

UNITED STATES
DEPARTMENT OF COMMERCE
WASHINGTON

SURVEY OF
CURRENT BUSINESS

SEPTEMBER, 1929

No. 97



ISSUED BY
BUREAU OF THE CENSUS

IMPORTANT NOTICE

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

INTRODUCTION

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

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

WEEKLY SUPPLEMENT

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

RELATIVE AND INDEX NUMBERS

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

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

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

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

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

RATIO CHARTS

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

RECORD BOOK

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

METHODS OF USE

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

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



SURVEY OF CURRENT BUSINESS

PUBLISHED BY

UNITED STATES DEPARTMENT OF COMMERCE



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

No. 97

WASHINGTON

September, 1929

CONTENTS

SUMMARIES		INDEX BY SUBJECTS		Text page	Table page
Preliminary summary for August.....	1	Textiles.....	9	23-25	
Business conditions in July.....	4	Metals and metal products.....	10	25-28	
Monthly business indicators (table and chart).....	2, 3	Fuels.....	11	29, 30	
Measures of industrial and commercial activity (charts):		Automobiles and rubber.....	11	29-31	
New building contracts and automobile production.....	8	Hides and leather.....	11	31	
Mineral production and railroad ton-mileage.....	8	Paper and printing.....	--	32, 33	
Factory employment, manufacturing, and electric- power production.....	8	Building construction and housing.....	12	33	
Check payments and retail trade.....	8	Lumber products.....	12	33-35	
Indexes of business.....	15	Stone, clay, and glass products.....	12	35, 36	
NEW DETAILED TABLES		Chemicals and oils.....	--	36-38	
Census of manufactures, 1927, by major groups.....	18	Foodstuffs and tobacco.....	12	38-41	
Debits to individual accounts grouped by Federal reserve districts.....	19	Transportation and public utilities.....	14	42-44	
Indexes of market values of common stocks.....	22	Employment and wages.....	5	44, 45	
		Distribution movement (trade, etc.).....	14	45, 46	
		Banking, finance, and insurance.....	14	46-49	
		Foreign exchange and trade.....	14	49, 50	

PRELIMINARY SUMMARY FOR AUGUST

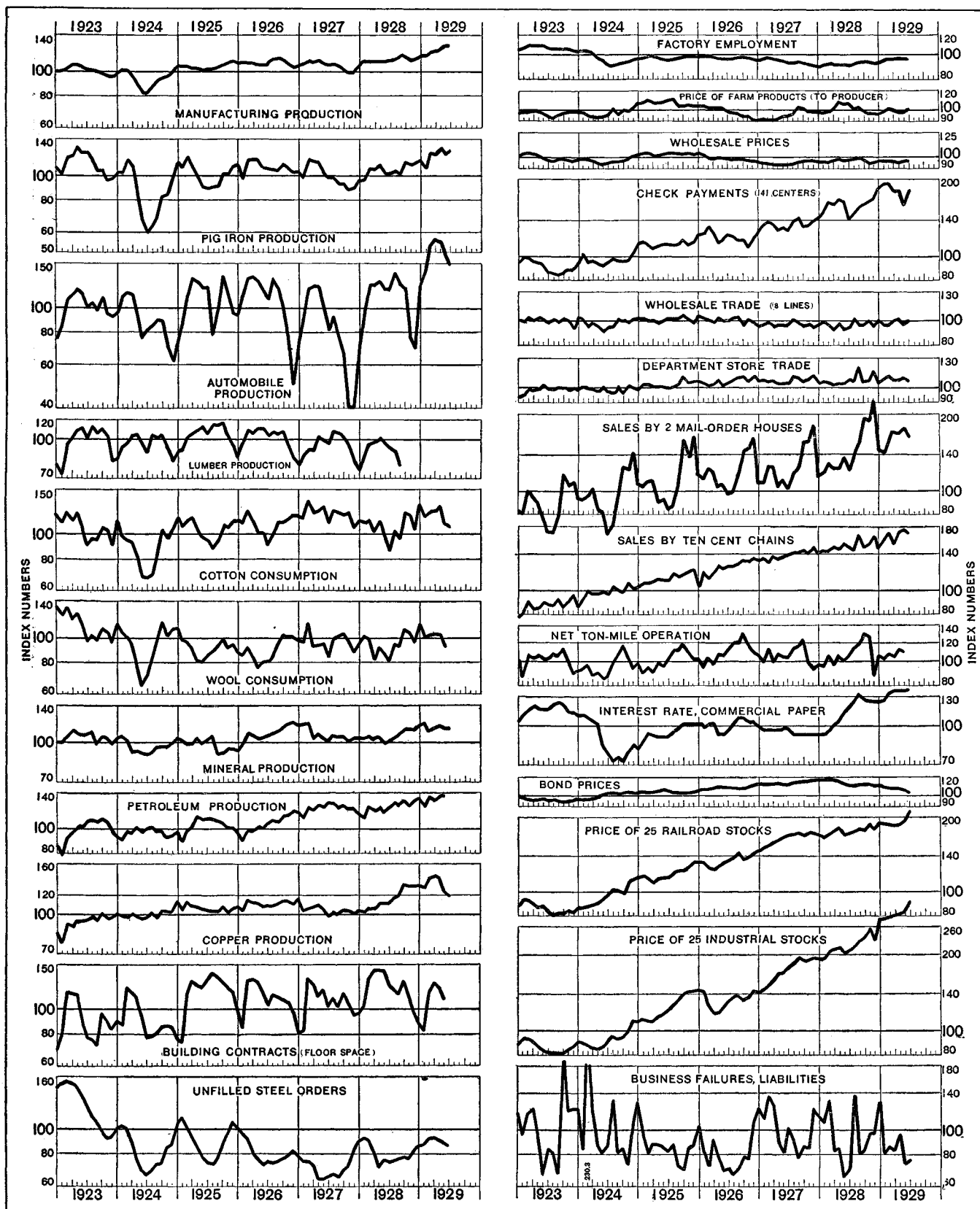
On the basis of early figures business activity in August was higher than in any other similar period on record. Commercial transactions, as indicated by the volume of checks passing through the banks for payment, were higher than were reported for any previous August on record. Activity in steel plants, though receding somewhat from the high level reported for the preceding month, was greater than in any other mid-summer period. The movement of merchandise through primary channels, as reflected by the volume of freight-car loadings, also reached a level not hitherto attained at this time of the year.

This sustained activity in business was registered in

the face of a decline in wholesale prices, which were not only lower than in the previous month but lower even than in August, 1928. Interest rates on time funds were somewhat stronger than prevailed in the preceding month and were higher also than a year ago. Loans and discounts of Federal reserve member banks showed practically no change from the preceding month but were higher than a year ago. Prices for stocks, both railroad and industrial, reached new high averages during August, while bond prices, reflecting the rise in interest rates, continued to show declines. Business failures were less numerous than those reported for August of last year.

MONTHLY BUSINESS INDICATORS, 1923-1929

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



MONTHLY BUSINESS INDICATORS

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

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

ITEM	MONTHLY AVERAGE						1928						1929							
	1923	1924	1925	1926	1927	1928	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
	1923-1925 monthly average=100																			
Industrial production:																				
• Total manufacturing.....	101.0	94.0	105.0	108.0	106.0	111.0	110.0	111.0	113.0	116.0	114.0	111.0	113.0	117.0	117.0	120.0	123.0	124.0	128.0	126.0
• Total minerals.....	105.0	96.0	99.0	107.0	107.0	106.0	99.0	101.0	105.0	108.0	114.0	113.0	112.0	117.0	120.0	107.0	115.0	116.0	112.0	113.0
Pig iron.....	111.7	86.7	101.5	109.0	101.0	105.5	103.1	102.8	105.0	102.5	112.9	110.5	112.8	115.2	107.3	124.3	122.6	130.5	124.4	126.7
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	120.2	108.3	110.3	120.9	120.0	134.5	123.2	116.3	129.9	125.1	146.3	142.8	152.5	141.2	139.9
Automobiles.....	101.7	90.8	107.5	108.4	85.7	109.8	120.2	118.7	139.7	125.8	120.3	77.9	70.9	121.5	141.2	177.2	188.2	182.9	165.2	151.5
Cement.....	92.1	99.8	108.1	110.0	115.3	118.0	140.8	140.6	150.9	143.9	141.1	124.5	98.1	79.5	68.6	80.2	110.6	129.9	135.0	138.5
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.2	106.8	99.5	85.7	102.6	95.9	120.6	119.0	104.1	130.2	116.5	123.3	123.1	130.2	111.1	106.5
Wool (consumption).....	112.8	94.6	92.6	89.7	97.0	94.7	87.1	80.4	95.2	91.8	108.6	105.7	96.8	114.0	101.3	102.7	103.8	102.9	93.0	99.8
Raw material output:																				
Animal products.....	100.0	104.0	96.0	96.0	97.0	99.0	116.0	108.0	97.0	92.0	102.0	93.0	92.0	96.0	80.0	88.0	99.7	108.9	111.8	114.4
Crops.....	92.0	104.0	104.0	109.0	113.0	119.0	82.0	87.0	114.0	178.0	251.0	179.0	152.0	112.0	82.0	72.0	57.2	51.0	55.6	-----
Forest products.....	99.0	97.0	104.0	98.0	93.0	88.2	97.0	88.0	90.0	78.0	84.0	84.0	76.0	82.0	74.0	86.0	90.2	98.6	90.1	88.6
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.2	118.1	122.9	126.8	124.5	129.5	123.8	129.4	133.5	123.3	134.4	130.5	137.5	135.9	148.8
Bituminous coal.....	108.0	92.5	99.5	109.7	99.0	94.3	82.6	83.3	94.4	94.8	115.6	105.7	99.6	118.1	108.5	90.3	84.7	92.2	87.4	93.3
Copper.....	93.4	100.2	106.4	110.2	104.9	114.9	111.0	111.3	116.7	118.8	131.1	129.5	129.8	130.9	128.5	142.1	143.9	141.6	124.9	120.3
Power and construction:																				
Electric power.....	92.5	98.1	109.5	122.6	133.3	146.0	139.8	142.4	149.8	145.2	58.0	154.6	157.8	164.3	148.1	159.3	157.1	161.2	154.9	159.7
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	121.4	142.2	123.7	118.8	114.2	129.1	111.1	98.2	88.6	81.9	117.1	128.0	122.4	109.7	113.7
Unfilled orders:																				
General index.....	121.7	87.0	91.3	84.6	74.0	76.2	75.2	77.1	74.7	74.7	71.5	72.7	71.0	75.0	80.0	86.0	93.0	88.5	83.4	82.0
U. S. Steel Corporation.....	125.8	83.6	90.6	82.1	71.1	80.7	76.2	74.8	75.9	77.4	78.6	76.9	83.3	86.1	86.8	92.4	92.7	90.1	89.2	85.6
Stocks:																				
General index.....	94.5	102.0	103.5	114.6	120.8	122.7	108.4	105.4	107.5	116.0	132.9	137.0	141.5	138.4	136.4	133.0	127.0	121.4	118.7	119.5
Manfd. commodities (28).....	93.8	103.2	103.0	106.3	112.5	116.7	117.3	118.3	115.4	111.3	110.7	113.7	120.4	125.2	124.8	121.0	119.0	117.8	117.8	116.9
Cotton.....	102.5	91.4	106.2	145.5	153.1	123.8	74.7	58.6	52.4	89.5	155.1	181.4	187.7	169.8	149.5	130.5	109.9	88.4	70.9	54.2
Copper (refined).....	106.4	113.9	73.1	64.8	85.4	58.4	52.0	48.5	48.4	45.8	40.3	46.1	57.8	55.4	48.8	46.8	60.8	62.2	73.4	86.3
Employment:																				
Factories.....	106.6	96.2	97.2	97.9	94.4	91.9	91.2	90.3	91.7	93.0	93.9	93.4	93.5	93.2	95.4	96.6	97.1	97.2	96.8	96.2
Prices:																				
Farm products, to producers.....	97.8	97.1	106.5	98.6	94.9	100.7	105.1	105.1	100.7	102.2	99.3	97.1	97.1	96.4	98.6	101.4	100.0	98.6	97.8	101.4
Wholesale, all commodities.....	99.9	97.4	102.8	99.3	94.7	97.0	96.9	97.6	98.2	99.4	97.1	96.0	96.0	96.5	96.0	96.8	96.1	95.1	95.7	97.3
Retail food.....	97.6	97.6	104.9	107.6	103.6	102.9	102.0	102.1	103.0	105.4	104.8	105.1	104.1	103.3	103.2	102.2	101.3	102.4	103.4	105.9
Cost of living (including food).....	98.1	99.9	102.3	102.3	99.9	98.7	98.0	98.0	98.0	99.3	99.3	99.3	98.7	98.0	98.0	97.4	96.8	96.8	97.4	98.7
Distribution, (values):																				
• Bank debits, 141 cities.....	91.2	96.7	111.9	119.6	132.5	158.2	165.4	140.4	149.9	156.9	161.0	165.1	172.3	187.2	194.3	195.1	180.6	180.5	159.0	184.8
• Wholesale trade.....	101.0	98.0	102.0	101.0	97.0	96.0	92.5	94.2	100.6	96.4	97.4	100.0	94.9	101.1	96.3	96.3	100.0	102.0	96.0	100.0
• Department stores, sales.....	98.0	99.0	103.0	106.0	106.0	108.0	105.0	107.0	105.0	119.0	105.0	106.0	116.0	104.0	110.0	113.0	105.0	107.0	112.0	106.0
Mail-order sales, 2 houses.....	89.2	98.1	112.7	120.2	126.2	147.6	137.1	123.1	140.6	155.4	194.4	188.4	227.4	144.9	141.8	163.3	170.0	168.2	176.4	163.0
• 10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	150.0	153.0	148.0	144.0	165.0	148.0	151.0	163.6	145.8	156.9	167.4	153.0	172.0	174.0	162.0
Imports.....	97.8	93.1	109.0	114.3	108.0	105.5	98.2	98.4	107.3	99.0	110.0	101.1	105.0	114.2	114.4	118.8	127.1	123.9	109.4	109.3
Exports.....	91.6	100.8	107.8	106.5	106.8	112.6	102.3	99.8	100.1	111.1	145.1	143.5	125.3	128.5	116.4	129.0	112.2	101.4	103.6	105.6
Transportation:																				
Freight, net ton miles.....	102.2	95.9	101.9	109.1	106.0	106.5	100.0	105.0	113.6	117.3	129.2	124.6	88.4	104.8	102.2	107.8	102.7	112.6	109.1	-----
Finance:																				
Member bank loans and discounts.....	94.1	98.5	107.4	112.9	117.3	126.8	128.4	128.6	125.6	127.3	128.3	129.8	135.4	128.7	130.6	132.4	131.3	129.3	135.1	136.2
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	112.8	113.2	119.0	124.8	130.6	127.6	124.8	124.8	124.8	127.6	136.4	139.2	139.2	139.2	139.2
Federal reserve ratio.....	99.0	104.1	96.9	96.0	99.1	89.1	84.7	88.9	90.0	86.5	87.0	84.5	80.2	89.9	90.5	92.6	94.9	96.5	94.4	96.4
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	113.0	112.3	110.9	109.8	111.0	111.3	112.0	110.7	110.8	109.6	108.0	107.6	106.7	105.4	104.9
Price, railroad stocks.....	86.0	96.1	117.9	133.4	162.7	174.5	169.6	170.3	173.8	178.5	176.4	186.0	180.3	189.3	188.3	184.9	183.7	184.4	192.1	213.4
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	214.8	202.1	206.1	213.4	226.9	234.5	252.6	229.0	275.0	280.3	283.7	285.8	290.3	297.8	330.8
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.2	95.6	70.3	69.8	137.3	80.1	82.5	95.8	96.2	127.1	80.3	85.7	83.2	97.2	74.0	76.5

* Seasonal adjustments.

BUSINESS CONDITIONS IN JULY

PRODUCTION

Industrial output during July, according to the weighted index of the Federal Reserve Board, showed a decline from the preceding month but a substantial gain over July, 1928, after adjustments for seasonal variations. The principal gains over July, 1928, occurred in iron and steel, nonferrous metals, cement, brick and glass, automobiles, and textiles. Mineral production, after seasonal adjustments, showed a gain over both the previous month and July, 1928.

COMMODITY STOCKS

Stocks of commodities held at the end of July were higher than at the end of either the preceding month

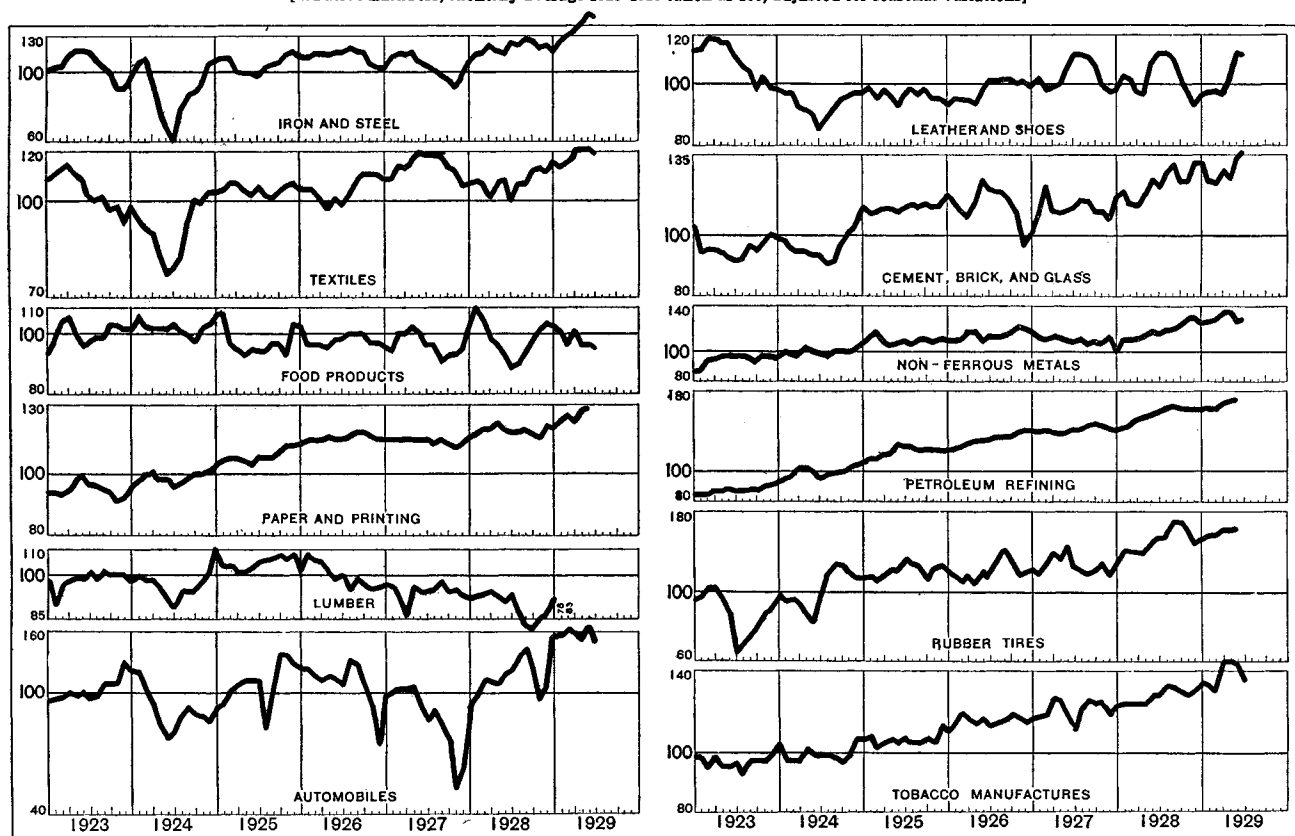
ment stores at the end of the month were smaller than at the end of either the preceding month or July, 1928.

Sales by 10-cent chain-store systems showed a decline from June, but were considerably larger than in July of last year. Grocery chains reported larger sales than in either the previous month or the corresponding period of 1928. The volume of business transacted by drug chains showed gains over both the preceding month and July a year ago, while shoe chains, showing a lower sales volume than in June, reported larger business than in July of last year.

Sales or new orders for manufactured goods were generally greater than in July a year ago. New orders for structural steel, fabricated steel plate, steel

MANUFACTURING PRODUCTION BY MAJOR GROUPS

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



or July of last year, the gain over a year ago being solely due to larger holdings of raw materials.

SALES

The weighted index of unfilled orders was lower at the end of July than at the end of June, but showed a gain over a year ago. As compared with last year, all groups showed higher forward business except lumber, which showed no change.

Wholesale trade in July, after seasonal adjustments, showed a larger sales volume than in either the previous month or July a year ago. Sales by department stores, after adjustments for seasonal conditions, showed a decline from both the preceding month and July a year ago. Merchandise stocks held by depart-

castings, malleable castings, and mechanical stokers were greater than last year. New orders for machine tools, though declining from the preceding month, were considerably larger than at this time a year earlier. New orders for steel sheets and electric hoists were also larger than a year ago. New orders received for cotton textiles showed a substantial gain over July, 1928, while sales of boxboard also were larger than in the same period of last year.

New orders for enameled sanitary ware showed a substantial gain over those reported for the corresponding period of last year. New orders for most types of lumber, however, showed a decline from a year ago. Sales of terra cotta were also lower than in July of last year, but new orders for porcelain plumbing fixtures showed a gain

PRICES

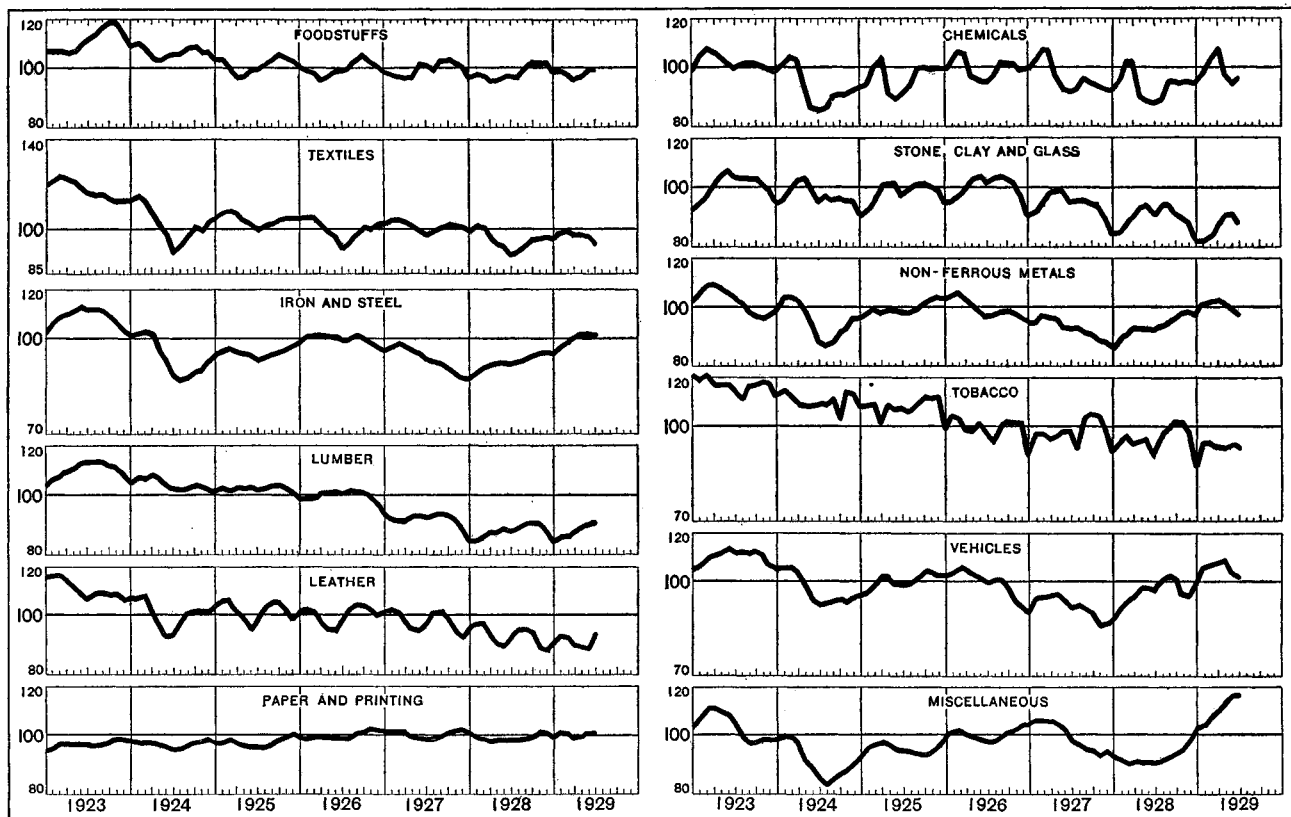
The weighted index of wholesale prices showed a gain of 2 per cent over the preceding month, reaching the level which prevailed in July, 1928. Prices for all groups advanced as compared with the preceding month, except fuel and lighting, which declined, and textiles, metals and metal products, chemicals, and house furnishings, which showed no change. Wholesale prices for all groups were higher than a year ago, except hides and leather, textiles, chemicals, and fuel and lighting, which declined, and house furnishings, which showed no change, these declines being balanced by increases in farm products, foods, metals, and building materials. Prices for raw materials and semi-manufactured articles were generally lower than a

EMPLOYMENT

The general index of factory employment showed a seasonal decline from the preceding month, but was almost 7 per cent higher than in July, 1928. Employment in factories producing foods, leather and its products, paper and printing, and chemicals was greater than in the previous month, but the gains in these groups were insufficient to offset declines reported in iron and steel, stone, clay, glass, nonferrous metals, tobacco products, and vehicle factories. Employment in all industrial groups in July was greater than was reported for the same month of 1928, except in factories producing stone, clay, and glass products, where a decline in employment was registered. The principal gains over a year ago occurred in iron and steel, chemicals, nonferrous metals, and vehicles, where

FACTORY EMPLOYMENT, BY GROUPS

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



year ago, while prices for finished products and non-agricultural commodities showed practically no change.

The index of prices received by farmers for their produce showed a gain of almost 4 per cent over the previous month, but was more than 3 per cent lower than a year ago. Farm prices for grains, fruits and vegetables, and meat animals were higher than in June, while prices for dairy and poultry products showed no change and cotton declined. Prices for all groups were lower than a year ago, except meat animals and poultry and dairy products which advanced.

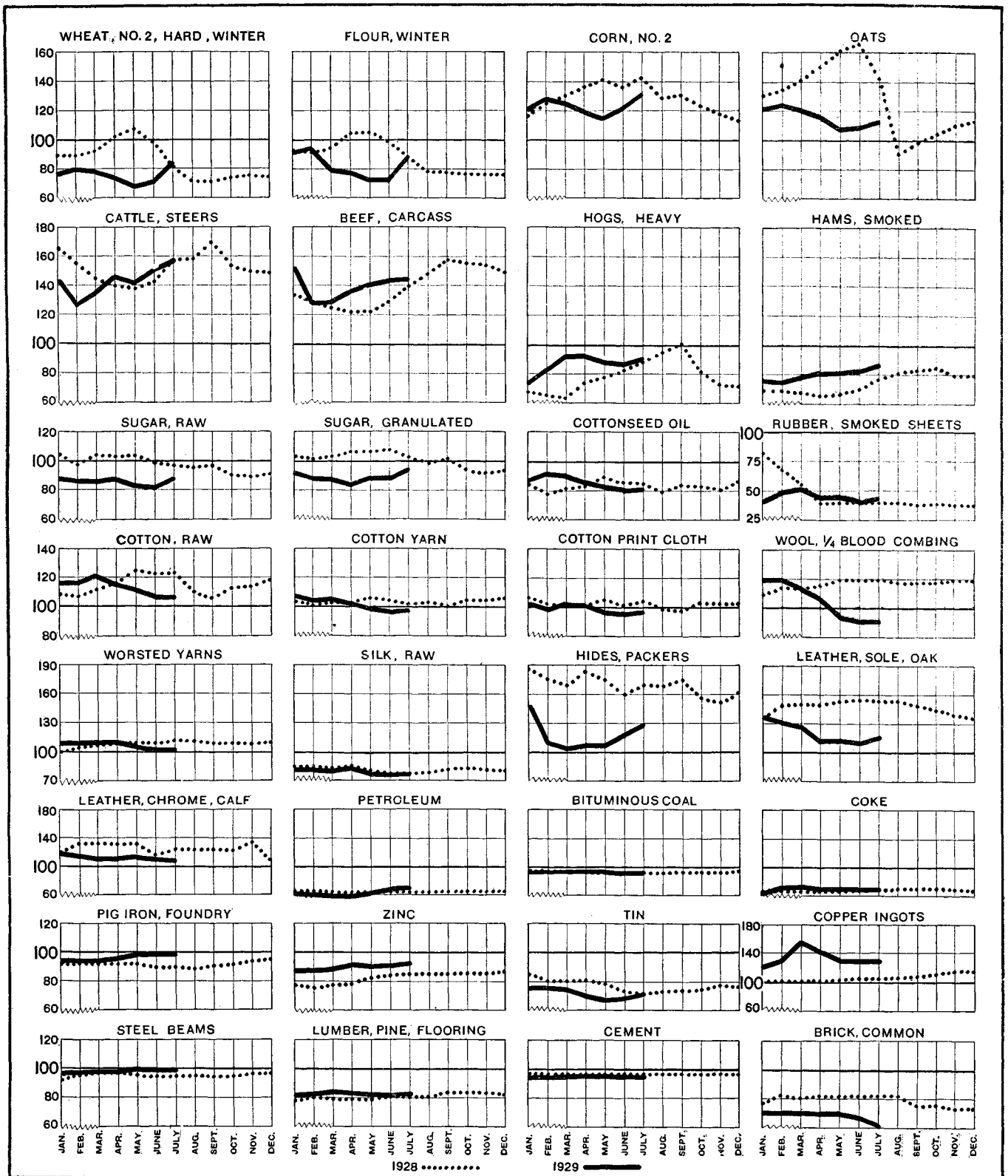
The cost of living index was higher than a year ago. Costs for food were higher than in July, 1928, while costs for clothing and other necessities declined.

the gains were 5 per cent or more. The gain in miscellaneous employment, including factories producing rubber tires, was 29 per cent over last year.

Factory pay-roll payments in July were seasonally lower than in the preceding month, but showed a gain of almost 8 per cent over the corresponding period of 1928. Pay-roll payments were lower than in June in all industrial groups, except leather, where a gain of 8 per cent was reported. The principal declines from the previous month occurred in vehicle, stone, clay, glass, and textile factories. Pay-roll payments in all major groups were greater than in July a year ago, except stone, clay, and glass, where a decline of almost 5 per cent was reported. The greatest gains over last year were registered in payments by iron and steel, nonferrous metal, chemical, and certain miscellaneous factories.

WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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



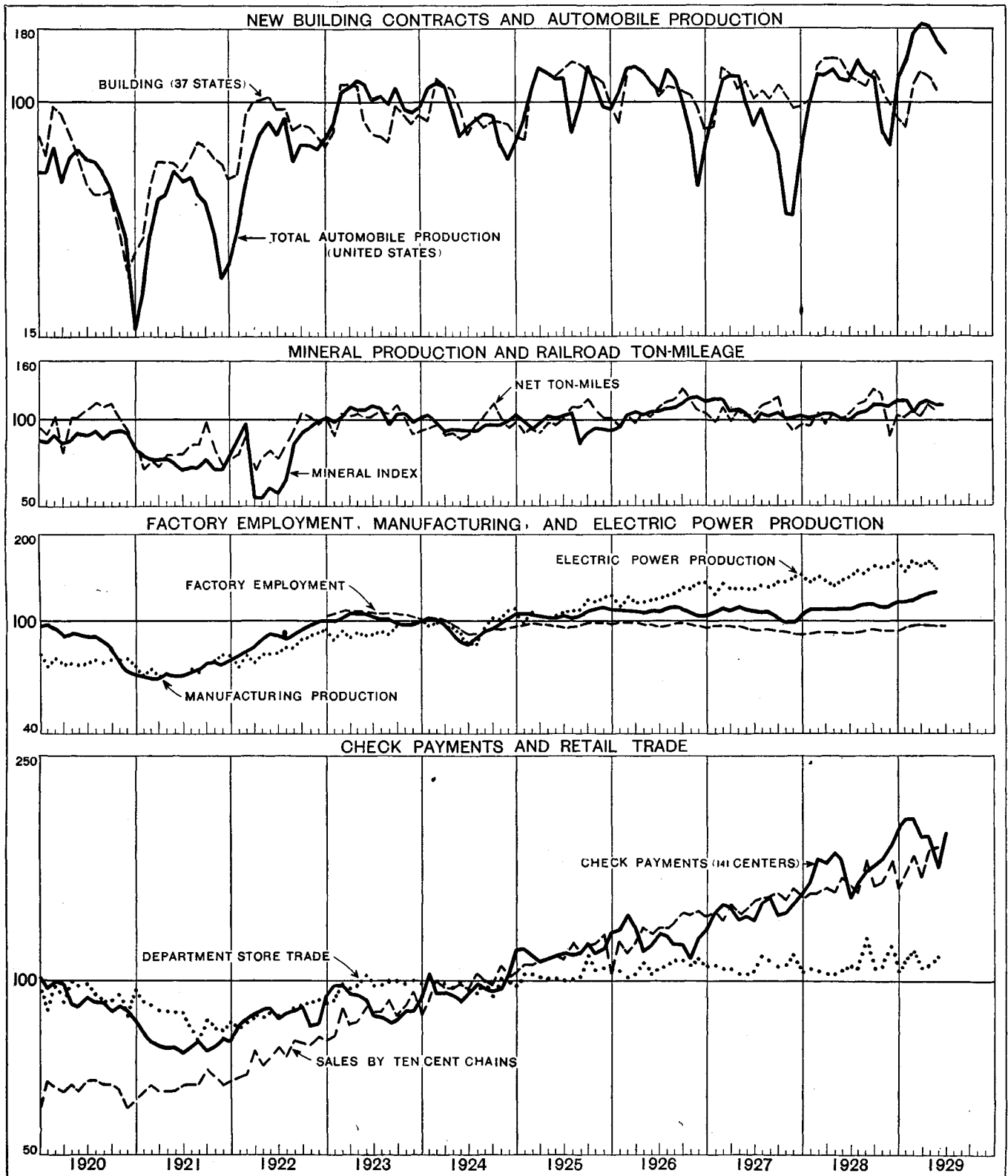
WHOLESALE PRICES FOR SPECIFIED COMMODITIES

NOTE.—Prices to producer on farm products and market price of wool are from *U. S. Department of Agriculture, Bureau of Agriculture Economics*, nonferrous metals from the *Engineering and Mining Journal-Press*, except tin, which is from the *American Metal Market*. All other prices are from *U. S. Department of Labor, Bureau of Labor Statistics*. So far as possible all quotations represent prices to producer or at mill.

COMMODITIES	Unit	ACTUAL PRICE (dollars)			RELATIVE PRICE				
					1926 average=100				
		June, 1929	July, 1929	July, 1928	May, 1929	June, 1929	July, 1929	June, 1928	July, 1928
FARM PRODUCTS—AVERAGE PRICE TO PRODUCER									
Wheat.....	Bushel.....	0.868	1.024	1.181	67	64	76	98	87
Corn.....	Bushel.....	.869	.912	1.024	123	124	131	146	147
Potatoes.....	Bushel.....	.633	.870	.779	32	34	47	45	42
Cotton.....	Pound.....	.179	.178	.210	119	119	118	131	139
Cottonseed.....	Ton.....	35.83	34.84	39.27	139	132	128	152	144
Cattle, beef.....	Pound.....	.0972	.0980	.919	151	151	152	141	142
Hogs.....	Pound.....	.0980	1.033	.964	84	83	88	74	82
Lambs.....	Pound.....	1.231	1.190	1.225	111	106	103	114	106
FARM PRODUCTS—MARKET PRICE									
Wheat, No. 1, northern spring (Minneapolis).....	Bushel.....	1.15	1.43	1.38	72	73	91	94	87
Wheat, No. 2, red, winter (Chicago).....	Bushel.....	1.221	1.334	1.521	77	79	87	107	99
Corn, contract grade No. 2, cash (Chicago).....	Bushel.....	.921	.995	1.080	114	121	131	136	142
Oats, contract grades, cash (Chicago).....	Bushel.....	.467	.483	.614	107	109	112	166	143
Barley, feeding (Chicago).....	Bushel.....	.531	.650	.833	79	77	94	139	120
Rye, No. 2, cash (Chicago).....	Bushel.....	.888	1.047	1.125	95	93	110	132	118
Cotton, middling upland (New York).....	Pound.....	.188	.186	.215	111	107	106	122	123
Wool, 1/4 blood combing, Ohio and Pennsylvania fleeces (Boston).....	Pound.....	.42	.42	.55	94	91	91	120	120
Cattle, steers, good to choice, corn fed (Chicago).....	Cwt.....	14.375	14.975	14.990	141	151	157	142	157
Hogs, heavy (Chicago).....	Cwt.....	10.656	11.200	10.855	87	86	91	82	88
Sheep, ewes (Chicago).....	Cwt.....	5.313	5.550	5.375	90	81	84	89	82
Sheep, lambs (Chicago).....	Cwt.....	12.750	13.800	15.175	93	93	101	95	111
FOOD									
Flour, standard patents (Minneapolis).....	Barrel.....	6.375	7.690	7.355	73	76	91	94	87
Flour, winter straights (Kansas City).....	Barrel.....	5.260	6.313	6.444	72	73	87	99	89
Sugar, 96° centrifugal (New York).....	Pound.....	.035	.038	.042	82	81	88	100	97
Sugar, granulated, in barrels (New York).....	Pound.....	.049	.052	.057	89	89	94	108	104
Cottonseed oil, prime yellow (New York).....	Pound.....	.096	.096	.101	82	81	81	86	85
Beef, fresh, carcass, good native steers (Chicago).....	Pound.....	.234	.238	.229	140	143	145	129	139
Beef, fresh, carcass, steers (New York).....	Pound.....	.238	.255	.249	135	139	149	132	146
Pork, smoked hams (Chicago).....	Pound.....	.254	.267	.236	81	82	87	70	77
Butter, creamery, 92 score (New York).....	Pound.....	.44	.42	.45	98	98	93	98	100
Oleomargarine, standard, uncolored (Chicago).....	Pound.....	.235	.235	.215	103	103	103	94	94
TEXTILES									
Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston).....	Pound.....	.348	.348	.384	99	97	97	104	107
Cotton-print cloth, 64 x 60-33 1/2"-5.35-yards to pound.....	Yard.....	.072	.073	.079	97	96	97	102	105
Cotton sheeting, brown 4/4 Trion (New York).....	Yard.....	.084	.083	.092	94	90	89	98	99
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....	Pound.....	1.450	1.450	1.600	105	101	101	110	112
Women's dress goods, French, 39 inches, at mills, serge.....	Yard.....	.975	.975	1.025	94	94	94	99	99
Suitings, unfinished worsted—13-ounce, mill.....	Yard.....	2.008	2.008	2.008	100	100	100	100	100
Suitings, serge, 11-ounce, 56-58 inch.....	Yard.....	1.959	1.959	2.064	90	90	90	97	95
Silk, Japan, 13-15.....	Pound.....	4.925	4.876	4.851	77	80	79	78	78
Hosiery, women's, pure silk, mill.....	Dozen pair.....	9.250	9.250	9.500	82	80	80	86	82
LEATHER									
Hides, green salted, packers' heavy native steers (Chicago).....	Pound.....	.168	.181	.239	106	119	129	160	170
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....	Pound.....	.186	.199	.278	103	107	115	154	160
Leather, chrome calf, dull or bright "B" grades (Boston).....	Square foot.....	.500	.490	.565	113	110	108	117	125
Leather, sole, oak, scoured backs, heavy (Boston).....	Pound.....	.485	.505	.670	112	111	115	155	153
Boots and shoes, men's black calf, blucher (Massachusetts).....	Pair.....	6.750	6.750	6.750	106	106	106	106	106
Boots and shoes, men's dress welt tan calf oxford (St. Louis).....	Pair.....	4.850	4.850	5.000	100	100	100	103	103
FUEL									
Coal, bituminous, mine-run (composite price).....	Net ton.....	3.905	3.906	3.984	91	91	91	93	92
Coal, bituminous, prepared sizes (composite price).....	Net ton.....	4.177	4.245	4.342	86	87	89	91	91
Coal, anthracite, chestnut (composite price).....	Long ton.....	12.628	12.754	12.965	91	92	93	94	94
Coke, Connellsville (range of prompt and future), furnace—at ovens.....	Short ton.....	2.800	2.800	2.785	68	68	68	68	68
Petroleum, crude, Kansas-Oklahoma—at wells.....	Barrel.....	1.300	1.300	1.195	61	69	69	63	63
METALS									
Pig iron, foundry No. 2, northern (Pittsburgh).....	Long ton.....	20.260	20.260	18.410	98	98	98	90	89
Pig iron, basic, valley furnace.....	Long ton.....	18.500	18.500	16.000	99	100	100	83	86
Steel billets, Bessemer (Pittsburgh).....	Long tons.....	35.250	35.000	32.000	103	101	100	92	91
Copper ingots, electrolytic, early delivery (New York).....	Pound.....	.1778	.1778	.1453	129	129	129	105	105
Brass, sheets, mill.....	Pound.....	.233	.233	.193	122	122	122	101	101
Lead, pig, desilverized, for early delivery (New York).....	Pound.....	.0700	.0680	.0622	83	83	81	75	74
Tin, straits (New York).....	Pound.....	.4426	.4640	.4710	67	68	71	73	72
Zinc, slab, western (St. Louis).....	Pound.....	.0669	.0677	.0620	90	91	92	84	85
BUILDING MATERIAL AND MISCELLANEOUS									
Lumber, pine, southern, yellow flooring, mill.....	M feet.....	37.040	37.270	36.160	82	82	83	81	80
Brick, common red, domestic building (New York).....	Thousand.....	11.000	10.125	13.500	70	67	62	82	82
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district).....	Barrel.....	1.650	1.650	1.683	95	95	95	97	97
Steel beams, mill (Pittsburgh).....	Cwt.....	1.950	1.950	1.850	100	100	100	95	95
Rubber, smoked sheets (New York).....	Pound.....	.206	.213	.192	44	43	44	40	40
Sulphuric acid, 66° (New York).....	Ton.....	15.500	15.500	15.500	107	107	107	107	107
Wood pulp, sulphite, domestic, unbleached, news grade (New York).....	Cwt.....	2.525	2.600	2.525	87	88	91	88	88
Newsprint, rolls, contract, mill.....	Cwt.....	3.250	3.250	3.250	94	94	94	94	94

MEASURES OF INDUSTRIAL AND COMMERCIAL ACTIVITY

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



REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

TEXTILES

Wool imports in July were greater than in either the preceding month or July of last year. Wool consumption also showed gains over both periods. Activity of woollen machinery was generally lower than in the previous month but greater than in the same month of 1928.

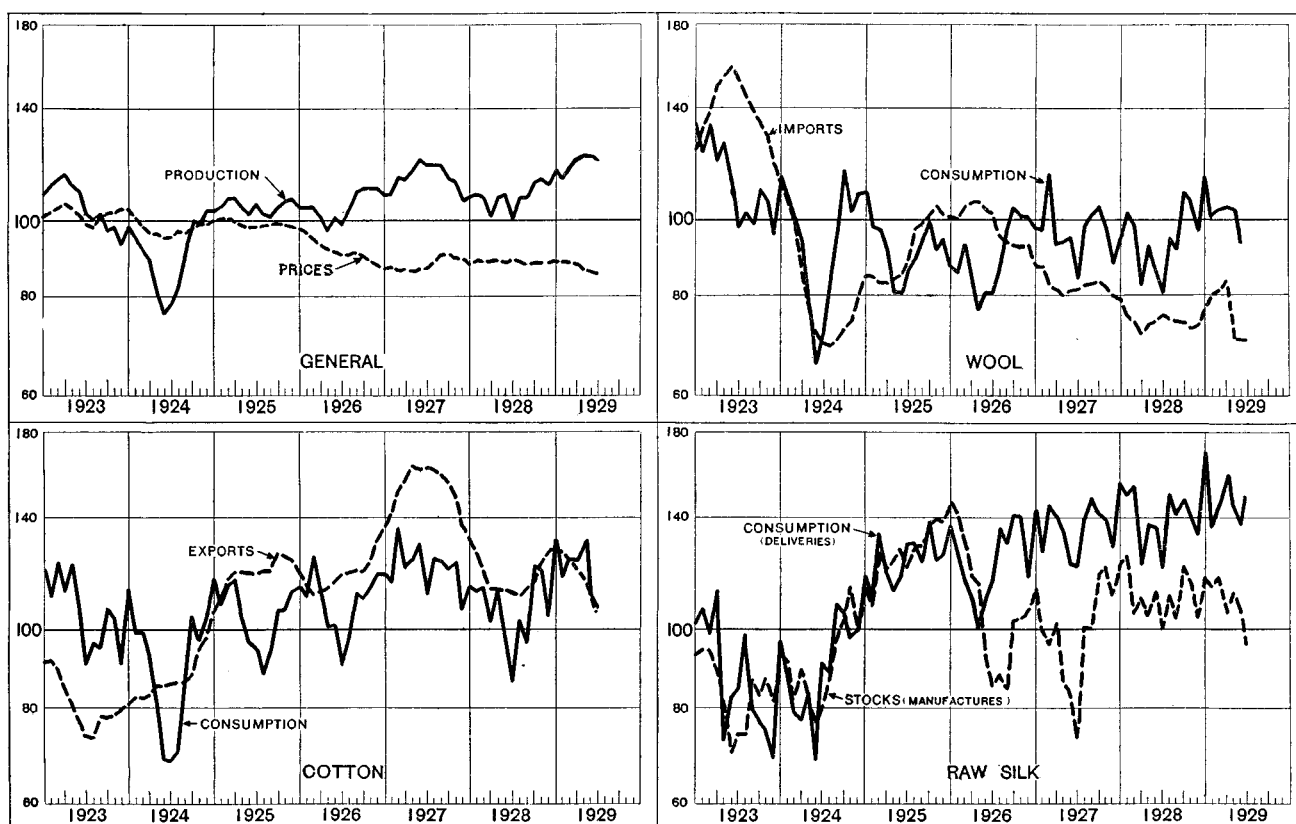
Receipts of cotton into sight were lower than a year ago. Exports of raw cotton were likewise lower than in July of last year. Consumption of cotton by textile mills, although lower than in June, was 24

showed an increase of 58 per cent over the same period of 1928. Prices for rayon averaged lower than in either the preceding month or July a year ago.

