2.5	-3.6			
Delaware.....rel. to 1923	74	75	74	75	74	73	71	-1.3	+4.2			
Maryland.....rel. to 1924	88.5	87.8	86.5	85.6		90.7	92.4					
Iowa.....rel. to 1923	120.5	121.5	124.1	123.3	124.0	117.2	118.7	+6	+4.5			
Illinois.....rel. to 1923	82.6	83.2	85.1	83.4	85.6	84.3	85.5	+2.6	+1			
Wisconsin.....rel. to 1923	91.8	91.8	92.9	96.8	97.9	97.1	98.7	+1.1	-8			
Detroit.....rel. to 1923	116.3	119.0	120.6	125.7	134.7	92.8	94.4	+7.2	+42.7			
Cleveland.....number	76,118	76,556	76,580	76,679	78,420	75,329	74,500	+2.3	+5.3			
Detroit.....number	253,390	259,073	262,651	273,796	293,457	202,156	205,525	+7.2	+42.8			
Milwaukee.....number	36,871	36,777	36,922	37,314	37,385	35,337	35,361	+2	+5.7			
New York State.....number	458,640	453,683	454,952	451,125	456,303	470,811	474,424	+1.1	-3.8			
Oklahoma.....number	26,205	26,553	27,888	29,405	31,137	30,173	30,718	+5.9	+1.4			
Total pay roll:												
New York State (weekly).....thous. of dolls.	13,200	13,241	13,413	13,149	13,411	13,632	13,898	+2.0	-3.5			
Oklahoma (weekly).....thous. of dolls.	709	702	743	793	877	814	819	+10.6	+7.1			
Wisconsin.....rel. to 1923	97.6	99.9	104.8	98.7	108.7	98.1	106.9	+10.1	+1.7			
New York State.....rel. to 1923	87.6	87.8	89.0	87.2	89.0	90.4	92.2	+2.1	-3.5			
New Jersey.....rel. to 1923	96	98	98	96	99	98	101	+3.1	-2.0			
Pennsylvania.....rel. to 1923	80	83	83	76	83	81	85	+9.2	-2.4			
Delaware.....rel. to 1923	75	79	78	74	76	74	75	+2.7	+1.3			
Employment, Canada.....rel. to Jan. 1920	105.5	112.4	116.3	119.9		109.2	109.7					
Employment, trade-unions:												
United States.....per cent of total	84.0	87.0	89.0	88.0	91.0			+3.4				
Canada.....per cent of total	94.8	96.3	96.8	97.5		96.7	96.3					
Anthracite mines:												
Employment.....rel. to 1923-25	112.3	115.9	113.8	105.1		116.9	117.1					
Pay roll.....rel. to 1923-25	86.1	122.1	92.8	62.0		86.3	90.5					
Federal civilian employees, Washington, D. C., end of month.....number												
	61,311	61,422	61,388	61,650		60,433	60,413					
Average weekly earnings, factories:												
Illinois.....dolls.	28.28	28.82	29.28	27.45	29.13	28.32	28.61	+6.1	+1.8			
New York State.....dolls.	28.78	29.19	29.48	29.15	29.39	28.95	29.29	+8	+3			
Wisconsin.....dolls.	25.49	24.07	27.03	24.45		24.22	25.94					
Oklahoma.....dolls.	27.04	26.44	26.24	26.97	28.15	26.98	26.66	+4.4	+5.6			
Massachusetts.....rel. to 1914	230.4	232.9	234.1	234.1	234.6	229.1	236.4	-1	-8			
New York.....rel. to 1914	230.6	233.9	236.2	233.6	235.5	232.0	234.7	+8	+3			
New Jersey.....rel. to 1923	108	110	110	108	109	106	109	+9	0.0			
Pennsylvania.....rel. to 1923	99	103	102	96	102	96	101	+6.3	+1.0			
Delaware.....rel. to 1923	99	104	103	98	102	99	102	+4.1	0.0			
Illinois.....rel. to 1923	104.5	106.5	108.2	101.4	107.6	104.6	105.7	+6.1	+1.8			
Wisconsin.....rel. to 1923	106.3	108.8	112.8	102.0	111.0	101.0	108.2	+8.8	+2.6			
Average weekly earnings (National Industrial Conference Board):												
Grand total (both sexes).....dollars	27.19	27.23	27.30	27.09		26.82	27.16					
Total male.....dollars	30.25	30.07	30.35	29.95		29.27	29.76					
Skilled male.....dollars	31.82	31.44	31.74	31.35		30.74	31.33					
Unskilled male.....dollars	24.47	24.98	25.17	24.69		23.95	24.08					
Total women.....dollars	16.69	16.87	17.01	17.07		17.08	17.26					
Average weekly hours:												
Nominal (both sexes).....hours	49.3	49.4	49.7	49.6		49.7	49.5					
Actual (both sexes).....hours	47.4	47.8	47.7	47.5		47.3	47.8					
Wages, road labor, by districts:												
New England.....cents per hour	50	49	48	47	48	50	49	+2.1	-2.0			
Middle Atlantic.....cents per hour	46	42	42	43	41	47	47	-4.7	-12.8			
South Atlantic.....cents per hour	23	28	26	27	34	30	27	+25.9	+25.9			
East South Central.....cents per hour	26	27	26	25	25	25	26	0.0	-3.8			
West South Central.....cents per hour	27	29	30	27	29	30	28	+7.4	+3.6			
East North Central.....cents per hour	41	38	37	38	39	37	38	+2.6	-2.6			
West North Central.....cents per hour	36	37	36	36	38	37	37	+5.6	+2.7			
Mountain.....cents per hour	46	49	45	44	50	45	46	+13.6	+8.7			
Pacific.....cents per hour	53	51	53	53	53	54	54	0.0	-1.9			
United States, average.....cents per hour	40	40	40	40	42	39	39	+5.0	+7.7			
Wage rates, U. S. Steel Corp.....cents per hour	50	50	50	50	50	50	50	0.0	0.0			
Wages, steel sheet workers.....per cent of base	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	137	128	121	137	129	134	129	-5.8	0.0			
Eastern States.....number	146	138	147	151	223	145	137	+47.7	+62.8			
Central States.....number	147	135	161	150	122	152	156	-12.0	-15.4			
Southern States.....number	219	204	221	174	121	118	122	-30.5	-8			
Western States.....number	69	66	66	80	69	87	70	-13.7	-1.4			
Canada.....number	120	114	118	113		121	109					
Factory Labor Turnover												
(Percentage of number on pay roll)												
Departures:												
Total.....per cent (annual basis)	37.9	42.1	39.5	38.0	41.6	35.7	36.4	+9.5	+14.3			
Voluntary quits.....per cent (annual basis)	25.4	28.7	27.1	27.2	31.9	24.4	23.0	+17.3	+38.7			
Lay offs.....per cent (annual basis)	7.5	8.4	7.5	5.9	4.7	6.0	8.5	-20.3	-44.7			
Discharges.....per cent (annual basis)	5.0	5.0	4.9	4.9	5.0	5.3	4.9	+2.0	+2.0			
Accessions.....per cent (annual basis)	41.3	47.2	41.3	46.9	53.4	37.8	39.6	+13.9	+34.8			
Industrial disputes:												
Disputes.....number	70	74	68	67		63	53					
Workers involved.....number	134,382	136,094	134,963	134,494		199,287	198,444					
Man-days lost in month.....number	4,884,430	3,526,608	3,586,110	3,368,219		5,308,123	4,999,751					