The output of cotton textiles was lower than in June but greater than a year ago. New orders and shipments, however, were larger than in either period. The output of fine cotton goods was considerably greater than in July of last year. Imports of cotton cloth were larger than in either the previous month or July a year ago, while cotton cloth exports showed similar comparisons with both periods. Prices for

THE TEXTILE INDUSTRIES

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



per cent larger than in July, 1928. For the first seven months of the year cotton consumption was 14 per cent greater than in the corresponding period of last year. Stocks of cotton held at mills and in public storage at the end of July were 7 per cent lower than at this time a year ago.

Imports of silk were larger than in either the preceding month or July a year ago. Deliveries of silk to consuming establishments were likewise greater than in any prior similar period. Silk machinery was generally more active than in July, 1928.

Imports of rayon, although smaller than in June, were 30 per cent heavier than in July of last year. For the first seven months of the year rayon imports

cotton goods were generally unchanged from the preceding month but were lower than in July a year ago.

Cotton finishers showed larger activity than was reported in July of last year. For the first seven months of the year cotton finishers showed an increase of 17 per cent in the shipment of finished goods. Stocks of finished goods in the hands of finishers at the end of July were 2 per cent lower than at that time in 1928.

Textiles spread with pyroxylin showed a decline from both the preceding month and July of last year, but for the first seven months of the year the output of pyroxylin-coated textiles showed a gain of almost 9 per cent over the same period of last year.

METALS

The production of pig iron was greater than in either the preceding month or July a year ago. For the first seven months of the year pig iron output was 18 per cent larger than in the same period of last year. Wholesale prices were lower than in the preceding month but higher than a year ago.

The output of steel ingots, although smaller than in June, was 27 per cent greater than in July a year ago. For the first seven months of the year steel-ingot production was 18 per cent larger than in the same period of 1928. Unfilled steel orders at the end of July were almost 15 per cent greater than at this time last year.

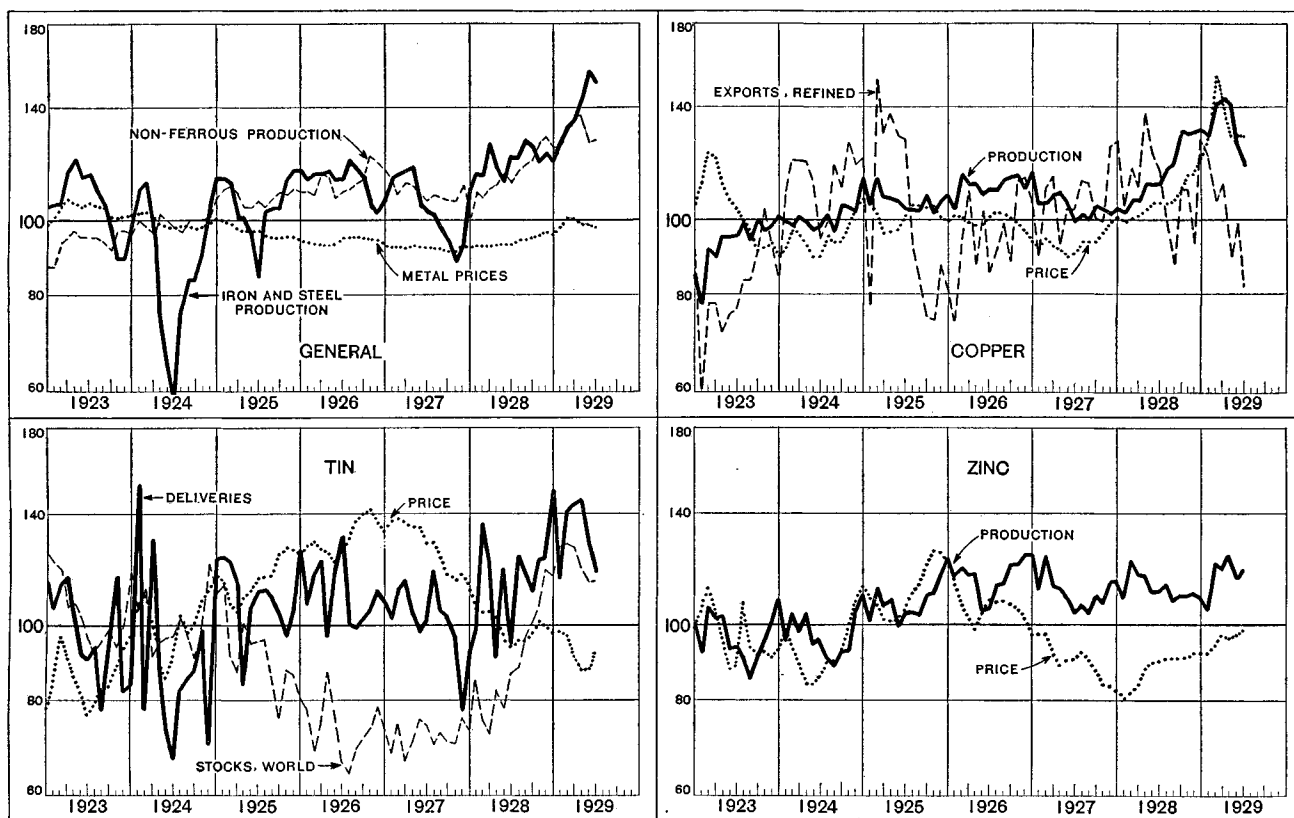
Shipments of structural steel were likewise greater than in either period. For the first seven months of the year structural steel shipments showed a gain of 19 per cent over the same period of 1928.

New orders for fabricated steel plate were also greater than in either the preceding month or July, 1928. Shipments of cold-finished steel bars, although declining from the preceding month, were greater than a year ago. The production of malleable castings was smaller than in June but greater than a year ago.

Shipments of enameled sanitary ware were smaller than in July a year ago. For the first seven months of the year sanitary ware shipments were substantially

THE METAL INDUSTRIES

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



The output of steel sheets by independent manufacturers showed a decline from the preceding month but was 21 per cent greater than in July, 1928. For the first seven months of the year steel-sheet production was 11 per cent larger than in the corresponding period a year ago. Wholesale prices of steel also averaged lower than in the previous month but were higher than a year ago.

New orders and production of steel castings were greater than in either the preceding month or July, 1928. For the first seven months of the year the production of steel castings was 31 per cent larger than in the same period of last year.

New orders for fabricated structural steel were greater than in either the previous month or July a

lower than in the same period of 1928. Stocks of sanitary ware at the end of July were greater than at this time last year.

New orders for machine tools were smaller than in June but larger than in July a year ago. Machine-tool shipments showed similar comparisons with both periods.

The production of copper was smaller than in June but larger than a year ago. For the first seven months of the year copper output was 23 per cent greater than a year ago. Stocks of blister copper in North and South America were lower than at this time last year. Copper prices showed no change from the preceding month but were 22 per cent higher than a year ago.

FUELS

The output of bituminous coal was greater than in either the preceding month or July a year ago. For the first seven months of the year bituminous coal production showed a gain of 12 per cent over the same period of last year. Anthracite production was smaller than in June but greater than a year ago. The production of coke was greater than a year ago. The production of crude petroleum was larger than in either the previous month or July, 1928.

AUTOMOBILES AND RUBBER

Automobile production for the first seven months of the year established a new high record. The output of automobiles in July, although declining from the

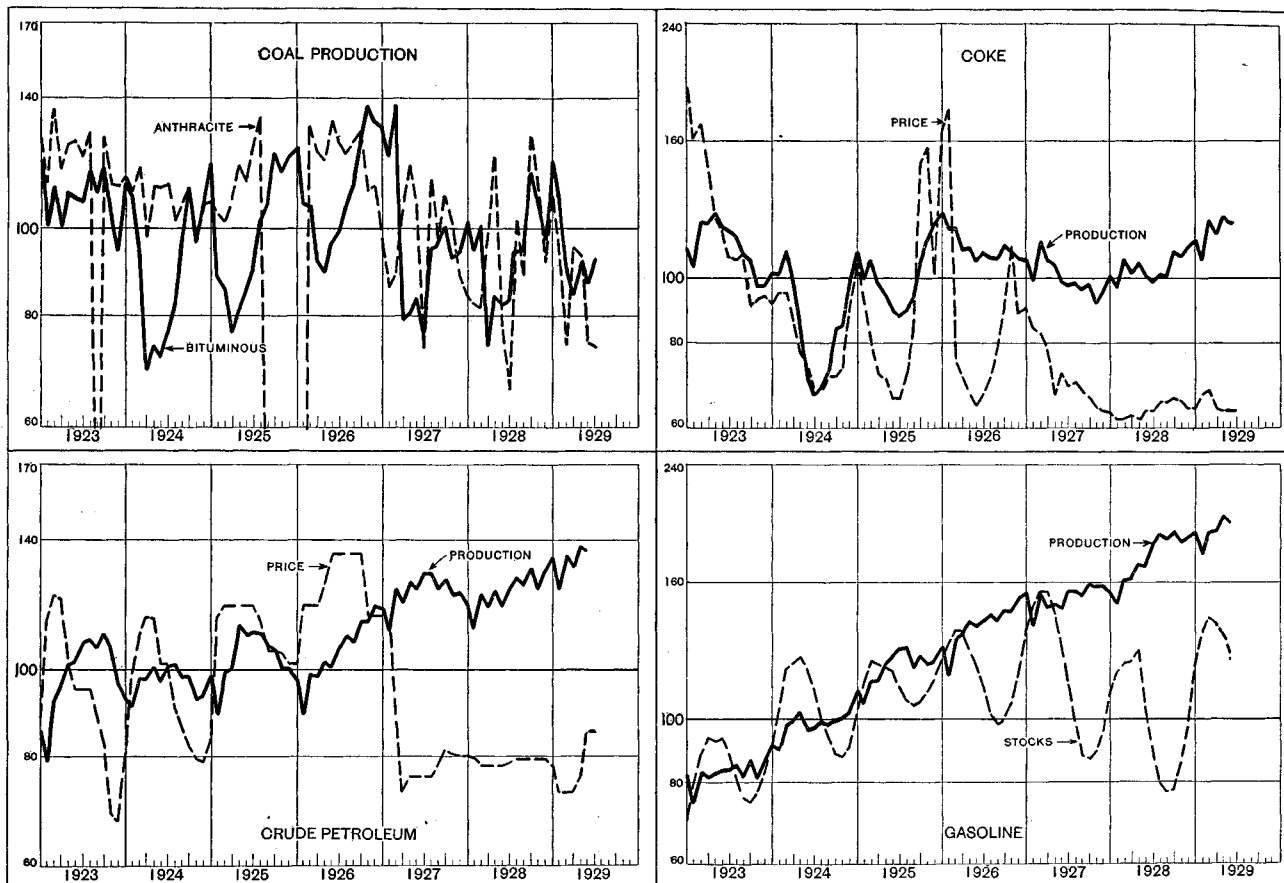
For the first seven months of the year imports were 18 per cent smaller than in the corresponding period of last year, the decline from a year ago being almost entirely due to smaller importations of cattle hides.

More animals were slaughtered under Federal inspection in July than in either the preceding month or July a year ago. For the first seven months of the year, however, a decline was registered from the same period of last year in the slaughter of animals, except sheep, which showed a gain. Prices for cattle hides averaged higher than in the previous month but were lower than a year ago.

The output of sole leather was lower than in either the preceding month or July of last year. For the first

THE FUEL INDUSTRIES

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



preceding month, was 28 per cent greater than in the corresponding period of last year. Imports of rubber were considerably greater than in July of last year. For the first seven months of the year rubber imports were 51 per cent larger than in the same period of 1928. Production of pneumatic tires in July, although smaller than in the preceding month, was greater than in the same period of 1928. The output of pneumatic tires for the first seven months of the year showed a gain of 15 per cent over the corresponding period of last year.

HIDES AND LEATHER

Imports of hides and skins, although greater than in the preceding month, were smaller than a year ago.

seven months of the year sole leather production was 12 per cent smaller than in the corresponding period of 1928. Stocks of sole and belting leather at the end of June were greater than a year ago. Exports in July were larger than in either the preceding month or July of last year, while prices for sole leather averaged higher than in June but were lower than a year ago.

The output of shoes showed a gain over both the preceding month and the corresponding period of last year. For the first seven months of the year shoe production was 2 per cent greater than in the same period of 1928. Shoe prices showed no change from either the preceding month or the same period a year ago.

BUILDING AND CONSTRUCTION

The value of new building contracts awarded during July was larger than in either the preceding month or July of last year. For the first seven months of the year, however, building contracts showed a decline of about 8 per cent from the corresponding period of 1928. Fire losses in the United States and Canada in July were greater than in either the preceding month or July of last year, but for the first seven months a decline of 2 per cent was reported from the same period of 1928.

LUMBER AND LUMBER PRODUCTS

The production of southern pine lumber was larger than in June but smaller than a year ago. For the first seven months of the year southern pine lumber

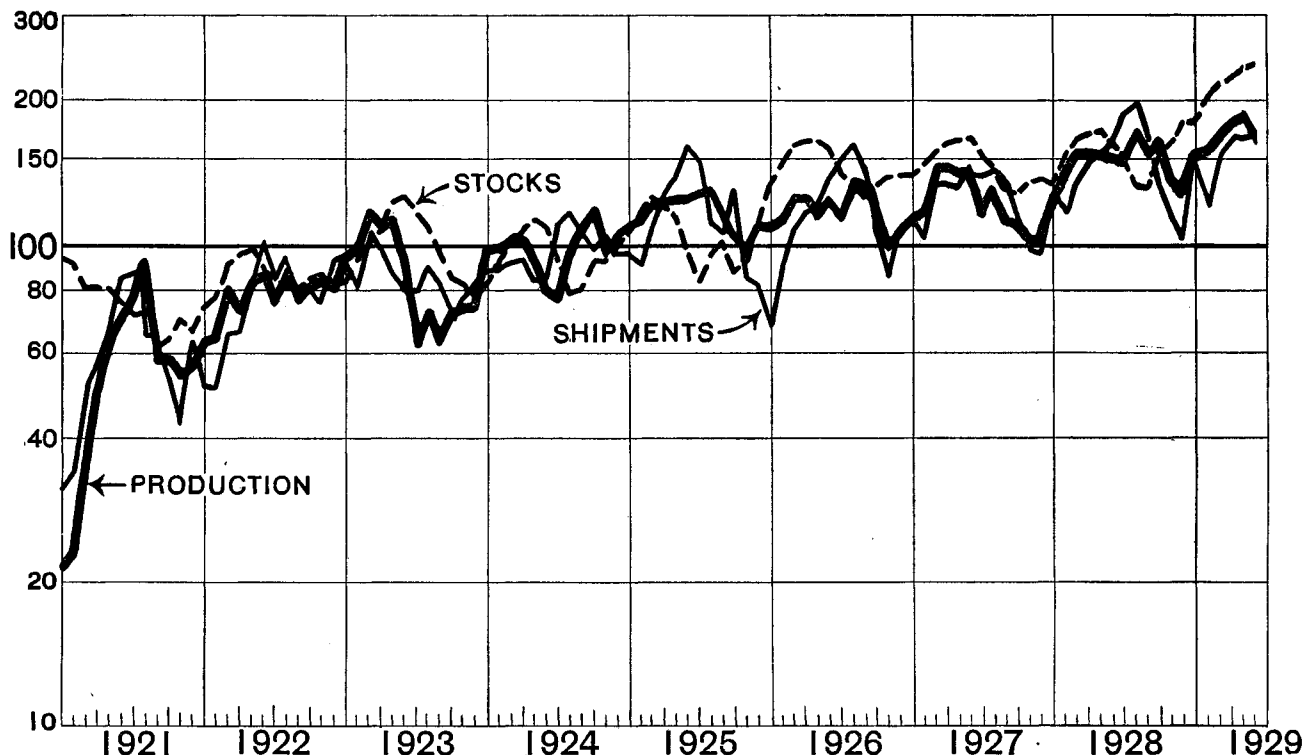
in the same month of 1928. Stocks of face brick at manufacturing plants were considerably greater than at this time a year ago. Shipments of common brick during June were smaller than a year ago, while stocks at the end of the month were higher than a year ago.

New orders for porcelain plumbing fixtures showed a gain over both the previous month and July, 1928, but for the first seven months of the year declined 55 per cent from the same period of 1928. New orders for terra cotta were greater than in June but smaller than a year ago.

The output of Portland cement was 3 per cent greater than in June but 2 per cent smaller than in July, 1928. Cement production during the first seven months of 1929 showed a decline of more than 2 per

PRODUCTION, SHIPMENTS, AND STOCKS OF PNEUMATIC TIRES

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



production showed a decline of 5 per cent from the same period of last year. Stocks of southern pine at the end of July were 6 per cent smaller than a year ago. Prices for southern pine flooring averaged higher than in either the preceding month or July a year ago. California redwood production showed declines from both the preceding month and July of last year, while the output of California white pine, showing an increase over June, was lower than in July, 1928. For the first seven months of the year the production of both California redwood and white pine was lower than in the same period of last year.

STONE, CLAY, AND GLASS

The production of face brick showed a gain over July of last year. Shipments were also larger than

cent from the corresponding period of 1928. Cement shipments by manufacturers were larger in July than in either the preceding month or July a year ago, but for the calendar year to date, shipments were almost 4 per cent lower than in the same period of last year.

FOODSTUFFS AND TOBACCO

The visible supply of wheat in the United States and Canada at the end of July was substantially greater than a year ago. Exports of wheat from the United States showed gains over both the preceding month and July of last year. For the first seven months of the year wheat exports were 41 per cent greater than in the same period of 1928. Wheat prices averaged higher than in either the previous month or July a year ago.

The visible supply of corn was smaller than a year ago. Receipts and shipments of corn at principal markets were also smaller than last year. The price of corn averaged higher than in June but was lower than a year ago.

The visible supply of oats was about four times as large as a year ago. Oat receipts also showed a gain over last year. Wholesale prices for oats averaged higher than in June but were lower than a year ago.

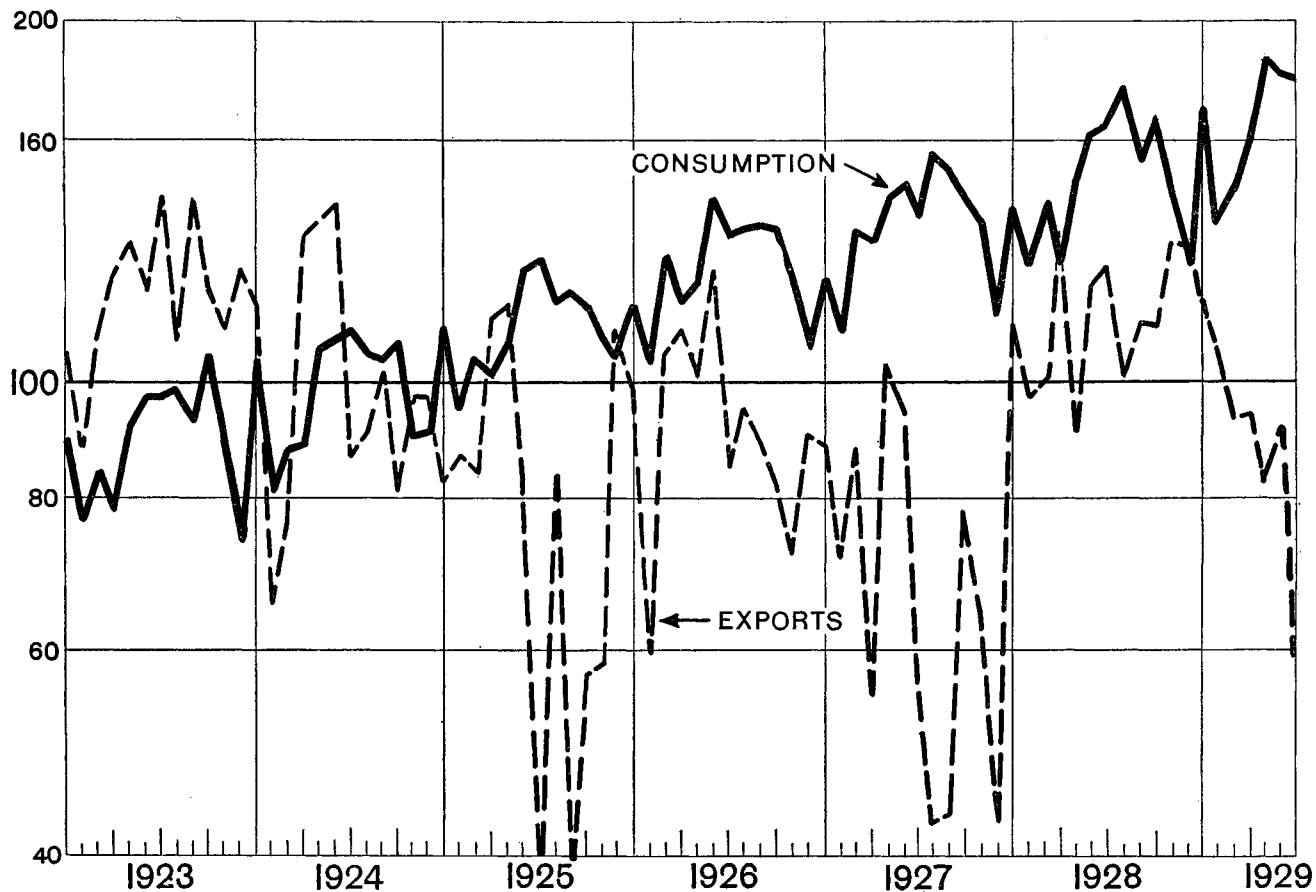
Receipts and shipments of cattle at primary markets showed gains over the previous month. Receipts were greater also than last year, but shipments

catch at the principal ports was greater than last year, while storage holdings showed a decline.

Receipts of butter at principal markets were larger than last year. Cold storage holdings also showed a gain over a year ago. Wholesale prices for butter averaged lower than in either the previous month or July, 1928. Receipts of cheese were lower than a year ago, but cold-storage holdings showed a gain. Cheese imports were substantially greater than in July, 1928. Wholesale prices for cheese showed no change from the previous month but were lower than a year ago. Receipts of eggs were greater than last year, while

CONSUMPTION AND EXPORTS OF CIGARETTES

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



declined. The output of beef products under Federal inspection was greater than last year. Cold-storage holdings at the end of the month were 50 per cent larger than a year ago. Prices for cattle were fractionally lower than a year ago, while beef prices averaged higher.

Receipts and shipments of hogs at primary markets were greater than in either the previous month or July, 1928. The output of pork products under Federal inspection was greater than a year ago, while storage holdings showed a decline.

Receipts of poultry at primary markets were greater than in either the previous month or the same month of 1928. Storage holdings of poultry at the end of July were somewhat larger than a year ago. Fish

storage holdings of case eggs at the end of the month showed a decline of 15 per cent from a year ago.

Imports of raw sugar were larger than in July, 1928. Sugar meltings also showed a gain over last year. Prices for sugar averaged higher than in June but were lower than a year ago. Imports of coffee showed a gain over a year ago, while prices averaged lower than in either the previous month or July, 1928.

The consumption of cigarettes showed a decline from the preceding month, but was 10 per cent larger than a year ago. For the first seven months of the year cigarette consumption showed a gain of 15 per cent over the same period of 1928. The consumption of cigars in July was greater than in either the previous month or July of last year.

TRANSPORTATION

The movement of freight by rail, as indicated by car loadings, were smaller than in June but greater than a year ago. For the first seven months of the year car loadings showed a gain of 5 per cent over the same period of 1928. The movement of freight by river and canal was greater than a year ago. Shipments of railroad locomotives by manufacturers were greater than in July a year ago. Unfilled orders for locomotives were almost three times as large as a year ago.

DISTRIBUTION MOVEMENT

Sales by mail-order houses and 10-cent chain stores were considerably greater than a year ago. Magazine

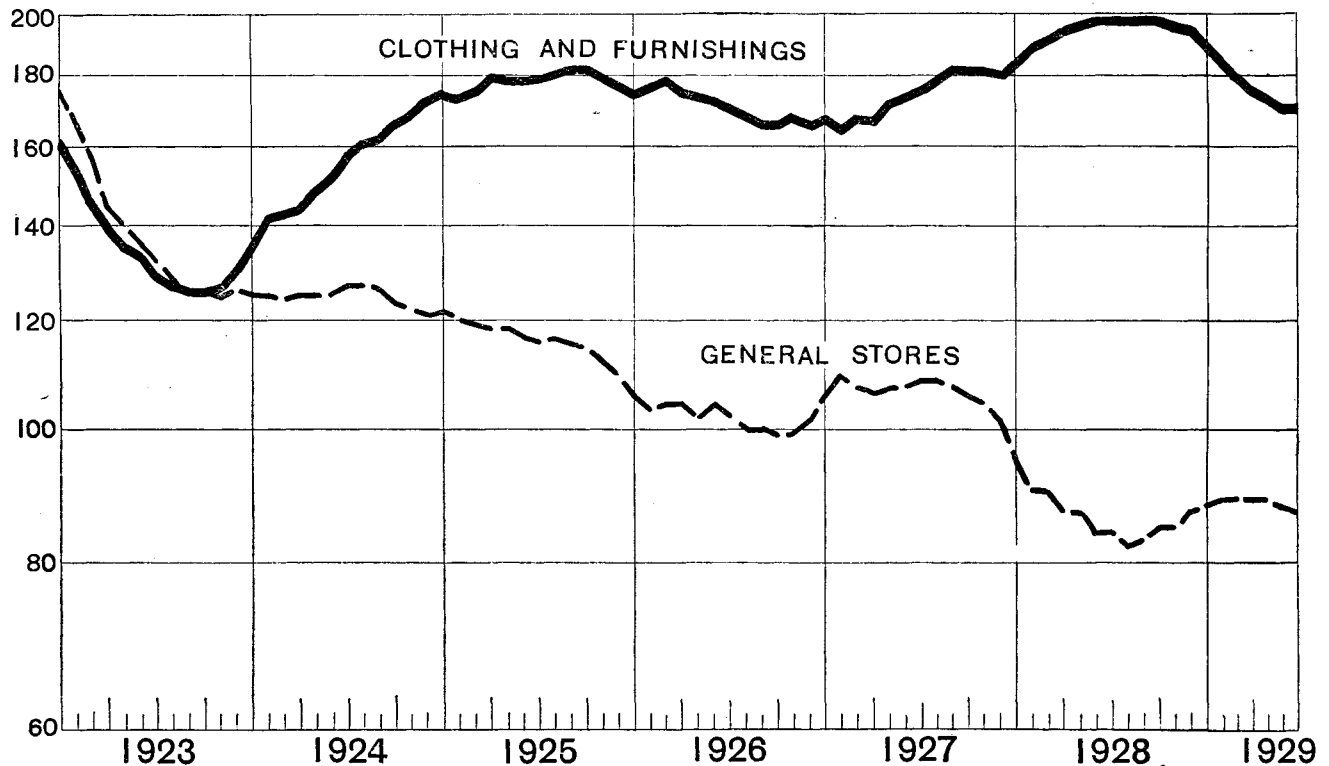
in life insurance, although smaller than in the previous month, were greater than a year ago. Prices for stocks listed on the New York Stock Exchange reached new high averages during the month. Bond prices showed declines from both the previous month and July, 1928. Business failures were less numerous than in June but larger than a year ago. Defaulted liabilities of failing business firms were greater than in either the previous month or July of last year.

GOLD, SILVER, AND FOREIGN EXCHANGE

Domestic receipts of gold at the mint were greater than in either the previous month or July, 1928. The Rand output of gold was also larger than in either period. Gold imports continued to mount.

BUSINESS FAILURES AMONG MERCHANTS

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



advertising and advertising in newspapers also showed gains over last year. Radio advertising was greater than a year ago. Postal receipts also showed a gain over July, 1928.

BANKING AND FINANCE

Check payments were larger than in either the previous month or July a year ago. Bills discounted by the Federal reserve banks showed declines from both periods. Loans and discounts of Federal reserve member banks were larger than in either period, while the Federal reserve ratio also averaged higher. Interest rates were generally higher than a year ago. Dividend and interest payments showed gains over both the previous month and July of last year. New sales

The production of silver showed a substantial gain over last year but was lower than in June. Domestic stocks of silver were considerably greater than a year ago. Silver imports were smaller than last year, while the price of silver averaged lower than a year ago. The production of silver in Canada was lower than in July, 1928, while silver stocks in Canada also declined from a year ago.

Exchange on the principal foreign countries showed practically no change from the preceding month. Of outstanding importance, however, was the recovery in the Japanese yen. As compared with a year ago all currencies showed lower rates or remained stationary, the principal declines occurring in the Chilean peso, the Indian rupee, 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	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			PER CENT INCREASE (+) OR DECREASE (-)	
			May	June	July	May	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928
PRODUCTION										
TOTAL INDUSTRIAL										
Unadjusted, except for working days.....	125	81	110	108	105	125	124	119	-4.0	+13.3
Adjusted for seasonal variations.....	123	83	109	109	110	123	126	124	-1.6	+12.7
MANUFACTURING										
Total (adjusted for working days only).....	127	79	111	108	106	126	126	119	-5.6	+12.3
Total (adjusted for seasonal variations).....	128	82	110	111	111	124	128	126	-1.6	+13.5
Iron and steel.....	155	59	116	115	124	145	155	151	-2.6	+21.8
Textiles.....	121	77	107	108	100	122	121	118	-2.5	+18.0
Food products.....	110	92	96	93	89	97	96	96	-0.0	+7.9
Paper and printing.....	127	91	121	118	117	122	127			
Lumber.....	110	78	93	91	94	83	85			
Automobiles.....	166	47	107	117	119	151	166	146	-12.0	+22.7
Leather and shoes.....	134	86	96	108	112	102	113	113	-0.0	+0.9
Cement, brick, and glass.....	138	92	116	123	119	128	134	138	+3.0	+16.0
Nonferrous metals.....	137	87	111	115	113	137	126	128	+1.6	+13.3
Petroleum refining.....	170	84	150	153	156	168	170			
Rubber tires.....	166	66	133	143	149	159	162			
Tobacco manufactures.....	142	93	120	125	125	142	139	131	+5.8	+4.8
MINERALS										
Total (adjusted for working days only).....	124	84	110	104	103	115	116	117	+0.9	+13.6
Total (adjusted for seasonal variations).....	120	90	105	101	100	116	112	114	+0.9	+14.0
Bituminous coal.....	125	77	93	91	93	102	100	101	+1.0	+8.6
Anthracite coal.....	133	1	112	76	67	86	76	72	-5.3	+7.5
Crude petroleum.....	142	88	120	118	119	133	136	142	+4.4	+19.3
Iron-ore shipments.....	143	0	80	107	104	143	126	119	-5.6	+14.4
Copper.....	139	82	110	110	113	139	124	122	-1.6	+8.0
Zinc.....	125	93	113	117	117	120	122	125	+2.5	+6.8
Lead.....	125	75	101	100	97		112	120		
Silver.....	123	85	85	93	76	100	91	91	0.0	+19.7
ANIMAL PRODUCTS (Marketings)										
Total.....	124	79	108	116	108	109	112	114	+1.8	+5.6
Wool.....	421	14	195	378	387	121	306	404	+32.0	+4.4
Livestock.....	131	76	90	83	78	84	76	83	+9.2	+6.4
Poultry and eggs.....	148	67	139	106	92	131	111	96	-13.5	+4.3
Dairy products.....	160	64	115	147	138	134	147	144	-2.0	+4.3
Fish.....	243	44	156	168	154	161	179	243	+35.8	+57.8
CROPS (Marketings)										
Total.....	251	45	72	52	87	51	56	90	+60.7	+3.4
Grains *.....	205	38	84	56	147	53	75	179	+136.0	+21.8
Vegetables *.....	199	60	136	164	107	118	147	169	+15.0	+57.0
Fruits *.....	266	43	94	75	164	111	89	106	+19.1	-35.4
Cotton products *.....	353	11	57	25	28	27	18	11	-38.9	-60.7
Miscellaneous crops *.....	266	22	23	24	22	22	25	15	-40.0	-31.8

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

INDEXES OF BUSINESS—Continued

Relative to 1923-1925 monthly average as 100	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			PER CENT INCREASE (+) OR DECREASE (-)	
			May	June	July	May	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928
PRODUCTION—Continued										
FOREST PRODUCTS										
Total.....	112	74	101	95	87	99	90	89	-1.1	+2.3
Lumber.....	112	71	98	93	88	94	87	87	0.0	-1.1
Pulpwood.....	151	54	120	96	64	132	99	81	-18.2	+26.6
Gum (rosin and turpentine) *.....	204	18	140	172	170	158	177	204	+15.3	+20.0
Distilled wood.....	148	65	85	84	80	108	100	95	-5.0	+18.8
NEW ORDERS										
Total.....	138	73	104	97	95					
Textiles.....	179	70	94	85	77					
Iron and steel.....	143	71	116	117	116					
Lumber.....	141	67	113	101	100					
Paper and printing.....	118	85	104	104	101					
Stone and clay products.....	129	75	94	104	97					
STOCKS										
Grand total.....	138	82	117	108	105	121	119	120	+0.8	+14.3
Total manufactured goods.....	125	88	120	117	118	118	118	117	-0.8	-0.8
Foodstuffs.....	129	79	103	103	118	99	113	124	+9.7	+5.1
Textiles.....	138	78	137	134	129	116	124	127	+2.4	-1.5
Iron and steel.....	157	78	147	140	133	142	145	139	-4.1	+4.5
Nonferrous metals.....	133	74	118	120	119	115	116	120	+3.4	+0.8
Lumber.....	125	78	109	94	104	101	99	101	+2.0	-2.9
Stone, clay, etc.....	192	64	155	153	149	180	168	160	-4.8	+7.4
Leather.....	123	66	69	71	71	71	71	70	-1.4	-1.4
Rubber.....	199	77	170	162	145	199	199	177	-10.1	+22.1
Paper.....	155	46	142	153	155	99	94	90	-4.3	-41.9
Chemicals and oils.....	125	84	103	96	90	114	105	100	-4.8	+11.1
Total raw materials.....	157	69	114	102	96	124	119	121	+1.7	+26.0
Foodstuffs.....	187	68	141	126	123	170	167	185	+10.8	+50.4
Textiles.....	202	43	98	81	67	92	80	64	-20.0	-4.5
Metals.....	136	54	82	74	87	80	94	100	+6.4	+14.9
Chemicals and oils.....	153	73	95	93	91	96	96	93	-3.1	+2.2
UNFILLED ORDERS										
Total.....	167	67	74	75	77	89	83	82	-1.2	+6.5
Textiles.....	154	62	72	67	68	73	75	73	-2.7	+7.4
Iron and steel.....	157	66	72	75	75	87	85	84	-1.2	+12.0
Transportation equipment.....	204	49	73	69	68	96	78	73	-6.4	+7.4
Lumber.....	142	56	79	84	91	104	95	97	-2.1	+6.6
WHOLESALE TRADE										
Grand total, all classes.....	124	82	93	89	90	96	91	96	+5.5	+6.7
Groceries.....	119	83	96	97	92	96	96	99	+3.1	+7.6
Meats.....	130	87	109	114	113	121	122	123	+0.8	+8.8
Dry goods.....	128	70	75	71	74	78	70	73	+4.3	-1.4
Men's clothing.....	167	43	57	39	68	60	49	69	+40.8	+1.5
Boots and shoes.....	128	68	114	77	98	113	90	110	+22.2	+12.2
Hardware.....	118	76	97	96	90	98	97	95	-2.1	+5.6
Drugs.....	131	88	110	104	102	111	105	111	+5.7	+8.8
Furniture.....	131	72	87	83	78	99	93	87	-6.5	+11.5
RETAIL TRADE										
CHAIN STORES:										
Ten-cent.....	305	62	139	139	128	166	153	146	-4.6	+14.1
Grocery.....	237	77	214	208	197	234	222	227	+2.3	+15.2
Drug.....	224	82	164	162	163	195	197	204	+3.6	+25.2
Shoe.....	184	55	130	147	116	144	161	120	-25.5	+3.4
DEPARTMENT STORES:										
Sales.....	187	71	108	104	78	110	106	80	-24.5	+2.6
Stocks.....	117	83	102	96	93	101	95	92	-3.2	-1.1

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

INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maxi- mum since Jan. 1, 1923	Mini- mum since Jan. 1, 1923	1928			1929			PER CENT INCREASE (+) OR DECREASE (-)	
			May	June	July	May	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928
EMPLOYMENT										
(Relative to 1926 monthly average as 100)										
Number employed, by industries:										
Total, all classes.....	111	92	93	93	92	99	99	98	-1.0	+6.5
Food products.....	119	95	6	97	97	97	99	100	+1.0	+3.1
Textiles.....	122	91	95	94	91	98	97	94	-3.1	+3.3
Iron and steel.....	113	86	92	92	91	102	102	101	-1.0	+11.0
Lumber.....	113	85	87	88	87	89	90	90	0.0	+3.4
Leather.....	117	88	90	89	93	89	89	94	+5.6	+1.1
Paper and printing.....	103	94	98	98	98	100	100	101	+1.0	+3.1
Chemicals.....	108	85	89	88	87	97	94	96	+2.1	+10.3
Stone, clay, and glass.....	106	82	93	93	91	90	91	88	-3.3	-3.3
Metal products other than iron and steel.....	109	86	93	92	92	101	99	97	-2.0	+5.4
Tobacco products.....	120	86	95	95	90	92	94	93	-1.1	+3.3
Vehicles.....	113	84	98	98	97	108	103	102	-1.0	+5.2
Miscellaneous.....	116	83	90	90	90	113	115	116	+0.9	+28.9
Amount of pay roll, by industries:										
Total, all classes.....	109	84	94	94	91	105	103	98	-4.9	+7.7
Food products.....	114	93	97	100	100	100	103	103	0.0	+3.0
Textiles.....	124	87	92	92	87	99	97	91	-6.2	+4.6
Iron and steel.....	111	75	94	93	89	108	107	102	-4.7	+14.6
Lumber.....	108	82	90	90	87	91	91	90	-1.1	+3.4
Leather.....	123	79	82	85	91	85	87	94	+8.0	+3.3
Paper and printing.....	106	86	101	101	99	106	105	103	-1.9	+4.0
Chemicals.....	108	86	93	92	92	102	100	100	0.0	+8.7
Stone, clay, and glass.....	106	78	93	93	88	90	91	84	-7.7	-4.5
Metal products other than iron and steel.....	112	81	95	94	90	109	105	100	-4.8	+11.1
Tobacco products.....	119	81	89	95	90	91	94	93	-1.1	+3.3
Vehicles.....	120	84	102	100	96	119	110	98	-10.9	+2.1
Miscellaneous.....	119	81	90	92	89	118	119	116	-2.5	+30.3
PRICE INDEX NUMBERS										
FARM PRICES										
(Relative to 1909-1914 average as 100)										
All groups.....	152	125	148	145	145	136	135	140	+3.7	-3.4
Grains.....	178	108	160	152	142	113	111	122	+9.9	-14.1
Fruits and vegetables.....	253	108	181	168	156	119	120	136	+13.3	-12.8
Meat animals.....	167	98	151	150	157	164	163	167	+2.5	+6.4
Dairy and poultry.....	166	122	134	132	134	137	137	137	0.0	+2.2
Cotton and cottonseed.....	252	81	166	162	170	148	146	145	-0.7	-14.7
Unclassified.....	108	79	86	87	88	86	85	85	0.0	-3.4
WHOLESALE PRICES										
Department of Labor Indexes										
(Relative to 1926 monthly average as 100)										
All commodities.....	105	94	99	98	98	96	96	98	+2.1	0.0
Farm products.....	114	94	110	107	107	102	103	108	+4.9	+0.9
Food, etc.....	107	85	101	100	102	98	99	103	+4.0	+1.0
Hides and leather products.....	127	98	126	124	124	107	108	109	+0.9	-12.1
Textile products.....	114	93	97	96	97	94	93	93	0.0	-4.1
Fuel and lighting.....	112	81	82	82	83	81	83	82	-1.2	-1.2
Metals and metal products.....	113	97	99	99	99	105	105	105	0.0	+6.1
Building materials.....	116	90	94	94	94	97	96	97	+1.0	+3.2
Chemicals.....	104	93	95	95	95	94	93	93	0.0	-2.1
House-furnishing goods.....	111	97	98	97	97	97	97	97	0.0	0.0
Miscellaneous.....	127	79	85	82	81	80	80	81	+1.3	0.0
Classified by state of manufacture:										
Semimanufactured articles.....	128	95	99	98	98	95	94	96	+2.1	-2.0
Finished products.....	103	93	97	97	98	96	97	98	+1.0	0.0
Raw materials.....	109	93	101	99	100	95	97	99	+2.1	-1.0
Nonagricultural commodities.....	106	93	96	95	96	94	95	96	+1.1	0.0
Commercial Indexes										
(Relative to 1926 monthly average as 100)										
Dun's.....	106	85	104	104	103	99	100	102	+2.0	-1.0
Bradstreet's.....	112	95	102	102	102	96	97	98	+1.0	-3.9

INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			PER CENT INCREASE (+) OR DECREASE (-)	
			May	June	July	May	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928
PRICE INDEX NUMBERS—Contd.										
COST OF LIVING										
National Industrial Conference Board Indexes										
(Relative to July, 1914)										
All items weighted.....	172	158	162	161	161	159	160	162	+1.3	+0.6
Food (Department of Labor).....	167	141	154	153	153	153	155	159	+2.6	+3.9
Shelter.....	186	159	163	162	161	160	159	159	0.0	-1.2
Clothing.....	177	160	171	171	174	167	167	166	-0.6	-4.6
Fuel and light (combined).....	179	156	158	158	158	157	157	157	0.0	-0.6
Fuel.....	208	174	176	176	177	175	175	176	+0.6	-0.6
Light.....	123	118	122	122	121	120	120	120	0.0	-0.8
Sundries.....	176	168	171	171	171	168	168	169	+0.6	-1.2

CENSUS OF MANUFACTURES 1927—SUMMARY OF SIXTEEN INDUSTRIAL GROUPS, FOR THE UNITED STATES¹

INDUSTRY	Census year	Number of establishments	Wage earners, (average for the year)	Wages	Cost of materials, fuel, and power	Value of products	Value added by manufacture
All industries.....	1927 1925	191,863 187,224	8,351,257 8,381,511	\$10,848,782,433 10,727,337,625	\$35,128,154,648 35,896,886,428	\$62,713,947,403 62,668,259,591	\$27,585,792,755 26,771,373,163
Food and kindred products.....	1927 1925	49,786 47,947	679,158 662,010	823,387,583 791,049,484	8,113,432,583 7,709,916,601	10,999,789,550 10,373,082,162	2,886,356,967 2,663,165,561
Textiles and their products.....	1927 1925	26,845 24,450	1,692,473 1,628,283	1,760,168,290 1,654,814,276	4,926,158,527 5,349,924,770	8,964,143,064 9,126,154,902	4,037,984,537 3,776,230,132
Iron and steel and their products, not including machinery.....	1927 1925	6,346 6,068	835,091 851,270	1,264,406,082 1,284,339,157	3,540,708,921 3,734,349,860	6,199,252,444 6,461,668,061	2,658,543,523 2,727,318,201
Lumber and allied products.....	1927 1925	20,163 21,926	866,581 921,266	929,789,682 978,472,291	1,633,938,116 1,725,350,920	3,457,427,173 3,689,126,705	1,823,489,057 1,963,775,785
Leather and its manufactures.....	1927 1925	4,263 4,243	316,421 314,025	364,229,059 355,346,411	1,087,916,992 1,012,880,605	1,868,320,020 1,763,709,361	780,403,028 750,828,756
Rubber products.....	1927 1925	516 509	141,997 148,382	198,073,743 191,089,638	660,370,209 720,058,847	1,225,077,114 1,257,997,707	564,706,905 537,938,860
Paper, printing, and related industries.....	1927 1925	28,404 26,553	555,040 536,766	858,336,931 805,510,245	1,837,402,806 1,614,234,478	4,638,571,773 4,143,684,899	2,801,168,967 2,529,450,421
Chemicals and allied products.....	1927 1925	8,939 8,871	394,817 381,075	534,947,864 506,386,054	4,061,009,903 4,184,910,627	6,404,914,348 6,438,027,055	2,343,904,445 2,253,116,428
Stone, clay, and glass products.....	1927 1925	8,673 8,478	350,397 353,036	464,272,991 467,012,428	594,774,314 603,426,910	1,612,548,765 1,640,651,985	1,017,774,451 1,037,225,075
Metals and metal products, other than iron and steel.....	1927 1925	6,658 6,924	270,665 275,292	380,365,227 380,781,402	1,780,358,036 1,946,777,164	2,668,696,686 2,833,769,702	888,338,650 886,992,538
Tobacco manufactures.....	1927 1925	2,156 2,623	129,299 132,132	105,250,631 111,558,170	420,666,513 425,769,266	1,163,768,379 1,091,000,981	743,101,866 665,231,715
Machinery, not including transportation equipment.....	1927 1925	12,038 11,807	886,344 858,843	1,287,777,619 1,225,359,140	2,062,670,606 1,985,367,067	5,367,014,850 5,020,281,100	3,304,344,244 3,034,914,033
Musical instruments and phonographs.....	1927 1925	431 461	42,985 46,980	60,761,435 62,501,841	90,158,731 98,760,497	226,362,120 231,686,552	136,203,389 132,926,055
Transportation equipment, air, land, and water.....	1927 1925	2,537 2,778	494,905 559,578	803,297,856 908,487,563	2,907,949,399 3,389,101,383	4,702,378,136 5,451,753,433	1,794,428,737 2,062,652,050
Railroad repair shops.....	1927 1925	2,309 2,363	428,291 457,755	648,908,452 668,191,768	545,491,754 563,645,944	1,289,695,158 1,332,679,079	744,203,404 769,033,135
Miscellaneous industries.....	1927 1925	11,799 11,223	268,793 254,818	364,808,988 336,431,757	865,147,238 832,411,489	1,925,987,823 1,812,985,907	1,060,840,585 980,574,418

¹ Compiled by the Bureau of the Census. Data for individual industries have been published in previous issues of the *Survey* beginning with September, 1928. Because of the fact that the products of many manufacturing establishments are used as materials by other establishments, the aggregate value of products as given above is considerably in excess of the total value of finished products in the form in which they reach the ultimate consumer. Figures relate to manufacturing plants with outputs valued at \$5,000 and over.

RELATIVE DEBITS TO INDIVIDUAL ACCOUNTS AT CLEARING-HOUSE CENTERS ¹

GROUPED BY FEDERAL RESERVE DISTRICTS

[Table continued on p. 20]

YEAR AND MONTH	U. S. TOTAL 141 CENTERS	BOSTON DISTRICT					NEW YORK DISTRICT					PHILADELPHIA DISTRICT			
		Total, 11 centers	Boston	Hart- ford	Provi- dence	New Haven	Total, 7 centers	Albany	Buffalo	Roches- ter	New York	Total, 10 centers	Phila- delphia	Scran- ton	Tren- ton
1919 av. mills. dolls.	37, 446	1, 769	1, 245	92	144	72	20, 917	87	263	120	20, 354	1, 625	1, 373	53	43
1919 monthly average ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average ..	106.0	109.2	105.9	117.4	118.7	118.1	99.4	111.5	114.8	119.2	98.8	113.3	112.4	124.5	125.6
1921 monthly average ..	88.7	102.4	106.7	98.9	93.0	98.6	85.2	119.5	92.8	103.3	84.8	95.8	93.8	122.7	111.6
1922 monthly average ..	97.8	105.5	109.3	103.3	95.1	104.2	98.4	119.5	99.6	110.0	98.2	102.5	101.7	109.4	118.6
1923 monthly average ..	103.2	117.1	120.2	119.6	105.5	122.2	98.2	118.3	114.8	124.2	97.6	114.3	111.9	139.6	137.2
1924 monthly average ..	109.5	120.9	125.6	131.3	104.4	125.8	108.3	134.8	115.0	129.0	107.9	116.8	114.3	142.3	146.5
1925 monthly average ..	126.8	136.7	143.9	141.7	114.9	134.6	128.7	147.7	133.3	144.3	128.3	129.5	128.1	138.9	159.6
1926 monthly average ..	135.3	141.6	157.0	152.3	113.4	139.6	139.0	154.0	136.9	146.3	138.8	134.6	133.1	144.2	168.5
1927 monthly average ..	150.0	158.1	168.9	202.5	113.2	148.6	160.1	168.3	140.6	152.2	160.3	140.0	138.6	145.5	175.6
1928 monthly average ..	179.5	161.3	169.1	232.7	115.5	162.4	203.7	179.0	166.0	157.8	204.8	156.2	155.8	146.6	187.4
1927															
October	158.1	174.3	186.0	226.1	122.9	166.7	167.3	163.2	151.7	162.5	167.5	144.8	141.7	154.7	176.8
November	152.5	170.7	183.6	210.9	124.3	148.6	163.0	147.1	139.5	137.5	163.5	139.4	139.3	141.5	167.5
December	174.8	181.8	192.9	266.3	130.5	166.7	190.7	162.0	161.6	173.3	191.3	159.8	159.3	149.1	214.0
1928															
January	168.0	176.8	186.4	258.7	150.0	159.7	185.5	137.9	164.6	160.0	186.1	151.3	149.7	137.8	195.4
February	145.6	135.7	139.2	206.5	116.6	143.1	160.3	160.9	131.5	125.8	160.9	125.7	122.9	128.3	195.4
March	188.7	167.3	176.1	243.5	122.9	165.3	218.7	255.1	148.7	150.0	220.0	157.4	154.8	217.0	172.1
April	179.0	169.3	179.3	257.6	125.7	161.1	204.0	162.0	154.0	159.2	205.3	155.3	155.5	141.5	167.5
May	191.3	170.0	177.0	272.8	129.1	175.0	221.4	265.4	167.7	160.8	222.4	163.5	164.0	154.7	186.1
June	193.6	163.5	168.6	245.7	134.0	175.0	222.4	202.2	173.0	196.7	223.3	175.8	177.8	151.0	202.4
July	157.5	149.1	157.4	200.0	111.1	161.1	172.1	152.8	160.4	153.3	172.4	143.8	142.9	130.2	172.1
August	156.3	143.4	152.2	188.1	106.9	147.2	172.0	142.5	162.0	139.2	172.5	132.8	131.1	126.4	172.1
September	168.7	142.4	148.8	210.9	110.4	152.8	189.4	139.0	162.7	148.3	190.3	146.6	146.1	134.0	172.1
October	194.7	172.2	180.4	231.5	142.3	176.4	220.9	156.3	190.5	165.0	222.0	169.7	169.4	145.3	195.4
November	190.6	166.8	176.5	217.4	124.3	159.7	220.0	157.4	180.2	155.0	223.4	163.6	164.7	137.8	188.4
December	220.1	178.5	187.5	259.8	137.5	172.2	257.2	198.8	196.6	180.0	259.0	189.3	191.2	154.7	230.3
1929															
January	221.3	181.3	187.9	295.7	143.7	195.8	266.7	186.1	191.2	175.0	268.8	179.1	178.9	151.0	200.0
February	189.1	151.2	159.5	220.7	117.3	144.5	225.4	157.4	149.8	141.7	227.4	156.1	155.9	137.8	216.3
March	223.2	171.4	178.4	267.4	134.0	172.2	270.0	233.2	180.2	165.8	272.3	175.1	177.7	143.4	181.4
April	199.7	166.0	168.8	301.1	131.9	172.2	234.4	241.3	181.4	153.3	235.7	178.4	179.9	141.5	193.1
May	204.5	167.4	173.7	254.4	133.3	166.7	244.4	232.7	176.0	149.2	245.9	166.7	167.1	141.5	183.8
June	186.1	162.5	166.5	250.0	137.5	170.8	211.9	212.6	188.2	164.2	212.6	177.1	178.7	139.6	193.1
July	207.3	182.1	189.8	300.0	140.2	180.6	240.8	204.5	217.1	176.7	241.8	175.5	175.3	139.6	227.9
August															
September															
October															
ATLANTA DISTRICT															
YEAR AND MONTH	Total, 15 centers	Atlanta	Bir- ming- ham	New Or- leans	Jack- son- ville	Nash- ville	Au- gusta	CHICAGO DISTRICT							
								Total, 21 centers	Chi- cago	Detroit	Indian- apolis	Mil- wau- kee	Des Moines	Grand Rapids	Sioux City
1919 av., mills. dolls.	928	123	59	304	48	93	37	4, 242	2, 800	525	136	237	83	75	63
1919 monthly average ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average ..	115.1	108.9	128.8	115.4	125.0	120.4	110.8	116.0	113.0	125.2	123.5	124.0	114.5	128.0	109.5
1921 monthly average ..	84.2	85.4	103.4	82.2	91.7	105.4	64.9	92.0	91.7	91.2	100.0	97.5	84.4	109.3	63.5
1922 monthly average ..	86.0	90.2	133.9	89.5	97.9	71.0	70.3	96.8	96.2	101.3	104.4	101.7	83.1	81.3	101.6
1923 monthly average ..	100.0	108.9	183.1	97.4	112.5	78.5	83.8	108.8	105.0	125.7	115.4	115.6	97.6	89.3	119.0
1924 monthly average ..	105.3	113.1	199.3	106.4	126.5	79.2	74.6	110.8	106.3	130.6	110.9	110.5	103.2	89.2	123.4
1925 monthly average ..	125.0	129.2	226.7	118.2	206.2	87.6	78.2	124.9	120.4	158.3	115.4	119.4	89.8	114.1	136.9
1926 monthly average ..	128.1	132.7	243.8	113.7	232.6	89.7	72.6	132.0	127.5	166.4	135.2	127.3	98.1	115.5	129.1
1927 monthly average ..	123.9	127.8	253.5	114.8	181.6	97.6	74.8	137.9	136.8	162.8	136.2	130.1	98.9	110.3	114.7
1928 monthly average ..	123.1	137.7	255.4	112.6	156.4	108.5	75.0	155.3	152.3	213.2	139.6	131.5	100.2	118.0	92.5
1927															
October	137.7	146.3	300.0	130.6	160.4	110.7	97.3	142.6	142.4	170.4	135.3	133.3	101.2	108.0	128.5
November	121.4	121.1	257.6	116.1	160.4	96.8	73.0	135.0	135.9	151.4	134.6	127.0	98.8	104.0	95.2
December	136.9	137.4	272.9	137.5	181.2	106.4	86.5	153.6	155.1	185.7	139.7	135.9	104.8	118.6	87.3
1928															
January	127.6	130.1	271.2	123.0	164.6	102.1	83.8	148.0	149.3	178.1	138.2	133.3	87.6	112.0	84.1
February	112.4	123.0	225.4	103.6	166.6	97.8	78.4	128.7	126.6	160.8	136.0	120.7	86.8	98.6	87.3
March	127.0	135.0	245.8	115.4	175.0	116.1	81.1	157.6	156.9	197.9	146.3	138.0	100.0	114.6	101.6
April	118.5	126.0	240.7	106.6	158.3	104.3	75.7	155.1	158.9	184.0	131.6	129.5	102.4	106.6	88.9
May	122.0	132.5	271.2	106.2	160.4	109.7	73.0	162.0	162.6	206.1	141.9	134.6	108.5	121.3	95.2
June	118.6	126.8	250.9	105.2	158.3	110.7	64.9	162.1	159.2	217.4	137.5	129.5	108.5	124.0	100.0
July	114.7	121.1	245.8	107.2	147.9	96.8	64.9	145.4	139.3	205.5	135.3	131.2	94.0	114.6	95.2
August	112.9	117.1	235.6	102.3	143.7	121.5	62.2	146.6	139.7	216.6	133.8	129.5	97.6	114.6	95.2
September	114.4	122.8	242.4	107.6	133.3	100.0	64.9	151.7	144.1	237.2	127.9	121.5	95.2	116.0	95.2
October	134.0	145.5	294.9	120.7	152.1	120.4	89.2	165.8	160.5	236.8	146.3	138.4	106.0	126.6	101.6
November	129.9	167.5	261.0	119.4	143.7	120.4	73.0	155.9	153.1	216.2	143.4	127.0	100.0	124.0	74.6
December	145.5	204.9	279.7	134.2	172.9	111.8	86.5	184.6	176.9	301.4	156.6	131.2	100.0	130.6	90.5
1929															
January	143.6	186.2	281.4	129.6	168.7	146.2	75.7	173.7	170.1	255.3	155.1	128.3	101.2	133.3	98.4
February	120.2	169.9	215.3	105.6	158.3	119.3	64.9	153.3	154.9	201.4	140.4	115.2	86.8	104.0	88.9
March	134.3	195.9	252.6	117.4	175.0	129.0	75.7	180.3	185.7	220.2	150.7	130.8	100.0	126.6	101.6
April	132.3	188.6	255.9	112.2	183.3	119.3	75.7	163.4	158.9	234.9	143.4	122.8	101.2	118.6	106.3
May	126.3	187.0	252.6	104.3	162.5	109.7	70.3	166.5	160.0	252.4	151.5	117.3	10		

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

[Table continued on p. 21]

YEAR AND MONTH		CLEVELAND DISTRICT									RICHMOND DISTRICT				
		Total, 13 centers	Akron	Cincinnati	Cleveland	Pittsburgh	Yngs- town	Toledo	Colum- bus	Dayton	Total, 7 centers	Balti- more	Norfolk	Rich- mond	Green- ville
1919 average millions of dollars....		1,963	90	247	653	746	60	116	116	50	718	404	84	116	37
1919 monthly average.....		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average.....		116.4	115.6	113.0	115.9	118.5	110.0	117.2	112.0	104.0	111.8	115.6	102.3	108.7	102.7
1921 monthly average.....		89.6	63.3	107.7	81.9	94.9	78.3	100.0	102.6	110.0	95.5	104.9	71.4	98.3	67.6
1922 monthly average.....		94.6	63.3	117.4	84.1	97.2	83.3	132.8	112.1	112.0	89.6	89.1	78.5	100.9	67.6
1923 monthly average.....		110.9	80.0	133.6	99.2	112.7	103.4	153.5	128.5	138.0	98.6	93.3	88.1	112.9	78.4
1924 monthly average.....		109.4	81.4	128.0	96.8	113.2	101.6	155.7	126.0	136.0	96.3	93.4	82.2	109.1	69.4
1925 monthly average.....		122.0	100.0	142.7	106.6	126.4	117.0	179.2	126.9	156.0	106.7	104.6	85.8	122.9	73.3
1926 monthly average.....		127.4	104.5	150.3	115.9	126.7	118.0	189.5	138.3	176.5	108.4	107.4	94.2	121.5	76.2
1927 monthly average.....		136.6	112.9	167.2	124.9	137.1	118.5	205.2	144.8	188.8	107.1	104.2	89.0	120.2	75.0
1928 monthly average.....		141.4	124.5	181.2	130.0	136.1	124.1	241.0	148.3	194.5	105.4	102.0	85.4	123.6	64.2
1927															
October.....		134.8	117.8	170.9	133.8	126.2	120.0	194.0	147.4	182.0	117.8	114.3	92.8	137.1	83.8
November.....		125.6	104.4	159.9	114.1	121.9	118.4	208.6	135.3	164.0	111.0	102.2	96.4	143.1	75.7
December.....		150.0	126.7	197.6	147.6	136.5	111.7	257.8	165.5	204.0	120.6	116.1	97.6	143.1	75.7
1928															
January.....		142.4	117.8	201.2	136.6	133.5	118.4	237.9	150.7	202.0	108.7	105.2	84.5	130.2	73.0
February.....		121.0	107.8	171.3	110.5	117.9	100.0	198.3	127.6	164.0	95.0	92.1	76.2	110.3	67.6
March.....		135.0	113.3	175.3	120.9	129.6	111.7	238.8	150.9	214.0	109.4	106.4	83.3	123.3	75.7
April.....		139.7	130.0	192.7	128.1	133.3	121.7	242.3	154.3	190.0	105.7	102.2	84.5	110.3	73.0
May.....		137.8	118.9	174.1	122.0	134.8	123.4	244.8	146.6	190.0	105.0	103.7	90.4	111.2	67.6
June.....		151.8	132.2	198.8	136.4	150.5	135.0	260.4	151.7	206.0	114.2	119.0	84.5	119.0	56.8
July.....		137.5	132.2	171.7	126.2	130.1	126.7	238.8	137.9	202.0	101.4	102.7	80.9	112.1	54.1
August.....		130.0	117.8	158.3	119.4	125.2	121.7	210.4	136.2	186.0	96.5	93.3	82.1	117.2	48.7
September.....		135.3	125.5	159.1	124.3	129.6	123.4	230.2	138.8	182.0	93.6	86.4	72.6	128.5	51.4
October.....		156.1	141.1	188.3	150.0	147.1	136.7	271.6	151.7	202.0	112.7	104.0	94.0	146.6	70.3
November.....		140.5	116.7	169.7	123.4	142.3	118.4	240.5	146.6	168.0	102.8	95.8	83.3	130.2	64.9
December.....		169.9	141.1	214.2	162.1	159.6	151.7	277.6	186.2	228.0	120.1	112.6	107.1	144.8	67.6
1929															
January.....		154.2	136.7	202.5	138.9	147.1	138.4	244.0	174.1	242.0	113.3	106.2	94.0	133.6	73.0
February.....		139.6	125.5	176.5	134.1	139.9	115.0	170.7	150.0	190.0	96.4	93.3	73.8	114.7	62.2
March.....		150.0	133.3	184.2	140.4	148.7	135.0	199.1	158.6	232.0	108.4	104.4	85.7	125.0	64.9
April.....		158.5	140.0	201.2	153.1	154.0	138.4	219.0	173.3	216.0	110.3	109.1	80.9	121.6	59.5
May.....		145.7	134.4	172.5	135.8	147.7	120.0	185.4	159.5	198.0	104.9	101.2	82.1	115.5	59.5
June.....		148.1	136.7	179.0	141.3	143.6	143.4	190.5	163.8	214.0	105.0	106.9	73.8	117.2	56.8
July.....		165.4	148.9	184.6	151.1	167.9	151.7	219.8	175.0	248.0	109.1	111.6	75.0	123.3	56.8
August.....															
September.....															
October.....															

YEAR AND MONTH	DALLAS DISTRICT				ST. LOUIS DISTRICT					MINNEAPOLIS DISTRICT					
	Total, 11 centers	Dallas	Hous- ton	Fort Worth	Sum- mary for 5 centers	Louis- ville	St. Louis	Memph- is	Little Rock	Total, 9 centers	Duluth	Minne- apolis	St. Paul	Helena	Billings
1919 av.,mill. dolls....	521	161	138	92	965	156	617	136	36	659	90	354	162	11	9
1919 monthly average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average.....	117.4	114.3	115.2	119.6	105.4	92.3	106.5	107.4	125.0	108.5	120.0	109.6	98.2	100.0	111.1
1921 monthly average.....	94.2	90.7	86.2	109.8	89.0	82.0	91.9	73.5	116.7	82.7	84.4	84.2	75.3	100.0	88.9
1922 monthly average.....	97.9	96.9	81.2	119.6	94.5	87.8	94.2	87.5	129.8	88.0	82.2	85.0	97.5	90.9	77.8
1923 monthly average.....	101.3	107.5	89.0	93.5	110.4	101.9	108.4	106.6	167.5	94.8	85.5	91.5	106.8	81.8	88.9
1924 monthly average.....	101.5	112.7	91.2	78.0	110.6	106.7	108.2	101.1	186.1	104.2	117.7	103.8	101.6	85.6	78.7
1925 monthly average.....	112.4	130.8	103.6	82.4	124.2	120.8	120.8	111.7	204.9	114.3	118.2	119.4	104.7	85.6	84.3
1926 monthly average.....	119.1	131.5	126.0	92.1	127.3	128.7	122.7	111.5	226.4	104.9	88.3	110.3	102.2	82.6	88.0
1927 monthly average.....	124.5	135.6	131.9	103.2	127.4	123.6	120.9	119.6	220.8	110.0	103.0	113.9	106.7	83.3	92.6
1928 monthly average.....	134.6	148.5	140.1	115.8	133.8	131.3	129.0	117.0	230.4	117.5	101.3	124.6	110.6	87.9	110.2
1927															
October.....	145.1	166.5	154.3	113.0	138.0	125.0	124.8	161.0	277.8	153.8	203.3	155.7	124.7	109.1	144.4
November.....	136.2	160.9	133.3	115.2	134.1	118.6	123.4	147.1	280.6	130.3	153.3	128.0	124.7	81.8	111.1
December.....	149.7	167.1	157.2	130.4	145.1	129.5	139.1	143.4	258.4	117.9	95.5	120.9	124.1	90.9	111.1
1928															
January.....	132.0	147.2	134.8	113.0	135.4	129.5	130.8	123.5	227.8	101.2	71.1	105.9	109.3	72.7	88.9
February.....	118.0	132.9	118.8	97.8	119.7	119.9	115.4	99.3	208.4	91.8	61.1	95.2	101.9	63.6	88.9
March.....	129.7	142.9	132.6	108.7	132.9	131.4	127.6	115.4	230.6	111.5	80.0	116.4	118.5	81.8	111.1
April.....	121.3	129.8	123.9	105.4	128.2	130.1	125.0	103.7	210.1	107.6	75.5	118.4	102.5	72.7	100.0
May.....	123.8	132.9	124.6	112.0	138.2	135.3	137.6	102.9	222.2	115.3	107.8	125.1	100.6	72.7	100.0
June.....	128.6	131.7	141.3	113.0	144.1	145.5	145.6	102.9	202.8	119.8	110.0	127.1	111.1	81.8	100.0
July.....	120.7	126.1	129.7	114.1	125.0	125.0	123.8	97.1	194.5	112.3	77.8	122.9	106.8	81.8	100.0
August.....	123.0	131.1	129.7	108.7	119.9	119.2	117.8	91.9	194.5	109.4	77.8	119.8	101.2	100.0	100.0
September.....	141.8	163.3	147.8	116.3	122.9	128.2	114.4	110.3	233.4	131.8	142.2	139.3	109.9	90.9	122.2
October.....	163.5	188.8	176.8	127.2	147.1	134.6	136.5	155.1	300.0	155.0	181.1	159.3	125.9	137.3	166.7
November.....	145.5	169.6	147.1	119.6	134.3	128.2	122.7	146.3	261.1	127.3	130.0	131.9	113.6	100.0	133.3
December.....	167.0	185.1	173.9	153.3	157.8	148.7	150.4	155.9	277.8	127.3	101.1	134.2	125.3	109.0	111.1
1929															
January.....	154.7	178.3	149.3	132.6	146.8	150.6	137.5	144.9	236.1	113.0	74.4	122.3	113.0	90.9	100.0
February.....	131.8	146.0	136.2	104.4	125.6	133.3	117.2	120.6	200.0	100.0	66.7	107.4	103.1	72.7	77.8
March.....	147.6	168.3	152.9	117.4	140.7	136.5	133.2	138.0	238.9	113.0	75.5	120.9	117.3	81.8	100.0
April.....	142.2	154.0	145.6	120.7	134.6	127.6	131.5	121.3	225.0	112.0	77.8	119.8	111.1	100.0	100.0
May.....	140.3	145.3	157.2	115.2	132.1	136.5	128.2	114.7	216.7	116.1	91.1	126.8	105.6	81.8	111.1
June.....	129.3	134.8	136.9	115.2	141.2	135.3	145.7	108.1	191.7	120.0	97.8	130.0	111.7	81.8	100.0
July.....	139.9	139.1	152.9	142.4	136.9	138.5	138.3	102.9	211.1	138.7	122.2	154.8	117.3	100.0	111.1
August.....															
September.....															
October.....															

See footnotes on p. 21.

RELATIVE DEBITS TO INDIVIDUAL ACCOUNTS AT CLEARING-HOUSE CENTERS—Continued

GROUPED BY FEDERAL RESERVE DISTRICTS

YEAR AND MONTH	KANSAS CITY DISTRICT							SAN FRANCISCO DISTRICT					
	Total, 14 centers	Denver	Kansas City, Mo.	Omaha	St. Joseph, Mo.	Oklahoma City	Tulsa	Total, 15 centers	Los Angeles	Portland, Oreg.	San Francisco	Seattle	Oak- land, Calif.
1919 average, millions of dolls.	1,231	146	413	264	85	68	94	1,909	314	181	760	206	63
1919 monthly average	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average	109.8	139.7	94.9	95.5	97.6	153.0	131.9	123.2	139.2	108.8	124.6	96.1	160.3
1921 monthly average	82.0	98.6	74.6	67.4	81.1	129.4	88.3	104.4	143.0	82.3	101.9	67.0	128.5
1922 monthly average	84.2	102.7	74.3	73.1	69.4	119.2	105.3	107.2	165.0	76.2	94.8	73.3	144.4
1923 monthly average	90.6	111.6	84.3	77.7	72.9	114.7	104.3	126.3	223.6	86.2	104.0	83.0	192.0
1924 monthly average	85.7	112.9	81.4	69.7	71.6	112.1	89.5	128.9	236.7	89.4	107.1	87.7	196.3
1925 monthly average	95.5	121.5	90.1	76.9	72.7	127.4	112.6	142.9	251.1	92.0	126.1	98.0	227.3
1926 monthly average	100.4	123.2	93.4	75.4	73.4	139.1	136.0	155.7	278.1	101.0	138.2	103.2	273.0
1927 monthly average	102.3	120.4	93.8	76.0	66.9	154.6	139.2	172.3	297.2	94.2	165.0	105.8	356.7
1928 monthly average	103.9	125.4	102.4	82.1	70.0	167.1	147.0	198.7	342.7	101.4	201.6	119.7	399.1
1927													
October	108.4	132.2	102.4	83.3	68.2	163.3	131.9	184.2	295.9	101.7	188.2	115.0	358.7
November	104.1	126.0	94.4	73.5	67.0	169.2	131.9	180.1	305.8	105.0	174.2	108.2	353.9
December	113.8	126.0	105.8	76.9	71.7	189.8	173.4	198.2	330.0	94.5	197.3	117.0	436.4
1928													
January	105.5	119.9	99.3	76.9	72.9	160.3	140.4	183.3	317.5	84.5	180.4	108.2	396.8
February	94.6	106.8	85.2	75.4	68.2	144.2	124.5	179.1	309.3	81.2	188.5	97.1	336.4
March	107.5	126.0	100.0	88.3	77.6	164.8	128.7	212.6	366.6	91.2	221.6	133.0	414.2
April	101.9	125.3	93.2	76.1	64.7	166.2	126.6	198.8	348.1	89.5	198.5	123.8	447.5
May	103.1	123.3	94.2	80.7	69.4	157.4	135.1	218.8	371.1	111.1	235.8	126.7	401.5
June	107.1	126.0	96.8	81.4	68.2	161.8	145.8	224.1	367.2	109.9	249.9	125.7	406.3
July	112.7	120.5	113.1	83.7	65.9	157.4	133.0	177.8	300.7	102.2	171.7	113.1	369.8
August	112.8	122.6	112.1	90.9	69.4	151.5	147.9	178.5	306.4	102.2	170.8	118.4	355.5
September	110.7	129.4	105.1	89.4	70.6	163.3	151.1	192.7	325.8	102.8	194.1	116.5	369.8
October	122.7	145.2	117.7	88.6	72.9	203.0	168.1	206.1	369.5	114.9	192.7	134.9	409.4
November	107.0	128.1	99.5	75.8	65.9	167.7	155.3	190.0	357.4	116.0	194.2	108.7	349.1
December	120.9	131.5	113.1	77.7	74.1	207.4	207.5	222.5	372.6	111.1	221.1	130.1	533.2
1929													
January	117.1	136.3	107.3	84.1	74.1	185.3	184.1	209.4	404.2	101.1	189.1	133.0	407.9
February	102.3	118.5	94.4	75.8	61.2	175.0	147.9	187.4	371.4	97.2	172.3	112.1	349.1
March	117.9	148.6	111.6	89.4	69.4	176.5	159.6	223.3	435.1	110.5	210.6	140.3	417.4
April	116.9	145.2	104.8	86.0	68.2	185.3	172.4	191.5	383.8	98.3	164.0	128.6	366.6
May	112.7	135.6	105.3	83.0	65.9	186.8	161.7	197.7	394.9	111.6	174.0	125.7	372.9
June	115.3	133.6	110.4	83.7	65.9	183.9	169.2	190.3	365.0	105.0	167.4	125.7	385.6
July	137.6	137.7	145.3	96.6	78.8	216.2	202.2	196.7	365.0	108.8	175.9	138.3	385.6
August													
September													
October													
DISTRICT TOTALS—SEASONAL VARIATIONS ELIMINATED													
YEAR AND MONTH	U. S. total	Boston	New York	Phila- delphia	Cleve- land	Rich- mond	Atlanta	Chicago	St. Louis	Minne- apolis	Kansas City	Dallas	San Francisco
1919 monthly average	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average	106.0	109.5	99.3	105.1	116.4	112.1	115.1	116.1	105.5	108.5	109.8	118.0	123.4
1921 monthly average	88.7	101.9	85.1	95.9	89.8	95.6	84.4	92.0	89.1	82.9	82.1	94.3	105.4
1922 monthly average	97.8	105.4	98.5	102.5	94.5	89.5	85.9	96.8	94.2	87.9	84.1	97.9	107.1
1923 monthly average	103.3	117.1	98.0	114.4	111.1	98.8	99.9	109.0	110.3	95.0	89.7	101.1	126.4
1924 monthly average	109.5	121.1	108.3	116.8	109.5	96.5	105.3	110.8	110.5	103.1	87.0	101.2	129.4
1925 monthly average	126.7	136.6	128.6	129.4	122.0	106.8	124.8	123.8	124.1	114.4	95.4	112.4	142.9
1926 monthly average	135.4	146.0	139.0	132.1	127.4	108.5	128.4	132.1	127.3	105.3	100.3	119.4	156.2
1927 monthly average	150.0	158.1	160.2	140.0	136.7	107.3	124.1	137.9	127.3	109.5	102.1	124.5	172.4
1928 monthly average	179.1	161.3	203.1	155.9	141.3	105.6	123.2	155.1	133.3	117.3	108.8	134.5	199.7
1927													
October	148.0	159.9	157.7	136.5	131.5	108.4	124.2	135.0	126.0	129.9	102.3	123.3	169.1
November	149.5	161.8	159.2	141.2	128.8	106.5	114.2	137.2	131.6	121.0	104.5	123.1	173.3
December	155.0	160.6	167.9	141.4	130.5	104.8	119.1	141.4	129.1	106.2	109.7	126.4	173.6
1928													
January	160.9	166.5	175.8	148.0	136.8	104.8	117.6	145.4	126.2	100.6	102.0	123.2	185.0
February	169.3	157.8	187.5	146.5	139.4	110.9	126.6	147.4	132.6	115.6	107.7	133.9	213.7
March	186.6	167.8	215.0	156.9	137.5	113.3	126.0	154.2	132.4	118.9	105.3	132.8	207.8
April	183.2	174.5	206.5	159.3	140.8	112.4	124.6	159.7	133.4	114.6	106.4	133.9	208.2
May	191.1	170.9	217.1	165.0	142.2	108.8	126.3	163.3	141.0	120.5	104.5	133.1	226.5
June	187.2	157.2	213.0	167.1	145.8	111.3	122.6	158.5	142.8	122.1	107.3	137.2	225.9
July	158.9	147.5	174.7	142.9	133.2	100.8	121.0	143.5	128.6	118.0	112.4	134.7	180.0
August	169.7	162.8	191.5	140.1	136.6	99.6	125.2	150.4	131.5	114.3	110.5	136.8	183.8
September	177.6	156.7	204.5	151.6	138.9	98.0	118.7	153.5	129.4	119.3	109.3	137.0	190.8
October	182.3	158.0	208.2	159.9	152.3	103.7	120.8	157.0	134.3	130.9	115.8	138.9	189.3
November	186.9	158.1	216.8	165.8	144.1	98.7	122.2	158.4	131.8	118.2	107.4	131.6	190.6
December	195.1	157.7	226.4	167.5	147.9	104.3	126.6	170.0	140.0	114.7	116.6	141.0	194.8
1929													
January	212.0	170.7	252.8	175.2	148.1	109.3	132.4	170.6	136.8	112.3	113.2	144.4	211.3
February	219.9	175.8	263.6	181.9	160.8	112.5	135.4	175.6	139.1	125.9	116.5	149.6	223.6
March	220.8	171.9	265.5	174.6	152.7	112.2	133.2	176.4	140.1	120.5	115.5	151.1	218.3
April	204.4	171.1	237.2	183.0	159.8	117.3	130.1	168.3	140.1	119.3	121.1	157.0	200.5
May	204.3	168.2	239.6	168.2	150.4	108.7	130.7	167.8	134.8	121.3	114.2	150.9	204.7
June	180.0	156.2	203.0	168.3	142.3	102.3	124.6	160.0	139.9	122.3	115.5	138.0	191.8
July	209.2	180.1	244.5	174.5	160.3	108.4	133.6	176.1	140.8	145.7	137.2	156.1	199.1
August													
September													
October													

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

² Greenville, S. C., substituted for Charleston, S. C., since May, 1928.

INDEXES OF MARKET VALUES OF COMMON STOCKS ¹

[1926=100]

MONTH	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
16 Oil Producing and Refining												
January.....	69.3	87.1	97.3	78.1	82.3	100.1	95.5	96.3	102.6	102.4	104.1	137.4
February.....	71.3	86.4	87.3	75.7	82.2	105.1	93.2	102.6	101.0	104.1	100.0	132.6
March.....	67.9	87.7	96.7	73.6	83.1	107.8	89.6	96.6	98.7	99.3	102.7	141.4
April.....	68.9	91.3	93.0	75.5	87.5	98.7	86.2	94.4	96.2	95.2	109.7	147.6
May.....	69.4	102.0	87.4	76.8	95.6	91.4	83.6	97.4	97.9	95.7	118.7	146.3
June.....	69.1	102.1	84.7	68.7	94.3	84.2	82.8	101.0	100.3	96.3	112.0	144.1
July.....	69.0	105.2	83.4	67.7	90.6	81.1	83.1	100.0	101.5	95.8	110.9	149.1
August.....	69.0	100.7	79.5	66.4	91.6	78.9	85.2	91.7	101.0	99.3	112.6	157.5
September.....	68.3	102.2	84.3	66.3	96.0	78.6	83.8	90.6	101.5	99.3	115.7	-----
October.....	74.6	108.4	84.3	71.1	104.6	78.5	83.1	92.9	98.7	98.2	117.0	-----
November.....	79.1	107.6	82.8	80.1	97.7	80.8	88.3	97.7	100.0	103.5	132.6	-----
December.....	79.6	104.1	75.9	85.2	95.9	90.6	90.4	100.7	101.2	103.6	132.7	-----
Monthly average.....	71.3	98.7	86.4	73.8	91.8	89.7	87.1	96.8	100.0	99.4	114.1	-----
9 Railroad Equipment												
January.....	44.6	48.5	68.3	57.4	61.5	75.2	76.7	94.9	104.5	106.1	141.3	139.2
February.....	46.8	48.1	63.9	57.6	62.6	78.4	77.8	95.9	101.7	112.4	136.9	140.2
March.....	47.1	50.6	68.7	57.7	63.6	80.5	76.1	96.0	94.3	115.8	138.2	144.3
April.....	46.8	53.0	69.5	56.5	66.7	79.2	72.4	91.6	91.1	115.2	137.4	142.4
May.....	48.0	59.6	65.4	57.3	68.3	75.8	73.0	92.7	91.1	119.2	135.2	138.2
June.....	48.6	62.1	65.9	53.2	67.6	73.6	74.0	91.9	96.6	123.6	127.1	141.7
July.....	49.4	66.8	66.3	52.8	67.6	71.8	78.0	97.6	99.4	126.2	125.1	148.5
August.....	49.6	63.4	64.3	50.8	71.7	69.6	77.6	92.2	102.5	131.9	123.6	157.8
September.....	50.1	68.5	64.3	53.0	76.4	71.8	78.0	102.3	104.3	133.5	129.5	-----
October.....	49.1	71.5	64.4	54.1	77.4	70.8	77.1	101.8	100.7	125.4	126.8	-----
November.....	48.9	68.5	60.5	57.4	73.1	73.9	80.9	103.4	104.4	127.6	130.6	-----
December.....	49.1	67.4	55.7	61.4	75.6	75.2	88.1	104.6	108.6	134.2	130.7	-----
Monthly average.....	48.2	60.7	64.8	55.8	69.3	74.7	77.5	97.1	100.0	122.6	131.9	-----
5 Rayon												
January.....	-----	-----	-----	-----	-----	-----	-----	-----	118.9	93.8	158.1	171.5
February.....	-----	-----	-----	-----	-----	-----	-----	-----	114.3	97.9	152.5	155.5
March.....	-----	-----	-----	-----	-----	-----	-----	-----	112.9	100.0	166.8	143.7
April.....	-----	-----	-----	-----	-----	-----	-----	-----	111.0	103.2	172.0	143.2
May.....	-----	-----	-----	-----	-----	-----	-----	-----	105.1	119.7	188.5	143.4
June.....	-----	-----	-----	-----	-----	-----	-----	-----	109.9	129.1	178.2	138.0
July.....	-----	-----	-----	-----	-----	-----	-----	-----	99.0	126.4	167.0	126.6
August.....	-----	-----	-----	-----	-----	-----	-----	-----	91.5	128.6	165.1	126.2
September.....	-----	-----	-----	-----	-----	-----	-----	-----	93.3	142.1	160.7	-----
October.....	-----	-----	-----	-----	-----	-----	-----	-----	83.9	149.1	161.3	-----
November.....	-----	-----	-----	-----	-----	-----	-----	-----	84.0	149.5	161.9	-----
December.....	-----	-----	-----	-----	-----	-----	-----	-----	80.0	156.1	156.4	-----
Monthly average.....	-----	-----	-----	-----	-----	-----	-----	-----	100.0	124.6	165.7	-----
10 Steel and Iron												
January.....	82.1	75.7	100.8	73.4	71.7	85.9	81.7	96.2	99.5	110.0	146.7	173.8
February.....	83.0	76.7	93.2	73.6	75.8	88.6	85.6	95.7	96.5	111.9	141.1	178.9
March.....	81.7	80.9	96.9	72.5	79.6	90.6	80.8	90.8	92.2	115.3	142.0	186.6
April.....	82.1	85.6	99.1	71.6	86.0	88.4	76.6	86.2	89.5	120.3	145.5	190.8
May.....	91.6	90.2	92.3	77.7	88.5	81.0	76.5	86.4	89.1	120.7	145.6	185.3
June.....	90.6	96.1	91.3	67.9	87.8	75.7	75.7	85.3	95.9	121.0	137.7	188.2
July.....	92.2	103.6	90.3	66.1	88.6	71.7	78.5	87.9	103.2	124.1	136.6	211.5
August.....	95.7	93.5	83.7	65.3	91.1	73.0	82.5	90.9	108.6	132.7	143.6	238.4
September.....	94.5	98.9	85.4	67.4	91.3	73.3	81.6	91.2	106.7	143.6	155.8	-----
October.....	88.3	107.5	83.5	67.4	90.6	71.3	80.1	93.7	102.8	133.7	158.7	-----
November.....	81.8	101.9	76.6	69.7	86.5	76.1	84.6	98.6	104.6	135.1	164.6	-----
December.....	80.0	100.1	69.3	71.0	84.7	77.8	90.8	101.8	110.2	144.3	157.8	-----
Monthly average.....	87.0	92.6	88.5	70.3	85.2	79.5	81.3	92.1	100.0	126.1	148.0	-----

¹ Compiled by *Standard Statistics Co. (Inc.)*. The indexes are weighted by the number of shares of each stock outstanding and are corrected for the value of right, stock dividends, changes in par value, and consolidations. Weekly indexes have been averaged to give monthly data which are presented in these tables. This table represents details of group averages shown in table on page 22 of the July, 1929, *SURVEY* and is a continuation of the table shown on pp. 20 and 21 of the August, 1929 *SURVEY*. Further details will appear in subsequent issues.