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927	
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928		
DISTRIBUTION MOVEMENT													
Retail Sales													
Mail-order houses:													
Total sales, 2 houses.....thous. of dolls..	40,100	40,074	44,848	40,253	45,994	32,967	37,795	+14.3	+21.7	292,725	328,913	+12.4	
Sears, Roebuck & Co.....thous. of dolls..	24,159	24,203	25,669	26,276	28,986	20,961	23,970	+10.3	+20.9	174,657	201,361	+15.3	
Montgomery Ward & Co.....thous. of dolls..	15,941	15,871	19,179	13,977	17,008	12,006	13,825	+21.7	+23.0	118,068	127,552	+8.0	
Ten-cent chain stores:													
Total sales (4 chains).....thous. of dolls..	39,765	42,234	42,007	38,764	41,050	36,901	39,514	+5.9	+3.9	289,423	311,621	+7.7	
Total stores operated (4 chains).....number..	2,476	2,488	2,509	2,526	2,552	2,335	2,349	+1.0	+8.6				
F. W. Woolworth & Co.....thous. of dolls..	21,937	22,997	22,400	20,592	21,812	20,175	21,400	+5.9	+1.9	158,346	167,692	+5.9	
Stores operated.....number..	1,624	1,634	1,652	1,658	1,675	1,546	1,552	+1.0	+7.9				
S. S. Kresge Co.....thous. of dolls..	10,784	11,340	11,834	10,583	11,272	9,791	10,513	+6.5	+7.2	76,206	84,646	+11.1	
Stores operated.....number..	445	449	450	460	468	404	409	+1.7	+14.4				
McCrary Stores Corp.....thous. of dolls..	3,060	2,974	3,097	2,950	3,116	2,877	3,037	+5.6	+2.6	22,889	23,556	+2.9	
Stores operated.....number..	222	221	223	224	224	213	214	0.0	+4.7				
S. H. Kress & Co.....thous. of dolls..	4,984	4,923	4,766	4,639	4,850	4,058	4,564	+4.5	+6.3	31,982	36,727	+14.8	
Stores operated.....number..	185	184	184	184	185	172	174	+1.5	+6.3				
Metropolitan.....thous. of dolls..	918	972	1,027	908	985	864	965	+8.5	+2.1	6,736	7,166	+6.4	
Stores operated.....number..	93	93	94	96	97	86	90	+1.0	+7.8				
F. & W. Grand.....thous. of dolls..	1,172	1,153	1,259	1,205	1,236	913	947	+2.6	+30.5	7,247	8,854	+22.2	
Stores operated.....number..	65	66	70	73	74	53	54	+1.4	+37.0				
W. T. Grant Co.....thous. of dolls..	3,656	4,086	4,366	3,731	3,996	3,018	3,114	+7.1	+28.3	23,197	29,019	+25.1	
Stores operated.....number..	172	175	181		191	121	126		+51.6				
Restaurant chains:													
Childs Co., sales.....thous. of dolls..	2,171	2,132	2,040	2,012	2,217	2,256	2,462	+10.2	-10.0	19,222	17,391	-9.5	
Stores operated.....number..	118	116	117	109	116	118	119	+6.4	-2.5				
J. R. Thompson Co., sales.....thous. of dolls..	1,207	1,256	1,209	1,163	1,190	1,155	1,183	+2.3	+1.6	9,517	9,669	+1.6	
Stores operated.....number..	119	120	121	121	121	113	114	0.0	+6.1				
Other chain stores:													
Isaac Silver & Bros.....thous. of dolls..	512	469	516	462	460	415	394	-4.4	+16.8	3,094	3,599	+16.3	
Stores operated.....number..	23	23	25	26	26	21	21	0.0	+23.8				
Hartman Corporation.....thous. of dolls..	2,185	1,526	1,170	991	1,416	1,066	1,706	+42.9	-17.0	11,447	10,525	-8.0	
Stores operated.....number..	20	20	20	20	19	17	17	-5.0	+11.8				
J. C. Penny Co.....thous. of dolls..	12,993	14,830	14,129	11,734	12,886	10,442	11,000	+9.8	+17.1	82,208	96,334	+17.2	
Stores operated.....number..	945	953	953	953	981	842	854	+2.9	+14.9				
United Cigar Stores Co.....thous. of dolls..	6,242	6,950	6,740	6,334	6,627	6,593	6,447	+4.6	+2.8	50,875	50,968	+0.2	
Stores operated.....number..	3,151	3,182	3,206	3,226	3,271	3,115	3,143	+1.4	+4.1				
A. Schulte (Inc.).....thous. of dolls..	1,915	2,036	2,075	1,846	1,912	2,447	2,225	+3.6	-14.1	19,336	15,665	-19.0	
Stores operated.....number..	298	291	298	300	300	296	297	0.0	+1.0				
G. C. Murphy Co.....thous. of dolls..	930	896	881	796	873	735	736	+9.7	+18.6	5,659	6,435	+13.7	
Stores operated.....number..	111	115	116	116	116	103	107	0.0	+8.4				
Installment sales in New England dept. stores; ratio to total sales.....per cent..	4.8	5.0	4.6	5.7		6.0	11.2						
Advertising													
Magazine advertising for the following month.....thous. of lines..	2,812	2,571	2,139	1,755	2,279	1,734	2,128	+29.9	+7.1	20,038	20,986	+4.7	
Newspaper advertising.....thous. of lines..	107,115	105,028	98,272	81,244	83,354	84,443	81,316	+2.6	+2.5	788,836	766,076	-2.9	
Postal Business													
Postal receipts:													
50 selected cities.....thous. of dolls..	30,758	31,589	29,990	26,508	27,951	26,300	28,478	+5.4	-1.9	239,815	242,202	+1.0	
50 industrial cities.....thous. of dolls..	3,348	3,276	3,094	2,956	3,115	2,988	3,197	+5.4	-2.6	25,847	26,379	+2.1	
Money orders:													
Domestic paid (50 cities)—													
Quantity.....number..	10,941	11,014	11,145	9,627	10,183	9,529	10,120	+5.8	+1.6	86,138	86,379	+0.3	
Value.....thous. of dolls..	84,068	86,110	85,280	76,227	81,180	76,970	82,538	+6.5	-1.6	676,814	662,722	-2.1	
Domestic issued (50 cities)—													
Quantity.....number..	3,417	3,461	3,382	3,180	3,165	2,994	3,162	-5.5	+1.1	26,011	27,125	+4.3	
Value.....thous. of dolls..	33,967	35,277	34,263	32,812	32,886	32,759	32,234	+1.2	-1.0	269,593	273,138	+1.3	
Air mail, weight dispatched.....pounds..	171,028	199,409	210,957	214,558		99,589	102,051			356,262	1,267,533	+255.8	
BANKING AND FINANCE													
Life Insurance													
<i>(Association of Life Insurance Presidents)</i>													
Policies, new (45 companies):													
Ordinary.....number of policies..	228,861	276,180	298,845	247,376	242,065	216,956	211,482	-2.1	+14.5	1,783,553	1,953,897	+9.6	
Industrial.....number of policies..	980,796	839,453	840,312	753,773	740,371	732,665	781,361	-1.8	-5.2	6,419,211	6,953,191	+8.3	
Group.....number of contracts..	159	172	190	170	159	161	138	-6.5	+15.2	1,407	1,392	-1.1	
Total.....number of policies and contracts..	1,209,816	1,115,805	1,139,347	1,001,319	982,595	949,782	992,981	-1.9	-1.0	8,207,171	8,908,640	+8.5	
Policies and certificates issued:													
Total policies and certificates.....number..	1,246,362	1,164,472	1,191,052	1,040,054	1,007,041	978,721	1,023,331	-3.2	-1.6	9,117,412	9,224,033	+1.2	
Group insurance certificates.....certificates..	36,705	48,839	51,895	38,905	24,605	29,100	30,488	-36.8	-19.3	311,648	316,945	+1.7	
Amount of new insurance (45 companies):													
Ordinary.....thous. of dolls..	706,852	749,297	767,865	655,131	620,220	638,866	625,510	-5.3	-0.8	5,354,242	5,516,356	+3.0	
Industrial.....thous. of dolls..	259,962	216,396	214,882	194,642	193,365	209,835	211,157	-0.7	-8.4	1,736,923	1,811,049	+4.3	
Group.....thous. of dolls..	62,007	205,195	113,711	74,196	56,926	54,229	43,977	-23.3	+29.4	501,687	708,367	+41.2	
Total insurance.....thous. of dolls..	1,028,821	1,170,888	1,096,458	923,969	870,511	893,930	880,644	-5.8	-1.2	7,593,452	8,035,772	+5.8	
Premium collections (45 companies):													
Ordinary.....thous. of dolls..	157,836	165,718	154,916	152,862	143,386	140,517	137,510	-6.2	+4.3	1,154,817	1,246,918	+8.0	
Industrial.....thous. of dolls..	50,691	52,184	51,509	53,072	50,228	47,108	49,220	-5.4	+2.0	369,052	411,454	+11.5	
Group.....thous. of dolls..	5,928	5,930	5,574	7,295	5,705	5,123	5,327	-21.8	+7.1	43,626	62,139	+42.4	
Total.....thous. of dolls..	214,455	223,832	211,999	213,230	199,319	192,748	192,057	-6.5	+3.8	1,567,495	1,720,511	+9.8	
Admitted life insurance assets (41 companies):													
Grand total.....mills. of dolls..	12,001	12,107	12,107	12,312	12,406	11,078	11,172	+8	+11.0				
Mortgage loans—													
Total.....mills. of dolls..	5,199	5,241	5,292	5,338	5,382	4,847	4,898	+8	+9.9				
Farm.....mills. of dolls..	1,602	1,601	1,600	1,601	1,602	1,620	1,622	+1	-1.2				
All other.....mills. of dolls..	3,597	3,640	3,692	3,737	3,780	3,227	3,276	+1.2	+15.4				

* Revised.

† Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS--Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
BANKING AND FINANCE—Continued												
Life Insurance—Continued												
Bonds and stocks (book value):												
Total.....mills. of dolls.	4,563	4,605	4,621	4,665	4,704	4,152	4,192	+1.8	+12.2			
Government.....mills. of dolls.	943	928	905	916	927	920	923	+1.2	+1.4			
Railroad.....mills. of dolls.	2,359	2,372	2,390	2,397	2,411	2,234	2,242	+1.0	+7.5			
Public utility.....mills. of dolls.	1,064	1,097	1,112	1,128	1,138	850	876	+1.9	+29.9			
All other.....mills. of dolls.	197	208	214	224	228	148	161	+1.8	+51.6			
Policy loans and premium notes.....mills. of dolls.	1,426	1,442	1,459	1,472	1,486	1,316	1,327	+1.0	+12.0			
(Life Insurance Sales Research Bureau)												
Sales of ordinary life insurance (81 companies):												
United States total.....thous. of dolls.	769,263	834,557	805,695	700,939	702,275	680,076	681,654	+1.2	+3.0	5,678,778	5,985,352	+3.8
Eastern manuf. dist.....thous. of dolls.	314,944	343,822	333,895	273,188	273,055	267,873	261,413	0.0	+4.5	2,372,293	2,462,924	+3.8
Western manuf. dist.....thous. of dolls.	165,567	180,589	176,121	163,694	163,568	151,721	154,708	-1.1	+5.7	1,272,760	1,325,302	+4.1
Western agric. district.....thous. of dolls.	119,317	128,946	121,089	107,659	104,287	105,250	103,638	-3.1	+6.6	852,159	904,047	+6.1
Southern district.....thous. of dolls.	94,128	99,513	96,796	85,056	86,288	86,058	86,549	+1.4	-3.3	692,831	708,607	+2.3
Far western district.....thous. of dolls.	75,307	81,687	77,794	71,342	75,077	69,174	75,346	+5.2	-4.4	578,735	584,457	+1.0
Canada total, 15 companies.....thous. of dolls.	46,718	49,870	51,844	49,492	43,503	39,962	38,360	-12.1	+13.4	325,198	374,109	+15.0
Banking												
Check payments:												
New York City.....mills. of dolls.	41,778	45,270	45,455	35,085	35,102	30,750	31,653	0.0	+10.9	251,877	318,100	+26.3
Outside New York City.....mills. of dolls.	25,225	26,346	27,029	23,897	23,401	22,932	22,048	-2.1	+6.1	183,510	198,507	+8.2
Canada.....mills. of dolls.	1,729	2,279	1,740	1,896	1,813	1,476	1,474	-4.4	+23.0	11,802	14,811	+25.5
Federal reserve banks:												
Bills discounted.....mills. of dolls.	757	944	1,191	1,086	1,039	398	401	+4.3	+139.1			
Notes in circulation.....mills. of dolls.	1,591	1,593	1,600	1,613	1,651	1,662	1,676	+1.2	+1.5			
Total investments.....mills. of dolls.	656	525	430	578	394	556	658	+4.2	-40.1			
Total reserve.....mills. of dolls.	2,868	2,757	2,693	2,756	2,765	3,181	3,146	+1.3	-12.1			
Total deposits.....mills. of dolls.	2,494	2,408	2,459	2,402	2,325	2,330	2,341	-3.2	-7.7			
Reserve ratio.....per cent.	70.2	68.9	65.4	68.6	69.5	79.7	78.3	+1.3	-11.2			
Federal reserve member banks:												
Total loans and discounts.....mills. of dolls.	15,951	15,893	16,089	15,861	15,729	14,488	14,697	-8.8	+7.0			
Total investments.....mills. of dolls.	6,637	6,683	6,647	6,589	6,405	5,992	5,927	-2.8	+8.1			
Net demand deposits.....mills. of dolls.	13,946	13,628	13,574	13,186	12,871	13,200	13,349	-2.4	-3.6			
Brokers' loans, end of month:												
To N. Y. Stock Ex. members—												
Total.....mills. of dolls.	4,908	5,274	4,898	4,837	5,051	3,642	3,674	+4.4	+37.5			
Ratio to market value.....per cent.	8.95	9.46	9.25	9.00	8.80	8.10	8.06	-2.2	+9.2			
By New York F. R. member banks.....mills. of dolls.	4,282	4,469	4,307	4,259	4,235	3,141	3,181	-6.6	+33.0			
Interest rates:												
Time loans, 90 days.....per cent.	4.94	5.25	4.09	6.00	6.25	4.44	4.13	+4.2	+51.3			
Call loans, renewal.....per cent.	5.08	5.70	6.21	6.05	6.87	4.05	3.68	+13.6	+86.7			
Prime com. paper (4-6 mos.).....per cent.	4.38	4.50	4.88	5.13	5.38	4.25	4.00	+4.9	+34.5			
Prime bankers' acceptances.....per cent.	3.75	4.00	4.07	4.25	4.63	3.50	3.13	+8.9	+47.9			
N. Y. Fed. Res. Bank (redisc.).....per cent.	4.00	4.50	4.50	5.00	5.00	4.00	3.50	0.0	+42.9			
Federal land banks.....per cent.	5.06	5.47	5.47	5.04	5.04	5.19	5.17	0.0	-2.5			
Intermediate credit banks.....per cent.	4.60	4.60	4.60	4.75	4.92	4.50	4.50	+3.6	+9.3			
Deposits, New York State savings banks, end of month.....mills. of dolls.												
	4,262	4,253	4,307	4,282	4,298	4,025	4,035	+1.4	+6.5			
Public Finance												
Government debt, gross, end mo.....mills. of dolls.												
	17,848	17,756	17,604	17,526	17,648	18,463	18,380	+7.7	-4.0			
Customs receipts.....thous. of dolls.	45,740	41,438	44,162	44,591	52,797	50,481	52,982	+18.4	-3.3	390,146	361,110	-7.4
Total ordinary receipts.....thous. of dolls.	169,965	164,932	178,927	154,859	173,495	173,970	202,182	+12.0	-14.2	2,474,027	2,380,762	-3.8
Expenditures chargeable to ordinary receipts.....thous. of dolls.	326,709	217,091	404,607	278,620	308,594	203,579	259,181	+10.5	+19.1	2,143,105	2,306,394	+7.6
Money in circulation, end mo.:												
Total.....mills. of dolls.	4,748	4,744	4,797	4,701	4,806	4,846	4,854	+2.2	-1.0			
Per capita.....dolls.	40.20	40.12	40.52	39.67		41.40	41.42					
Gold and Silver												
Gold:												
Domestic receipts at mint.....fine ounces	65,166	75,983	70,205	72,676	98,769	91,428	91,245	+35.9	+8.2	605,169	596,414	-1.4
Rand output.....fine ounces	825,907	886,186	862,363	867,211	891,000	851,861	863,345	+2.7	+3.2	6,733,485	6,870,037	+2.0
Imports.....thous. of dolls.	5,319	1,968	20,001	10,331	2,445	10,738	7,877	-76.3	-69.6	179,987	96,953	-46.1
Exports.....thous. of dolls.	96,469	83,689	99,932	74,190	1,698	1,803	1,521	-97.7	+11.4	33,198	531,406	
Monetary stock, end mo.....mills. of dolls.												
	4,266	4,160	4,109	4,113	4,125	4,580	4,588	+3.3	-10.1			
Silver:												
Production—												
United States.....thous. of fine oz.	4,668	4,574	4,945	4,915	4,499	4,838	5,145	+14.9	-12.6	39,716	37,404	-5.8
Canada.....thous. of fine oz.	1,388	1,222	1,401	1,389	2,252	1,752	2,388	-5.7	-5.7	13,586	12,826	-5.6
Stocks, end of month—												
United States.....thous. of fine oz.	128	133	479	262	263	904	508	+1.4	-48.2			
Canada.....thous. of fine oz.	550	456	707	430	720	847	624	+67.4	+15.4			
Imports.....thous. of dolls.	4,888	4,247	6,221	6,544	6,496	4,288	4,856	-7.7	+33.8	36,149	41,493	+23.1
Exports.....thous. of dolls.	6,587	6,712	7,456	6,166	9,246	6,650	5,590	+50.1	+65.4	50,232	57,737	+14.9
Price at New York.....dolls. per fine oz.	.574	.603	.600	.592	.589	.564	.547	-5.5	+7.7			
Business Failures												
Liabilities (United States):												
Total commercial.....thous. of dolls.	34,985	36,117	27,978	29,587	58,202	43,150	39,196	+96.7	+48.5	363,874	334,388	-8.1
Manufacturers.....thous. of dolls.	13,236	14,230	12,723	12,932	16,877	16,743	14,921	+30.5	+13.1	137,213	118,032	-14.0
Trade establishments.....thous. of dolls.	16,049	18,900	13,781	12,899	19,096	16,832	14,702	+48.0	+29.9	167,803	158,309	-5.7
Agents and brokers.....thous. of dolls.	5,700	2,987	3,324	3,755	22,229	9,575	9,573	+492.0	+132.2	58,858	59,896	+1.8
Liabilities (Canada).....thous. of dolls.												
	1,556	3,707	1,681	1,406	2,589	1,827	1,692	+84.1	+53.0	16,137	25,029	+55.1