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

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
TEXTILES												
Wool												
Receipts at Boston:												
Total.....thous. of lbs..	23, 189	15, 390	24, 215	47, 795	56, 981	55, 842	54, 907	+19. 2	+3. 8	225, 497	204, 445	-9. 3
Domestic.....thous. of lbs..	5, 738	6, 442	16, 108	40, 596	53, 652	50, 083	51, 346	+32. 2	+4. 5	156, 350	128, 904	-17. 6
Foreign.....thous. of lbs..	17, 451	8, 948	8, 107	7, 199	3, 329	5, 759	3, 561	-53. 8	-6. 5	69, 147	75, 541	+9. 2
Imports:												
In condition imported.....thous. of lbs..	32, 743	28, 165	19, 786	16, 592	18, 815	19, 671	18, 289	+13. 4	+2. 9	159, 006	186, 022	+17. 0
Grease equivalent.....thous. of lbs..	37, 682	30, 941	22, 372	17, 903	21, 931	21, 383	19, 805	+22. 5	+10. 7	177, 908	207, 050	+16. 4
Consumption by textile mills, grease equivalent.....thous. of lbs..	48, 656	49, 205	48, 765	44, 066	47, 296	41, 282	38, 099	+7. 3	+24. 1	302, 315	340, 012	+12. 5
Stocks, grease equivalent, end of quarter:												
Total.....thous. of lbs..	² 279, 211			² 343, 837		² 385, 407		+23. 1	-10. 8			
Held by manufacturers.....thous. of lbs..	² 161, 139			² 156, 796		² 173, 556		-2. 7	-9. 7			
Held by dealers.....thous. of lbs..	² 118, 072			² 187, 041		² 211, 850		+58. 4	-11. 7			
Machinery, activity, hourly:												
Looms—												
Wide.....per ct. of hours active..	67	70	67	65	62	59	53	-4. 6	+17. 0			
Narrow.....per ct. of hours active..	60	64	61	61	60	58	49	-1. 6	+22. 4			
Carpet and rug.....per ct. of hours active..	69	70	72	69	61	62	55	-11. 6	+10. 9			
Sets of cards.....per ct. of hours active..	86	87	86	85	80	81	78	-5. 9	+2. 6			
Combs.....per ct. of hours active..	82	81	84	78	86	63	59	+10. 3	+45. 8			
Spinning spindles—												
Woolen.....per ct. of hours active..	83	84	82	82	78	78	75	-4. 9	+4. 0			
Worsted.....per ct. of hours active..	68	70	66	65	62	49	50	-4. 6	+24. 0			
Prices:												
Raw, territory, fine, scoured.....dolls. per lb..	1. 05	1. 04	1. 00	. 97	. 93	1. 18	1. 17	-4. 1	-20. 5			
Raw, Ohio and Pa. fleeces, 1/4 blood, combing, grease.....dolls. per lb..	. 52	. 49	. 43	. 42	. 42	. 55	. 55	0. 0	-23. 6			
Worsted yarn.....dolls. per lb..	1. 58	1. 55	1. 50	1. 45	1. 45	1. 58	1. 60	0. 0	-9. 4			
Women's dress goods, French serge, 39-in.....dolls. per yd..	. 98	. 98	. 98	. 98	. 98	1. 03	1. 03	0. 0	-4. 9			
Suiting, 13-oz.....dolls. per yd..	2. 008	2. 008	2. 008	2. 008	2. 008	2. 008	2. 008	0. 0	0. 0			
Cotton												
Production, crop estimate.....thous. of bales.....					¹ 15, 543		⁴ 14, 478					
Ginnings.....thous. of bales.....					¹ 304		⁴ 280					
Receipts into sight.....thous. of bales.....	736	555	328	220	126	302	339	-42. 7	-62. 8	4, 362	3, 709	-15. 0
Imports, unmanufactured.....bales.....	37, 124	84, 621	42, 486	26, 113	21, 369	14, 587	18, 473	-18. 2	+15. 7	192, 547	306, 372	+59. 1
Exports, unmanufactured (including linters).....bales.....	569, 653	472, 304	328, 068	308, 947	246, 983	457, 781	341, 849	-20. 1	-27. 8	3, 866, 151	3, 371, 347	-12. 8
Consumption by textile mills.....bales.....	632, 808	631, 710	668, 229	570, 281	546, 457	510, 399	439, 821	-4. 2	+24. 2	3, 792, 711	4, 315, 972	+13. 8
Stocks, domestic, end of month:												
Totals, mills and w'houses.....thous. of bales.....	4, 908	4, 130	3, 325	2, 665	2, 038	2, 808	2, 201	-23. 5	-7. 4			
Mills.....thous. of bales.....	1, 731	1, 607	1, 477	1, 289	1, 052	1, 161	1, 012	-18. 4	+4. 0			
Warehouses.....thous. of bales.....	3, 177	2, 524	1, 848	1, 376	986	1, 647	1, 190	-28. 3	-17. 1			
Stocks, world visible, end of month:												
Total.....thous. of bales.....	6, 749	6, 053	5, 268	4, 476	3, 651	4, 962	4, 056	-18. 4	-10. 0			
American.....thous. of bales.....	4, 469	3, 680	3, 000	2, 302	1, 693	2, 910	2, 165	-26. 5	-21. 8			
Prices:												
To producer.....dolls. per lb..	. 188	. 185	. 180	. 179	. 178	. 197	. 210	-0. 6	-15. 2			
In New York, middling.....dolls. per lb..	. 212	. 201	. 195	. 188	. 186	. 214	. 215	-1. 1	-13. 5			
Cotton Yarn												
Machinery activity of spindles:												
Active spindles.....thousands.....	31, 104	30, 924	30, 910	30, 628	30, 396	28, 628	28, 160	-0. 8	+7. 9			
Total activity.....millions of hours.....	8, 910	8, 861	9, 165	8, 155	7, 744	7, 252	6, 251	-5. 0	+23. 9			
Activity per spindle.....hours.....	252	251	261	232	222	203	176	-4. 3	+26. 1			
Ratio to capacity.....per cent.....	109. 3	110. 3	110. 9	104. 6	100. 2	88. 4	79. 7	-4. 2	+25. 7			
Carded sales yarn:												
Production.....thous. of lbs..	23, 373	18, 269	17, 941	20, 272	13, 211	19, 415	12, 522	-34. 8	+5. 5	125, 206	130, 095	+3. 9
Stocks, end of month.....thous. of lbs..	8, 328	8, 446	8, 760	8, 785	8, 901	12, 539	12, 350	+1. 3	-27. 9			
Unfilled orders, end of month.....thous. of lbs..	43, 476	40, 345	37, 609	32, 650	32, 472	25, 435	24, 619	-0. 5	+31. 9			
Prices:												
22/1 cones, Boston.....dolls. per lb..	. 377	. 363	. 353	. 348	. 348	. 374	. 384	0. 0	-9. 4			
40/1s, southern spinning.....dolls. per lb..	. 527	. 510	. 499	. 499	. 505	. 489	. 515	+1. 2	-1. 9			
Cotton Goods												
Cotton textiles:												
Production.....thous. of yds..	297, 994	283, 878	341, 370	285, 928	234, 439	287, 818	221, 826	-18. 0	+5. 7	2, 100, 991	2, 079, 288	-1. 0
New orders.....thous. of yds..	358, 333	202, 520	278, 335	228, 244	262, 889	267, 025	187, 439	+15. 2	+40. 3	1, 859, 723	1, 988, 108	+6. 9
Shipments.....thous. of yds..	325, 633	277, 098	326, 121	252, 008	252, 779	270, 342	217, 540	+0. 3	+16. 2	1, 974, 222	2, 088, 111	+5. 8
Stocks, end of month.....thous. of yds..	345, 311	352, 091	367, 340	401, 260	382, 920	458, 984	463, 270	-4. 6	-17. 3			
Unfilled orders, end of mo.....thous. of yds..	504, 876	430, 298	382, 512	358, 748	368, 858	302, 328	272, 227	+2. 8	+35. 5			

¹ Quarter ending in month indicated.² As of Aug. 1.⁴ Final estimate for 1928.⁵ As of Aug. 16.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
TEXTILES—Continued												
Cotton Goods—Continued												
Fine cotton goods, production.....pieces	464, 539	425, 925	526, 971	463, 658	408, 659	134, 158	80, 358	-12.2	+408.5	1, 891, 269	3, 105, 424	+64.2
Cotton cloth:												
Imports.....thous. of sq. yds.	5, 362	5, 334	6, 527	4, 880	5, 175	4, 615	3, 490	+6.0	+48.3	40, 454	37, 747	-6.7
Exports.....thous. of sq. yds.	58, 474	49, 233	46, 261	44, 730	45, 274	46, 534	44, 951	+1.2	+0.7	292, 422	350, 650	+19.9
Fabric for tire manufacture consumption.....thous. of lbs.	21, 238	23, 620	23, 302	20, 359	19, 646	20, 947	20, 947			6 108, 942	6 128, 625	+18.1
Elastic webbing, shipments.....thous. of dolls.	1, 869	1, 766	1, 725	1, 473	1, 357	1, 384	1, 211	-7.9	+12.1	9, 502	11, 174	+17.6
Prices:												
Print cloth, 64 x 60.....dolls. per yd.	.077	.076	.073	.072	.073	.077	.079	+1.4	-7.6			
Sheeting, brown.....dolls. per yd.	.089	.089	.087	.084	.083	.091	.092	-1.2	-9.8			
Cotton goods (Fairchild), rel. to 1911-1913.....	164	164	162	159	159	162	165	0.0	-3.6			
Cotton Finishing												
White, dyed and printed (outside mills):												
Billings, finished goods.....thous. of yds.	98, 495	96, 707	88, 707	78, 964	75, 582	70, 029	58, 685	-4.3	+28.8	514, 894	601, 549	+16.8
New orders, gray yardage.....thous. of yds.	94, 872	90, 469	79, 228	65, 402	69, 475	61, 347	62, 310	+6.1	+11.5	501, 111	574, 268	+14.6
Shipments, finished goods.....cases	65, 112	57, 030	54, 247	45, 674	44, 809	42, 357	40, 500	-1.9	+10.6	318, 993	374, 459	+17.4
Stocks, finished goods, end mo.....cases	35, 478	34, 920	35, 618	33, 487	37, 299	38, 907	37, 958	+5.1	-1.7			
Operating activity.....per ct. of capacity	77	74	71	60	57	53	51	-5.0	+11.8			
Unfilled orders, end of month.....days	6.3	6.4	5.2	5.1	4.9	3.6	3.8	-3.9	+28.9			
Printed only (mills and outside):												
Production.....thous. of yds.	92, 544	88, 635	85, 894	72, 808	60, 902	63, 796	49, 996	-16.4	+21.8	446, 256	561, 349	+25.8
Stocks, end of month.....thous. of yds.	79, 361	82, 106	78, 184	73, 492	87, 397	79, 416	75, 977	+11.3	+15.0			
Silk												
Imports, raw.....thous. of lbs.	6, 476	6, 220	8, 599	7, 596	7, 858	6, 174	5, 832	+3.4	+34.7	48, 391	52, 946	+9.4
Deliveries (consumption).....bales	49, 878	53, 855	49, 121	46, 504	51, 624	46, 051	40, 931	+11.0	+26.1	329, 717	354, 559	+7.5
Stocks, end of month:												
At warehouses.....bales	45, 218	39, 125	39, 898	47, 425	42, 596	41, 127	38, 866	-10.2	+9.6			
At manufacturing plants.....bales	25, 892	23, 108	24, 623	23, 162	20, 985	24, 746	22, 188	-9.4	-5.4			
Silk machinery activity:												
Broad looms.....per cent of normal	100.2	101.1	101.0	100.7	99.7	97.4	93.0	-1.0	+7.2			
Narrow looms.....per cent of normal	66.3	68.8	74.2	67.8	65.1	55.4	52.1	-4.0	+25.0			
Spinning spindles.....per cent of normal	66.3	66.9	63.3	63.1	63.8	57.1	62.7	+1.1	+1.8			
Prices:												
Raw, Japanese, 13-15, N. Y.....dolls. per lb.	4.998	5.145	4.777	4.925	4.876	4.851	4.851	-1.0	+0.5			
Silk goods, composite.....dolls. per yd.	1.19	1.18	1.18	1.19	1.18	1.18	1.17	-0.8	+0.9			
Rayon												
Imports.....thous. of lbs.	1, 901	1, 683	1, 589	1, 582	858	710	659	-45.8	+30.2	6, 714	10, 587	+57.7
Stocks, bonded, end of month.....thous. of lbs.	2, 863	2, 736	2, 423	2, 902		3, 157	2, 949					
Price, 150 denier, A grade, N. Y.....dolls. per lb.	1.30	1.30	1.30	1.23	1.15	1.50	1.50	-6.5	-23.3			
Clothing												
Men's and boys' garments cut:												
Suits.....thous. of garments	2, 411	1, 885	1, 987	2, 198	2, 202	2, 090	2, 129	+0.2	+3.4	15, 253	15, 557	+2.0
Separate trousers.....thous. of garments	2, 312	2, 295	2, 412	2, 221	2, 307	2, 098	1, 898	+3.9	+21.5	14, 488	15, 761	+8.8
Overcoats.....thous. of garments	475	235	346	507	631	496	590	+24.5	+6.9	2, 599	2, 918	+12.3
Overalls:												
Cut.....thous. of dozen garments	402	394	384	7 362	370	367	346	+2.2	+6.9	2, 527	2, 649	+4.8
Net shipments.....thous. of dozen garments	376	348	352	7 317	358	322	330	+12.9	+8.5	2, 184	2, 389	+9.4
Unfilled orders, end of mo.....thous. of dozen garments	241	229	194	7 161	216	159	169	+34.2	+27.8			
Hosiery												
Production.....thous. of dozen pairs	3, 741	3, 639	3, 823	3, 543	3, 068	3, 292	2, 786	-13.4	+10.1	23, 833	24, 623	+3.3
Net shipments.....thous. of dozen pairs	3, 713	3, 493	3, 658	3, 567	3, 075	3, 386	2, 963	-13.8	+3.8	22, 998	23, 821	+3.6
Stocks, end of month.....thous. of dozen pairs	8, 178	7, 985	8, 399	8, 413	7, 943	9, 011	8, 916	-5.6	-10.9			
New orders.....thous. of dozen pairs	3, 776	3, 977	4, 101	3, 513	2, 813	3, 573	2, 836	-19.9	-0.8	23, 118	24, 445	+5.7
Unfilled orders, end of month.....thous. of dozen pairs	4, 254	4, 665	5, 071	4, 841	4, 437	4, 900	4, 711	-8.3	-5.8			
Knit Underwear												
Production.....thous. of dozen garments	1, 251	1, 274	1, 316	7 1, 187	1, 101	1, 113	881	-7.2	+25.0	7, 662	8, 255	+7.7
Net shipments.....thous. of dozen garments	1, 166	1, 112	1, 168	7 1, 126	1, 074	998	942	+4.6	+14.0	7, 077	7, 589	+7.2
Stocks, end of mo.....thous. of dozen garments	1, 368	1, 523	1, 679	7 1, 735	1, 797	1, 761	1, 658	+3.6	+8.4			
New orders.....thous. of dozen garments	1, 330	1, 071	1, 088	7 1, 157	910	894	852	+21.3	+6.8	7, 250	8, 359	+15.3
Unfilled orders, end of month.....thous. of dozen garments	2, 501	2, 444	2, 349	7 2, 293	2, 114	2, 053	1, 947	+7.8	+8.6			
Burlaps and Fibers												
Imports:												
Burlaps.....thous. of lbs.	52, 550	69, 787	71, 649	51, 216	41, 526	56, 913	58, 541	-18.9	-29.1	414, 553	405, 572	-2.2
Fibers (unmanufactured).....long tons	26, 655	30, 389	26, 300	21, 182	20, 469	19, 672	18, 449	-3.4	+10.9	183, 497	202, 628	+10.4
Pyroxylin-Coated Textiles												
Pyroxylin spread.....thous. of lbs.	6, 629	5, 554	5, 245	4, 615	4, 331	5, 150	5, 040	-6.2	-14.1	34, 853	37, 836	+8.6
Shipments billed.....thous. of linear yards	5, 638	4, 822	4, 563	4, 007	3, 569	4, 317	3, 757	-12.4	-6.6	27, 047	31, 445	+16.3
Unfilled orders, end mo.....thous. of linear yards	4, 302	4, 061	3, 531	2, 910	2, 805	4, 227	4, 182	-3.6	-32.9			
Fur												
Sales by dealers.....thous. of dollars	21, 228	12, 994	12, 522	8, 546	8, 135	13, 840	12, 215	-4.8	-33.4	85, 645	87, 770	+2.5
* Cumulative through June 30.												

* Cumulative through June 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
TEXTILES—Continued												
Cotton Mill Dividends (Quarterly)												
Fall River mills.....thous. of dollars..	\$ 235			\$ 225		\$ 241		-4.3	-6.6	\$ 487	\$ 460	-5.5
New Bedford mills.....thous. of dollars..	\$ 249			\$ 280		\$ 346		+12.4	-19.1	\$ 943	\$ 529	-43.9
Buttons												
Fresh-water pearl buttons:												
Production.....ratio to capacity..	52.9	52.6	51.6	50.1	40.9	46.8	29.7	-18.4	+37.7			
Stocks, end of month.....thous. of gross..	11,034	11,114	11,226	11,351	11,171	11,277	10,847	-1.6	+3.0			
IRON AND STEEL												
Iron												
Manganese ore, imports.....thous. of long tons..	18	31	29	51	48	13	22	-5.9	+118.2	107	213	+99.1
Iron ore:												
Imports.....thous. of long tons..	244	284	276	244	301	189	183	+23.4	+64.5	1,418	1,770	+24.8
Shipments from mines.....thous. of long tons..	None.	2,516	9,549	10,174	10,671	8,926	8,980	+4.9	+18.8	23,275	32,910	+41.4
Receipts—												
Lake Erie ports and furnaces.....thous. of long tons..	None.	1,191	6,753	6,985	7,509	6,010	6,078	+7.5	+23.5	14,936	22,438	+50.2
Other ports.....thous. of long tons..	None.	387	2,527	2,805	3,127	2,613	2,655	+11.5	+17.8	6,791	8,846	+30.3
Consumption.....thous. of long tons..	5,465	5,417	5,980	5,677	5,808	4,667	4,633	+2.3	+25.4	32,535	38,361	+17.9
Stocks, end of month—												
Total.....thous. of long tons..	20,005	15,930	19,146	23,701	28,697	22,981	27,209	+21.1	+5.5			
At furnaces.....thous. of long tons..	15,782	12,283	15,275	19,619	24,245	17,913	21,824	+23.6	+11.1			
On Lake Erie docks.....thous. of long tons..	4,223	3,647	3,872	4,082	4,452	5,051	5,385	+9.1	-17.3			
Pig-iron production:												
Total, United States.....thous. of long tons..	3,714	3,663	3,898	3,717	3,785	3,082	3,072	+1.8	+23.2	21,593	25,425	+17.7
Merchant furnaces.....thous. of long tons..	755	837	793	717	746	633	607	+4.0	+22.9	4,452	5,346	+20.1
Canada.....thous. of long tons..	86	79	81	90	100	97	95	+11.1	+5.3	563	618	+9.8
Furnaces in blast, end of month:												
Furnaces.....number..	212	215	219	218	216	189	185	-0.9	+16.8			
Capacity.....long tons per day..	120,740	122,980	126,150	122,590	121,965	100,855	98,445	-0.5	+23.9			
Per cent of total.....per cent..	66.5	67.4	68.7	68.6		55.3	54.6					
Ohio gray-iron foundries:												
Meltings—												
Actual.....long tons..	20,662	23,703	23,588	21,214	19,508	19,382	19,967	-8.0	-2.3	114,877	151,422	+31.8
Normal.....long tons..	18,985	20,949	20,568	19,164	18,535	18,454	19,363	-3.3	-4.3	112,297	139,406	+24.1
Ratio to normal.....per cent of normal..	108.8	113.1	114.6	110.6	105.3	105.0	103.0	-4.8	+2.2			
Stocks, end of month.....per cent of normal..	133	122	118	131	131	147	127	0.0	+3.1			
Receipts.....per cent of normal..	107	102	112	105	99	99	107	-5.7	-7.5			
Malleable castings:												
Production.....short tons..	83,365	83,765	81,705	77,512	70,132	67,090	60,290	-3.3	+16.3	455,164	538,718	+18.4
Operating activity.....per ct. of capacity..	87.7	87.8	83.8	75.2	73.2	69.9	63.1	-2.7	+16.0			
Shipments.....short tons..	81,063	81,999	80,535	77,608	69,940	66,737	60,084	-3.7	+16.4	445,312	534,662	+20.1
New orders.....short tons..	86,744	80,808	76,927	75,377	61,988	61,071	60,964	-5.2	+1.7	444,973	526,867	+18.4
Wholesale prices:												
Foundry, No. 2,												
northern.....dolls. per long ton..	19.51	19.76	20.26	20.26	20.26	18.51	18.41	0.0	+10.0			
Basic (valley furnace).....dolls. per long ton..	17.50	17.90	18.38	18.50	18.50	15.45	16.00	0.0	+15.6			
Composite pig iron.....dolls. per long ton..	19.11	19.25	19.27	19.35	18.31	17.97	17.79	-5.4	+2.9			
Cast-Iron Boilers and Radiators												
Round boilers:												
Production.....thous. of lbs..	12,248	10,184	11,212	10,578	9,761	12,094	10,581	-7.7	-7.7	87,368	77,719	-11.0
Shipments.....thous. of lbs..	7,208	8,603	9,682	10,171	14,342	13,071	12,302	+41.0	+16.6	78,855	67,287	-14.7
New orders.....thous. of lbs..	6,151	7,920	9,143	9,059	16,854	14,765	12,950	+86.0	+30.1	85,472	64,422	-24.6
Stocks, end of month.....thous. of lbs..	86,526	87,971	89,104	89,437	90,026	80,728	87,993	+0.7	+2.3			
Square boilers:												
Production.....thous. of lbs..	28,429	20,014	19,410	16,119	12,632	31,238	19,541	-21.6	-35.4	204,918	161,173	-21.3
Shipments.....thous. of lbs..	11,476	12,264	14,946	17,458	24,097	25,165	28,247	+38.0	-14.7	143,332	112,398	-21.6
New orders.....thous. of lbs..	11,844	13,616	15,034	18,421	29,471	29,779	32,164	+60.0	-8.4	161,248	117,363	-27.2
Stocks, end of month.....thous. of lbs..	170,212	177,755	181,938	179,900	175,019	188,078	179,539	-2.7	-2.5			
Radiators:												
Production.....thous. sq. ft. heating surface..	13,182	10,653	10,641	9,364	7,465	13,363	11,388	-20.3	-34.4	100,309	80,171	-20.1
Shipments.....thous. sq. ft. heating surface..	6,116	6,443	7,900	9,226	13,247	11,665	13,285	+43.6	-0.3	70,233	59,655	-15.1
New orders.....thous. sq. ft. heating surface..	6,062	8,238	8,178	9,603	17,545	12,394	14,844	+82.7	+18.2	80,659	65,939	-18.2
Stocks, end of month.....thous. sq. ft. heating surface..	66,903	71,284	74,067	74,189	73,958	79,549	78,279	-0.3	-5.5			
Gas-fired boilers:												
Shipments.....dollars..	239,879	262,914	190,295	285,223	315,696	230,250	266,627	+10.7	+18.4	1,224,292	1,539,073	+25.7
Shipments.....thous. B. t. u..	171,048	202,358	149,555	213,780	254,856	182,195	224,098	+19.2	+13.7	986,477	1,180,948	+19.7
Production.....thous. B. t. u..	177,375	350,409	298,794	271,330	248,993	135,711	125,000	-8.2	+99.2	1,102,481	1,735,746	+57.4
Stocks, end of month.....thous. B. t. u..	825,707	916,004	939,481	1,197,768	1,115,865	960,656	852,822	-6.8	+30.8			
Crude Steel												
Steel ingots, production:												
United States, total.....thous. of long tons..	5,058	4,938	5,273	4,881	4,838	3,744	3,806	-0.9	+27.1	28,603	33,804	+18.2
Ratio to capacity.....per cent..	99	97	100	100	95	76	81	-5.0	+17.3			
Canada.....thous. of long tons..	137	122	126	120	130	117	83	+83	+56.6	732	868	+18.6
U. S. Steel Corporation:												
Unfilled orders,												
end of month.....thous. of long tons..	4,411	4,428	4,304	4,257	4,088	3,637	3,571	-4.0	+14.5			
Earnings.....thous. of dolls..	22,265	22,361	25,605	24,029		16,359	16,134			\$ 87,867	\$ 132,100	+50.3

¹ Quarter ending in month indicated.² Cumulative through June 30.³ Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL ¹ FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
IRON AND STEEL—Continued												
Crude Steel—Continued												
Steel castings:												
Production—												
Total.....short tons.....	115,163	121,941	127,189	116,009	119,474	91,746	78,648	+3.0	+51.9	605,913	790,757	+30.5
Ratio to capacity.....per cent.....	79	84	87	80	82	62	53	+2.5	+54.7			
Railroad specialties.....short tons.....	49,562	53,458	58,636	54,154	51,579	30,742	27,501	-4.8	+87.6	232,342	343,360	+47.8
Miscellaneous.....short tons.....	65,601	68,483	68,553	61,855	67,895	61,004	51,147	+9.8	+32.7	373,571	447,397	+19.8
New orders—												
Total.....short tons.....	130,836	144,616	113,329	94,996	103,447	72,107	66,992	+8.9	+54.4	576,260	827,176	+43.5
Ratio to capacity.....per cent.....	90	99	78	65	71	49	45	+9.2	+57.8			
Railroad specialties.....short tons.....	60,743	75,625	44,919	34,947	37,883	22,597	20,483	+7.0	+82.5	224,249	377,329	+68.3
Miscellaneous.....short tons.....	70,093	68,991	68,410	60,049	66,064	49,510	46,509	+10.0	+42.0	352,011	449,847	+27.8
Sheets, black, blue, galvanized, and full finished:												
Production—												
Total.....net tons.....	364,202	375,256	393,430	337,841	323,905	311,629	267,685	-4.1	+21.0	2,269,823	2,512,506	+10.7
Ratio to capacity.....per cent.....	115.2	115.2	115.8	110.4	98.1	94.3	82.2	-11.1	+19.3			
Stocks, end of month—												
Total.....net tons.....	189,050	175,306	167,869	163,607	154,854	151,606	161,933	-5.4	-4.4			
Unsold.....net tons.....	63,397	54,142	48,334	52,274	47,103	50,702	55,280	-9.9	-14.8			
Shipments.....net tons.....	363,648	377,274	392,336	347,989	344,676	308,741	278,310	-1.8	+23.8	2,173,127	2,514,000	+15.7
New orders.....net tons.....	464,297	398,206	279,783	307,911	337,222	318,902	333,357	+9.5	+1.2	2,155,217	2,615,305	+21.3
Unfilled orders end of month.....net tons.....	791,615	835,801	713,568	676,568	658,155	526,798	550,468	-2.7	+19.6			
Steel barrels:												
Production.....barrels.....	742,165	771,584	836,532	774,853	790,175	712,779	647,844	+2.0	+22.0	4,356,436	5,041,199	+15.7
Ratio to capacity.....per cent.....	61.0	64.8	72.0	61.8	64.2	61.4	55.5	+3.9	+15.7			
Shipments.....barrels.....	743,407	775,481	834,699	779,567	782,411	717,496	645,881	+0.4	+21.1	4,353,211	5,027,678	+15.5
Stocks, end of month.....barrels.....	59,000	55,103	56,936	52,222	59,986	53,868	55,831	+14.9	+7.4			
Unfilled orders, end of month.....barrels.....	1,470,258	1,269,044	1,215,972	1,548,999	1,372,697	1,159,756	1,232,412	-11.4	+11.4			
Track work, production.....short tons.....	14,927	16,815	16,333	14,838	13,844	13,716	11,776	-6.7	+17.6	88,905	99,281	+11.7
Iron, steel, and heavy hardware												
sales.....rel. to Jan., 1921.....	217	226	230	220	223	204	187	+1.4	+19.3			
Lock washers, shipments.....thous. of dolls.....	353	370	373	397	391	287	257	-1.5	+52.1	1,844	2,491	+35.1
Wholesale prices:												
Steel billets, Bessemer.....dolls. per long ton.....	34.00	34.80	36.00	35.25	35.00	32.25	32.00	-0.7	+9.4			
Iron and steel comp.....dolls. per long ton.....	36.37	36.81	37.10	37.01	36.72	35.34	34.91	-0.8	+5.2			
Structural steel beams.....dolls. per 100 lbs.....	1.90	1.90	1.95	1.95	1.95	1.85	1.85	0.0	+5.4			
Composite finished steel.....dolls. per 100 lbs.....	2.55	2.56	2.56	2.56	2.56	2.48	2.48	0.0	+3.2			
Fabricated Steel Products												
Structural steel, fabricated:												
New orders (prorated).....short tons.....	358,050	334,950	342,650	342,650	350,350	296,450	296,450	+2.2	+18.2	1,867,250	2,271,500	+21.6
Ratio to capacity.....per cent.....	93	87	89	89	91	77	77	+2.2	+18.2			
Shipments (prorated).....short tons.....	277,200	304,150	311,580	292,600	304,150	261,800	265,650	+3.9	+14.5	1,690,150	2,009,700	+18.9
Ratio to capacity.....per cent.....	72	79	81	76	79	68	69	+3.9	+14.5			
Steel plate, fabricated, new orders:												
Total.....short tons.....	57,869	40,675	47,763	45,918	46,686	35,202	35,959	+1.7	+29.8	296,442	330,300	+11.4
Ratio to capacity.....per cent.....	72	51	60	58	62	44	47	+6.9	+31.9			
Oil storage tanks.....short tons.....	22,045	9,984	10,087	6,890	14,963	12,204	16,881	+117.2	-11.4	127,891	91,117	-28.8
Steel bars, cold finished, shipments.....short tons.....	62,179	60,486	58,768	51,181	49,910	39,542	39,943	-2.5	+25.0	280,208	385,734	+37.7
Steel boilers, new orders:												
Quantity.....number.....	1,466	1,706	1,751	1,685	2,052	1,887	1,932	+21.8	+6.2	11,099	10,777	-2.9
Area.....thous. of sq. ft.....	1,558	1,769	2,145	1,823	2,081	1,666	1,738	+14.2	+19.7	10,273	11,824	+15.1
Steel furniture:												
Business group—												
Shipments.....thous. of dolls.....	2,923	2,845	2,784	2,574	2,625	3,009	2,515	+2.0	+4.4	20,594	20,609	+0.1
New orders.....thous. of dolls.....	2,884	2,880	2,814	2,522	2,560	2,764	2,594	+1.5	-1.3	21,186	20,613	-2.7
Unfilled orders, end mo.....thous. of dolls.....	2,344	2,379	2,401	2,320	2,240	1,993	2,072	-3.4	+8.1			
Shelving—												
Shipments.....thous. of dolls.....	1,110	1,131	989	920	867	720	723	-5.8	+19.9	5,122	6,893	+34.6
New orders.....thous. of dolls.....	1,146	1,095	1,121	959	939	737	713	-2.1	+31.7	5,275	7,280	+38.0
Unfilled orders, end mo.....thous. of dolls.....	802	765	897	934	999	729	706	+7.0	+41.5			
Iron and steel:												
Exports.....long tons.....	270,925	277,580	261,516	247,811	270,532	262,052	253,336	+9.2	+6.8	1,612,078	1,862,371	+15.5
Imports.....long tons.....	39,888	43,936	54,445	46,397	51,275	56,573	33,465	+10.5	+53.2	345,585	326,847	-5.4
Enameled Ware												
Baths:												
Shipments.....pieces.....	82,897	93,894	94,452	89,388	99,705	119,297	111,067	+11.5	-10.2	705,750	595,972	-15.6
Stocks, end of month.....pieces.....	215,000	208,512	197,472	181,677	162,694	120,723	113,430	-10.4	+43.4			
New orders.....pieces.....	99,039	99,070	80,944	82,349	119,670	113,017	101,603	+45.3	+17.8	820,752	631,060	-23.1
Unfilled orders, end of month.....pieces.....	54,746	58,015	49,870	41,644	61,118	121,061	101,560	+46.8	-39.8			
Lavatories:												
Shipments.....pieces.....	94,321	104,199	104,471	101,900	108,077	131,623	120,600	+6.1	-10.4	806,692	675,089	-16.3
Stocks, end of month.....pieces.....	278,137	273,284	257,245	246,575	223,657	173,898	164,830	-9.3	+35.7			
New orders.....pieces.....	107,878	114,819	102,187	92,709	140,109	138,113	104,262	+51.1	+34.4	936,451	726,987	-22.4
Sinks:												
Shipments.....pieces.....	97,429	109,748	108,081	102,709	114,051	128,298	122,593	+11.0	-7.0	824,217	704,501	-14.5
Stocks, end of month.....pieces.....	318,069	312,209	313,022	298,739	273,463	227,929	213,539	-8.5	+28.1			
New orders.....pieces.....	107,127	128,629	111,580	94,446	138,064	128,368	116,236	+46.2	+18.8	952,171	755,359	-20.7
Miscellaneous sanitary ware:												
Shipments.....pieces.....	36,152	40,544	35,616	42,061	44,762	48,221	48,550	+6.4	-7.8	334,499	274,306	-18.0
Stocks, end of month.....pieces.....	149,013	147,990	145,277	142,411	133,265	111,141	110,330	-6.4	+20.8			
New orders.....pieces.....	40,050	45,588	33,781	41,817	54,131	47,197	41,605	+29.4	+30.1	365,635	294,539	-19.4
Small ware (all except baths):												
Unfilled orders, end of month.....pieces.....	151,113	183,072	174,981	154,243	214,996	315,920	274,135	+39.4	-21.6			
Enameled sheet-metal ware:												
Shipments.....dozen pieces.....	449,425	463,577	352,885	337,375		299,078	277,684			2,134,181	2,421,710	+13.5

¹ Cumulative through June 30.² Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
IRON AND STEEL—Continued												
Machinery												
Vacuum cleaners, shipments..... number	123,650	124,882	116,192	87,951	-----	75,631	57,702	-----	-----	\$506,145	\$610,517	+20.6
Water softeners, shipments..... units	1,510	1,604	1,444	1,228	1,177	1,235	1,218	-4.2	-3.4	10,042	9,549	-4.9
Water systems, shipments..... units	9,322	11,030	12,348	13,031	12,270	11,487	10,935	-5.8	+12.2	67,152	72,386	+7.8
Pumps:												
Steam, power, and centrifugal—												
New orders.....thous. of dolls.	1,878	2,175	1,772	2,014	1,778	1,505	1,460	-11.7	+21.8	9,798	12,744	+30.1
Shipments.....thous. of dolls.	1,608	1,740	1,886	1,715	1,849	1,640	1,553	+7.8	+19.1	9,754	11,857	+21.6
Unfilled orders, end mo.thous. of dolls.	3,912	4,343	4,058	4,364	4,282	3,088	2,984	-1.9	+43.5	-----	-----	-----
Agricultural machinery and equipment:												
Shipments—												
Total.....rel. to 1923-25.....	255.0	261.7	225.5	240.1	229.7	219.3	211.7	-4.3	+8.5	-----	-----	-----
Domestic.....rel. to 1923-25.....	246.7	264.3	223.9	233.3	219.6	222.5	206.1	-5.9	+6.6	-----	-----	-----
Foreign.....rel. to 1923-25.....	298.3	247.9	233.6	275.3	260.0	202.7	241.0	-5.6	+7.9	-----	-----	-----
Production.....rel. to 1923-25.....	185.1	187.2	182.5	174.2	159.5	142.6	142.5	-8.4	+11.9	-----	-----	-----
Foundry equipment:												
New orders.....rel. to 1922-24.....	209.4	172.6	177.7	177.3	219.3	149.1	94.8	+23.7	+131.3	-----	-----	-----
Shipments.....rel. to 1922-24.....	197.5	220.3	217.0	172.7	182.1	129.4	124.8	+5.4	+45.9	-----	-----	-----
Unfilled orders, end of mo. rel. to 1922-24.....	414.4	363.4	323.8	300.8	368.7	359.3	332.1	+22.6	+11.0	-----	-----	-----
Stokers, mechanical, sales:												
Quantity.....number	117	141	174	203	186	162	186	-8.4	0.0	849	998	+17.6
Power.....horsepower	42,432	48,749	60,772	67,322	65,197	42,628	58,670	-3.2	+11.1	284,687	358,418	+25.9
Machine tools:												
New orders.....rel. to 1922-24.....	334	320	334	292	259	215	204	-11.3	+27.0	-----	-----	-----
Shipments.....rel. to 1922-24.....	329	311	301	296	278	193	181	-6.1	+53.6	-----	-----	-----
Unfilled orders, end of mo. rel. to 1922-24.....	687	718	721	722	694	348	420	-3.9	+65.2	-----	-----	-----
Electric hoists:												
New orders—												
Quantity.....number	595	508	541	600	504	442	394	-16.0	+27.9	2,994	4,031	+34.6
Value.....dollars	285,465	246,673	268,043	283,170	249,447	181,205	204,636	-11.9	+21.9	1,381,941	1,932,802	+39.9
Shipments.....dollars	247,348	232,483	262,641	269,978	290,141	195,807	177,404	+7.5	+63.5	1,267,194	1,717,658	+35.5
Electric overhead cranes:												
Shipments.....thous. of dolls.	773	748	1,122	1,091	1,146	600	463	+5.0	+147.5	3,968	6,318	+59.2
New orders.....thous. of dolls.	1,919	1,194	1,457	1,189	1,157	573	733	-2.7	+57.8	4,005	9,472	+136.5
Unfilled orders, end of mo. thous. of dolls.	4,300	4,587	4,786	5,047	5,118	1,688	1,800	+1.4	+184.3	-----	-----	-----
Woodworking machinery:												
New orders.....thous. of dolls.	1,850	1,718	1,620	1,678	1,691	1,173	1,247	+0.8	+35.6	9,441	12,399	+31.3
Shipments.....thous. of dolls.	1,560	2,130	1,786	1,612	1,767	1,319	1,264	+9.6	+39.8	8,846	11,765	+33.0
Shipments.....number of machines.	1,179	1,420	1,231	1,056	1,232	871	932	+16.7	+32.2	6,690	8,119	+21.4
Cancellations.....thous. of dolls.	29	30	40	27	18	44	32	-33.3	-43.7	195	251	+28.7
Unfilled orders, end of mo. thous. of dolls.	2,839	2,582	2,406	2,445	2,369	1,873	1,838	-3.1	+28.9	-----	-----	-----
Electric industrial trucks and tractors:												
Shipments, domestic—												
Tractors.....number of vehicles.	14	12	28	17	19	6	5	+11.8	+280.0	66	104	+57.6
All other types.....number of vehicles.	187	169	174	168	145	96	87	-13.7	+66.7	676	1,093	+61.7
Exports.....number of vehicles.	10	13	9	16	5	14	15	-68.7	-66.7	91	75	-17.6
Fire-extinguishing equipment, shipments:												
Motor vehicles.....number	107	108	118	120	132	97	105	+10.0	+25.7	682	751	+10.1
Hand types.....number	55,303	58,696	54,420	51,929	62,266	48,123	48,897	+19.9	+27.3	334,956	375,598	+12.1
Patents issued:												
Total, all classes.....number	3,357	4,267	3,861	3,591	4,054	4,275	3,107	+12.9	+30.5	24,820	26,092	+5.1
Agricultural implements.....number	42	62	62	51	53	24	44	+3.9	+20.5	295	358	+21.4
Internal-combustion engines.....number	50	54	51	39	92	42	59	+135.9	+55.9	371	384	+3.5
NONFERROUS METALS												
Copper												
Production:												
Mines.....short tons.	93,698	94,902	93,392	82,354	79,329	73,224	73,426	-3.7	+8.0	496,319	614,735	+23.9
Smelter.....short tons.	107,253	110,313	108,961	95,339	94,690	88,398	83,875	-0.7	+12.9	578,539	712,941	+23.2
Refined (N. and S. America).....short tons.	163,561	161,285	161,784	156,447	153,513	131,024	135,092	-1.9	+13.6	894,719	1,092,447	+22.1
World production, blister.....short tons.	192,792	196,820	192,589	174,586	174,547	159,474	156,190	0.0	+11.8	1,057,439	1,277,207	+20.8
Domestic shipments, refined.....short tons.	105,860	99,051	93,743	95,258	98,720	81,436	82,245	+3.6	+20.0	526,273	691,538	+31.4
Exports.....short tons.	43,745	45,842	36,949	40,852	33,876	50,261	47,855	-17.1	-29.2	343,836	303,683	-11.7
Stocks (North and South America), end mo:												
Refined.....short tons.	52,968	57,494	70,412	83,140	97,729	58,809	54,871	+17.5	+78.1	-----	-----	-----
Blister.....short tons.	242,341	253,509	262,229	251,481	239,470	235,363	241,131	-4.8	-0.7	-----	-----	-----
Wholesale price, electrolytic.....dolls. per lb.	.2126	.1950	.1778	.1778	.1778	.1453	.1453	0.0	+22.4	-----	-----	-----
Wire Cloth												
Production:												
.....thous. of sq. ft.	473	509	536	456	438	400	367	-3.9	+19.3	3,079	3,284	+6.7
Shipments.....thous. of sq. ft.	439	441	518	404	461	364	365	+14.1	+26.3	2,871	2,980	+3.8
Stocks, end of month.....thous. of sq. ft.	1,085	1,137	1,120	1,084	1,049	1,157	1,124	-3.2	-6.7	-----	-----	-----
New orders.....thous. of sq. ft.	1,172	247	262	244	345	310	346	+41.4	0.3	2,639	3,056	+15.8
Unfilled orders, end of mo. thous. of sq. ft.	789	497	495	249	405	185	247	+62.7	+64.0	-----	-----	-----
Make and hold orders, end of month.....thous. of sq. ft.	743	689	618	568	507	414	405	-10.7	+25.2	-----	-----	-----
Tin												
Deliveries (consumption).....long tons.												
8,175	8,435	8,450	7,455	6,865	6,950	5,545	-----	-7.9	+23.8	44,005	54,955	+24.9
Stocks, end of month:												
World visible supply.....long tons.	26,632	26,353	24,765	23,751	23,787	16,231	18,022	+0.2	+32.0	-----	-----	-----
United States.....long tons.	2,550	3,603	3,464	3,820	3,087	2,148	2,878	-19.2	+7.3	-----	-----	-----
Imports.....long tons.	7,435	8,838	8,902	7,150	5,521	5,050	4,772	-22.8	+15.7	43,645	54,669	+25.3
Wholesale price, Straits, N. Y.....dolls. per lb.	.4885	.4597	.4392	.4426	.4640	.4796	.4710	+4.8	-1.5	-----	-----	-----

* Cumulative through June 30.

† Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
NONFERROUS METALS—Continued												
Zinc												
Retorts in operation, end of month.....number	67, 519	73, 319	73, 231	72, 087	72, 329	65, 680	62, 384	+0.3	+15.9			
Per cent of total.....per cent	56.3	61.2	61.1	60.2	60.1	53.4	53.9	-0.2	+11.5			
Production.....short tons	55, 471	54, 653	56, 958	52, 953	54, 441	50, 825	50, 890	+2.8	+7.0	366, 967	372, 339	+1.5
Stocks, end of month.....short tons	37, 962	34, 588	33, 826	36, 932	44, 142	44, 468	42, 210	+19.5	+4.6			
Ore, Joplin district:												
Shipments.....short tons	72, 206	54, 821	37, 961	7 60, 119	48, 995	64, 531	43, 227	-18.5	+13.3	342, 768	373, 727	+9.0
Stocks, mines, end of month.....short tons	20, 969	26, 448	40, 957	7 47, 458	39, 813	32, 266	31, 679	-16.1	+25.7			
Price, slab, prime western.....dolls. per lb.	.0646	.0666	.0662	.0669	.0677	.0616	.0620	+1.2	+9.2			
Lead												
Production.....short tons	59, 298	62, 476	62, 119	7 57, 579	58, 108	51, 501	48, 671	+0.9	+19.4	369, 196	406, 441	+10.1
Ore shipments:												
Joplin district.....short tons	13, 329	11, 615	8, 424	8, 491	5, 373	13, 277	6, 623	-36.7	-18.9	53, 242	62, 258	+16.9
Utah.....short tons	101, 763	75, 935	96, 688	76, 003	66, 083	77, 074	56, 395	-13.1	+17.2	478, 833	559, 166	+16.8
Receipts in U. S. ore.....short tons	57, 197	57, 449	58, 140	53, 542		54, 185	49, 305			318, 256	331, 163	+4.1
Stocks, U. S. and Mexico, end mo. short tons	158, 149	156, 888	162, 255	173, 612		163, 709	158, 919					
Price, pig, desilverized, N. Y.....dolls. per lb.	.0745	.0719	.0700	.0700	.0680	.0630	.0622	-2.9	+9.3			
Other Metal Products												
Babbitt metal, consumption:												
Total apparent.....thous. of lbs.	6, 466	6, 046	5, 479	5, 928	5, 361	4, 731	4, 693	-9.6	+14.2	33, 201	41, 093	+23.8
Direct by producers.....thous. of lbs.	1, 346	1, 189	1, 230	1, 107	1, 313	1, 106	900	+18.6	+45.9	7, 098	8, 427	+18.7
Sale to consumers.....thous. of lbs.	5, 120	4, 857	4, 249	4, 821	4, 048	3, 625	3, 793	-16.0	+6.7	26, 102	32, 668	+25.2
Band instruments, shipments:												
Total.....dollars	395, 465	313, 462	336, 794	322, 040	260, 216	345, 169	266, 219	-16.4	+1.1	2, 470, 177	2, 300, 783	-6.9
Cup mouthpieces.....dollars	167, 302	143, 123	156, 939	154, 327	113, 724	148, 148	110, 104	-26.3	+3.3	986, 398	1, 006, 738	+2.1
Saxophone.....dollars	192, 739	138, 110	151, 008	135, 770	124, 372	168, 420	134, 350	-8.4	-7.4	1, 308, 003	1, 057, 876	-19.1
Wood wind.....dollars	36, 424	32, 229	28, 847	31, 943	31, 120	28, 601	21, 765	-2.6	+43.0	175, 776	236, 169	+34.4
Pails and tubs, galvanized:												
Production.....dozens	211, 252	165, 155	176, 622	98, 857		141, 448	114, 343			1, 004, 112	954, 011	-5.0
Shipments.....dozens	211, 516	171, 722	150, 501	104, 762		144, 385	121, 415			1, 001, 966	975, 059	-2.7
Other galvanized ware:												
Production.....dozens	50, 055	55, 778	43, 370	37, 479		48, 038	61, 678			233, 980	287, 802	+23.0
Shipments.....dozens	49, 549	55, 632	38, 597	35, 334		44, 833	47, 856			226, 407	259, 337	+14.5
Electrical Equipment												
Electrical mfrs., new orders (quarterly).....thous. of dolls.	2 322, 434			2 340, 898		2 245, 521		+5.7	+38.8	4 483, 029	6 663, 332	+37.3
Electrical porcelain, shipments:												
Standard.....dollars	105, 716	109, 558	110, 326	101, 013	139, 240	66, 968	106, 503	+37.8	+30.7	494, 621	809, 465	+63.7
Special.....dollars	185, 908	148, 280	159, 785	172, 704	168, 066	128, 243	132, 762	-2.7	+26.6	868, 584	1, 107, 067	+27.5
High tension.....dollars	735, 865	632, 025	679, 579	667, 099	632, 172	514, 307	637, 602	-5.2	-0.9	3, 505, 592	4, 484, 453	+27.9
Glazed nail knobs.....thous. of pieces	3, 683	3, 821	4, 160	3, 794		2, 597	4, 079			14, 077	23, 572	+67.5
Un glazed nail knobs.....thous. of pieces	2, 576	2, 458	3, 202	1, 998		1, 349	2, 065			7, 401	15, 243	+106.0
Tubes.....thous. of pieces	1, 380	1, 345	2, 025	1, 746		1, 239	3, 237			6, 456	9, 875	+53.0
Laminated phenolic products, shipments.....dollars	1, 299, 437	1, 409, 532	1, 477, 523	1, 456, 335		1, 020, 948	1, 125, 767			4 989, 688	8 263, 225	+65.6
Motors:												
New orders.....dollars	942, 665	1, 258, 364	854, 349	1, 098, 864		896, 638	804, 226			4 660, 068	5 903, 511	+26.7
Billings, (shipments).....dollars	703, 848	922, 220	1, 038, 218	883, 821		761, 630	778, 787			4 346, 701	5 052, 255	+16.2
Power switching equipments:												
New orders—												
Indoor.....dollars	162, 578	200, 564	246, 171	133, 418		144, 940	124, 345					
Outdoor.....dollars	521, 874	400, 397	460, 749	598, 645		385, 428	380, 416					
Outlet boxes and covers, shipments.....pieces	2, 688, 191	3, 005, 179	2, 931, 583	2, 114, 582		2, 779, 032	2, 769, 866			16 040, 834	16 182, 221	+0.6
Vulcanized fiber:												
Shipments, total.....thous. of dolls.	828	812	827	814		626	561			3 919	4 807	+22.7
Consumption.....thous. of lbs.	3, 006	3, 144	3, 693	3, 470		3, 098	2, 606			16, 652	19, 818	+19.0
Industrial reflectors, sales.....units	134, 751	126, 948	153, 716	130, 413	124, 466	117, 104	115, 929	-4.6	+7.4	843, 520	956, 631	+13.4
Power cables, shipments.....thous. of ft.	2, 320	1, 954	1, 986	2, 112	2, 366	1, 947	1, 738	+12.0	+36.1	12, 766	14, 444	+13.1
Flexible cords:												
Shipments.....thous. of ft.	47, 932	49, 221	48, 324	40, 588		37, 803	37, 328			231, 764	281, 947	+21.7
Stocks, end of month.....thous. of ft.	45, 109	50, 286	55, 771	66, 831		46, 882	46, 411			280, 409	304, 992	+8.8
Welding sets, new orders:												
Single operator.....units	443	371	387	296	282	206	294	-4.7	-4.1	1, 562	2, 388	+52.9
Multiple operator.....units	7	7	8	9	5	2	10	-44.4	-50.0	110	51	-53.6
Panel boards and cabinets, shipments (quarterly).....thous. of dolls.	1, 288					1, 205						
Nonmetallic conduits, shipments.....thous. of ft.	6, 397	6, 829	8, 242	6, 684		7, 645	6, 373			47, 554	64, 675	+34.5
Electric furnaces, new orders.....kilowatts	7, 218	14, 542	6, 562	6, 237	6, 932	4, 958	4, 861	+11.1	+42.6	33, 414	64, 352	+92.6
Manufactured mica:												
Shipments.....thous. of dolls.	335	292	303	252		270	265					
Unfilled orders, end of mo. thous. of dolls.	308	332	302	294		305	304					
Delinquent accounts, electrical trade:												
Amount.....dollars	209, 002	199, 949	189, 067	168, 724	146, 166	164, 693	150, 243	-13.4	-2.7			
Delinquent firms.....number	1, 363	1, 279	1, 285	1, 223	1, 027	1, 277	1, 176	-16.0	-12.7			
Radio equipment, dealers' stocks, end quarter:												
Receiving sets.....pieces	274, 817			2 61, 149		2 52, 877		-18.3	+15.6			
Loud speakers.....pieces	275, 651			2 63, 604		2 42, 158		-15.9	+50.9			
Batteries.....pieces	203, 193			2 137, 479		2 177, 505		-32.3	-22.5			
Socket-power units.....pieces	27, 282			2 5, 207		2 19, 696		-28.5	-73.6			
Tubes, receiving.....pieces	2756, 008			2 554, 113		2 401, 654		-26.7	+38.0			
Tubes, rectifying.....pieces	270, 956			2 60, 064		2 26, 461		-15.4	+127.0			