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1928 from 1927	
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928		
BANKING AND FINANCE—Continued													
Business Failures—Continued													
Firms (United States):													
Total commercial.....	number..	1,818	2,008	1,950	1,723	1,852	1,756	1,708	+7.5	+8.4	15,760	16,406	+4.1
Manufacturers.....	number..	432	470	513	450	493	448	438	+9.6	+12.6	3,730	3,925	+5.2
Trade establishments.....	number..	1,276	1,407	1,325	1,161	1,241	1,187	1,174	+6.9	+5.7	11,123	11,503	+3.4
Agents and brokers.....	number..	110	131	109	112	112	121	96	0.0	+16.7	907	969	+6.8
Firms (Canada).....	number..	125	127	127	124	135	144	145	+8.9	-6.9	1,352	1,208	-10.7
Dividend and Interest Payments													
(For the following month)													
Grand total.....	thous. of dolls.	334,850	467,225	719,196	333,400	408,600	313,475	392,250	+22.6	+4.2	4,136,898	4,336,601	+4.8
Interest payments.....	thous. of dolls.	203,500	316,900	466,704	182,000	262,500	161,100	250,100	+44.2	+5.0	2,543,273	2,699,004	+6.1
Dividend payments:													
Total.....	thous. of dolls.	131,350	150,325	252,492	151,400	146,100	152,375	142,150	-3.5	+2.8	1,583,625	1,637,597	+3.4
Industrial and misc.....	thous. of dolls.	96,550	118,050	184,892	109,450	118,450	111,200	115,300	+8.2	+2.7	1,156,275	1,200,042	+3.8
Steam railroads.....	thous. of dolls.	27,100	26,075	34,500	35,200	20,400	34,675	19,750	-42.0	+3.3	263,575	273,155	+3.6
Street railways.....	thous. of dolls.	7,700	6,200	13,600	6,750	7,250	6,500	7,100	+7.4	+2.1	84,275	89,900	+6.7
New Security Issues													
Foreign loans in the U. S.	thous. of dolls.	141,840	233,755	268,179	45,000	-----	67,072	105,145	-----	-----	966,495	1,098,165	+13.6
Foreign governments.....	thous. of dolls.	87,130	79,885	48,550	41,396	-----	25,596	81,000	-----	-----	516,875	539,870	+4.4
Total corporation.....	thous. of dolls.	833,206	757,834	828,434	323,748	199,426	371,095	444,278	-38.4	-55.1	4,646,354	4,870,867	+4.8
Purpose of issue--													
New capital.....	thous. of dolls.	484,096	583,357	645,883	284,803	180,716	341,658	277,832	-36.5	-35.0	3,434,308	3,379,453	-1.6
Refunding.....	thous. of dolls.	349,116	174,477	182,551	38,945	18,710	29,437	166,446	-52.0	-88.8	1,212,046	1,491,414	+23.0
Kinds of issue--													
Stocks.....	thous. of dolls.	310,263	321,257	409,611	208,212	73,892	79,052	153,887	-64.5	-52.0	1,117,325	1,833,733	+64.1
Bonds and notes.....	thous. of dolls.	522,943	436,577	418,823	115,538	125,534	292,043	290,391	+8.7	-56.8	3,529,030	3,037,135	-13.9
Class of industry--													
Railroads.....	thous. of dolls.	95,053	28,601	42,158	18,874	13,726	14,306	183,764	-27.3	-92.5	820,282	543,631	-33.7
Public utilities.....	thous. of dolls.	380,541	242,497	378,637	57,598	97,776	115,360	109,821	+69.8	-11.0	1,704,603	1,856,762	+8.9
Industrials.....	thous. of dolls.	138,172	150,783	190,356	98,810	32,989	69,127	65,392	-66.6	-49.6	743,981	954,844	+28.3
Oil.....	thous. of dolls.	7,300	22,929	21,241	15,030	-----	20,750	25,000	-----	-----	333,138	102,327	-69.3
Land and buildings.....	thous. of dolls.	97,152	82,253	74,071	64,538	30,256	48,936	38,292	-53.1	-21.0	448,706	548,984	+22.3
Shipping and misc.....	thous. of dolls.	114,988	230,272	121,971	68,374	44,678	102,616	22,009	-34.7	+103.0	531,881	870,089	+63.6
Bond sales (Canada):													
Govt. and provincial.....	thous. of dolls.	36	30,000	10,734	-----	-----	-----	-----	-----	-----	54,966	49,770	-9.5
Municipal.....	thous. of dolls.	2,312	4,347	2,158	975	964	4,799	904	-1.1	+6.6	41,993	17,110	-59.3
Corporation.....	thous. of dolls.	41,845	57,970	77,193	9,565	4,095	31,557	6,625	-57.2	-38.2	145,035	210,744	+45.3
States and municipalities:													
Permanent loans.....	thous. of dolls.	130,211	147,935	136,244	75,991	69,577	86,268	88,878	-8.4	-21.7	1,014,529	927,630	-8.6