2 Quarter ending in month indicated.

6 Cumulative through June 30.

7 Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July 1929, from July, 1928	1928	1929	
AUTOMOBILES												
Production:												
United States—												
Total.....number of cars..	7 585,222	621,336	7 604,071	7 545,375	500,331	396,796	392,086	-8.3	+27.6	2,593,607	3,723,723	+43.6
Passenger cars.....number of cars..	7 513,344	537,225	516,055	7 452,624	426,159	356,214	338,383	-5.8	+25.9	2,301,199	3,198,497	+39.0
Taxicabs.....number of cars..	2,079	1,686	1,318	1,378	1,054	408	409	-23.5	+157.7	3,573	11,687	+227.1
Trucks.....number of cars..	7 69,799	82,425	7 86,698	7 91,373	73,118	40,174	53,294	-20.0	+37.2	288,835	513,539	+77.8
Canada—												
Total.....number of cars..	40,621	41,901	31,559	21,492	17,461	28,399	25,226	-18.8	-30.8	150,214	205,822	+37.0
Passenger cars.....number of cars..	32,833	34,392	25,129	16,511	13,600	25,341	20,122	-17.6	-32.4	127,991	165,213	+29.1
Trucks.....number of cars..	7,788	7,509	6,430	4,981	3,861	3,058	5,104	-22.5	-24.4	22,223	40,609	+82.7
Exports (assembled):												
From United States—												
Total.....number of cars..	76,382	64,437	39,913	50,976	55,545	47,171	51,670	+9.0	+7.5	305,008	379,976	+24.6
Passenger cars.....number of cars..	51,504	47,732	28,417	34,106	29,082	36,038	38,880	-14.7	-25.2	233,184	250,725	+7.5
Trucks.....number of cars..	24,878	16,705	11,496	16,870	26,463	11,133	12,790	+56.9	+106.9	71,824	129,251	+80.0
From Canada—												
Total.....number of cars..	15,528	6,586	9,561	8,219	7,319	5,589	8,021	-11.0	-8.8	34,933	67,033	+91.9
Passenger cars.....number of cars..	10,194	4,164	5,727	5,346	4,732	4,431	6,545	-11.5	-27.7	25,596	43,497	+69.9
Trucks.....number of cars..	5,334	2,422	3,834	2,873	2,587	1,158	1,476	-10.0	+75.3	9,337	23,546	+152.2
Shipments (General Motors Co.):												
To dealers.....number of cars..	220,391	227,718	220,277	200,754	189,428	186,160	169,473	-5.6	+11.8	1,252,789	1,361,296	+8.7
To users.....number of cars..	205,118	223,303	214,870	194,705	181,851	206,259	177,728	-6.6	+2.3	1,240,461	1,262,905	+1.8
Accessories and parts:												
Shipments—												
Original shipment.....rel. to Jan., 1925..	275	287	278	231	205	200	203	-11.3	+1.0			
Replacement parts.....rel. to Jan., 1925..	148	174	169	150	152	150	145	+1.3	+2.7			
Accessories.....rel. to Jan., 1925..	85	91	91	90	92	110	112	+2.2	-17.9			
Service parts.....rel. to Jan., 1925..	224	227	260	185	176	140	120	-8.6	+41.7			
Rim production.....thous. of rims..	2,613	2,730	2,574	2,184	1,897	2,429	2,210	-13.1	-14.2	15,180	16,098	+6.0
New passenger-car registrations:												
Total.....number of cars..	378,069	481,750	453,981	386,441	432,609	317,069	7 324,120	+11.9	+33.5	1,880,526	2,587,810	+37.6
Highest price group.....number of cars..	11,392	16,276	14,977	11,447	11,246	11,648	11,310	-1.8	-0.6	77,929	78,615	+0.9
Second highest group.....number of cars..	58,623	74,944	67,815	57,915	64,768	63,886	7 67,439	+11.8	-4.6	392,965	393,975	+0.3
Third highest group.....number of cars..	84,932	112,183	103,859	85,913	87,685	94,746	7 93,993	+2.1	-6.7	578,665	573,478	-0.9
Lowest price group.....number of cars..	222,646	277,854	266,891	230,801	267,878	145,490	7 150,254	+16.1	+78.3	822,055	1,537,876	+87.1
Miscellaneous.....number of cars..	476	493	439	365	1,038	1,299	7 1,124	+184.4	-7.7	8,972	3,866	-56.9
FUELS												
Coal and Coke												
Bituminous:												
Production—												
United States.....thous. of short tons..	39,347	36,888	40,172	38,073	40,635	35,963	36,276	+6.7	+12.0	270,565	293,842	+8.6
Canada.....thous. of short tons..	1,370	1,393	1,388	1,348	1,348	1,351	1,341	-----	-----	6 8,269	6 8,647	+4.6
Exports.....thous. of long tons..	878	851	1,402	1,721	1,735	1,277	1,503	+0.8	+15.4	7,040	8,503	+20.8
Consumption—												
By vessels.....thous. of long tons..	283	361	338	314	351	322	314	+11.8	+11.8	2,197	2,198	0.0
By electric-power plants.....thous. of short tons..	3,576	3,415	7 3,370	7 3,404	3,585	3,037	3,169	+5.3	+13.1	23,060	25,298	+9.3
By railroads.....thous. of short tons..	8,180	7,393	7,630	7,071	-----	6,927	7,002	-----	-----	6 46,251	6 47,146	+1.9
By coke plants—												
United States.....thous. of short tons..	7,486	7,156	7,658	7 7,442	7,588	6,167	6,046	+2.0	+25.5	43,612	50,944	+16.8
Canada.....thous. of short tons..	315	306	318	308	-----	271	279	-----	-----	6 1,521	6 1,826	+20.1
Stocks, end of month, held by consumers.....thous. of short tons..	* 36,900	-----	-----	* 33,100	-----	* 41,700	-----	-----	-----	-----	-----	-----
Prices—												
Mineaver. (spot).....dolls. per short ton..	1.79	1.69	1.68	1.67	1.67	1.73	1.71	0.0	-2.3	-----	-----	-----
Wholesale, comp.....dolls. per short ton..	4.600	3.912	3.908	3.905	3.966	4.001	3.984	0.0	-2.0	-----	-----	-----
Retail, composite.....dolls. per short ton..	9.06	8.76	8.52	8.50	8.62	8.72	8.69	+1.4	-0.8	-----	-----	-----
Anthracite:												
Production.....thous. of short tons..	5,044	6,441	6,308	5,669	4,999	5,301	4,394	-1.4	+13.8	41,497	41,868	+0.9
Exports.....thous. of long tons..	151	160	246	189	203	269	167	+7.4	+21.6	1,467	1,521	+3.7
Stocks, end of mo. in yds. of dealers.....no. of days' supply..	* 34	* 55	-----	* 59	-----	* 55	* 57	-----	-----	-----	-----	-----
Prices—												
Wholesale, comp.....dolls. per long ton..	13.677	12.654	12.539	12.628	12.754	12.949	12.965	+1.0	-1.6	-----	-----	-----
Retail, composite.....dolls. per short ton..	15.07	14.71	14.40	14.48	14.63	14.61	14.63	+1.0	0.0	-----	-----	-----
Coke:												
Production, U. S.—												
Beehive.....thous. of short tons..	534	468	597	602	600	302	280	-0.3	+114.3	2,550	3,720	+45.9
By-product.....thous. of short tons..	4,613	4,457	4,664	4,510	4,614	3,961	3,911	+2.3	+18.0	27,582	31,308	+13.5
Production, Canada.....thous. of short tons..	228	220	231	231	-----	195	200	-----	-----	6 1,095	6 1,333	+21.7
Exports.....thous. of long tons..	87	60	83	92	84	126	79	-8.7	+6.3	571	586	+2.6
Price, furnace, Connellsville.....dolls. per short ton..	2.99	2.81	2.80	2.80	2.80	2.80	2.79	0.0	+0.4	-----	-----	-----
Petroleum												
Crude petroleum:												
Production.....thous. of bbls..	82,515	80,110	84,415	83,403	91,327	72,526	75,426	+9.5	+21.1	510,990	579,442	+13.4
Stocks at end of month—												
Total (comparable).....thous. of bbls..	379,659	380,706	379,542	379,089	383,343	371,212	369,389	+1.1	+3.8	-----	-----	-----
Tank farms and pipe lines.....thous. of bbls..	333,402	332,976	330,984	331,786	335,232	328,094	326,314	+1.0	+2.7	-----	-----	-----
Refineries.....thous. of bbls..	46,257	47,730	48,558	47,303	48,111	43,118	43,075	+1.7	+11.7	-----	-----	-----
California—												
Light.....thous. of bbls..	24,067	26,500	29,934	32,667	34,430	19,197	18,215	+5.4	+89.0	-----	-----	-----
Heavy.....thous. of bbls..	100,504	100,332	102,177	103,660	105,646	94,234	95,663	+1.9	+10.4	-----	-----	-----
Imports.....thous. of bbls..	6,790	7,828	7,552	6,591	6,122	6,553	7,878	-7.1	-22.3	45,884	49,974	+8.9
Consumption (run to stills).....thous. of bbls..	80,708	80,459	84,420	84,400	85,919	75,958	80,602	+1.8	+6.6	514,979	566,762	+10.1
Refinery operation.....per ct. of capacity..	78	80	81	83	81	81	82	-2.4	-1.2	-----	-----	-----
Price, Kansas-Oklahoma.....dolls. per bbl..	1.110	1.110	1.158	1.300	1.300	1.190	1.195	0.0	+8.3	-----	-----	-----
Oil wells completed.....number..	1,074	1,207	1,191	1,316	1,420	1,056	1,096	+7.9	+29.6	6,623	8,499	+28.3
Mexico—												
Production.....thous. of bbls..	3,526	3,504	3,635	3,648	-----	4,049	4,040	-----	-----	6 26,965	6 20,958	-22.3
Exports.....thous. of bbls..	2,169	2,150	2,923	2,961	-----	2,808	3,249	-----	-----	6 16,179	6 13,306	-30.6

* Cumulative through June 30.

7 Revised.

* As of month indicated.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (—)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (—) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
FUELS—Continued												
Petroleum—Continued												
Crude petroleum—Continued.												
Venezuela—												
Production.....thous. of bbls..	10,694	11,351	12,038	12,101	10,793	8,339	9,398	−10.8	+14.8	55,509	78,824	+42.0
Exports.....thous. of bbls..	9,438	9,661	10,275	10,564	10,731	8,231	8,808	+1.6	+12.8	54,116	69,683	+28.8
Gasoline:												
Production—												
Raw (at refineries).....thous. of bbls..	34,467	34,636	36,270	35,606	37,855	30,703	32,974	+6.3	+14.8	207,932	244,433	+17.6
Natural gas, (at plants).....thous. of bbls..	4,324	4,264	4,343	4,250	4,417	3,355	3,431	+3.9	+28.7	23,927	29,317	+22.5
Exports.....thous. of bbls..	4,609	4,518	5,207	5,658	5,925	4,614	5,108	+4.7	+16.0	30,292	34,220	+13.0
Consumption.....thous. of bbls..	27,495	32,019	34,117	33,163	36,860	29,469	32,542	+11.1	+13.3	182,398	209,032	+22.5
Stocks, end of month—												
Raw (at refineries).....thous. of bbls..	48,205	47,015	44,648	41,991	37,880	34,862	30,394	−9.8	+24.6	—	—	—
Natural gas, (at plants).....thous. of bbls..	995	1,166	1,391	1,357	1,155	648	476	+14.9	+142.6	—	—	—
Retail distribution, 41 States.....thous. of gals..	769,490	817,177	934,284	—	—	870,210	954,697	—	—	—	—	—
Prices—												
Wholesale, New York.....dolls. per gal..	.170	.170	.190	.190	.190	.170	.173	0.0	+9.8	—	—	—
Retail, wagon, 50 cities.....dolls. per gal..	.149	.150	.157	.160	—	.153	.156	—	—	—	—	—
Kerosene:												
Production.....thous. of bbls..	4,515	4,434	4,902	4,928	4,406	4,849	4,994	−10.6	−11.8	34,641	32,320	−6.7
Exports.....thous. of bbls..	1,872	1,620	1,454	1,761	1,281	1,632	1,826	−27.3	−29.8	13,066	11,466	−12.2
Consumption.....thous. of bbls..	2,976	3,156	3,200	2,547	2,684	2,323	3,141	+5.4	−14.5	20,802	21,038	+1.1
Stocks at refineries, end mo. thous. of bbls..	7,855	7,497	7,742	8,348	8,797	8,432	8,470	+5.4	+3.9	—	—	—
Retail distribution, 13 States.....thous. of bbls..	30,844	34,281	34,322	31,083	—	30,759	30,594	−6.8	+1.5	192,671	191,225	−0.8
Price, 150° water white.....dolls. per gal..	.077	.084	.080	.074	.069	.073	.068	—	—	—	—	—
Gas and fuel oils:												
Production.....thous. of bbls..	37,456	37,533	38,570	37,338	37,980	35,765	36,754	+1.7	+3.3	241,356	260,046	+7.7
Consumption—												
By vessels.....thous. of bbls..	4,183	4,179	4,704	4,544	4,593	4,307	4,116	—	—	29,628	30,370	+2.5
By electric pow. plants.....thous. of bbls..	743	647	600	617	711	498	554	+15.6	+28.3	3,835	5,115	+33.4
By railroads.....thous. of bbls..	4,484	4,266	4,259	4,170	—	3,819	4,071	—	—	23,927	25,913	+8.3
Stocks at refineries, end mo. thous. of bbls..	30,195	33,404	35,636	37,332	40,075	36,085	36,410	+7.3	+10.1	—	—	—
Price, Okla. 24-26, refineries.....dolls. per bbl..	.675	.665	.631	.675	.695	.719	.670	+3.0	+3.7	—	—	—
Lubricating oil:												
Production.....thous. of bbls..	2,943	2,899	3,005	2,928	2,936	3,009	2,828	+0.3	+3.8	20,215	—	—
Consumption.....thous. of bbls..	1,581	2,442	2,322	2,446	2,167	2,143	1,931	−11.4	+12.2	13,512	—	—
Stocks at refineries, end mo. thous. of bbls..	8,853	8,527	8,370	7,869	7,524	7,832	7,667	−4.4	−1.9	—	—	—
Price, cylinder oil.....dolls. per gal..	.293	.363	.405	.400	.388	.220	.226	−3.0	+71.7	—	—	—
Asphalt:												
Production.....thous. of short tons..	228	283	315	327	386	332	331	+18.0	+16.6	1,942	1,935	−0.4
Stocks, end of month.....thous. of short tons..	250	249	236	247	243	271	251	−1.6	−3.2	—	—	—
Imports.....thous. of short tons..	2	6	4	13	3	3	11	−76.9	72.7	52	48	−7.7
Coke:												
Production.....thous. of short tons..	129	131	142	154	158	118	127	+2.6	+24.4	782	979	+25.2
Stocks, end of month.....thous. of short tons..	402	445	471	498	564	344	385	+13.3	+46.5	—	—	—
Wax:												
Production.....thous. of lbs..	56,372	57,976	53,783	52,714	46,171	50,792	45,273	−12.4	+2.0	360,011	375,928	+4.4
Stocks, end of month.....thous. of lbs..	158,404	170,687	179,139	188,764	191,298	91,989	84,476	+1.3	+126.5	—	—	—
RUBBER												
Crude Rubber												
World shipments, plantation.....long tons..	71,644	73,547	62,346	61,872	—	40,927	52,831	—	—	264,530	426,897	+61.4
Imports (including latex).....long tons..	50,610	55,730	51,186	41,828	44,338	27,764	31,258	+6.0	+41.8	241,399	365,564	+51.4
Consumption (quarterly):												
Total.....long tons..	118,280	—	—	128,149	—	95,220	—	+8.3	+34.6	190,493	246,429	+29.4
For tires.....long tons..	102,091	—	—	111,068	—	81,323	—	+8.8	+36.6	162,194	213,159	+31.4
Consumption by tire mfrs.....thous. of lbs..	61,335	65,673	66,028	56,861	—	53,159	47,128	—	—	286,995	361,617	+26.0
Stocks, end of quarter:												
Total.....long tons..	95,110	—	—	95,519	—	87,771	—	+0.4	+8.8	—	—	—
Manufacturers.....long tons..	65,615	—	—	70,598	—	77,132	—	+7.6	−8.5	—	—	—
Dealers.....long tons..	29,495	—	—	24,924	—	10,639	—	−15.5	+134.3	—	—	—
Afloat.....long tons..	51,336	—	—	42,719	—	38,478	—	+16.8	+11.0	—	—	—
World stocks, end of month:												
World total.....long tons..	252,676	266,379	252,867	241,833	—	212,527	208,789	—	—	—	—	—
United States.....long tons..	100,537	107,659	97,192	92,062	95,536	90,198	83,242	+3.8	+14.8	—	—	—
Europe.....long tons..	33,484	36,789	37,143	37,135	—	42,365	39,269	—	—	—	—	—
Producing countries.....long tons..	32,955	30,731	35,242	36,336	39,131	20,664	21,578	+7.7	+81.3	—	—	—
Afloat.....long tons..	85,700	91,200	83,290	76,300	—	59,300	64,700	—	—	—	—	—
Wholesale price, Para, N. Y.....dolls. per lb..	.244	.211	.214	.206	.213	.194	.192	+3.4	+10.9	—	—	—
Tires and Tubes												
Pneumatic tires:												
Production.....thousands..	5,639	5,913	6,109	5,478	4,834	5,030	4,881	−11.8	−1.0	33,576	38,200	+13.8
Stocks, end of month.....thousands..	12,264	12,697	13,386	13,468	11,932	9,150	8,396	−11.4	+42.1	—	—	—
Shipments—												
Domestic.....thousands..	4,804	5,242	5,185	5,288	5,745	5,162	5,811	+8.6	−1.1	31,623	34,745	+9.9
Export.....thousands..	227	229	204	153	171	184	121	+11.8	+41.3	1,033	1,444	+39.8
Inner tubes:												
Production.....thousands..	5,600	5,726	5,745	5,234	4,672	5,222	5,009	−10.7	−6.7	35,301	36,942	+4.6
Stocks, end of month.....thousands..	13,313	13,601	14,196	14,056	11,763	12,892	11,248	−16.3	+4.6	—	—	—
Shipments—												
Domestic.....thousands..	4,889	5,220	5,146	5,115	6,177	5,254	6,469	+20.8	−4.5	33,221	35,633	+7.3
Export.....thousands..	164	153	133	98	91	105	83	−7.1	+9.6	643	942	+46.5
Solid and cushion:												
Production.....thousands..	36	39	40	40	38	49	46	−15.0	−17.4	304	255	−16.1
Stocks, end of month.....thousands..	143	139	135	133	130	156	152	−2.3	+18.4	—	—	—
Shipments—												
Domestic.....thousands..	38	40	40	38	39	45	45	+2.6	−13.3	282	256	−9.2
Exports.....thousands..	2	3	3	2	2	5	4	0.0	−50.0	27	16	−40.7

* Quarter ending in month indicated.

* Cumulative through June 30.

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 133 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
RUBBER—Continued												
Other Rubber Products												
Reclaimed rubber, (quarterly):												
Production.....long tons	2 53,552			2 57,760		2 51,109		+7.9	+13.0	6 102,221	111,312	+8.9
Stocks, end of quarter.....long tons	2 17,727			2 16,446		2 15,459		-7.2	+6.4			
Scrap rubber, (quarterly):												
Stocks at reclaimers.....long tons	2 59,135			2 61,429		2 51,518		+3.9	+19.2			
Consumption by reclaimers.....long tons	2 71,001			2 74,292		2 65,387		+4.6	+13.6	6 129,456	145,293	+12.2
Rubber-proofed fabrics:												
Production—												
Total.....thous. of yds.	3,952	4,000	4,860	4,409	4,260	2,953	3,447	-3.3	+23.6	19,455	27,337	+40.5
Auto fabrics.....thous. of yds.	878	917	919	1,199	1,188	895	763	-0.9	+55.7	5,670	6,588	+16.2
Raincoat fabrics.....thous. of yds.	1,730	1,839	2,387	1,948	1,864	1,351	1,951	-4.3	-4.5	8,415	11,925	+41.7
All other.....thous. of yds.	1,344	1,199	1,554	1,262	1,208	707	733	-4.3	+64.8	5,370	8,814	+64.1
Rubber heels:												
Production.....thous. of pairs	17,226	17,256	19,541	20,007		18,763	17,620			6 118,381	6 112,984	-4.6
Shipments—												
To shoe manufacturers.....thous. of pairs	8,798	11,028	12,552	12,262		9,166	12,070			6 58,373	6 67,703	+16.0
To repair trade.....thous. of pairs	7,925	6,506	7,604	8,256		9,022	7,372			6 45,229	6 43,837	-3.1
For export.....thous. of pairs	1,230	1,072	1,054	926		804	457			6 5,656	6 6,762	+19.6
Stocks, end of month.....thous. of pairs	49,571	47,209	44,969	44,581		50,569	49,679					
Rubber soles:												
Production.....thous. of pairs	2,746	2,601	2,916	2,502		3,321	3,168			6 20,574	6 17,510	-14.9
Shipments—												
To shoe manufacturers.....thous. of pairs	1,862	1,967	2,361	2,185		1,977	1,897			6 11,378	6 13,526	+18.9
To repair trade.....thous. of pairs	705	623	635	522		948	808			6 5,724	6 4,101	-28.4
For export.....thous. of pairs	34	23	32	17		41	55			6 1,788	6 286	-84.0
Stocks, end of month.....thous. of pairs	4,243	4,184	3,997	3,843		4,687	5,067					
Mechanical rubber goods, shipments:												
Total.....thous. of dolls.	7,013	7,035	7,189	6,792		6,126	5,157			6 35,939	6 40,197	+11.8
Belting.....thous. of dolls.	1,546	1,668	1,798	1,613		1,568	1,396			6 8,394	6 9,343	+11.3
Hose.....thous. of dolls.	2,733	2,730	2,643	2,658		2,298	1,795			6 14,178	6 15,413	+8.7
All other.....thous. of dolls.	2,735	2,636	2,748	2,521		2,260	1,966			6 13,376	6 15,442	+15.4
Rubber bands, shipments.....thous. of lbs.	288	231	205	187		192	173			6 1,167	6 1,370	+17.4
Rubber flooring, shipments.....thous. of sq. ft.	603	596	733	525		717	477			6 3,446	6 3,307	-4.0
Calendered rubber clothing:												
Production.....no. coats and sundries	77,740	91,193	100,706	87,530	89,871	109,802	59,685	+2.7	+50.6	745,242	564,995	-24.2
Net orders.....no. coats and sundries	32,967	102,490	78,972	98,444	60,921	89,145	37,512	-38.1	+62.4	460,705	435,517	-5.5
HIDES AND LEATHER												
Hides												
Imports:												
Total hides and skins.....thous. of lbs.	34,063	39,505	38,643	41,509	49,910	58,091	50,175	+20.2	-0.5	333,316	274,228	-17.7
Calfskins.....thous. of lbs.	1,462	3,379	5,096	6,559	5,636	5,537	4,134	-14.1	+36.3	27,281	26,691	-2.2
Cattle hides.....thous. of lbs.	16,161	16,155	14,122	17,450	24,259	34,168	28,193	+39.0	-14.0	189,333	125,798	-33.6
Goatskins.....thous. of lbs.	8,768	10,869	9,882	8,309	9,361	8,383	7,873	+12.3	+18.9	55,783	60,941	+9.2
Sheepskins.....thous. of lbs.	4,892	6,406	6,301	6,824	6,849	7,323	6,171	+0.4	+11.0	39,172	40,117	+2.4
Stocks, end of month:												
Total hides and skins.....thous. of lbs.	240,740	246,359	246,330	250,025		244,746	239,877					
Cattle hides.....thous. of lbs.	203,947	206,248	201,176	196,202		196,561	194,668					
Calf and kip skins.....thous. of lbs.	20,265	22,058	26,068	32,525		29,159	25,551					
Sheep and lamb skins.....thous. of lbs.	16,528	18,053	19,086	21,298		19,026	19,658					
Prices:												
Green salted, packers' heavy native steers.....dolls. per lb.	.145	.149	.149	.168	.181	.224	.239	+7.7	-24.3			
Calfskins, country, No. 1.....dolls. per lb.	.183	.187	.179	.186	.199	.266	.278	+7.0	-28.4			
Inspected slaughter of livestock:												
United States—												
Cattle.....thous. of animals	632	662	676	636	706	706	662	+11.0	+6.6	4,756	4,617	-2.9
Calves.....thous. of animals	409	460	427	344	363	398	362	+5.5	+0.3	2,835	2,683	-5.4
Swine.....thous. of animals	3,645	3,761	3,798	3,756	3,597	4,078	2,984	-4.2	+20.5	30,711	28,773	-6.3
Sheep.....thous. of animals	1,006	1,119	1,202	1,108	1,255	1,109	1,076	+13.3	+16.6	7,333	7,793	+6.3
Canada—												
Cattle and calves.....thous. of animals	74	105	110	93	105	99	100	+12.9	+5.0	626	615	-1.8
Swine.....thous. of animals	215	208	187	161	159	205	164	-1.2	-3.0	1,576	1,387	-12.0
Sheep.....thous. of animals	21	19	17	25	55	25	45	+120.0	+22.2	164	193	+17.7
Leather												
Sole and belting leather:												
Production—												
Sole only.....thous. of backs, bends, sides	1,140	1,184	1,144	1,244	1,173	1,399	1,436	-5.7	-18.3	9,426	8,274	-12.2
Sole and belting.....thous. of lbs.	22,191	22,939	22,691	24,911		24,971	25,070			6 146,621	6 137,612	-6.1
Stocks, end of month—												
In process of tanning.....thous. of lbs.	79,524	79,487	80,606	79,153		91,781	90,949					
Finished.....thous. of lbs.	78,772	76,444	72,070	70,616		63,921	69,557					
Exports.....thous. of lbs.	1,336	1,080	1,149	758	832	538	531	+9.8	+56.7	5,792	6,938	+19.8
Price oak, scoured backs.....dolls. per lb.	.55	.49	.49	.49	.51	.68	.67	+4.1	-23.9			
Upper leather:												
Production.....thous. of sq. ft.	66,132	65,152	63,653	68,681		66,047	66,464			6 406,820	6 392,996	-3.4
Stocks, end of month—												
In process of tanning.....thous. of sq. ft.	133,335	130,430	134,079	135,198		143,099	147,443					
Finished.....thous. of sq. ft.	249,373	246,992	241,783	235,156		262,667	254,563					
Exports.....thous. of sq. ft.	11,991	10,818	10,208	8,491	9,267	8,949	8,408	+9.1	+10.3	84,994	71,137	-16.3
Chrome calf, "B" grades.....dolls. per sq. ft.	.49	.50	.51	.50	.49	.53	.57	-2.0	-14.0			
Leather Products												
Shoes:												
Production.....thous. of pairs	30,900	29,382	29,159	27,910		27,284	28,154			6 168,479	6 172,303	+2.3
Exports.....thous. of pairs	435	372	333	357	320	318	344	-10.4	-7.0	2,627	2,607	-0.8
Wholesale prices—												
Men's black calf blucher, Mass.....dolls. per pair	6.75	6.75	6.75	6.75	6.75	6.75	6.75	0.0	0.0			
Men's dress welt, tan calf oxford, St. Louis.....dolls. per pair	4.85	4.85	4.85	4.85	4.85	4.85	4.85	0.0				
Women's black kid, dress welt, lace, oxford.....dolls. per pair	4.25	4.25	4.25	4.25	4.25	4.25	4.25	0.0	0.0			
Gloves, cut.....dozen pairs	256,691	258,301	263,933	252,703	255,711	228,039	202,051	+1.2	+26.6	1,461,175	1,742,281	+19.2

2 Quarter ending in month indicated.

6 Cumulative through June 30.

7 Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
PAPER AND PRINTING												
Wood Pulp												
Mechanical:												
Production.....short tons..	147,640	162,042	166,375	142,915	123,283	133,854	112,403	-3.7	+9.7	970,622	1,018,198	+4.9
Consumption and shipments.....short tons..	136,880	142,920	148,251	136,669	137,017	135,917	125,465	+0.3	+9.2	958,673	971,540	+1.3
Stocks, end of month.....short tons..	141,557	160,875	178,963	185,209	170,985	184,314	171,098	-5.7	-0.7			
Imports.....short tons..	16,481	23,314	21,044	24,014	18,724	20,528	14,553	-22.0	+28.7	141,011	143,637	+1.9
Chemical:												
Production.....short tons..	231,836	233,742	241,354	225,940	221,388	217,456	200,654	-2.0	+10.3	1,499,432	1,604,478	+7.0
Consumption and shipments.....short tons..	231,526	234,638	242,254	223,016	221,100	214,068	204,512	-0.9	+8.1	1,504,116	1,383,148	-8.0
Stocks, end of month.....short tons..	37,638	36,150	34,112	36,188	35,940	45,870	42,580	-0.7	-15.6			
Imports.....short tons..	85,074	123,757	121,989	153,956	161,185	122,474	129,910	+4.7	+24.1	793,380	915,447	+15.4
Price, sulphite.....dolls. per 100 lbs..	2.45	2.45	2.49	2.53	2.53	2.53	2.53	0.0	0.0			
Newsprint Paper												
Production:												
United States, total.....short tons..	114,586	118,679	123,504	113,407	111,578	119,673	109,861	-1.6	+1.6	828,661	809,220	-2.3
Ratio to capacity.....per cent..	79	82	82	81	81	83	82					
Canada.....short tons..	218,147	221,784	245,644	225,055	229,045	190,757	187,434	+1.8	+22.2	1,345,687	1,539,066	+14.4
Consumption by publishers.....short tons..	198,722	189,986	200,826	192,424		170,892	152,763					
Shipments:												
United States.....short tons..	120,003	121,548	124,840	114,558	112,616	116,901	109,849	-1.7	+2.5	809,028	822,203	+1.6
Canada.....short tons..	119,739	220,270	247,449	233,920	227,502	185,069	185,069	-2.7	+22.9	1,333,667	1,444,295	+8.3
Imports.....short tons..	182,994	178,076	206,036	202,398	210,497	163,507	174,667	+4.0	+20.5	1,206,905	1,342,214	+11.2
Exports:												
Canada.....short tons..	244,167	162,381	214,342	219,895	199,692	174,031	167,456	-9.2	+19.3	1,232,836	1,409,993	+14.4
Stocks, end of month:												
At mills—												
United States.....short tons..	30,534	27,102	25,778	24,602	23,603	39,979	40,386	-4.1	-41.6			
Canada.....short tons..	24,045	25,741	23,893	24,199	28,993	47,937	48,270	+19.8	-39.9			
At publishers.....short tons..	174,750	166,089	154,948	161,318		186,307	199,214					
In transit to publishers.....short tons..	45,673	46,724	51,425	48,716		42,767	44,266					
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			
Printing												
Book publication:												
American manufacture.....no. of titles..	914	718	601	695	501	745	555	-27.9	-9.7	4,610	4,618	+0.2
Imported.....no. of titles..	201	108	135	125	131	113	128	+4.8	+2.3	905	963	+6.4
Sales books:												
New orders.....thous. of books..	12,317	12,718	12,748	12,332	11,476	12,711	12,098	-6.9	-5.1	86,618	86,214	-0.5
Shipments.....thous. of books..	12,414	12,176	12,154	12,445	13,737	13,100	9,986	+10.4	+37.6	82,087	87,077	+6.1
Printing activity.....weighted index number..	126	124	123			96	86					
Blank forms, new orders.....thous. of sets..	63,633	62,074	70,169	58,687	57,225	53,774	48,963	-2.5	+16.9	312,207	419,259	+34.3
Box Board												
Operation.....thous. of inch hours..	9,417	9,273	9,526	7,915	9,028	8,200	7,992	-1.4	+13.0	58,052	64,137	+10.5
Operation.....per ct. of capacity..	82.5	81.3	83.4	78.9	79.1	75.3	76.3	-9.0	3.7			
Production.....short tons..	256,118	251,147	264,830	240,633	235,944	228,646	201,153	-1.9	+17.3	1,536,360	1,724,996	+12.3
New orders.....short tons..	266,895	250,366	240,395	230,835	240,113	228,252	209,976	+4.0	+14.4	1,538,230	1,697,285	+10.3
Shipments.....short tons..	258,604	247,773	260,283	235,484	234,763	223,901	203,741	-0.3	+15.2	1,527,833	1,711,611	+12.0
Stocks, end of month.....short tons..	54,982	57,581	62,311	76,370	63,215	53,560	49,969	+1.4	+26.5			
Stocks of waste paper, end of month:												
On hand.....short tons..	137,008	142,666	150,048	158,153	174,733	130,484	132,265	+10.5	+32.1			
In transit and unshipped purchases.....tons..	51,520	68,005	54,433	56,904	64,389	43,480	62,056	+13.2	+3.8			
Unfilled orders, end of month.....short tons..	96,209	98,162	89,485	81,880	88,22	77,782	79,492	+7.7	+11.0			
Consumption of waste paper.....short tons..	242,073	231,089	248,813	233,809	215,161	204,468	190,810	-8.0	+12.8	1,421,285	1,627,039	+14.5
Other Paper												
Binder's board, production.....short tons..	2,917	2,994	3,491	3,092	2,828	2,705	2,153	-8.5	+31.4	22,583	21,075	-6.7
Book paper:												
Production.....short tons..	136,657	138,024	128,024	129,743	130,768	122,387	117,492	+0.8	+11.3	878,289	927,230	+5.6
Ratio to capacity.....per cent..	93	92				84	80					
Shipments.....short tons..	139,253					120,551	118,314					
Stocks, end of month.....short tons..	71,399					89,385	88,491					
New orders—												
Coated.....p. ct. of normal production..	104	89	86	84	82	75	77	-2.4	+6.5			
Uncoated.....p. ct. of normal production..	91	84	80	82	81	73	80	-1.2	+1.3			
Unfilled orders, end of month—												
Coated.....p. ct. of normal production..	10	10	10	9	10	9	10	+11.1	0.0			
Uncoated.....p. ct. of normal production..	9	10	9	8	9	7	8	+12.5	+12.5			
Wrapping paper:												
Production.....short tons..	91,746	91,286	94,302	87,191	83,965	90,577	88,477	+3.7	-5.1	659,681	637,176	-3.4
Ratio to capacity.....per cent..	86	85	85	85		84	86	-7.1	-8.1			
Shipments.....short tons..	96,700	91,377	92,227	86,406	85,392	89,309	94,228	-1.2	-9.4	650,567	639,090	-1.8
Stocks, end of month.....short tons..	86,596	86,075	87,733	88,091	86,326	98,344	92,467	-2.0	-6.6			
Fine paper:												
Production.....short tons..	41,348	41,819	41,660	38,513	37,624	38,225	33,984	-2.3	+10.7	272,141	276,981	+1.8
Ratio to capacity.....per cent..	86	93	90	90	90	84	80	0.0	+12.5			
Shipments.....short tons..	43,788	40,564	42,368	37,897	36,608	38,875	34,562	-3.4	+5.9	269,144	280,632	+4.3
Stocks, end of month.....short tons..	47,373	50,213	49,488	50,103	47,583	53,155	53,156	+5.0	-10.5			
All other grades:												
Production.....short tons..	104,355	104,506	111,182	100,897	100,632	104,725	95,469	-0.3	+5.4	709,126	728,066	+2.7
Shipments.....short tons..	102,091	102,278	107,735	100,098	101,588	104,977	96,056	-1.5	+5.8	703,127	720,869	+2.5
Stocks, end of month.....short tons..	53,205	55,486	58,932	59,875	57,917	71,006	70,578	-3.3	-17.9			
Total paper (inc. newsprint and box board):												
Production.....short tons..	744,810	745,461	773,502	710,384	700,511	704,233	646,436	-1.4	+8.4	4,884,253	5,103,669	+4.5
Ratio to capacity.....per cent..	86	87	87	87		82	77					
Shipments.....short tons..	760,439					694,514	656,750					
Stocks, end of month.....short tons..	349,673					405,429	395,047					

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
PAPER AND PRINTING—Continued												
Paperboard Shipping Boxes												
Production:												
Total.....thous. of sq. ft.	510,680	492,272	490,117	481,762	506,826	423,282	404,520	+5.2	+25.3	2,811,243	3,426,934	+21.9
Corrugated.....thous. of sq. ft.	398,777	387,596	386,241	406,908	384,885	341,291	335,732	-5.4	+14.6	2,230,876	2,699,619	+21.0
Solid fiber.....thous. of sq. ft.	111,903	104,676	103,876	99,922	96,887	81,991	68,788	-3.0	+40.8	531,708	727,329	+36.8
Operating activity:												
Total.....per cent of normal	86	82	82	85	80	76	72	-5.9	+11.1			
Corrugated.....per cent of normal	86	83	83	87	82	74	71	-5.7	+15.5			
Solid fiber.....per cent of normal	85	79	79	77	74	83	75	-3.9	-1.3			
Rope paper sacks, shipments.....rel. to 1921-22	90	83	81	96	85	83	89	-11.5	-4.5			
Abrasive paper and cloth:												
Domestic sales.....reams	101,845	98,394	95,224	90,255		88,569	81,689			\$ 526,005	\$ 567,911	+8.0
Foreign sales.....reams	22,194	24,642	26,040	16,696		18,829	17,657			\$ 111,247	\$ 128,782	+15.8
BUILDING CONSTRUCTION AND HOUSING												
Building Costs												
Building materials:												
Frame house, 6-rm. 1st of mo.rel. to 1913.....	176	176	177	176	177	176	175	+0.6	+1.1			
Brick house, 6-rm. 1st of mo.rel. to 1913.....	181	181	182	181	182	181	181	+0.6	0.6			
Bldg. costs, 1st of mo.rel. to 1913.....	207.8	203.4	205.2	205.7	204.8	206.2	206.7	-0.4	-0.9			
Bldg. costs (A. G. C.), 1st of mo.rel. to 1913.....	204	204	203	203	202	198	198	-0.5	+2.0			
Plumbing fixtures, 6 pieces.....dollars	98.51	97.90	98.16	97.54	97.94	100.90	100.09	-0.4	-2.1			
Construction costs (Am. Appraisal):												
Frame.....rel. to 1913.....	204	204	204	204	204	203	204	0.0	0.0			
Brick, wood frame.....rel. to 1913.....	213	214	214	214	214	212	213	0.0	+0.5			
Brick, steel frame.....rel. to 1913.....	197	197	197	197	197	198	198	0.0	-0.5			
Reinforced concrete.....rel. to 1913.....	201	201	201	201	201	201	201	0.0	0.0			
Contracts and Losses												
Contracts awarded, (36 States):												
Commercial buildings.....thous. of sq. ft.	12,204	14,506	15,789	13,353	12,873	13,982	16,835	-3.6	-23.5	89,742	95,052	+5.9
Industrial buildings.....thous. of sq. ft.	9,342	6,844	10,325	8,341	9,563	10,523	6,214	+14.7	+53.9	50,327	59,392	+18.0
Residential buildings.....thous. of sq. ft.	39,849	49,908	38,740	36,227	36,161	52,030	43,093	-0.2	-16.1	341,705	254,442	-25.5
Educational buildings.....thous. of sq. ft.	6,241	4,627	6,050	6,349	6,525	6,978	5,586	+2.8	+16.8	36,255	35,823	-1.2
Other public and semi-public buildings.....thous. of sq. ft.	5,191	5,070	5,866	5,195	5,743	7,192	6,605	+10.5	-13.1	40,996	32,773	-20.1
Grand total.....thous. of sq. ft.	73,849	81,407	77,586	70,297	71,320	90,971	78,778	+1.5	-9.5	562,338	482,486	-14.2
Contracts awarded, value (36 States):												
Commercial buildings.....thous. of dolls.	69,064	73,527	82,681	78,625	88,137	90,914	93,144	+12.1	-5.4	538,769	556,604	+3.3
Industrial buildings.....thous. of dolls.	55,204	67,510	79,915	69,621	66,818	57,464	31,193	-4.8	+112.6	318,109	451,407	+41.9
Residential buildings.....thous. of dolls.	190,146	249,896	185,658	185,328	194,754	250,818	221,345	+5.1	-12.0	1,707,327	1,262,403	-26.1
Educational buildings.....thous. of dolls.	36,992	28,730	36,690	41,745	46,333	43,787	35,315	+11.0	+31.2	231,345	229,756	-0.0
Other public and semi-public buildings.....thous. of dolls.	44,843	54,962	47,387	39,324	49,537	56,605	50,380	+26.0	-1.7	337,932	285,665	-15.5
Public works and utilities.....thous. of dolls.	67,661	148,543	132,383	117,426	179,897	124,636	132,853	+53.2	+35.4	748,294	756,817	+1.1
Grand total.....thous. of dolls.	463,911	623,174	566,010	532,069	624,976	624,224	564,229	+17.5	+10.8	3,881,776	3,543,947	-8.7
Contracts awarded, Canada.....thous. of dolls.	27,125	43,328	64,860	72,420	57,941	59,926	38,360	+20.0	+51.0	294,617	336,063	+14.1
Building volume (A. G. C.).....rel. to 1913.....	116	178	211	231	218	244	237	-5.6	-8.0			
Fire losses:												
United States and Canada, (Journal of Commerce).....thous. of dolls.	29,662	22,647	21,637	26,631	31,528	11,123	17,106	+18.4	+84.3	192,155	195,202	+1.6
Canada (Monetary Times).....thous. of dolls.	2,453	1,972	2,551	3,079	5,027	1,909	1,491	+63.3	-66.3	15,081	20,824	+38.1
LUMBER PRODUCTS												
Softwood Lumber												
Southern pine:												
Production (computed).....M ft. b. m.	392,771	409,423	414,166	369,971	393,932	404,679	405,937	+6.5	-3.0	2,976,421	2,778,390	-6.7
Operation.....per cent of full time	83	88	87	83	81	96	88	-2.4	-8.0			
Shipments (computed).....M ft. b. m.	409,229	432,754	409,616	370,310	377,571	416,006	435,223	+2.0	-13.2	3,112,929	2,755,445	-11.5
New orders (computed).....M ft. b. m.	443,936	408,793	388,317	343,106	379,217	406,470	434,061	+10.5	-12.6	3,127,643	2,763,723	-11.6
Stocks, end of mo. (computed).....M ft. b. m.	1,004,658	981,327	985,877	985,538	1,001,899	1,090,126	1,063,109	+1.7	-5.8			
Unfilled orders, end mo. (comp.).....M ft. b. m.	365,611	341,650	320,351	293,147	294,793	323,985	335,836	+0.6	-12.2			
Exports, lumber.....M ft. b. m.	57,111	68,289	59,384	59,263	57,275	54,313	62,094	-3.4	-7.8	425,283	420,835	-1.0
Exports, timber.....M ft. b. m.	6,255	10,261	10,722	9,311	17,474	12,933	12,302	+87.7	+42.0	110,290	71,110	-35.5
Price, flooring.....dolls. per M ft. b. m.	37.55	37.35	37.00	37.04	37.27	36.40	36.16	+0.6	+3.1			
Douglas fir:												
Exports, lumber.....M ft. b. m.	77,443	65,953	95,104	83,966	98,179	85,174	54,181	+16.9	+81.2	458,279	562,111	+22.7
Exports, timber.....M ft. b. m.	56,238	60,207	23,309	51,571	43,932	43,142	45,471	-14.8	-3.4	342,256	332,240	-2.9
Price, No. 1 common, dolls. per M ft. b. m.	19.15	18.76	18.89	18.74	18.77	16.68	16.99	+0.2	+10.5			
Price, flooring, 1 x 4, "B" and better, V. G., dolls. per M ft. b. m.	42.26	42.60	42.95	42.69	42.73	35.15	36.13	+0.1	+18.3			
California redwood:												
Production (computed).....M ft. b. m.	43,797	39,292	48,083	37,866	28,435	36,190	30,092	-24.9	-5.5	280,111	259,822	-7.2
Shipments (computed).....M ft. b. m.	42,315	36,307	48,742	41,507	28,672	38,825	29,615	-30.9	-3.2	267,780	259,487	-3.1
New orders (computed).....M ft. b. m.	47,059	43,363	49,507	38,776	35,657	38,022	31,620	-8.0	+12.8	277,112	282,594	+2.0
Unfilled orders, end of month (computed).....M ft. b. m.	37,898	45,871	45,062	40,257	47,235	46,519	48,910	+17.3	-3.4			
California white pine:												
Production.....M ft. b. m.	67,401	87,238	127,672	118,422	120,968	133,064	123,923	+2.1	-2.4	649,514	636,013	-2.1
Shipments.....M ft. b. m.	102,908	106,018	109,599	98,779	97,302	107,019	105,482	-1.5	-7.8	687,097	712,910	+3.8
Stocks, end of month.....M ft. b. m.	437,089	442,929	462,929	463,175	486,416	477,079	506,119	+5.0	-3.9			
New orders.....M ft. b. m.	95,848	101,387	105,597	105,832	88,208	89,802	96,433	-16.7	-8.5	610,824	677,676	+10.9
Unfilled orders, end of month.....M ft. b. m.	161,865	195,268	143,950	156,475	150,643	183,610	190,185	-3.7	-20.8			