Temporary loans.....	thous. of dolls.	78,001	14,896	44,621	56,989	26,249	19,288	60,382	-53.9	-56.5	411,401	482,824	+17.4
Tax-exempt securities outstand- ing, end of month.....	mills. of dolls.	16,659	16,724	16,847	16,839	-----	15,785	15,850	-----	-----	-----	-----	-----
Agricultural Finances													
Loans outstanding, end mo.:													
War Finance Corporation.....	thous. of dolls.	985	926	904	781	747	4,731	4,569	-4.4	-83.7	-----	-----	-----
Stocks and Bonds													
Stock prices, average daily closing:													
25 industrials, average.....	dolls. per share.	263.34	267.38	252.94	257.98	267.16	221.90	229.99	+3.6	+16.2	-----	-----	-----
25 railroads, average.....	dolls. per share.	123.09	125.39	118.64	119.18	121.57	117.00	117.42	+2.0	+3.5	-----	-----	-----
103 stocks, average.....	dolls. per share.	159.16	162.58	147.69	146.71	151.24	125.83	141.17	+3.1	+7.1	-----	-----	-----
Southern cotton mills.....	dolls. per share.	110.97	110.58	110.42	108.17	104.82	112.48	111.05	-3.1	-5.6	-----	-----	-----
Stock prices, average weekly closing:													
Industrials, rails, and utilities													
(394).....	rel. to 1926	145.9	152.1	145.3	144.2	148.3	117.2	122.0	+2.8	+21.6	-----	-----	-----
All industrials (325).....	rel. to 1926	149.5	154.9	148.2	147.8	152.6	116.7	112.3	+3.2	+35.9	-----	-----	-----
Railroads (33).....	rel. to 1926	130.7	133.2	120.7	124.6	126.5	120.7	123.1	+1.5	+2.8	-----	-----	-----
All utilities (36).....	rel. to 1926	142.5	155.3	148.1	145.3	147.9	114.9	118.5	+1.8	+24.8	-----	-----	-----
Automobiles (14).....	rel. to 1926	241.4	249.4	235.3	238.4	244.7	144.5	157.4	+2.6	+55.5	-----	-----	-----
Chain stores (18).....	rel. to 1926	135.6	139.0	136.8	135.3	142.9	110.0	119.7	+5.6	+19.4	-----	-----	-----
Copper and brass (10).....	rel. to 1926	143.7	151.5	147.5	150.0	155.2	103.1	110.0	+3.5	+41.1	-----	-----	-----
Food, other than meat (23).....	rel. to 1926	154.9	158.4	152.4	152.1	158.1	120.7	124.3	+3.9	+27.2	-----	-----	-----
Machinery and machine													
equipment (10).....	rel. to 1926	133.6	138.0	132.3	132.7	135.4	106.9	111.1	+2.0	+21.9	-----	-----	-----
Oil producing and refining (16).....	rel. to 1926	109.7	118.7	112.0	110.9	112.6	95.8	99.3	+1.5	+13.4	-----	-----	-----
Railroad equipment (9).....	rel. to 1926	137.4	135.2	127.1	125.1	123.6	126.2	131.9	-1.2	-6.3	-----	-----	-----
Steel and iron (10).....	rel. to 1926	145.5	145.6	137.7	136.6	143.6	124.1	132.7	+5.1	+8.2	-----	-----	-----
Textiles (23).....	rel. to 1926	119.1	120.0	110.4	106.4	105.9	99.0	102.4	-1.5	+3.4	-----	-----	-----
Theaters, motion pictures, and													
amusements (7).....	rel. to 1926	111.3	115.6	111.5	111.0	116.6	96.1	99.4	+5.0	+17.3	-----	-----	-----
Automobile tires, rubber													
goods, etc. (7).....	rel. to 1926	127.4	128.8	115.8	113.3	119.3	106.3	114.5	+5.3	+4.2	-----	-----	-----
Tobacco and tobacco products													
(10).....	rel. to 1926	149.1	140.0	134.9	134.3	137.6	139.9	142.0	+2.5	-3.1	-----	-----	-----
Traction, motor transporta- tion, etc. (9).....	rel. to 1926	106.7	105.9	97.3	96.0	95.7	96.8	94.3	-1.3	+1.5	-----	-----	-----
Stock yields:													
Common.....	per cent.	4.49	4.36	4.53	4.56	4.52	5.25	5.12	-1.9	-11.7	-----	-----	-----
Preferred, high grade.....	per cent.	5.18	5.21	5.32	5.40	5.43	5.52	5.48	+0.6	-0.9	-----	-----	-----
Stock sales, N. Y. Stock Exch.	thous. of shares	80,365	82,164	63,741	39,001	67,704	38,493	51,057	+73.6	+32.6	368,391	522,295	+41.8
Bond sales:													
Miscellaneous.....	thous. of dolls.	301,084	263,385	246,885	183,815	173,561	252,423	290,948	-5.6	-40.3	2,347,905	1,965,361	-16.3
Liberty-Treasury.....	thous. of dolls.	14,489	14,764	14,517	25,240	9,988	17,289	13,070	-60.4	-23.6	208,267	128,383	-38.4
Total.....	thous. of dolls.	315,573	278,152	261,402	209,055	183,549	269,712	304,018	-12.2	-39.6	2,556,172	2,093,744	-18.1