* Cumulative through June 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
LUMBER PRODUCTS—Continued												
Softwood Lumber—Continued												
North Carolina pine:												
Production (computed).....M ft. b. m.	71,610	64,841	61,243	53,270	-----	57,904	44,471	-----	-----	\$ 313,957	\$ 361,613	+15.2
Shipments (computed).....M ft. b. m.	67,543	57,029	65,954	59,080	-----	59,528	48,433	-----	-----	\$ 323,273	\$ 348,929	+7.9
New orders.....M ft. b. m.	83,300	80,710	-----	-----	-----	59,360	43,190	-----	-----	-----	-----	-----
Northern pine:												
Lumber—												
Production.....M ft. b. m.	22,654	42,363	56,031	50,537	50,733	51,756	52,384	+0.4	-3.2	287,033	268,190	-6.6
Shipments.....M ft. b. m.	40,159	44,043	47,641	44,197	44,825	47,243	48,300	+1.4	-7.2	282,118	286,234	+1.5
New orders.....M ft. b. m.	39,732	44,379	37,478	37,142	40,012	47,018	41,820	+7.7	-4.3	268,767	263,504	-2.0
Lath—												
Production.....thousands..	2,938	7,722	10,001	6,818	8,822	11,706	13,476	+29.4	-34.5	59,517	43,979	-26.1
Shipments.....thousands..	7,316	8,003	9,632	10,256	10,083	11,151	9,734	-1.7	+3.6	56,630	57,427	+1.4
Northern hemlock:												
Production.....M ft. b. m.	14,876	13,112	14,488	13,527	-----	18,426	16,348	-----	-----	\$ 98,175	\$ 89,682	-8.7
Shipments.....M ft. b. m.	9,814	12,625	14,247	16,262	-----	22,343	18,920	-----	-----	\$ 89,166	\$ 75,823	-15.0
Hardwood Lumber												
Walnut lumber:												
Production.....M ft. b. m.	2,993	3,724	4,508	4,532	3,839	3,422	2,527	-15.3	+51.9	20,714	25,350	+22.4
Shipments.....M ft. b. m.	3,926	4,003	3,823	3,699	3,570	3,000	2,742	-3.5	+30.2	20,267	25,617	+26.4
Stocks, end of month.....M ft. b. m.	10,711	10,543	11,970	12,960	12,640	13,530	13,116	-2.5	-3.6	-----	-----	-----
New orders.....M ft. b. m.	4,104	4,073	4,120	3,625	2,627	2,538	2,731	-27.5	-3.8	20,371	25,523	+25.3
Unfilled orders, end of month.....M ft. b. m.	6,804	7,126	7,563	7,636	6,474	5,216	5,088	-15.2	+27.2	-----	-----	-----
Walnut logs:												
Purchased.....M ft. log measure..	2,213	2,899	3,735	3,711	2,951	2,519	2,633	-20.5	+12.1	17,097	19,820	+15.9
Made into lumber and veneer.....M ft. log measure..	2,539	2,799	3,005	3,241	3,217	2,670	2,527	-0.7	+27.3	17,481	19,465	+11.3
Stocks, end of month.....M ft. log measure..	1,048	1,152	1,897	2,253	2,273	2,752	2,996	+0.9	-24.1	-----	-----	-----
Northern hardwoods:												
Production.....M ft. b. m.	42,865	29,755	30,885	31,348	-----	28,705	23,673	-----	-----	\$ 247,651	\$ 217,139	-12.3
Shipments.....M ft. b. m.	32,605	26,755	23,818	24,444	-----	28,498	26,194	-----	-----	\$ 192,059	\$ 167,230	-12.9
Lower Michigan hardwoods:												
Production.....M ft. b. m.	6,795	5,961	5,825	-----	-----	7,049	5,438	-----	-----	-----	-----	-----
Shipments.....M ft. b. m.	6,732	5,053	5,734	-----	-----	6,683	7,252	-----	-----	-----	-----	-----
Stocks, end of month.....M ft. b. m.	27,443	28,286	28,467	-----	-----	23,610	20,605	-----	-----	-----	-----	-----
Gum:												
Stocks, total end of month.....mill. ft. b. m.	489	468	464	475	465	555	542	-2.1	-14.2	-----	-----	-----
Stocks, unsold end of month.....mill. ft. b. m.	332	318	328	325	318	424	419	-2.2	-24.1	-----	-----	-----
Unfilled orders, end of month.....mill. ft. b. m.	157	151	136	150	147	130	124	-2.0	+18.5	-----	-----	-----
Oak:												
Stocks, total end of month.....mill. ft. b. m.	914	909	918	923	955	1,000	974	+3.5	-2.0	-----	-----	-----
Stocks, unsold, end of month.....mill. ft. b. m.	751	739	743	747	785	854	809	+5.1	-3.0	-----	-----	-----
Unfilled orders, end of month.....mill. ft. b. m.	163	170	169	169	176	146	165	+4.1	+6.7	-----	-----	-----
All hardwoods:												
Production.....mill. ft. b. m.	315	319	296	300	311	236	244	+3.7	+27.5	1,835	2,168	+18.1
Shipments.....mill. ft. b. m.	341	330	293	285	278	248	263	-2.5	+5.7	1,842	2,139	+16.1
New orders.....mill. ft. b. m.	334	323	311	277	278	263	262	0.0	-6.1	1,913	2,176	+13.7
Stocks, total, end of month.....mill. ft. b. m.	2,672	2,670	2,635	2,681	2,731	2,817	2,786	+1.9	-2.0	-----	-----	-----
Stocks, unsold, end of month.....mill. ft. b. m.	2,024	1,982	2,015	2,031	2,088	2,289	2,225	+2.8	-6.2	-----	-----	-----
Unfilled orders, end of month.....mill. ft. b. m.	648	648	617	657	643	528	547	-2.1	+17.6	-----	-----	-----
Production, 10 species.....M ft. b. m.	2,127,346	2,170,685	2,356,602	2,190,749	2,194,165	2,331,672	2,204,457	+0.2	-0.5	16,078,051	14,888,034	-7.4
Exports, planks, joists, etc.....M ft. b. m.	200,790	201,858	220,153	211,952	231,516	220,961	185,368	+9.2	+24.9	1,393,925	1,483,335	+6.4
Retail yards, Minneapolis district:												
Sales.....M ft. b. m.	6,564	11,076	14,111	18,043	15,964	17,591	15,944	-11.5	+0.1	73,428	74,531	+1.5
Stocks, end of month.....M ft. b. m.	88,605	89,615	90,474	88,646	88,339	88,360	87,345	+0.2	+1.7	-----	-----	-----
Retail yards, Kansas City district:												
Sales.....M ft. b. m.	6,622	7,276	6,682	5,421	6,310	5,200	5,677	+16.4	+11.2	38,824	40,055	+3.2
Stocks, end of month.....M ft. b. m.	47,564	48,447	48,038	47,688	46,611	45,540	44,874	-2.3	+3.9	-----	-----	-----
Flooring												
Maple flooring:												
Production.....M ft. b. m.	6,794	5,759	5,625	5,418	6,450	7,608	7,784	+19.0	-17.1	52,520	44,839	-14.6
Shipments.....M ft. b. m.	6,141	7,583	6,848	6,420	7,883	8,686	8,311	+22.8	-5.1	55,123	46,042	-16.5
Stocks, end of month.....M ft. b. m.	25,494	24,443	22,230	20,964	21,913	26,271	24,667	+4.5	-11.2	-----	-----	-----
New orders.....M ft. b. m.	6,604	8,616	6,336	3,822	6,159	7,867	7,466	+61.1	-17.5	54,650	45,853	-16.1
Unfilled orders, end of month.....M ft. b. m.	11,106	13,337	13,104	10,600	10,431	10,500	10,076	-1.6	+3.5	-----	-----	-----
Oak flooring:												
Production.....M ft. b. m.	28,497	36,578	41,353	36,722	37,638	44,444	46,065	+2.5	-18.3	298,208	246,857	-17.2
Shipments.....M ft. b. m.	40,902	41,837	41,558	39,979	37,002	49,475	47,832	-7.4	-22.6	319,579	261,828	-18.1
Stocks, end of month.....M ft. b. m.	80,603	75,744	74,013	72,147	70,435	71,425	68,851	-2.4	+2.3	-----	-----	-----
New orders.....M ft. b. m.	52,642	40,244	33,909	34,479	25,901	48,873	45,972	-24.9	-43.7	330,077	248,672	-24.7
Unfilled orders, end of month.....M ft. b. m.	54,644	68,925	57,496	50,832	43,895	49,002	49,912	-13.6	-12.1	-----	-----	-----
Doors at Wholesale												
Fir, manufacturing plants:												
Production.....number..	298,206	309,192	371,162	322,987	302,452	393,224	434,299	-6.4	-30.4	-----	-----	-----
Shipments.....number..	275,775	287,222	357,900	258,041	340,978	386,636	431,800	+32.1	-21.0	-----	-----	-----
Stocks, end of month.....number..	232,170	260,160	217,204	282,150	217,547	293,505	302,990	-22.9	-28.2	-----	-----	-----
New orders.....number..	460,074	349,579	222,746	261,271	204,745	221,896	327,387	-21.6	-37.5	-----	-----	-----
Unfilled orders, end of month.....number..	585,652	632,744	476,215	477,349	315,566	535,697	470,617	-33.9	-32.9	-----	-----	-----
Wooden Furniture												
Household furniture and case goods:												
Shipments.....dolls., average per firm..	64,527	57,081	57,605	47,831	53,748	39,214	43,462	+12.4	+23.7	323,978	389,123	+20.1
Unfilled orders.....dolls., average per firm..	40,469	32,776	38,713	36,232	64,573	30,858	59,214	+78.2	+9.1	-----	-----	-----

⁶ Cumulative through June 30.⁷ Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
LUMBER PRODUCTS—Continued												
Wooden Furniture—Continued												
Grand Rapids district:												
Unfilled orders, end of month.....No. of days' production..	37	34	60	58	68	46	54	+17.2	+25.9			
New orders.....No. of days' production..	27	18	49	20	36	27	31	+80.0	+16.1			
Shipments.....No. of days' production..	24	19	23	22	24	17	22	+9.1	+9.1			
Outstanding accounts, end of month.....No. of days' sales..	49	42	43	44	46	44	48	+4.5	-4.2			
Cancellations.....per cent of new orders..	6.0	14.0	4.0	11.0	5.0	10.0	5.0	+54.5	0.0			
Plant operation.....per cent of full time..	93.0	94.0	89.0	88.0	90.0	95.0	88.0	+2.3	+2.3			
Plywood and Veneer												
Douglas-fir plywood:												
Production.....thous. of sq. ft. of surface..	11,823	11,655	15,652	13,169	15,567		8,218	+18.2	+89.4			
Shipments.....thous. of sq. ft. of surface..	13,295	11,406	15,906	12,778	14,113		8,387	+10.4	+68.3			
New orders (sales).....thous. of sq. ft. of surface..	20,509	14,084	14,342	10,525	12,149		8,782	+15.4	+38.3			
Unfilled orders, end of month.....thous. of sq. ft. of surface..	16,904	19,105	17,222	14,120	12,308	8,156	7,494	-12.8	+64.2			
Stocks, end of month.....thous. of sq. ft. of surface..	4,722	5,306	5,185	5,702	7,158	7,284	7,251	+25.5	-1.3			
Other plywood:												
New orders.....thous. of sq. ft. of surface..	5,428	5,953	5,369	6,135		3,237	2,920			\$ 16,665	\$ 31,650	+89.1
Shipments.....thous. of sq. ft. of surface..	4,876	4,067	3,447	4,234		2,713	2,523			\$ 16,567	\$ 24,647	+48.8
Unfilled orders, end of month.....thous. of sq. ft. of surface..	6,053	7,237	8,040	9,724		3,504	3,918					
Rotary-cut veneer:												
Receipts.....number of carloads..	143	307	220	169	272	164	181	+60.9	+50.3	951	1,426	+49.9
Purchases.....number of carloads..	451	256	157	181	260	244	249	+43.6	+4.4	1,327	1,732	+30.5
Bushel baskets:												
Production.....dozens..	187,881	224,835	244,782	202,426	232,860	188,021	229,342	+15.0	+1.5	1,398,668	1,362,455	-2.6
Shipments.....dozens..	140,205	149,055	152,274	200,814	232,154	254,432	294,662	+15.6	-21.2	1,343,000	1,069,759	-20.3
Stocks, end of month.....dozens..	480,769	565,598	662,636	665,881	674,339	602,083	565,911	+1.3	+19.2			
STONE, CLAY, AND GLASS PRODUCTS												
Clay Products												
Face brick, averages per plant:												
Production.....thousands..	732	913	907	999		844	763			\$ 3,910	\$ 4,854	+24.1
Shipments.....thousands..	766	1,018	1,060	1,051		876	815			\$ 4,104	\$ 4,816	+17.3
Stocks, end of month.....thousands..	3,278	3,465	3,443	3,304		2,495	2,439					
Unfilled orders, end of month.....thousands..	987	1,117	1,124	1,169		950	1,046					
Common brick:												
Stocks, end of month—												
Burned.....thousands..	341,843	315,607	325,208	308,257		302,249	408,563					
Unburned.....thousands..	171,545	153,168	168,036	154,185		130,990	208,202					
Shipments.....thousands..	76,364	284,793	121,641	154,021		219,522	238,941			\$ 1,167,831	\$ 827,280	-29.2
Unfilled orders, end of month.....thousands..	102,389	207,649	144,271	163,126		260,970	299,457					
Plants closed down.....number..	36	19	15	50		3	11					
Price, red, New York.....dolls. per thous..	11.50	11.50	11.50	11.00	10.13	13.50	13.50	-7.9	-25.0			
Porcelain plumbing fixtures:												
Net new orders.....pieces..	14,479	13,417	8,970	9,669	13,153	13,405	12,976	+36.0	+1.4	186,954	84,634	-54.7
Shipments.....pieces..	9,483	12,193	10,059	10,807	11,845	19,257	20,253	+9.6	-41.5	109,293	75,182	-31.2
Unfilled orders, end of month.....pieces..	40,047	37,184	35,045	31,234	30,088	95,246	81,699	-3.7	-63.2			
Stocks, end of month.....pieces..	46,980	47,315	48,228	45,848	37,947	40,823	48,261	-17.2	-21.4			
Vitreous china plumbing fixtures:												
New orders.....pieces..	207,681	205,870	199,477	196,707	244,351	225,694	184,783	+24.2	+32.2	2,006,076	1,816,793	-9.4
Shipments.....pieces..	256,249	251,920	254,776	246,071	271,411	274,351	248,363	+10.3	+9.3	1,924,861	1,794,764	-6.8
Unfilled orders, end of month.....pieces..	589,428	543,378	488,079	438,715	411,655	466,919	403,339	-6.2	+2.1			
Stocks, end of month.....pieces..	549,440	544,899	543,987	591,633	582,414	444,399	460,360	-1.6	+26.5			
Floor and wall tile:												
Production.....thous. of sq. ft..	6,162	6,560	6,317	6,287		6,192	6,452			\$ 31,884	\$ 36,644	+14.9
Shipments, quantity.....thous. of sq. ft..	5,250	6,177	6,379	6,467		6,604	6,595			\$ 31,825	\$ 32,945	+3.5
Shipments, value.....thous. of dolls..	2,044	2,376	2,446	2,420		2,462	2,529			\$ 12,047	\$ 12,656	+5.1
Stocks, end of month.....thous. of sq. ft..	18,140	18,604	18,452	18,079		13,031	12,837					
Terra cotta, new orders:												
Quantity.....net tons..	9,961	12,949	13,313	10,798	11,756	16,108	14,191	+8.9	-17.2	91,079	80,103	-12.1
Value.....thous. of dolls..	1,172	1,472	1,487	1,178	1,183	1,558	1,385	+0.4	-14.6	8,652	8,778	+1.5
Sand-lime brick:												
Production.....thousands..	11,433	16,155	12,969	17,578	16,061	19,134	18,072	-8.6	-11.1	110,235	92,176	-16.4
Shipments by rail.....thousands..	3,945	4,659	5,658	5,412	4,263	5,120	6,055	-21.2	-29.6	36,712	28,266	-23.0
Shipments by trucks.....thousands..	9,498	13,580	13,107	13,757	12,266	14,437	11,772	-10.8	+4.2	76,239	74,358	-2.5
Stocks, end of month.....thousands..	14,256	14,236	10,561	10,447	8,854	11,656	12,591	-15.2	-29.7			
Unfilled orders, end of month.....thousands..	12,630	11,587	9,183	14,968	14,739	11,718	11,762	-1.5	+25.3			
Portland Cement												
Production.....thous. of bbls..	9,969	13,750	16,151	16,775	17,216	17,497	17,474	+2.6	-1.5	94,535	92,264	-2.4
Operation.....per ct. of capacity..	47.4	67.1	76.4	80.9	80.4	90.1	97.0	-0.6	-17.1			
Shipments.....thous. of bbls..	10,113	13,325	16,706	18,942	20,273	18,421	19,901	+7.0	+1.9	93,854	90,514	-3.6
Stocks, end of month.....thous. of bbls..	29,724	30,151	29,597	27,428	24,372	25,029	22,580	-11.1	+7.9			
Stocks, clinker, end of month.....thous. of bbls..	14,948	15,472	14,910	13,573	11,607	12,944	11,707	-14.5	-0.9			
Wholesale prices, composite.....dolls. per bbl..	1.650	1.650	1.650	1.650	1.650	1.683	1.683	0.0	-2.0			
Highways												
Concrete pavements, new contracts:												
Total.....thous. of sq. yds..	6,000	16,654	23,704	16,421	18,022	15,446	13,123	+9.8	+37.3	92,859	91,503	-1.5
Road.....thous. of sq. yds..	2,826	12,315	17,518	10,410	11,344	8,997	6,984	+9.0	+62.4	60,413	62,191	+2.9
Federal-aid highways:												
Completed—												
Cost.....thous. of dolls..	4,570	7,410	10,309	15,552	16,445	18,802	8,828	+5.7	+86.3	81,263	83,531	+2.8
Distance.....miles..	151	211	335	520	693	661	483	+33.3	+43.5	3,341	2,840	-15.0
Under construction, end of month.....miles..	7,665	7,707	7,900	8,359	8,494	9,494	9,497	+1.6	-10.6	61,384	55,639	-9.4

* Cumulative through June 30.

† Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
STONE, CLAY, AND GLASS PRO-DUCTS—Continued												
Plate Glass												
Production, polished.....thous. of sq. ft..	13, 144	12, 555	12, 782	12, 278	13, 037	11, 354	9, 966	+6. 2	+30. 8	74, 227	86, 531	+16. 6
Glass Containers												
Actual production:												
Quantity.....gross.....	2, 574	2, 519	2, 633	2, 561	2, 396	2, 589	2, 374	-6. 4	+0. 9	16, 934	17, 361	+2. 5
Relation to capacity.....per cent..	78. 8	79. 1	79. 1	81. 5	73. 3	86. 7	77. 2	-10. 1	-5. 1			
New orders.....gross.....	2, 562	2, 408	2, 584	2, 023	2, 224	2, 225	2, 008	+9. 9	+10. 8	17, 016	17, 687	+3. 9
Shipments.....gross.....	2, 530	2, 546	2, 657	2, 679	2, 507	2, 552	2, 311	-7. 4	+8. 5	16, 800	17, 493	+4. 1
Stock, end of month.....gross.....	6, 595	6, 588	6, 601	6, 500	6, 388	6, 220	6, 267	-1. 7	+1. 9			
Unfilled orders, end of month.....gross..	10, 518	10, 214	9, 859	9, 278	8, 824	9, 642	9, 166	-4. 9	-3. 7			
Illuminating Glassware												
Production:												
Total.....number of turns..	3, 256	3, 285	3, 884	3, 239	1, 818	3, 365	1, 748	-43. 9	+4. 0	20, 482	22, 406	+9. 4
Ratio to capacity.....per ct. of capacity..	42. 9	42. 9	46. 8	46. 3	18. 7	44. 2	22. 3	-49. 6	-16. 1			
New orders.....per ct. of capacity..	46. 8	45. 3	48. 1	44. 6	40. 1	41. 6	40. 2	-10. 1	-0. 2			
Shipments.....per ct. of capacity..	41. 8	44. 9	42. 2	45. 1	35. 3	42. 6	26. 8	-21. 7	+31. 7			
Unfilled orders, end of month.....number of weeks' supply...	1. 1	1. 1	1. 4	1. 6	1. 5	1. 3	1. 6	-6. 2	-6. 2			
Stocks, end mo.....number of weeks' supply...	5. 5	5. 3	5. 8	6. 0	5. 4	4. 4	4. 6	-10. 6	+17. 4			
CHEMICALS AND OILS												
Chemicals												
Sulphur production (quarterly).....long tons..	2 539, 832			2 652, 735		2 526, 009		+20. 9	+24. 1	6 926, 910	6 1, 192, 567	+28. 7
Sulphuric acid:												
Exports.....thous. of lbs..	704, 729	634, 959	287, 306	693, 027	506, 758	732, 598	773, 624	-26. 9	-34. 5	4, 731, 568	3, 882, 832	-17. 9
Price, wholesale.....dolls. per 100 lbs..	. 78	. 78	. 78	. 78	. 78	. 78	. 78	0. 0	0. 0			
Nitrate of soda:												
Imports.....long tons..	101, 297	119, 620	127, 645	64, 733	40, 501	76, 135	28, 150	-37. 4	+43. 9	741, 596	683, 798	-7. 8
Production in Chile.....metric tons..	279, 100	272, 200	276, 600	252, 600	272, 300	252, 300	264, 300	+7. 8	+3. 0	1, 767, 300	1, 882, 800	+6. 5
Potash salts:												
Imports, (commercial).....long tons..	22, 116	21, 299	24, 696	9, 895	37, 126	14, 525	38, 461	+275. 2	-3. 5	181, 770	168, 345	-7. 4
Production in France (K ₂ O content).....metric tons..	39, 693	38, 990	37, 242	39, 700		34, 000	30, 260			6 194, 618	6 235, 530	+21. 0
Sales in Germany (K ₂ O content).....metric tons..	233, 000	107, 588	77, 326	97, 723		99, 948	102, 608			6 802, 978	6 825, 049	+2. 7
Superphosphate, (acid phosphate):												
Production.....short tons..	282, 504	286, 897	276, 462	302, 434	305, 808	294, 115	294, 121	+1. 1	+4. 0	2, 241, 817	2, 131, 636	-4. 9
Stocks, end of month.....short tons..	1, 558, 588	831, 841	822, 659	7 967, 766	1, 208, 206	1, 025, 612	1, 234, 006	+24. 8	-2. 3			
Shipments.....short tons..	414, 243	468, 200	116, 580	55, 459	62, 965	60, 343	7 64, 378	+13. 5	-2. 2	1, 419, 632	1, 418, 909	-0. 1
Fertilizer:												
Exports.....long tons..	165, 551	136, 937	114, 655	140, 090	123, 515	111, 581	98, 803	-11. 8	+25. 0	761, 194	881, 007	+15. 7
Consumption, Southern States.....short tons..	2, 118, 688	1, 242, 330	219, 763	99, 407	20, 047	45, 776	7 19, 101	-79. 8	+5. 0	5, 038, 344	4, 968, 324	-1. 4
Dyes and dyestuffs, exports:												
Vegetable.....thous. of lbs..	157	160	202	264	126	272	254	-52. 3	-50. 4	1, 987	1, 189	-40. 2
Coal tar.....thous. of lbs..	2, 305	26	27	21	3, 180	1, 726	8, 340		-61. 9	20, 050	5, 646	-71. 8
Arsenic												
Crude:												
Production.....short tons..	1, 307	1, 382	1, 888	2, 452	1, 444	1, 703	1, 385	-41. 1	+4. 3	9, 245	10, 871	+17. 6
Stocks, end of month.....short tons..	2, 418	2, 451	2, 073	2, 161	1, 998	2, 099	2, 105	-7. 5	-5. 1			
Refined:												
Production.....short tons..	945	836	779	917	812	732	728	-11. 5	+11. 5	5, 025	6, 102	+21. 4
Stocks, end of month.....short tons..	3, 458	3, 316	3, 236	3, 709	3, 305	1, 916	1, 568	-10. 9	+110. 8			
Price index numbers:												
Crude drugs.....rel. to Aug., 1914..	194	187	187	184	183	199	197	-0. 5	-7. 1			
Essential oils.....rel. to Aug., 1914..	206	205	193	190	191	166	162	+0. 5	+17. 9			
Drugs and pharma- cuticals.....rel. to Aug., 1914..	164	164	163	163	173	169	168	+6. 1	+3. 0			
Chemicals.....rel. to 1913-14..	113	113	113	113	113	113	113	0. 0	0. 0			
Oils and fats.....rel. to 1913-14..	127	123	118	116	117	123	123	-0. 9	-4. 9			
Wood Chemicals												
Acetate of lime:												
Production—												
United States.....thous. of lbs..	12, 082	11, 796	12, 446	7 11, 718	10, 534	9, 390	9, 570	-10. 1	+10. 1	78, 899	81, 529	+3. 3
Canada.....thous. of lbs..	1, 150	1, 032	751	733	774	720	443	+5. 6	+74. 7	6, 164	6, 793	+10. 2
Shipments—												
United States.....thous. of lbs..	7 11, 882	11, 986	12, 335	7 11, 548	10, 917	10, 223	13, 532	-5. 5	-19. 3	83, 950	80, 881	-3. 7
Canada.....thous. of lbs..	1, 165	1, 066	723	668	761	887	882	+13. 9	-13. 7	5, 914	6, 672	+12. 8
Stocks, end of month—												
United States.....thous. of lbs..	1, 930	7 1, 601	1, 828	7 1, 724	1, 206	15, 128	11, 411	-30. 0	-89. 4			
Canada.....thous. of lbs..	172	96	109	119	156	2, 848	2, 333	+31. 1	-93. 3			
Exports.....thous. of lbs..	17		13		120	215	1, 792	-93. 3	-93. 3	9, 503	208	-97. 8
Price, wholesale.....dolls. per cwt..	4. 50	4. 50	4. 50	4. 50	4. 50	3. 50	3. 50	0. 0	+28. 6			
Methanol, crude:												
Production—												
United States.....gallons..	714, 266	732, 204	730, 785	7 665, 557	624, 633	528, 029	544, 693	-6. 1	+14. 7	4, 389, 445	4, 828, 883	+10. 0
Canada.....gallons..	51, 303	42, 183	32, 614	28, 441	29, 538	27, 741	14, 885	+3. 9	+98. 9	247, 169	283, 071	+14. 5
Stocks at crude plants, end of month—												
United States.....gallons..	272, 393	185, 123	228, 965	7 226, 207	234, 520	295, 455	327, 028	+3. 7	-28. 3			
Canada.....gallons..	30, 003	16, 597	14, 322	13, 983	20, 863	34, 950	38, 485	+49. 2	-45. 8			
Stocks at refineries and in transit—												
United States.....gallons..	147, 531	7 172, 755	262, 082	277, 376	475, 698	558, 483	277, 077	+71. 5	+71. 7			
Canada.....gallons..	59, 623	66, 218	65, 965	66, 870	78, 120	73, 955	66, 518	+16. 8	+17. 4			
Exports.....gallons..	28, 478	57, 134	44, 602	16, 613	95, 755	66, 785	54, 535	+476. 4	+75. 6	396, 814	323, 710	-18. 4

* Quarter ending in month indicated.

* Cumulative through June 30.

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
CHEMICALS AND OILS—Continued												
Wood Chemicals—Continued												
Wood at chemical plants:												
Consumption—												
United States.....cords..	73,073	73,084	76,382	770,729	67,165	58,959	56,187	-5.0	+19.5	443,805	500,290	+12.7
Canada.....cords.....	6,289	5,244	3,831	3,539	3,587	3,498	1,938	+1.4	+85.1	30,921	34,944	+13.0
Stocks, end of month—												
United States.....cords..	456,035	487,881	524,567	529,684	519,857	505,329	507,227	-1.9	+2.5			
Canada.....cords.....	73,976	73,496	73,095	73,100	73,100	73,900	73,699	0.0	-0.8			
Daily capacity—												
Total.....cords.....	3,336	3,336	3,336	3,326	3,276	3,486	3,470	-1.5	-5.6			
Shutdown.....cords.....	404	463	417	441	548	697	807	+24.3	-32.1			
Methanol, refined:												
Production—												
United States.....gallons..	494,435	502,010	423,244	423,811	259,118	603,247	541,113	-38.9	-52.1	3,498,781	3,046,919	-12.9
Canada.....gallons.....	47,500	35,300	49,700	36,900	10,400	6,200	10,800	-71.8	-3.7	225,350	287,300	+27.5
Stocks, end of month—												
United States.....gallons..	681,815	695,180	716,762	759,740	712,752	541,083	444,496	-6.2	+60.4			
Canada.....gallons.....	36,149	48,226	43,474	51,787	31,185	45,733	39,210	-39.8	-20.5			
Shipments—												
United States.....gallons..	518,906	568,118	472,360	449,245	365,438	596,502	667,549	-18.7	-45.3	3,528,054	3,347,312	-5.1
Canada.....gallons.....	43,885	14,576	45,274	11,650	21,403	11,462	12,672	+83.7	+68.9	143,784	218,040	+51.6
Price, wholesale, N. Y.....dolls. per gal..	.58	.58	.58	.58	.58	.46	.47	0.0	+23.4			
Ethyl Alcohol												
Production.....thous. of gals..	14,858	14,709	15,216			13,036	16,618					
Withdrawn for denaturation.....thous. of gals..	13,090	12,003	13,812			16,336	14,927					
Warehouse stocks, end of month.....thous. of gals..	10,424	11,723	12,341			6,646	7,351					
Explosives												
(Black powder, permissible, and other high explosives)												
Production.....thous. of lbs..	34,485	36,077	37,235	34,383	35,756	32,625	30,084	+4.0	+18.9	219,215	246,924	+12.6
Shipments.....thous. of lbs..	33,168	36,458	39,474	35,032	36,811	32,816	29,561	+5.1	+24.5	221,151	250,841	+13.4
New orders.....thous. of lbs..	32,543	34,786	37,199	34,202	35,499	31,305	27,993	+3.8	+26.8	210,903	242,568	+15.0
Stocks, end of month.....thous. of lbs..	20,366	20,119	17,989	17,225	16,964	16,732	17,158	-1.5	-1.1			
Naval Stores												
Turpentine, (gum):												
Net receipts, southern ports.....barrels.....	8,440	31,610	43,722	48,658	54,872	48,111	46,637	+12.8	+17.7	173,233	200,235	+15.6
Stocks at port, end of month.....barrels.....	48,396	52,687	53,536	57,728	65,570	61,336	69,245	+13.6	-5.3			
Price, southern, New York.....dolls. per gal..	.88	.54	.54	.52	.52	.57	.55	0.0	-5.5			
Rosin, (gum):												
Net receipts, southern ports.....barrels.....	37,733	100,454	137,384	154,168	181,433	148,041	148,250	+17.7	+22.4	579,766	685,659	+18.3
Stocks at 3 ports, end of month.....barrels.....	100,722	108,335	120,665	123,505	169,420	165,604	178,225	+37.2	-4.9			
Price, B, New York.....dolls. per bbl.....	7.86	7.41	7.58	7.88	8.51	9.10	9.71	+8.0	-12.4			
Rosin, (wood):												
Production.....barrels.....	37,361	36,150	37,708	36,123	37,844	36,054	37,016	+4.8	+2.2	241,077	256,103	+6.2
Stocks, end of month.....barrels.....	128,665	124,192	115,870	113,449	104,492	108,200	112,703	-7.9	-7.3			
Turpentine, (wood):												
Production.....barrels.....	7,059	6,917	6,855	6,505	6,718	5,700	6,304	+3.3	+6.6	42,469	47,837	+12.6
Stocks, end of month.....barrels.....	6,773	5,356	4,503	4,778	4,628	8,510	7,786	-3.1	-40.6			
Pine oil:												
Production.....gallons.....	235,445	212,720	219,304	215,153	235,892	191,947	238,767	+9.6	-1.2	1,615,843	1,561,917	-3.3
Stocks, end of month.....gallons.....	888,915	895,099	878,784	873,358	882,037	829,507	824,671	+1.0	+7.0			
Roofing												
Roofing, felt:												
Production, dry felt.....tons.....	28,153	30,177	31,402	29,981	26,339	28,476	25,810	-12.1	+2.0	175,674	190,156	+8.2
Stocks, end of month, dry felt.....tons.....	3,102	2,907	2,138	3,077	2,846	2,153	2,798	-7.5	+1.7			
Fats and Oils												
Total vegetable oils and copra:												
Exports.....thous. of lbs..	2,608	1,575	1,816	1,428	541	1,652	1,145	-62.1	-52.8	37,161	14,489	-61.0
Imports.....thous. of lbs..	85,328	106,331	129,285	91,375	73,157	59,951	53,379	-19.9	+37.1	401,391	639,862	+59.4
Copra, imports.....short tons..	31,587	29,868	34,728	23,828	21,693	20,488	24,407	-9.0	-11.1	127,623	187,378	+46.8
Copra or coconut oil:												
Imports.....thous. of lbs..	30,842	30,319	49,260	32,571	23,669	12,671	19,629	-27.3	+20.6	146,399	237,089	+61.9
Consumption in oleomargarine.....thous. of lbs..	15,587	14,932	14,603	12,029	12,658	11,791	10,642	+5.2	+18.9	86,911	100,485	+15.6
Oleomargarine:												
Production.....thous. of lbs..	29,718	28,704	28,357	24,276	24,873	23,738	21,444	+6.4	+16.0	174,334	194,345	+11.5
Consumption.....thous. of lbs..	28,260	27,067	29,008	23,379	24,972	23,926	20,490	+6.8	+21.9	172,080	193,246	+12.3
Animal glues, shipments.....thous. of lbs..	6,826	7,259	7,225	6,246	6,376	5,887	6,621	+2.1	-3.7	45,594	46,476	+1.9
Cottonseed												
Cottonseed:												
Receipts at mills.....short tons..	106,052	40,308	22,007	26,041	29,377	18,772	24,936	+12.8	+17.8	653,525	805,556	+23.3
Consumption, (crush).....short tons..	364,816	236,246	112,421	63,274	51,438	38,955	33,230	-18.7	+54.8	1,644,506	2,090,320	+27.1
Stocks at mills, end of month.....short tons..	386,986	191,048	100,634	63,401	41,340	30,266	21,972	-34.8	+88.1			
Cottonseed oil, crude:												
Production.....thous. of lbs..	119,825	80,474	39,688	21,552	18,558	13,500	11,257	-13.9	+64.9	539,946	683,096	+26.5
Stocks, end of month.....thous. of lbs..	106,955	80,863	51,284	30,079	19,094	34,559	20,351	-36.5	-6.2			
Cottonseed oil, refined:												
Production.....thous. of lbs..	126,859	101,475	60,581	40,795	27,680	22,274	25,930	-32.1	+6.7	601,545	730,947	+21.5
Stocks, end of month.....thous. of lbs..	584,978	570,889	512,118	431,100	338,320	415,047	335,993	-21.5	+0.7			
Factory consumption, (qty.).....thous. of lbs..	303,618			303,688		245,123		0.0	+23.9	548,601	607,306	+10.7
Price, yellow, prime, New York.....dolls. per lb..	.106	.102	.097	.096	.096	.102	.101	0.0	-5.0			
Consumption in oleomargarine.....thous. of lbs..	2,387	2,362	2,518	2,124	2,051	2,106	1,867	-3.4	+9.9	14,611	16,039	+9.8

*Quarter ending in month indicated.

*Cumulative through June 30.

*Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
CHEMICALS AND OILS—Continued												
Cottonseed—Continued												
Cottonseed cake and meal:												
Production.....short tons..	167,225	107,296	50,278	28,423	25,971	19,847	14,065	-8.6	+84.6	757,115	952,659	+25.8
Stocks, end of month.....short tons..	239,050	225,362	191,983	142,014	80,914	45,241	32,648	-43.0	+147.8			
Exports.....short tons..	23,790	6,675	6,151	4,777	11,969	143	71	+150.6		106,784	114,508	+7.2
Flaxseed												
Production, crop estimate.....thous. of bush..					* 17,979		* 18,690					
Minneapolis and Duluth:												
Receipts.....thous. of bush..	369	270	313	492	381	632	245	-22.6	+55.5	3,757	2,540	-32.4
Shipments.....thous. of bush..	351	219	101	271	340	392	272	+25.5	+25.0	3,529	1,964	-44.3
Stocks, end of month.....thous. of bush..	603	478	578	764	360	764	411	-52.9	-12.4			
Imports.....thous. of bush..	2,737	3,911	2,518	2,366	1,293	1,664	1,484	-45.4	-12.9	11,138	16,765	+50.5
Mill receipts at Duluth:												
Superior.....thous. of bush..	13	7		33	84	50	76	+154.5	+10.5	397	240	-39.5
Oil mills, (quarterly):												
Consumption.....thous. of bush..	* 10,723			* 9,816		* 9,608		-8.5	+2.2	* 21,479	* 20,539	-4.4
Stocks, end of quarter.....thous. of bush..	* 4,544			* 3,593		* 3,034		-20.9	+18.4			
Linseed oil:												
Shipments from Minneapolis.....thous. of lbs..	14,602	14,237	18,005	15,205	14,381	17,196	14,229	-5.4	+1.1	105,411	102,426	-2.8
Price, New York.....dolls. per lb..	.102	.101	.102	.105	.120	.103	.100	+14.3	+20.0			
Linseed cake and meal:												
Shipments from Minneapolis.....thous. of lbs..	19,427	16,917	12,067	7,632	12,215	11,421	10,057	+60.0	+21.5	144,849	116,148	-19.8
Exports.....thous. of lbs..	38,874	36,028	32,501	30,065	40,428	45,135	47,258	+34.5	-14.5	327,891	222,872	-32.0
FOODSTUFFS												
Wheat												
Visible supply, end of month:												
United States.....thous. of bush..	125,351	117,079	97,962	94,060	142,855	40,480	55,362	+51.2	+158.0			
Canada.....thous. of bush..	181,676	167,837	142,168	118,249	103,315	99,228	72,891	-12.6	+41.7			
Production, crop estimate:												
Winter wheat.....thous. of bush..					* 568,233		* 578,133					
Spring wheat.....thous. of bush..					* 205,652		* 324,058					
Total, wheat.....thous. of bush..					* 773,885		* 902,191					
Receipts, principal markets.....thous. of bush..	27,220	17,472	18,637	25,694	94,158	15,544	72,618	+266.5	+29.7	204,326	234,416	+14.7
Shipments, principal markets.....thous. of bush..	16,926	15,697	23,560	18,644	42,577	14,840	33,543	+128.4	+26.9	132,502	149,358	+12.7
Stocks, millers', end of quarter.....thous. of bush..	* 107,215			* 75,355		* 46,083		-29.7	+63.5			
Exports:												
United States—												
Wheat only.....thous. of bush..	3,487	3,942	11,741	4,564	8,691	5,006	4,153	+90.4	+109.3	27,677	39,038	+41.0
Including wheat flour.....thous. of bush..	9,153	8,930	15,941	8,814	13,575	8,093	7,064	+54.0	+92.2	56,827	74,676	+31.4
Canada—												
Including wheat flour.....thous. of bush..	27,566	10,554	31,155	29,796	20,538	25,182	35,944	-31.1	-42.9	170,766	164,350	-3.8
Prices:												
No. 1, Northern Spring,												
Minneapolis.....dolls. per bush..	1.25	1.20	1.11	1.15	1.43	1.48	1.38	+24.3	+3.6			
No. 2 Red Winter,												
St. Louis.....dolls. per bush..	1.35	1.25	1.17	1.21	1.39	1.79	1.47	+14.9	-5.4			
No. 2 Hard Winter,												
Kansas City.....dolls. per bush..	1.16	1.10	1.01	1.05	1.25	1.47	1.20	+19.0	+4.2			
Wheat Flour												
Grindings of wheat:												
United States.....thous. of bush..	42,004	39,475	42,738	* 40,833	42,876	36,083	39,552	+5.0	+8.4	285,353	294,985	+3.4
Canada.....thous. of bush..	7,455	7,339	7,998	7,029		6,304	6,769			* 40,964	* 44,901	+9.6
Production:												
United States, actual.....thous. of bbls..	9,207	8,636	9,334	* 8,912	9,333	7,758	8,516	+4.7	+9.6	61,482	64,462	+4.8
United States, prorated.....thous. of bbls..	10,360	9,938	10,680	9,838		8,854	9,409			* 59,822	* 61,644	+3.0
Canada.....thous. of bbls..	1,631	1,606	1,749	1,548		1,359	1,458			* 8,874	* 9,832	+10.8
Grain offal, production.....thous. of lbs..	725,848	683,046	742,133	* 711,357	745,488	645,048	697,371	+4.8	+6.9	5,046,660	5,117,351	+1.4
Capacity operated, flour mills.....per cent.	54	51	55	54	55	45	51	+1.9	+7.8			
Consumption, (computed).....thous. of bbls..	9,101	8,530	9,847	8,494		* 8,268	7,762			* 53,893	* 54,187	+0.5
Stocks, all positions, end of month, (computed).....thous. of bbls..	7,400	7,700	7,600	8,000		6,200	7,847					
Stocks, millers', end of quarter.....thous. of bbls..	* 4,356			* 3,826		* 3,634		-12.2	+5.3			
Exports:												
United States.....thous. of bbls..	1,259	1,108	933	944	1,085	686	647	+14.9	+67.7	6,478	7,918	+22.2
Canada.....thous. of bbls..	1,413	720	907	935	782	716	782	-16.4	0.0	5,669	6,688	+18.0
Wholesale prices:												
Standard patents, Minn.....dolls. per bbl..	6.67	6.41	6.12	6.38	7.69	7.95	7.36	+20.5	+4.5			
Winter, straights,												
Kansas City.....dolls. per bbl..	5.72	5.58	5.21	5.26	6.32	7.18	6.44	+20.2	-1.9			
Corn												
Production, crop estimate.....thous. of bush..					* 2,740,514		* 2,835,678					
Exports, including meal.....thous. of bush..	5,021	2,560	1,050	981	850	1,045	891	-13.4	-4.6	15,932	30,906	+94.0
Visible supply, end of month.....thous. of bush..	37,100	30,991	15,571	13,932	9,493	17,451	12,479	-31.9	-23.9			
Receipts, principal markets.....thous. of bush..	21,562	16,433	11,420	20,644	21,205	18,771	23,742	+2.7	-10.7	206,966	160,369	-22.5
Shipments, prin. markets.....thous. of bush..	13,461	17,677	16,276	15,160	15,644	20,221	16,080	+3.2	-2.7	145,262	112,097	-22.9
Grindings, (starch, glucose).....thous. of bush..	7,085	6,044	6,338	6,697	6,558	6,428	5,833	-2.1	+12.4	53,380	49,895	-6.7
Price, No. 2, Chicago.....dolls. per bush..	.95	.91	.86	.92	1.00	1.03	1.08	+8.7	-7.4			

* Quarter ending in month indicated.

* As of Aug. 1.

* Final estimate for 1928.

* Cumulative through June 30.