* Revised.

* Cumulative through September 30.

* Data not comparable with those shown previously.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	July	August	August, 1928, from July, 1928	August, 1928, from August, 1927	1927	1928	
BANKING AND FINANCE—Continued												
Stocks and Bonds—Continued												
Bond prices:												
Highest-grade rails . . . p. ct. of par, 4% bond	95.33	94.49	92.04	90.62	89.66	93.57	94.58	-1.1	-5.2			
Second-grade rails . . . p. ct. of par, 4% bond	87.89	86.92	84.42	83.09	80.99	84.16	85.43	-2.5	-5.2			
Public utility p. ct. of par, 4% bond	82.17	81.42	79.51	79.47	79.08	76.85	78.23	-5	+1.1			
Industrial p. ct. of par, 4% bond	81.09	80.73	79.39	77.74	77.97	78.60	79.55	+3	-2.0			
Comb. price index . . . p. ct. of par, 4% bond	86.26	85.54	83.54	82.45	81.68	82.81	83.98	-9	-2.7			
Bond prices, 1st of following month:												
5 Liberty bonds p. ct. of par	105.98	105.03	105.16	103.20	103.88	103.58	104.14	+7	-2			
16 foreign govt. and city . . . p. ct. of par	105.46	105.28	104.84	104.85	104.77	105.42	105.67	-1	-9			
Comb. price index, 66 bonds . . p. ct. of par	102.44	101.71	101.14	100.05	100.36	100.79	101.34	+3	-1.6			
Bond yields:												
Total, 60 high grade per cent.	4.35	4.42	4.50	4.54	4.59	4.51	4.48	+1.1	+2.5			
Railroads (15) per cent.	4.24	4.27	4.35	4.44	4.49	4.34	4.32	+1.1	+3.9			
Industries (15) per cent.	4.78	4.81	4.91	4.95	4.96	4.86	4.81	+2	+3.1			
Utilities (15) per cent.	4.56	4.57	4.66	4.68	4.73	4.81	4.78	+1.1	-1.0			
Municipal (15) per cent.	3.93	4.02	4.09	4.13	4.15	4.02	4.06	+7	+4.6			
Municipal (20) per cent.	3.93	4.01	4.06	4.13		4.06	4.02					
U. S. Treasury notes and certificates, 3-6 months . . . per cent.	3.62	3.90	3.97	4.26	4.43	2.96	2.70	+4.6	+64.1			
Liberty and Treasury bonds . . per cent.	3.32	3.35	3.40	3.50	3.56	3.48	3.45	+1.7	+3.2			
Long-term real-estate bonds issued:												
Grand total thous. of dolls.	87,748	77,450	66,364	48,495	21,947	39,719	32,247	-54.7	-31.9	389,434	465,973	+19.7
Purpose of issue—												
Finance construction thous. of dolls.	29,220	44,515	27,400	18,581	9,970	12,223	19,435	-46.3	-48.7	174,186	190,050	+9.1
Real-estate mortgage thous. of dolls.	36,865	20,910	6,763	24,079	5,590	15,040	4,482	-76.8	+24.7	105,104	145,374	+38.3
Acquisitions and improvements thous. of dolls.	16,323	2,600	2,610	1,510	3,252	4,575	2,080	+115.4	+56.3	53,043	49,228	-7.2
Kind of structure—												
Office and commercial thous. of dolls.	14,605	45,175	22,430	9,786	4,785	6,828	7,769	-51.1	-37.9	119,738	160,161	+33.8
Hotels thous. of dolls.	11,395	10,300	885	4,020	2,200	2,065	7,170	-45.3	-69.3	32,831	34,160	+4.0
Apartments thous. of dolls.	3,635	4,265	4,085	4,600	3,145	3,680	4,700	-31.6	-33.1	37,252	30,009	-19.4
FOREIGN EXCHANGE RATES												
Europe:												
England dolls. per £ sterling	4.88	4.88	4.88	4.86	4.85	4.86	4.86	-2	-2			
France dolls. per franc	.039	.039	.039	.039	.039	.039	.039	0.0	0.0			
Italy dolls. per lira	.053	.053	.053	.052	.052	.055	.054	0.0	-3.7			
Belgium dolls. per franc	.140	.140	.140	.139	.139	.139	.139	0.0	0.0			
Netherlands dolls. per guilder	.403	.404	.403	.403	.401	.401	.401	-5	0.0			
Sweden dolls. per krone	.269	.268	.268	.268	.268	.268	.268	0.0	0.0			
Switzerland dolls. per franc	.193	.193	.193	.193	.193	.193	.193	0.0	0.0			
Asia:												
Japan dolls. per yen	.477	.466	.466	.459	.451	.471	.473	-1.7	-4.7			
India dolls. per rupee	.366	.366	.365	.363	.363	.361	.361	0.0	+6			
America:												
Canada dolls. per Canadian doll.	1.000	.999	.998	.998	1.000	.999	.999	+2	+2			
Argentina dolls. per gold peso	.972	.972	.969	.961	.959	.966	.968	-2	-9			
Brazil dolls. per milreis	.120	.120	.120	.119	.119	.118	.118	0.0	+8			
Chile dolls. per paper peso	.120	.122	.122	.121	.121	.120	.120	0.0	+8			
U. S. FOREIGN TRADE												
Imports												
Grand total thous. of dolls.	345,194	353,981	317,289	317,804	346,806	319,298	368,826	+9.1	-6.0	2,811,293	2,750,489	-2.2
By grand divisions:												
Europe—												
Total thous. of dolls.	94,282	104,335	95,565	97,688		96,651	110,169			\$ 819,883	\$ 699,656	-14.7
France thous. of dolls.	10,429	11,157	11,927	11,293		11,820	14,729			\$ 104,903	\$ 83,447	-20.5
Germany thous. of dolls.	16,725	16,136	15,788	20,662		16,148	17,857			\$ 125,635	\$ 122,928	-2.2
Italy thous. of dolls.	7,899	8,588	8,169	6,949		7,896	8,578			\$ 69,499	\$ 56,788	-18.3
United Kingdom thous. of dolls.	28,097	35,047	27,854	28,113		29,343	33,038			\$ 232,184	\$ 263,950	-12.2
North America—												
Total thous. of dolls.	84,978	85,915	73,901	77,735		77,830	82,865			\$ 664,859	\$ 567,001	-14.7
Canada thous. of dolls.	35,044	42,993	41,015	41,784		38,158	39,973			\$ 302,838	\$ 273,651	-9.6
South America—												
Total thous. of dolls.	49,772	47,376	51,099	45,644		37,651	46,401			\$ 344,240	\$ 347,749	+1.0
Argentina thous. of dolls.	9,746	10,713	10,319	8,119		6,771	9,694			\$ 63,977	\$ 65,135	+1.8
Asia and Oceania—												
Total thous. of dolls.	109,772	109,724	87,252	89,769		100,261	123,707			\$ 917,180	\$ 733,403	-29.0
Japan thous. of dolls.	29,505	38,536	22,306	24,890		30,625	47,482			\$ 272,896	\$ 211,579	-22.5
Africa, total thous. of dolls.	6,391	6,617	9,472	6,968		6,925	5,677			\$ 65,130	\$ 55,860	-14.2
By classes and commodities:												
Crude materials thous. of dolls.	127,034	137,799	109,694	106,030	122,146	121,185	144,232	+15.2	-15.3	1,110,867	1,012,526	-8.9
Foodstuffs, crude, and food animals thous. of dolls.	46,049	47,969	48,334	43,174	45,939	34,269	42,656	+6.4	+7.7	326,537	380,763	+16.6
Manufactured foodstuffs thous. of dolls.	43,276	34,232	30,005	33,314	30,090	35,076	35,471	-9.8	-15.3	311,882	274,657	-11.9
Seminanufactures thous. of dolls.	60,672	59,084	57,658	60,045	66,492	61,523	66,691	+10.7	-7	499,568	493,498	-1.2
Finished manufactures thous. of dolls.	68,163	74,896	71,598	75,242	82,168	67,244	79,770	+9.2	+3.0	562,439	586,045	+4.2
Exports												
Grand total, including reexports thous. of dolls.	363,925	421,888	388,563	378,768	381,000	341,809	374,751	+6	+1.7	3,082,856	3,136,985	+1.8
By grand division:												
Europe—												
Total thous. of dolls.	161,620	188,160	161,481	152,342		143,189	168,282			\$ 1,231,018	\$ 1,249,915	+1.5
France thous. of dolls.	13,114	18,525	15,712	15,918		11,411	14,403			\$ 112,551	\$ 119,023	+5.8
Germany thous. of dolls.	26,435	32,078	28,365	22,094		24,133	30,236			\$ 244,444	\$ 227,102	-7.1
Italy thous. of dolls.	11,014	15,149	11,254	11,853		7,940	9,332			\$ 68,823	\$ 88,765	+29.0
United Kingdom thous. of dolls.	56,953	61,161	52,230	52,120		52,789	57,670			\$ 468,272	\$ 436,285	-6.8
North America—												
Total thous. of dolls.	101,900	123,489	114,005	110,530		98,724	109,058			\$ 713,770	\$ 739,102	+3.5
Canada thous. of dolls.	70,471	88,978	81,888	77,325		64,772	75,241			\$ 468,168	\$ 506,662	+8.2

* Revised.