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
FOODSTUFFS—Continued												
Oats												
Production, crop estimate.....thous. of bush..					¹ 202,895		¹ 448,677					
Receipts, principal markets.....thous. of bush..	8,535	9,494	10,432	8,486	10,123	7,144	6,610	+19.3	+53.1	76,733	66,551	-13.3
Visible supply, end of month.....thous. of bush..	14,071	12,204	10,063	8,114	8,129	3,392	1,954	+0.2	+316.0			
Exports, including meal.....thous. of bush..	513	358	513	254	255		104	+0.4	+145.2	2,446	3,047	+24.6
Price, contract grades, Chi.....dolls. per bush..	.52	.50	.46	.47	.48		.61	+2.1	-21.3			
Grindings, Canada.....thous. of bush..	925	776	900	895		753	723			² 5,292	² 5,245	-0.9
Production, oatmeal and rolled oats, Canada.....thous. of lbs....	12,133	8,987	10,728	11,360		9,974	9,320			² 64,505	² 64,874	+0.6
Barley												
Production, crop estimate.....thous. of bush..					¹ 304,381		¹ 356,667					
Receipts, principal markets.....thous. of bush..	3,891	3,450	3,264	3,338	4,849	2,652	2,217	+45.3	+118.7	26,527	27,722	+4.5
Visible supply, end of month.....thous. of bush..	8,459	6,849	6,022	5,731	5,518	711	685	-3.7				
Exports.....thous. of bush..	2,209	1,862	1,268	2,783	4,120	1,910	2,242	+48.0	+83.8	10,234	17,763	+73.6
Price, fair to good, malting, Chicago.....dolls. per bush..	.59	.55	.55	.53	.65	.96	.83	+22.6	-21.7			
Rye												
Production, crop estimate.....thous. of bush..					¹ 41,028		¹ 41,676					
Receipts, principal markets.....thous. of bush..	914	1,064	1,464	870	880	781	571	+1.1	+54.1	8,920	7,356	-17.5
Visible supply, end of month.....thous. of bush..	6,725	6,632	6,325	6,422	6,447	1,465	1,146	+0.4	+462.6			
Exports, including flour.....thous. of bush..	97	32	368	295	106	1,297	195	-64.1	-45.6	6,493	1,221	-81.2
Price, No. 2, Chicago.....dolls. per bush..	1.08	1.00	.90	.89	1.05	1.26	1.13	+18.0	-7.1			
Total Grains												
Total grain exports, incl. flour.....thous. of bush..	10,992	13,741	19,140	13,127	18,907	12,423	10,496	+44.0	+80.1	87,923	127,613	+45.1
Rice												
Production, crop estimate.....thous. of bush..					¹ 34,810		¹ 41,881					
Southern paddy, receipts at mills.....bbls.	439,439	429,389	231,893	191,944	125,737	129,752	16,892	-34.5		3,718,775	2,631,176	-29.2
Shipments:												
Total from mills.....pockets, (100 lbs.)	766,365	745,097	714,677	650,414	515,342	531,073	285,155	-20.8	+80.7	5,546,845	5,181,521	-6.6
New Orleans.....pockets, (100 lbs.)	116,548	131,246	125,528	130,369	113,969	115,399	35,274	-12.6	+223.1	1,112,779	886,457	-20.3
Stocks, end of month.....pockets, (100 lbs.)	2,057,078	1,763,837	1,311,568	865,117	485,177	1,067,092	829,608	43.9	-41.5			
Exports.....pockets, (100 lbs.)	428,450	378,971	343,168	261,377	231,401	291,287	189,472	-11.5	+22.1	2,334,680	2,516,666	+7.8
Imports.....pockets, (100 lbs.)	18,647	21,356	15,257	2,984	6,556	14,815	31,688	+119.7	-79.3	259,245	170,644	-34.2
Other Crops												
Apples:												
Production, crop estimate.....thous. of bush..					¹ 149,140		¹ 185,743					
Cold-storage holdings, end of month.....thous. of bbls.	2,718	1,257			1,903							
Car-lot shipment.....carloads	5,379	2,918	1,668	1,001	1,903	1,040	3,369	+90.1	-43.5	22,321	28,222	+26.4
Potatoes:												
Production, crop estimate.....thous. of bush..					¹ 372,812		¹ 464,483					
Car-lot shipments.....carloads	22,334	19,341	19,683	24,321	19,359	29,152	20,972	-20.4	-7.7	155,435	144,385	-7.1
Onions, car-lot shipments.....carloads	1,497	4,141	3,366	1,700	2,351	1,200	1,652	+38.3	+42.3	17,305	17,282	-0.1
Citrus fruits, car-lot shipments.....carloads	15,144	16,713	15,524	11,820	8,152	5,134	5,070	-31.0	+60.8	55,433	95,917	+73.0
Hay, all tame:												
Production, crop estimates.....thous. of tons					¹ 97,421		¹ 92,983					
Hay, receipts.....tons	75,490	57,993	44,197	47,445	27,599	43,622	43,770	-41.8	-36.9	360,224	398,027	+10.5
Cattle and Beef												
Cattle movements, primary markets:												
Receipts.....thousands	1,445	1,748	1,653	1,444	1,659	1,558	1,650	+14.9	+0.5	11,443	10,775	-5.8
Shipments, total.....thousands	497	646	680	528	592	594	608	+12.1	-2.6	4,258	3,909	-8.2
Shipments, stocker and feeder.....thousands	162	292	292	176	173	184	196	-37.3	-11.7	1,518	1,390	-8.4
Local slaughter.....thousands	923	1,080	979	901	1,039	963	1,013	+15.3	+2.6	7,090	6,766	-4.6
Beef products:												
Production, inspected.....thous. of lbs.	371,942	392,784	392,816	364,470	402,501	406,435	375,745	+10.4	+7.1	2,703,143	2,673,046	-1.1
Apparent consumption.....thous. of lbs.	389,622	415,184	417,481	388,426	420,355	418,874	386,213	-38.3	+8.8	2,796,552		
Exports.....thous. of lbs.	1,614	1,073	1,293	1,496	2,268	1,392	1,510	+51.6	+50.2	8,171	10,136	+24.0
Cold-storage holdings, end of month.....thous. of lbs.	81,607	70,714	57,315	¹ 52,055	48,789	32,238	32,442	-6.3	+50.4			
Prices:												
Cattle, corn-fed, Chicago.....dolls. per 100 lbs.	12.84	13.88	13.44	14.38	14.98	13.56	14.99	+4.2	-0.1			
Steer rounds, No. 2.....dolls. per lb.	.211	.224	.230	.234	.238	.212	.229	+1.7	+3.9			
Western dressed steers, N. Y.....dolls. per lb.	.217	.225	.231	.238	.255	.225	.249	+7.1	+2.4			
Hogs and Pork												
Hog movements, primary markets:												
Receipts.....thousands	3,378	3,545	3,375	3,230	3,257	3,548	2,924	+0.8	+11.4	28,890	25,768	-10.8
Shipments, total.....thousands	1,365	1,273	1,300	1,149	1,199	1,299	1,193	+4.4	+0.5	10,592	9,652	-8.9
Shipments, stocker and feeder.....thousands	72	73	57	53	38	56	45	-28.3	-15.6	462	389	-15.8
Local slaughter.....thousands	2,015	2,258	2,083	2,081	2,055	2,269	1,719	-1.2	+19.5	18,278	16,092	-12.0
Pork products, total:												
Production, inspected.....thous. of lbs.	635,791	655,418	665,985	672,947	675,915	705,111	537,820	+0.4	+25.7	5,344,075	5,050,212	-5.5
Apparent consumption.....thous. of lbs.	551,810	559,351	622,890	582,512	602,958	598,492	560,122	-7.6	+7.6	4,241,376		
Exports.....thous. of lbs.	102,276	89,813	98,080	100,556	96,298	82,936	84,290	-4.2	+14.2	663,597	703,281	+6.0
Cold-storage holdings, end of month:												
Total.....thous. of lbs.	921,961	923,558	870,785	¹ 841,937	814,795	1,129,839	1,024,124	-3.2	-20.4			
Fresh and cured.....thous. of lbs.	742,533	738,810	687,295	¹ 642,238	610,864	915,360	819,185	-4.9	-24.5			

¹ As of Aug. 1.² Final estimate for 1928.³ Cumulative through June 30.⁴ Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
FOODSTUFFS—Continued												
Hogs and Pork—Continued												
Lard, (included in pork products):												
Production.....thous. of lbs.	133, 923	137, 953	141, 989	144, 272	-----	146, 520	108, 522	-----	-----	6 1, 016, 503	6 936, 832	-7.8
Exports.....thous. of lbs.	70, 572	59, 144	64, 192	67, 252	64, 274	53, 436	52, 940	-4.4	+21.4	448, 931	481, 290	+7.2
Cold-storage holdings, end of month.....thous. of lbs.	179, 428	184, 748	183, 490	199, 699	203, 931	214, 479	204, 939	+2.1	-0.5			
Prices:												
Hogs, heavy, Chicago.....dolls. per 100 lbs.	11.39	11.46	10.75	10.66	11.20	10.12	10.86	+5.1	+3.1			
Hams, smoked, Chicago.....dolls. per lb.	.238	.248	.249	.254	.267	.215	.236	+5.1	+13.1			
Lard, prime contract, N. Y.....dolls. per lb.	.125	.122	.120	.123	.125	.122	.125	+1.6	0.0			
Sheep and Lambs												
Sheep movement, primary market:												
Receipts.....thousands	1, 526	2, 010	2, 169	1, 749	2, 112	1, 913	1, 898	+20.8	+11.3	12, 248	12, 985	+6.0
Shipments, total.....thousands	669	954	1, 074	740	876	904	828	+18.4	+5.8	5, 643	5, 863	+3.9
Shipments, stocker and feeder.....thousands	122	211	217	226	231	278	234	+2.2	-1.3	1, 162	1, 310	+12.7
Local slaughter.....thousands	835	1, 049	1, 101	1, 020	1, 216	1, 020	1, 068	+19.2	+13.9	6, 606	7, 100	+7.5
Lamb and mutton:												
Production, inspected.....thous. of lbs.	40, 888	44, 575	46, 397	42, 012	46, 804	40, 691	39, 395	+11.4	+18.8	288, 057	304, 585	+5.7
Apparent consumption.....thous. of lbs.	41, 330	46, 183	46, 694	41, 967	47, 570	39, 923	39, 449	+20.6	+20.6	292, 191		
Cold-storage holdings, end mo. thous. of lbs.	3, 109	2, 533	2, 461	3, 061	2, 633	1, 947	1, 822	-14.0	+44.5			
Prices:												
Sheep, ewes, Chicago.....dolls. per 100 lbs.	8.42	9.18	5.91	5.31	5.55	5.88	5.38	+4.5	+3.2			
Sheep, lambs, Chicago.....dolls. per 100 lbs.	16.19	16.45	12.78	12.75	13.80	13.03	15.18	+8.2	-9.1			
Miscellaneous Meats												
• Cold-storage holdings, end mo.....thous. of lbs.	90, 129	88, 314	82, 331	81, 132	81, 149	63, 941	63, 610	0.0	+27.6			
Total Meats												
Production, inspected.....thous. of lbs.	1, 048, 621	1, 092, 777	1, 105, 198	1, 079, 429	1, 125, 221	1, 152, 237	952, 959	+4.2	+18.1	8, 335, 273	8, 027, 844	-3.7
Cold-storage holdings, end mo.....thous. of lbs.	1, 096, 806	1, 085, 119	1, 012, 892	7 978, 185	944, 366	1, 227, 965	1, 121, 998	-3.5	-15.8			
Apparent consumption.....thous. of lbs.	982, 762	1, 020, 718	1, 087, 065	1, 012, 905	1, 070, 884	1, 057, 289	985, 784	-----	+8.6	7, 330, 119		
Poultry												
Receipts at 5 markets.....thous. of lbs.	17, 116	16, 846	17, 593	20, 434	22, 548	18, 849	22, 238	+10.3	+1.4	143, 294	146, 178	+2.0
Cold-storage holdings, end of mo. thous. of lbs.	68, 728	52, 901	41, 643	7 42, 001	40, 900	38, 230	40, 395	-2.6	+1.3			
Fish												
Total catch, prin. ports.....thous. of bbls.	27, 759	29, 042	28, 631	31, 728	43, 185	29, 809	27, 324	+36.1	+58.0	170, 646	200, 405	+17.4
Cold-storage holdings, 15th of mo. thous. of lbs.	37, 707	31, 360	30, 119	40, 451	51, 334	40, 946	53, 140	+26.9	-3.4			
Canned salmon:												
Shipments, United States.....cases	364, 414	109, 690	186, 202	217, 781	367, 842	240, 311	454, 600	+68.9	-19.1	1, 850, 861	2, 198, 089	+18.8
Exports, Canada.....cases	89, 225	49, 177	90, 775	42, 794	38, 983	23, 106	26, 333	-8.9	+48.0	480, 620	589, 606	+22.7
Butter												
Production, (factory).....thous. of lbs.	112, 378	126, 664	226, 180	181, 359	173, 314	178, 618	165, 247	-4.4	+4.9	924, 294	1, 059, 542	+14.6
Receipts, 5 markets.....thous. of lbs.	46, 186	48, 707	63, 259	69, 511	98, 104	69, 650	65, 145	-2.0	+4.5	363, 102	382, 249	+5.3
Cold-storage holdings, creamery, end of month.....thous. of lbs.	5, 532	5, 883	28, 369	7 91, 962	151, 614	69, 750	120, 437	+64.9	+25.9			
Apparent consumption.....thous. of lbs.	157, 670	170, 745	203, 760	192, 045	241, 232	204, 173	186, 188	+25.6	+29.6	1, 219, 627	1, 259, 975	+3.3
Wholesale price, New York.....dolls. per lb.	.48	.45	.44	.44	.42	.44	.45	-4.5	-6.7			
Cheese												
Total, all varieties:												
Production, (factory).....thous. of lbs.	23, 562	31, 105	41, 083	48, 854	47, 004	64, 141	56, 653	-3.8	-17.0	323, 597	233, 914	-27.7
Receipts, 5 markets.....thous. of lbs.	12, 261	12, 331	16, 751	18, 404	20, 548	19, 216	21, 741	+11.6	-5.5	115, 129	107, 954	-6.2
Apparent consumption.....thous. of lbs.	34, 612	39, 886	40, 639	38, 625	36, 607	45, 778	32, 146	-5.2	+13.9	268, 917	267, 011	-0.7
Cold-storage holdings, end mo. thous. of lbs.	58, 153	54, 618	61, 097	7 97, 724	96, 488	68, 613	89, 708	+21.0	+7.6			
Imports.....thous. of lbs.	5, 423	5, 553	0, 183	8, 608	6, 653	6, 581	5, 937	-22.7	+12.1	41, 436	45, 398	+9.6
Exports, United States.....thous. of lbs.	278	242	204	209	285	180	172	+36.4	+65.7	1, 573	1, 656	+5.3
Exports, Canada.....thous. of lbs.	726	804	1, 692	8, 403	15, 074	5, 849	20, 095	+79.4	-25.0	35, 955	28, 913	-19.6
American whole milk:												
Cold-storage holdings, end of month.....thous. of lbs.	45, 105	42, 032	47, 641	7 62, 737	78, 267	53, 646	73, 088	+24.8	+7.1			
Wholesale price, New York.....dolls. per lb.	.24	.24	.23	.23	.23	.26	.26	0.0	-11.5			
Eggs												
Receipts, 5 markets.....thous. of cases	1, 816	2, 596	2, 331	1, 813	1, 409	1, 763	1, 335	-22.3	+5.5	12, 177	11, 715	-3.8
Cold-storage holdings, end of month:												
Case.....thous. of cases	559	3, 952	6, 705	7 8, 510	8, 958	10, 002	10, 496	+5.3	-14.7			
Frozen.....thous. of lbs.	34, 918	51, 825	71, 560	7 84, 766	91, 525	77, 744	81, 670	+8.0	+12.1			
Milk												
Condensed milk:												
Total stocks, mfrs., end mo.—												
Case goods.....thous. of lbs.	8, 677	12, 534	22, 193	31, 459	34, 750	31, 087	30, 397	+10.5	+14.3			
Bulk goods.....thous. of lbs.	6, 633	11, 312	18, 262	7 25, 803	29, 118	25, 255	20, 794	+12.8	+40.0			
Unsold stocks, mfrs., end mo.—												
Case goods.....thous. of lbs.	3, 841	7, 984	17, 249	25, 140	28, 883	25, 081	23, 594	+14.9	+22.4			
Bulk goods.....thous. of lbs.	2, 799	4, 012	6, 644	7 9, 296	8, 934	13, 368	8, 611	-3.9	+3.8			
Exports.....thous. of lbs.	4, 510	3, 643	2, 689	3, 280	3, 865	3, 054	3, 011	+17.8	+28.4	23, 215	24, 905	+7.3
Wholesale price, New York.....dolls. per case	6.18	6.13	6.13	6.13	6.13	5.83	5.97	0.0	+2.7			

* Cumulative through June 30.

7 Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
FOODSTUFFS—Continued												
Milk—Continued												
Evaporated milk:												
Manufacturers' stocks, end of mo.—												
Total, case goods.....thous. of lbs.	111,868	126,314	160,426	222,956	280,944	187,789	180,377	+26.0	+55.8			
Unsold, case goods.....thous. of lbs.	87,491	89,789	116,144	173,684	215,685	151,769	124,738	+24.2	+72.9			
Exports.....thous. of lbs.	7,768	5,963	5,917	7,121	5,929	5,464	5,180	-16.7	+14.5	48,504	45,325	-6.6
Wholesale price, New York.....dolls. per case	4.56	4.30	4.30	4.30	4.30	4.28	4.34	0.0	-0.9			
Production, condensed and evaporated milk.....thous. of lbs.	147,671	194,810	257,343	290,350	261,989	255,369	197,877	-9.8	+32.4	1,290,381	1,385,732	+7.4
Powdered milk:												
Manufurs.' stocks, end mo.....thous. of lbs.	14,022	16,659	22,802	31,103	33,530	21,517	22,632	+7.8	+48.2			
Exports.....thous. of lbs.	454	480	396	488	400	225	359	-18.0	+11.4	1,990	3,078	+54.7
Net new orders.....thous. of lbs.	6,126	6,019	7,358	8,228	7,790	6,129	6,264	-5.3	+24.4	40,743	45,924	+12.7
Fluid milk:												
Receipts—												
Boston, (includ. cream).....thous. of qts.	18,443	18,002	19,381	19,920		19,151	19,215			106,392	107,937	+1.5
Greater New York.....thous. of qts.	116,025	110,419				115,866	122,100					
Production—												
Minneapolis, St. Paul.....thous. of lbs.	31,248	30,960	35,435	36,949	32,021	32,686	28,374	-13.3	+12.9	201,643	222,026	+10.1
Consumption in manufacture of oleomargarine.....thous. of lbs.	8,133	7,847	7,514	6,487	7,045	7,034	6,652	+8.6	+5.9	51,245	52,897	+3.2
Sugar												
Raw:												
Imports—												
From Hawaii, Porto Rico.....long tons.	124,704	143,628	134,891	112,546	156,633	180,861	102,353	+39.2	+53.0	985,903	842,461	-14.5
From foreign countries.....long tons.	601,727	605,003	458,183	338,905	359,393	208,241	253,613	+6.0	+41.7	2,171,874	3,063,136	+41.0
Meltings, 8 ports.....long tons.	505,286	502,980	409,503	450,035	445,904	404,120	433,367	-0.9	+2.9	2,711,323	3,027,479	+11.7
Stocks at refineries, end month.....long tons.	559,993	779,091	911,055	875,942	864,589	682,591	595,214	-1.3	+45.3			
Refined:												
Shipments, 2 ports.....long tons.	73,231	87,466	73,898	81,088	93,673	64,224	67,638	+15.5	+38.5	409,807	523,160	+27.7
Stocks, 2 ports.....long tons.	49,451	46,341	47,158	50,753	42,889	34,166	24,930	-15.5	+72.0			
Exports, including maple.....long tons.	10,159	9,265	8,538	6,341	11,631	5,364	10,313	+83.4	+12.8	58,082	64,121	+10.4
Prices:												
Wholesale, 96° centrif., N. Y.dolls. per lb.	.037	.037	.036	.035	.038	.043	.042	+8.6	-9.5			
Wholesale, granulated, N. Y.dolls. per lb.	.048	.048	.049	.049	.052	.059	.057	+6.1	-8.8			
Retail, granulated, N. Y.dolls. per lb.	.057	.056	.056	.056	.057	.067	.066	+1.8	-13.6			
Retail average, 51 cities.....relative to 1913.	118	116	116	116	116	133	133	0.0	-12.8			
Cuban movement, (raw):												
Receipts at Cuban ports.....long tons.	1,061,472	809,807	440,821	196,995	153,925	123,340	149,682	-21.9	+2.8	3,248,035	4,261,334	+31.2
Exports.....long tons.	659,501	583,906	510,217	356,616	428,066	229,869	259,714	+20.0	+42.8	2,387,260	3,244,271	+35.9
Stocks, end of month.....long tons.	1,296,744	1,509,795	1,439,050	1,298,387	978,543	1,127,054	1,017,638	-24.6	-3.8			
Candy												
Sales by manufacturers.....thous. of dolls.	29,705	25,917	27,047	22,774	17,962							
Coffee												
Imports.....thous. of bags.	1,052	988	860	817	864	906	821	+5.8	+5.2	6,758	6,649	-1.6
Visible supply:												
World.....thous. of bags.	4,983	5,207	5,335	5,352	5,448	5,321	5,734	+1.8	-5.0			
United States.....thous. of bags.	822	788	683	700	760	861	850	+8.6	-10.6			
Receipts, total, Brazil.....thous. of bags.	1,175	1,141	1,079	1,069	1,056	1,303	1,168	-1.2	-9.6	8,420	7,785	-7.5
Clearances:												
Total, Brazil, for world.....thous. of bags.	1,041	1,119	971	1,020	1,267	1,100	1,105	+24.2	+14.7	8,117	7,759	-4.4
Total, Brazil, for U. S.thous. of bags.	501	511	503	488	634	549	598	+29.9	+6.0	4,297	3,999	-6.9
Price, Rio No. 7, Brazil grades.....dolls. per lb.	.180	.176	.171	.168	.163	.157	.165	-3.0	-1.2			
Tea												
Imports.....thous. of lbs.	5,470	5,418	4,769	6,029	6,734	4,863	7,209	+11.7	-6.6	42,950	45,295	+5.5
Stocks, United Kingd., end of mo.....thous. of lbs.	259,651	251,209										
Price, Formosa, fine, New York.....dolls. per lb.	.330	.330	.330	.325	.310	.325	.325	-4.6	-4.6			
Cocoa												
Shipments from the Gold and Nigerian Coasts, Africa.....long tons.	35,396	17,670	12,464	9,889	7,224	7,601	6,316	-26.9	+14.4	164,840	182,499	+10.7
Imports.....long tons.	25,041	29,182	15,394	14,486	18,862	23,336	12,971	+30.2	+45.4	123,199	146,954	+19.3
Spot price, Accra, New York.....dolls.	.1088	.1044	.1031	.1069	.1069	.1450	.1350	0.0	-20.8			
TOBACCO												
Production, crop estimate.....thous. of lbs.					1,492,508		1,373,501					
Consumption, (tax-paid withdrawals):												
Large cigars.....thousands.	491,305	550,912	572,413	556,746	589,282	575,996	558,206	+5.8	+5.6	3,499,766	3,625,850	+3.6
Small cigarettes.....thousands.	8,689,510	9,608,221	11,168,407	10,839,673	10,724,403	9,690,961	9,723,647	-1.1	+10.3	60,189,286	69,252,976	+15.1
Manufac. tobacco and snuff.....thous. of lbs.	31,663	31,950	33,360	32,353	32,694	33,801	30,155	+1.1	+8.4	226,494	224,263	-1.0
Exports:												
Unmanufactured.....thous. of lbs.	30,673	39,634	32,753	28,588	26,266	30,796	20,252	-8.1	+29.7	264,256	252,421	-4.5
Cigarettes.....thousands.	799,935	805,777	703,045	784,160	504,565	1,032,268	1,078,362	-35.7	-53.2	6,702,873	5,534,147	-17.4
Sales of loose-leaf, warehouses.....thous. of lbs.	25,726	3,245	441	48		144	227			205,915	284,785	
Price, leaf, Kentucky.....dolls. per 100 lbs.	22.270	11.783	11.692	8.722		6.492	9.069					

¹ As of Aug. 1.² Final estimate for 1928.³ Cumulative through June 30.⁷ Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per cent. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
TRANSPORTATION												
River and Canal Cargo Traffic												
Panama Canal:												
Total cargo traffic.....thous. of long tons..	2,744	2,720	2,537	2,424	2,424	2,140	2,292			14,565	15,834	+8.7
In American vessels.....thous. of long tons..	1,229	1,194	1,206	1,186	1,186	1,007	1,212			6,654	7,171	+7.8
In British vessels.....thous. of long tons..	755	735	667	591	591	537	535			4,231	4,370	+3.4
Sault Ste. Marie canals.....thous. of short tons..		4,406	13,930	14,076	14,120	12,633	13,247	+0.3	+6.6	35,178	46,532	+32.3
New York State canals.....thous. of short tons..		60	393	387	444	400	414	+14.7	+7.2	1,347	1,284	-4.7
Cape Cod Canal.....thous. of short tons..	146,483	166,205	201,444	161,143	175,179	120,261	135,702	+8.7	+29.1	671,320	1,129,584	+68.3
Suez Canal.....thous. of met. tons..	3,157	3,103	3,093	2,590	2,590	2,538	2,758			16,207	17,615	+8.7
Welland Canal.....thous. of short tons..		299,020	775,786	760,431	628,041	1,037,051	1,006,713	-17.4	-37.6	3,093,717	2,463,278	-20.4
St. Lawrence Canal.....thous. of short tons..		215,402	878,458	927,933	781,310	1,143,735	1,225,338	-15.8	-36.2	3,464,489	2,803,103	-19.1
Mississippi River Govt. barges.....thous. of short tons..	104,499	134,747	123,851	103,934	94,300	90,638	112,248	-9.3	-16.0	769,179	802,668	+4.4
Ohio River, Pittsburgh, Pa., to												
Wheeling, W. Va.....thous. of short tons..	840,604	976,992	1,070,125	1,056,795	1,088,912	931,641	947,227	+3.0	+15.0	5,460,320	6,037,393	+10.6
Allegheny River.....thous. of short tons..	187,400	232,204	328,289	345,995	396,514	225,960	306,010	+14.6	+29.6	1,396,248	1,660,025	+18.9
Monongahela River.....thous. of short tons..	2,382,405	2,438,939	2,450,876	2,460,644	2,396,993	2,109,892	2,095,606	-2.6	+14.4	14,672,911	16,378,084	+11.6
Ohio River, tonnage originating, (quarterly):												
Pittsburgh district.....thous. of short tons..	2,183			2,307		2,642		+67.6	+16.2	4,487	4,902	+9.2
Huntington district.....thous. of short tons..	1,001			1,348		1,397		+34.7	-3.5	2,438	2,349	-3.7
Cincinnati district.....thous. of short tons..	442			1,133		1,116		+216.7	+14.7	223	175	-21.5
Louisville district.....thous. of short tons..	850			1,869		1,272		+119.9	+46.9	1,864	2,719	+45.9
Total.....thous. of short tons..	2,372			2,642		2,427		+72.3	+18.3	9,012	10,145	+12.6
Ocean traffic												
Clearances, vessels in foreign trade:												
Total.....thous. of net tons..	5,933	6,661	7,277	7,664	8,099	7,371	7,781	+5.7	+4.1	42,464	46,426	+9.3
American.....thous. of net tons..	2,145	2,738	2,851	2,985	3,176	2,847	3,056	+6.4	+3.9	16,467	17,754	+7.8
Foreign.....thous. of net tons..	3,788	3,924	4,425	4,679	4,923	4,524	4,725	+5.2	+4.2	25,997	28,672	+10.3
Shipbuilding												
Completed during month:												
Total.....gross tons..	11,128	20,668	9,775	37,616		10,719	25,523			82,098	89,923	+9.5
Steel seagoing.....gross tons..	3,919	9,468	3,804	14,379		4,458	21,450			42,563	36,297	-14.7
Building or under contract, end of month:												
Merchant vessels.....thous. of gross tons..	187	290	268	170		264	256			1,428	1,209	-15.3
World construction, (quarterly)												
.....thous. of gross tons..	2,838			2,838		2,660		0.0	+6.7	5,553	5,676	+2.2
World launchings, (quarterly)												
.....thous. of gross tons..	501			711		662		+41.9	+7.4	1,316	1,212	-7.9
Freight cars												
Surplus, (daily av. last week of month):												
Total.....cars..	279,107	220,821	222,626	217,657	197,923	336,181	271,017	-9.1	-27.0			
Box.....cars..	95,429	89,952	109,924	116,657	96,577	170,606	137,618	-17.2	-24.8			
Coal.....cars..	136,452	87,367	64,156	55,150	58,485	114,710	90,513	+6.0	-35.4			
Shortage, (daily av. last week of month):												
Total.....cars..	40	19	18	75	3		82	-96.0	-96.3			
Box.....cars..	40											
Coal.....cars..			18	11	32							
Car loadings:												
Total.....cars..	4,807,944	3,983,978	4,205,709	5,260,571	4,153,220	4,924,115	73,944,041	-21.1	+5.3	28,405,814	29,750,158	+4.7
Grain and grain products.....cars..	212,988	143,743	152,544	215,606	246,696	172,412	7,207,348	+14.4	+19.0	1,314,674	1,342,190	+2.1
Livestock.....cars..	121,105	106,894	105,838	116,744	91,969	126,020	7,91,007	-21.2	+1.1	830,127	766,232	-7.7
Coal and coke.....cars..	857,217	643,238	690,020	842,553	644,715	773,449	7,606,857	-23.5	+6.2	5,020,629	5,436,522	+8.3
Forest products.....cars..	335,479	278,814	277,316	347,917	245,036	329,127	7,238,676	-29.6	-2.7	1,942,574	1,944,245	+0.1
Ore.....cars..	57,113	110,678	283,805	379,813	304,962	327,987	7,250,150	-19.7	+21.9	892,394	1,209,015	+35.5
Merchandise and l. c. l.....cars..	1,305,042	1,060,943	1,053,688	1,273,002	996,357	1,261,515	7,986,282	-21.7	+1.0	7,536,926	7,573,975	+0.5
Miscellaneous.....cars..	1,919,000	1,639,668	1,642,498	2,084,936	1,623,485	1,933,605	7,156,721	-22.1	+3.8	10,868,490	11,477,979	+5.6
Railroad Operations												
Operating revenue:												
Freight.....thous. of dolls..	393,368	393,058	412,018	390,360		370,814	381,576					
Passenger.....thous. of dolls..	71,879	67,509	68,896	79,329		81,824	82,722					
Total operating.....thous. of dolls..	516,973	513,955	537,748	531,748		503,157	512,953					
Operating expenses.....thous. of dolls..	377,279	376,494	390,977	381,596		375,571	375,490					
Net operating income.....thous. of dolls..	97,466	94,204	103,616	105,961		85,992	95,226					
Freight carried.....mills. ton-miles..	40,213	38,334	42,027	40,725		37,307	39,196					
Railway Equipment												
Locomotives (Am. Ry. Assn.):												
Owned, end of month—												
Quantity.....number..	58,322	58,144	58,052	57,876	57,627	60,095	59,975	-0.4	-3.9			
Tractive power.....mills. of lbs..	2,553	2,550	2,549	2,546	2,541	2,591	2,590	-0.2	-1.9			
In bad order, end of month—												
Quantity.....number..	8,042	8,057	7,803	7,453	7,681	8,006	8,310	+3.1	-7.6			
Per cent of total in use.....per cent..	13.9	14.0	13.4	13.0	13.4	13.4	14.0	+3.1	-4.3			
Installed.....number..	121	130	177	158	120	95	116	-24.1	+3.4	881	931	+5.7
Retired.....number..	307	308	269	297	369	284	235	+24.2	+57.0	1,689	2,000	+18.4
New orders.....number..	142	58	50	181	36	7	32	-80.1	+12.5	171	563	+229.2
Shipments, manufacturers', (Census)—												
Total.....number..	35	61	99	78	69	51	46	-11.5	+50.0	360	388	+7.8
Steam, domestic.....number..	31	57	92	58	39	39	19	-32.8	+105.3	234	303	+29.5
Electric, domestic.....number..	4	2	2	1	3	11	5	+200.0	-40.0	81	19	-76.5
Unfilled orders, (railroads), end of mo.—												
From manufacturers.....number..	326	308	265	334	365	90	56	+9.3				
In railroad shops.....number..	46	38	59	55	45	30	17	-18.2	+164.7			

* Quarter ending in month indicated

* Cumulative through June 30.

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
TRANSPORTATION—Continued												
Railway Equipment—Continued												
Locomotives—Continued.												
Unfilled orders, manufacturers', (Census)—												
Total.....number.....	488	495	444	552	539	201	198	-2.4	+172.2			
Steam, domestic.....number.....	419	419	362	489	490	109	98	+0.2	+400.0			
Electric, domestic.....number.....	24	24	22	21	18	37	59	-14.3	-69.5			
Exports, steam.....number.....	22	10	14	14	32	15	32	+128.6	0.0	113	123	+8.8
Freight cars, (Am. Ry. Assn.):												
Owned, end of month—												
Quantity.....thous. of cars.....	2,268	2,267	2,267	2,266	2,267	2,301	2,300	0.0	-1.4			
Capacity.....mills. of lbs.....	208,507	208,569	208,850	208,867	209,095	210,386	210,437	+0.1	-0.6			
In bad order, end of month—												
Quantity.....cars.....	139,538	142,543	144,634	142,064	137,495	145,210	151,867	-3.2	-9.5			
Per cent of total in use.....per cent.....	6.3	6.5	6.5	6.4	6.2	6.5	6.7	-3.1	-7.5			
New orders.....cars.....	11,068	6,983	8,364	5,869	442	2,286	307	-92.5	+44.0	22,633	59,571	+163.2
Shipments—												
Total.....cars.....	3,599	5,510	8,459	6,517	7,109	5,147	4,963	+9.1	+43.2	25,135	34,160	+35.9
Domestic.....cars.....	3,589	5,300	8,350	6,514	6,963	5,115	4,908	+6.9	+41.9	24,502	32,128	+31.1
Unfilled orders, (railroads)—												
Total.....cars.....	41,197	43,486	39,843	39,173	36,014	12,446	13,531	-8.1	+166.2			
From manufacturers.....cars.....	35,360	36,674	33,588	34,145	31,590	9,316	10,371	-7.5	+204.6			
In railroad shops.....cars.....	5,837	6,812	6,255	5,028	4,424	3,130	3,160	-12.0	+40.0			
Passenger cars:												
New orders.....cars.....	53	250	131	176	97	57	19	-44.9	+410.5	1,113	956	-14.1
Shipments—												
Total.....cars.....	87	86	48	94	64	95	123	-31.9	-48.0	524	580	+10.7
Domestic.....cars.....	87	78	44	82	53	95	123	-35.4	-56.9	460	543	+18.0
In railroad hands, (quarterly).....cars.....	52,869			52,399		53,058		-0.9	-1.2	106,467	105,268	-1.1
Unfilled orders, (quarterly).....cars.....	615			740		1,033		+20.3	-28.4	2,069	1,355	-34.5
Passenger Travel												
National parks:												
Visitors.....number.....	72,377	64,807	102,207	273,059	593,324	271,621	553,394	+117.3	+7.2	1,188,069	1,195,521	+0.6
Automobiles entered.....number.....	8,498	10,460	21,190	59,412	131,511	60,324	111,642	+121.4	+17.8	224,264	249,379	+11.2
Arrivals from abroad:												
Immigrants.....number.....	20,145	28,565	25,711	22,490		20,419	20,682			142,590	131,971	-7.4
United States citizens.....number.....	37,375	32,288	27,169	28,119		27,201	32,974			174,261	181,617	+4.2
Departures abroad:												
Emigrants.....number.....	2,449	3,387	4,985	4,881		7,205	7,804			32,922	24,526	-25.5
United States citizens.....number.....	27,972	25,277	31,505	42,846		53,028	68,463			208,885	188,755	-9.6
Passports issued.....number.....	17,066	29,995	38,175	29,508	18,115	29,674	15,776	-38.6	+14.8	145,397	151,260	+4.0
Pullman company operations:												
Revenue.....thous. of dolls.....	6,627	6,404	6,471	7,763		7,432	7,279			39,747	40,715	+2.4
Passengers carried.....thousands.....	2,726	2,582	2,590	3,000		3,095	3,073			16,496	16,289	-1.3
Trend of business in hotels:												
Room occupancy.....per ct. of capacity.....	69	75	71	66	63	64	60	-4.5	+5.0			
Average sale per occupied room.....dollars.....	3.98	4.09	3.88	3.97	3.94	4.05	3.98	-0.8	-1.0			
Warehouses												
Public merchandise warehouses, space occupied.....per ct. of total.....	69.9	71.8	71.0	71.0		67.2	67.1					
PUBLIC UTILITIES												
Telephone companies:												
Operating revenue.....thous. of dolls.....	74,899	74,830	76,158	74,622		68,783	67,676			404,110	446,331	+10.4
Operating income.....thous. of dolls.....	17,825	17,776	18,355	18,194		16,941	15,019			101,541	109,687	+8.0
Telegraph companies:												
Commercial telegraph tolls.....thous. of dolls.....	11,864	11,328	11,853	11,396		11,169	10,618			63,716	67,886	+6.5
Operating revenues.....thous. of dolls.....	14,911	14,344	15,016	14,446		14,036	13,375			79,644	85,910	+7.9
Operating income.....thous. of dolls.....	1,951	1,700	1,749	1,516		1,906	1,428			10,343	9,970	-3.6
Gas and electric companies:												
Gross earnings.....thous. of dolls.....	195,000	190,000	189,750	183,000		178,697	173,646			1,111,780	1,154,750	+3.9
Net earnings.....thous. of dolls.....	85,000	83,000	82,500	79,000		67,537	62,260			430,362	507,500	+17.9
Electric railways, (212 companies):												
Passengers carried.....thous. of persons.....	820,405	774,517	792,894	744,310	722,289	760,509	728,849	-3.0	-0.9	5,463,332	5,395,281	-1.2
Average fare.....cents.....	8.202	8.202	8.221	8.228	8.244	8.081	8.081	+0.2	+2.0			
ELECTRIC POWER												
Electric power production:												
Total.....mills. of kw. hours.....	7,989	7,881	8,083	7,769		6,998	7,142			42,335	47,392	+11.9
By water power.....mills. of kw. hours.....	3,147	3,285	3,482	3,072		3,093	3,071			17,380	18,126	+4.3
By fuels.....mills. of kw. hours.....	4,842	4,596	4,601	4,697		3,905	4,071			24,955	29,266	+17.3
In street railways, manfg. plants, etc.....mills. of kw. hours.....	382	375	378	362		372	381			2,753	2,317	-15.8
In central stations.....mills. of kw. hours.....	7,607	7,506	7,705	7,407		6,638	6,762			30,622	45,075	+13.8
Electric power production, (Canada):												
Total.....mills. of kw. hours.....	1,471	1,409	1,457	1,377		1,242	1,248			7,746	8,567	+10.6
By water power.....mills. of kw. hours.....	1,441	1,379	1,432	1,360		1,228	1,233			7,643	8,405	+10.0
Exported.....mills. of kw. hours.....	127	111	112	119		127	130			767	694	-9.5
Electric power, gross revenue.....thous. of dolls.....	167,700	167,900	165,600			149,500	146,600					
Consumption of electrical energy:												
By geographic divisions—												
United States.....rel. to 1923-25.....	135.7	136.4	136.9	135.2	129.0	116.4	120.2	-4.6	+7.3			
New England.....rel. to 1923-25.....	130.8	125.4	123.3	123.5	113.4	108.4	102.4	-8.2	+10.7			
North Central.....rel. to 1923-25.....	141.9	146.5	148.9	142.0	141.3	124.6	131.8	-0.5	+7.2			
Middle Atlantic.....rel. to 1923-25.....	130.5	128.0	130.4	129.5	120.5	113.4	110.8	-6.9	+8.8			
Southern.....rel. to 1923-25.....	125.4	126.3	128.1	128.4	114.7	114.6	112.0	-10.7	+2.4			
Western.....rel. to 1923-25.....	138.2	137.0	144.7	134.2	129.4	118.5	116.5	-3.6	+11.1			

* Quarter ending in month indicated.

* Cumulative through June 30.

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
ELECTRIC POWER—Continued												
Consumption of electrical energy—Continued.												
By industry—												
All industry.....rel. to 1923-25.....	135.7	136.4	136.9	135.2	129.0	116.4	120.2	-4.6	+7.3			
Chemical and allied products.....rel. to 1923-25.....	133.0	131.7	129.2	133.8	127.0	122.6	128.5	-5.1	-1.2			
Food and kindred products.....rel. to 1923-25.....	122.2	121.2	122.6	121.8	129.9	116.8	129.2	+6.7	+0.5			
Rolling mills and steel plants.....rel. to 1923-25.....	160.3	153.3	172.2	154.3	144.4	121.2	121.2	-6.4	+19.1			
Metal working plants.....rel. to 1923-25.....	151.4	148.3	144.2	143.4	144.4	123.7	126.3	+0.7	+14.3			
Metal groups.....rel. to 1923-24.....	154.9	149.9	154.8	147.9	144.2	122.7	124.2	-2.5	+16.1			
Leather and its products.....rel. to 1923-25.....	93.4	82.0	95.2	98.7	82.0	100.2	99.0	-16.9	-17.2			
Lumber and its products.....rel. to 1923-25.....	104.2	108.0	111.1	113.8	103.2	109.2	108.8	-9.3	-5.1			
Paper and pulp.....rel. to 1923-25.....	129.2	136.0	129.9	137.3	122.3	133.7	127.3	-10.9	-3.9			
Rubber and its products.....rel. to 1923-25.....	155.8	155.7	157.6	158.1	136.7	131.7	135.3	-13.5	+1.0			
Shipbuilding.....rel. to 1923-25.....	99.7	116.1	135.2	106.9	107.7	85.3	67.2	+0.7	+60.3			
Stone, clay, and glass.....rel. to 1923-25.....	138.0	145.0	143.5	170.3	154.7	128.0	129.8	-9.2	+19.2			
Textiles.....rel. to 1923-25.....	126.6	128.1	129.9	123.0	113.4	104.7	91.8	-7.8	+23.5			
Automobiles, including repair parts.....rel. to 1923-25.....	154.9	170.6	161.8	154.0	139.5	136.0	143.7	-9.4	-2.9			
EMPLOYMENT AND WAGES												
Employment in factories:												
Massachusetts.....rel. to 1919-23.....	79.9	79.0	78.8	77.2	77.0	73.6	72.9	-0.3	+5.6			
New York State.....rel. to 1923.....	88.7	88.3	87.5	87.6	87.3	82.2	81.5	-0.3	+7.1			
New Jersey.....rel. to 1923.....	99	100	101	101	102	90	90	+1.0	+13.3			
Pennsylvania.....rel. to 1923.....	84	85	85	86	86	80	79	0.0	+8.9			
Delaware.....rel. to 1923.....	76	79	79	78	81	74	75	+3.8	+8.0			
Maryland.....rel. to 1924.....	90.9	91.8	91.6	93.9	93.0	86.5	85.6	-1.0	+8.6			
Iowa.....rel. to 1923.....	125.2	127.4	127.6	130.8	129.7	124.1	123.3	-0.8	+5.2			
Illinois.....rel. to 1925-27.....	102.2	103.0	103.7	104.1	103.4	95.8	93.9	-0.7	+10.1			
Wisconsin.....rel. to 1923.....	98.5	99.2	99.1	98.5		92.9	96.8					
Ohio.....rel. to 1923.....	113	115	115	116		105	104					
Cleveland.....rel. to Jan., 1921.....	123.4	123.1	124.0	123.9		111.1	111.3					
Milwaukee.....number.....	43,226	43,891	44,067	43,814	43,761	36,922	37,314	-0.1	+17.3			
New York State.....number.....	490,879	488,390	484,464	484,637	483,142	454,952	451,125	-0.3	+7.1			
Oklahoma.....number.....	32,471	34,809	34,686			27,888	29,405					
Total pay roll:												
New York State, (weekly) thous. of dolls.....	14,897	14,687	14,549	14,549	14,398	13,413	13,149	-1.0	+9.5			
Oklahoma, (weekly) thous. of dolls.....	871	908	1,039			743	793					
Wisconsin.....rel. to 1923.....	110.7	111.5	110.1	107.0		104.8	98.7					
New York State.....rel. to 1923.....	98.8	97.4	96.5	96.5	95.5	89.0	87.2	-1.0	+9.5			
New Jersey.....rel. to 1923.....	112	113	114	114	111	98	96	-2.6	+15.6			
Pennsylvania.....rel. to 1923.....	91	92	94	93	88	83	76	-5.4	+15.8			
Delaware.....rel. to 1923.....	83	86	88	86	84	78	74	-2.3	+13.5			
Illinois.....rel. to 1925-27.....	101.6	105.2	105.7	107.5		97.9	91.4					
Employment, Canada.....rel. to calendar year 1926.....	111.4	110.4	116.2	122.2	124.7	113.8	117.7	+2.0	+5.9			
Ohio construction.....rel. to 1923.....	95.9	107.8	122.5	132.8		115.7	130.6					
Employment, trade-unions:												
United States.....per cent of total.....	86.0	88.0	89.0	91.0		89.0	88.0					
Canada.....per cent of total.....	94.0	94.5	96.0	97.1		96.3	97.5					
Anthracite mines:												
Employment.....rel. to 1923-25.....	101.3	104.1	107.2	95.4	85.6	102.3	100.7	-10.3	-15.0			
Pay roll.....rel. to 1923-25.....	79.5	77.4	85.4	71.0	56.8	60.6	82.5	-20.0	-31.2			
Federal civilian employees, Washington, D. C., end month.....number.....	62,926	63,507	63,841	63,904		61,388	61,650					
Average weekly earnings, factories:												
Illinois.....dollars.....	28.92					29.28	27.45					
New York State.....dollars.....	30.35	30.07	30.03	30.02	29.80	29.48	29.15	-0.7	+2.2			
Wisconsin.....dollars.....	26.95	26.94	26.64	26.03		27.03	24.45					
Oklahoma.....dollars.....	26.81	26.08	29.95			26.24	26.97					
Massachusetts.....rel. to 1914.....	233.8	232.6	232.4	231.5	231.0	234.1	234.6	-0.2	-1.5			
New York.....rel. to 1914.....	243.2	240.9	240.6	240.5	238.8	236.2	233.6	-0.7	+2.2			
New Jersey.....rel. to 1923.....	114	114	114	113	110	110	108	-2.7	+1.9			
Pennsylvania.....rel. to 1923.....	109	109	110	108	101	102	96	-6.5	+5.2			
Delaware.....rel. to 1923.....	108	107	111	108	102	103	98	-5.6	+4.1			
Illinois.....rel. to 1925-27.....	101.9	102.1	102.4	103.8	99.2	103.2	96.7	-4.4	+2.6			
Wisconsin.....rel. to 1923.....	112.4	112.4	111.1	108.6		112.8	102.0					
Average weekly earnings, (National Industrial Conference Board):												
Grand total, (both sexes).....dollars.....	28.53	28.53	28.54	28.28		27.30	27.09					
Total male.....dollars.....	31.68	31.61	31.48	31.16		30.35	29.95					
Skilled male.....dollars.....	33.15	33.09	33.04	32.66		31.74	31.35					
Unskilled male.....dollars.....	26.07	25.95	25.59	25.45		25.17	24.69					
Total women.....dollars.....	17.76	17.85	17.95	17.86		17.01	17.07					
Average weekly hours:												
Nominal, (both sexes).....hours.....	49.8	49.8	49.9	49.7		49.7	49.6					
Actual, (both sexes).....hours.....	49.5	49.3	49.0	48.5		47.7	47.5					
Wages, road labor, by districts:												
New England.....cents per hour.....	51	51	50	51	49	48	47	-3.9	+4.3			
Middle Atlantic.....cents per hour.....	44	42	42	42	42	42	43	0.0	-2.3			
South Atlantic.....cents per hour.....	23	27	30	29	30	26	27	+3.4	+11.1			
East South Central.....cents per hour.....	27	27	26	26	25	26	25	-3.8	0.0			
West South Central.....cents per hour.....	33	31	31	32	30	30	27	-6.2	+11.1			
East North Central.....cents per hour.....	42	38	40	38	40	37	38	+5.3	5.3			
West North Central.....cents per hour.....	37	37	37	37	36	36	36	-2.7	0.0			
Mountain.....cents per hour.....	43	44	45	47	47	45	44	0.0	+6.8			
Pacific.....cents per hour.....	52	53	53	52	53	53	53	+1.9	0.0			
United States, average.....cents per hour.....	37	38	49	40	39	40	40	-2.5	-2.5			