* Cumulative through July 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"

	1928				1927		1926		1925		1924		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	April	May	June	July	August	from July, 1928	from August, 1927	1927	1928	1927	1928	1927	1928
U. S. FOREIGN TRADE—Continued													
Exports—Continued													
By grand division—Continued													
South America—													
Total.....thous. of dolls.	\$ 33,825	\$ 38,242	\$ 39,005	\$ 43,907	36,034	38,391		\$ 256,066	\$ 261,474				+2.1
Argentina.....thous. of dolls.	11,776	14,082	15,692	16,736	15,239	15,678		\$ 90,786	\$ 96,910				+6.7
Asia and Oceania—													
Total.....thous. of dolls.	\$ 59,151	\$ 63,014	\$ 63,520	\$ 61,979	54,318	50,492		\$ 446,290	\$ 440,583				-1.3
Japan.....thous. of dolls.	16,985	22,998	21,628	17,987	15,190	12,199		\$ 142,717	\$ 140,900				-1.3
Africa, total.....thous. of dolls.	\$ 7,420	\$ 8,983	\$ 10,552	\$ 9,950	9,545	8,527		\$ 60,957	\$ 64,912				+6.5
Total domestic exports only.....thous. of dolls.	\$ 356,057	\$ 413,728	\$ 380,306	\$ 371,450	332,994	367,575	0.0	+1.0	3,010,781	3,067,458			+1.9
By classes of commodities:													
Crude materials.....thous. of dolls.	74,394	\$ 89,811	74,920	\$ 60,177	52,389	55,023	55,135	-12.9	-5.0	666,894	650,655		-2.4
Foodstuffs, crude, and food animals.....thous. of dolls.	13,203	19,738	\$ 17,158	\$ 14,212	29,308	21,910	46,770	+106.2	-37.3	219,227	139,824		-36.2
Manufactured foodstuffs.....thous. of dolls.	32,866	33,123	\$ 31,222	\$ 30,666	34,870	31,278	34,160	+13.7	+2.1	294,644	288,327		-2.1
Semimanufactures.....thous. of dolls.	56,320	\$ 67,049	\$ 63,069	\$ 61,397	56,093	59,354	59,786	-8.4	-6.2	474,293	486,527		+2.6
Finished manufactures.....thous. of dolls.	\$ 179,274	\$ 204,007	193,938	\$ 204,999	198,769	165,429	171,724	-3.0	+15.7	1,355,724	1,502,127		+10.8
Agricultural exports (quantities):													
All commodities.....rel. to 1910-14.....	82	92	76	64	75	75	94	+17.2	-20.2				
All commodities except cotton.....rel. to 1910-14.....	99	103	91	84	126	102	155	+50.0	-18.7				
CANADIAN FOREIGN TRADE													
Total trade:													
Imports.....thous. of dolls.	78,490	113,582	110,694	103,404	114,175	91,369	99,348	+10.4	+14.9	724,550	806,201		+11.3
Exports.....thous. of dolls.	60,455	120,154	109,139	127,369	113,904	80,787	95,955	-10.6	+18.7	745,932	814,983		+9.3

¹ Revised.

² Cumulative through July 31.

IMPORTS OF RAW COCOA ¹

(In long tons)

MONTH	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
January.....	4,630	5,026	7,770	7,786	6,365	8,564	7,659	10,664	12,850	16,385
February.....	3,890	3,966	6,426	6,514	7,351	9,206	9,742	9,535	16,738	12,078
March.....	4,170	6,018	7,911	6,398	9,622	11,235	10,559	9,287	29,216	15,783
April.....	13,702	3,800	6,203	8,902	5,693	7,142	13,093	10,041	11,158	19,696
May.....	3,548	5,238	5,463	7,544	4,734	6,506	7,003	7,839	16,332	22,791
June.....	4,810	5,032	5,223	7,034	4,580	4,838	6,078	12,441	16,387	19,963
July.....	3,919	5,079	5,180	7,392	6,573	4,635	8,122	11,152	15,094	9,970
August.....	2,866	3,401	5,135	4,206	4,882	4,504	9,797	9,395	16,529	11,299
September.....	1,711	2,264	1,585	2,673	5,403	5,343	7,442	9,360	7,687	8,993
October.....	2,848	2,637	2,205	2,988	3,671	7,804	6,426	4,129	7,310	6,234
November.....	3,227	4,249	2,176	2,921	3,474	4,200	7,808	9,435	14,673	9,460
December.....	4,862	5,006	4,707	3,992	7,197	5,231	9,184	5,033	10,154	8,044
Total.....	54,183	51,716	59,984	68,350	69,545	79,208	102,913	108,311	174,128	160,696
Monthly average.....	4,515	4,310	4,999	5,696	5,795	6,601	8,576	9,026	14,511	13,391
	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
January.....	6,902	18,415	11,384	7,319	16,528	15,872	8,995	23,504	27,643	16,600
February.....	6,471	17,033	9,755	14,426	14,379	28,406	25,988	16,280	19,818	16,212
March.....	10,283	20,058	22,323	26,486	25,832	16,617	24,896	24,132	28,236	18,726
April.....	16,806	23,002	13,507	21,281	22,260	15,813	15,439	20,720	18,826	16,750
May.....	26,525	11,151	18,586	16,396	17,022	10,509	13,305	14,745	10,178	18,604
June.....	18,761	9,005	15,724	10,866	17,102	13,950	12,456	17,252	11,529	23,336
July.....	23,622	13,306	8,386	13,150	11,195	16,112	12,159	13,143	10,538	
August.....	10,203	8,582	6,403	10,359	15,339	15,904	14,399	9,548	13,310	
September.....	13,277	7,026	6,043	6,245	7,149	8,400	12,139	6,221	10,444	
October.....	9,487	8,374	9,990	10,886	13,999	6,744	9,840	7,960	11,340	
November.....	12,483	9,291	8,885	8,296	8,827	6,159	8,243	16,906	12,057	
December.....	19,911	8,180	5,093	8,257	15,295	16,390	12,685	19,806	15,807	
Total.....	174,731	153,423	136,079	153,967	184,927	168,876	170,544	190,307	189,726	
Monthly average.....	14,561	12,785	11,340	12,831	15,411	14,073	14,212	15,859	15,811	

¹ Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce.

OHIO—EMPLOYMENT ¹

(Relative to 1923 as 100)

MONTH	Manufacturing						Construction					
	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928
January.....	94.7	97.4	94.6	103.7	101.7	97.0	69.6	76.0	84.6	87.8	87.5	79.6
February.....	98.1	99.8	95.9	104.7	103.7	101.5	65.8	74.9	85.4	85.6	95.8	76.2
March.....	102.4	101.0	97.2	105.3	106.5	103.8	74.6	81.4	92.7	77.8	93.9	88.8
April.....	102.4	99.3	97.7	104.7	106.2	103.6	88.6	102.1	108.4	94.4	99.9	103.2
May.....	103.5	93.9	99.0	104.5	106.7	104.2	101.7	111.1	117.7	106.3	110.4	115.6
June.....	104.5	87.5	99.4	105.2	105.7	104.7	114.9	120.1	124.0	125.5	120.2	115.7
July.....	100.4	85.4	99.7	104.6	102.9	103.7	120.0	130.7	122.8	130.5	132.9	130.6
August.....	101.4	87.1	100.4	107.3	102.6	106.4	125.5	131.1	122.1	130.5	139.7	138.2
September.....	99.4	90.0	103.8	110.0	101.9	-----	119.7	128.5	123.9	138.5	135.9	-----
October.....	98.8	90.8	104.1	110.1	101.0	-----	115.7	126.5	126.2	130.6	122.0	-----
November.....	98.1	89.3	103.8	105.7	98.8	-----	109.4	113.0	115.5	123.1	102.9	-----
December.....	96.3	91.2	103.9	104.0	97.9	-----	94.5	92.3	114.8	109.5	87.6	-----
Monthly average.....	100.0	93.9	99.6	104.3	99.7	-----	100.0	107.3	111.5	106.6	101.7	-----

¹ Compiled by *Ohio State University, Bureau of Business Research*. Prior to 1925, the indexes are based on original reports to the Industrial Commission of Ohio by firms employing 3 or more employees. Beginning with 1925, manufacturing employment includes companies having about 40 per cent of the total employees in Ohio manufacturing industries, while the construction index is also based on reports direct to the bureau. These data revise the table shown on page 138 of the August, 1928, issue.



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

Directory of Licensed Pilots.—Aeronautics Bulletin No. 20; ii+52 pages. Issued by the Aeronautics Branch of the Department of Commerce, lists the names alphabetically under different States.

Standard City Planning Enabling Act, by Advisory Committee on City Planning and Zoning Appointed by Secretary Hoover.—iv+54 pages. This suggested legislation is the result of some years of study of city planning by the members of the advisory committee and it is hoped that it will be an aid in the development of towns throughout the country. A short bibliography is included. Price, 15¢.

BUREAU OF THE CENSUS

For information concerning plan of publication and distribution of census publications, address the Director of the Census.

Animal and Vegetable Fats and Oils.—Production, Consumption, Imports, Exports, and Stocks, by Quarters, for the Calendar Years 1926 and 1927. 18 pages. Price, 5¢.

Census of Religious Bodies, 1926.—Denominational reports showing history, doctrine, and organization with general statistics concerning membership, value, amount of church property, debt, expenditures, etc.

Christian Congregation. Paper, 6 pages. Price, 5¢.
Christian Church (General Convention of Christian Church). Paper, 13 pages. Price, 5¢.
Church of Armenia in America. Paper, 13 pages. Price, 5¢.
Church of Daniel's Band. Paper, 6 pages. Price, 5¢.
Church of God (Apostolic). Paper, 7 pages. Price, 5¢.
Evangelical Church. Paper, 14 pages. Price, 5¢.
Hephzibah Faith Missionary Association. Paper, 8 pages. Price, 5¢.
Holiness Church. Paper, 9 pages. Price, 5¢.
Liberal Church of America. Paper, 6 pages. Price, 5¢.
Protestant Episcopal Church. Paper, 23 pages. Price, 5¢.
Universalist Church. Paper, 14 pages. Price, 5¢.
Vedanta Society. Paper, 8 pages. Price, 5¢.
Evangelical Congregational Church. Paper, 10 pages. Price, 5¢.

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, July, 1928.—Parts I and II. Part I contains statistics of exports of domestic merchandise, and imports by articles for July, 1927 and 1928, and for seven months ended July, 1927 and 1928. Part II contains summaries of export and import trade; monthly average import and export prices; statistics of trade with Alaska, Hawaii, and Porto Rico. Single copies, Part I, 10¢; Part II, 5¢. Annual subscription, \$1.25.

Foreign Trade of United States in Fiscal Year 1927-28, by Lawrence B. Mann and Grace A. Witherow. Trade Information Bulletin No. 572; iv+24 pages. Shows the trends in trade of the United States during the past fiscal year.

BUREAU OF STANDARDS

Simplified Practice Recommendations:

R3-23. Metal Lath. iv+10 pages, 1 illus. Price, 5¢.
R14-23. Roofing Slate. iv+12 pages, 1 illus. Price, 5¢.
R20-23. Steel Barrels and Drums. vi+10 pages, 1 illus. Price, 5¢.
R37-23. Commercial Forms (Invoice, Inquiry, and Purchase Order). xiv+12 pages, 1 illus. Price, 5¢.
R43-23. Paint and Varnish Brushes. iv+16 pages, 1 illus. Price, 5¢.
R51-23. Die-Head Chasers (for Self-Opening and Adjustable Die Heads). vi+14 pages, 1 illus. Price, 5¢.
R80-23. Folding and Portable Wooden Chairs. iv+14 pages, 1 illus. Price, 5¢.
R86-23. Surgical Gauze. vi+12 pages, 1 illus. Price, 5¢.

Supplement No. 3 to Miscellaneous Publication No. 15: Some Technical Methods of Testing Miscellaneous Supplies, etc. 4 pages.

Technical News Bulletin, August, 1928. Pages 109-124. This monthly publication contains items describing the laboratory activities of the bureau and a list of pamphlets issued and magazine articles published during the preceding month. Annual subscription, 25¢.

United States Government Master Specifications.—These specifications for the purchase of materials for the use of Government departments are issued as circulars of the Bureau of Standards. Those listed below by circular number may be obtained at 5c. each:

No. 364. Shade Cloth. 4 pages.
No. 367. Drill (Unbleached). 3 pages.
No. 368. Shades, Window; Rollers; Slats; Cords; and Accessories. 5 pages.

BUREAU OF FISHERIES

Experimental Study of Function Oyster Gills and its Bearing on Problems of Oyster Culture and Sanitary Control of Oyster Industry, by Paul S. Galtsoff. Document No. 1035. (From Bulletin of Bureau of Fisheries, vol. xlv, 1928, pp. 1-39, 13 illustrations.) A bibliography is included. Price, 15c.

Trade in Fresh and Frozen Fishery Products and Related Marketing Considerations in Jacksonville, Fla., by R. H. Fiedler. Document No. 1036. (Appendix I to Report of U. S. Commissioner of Fisheries for 1928, pp. 1-26, 2 illus.) Report of sources of supply of fishery products, methods of transportation and distribution, cold-storage facilities, and fish trade in Jacksonville, Fla. Price, 10c.

Food of Bullheads, by Louella E. Cable. Document No. 1037. (Appendix II to Report of U. S. Commissioner of Fisheries for 1928, pp. 27-41, 1 illus.) Investigation into the kinds of food eaten and the food habits of bullheads. Price, 5c.

BUREAU OF MINES

Gold, Silver, Copper, Lead, and Zinc in Utah in 1926.—(From Mineral Resources of United States, 1926, Pt. I, pp. 471-510.) Price, 10c.

Fuller's Earth in 1927.—(From Mineral Resources of United States, 1927, Pt. II, pp. 39-42.) Price, 5c.

System of Analysis for Oil-field Waters, by C. E. Reistle, jr., and E. C. Lane. Technical Paper 432; ii+14 pages. Methods used in estimating the constituents of water found in oil fields. Price, 5c.

Measuring Variation of Ground Resistivity with Megger, by F. W. Lee. Technical Paper 440; ii+16 pages, 3 illus., 2 plates. Price, 10c.

BUREAU OF NAVIGATION

American Documented Seagoing Merchant Vessels of 500 Gross Tons and Over, August, 1928. ii+72 pages. Monthly. Single copies, 10c.; annual subscription, 75c.

COAST AND GEODETIC SURVEY

Catalogue of Charts, Coast Pilots, Tide Tables, and Current Tables of Philippine Islands. Serial No. 422; 16 pages, 6 illus.
Seismological Report, July, August, September, 1926, by Frank Neumann. Serial No. 424; ii+74 pages. This is the quarterly report on records of earthquake disturbances in various parts of the world. Price, 10c.

LIGHTHOUSE SERVICE

Regulations for Uniforms, 1928. ii+12 pages, 4 pages of illustrations.

STEAMBOAT-INSPECTION SERVICE

Ocean and Coastwise: General Rules and Regulations Prescribed by Board of Supervising Inspectors as Amended at Board Meeting of January, 1928.—Form 801A; viii+252 pages, 5 illus. Contains rules and regulations for equipment of vessels engaged in ocean and coastwise trade, with lists of approved equipment.

CHIEF FUNCTIONS OF THE DEPARTMENT OF COMMERCE

WILLIAM F. WHITING, Secretary of Commerce

WALTER F. BROWN, Assistant Secretary of Commerce. EPHRAIM F. MORGAN, Solicitor

AERONAUTICS BRANCH

WILLIAM P. McCracken, 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, inmates of institutions, mines and quarries, forest products, and water transportation 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 institutions annually, and of death rates in cities and automobile accidents weekly.

Compilation quarterly or monthly of statistics on cotton, wool, tobacco, leather, and other industries; publication in the Survey of Current Business of monthly commercial and industrial statistics.

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

JULIUS KLEIN, 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 publication 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

E. LESTER JONES, 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. TYLER, Commissioner

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

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

STEAMBOAT INSPECTION SERVICE

DICKERSON N. HOOVER, Supervising Inspector General

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

UNITED STATES PATENT OFFICE

THOMAS E. ROBERTSON, Commissioner

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

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

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

RADIO DIVISION

W. D. TERRELL, Chief

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