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
EMPLOYMENT AND WAGES—Con.												
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	142	128	126	128	131	121	137	+2.3	-4.4			
Eastern States.....number	144	126	126	127	139	147	151	+9.4	-7.9			
Central States.....number	153	134	126	140	141	161	150	+0.7	-6.0			
Southern States.....number	215	200	198	185	174	221	174	-5.9	0.0			
Western States.....number	76	73	93	71	83	66	80	+16.9	+3.8			
Illinois.....number	156	134	124	139		168	151					
Wisconsin.....number	138	117	110			123	113					
Canada.....number	133	117	118	121	100	118	113	-17.4	-11.5			
Factory Labor Turnover												
(Percentage of number on payroll)												
Departures:												
Total.....per cent, (annual basis).....	49.2	55.7	52.1	51.1	45.0	39.5	38.0	-11.9	+18.4			
Voluntary quits.....per cent, (annual basis).....	36.8	43.3	40.8	39.5	35.4	27.1	27.2	-10.4	+30.1			
Lay offs.....per cent, (annual basis).....	5.7	5.5	5.7	5.4	4.8	7.5	5.9	-11.1	-18.6			
Discharges.....per cent, (annual basis).....	6.7	6.9	5.6	6.2	4.8	4.9	4.9	-22.6	-2.0			
Accessions.....per cent, (annual basis).....	61.2	70.2	59.9	60.9	61.2	41.3	46.9	+0.5	+30.5			
Industrial disputes:												
Disputes.....number	742	752	774	86		746	742					
Workers involved.....number	741,321	752,292	52,565	55,795		7143,137	7132,187					
Man-days lost in month.....number	71,094,161	71,429,046	71,582,295	1,536,098		73,670,878	73,337,386					
DISTRIBUTION MOVEMENT												
Retail Sales												
Mail-order houses:												
Total sales, 2 houses.....thous. of dolls..	53,413	55,619	55,006	57,702	53,309	44,848	40,253	-7.6	+32.4	282,919	368,845	+30.4
Sears, Roebuck & Co.....thous. of dolls..	30,796	34,046	35,126	35,748	33,501	25,669	26,276	-6.3	+27.5	172,375	226,229	+31.2
Montgomery Ward & Co.....thous. of dolls..	22,617	21,573	19,880	21,954	19,808	19,179	13,977	-9.8	+41.7	110,544	142,616	+29.0
Ten-cent chain stores:												
Total sales, (4 chains).....thous. of dolls..	46,138	41,652	49,202	44,401	42,604	742,099	38,764	-4.0	+9.9	270,559	293,859	+8.6
Total stores operated, (4 chains).....number	2,695	2,711	2,728	2,744	2,767	2,509	2,526	+0.8	+1.6			
F. W. Woolworth & Co.....thous. of dolls..	24,528	22,061	28,578	23,609	22,522	22,400	720,587	-4.6	+9.4	145,861	158,330	+8.5
Stores operated.....number	1,750	1,759	1,767	1,775	1,789	1,652	1,658	+0.8	+7.9			
S. S. Kresge Co.....thous. of dolls..	12,567	11,368	12,345	12,572	11,687	11,834	10,583	-7.0	+10.4	73,374	79,332	+8.1
Stores operated.....number	517	523	531	537	542	450	460	+0.9	+17.8			
McCormick Stores corp.....thous. of dolls..	3,735	3,160	3,263	3,335	3,300	73,099	72,951	-1.0	+11.8	20,442	22,329	+9.2
Stores operated.....number	234	235	236	238	239	223	224	+0.4	+6.7			
S. H. Kress & Co.....thous. of dolls..	5,308	5,063	5,016	4,885	5,095	4,766	4,639	+4.3	+9.8	31,878	33,868	+6.2
Stores operated.....number	194	194	194	194	197	184	184	+1.5	+7.1			
Metropolitan.....thous. of dolls..	1,138	1,141	1,360	1,467	1,337	1,027	908	-8.9	+47.2	6,180	8,124	+31.5
Stores operated.....number	111	112	117	120	123	94	96	+2.5	+28.1			
F. & W. Grand.....thous. of dolls..	1,712	1,588	1,688	1,889	1,635	1,259	1,205	-13.4	+35.7	7,618	10,783	+41.5
Stores operated.....number	83	86	88	89	90	70	73	+1.1	+23.3			
W. T. Grant Co.....thous. of dolls..	5,141	4,421	5,089	5,374	4,524	4,366	3,731	-15.8	+21.3	25,022	31,393	+25.5
Stores operated.....number	222	226	227	241	244	181	7193	+1.2	+26.4			
Restaurant chains:												
Total sales, (3 chains).....thous. of dolls..	5,027	4,944	75,025	4,762		4,429	4,280					
Childs Co., sales.....thous. of dolls..	2,355	2,247	2,261	2,177	2,259	72,041	2,012	-3.8	+12.3	15,176	15,578	+2.6
J. R. Thompson Co., sales.....thous. of dolls..	1,284	1,359	1,403	1,313		1,209	1,163					
Waldorf System, (Inc.), sales.....thous. of dolls..	1,388	1,338	1,361	1,272	1,258	1,180	1,105	-1.1	+13.8	8,357	9,144	+9.4
Other chain stores:												
Isaac Silver & Bros.....thous. of dolls..	615	566	566	613	650	7517	462	+6.0	+40.7	3,094	3,816	+23.3
Stores operated.....number	32	36	37	39	41	25	26	+5.1	+57.7			
J. C. Penny Co.....thous. of dolls..	15,381	14,406	16,090	17,121	14,554	14,129	11,734	-15.0	+24.0	83,487	95,201	+14.0
Stores operated.....number	1,082	1,105	1,109	1,215	1,215	953	953	0.0	+27.5			
G. C. Murphy Co.....thous. of dolls..	1,199	1,112	1,192	1,229	1,148	881	796	-6.6	+44.2	5,562	7,604	+36.7
Stores operated.....number	140	142	143	145	145	116	116	0.0	+25.0			
Installment sales in New England dept. stores, ratio to total sales.....per cent	7.1	6.3	6.1	4.1		4.6	5.7					
Advertising												
Magazine advertising.....thous. of lines..	2,877	3,282	3,120	2,895	2,346	72,630	72,193	-19.0	+7.0			
Magazine advertising, total cost.....thous. of dolls..	17,438	20,445	19,310	17,756	15,437	16,500	14,210	-13.1	+8.6	112,026	118,312	+5.6
Newspaper advertising.....thous. of lines..	112,033	108,401	113,242	101,200	83,930	797,092	781,012	-17.1	+3.6	676,155	706,510	+4.5
Radio broadcast:												
Cost of facilities.....thous. of dolls..	1,610	1,550	1,563	1,309	1,312	680	640	+0.2	+105.0	5,133	9,974	+94.3
National advertising in newspapers:												
Total.....thous. of lines..	56,133	55,868	61,548	56,118	48,023	42,916	41,339	-14.4	+16.2	289,361	343,747	+18.8
Passenger cars.....thous. of lines..	9,228	9,779	8,757	6,603	6,219	6,168	7,193	-5.8	-13.5	47,892	52,026	+18.8
Tires, trucks, and accessories.....thous. of lines..	3,781	5,288	7,397	7,926	7,565	6,488	5,536	-4.6	+36.7	28,253	36,919	+30.7
Financial.....thous. of lines..	8,011	7,653	8,176	7,485	8,672	5,863	6,648	+15.9	+30.4	44,436	52,090	+17.2
Building materials.....thous. of lines..	600	1,261	1,148	632	275	549	342	-56.5	-19.6	3,786	4,283	+13.1
Electrical appliances.....thous. of lines..	1,466	1,495	1,553	1,763	1,093	1,127	822	-38.0	+33.0	5,839	8,052	+37.9
Foods and beverages.....thous. of lines..	7,185	7,556	8,837	8,230	6,676	7,449	6,640	-18.9	+0.5	40,499	43,959	+8.5
Heating and plumbing equipment.....thous. of lines..	579	649	650	381	319	492	352	-16.3	-9.4	2,730	3,126	+14.5
Medical.....thous. of lines..	6,557	4,266	3,810	2,830	2,285	2,347	2,232	-19.3	+2.4	25,614	29,325	+14.5
Radio.....thous. of lines..	2,176	1,390	2,148	1,885	2,515	583	634	+33.4	+296.7	5,684	13,245	+133.0
Tobacco.....thous. of lines..	3,885	3,161	5,171	4,264	2,484	2,117	2,520	-41.7	-1.4	19,767	22,852	+15.6
Toilet requisites.....thous. of lines..	3,574	3,333	2,936	3,123	2,592	2,294	2,250	-17.0	+15.2	16,773	19,177	+14.3
Transportation.....thous. of lines..	2,307	2,960	4,263	4,667	3,756	3,361	2,946	-19.5	+27.5	17,107	20,770	+21.4
All other.....thous. of lines..	6,783	7,078	6,704	6,291	3,572	4,081	3,224	-43.2	+10.8	30,914	37,888	+22.6

† Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
DISTRIBUTION MOVEMENT—Con.												
Postal Business												
Postal receipts:												
50 selected cities.....thous. of dolls..	34,375	32,352	32,446	29,280	29,069	29,990	26,508	-0.7	+9.7	214,251	219,130	+2.3
50 industrial cities.....thous. of dolls..	3,537	3,454	3,339	3,061	3,189	3,094	2,956	+4.2	+7.9	23,264	23,372	+0.5
Money orders:												
Domestic issued, (50 cities)—												
Quantity.....thousands.....	3,959	3,851	3,702	3,545	3,602	3,382	3,180	+1.6	+13.3	23,960	25,765	+7.6
Value.....thous. of dolls.....	38,840	38,188	38,011	36,198	37,120	34,263	32,812	+2.5	+13.1	240,252	259,003	+7.8
Domestic paid, (50 cities)—												
Quantity.....thousands.....	12,624	11,825	11,693	11,223	10,741	11,145	9,627	-4.3	+11.6	76,196	79,450	+4.3
Value.....thous. of dolls.....	93,937	90,423	90,363	86,958	86,573	85,280	76,227	-0.4	+13.6	581,542	608,795	+4.7
Air mail, weight dispatched.....pounds..	523,414	508,672	587,471	593,254	638,810	210,957	214,558	+7.7	+197.7	1,267,533	3,774,271	+197.8
BANKING AND FINANCE												
Life Insurance												
(Association of Life Insurance Presidents)												
Policies and certificates, new, (44 companies):												
Ordinary.....number of policies.....	292,232	284,055	293,458	277,615	273,099	293,224	249,738	-1.6	+9.4	1,714,694	1,879,966	+9.6
Industrial.....number of policies.....	1,045,058	964,177	888,462	880,770	809,110	840,312	753,773	-8.1	+7.3	6,212,820	6,531,204	+5.1
Group.....number of certificates.....	35,986	47,028	45,455	66,353	72,923	51,895	38,905	+9.9	+87.4	292,340	352,525	+20.6
Total policies and certificates.....number..	1,373,276	1,295,260	1,227,375	1,224,738	1,155,132	1,185,431	1,042,416	-5.7	+10.8	8,219,354	8,763,695	+6.6
Amount of new insurance, (44 companies):												
Ordinary.....thous. of dolls.....	830,244	793,786	801,698	750,228	722,451	755,699	660,062	-3.7	+9.5	4,901,065	5,241,792	+7.0
Industrial.....thous. of dolls.....	274,824	256,279	240,501	242,166	223,680	214,882	194,642	-7.6	+14.9	1,617,685	1,734,227	+7.2
Group.....thous. of dolls.....	64,813	72,238	109,827	106,589	147,658	113,711	74,196	+38.5	+99.0	651,441	658,369	+1.1
Total insurance.....thous. of dolls.....	1,169,881	1,122,303	1,152,026	1,098,983	1,093,789	1,084,292	928,900	-0.5	+17.8	7,170,191	7,634,388	+6.5
Premium collections, (44 companies):												
Ordinary.....thous. of dolls.....	175,645	172,282	174,278	158,733	169,773	154,916	152,862	+7.0	+11.1	1,103,532	1,172,208	+6.2
Industrial.....thous. of dolls.....	56,159	55,768	52,218	55,801	57,932	51,509	53,072	+3.8	+9.2	361,226	383,640	+6.2
Group.....thous. of dolls.....	7,515	8,336	7,691	7,345	11,494	5,574	7,296	+56.5	+57.5	56,434	68,979	+22.2
Total.....thous. of dolls.....	239,319	236,386	234,187	221,879	239,199	211,999	213,230	+7.8	+12.2	1,521,192	1,624,827	+6.8
Admitted life insurance assets, (41 companies):												
Grand total.....mills. of dolls.....	13,173	13,269	13,373	13,469	-----	12,197	12,312	-----	-----	-----	-----	-----
Mortgage loans—												
Total.....mills. of dolls.....	5,675	5,710	5,750	5,792	-----	5,292	5,338	-----	-----	-----	-----	-----
Farm.....mills. of dolls.....	1,597	1,597	1,599	1,599	-----	1,600	1,601	-----	-----	-----	-----	-----
All other.....mills. of dolls.....	4,078	4,113	4,151	4,193	-----	3,692	3,737	-----	-----	-----	-----	-----
Bonds and stocks, (book value):												
Total.....mills. of dolls.....	5,007	5,037	5,085	5,119	-----	4,621	4,665	-----	-----	-----	-----	-----
Government.....mills. of dolls.....	1,604	1,617	1,633	1,648	-----	905	916	-----	-----	-----	-----	-----
Railroad.....mills. of dolls.....	2,472	2,477	2,498	2,507	-----	2,390	2,397	-----	-----	-----	-----	-----
Public utility.....mills. of dolls.....	1,247	1,251	1,256	1,261	-----	1,112	1,128	-----	-----	-----	-----	-----
All other.....mills. of dolls.....	284	292	298	303	-----	214	224	-----	-----	-----	-----	-----
Policy loans and premium notes.....mills. of dolls..	1,587	1,608	1,630	1,652	-----	1,459	1,472	-----	-----	-----	-----	-----
(Life Insurance Sales Research Bureau)												
Sales of ordinary life insurance:												
United States total.....thous. of dolls.....	896,333	862,578	873,490	829,202	796,900	805,695	700,939	-3.9	+13.7	5,283,077	5,712,468	+8.1
Eastern manuf. dis.....thous. of dolls.....	385,309	355,180	352,208	334,551	319,437	333,895	273,188	-4.5	+16.9	2,189,874	2,373,457	+8.4
Western manuf. dis.....thous. of dolls.....	207,017	196,585	200,638	189,447	182,763	176,121	163,694	-3.5	+11.6	1,161,734	1,312,508	+13.0
Western agric. district.....thous. of dolls.....	122,062	125,988	125,716	125,349	121,224	121,089	107,659	-3.3	+12.6	799,770	821,271	+2.7
Southern district.....thous. of dolls.....	97,421	98,246	102,475	97,104	90,954	96,796	85,056	-6.3	+6.9	622,319	639,108	+2.7
Far western district.....thous. of dolls.....	84,524	86,579	92,453	82,751	82,522	77,794	71,342	-0.3	+15.7	509,380	566,124	+11.1
Canada total, 15 companies.....thous. of dolls..	49,406	53,333	51,283	54,700	56,078	51,844	49,492	+2.5	+13.3	331,044	362,818	+9.6
Banking												
Check payments:												
New York City.....mills. of dolls.....	55,425	47,979	50,043	43,263	49,215	45,455	35,085	+13.8	+40.3	282,998	346,933	+22.6
Outside New York City.....mills. of dolls.....	28,131	26,803	26,520	26,423	28,409	27,029	23,897	+3.7	+18.9	175,100	188,927	+7.9
Canada.....mills. of dolls.....	1,942	1,873	2,097	1,817	2,108	1,896	1,896	+16.0	+11.2	13,238	13,684	+3.4
Federal reserve banks:												
Bills discounted.....mills. of dolls.....	1,030	986	988	1,125	1,076	1,191	1,086	-4.4	-0.9	-----	-----	-----
Notes in circulation.....mills. of dolls.....	1,664	1,664	1,654	1,736	1,779	1,660	1,613	+2.5	+10.3	-----	-----	-----
Total investments.....mills. of dolls.....	351	343	270	226	232	430	378	+2.7	-38.6	-----	-----	-----
Total reserve.....mills. of dolls.....	2,893	2,986	2,970	3,041	3,109	2,693	2,756	+2.2	+12.8	-----	-----	-----
Total deposits.....mills. of dolls.....	2,382	2,410	2,331	2,438	2,398	2,459	2,402	-1.6	-0.2	-----	-----	-----
Reserve ratio.....per cent.....	71.5	73.3	74.5	72.9	74.4	65.4	68.6	+2.1	+8.5	-----	-----	-----
Federal reserve member banks:												
Total loans and discounts.....mills. of dolls.....	16,583	16,451	16,202	16,925	17,058	16,089	15,861	+0.8	+7.5	-----	-----	-----
Total investments.....mills. of dolls.....	5,976	5,875	5,799	5,560	5,549	6,647	6,589	-0.2	-15.8	-----	-----	-----
Net demand deposits.....mills. of dolls.....	13,157	13,234	12,791	13,293	13,395	13,574	13,186	+0.8	+1.6	-----	-----	-----
Brokers' loans, end of month:												
To N. Y. Stock Ex. members—												
Total.....mills. of dolls.....	6,804	6,775	6,665	7,071	7,474	4,898	4,837	+5.7	+54.5	-----	-----	-----
Ratio to market value.....per cent.....	9.75	9.19	9.39	9.15	8.87	9.25	9.00	-3.1	-1.4	-----	-----	-----
By New York F. R. member banks.....mills. of dolls.....	5,562	5,532	5,288	5,769	5,960	4,307	4,259	+3.3	+39.9	-----	-----	-----
Interest rates:												
Time loans, 90 days.....per cent.....	7.88	8.75	8.75	8.13	7.75	5.69	6.00	-4.7	+29.2	-----	-----	-----
Call loans, renewal.....per cent.....	9.10	8.89	8.91	7.70	9.23	6.21	6.05	+19.9	+52.6	-----	-----	-----
Prime com. paper, (4-6 mos.).....per cent.....	5.88	6.00	6.00	6.00	6.00	4.88	5.13	0.0	+17.0	-----	-----	-----
Prime bankers' acceptances.....per cent.....	5.38	5.50	5.50	5.50	5.13	4.07	4.25	-6.7	+20.7	-----	-----	-----
N. Y. Fed. Res. Bank, (redis.).....per cent.....	5.00	5.00	5.00	5.00	5.00	4.50	5.00	0.0	0.0	-----	-----	-----
Federal land banks.....per cent.....	5.09	5.10	5.13	5.19	5.29	5.04	5.04	+1.9	+5.0	-----	-----	-----
Intermediate credit banks.....per cent.....	5.36	5.48	5.54	5.60	5.68	4.56	4.63	+1.4	+22.7	-----	-----	-----
Deposits, New York State savings banks, end of month.....mills. of dolls.....	4,466	4,439	4,418	4,459	4,434	4,301	4,283	-0.6	+3.5	-----	-----	-----

/ Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
BANKING AND FINANCE—Continued												
Public Finance												
Government debt, gross, end mo. mills. of dolls.	17,237	17,196	17,167	16,931	16,832	17,604	17,526	-0.6	-4.0			
Customs receipts.....thous. of dolls.	55,200	50,404	48,279	52,401	52,144	44,162	44,591	-0.5	+16.9	308,313	352,628	+14.4
Total ordinary receipts.....thous. of dolls.	736,816	173,508	166,722	765,882	169,473	678,927	154,859	-77.9	+9.4	2,207,267	2,335,084	+5.8
Expenditures chargeable to ordinary receipts.....thous. of dolls.	273,865	335,643	225,269	420,473	349,825	404,607	278,620	-16.8	+25.6	1,994,710	2,162,164	+8.4
U. S. money in circulation: Daily average.....mills. of dolls.	4,709	4,679	4,684	4,687	4,764	4,736	4,746	+1.6	+0.4			
Gold and Silver												
Gold:												
Domestic receipts at mint.....fine ounces.	57,765	65,547	70,520	73,468	92,256	70,205	72,676	+25.6	+26.9	497,645	483,249	-2.9
Rand output.....fine ounces.	866,529	872,123	897,598	856,029	889,480	862,363	867,211	+3.9	+2.6	5,979,037	6,073,495	+1.6
Monetary stock of U. S.—daily average.....mills. of dolls.	4,166	4,226	4,292	4,311	4,335	4,119	4,113	+0.6	+5.4			
Imports.....thous. of dolls.	26,470	24,687	24,098	30,762	35,524	20,001	10,331	+15.5	+243.9	193,308	217,031	+12.3
Exports.....thous. of dolls.	1,635	1,594	467	550	803	99,932	74,190	+46.0		529,708	7,852	
Silver:												
Production—United States.....thous. of fine oz.	5,223	5,422	5,080	4,817	4,674	4,945	3,915	-3.0	+19.4	32,905	35,015	+6.4
Canada.....thous. of fine oz.	1,569	1,151	1,560	1,146	1,910	1,401	2,389	+66.7	-20.1	10,574	10,207	-3.5
Stocks, end of month—United States.....thous. of fine oz.	1,274	867	1,105	1,382	682	479	262	-50.7	+160.3			
Canada.....thous. of fine oz.	414	1,032	360	543	339	707	430	-37.6	-21.2			
Imports.....thous. of dolls.	6,435	3,957	4,602	5,022	4,723	6,221	6,544	-6.0	-27.8	37,997	37,457	-1.4
Exports.....thous. of dolls.	7,814	5,752	7,485	5,445	6,784	7,456	6,160	+24.6	+10.1	48,491	48,139	-0.7
Price at New York.....dolls. per fine oz.	.563	.567	.541	.524	.525	.600	.592	+0.2	-11.3			
Business Failures												
Liabilities:												
Total commercial.....thous. of dolls.	36,356	35,270	41,216	31,375	32,426	29,827	29,587	+3.3	+9.6	281,035	264,556	-5.9
Manufacturing establishments.....thous. of dolls.	15,001	10,423	18,954	12,721	12,767	12,723	12,932	+0.4	-1.3	104,155	98,447	-5.5
Trade establishments.....thous. of dolls.	17,190	19,102	18,191	13,931	14,605	13,781	12,899	+4.8	+13.2	139,213	132,934	-4.5
Agents and brokers.....thous. of dolls.	4,165	5,745	4,071	4,723	5,053	3,324	3,755	+7.0	+34.6	37,667	33,176	-11.9
Banks, (quarter).....thous. of dolls.	37,509			54,458		28,953		+45.2	+88.1	65,755	91,967	+39.9
Liabilities, (Canada).....thous. of dolls.	707	2,435	4,416	3,758	2,441	1,681	1,402	-35.0	+74.1	22,465	18,441	-17.9
Firms:												
Total commercial.....number.	1,987	2,021	1,897	1,767	1,752	1,947	1,723	-0.8	+1.7	14,551	13,924	-4.3
Manufacturing establishments.....number.	512	499	515	496	461	513	450	-7.1	+2.4	3,432	3,575	+4.2
Trade establishments.....number.	1,349	1,388	1,266	1,154	1,190	1,325	1,161	+3.1	+2.5	10,262	9,494	-7.5
Agents and brokers.....number.	126	134	116	117	101	109	112	-13.7	-9.8	857	855	-0.2
Banks, (quarterly).....number.	281		148			92		+82.7	+60.9	6201	6229	+13.9
Firms, (Canada).....number.	183	141	164	154	176	126	123	+14.3	+43.1	1,072	1,181	+10.2
By groups:												
Manufacturers—												
Metals.....number.	40	34	30	40	39	40	31	-2.5	+25.8	263	253	-3.8
Textiles.....number.	60	52	67	47	63	67	61	+34.0	+3.3	427	418	-2.1
Lumber.....number.	103	87	103	107	88	76	69	-17.8	+27.5	531	668	+25.8
Chemicals.....number.	12	15	11	19	6	7	5	-68.4	+20.0	54	80	+48.1
Printing and engraving.....number.	10	16	15	23	15	18	16	-34.8	-6.2	106	119	+12.3
Foodstuffs.....number.	44	48	35	45	31	45	47	-31.1	-34.0	299	289	-3.3
Leather, etc.....number.	11	13	15	12	10	11	18	-16.7	-44.4	94	95	+1.1
Liquors and tobacco.....number.	8	4	12	3	7	5	3	+133.3	+133.3	41	50	+22.0
Stone, clay, and glass.....number.	9	4	12	6	9	9	5	+50.0	+80.0	61	59	-3.3
All other.....number.	215	226	215	194	193	235	195	-0.5	-1.0	1,556	1,544	-0.8
Traders—												
General stores.....number.	101	88	86	68	68	78	77	0.0	-11.7	637	638	+0.2
Foods and tobacco.....number.	429	446	385	373	406	426	387	+8.8	+4.9	2,998	2,962	-1.2
Clothing.....number.	233	228	228	202	201	248	202	-0.5	-0.5	2,100	1,689	-19.6
Household furniture.....number.	257	252	214	200	180	228	179	-10.0	+0.6	1,844	1,743	-5.5
Chemicals and paints.....number.	69	79	60	50	54	57	55	+8.0	-1.8	484	429	-11.4
Books and paper.....number.	9	15	13	13	5	7	14	-61.5	-64.3	91	85	-6.6
All other.....number.	251	280	280	248	276	281	247	+11.3	+11.7	2,099	1,948	-7.2
Dividend and Interest Payments												
Grand total.....thous. of dolls.	462,870	608,100	398,000	558,200	863,356	747,100	748,704	+54.7	+15.3	3,653,814	4,128,901	+13.0
Interest payments.....thous. of dolls.	264,170	398,100	237,000	386,400	515,156	316,900	466,704	+33.3	+10.4	2,253,754	2,516,201	+11.6
Dividend payments:												
Total.....thous. of dolls.	198,700	210,000	161,000	171,800	348,200	715,200	728,000	+102.7	+23.5	1,400,060	1,612,700	+15.2
Industrial and misc.....thous. of dolls.	155,000	167,000	124,500	136,000	250,000	719,500	720,500	+83.8	+24.7	1,017,380	1,187,300	+16.7
Steam railroads.....thous. of dolls.	36,500	32,200	28,900	29,300	55,000	727,500	743,900	+87.7	+25.3	229,880	257,900	+12.2
Street railways.....thous. of dolls.	7,200	10,800	7,600	6,500	13,100	6,200	712,600	+101.5	+4.0	72,800	76,500	+5.1
New Security Issues												
Foreign loans in the U. S.....thous. of dolls.	179,691	712,456	755,320	144,626	30,000	271,204	43,591	-79.3	-31.2	1,080,595	516,432	-52.2
Foreign governments.....thous. of dolls.	10,000			6,000		48,550	41,396			539,870	41,750	-99.9
Total corporation.....thous. of dolls.	934,530	725,798	1,313,893	630,102	860,747	7830,434	323,748	+36.6	+165.9	4,715,869	6,372,599	+35.1
Purpose of issue—												
New capital.....thous. of dolls.	876,203	891,626	920,046	613,880	801,453	7613,408	284,803	+30.6	+181.4	3,208,690	5,745,796	+79.1
Refunding.....thous. of dolls.	58,327	134,172	390,847	16,222	59,294	7217,026	38,945	+265.1	+52.3	1,507,079	923,803	-38.7
Type of security—												
Stocks.....thous. of dolls.	559,139	438,276	869,271	357,982	648,504	409,611	208,212	+81.2	+211.5	1,798,269	4,140,608	+130.3
Bonds and notes.....thous. of dolls.	375,391	287,522	444,622	272,120	212,243	7420,823	7115,536	-20.0	+83.7	2,917,600	2,261,991	-22.5
Class of industry—												
Railroads.....thous. of dolls.	21,500	159,783	105,308	91,350	27,580	42,158	18,874	-69.8	+46.1	530,905	478,829	-9.8
Public utilities.....thous. of dolls.	320,222	127,311	342,919	129,552	319,796	378,637	57,598	+146.8	+455.2	1,767,486	1,737,495	-1.7
Industrials.....thous. of dolls.	215,350	148,837	459,215	105,205	127,621	190,356	98,810	+21.3	+29.2	927,889	1,459,030	+57.2
Oil.....thous. of dolls.	11,594	35,267	36,102	45,641	17,639	21,241	15,030	-61.4	+17.4	102,327	297,410	+190.6
Land and buildings.....thous. of dolls.	77,314	33,952	48,857	40,843	41,269	74,071	64,538	+1.0	-36.1	518,728	429,493	-17.2
Shipping and misc.....thous. of dolls.	279,185	203,822	319,290	217,511	326,844	7123,971	68,374	+50.3	+378.0	854,305	1,915,112	+124.2

2 Quarter ending in month indicated.

6 Cumulative through June 30.

7 Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
BANKING AND FINANCE—Continued												
New Security Issues—Continued												
Bond sales, (Canada):												
Govt. and provincial.....thous. of dolls.		10,000	7 41,266	2,526		10,734				49,770	60,209	+21.0
Municipal.....thous. of dolls.	7 5,444	7 1,420	7 22,712	7,363	1,537	2,158	975	-79.1	+57.6	16,146	62,535	+287.3
Corporation.....thous. of dolls.	47,326	2,485	7 6,607	16,080	39,525	77,198	9,565	+145.8	+313.2	206,649	153,953	-25.5
States and municipalities:												
Permanent loans.....thous. of dolls.	7 109,056	7 87,343	7 190,222	7 161,047	78,891	137,213	75,886	-51.0	+4.0	853,006	788,663	-7.5
Temporary loans.....thous. of dolls.	55,411	105,141	7 60,118	7 48,109	51,346	44,621	57,014	+6.7	-9.9	456,600	506,549	+10.9
Tax-exempt securities outstanding, end of month.....mills. of dolls.	17,296	7 17,329	17,437	17,523	17,554	7 16,804	7 16,845	+0.2	+4.2			
Agricultural Finances												
Loans outstanding, end mo.:												
Federal farm loan banks.....thous. of dolls.	1,202,571	1,203,724	1,204,128	1,204,916	1,204,363	1,184,656	1,185,714	0.0	+1.6			
Joint-stock land banks.....thous. of dolls.	604,294	602,421	599,413	597,956	596,403	609,580	608,314	-0.3	-2.0			
Federal intermediate credit banks.....thous. of dolls.	80,706	77,609	69,326	68,101	68,981	69,978	67,815	+1.3	+1.7			
Stocks and Bonds												
Stock prices, average daily closing:												
25 industrials, average.....dolls. per share	355.10	357.70	363.37	372.70	414.04	252.94	257.98	+11.1	+60.5			
25 railroads, average.....dolls. per share	129.30	128.49	128.95	134.37	149.27	118.64	119.18	+11.1	+25.2			
Southern cotton mills.....dolls. per share	98.10	98.00	96.77	95.15	92.45	110.42	108.17	-2.8	-14.6			
Stock prices, average weekly closing:												
Industrials, rails, and utilities, (405).....rel. to 1926	189.1	186.6	187.8	190.7	207.2	145.3	144.2	+8.7	+43.7			
All industrials, (337).....rel. to 1926	196.0	193.4	192.6	191.0	202.7	148.2	147.8	+6.1	+37.1			
All railroads, (33).....rel. to 1926	140.4	138.3	138.7	144.8	160.0	126.7	124.6	+10.5	+28.4			
All utilities, (35).....rel. to 1926	203.7	201.4	212.3	233.0	272.8	148.1	145.3	+17.1	+87.7			
Automobiles and trucks, (13).....rel. to 1926	284.2	277.6	260.5	241.7	241.0	235.3	238.4	-0.3	+1.1			
Automobile tires and rubber goods, (7).....rel. to 1926	209.8	200.3	184.4	184.9	184.9	115.8	113.3	+0.1	+63.2			
Airplane, (9).....rel. to 1926	905.1	923.0	1,147.0	1,069.0	1,131.0	576.6	565.2	+5.8	+100.1			
Agricultural implements, (4).....rel. to 1926	395.0	389.5	399.8	380.5	418.6	259.9	263.9	+10.0	+58.6			
Chain stores, (17).....rel. to 1926	149.6	148.7	148.3	144.5	148.0	136.8	135.3	+2.4	+9.4			
Copper and brass, (9).....rel. to 1926	329.3	294.0	279.8	270.8	280.8	147.5	150.0	+3.7	+87.2			
Food, other than meat, (20).....rel. to 1926	173.9	171.4	172.0	175.6	189.1	152.4	158.1	+7.7	+19.6			
Machinery and machine equipment, (10).....rel. to 1926	167.2	163.1	160.8	159.4	171.8	132.3	132.7	+7.8	+29.5			
Oil producing and refining, (16).....rel. to 1926	141.4	147.6	146.3	144.1	149.1	112.0	110.9	+3.5	+34.4			
Railroad equipment, (9).....rel. to 1926	144.3	142.4	138.2	141.7	148.5	127.1	125.1	+4.8	+18.7			
Rayon, (5).....rel. to 1926	143.7	143.2	143.4	138.0	126.6	178.2	167.0	-8.3	-24.2			
Steel and iron, (10).....rel. to 1926	186.6	190.8	185.3	188.2	211.5	137.7	136.6	+12.4	+54.8			
Textiles, (30).....rel. to 1926	136.2	131.5	127.0	122.4	120.3	126.3	120.3	-1.7	0.0			
Theaters, motion pictures, and amusements, (7).....rel. to 1926	146.2	135.8	140.1	133.4	139.0	111.5	111.0	+4.2	+25.2			
Tobacco and tobacco products, (10).....rel. to 1926	142.5	136.4	139.1	135.1	139.1	134.9	134.3	+3.0	+3.6			
Traction, motor transportation, etc., (9).....rel. to 1926	97.4	90.4	85.8	83.7	83.0	97.3	96.0	-0.8	-13.5			
Stock yields:												
Total common, (90).....per cent.	3.27	3.30	3.32	3.32	3.10	4.13	4.14	-6.6	-25.1			
Industrials, (60).....per cent.	3.21	3.25	3.30	3.42	3.27	4.12	4.11	-4.4	-20.4			
Public utilities, (20).....per cent.	2.59	2.65	2.48	2.22	1.93	3.43	3.48	-13.1	-44.5			
Railroads, (20).....per cent.	4.62	4.68	4.79	4.62	4.17	5.03	5.14	-9.7	-18.9			
Preferred, high grade industrial, (20).....per cent.	5.44	5.45	5.45	5.49	5.52	5.32	5.40	+0.5	+2.2			
Stock sales, N. Y. Stock Exch. thous. of shares	105,662	82,600	91,279	69,548	93,379	63,741	39,001	+34.3	+139.4	454,591	631,241	+38.9
Bond sales:												
Miscellaneous.....thous. of dolls.	201,566	205,649	225,716	227,676	295,577	246,885	183,815	+29.8	+60.8	1,791,800	1,566,058	-12.6
Liberty-Treasury.....thous. of dolls.	12,149	9,970	8,851	9,848	13,330	14,517	25,240	+35.4	-47.2	118,395	77,424	-34.6
Total.....thous. of dolls.	213,715	215,619	234,567	237,524	308,907	261,402	209,055	+30.1	+47.8	1,910,195	1,643,482	-14.0
Bond prices:												
Highest-grade rails p. ct. of par. 4% bond	87.87	88.05	87.81	86.37	86.06	92.04	90.62	-0.4	-5.0			
Second-grade rails p. ct. of par. 4% bond	79.13	79.27	79.13	78.59	78.55	84.42	83.09	-0.1	-5.5			
Public utility p. ct. of par. 4% bond	77.68	76.19	75.03	74.32	73.25	79.51	79.47	-1.4	-7.8			
Industrial p. ct. of par. 4% bond	77.49	77.47	76.51	75.29	75.24	79.39	77.74	-0.1	-3.2			
Comb. price index p. ct. of par. 4% bond	80.34	80.00	79.33	78.37	77.99	83.54	82.45	-0.5	-5.4			
Bond prices, 1st of following month:												
5 Liberty bonds p. ct. of par.	100.14	101.75	100.24	100.87	100.64	105.16	103.20	-0.2	-2.5			
16 foreign govt. and city p. ct. of par.	102.98	103.54	103.49	103.30	103.60	104.84	104.85	+0.3	-1.2			
Comb. price index, 66 bonds p. ct. of par.	98.36	99.13	97.91	97.69	97.95	101.14	100.05	+0.3	-2.1			
Bond yields:												
Total, 60 high grade.....per cent.	4.69	4.69	4.69	4.73	4.73	4.50	4.54	0.0	+4.2			
Railroads (15).....per cent.	4.59	4.59	4.58	4.65	4.67	4.35	4.44	+0.4	+5.2			
Industrials (15).....per cent.	5.02	5.02	5.06	5.09	5.09	4.91	4.95	0.0	+2.8			
Utilities (15).....per cent.	4.81	4.85	4.85	4.90	4.90	4.66	4.68	0.0	+4.7			
Municipal (15).....per cent.	4.32	4.29	4.23	4.26	4.28	4.09	4.13	+0.5	+3.6			
Municipal bond yield (20).....per cent.	4.34	4.25	4.30	4.33	4.33	4.06	4.13	0.0	+4.8			
U. S. Treasury notes and certificates, 3-6 months.....per cent.	4.79	4.82	5.04	4.89	4.49	3.92	4.12	-8.2	+9.0			
Liberty and Treasury bonds.....per cent.	3.76	3.67	3.67	3.71	3.68	3.40	3.50	-0.8	+5.1			

7 Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
BANKING AND FINANCE—Continued												
Stocks and Bonds—Continued												
Long-term real-estate bonds issued:												
Grand total.....thous. of dolls..	68,431	21,711	22,868	20,025	36,790	66,364	48,495	+83.7	-24.1	444,206	264,939	-40.3
Purpose of issue—												
Finance construction.....thous. of dolls..	23,250	12,962	8,720	4,295	24,660	27,400	18,581	+474.2	+32.7	180,080	96,442	-46.4
Real-estate mortgage.....thous. of dolls..	31,663	4,529	4,148	4,800	4,556	6,763	24,079	-5.1	-81.1	139,784	68,765	-50.8
Acquisitions and improvements.....thous. of dolls..	9,280	2,000	2,275	7,485	2,390	2,610	1,510	-68.1	+58.3	45,976	52,500	+14.2
Kind of structure—												
Office and commercial.....thous. of dolls..	22,340	5,390	4,760	10,845	24,860	22,430	9,786	+129.2	+154.0	155,376	87,430	-43.7
Hotels.....thous. of dolls..	375	7,810	2,900	700	1,175	885	4,020	+67.9	-70.8	31,960	15,235	-52.3
Apartments.....thous. of dolls..	1,375	1,722	1,885	2,200	1,582	4,085	4,600	-28.1	-65.6	26,864	13,849	-48.4
Corporation Stockholders												
(Quarterly)												
Pennsylvania Railroad Co.:												
Domestic.....number	157,211			158,456		153,294		+0.8	+3.4			
Foreign.....number	2,996			2,978		3,016		-0.6	-1.3			
U. S. Steel Corp. common stock:												
Domestic.....number	101,767				103,805	96,649		+2.0	+7.4			
Foreign.....number	1,804				1,807	1,688		+0.2	+7.0			
Shares held by brokers.....per ct. of total	23.68				25.27	22.79		+6.7	+10.9			
American Telephone & Telegraph Co.:												
Domestic.....number	443,570			453,434		427,195		+2.2	+6.1			
Foreign.....number	5,415			5,425		5,172		+0.2	+4.9			
FOREIGN EXCHANGE RATES												
Europe:												
England.....dolls. per £ sterling	4.85	4.85	4.85	4.85	4.85	4.88	4.86	0.0	-0.2			
France.....dolls. per franc	.039	.039	.039	.039	.039	.039	.039	0.0	0.0			
Italy.....dolls. per lira	.052	.052	.052	.052	.052	.053	.052	0.0	0.0			
Belgium.....dolls. per franc	.139	.139	.139	.139	.139	.140	.139	0.0	0.0			
Netherlands.....dolls. per guilder	.401	.401	.402	.402	.401	.403	.403	-0.2	-0.5			
Sweden.....dolls. per krona	.267	.267	.267	.268	.268	.268	.268	0.0	0.0			
Switzerland.....dolls. per franc	.192	.193	.193	.192	.192	.193	.193	0.0	-0.5			
Asia:												
Japan.....dolls. per yen	.445	.446	.447	.439	.456	.466	.459	+3.9	-0.7			
India.....dolls. per rupee	.364	.363	.362	.360	.360	.365	.363	0.0	-0.8			
America:												
Canadian.....dolls. per Canadian doll.	.994	.992	.993	.992	.995	.998	.998	+0.3	-0.3			
Argentina.....dolls. per gold peso	.956	.956	.955	.953	.954	.969	.961	+0.1	-0.7			
Brazil.....dolls. per milreis	.118	.118	.119	.119	.119	.120	.119	0.0	0.0			
Chile.....dolls. per paper peso	.121	.121	.120	.120	.120	.122	.121	0.0	-0.8			
U. S. FOREIGN TRADE												
Imports												
Grand total.....thous. of dolls..	7383,818	7410,666	400,149	353,400	354,150	317,249	317,848	+0.2	+11.4	2,403,780	2,640,522	+9.8
By grand divisions:												
Europe—												
Total.....thous. of dolls..	109,812	7113,942	113,790	106,427		95,532	97,596			601,752	655,423	+8.9
France.....thous. of dolls..	14,522	711,432	713,954	13,267		11,918	11,321			72,157	80,665	+11.8
Germany.....thous. of dolls..	20,766	724,426	20,626	19,328		15,793	20,668			102,263	125,998	+23.2
Italy.....thous. of dolls..	8,518	79,819	10,374	10,608		8,145	6,956			49,797	56,613	+13.7
United Kingdom.....thous. of dolls..	31,458	729,973	29,753	25,378		27,871	28,103			175,644	169,586	-3.4
North America—												
Total.....thous. of dolls..	92,253	793,639	792,363	81,898		73,905	77,473			489,560	522,363	+6.7
Canada.....thous. of dolls..	39,938	740,395	44,330	44,292		41,027	41,798			232,069	247,989	+6.9
South America—												
Total.....thous. of dolls..	60,716	761,284	753,628	50,740		51,102	45,894			302,126	344,428	+14.0
Argentina.....thous. of dolls..	12,679	713,063	9,172	8,342		10,319	8,119			57,026	63,279	+11.0
Asia and Oceania—												
Total.....thous. of dolls..	110,470	7124,500	7130,059	107,848		87,237	89,788			643,628	701,512	+9.0
Japan.....thous. of dolls..	36,020	723,819	733,828	32,483		22,317	24,888			186,700	191,732	+2.7
Africa, total.....thous. of dolls..	10,541	17,300	10,308	6,488		9,472	7,037			48,892	62,617	+28.1
By economic classes:												
Crude materials.....thous. of dolls..	738,645	7146,932	7141,697	120,724	119,611	109,666	7106,065	-0.9	+12.8	890,376	947,651	+6.4
Foodstuffs, crude, and food animals.....thous. of dolls..	748,943	752,172	746,561	40,955	42,954	48,325	43,174	+4.9	-0.5	334,813	329,450	-1.6
Manufactured foodstuffs.....thous. of dolls..	744,330	745,919	742,290	36,527	32,993	30,005	33,314	-0.7	-1.0	246,713	267,596	+8.5
Semimanufactures.....thous. of dolls..	70,525	782,264	785,917	75,557	71,620	57,655	760,038	-5.2	+19.3	427,969	526,357	+23.0
Finished manufactures.....thous. of dolls..	81,375	783,379	783,684	79,637	86,972	71,597	775,258	+9.2	+15.6	503,910	569,468	+13.0

* Quarter ending in month indicated.
 * Cumulative through June 30.

* Revised.
 * Period ending July 31.

TREND OF BUSINESS MOVEMENTS—Continued.

The cumulatives shown are through July, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH JULY 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	March	April	May	June	July	June	July	July, 1929, from June, 1929	July, 1929, from July, 1928	1928	1929	
U. S. FOREIGN TRADE—Continued												
Exports												
Grand total, including reexports.....thous. of dolls..	7 489,855	7 425,293	7 384,850	393,293	401,000	388,661	378,984	+2.0	+5.8	2,756,973	3,024,068	+9.7
By grand division:												
Europe—												
Total.....thous. of dolls..	7 211,894	7 172,223	7 146,025	153,988	-----	161,579	152,377	-----	-----	6 1,098,309	6 1,119,908	+2.0
France.....thous. of dolls..	24,621	19,444	7 13,248	14,603	-----	15,733	15,918	-----	-----	6 102,506	6 122,592	+19.6
Germany.....thous. of dolls..	32,993	7 26,541	7 23,927	21,261	-----	28,371	22,094	-----	-----	6 206,038	6 180,220	-12.5
Italy.....thous. of dolls..	15,057	7 13,065	9,771	12,642	-----	11,254	11,853	-----	-----	6 76,912	6 79,242	+3.0
United Kingdom.....thous. of dolls..	75,659	7 59,290	7 54,431	52,824	-----	52,298	52,155	-----	-----	6 384,855	6 402,304	+4.5
North America—												
Total.....thous. of dolls..	7 130,702	128,035	7 132,897	115,658	-----	114,009	110,770	-----	-----	6 628,543	6 724,875	+15.3
Canada.....thous. of dolls..	7 90,634	91,928	7 97,905	80,481	-----	81,883	77,324	-----	-----	6 429,264	6 502,637	+17.1
South America—												
Total.....thous. of dolls..	7 53,054	7 44,386	7 35,852	49,690	-----	38,999	43,907	-----	-----	6 217,562	6 288,006	+32.4
Argentina.....thous. of dolls..	19,122	15,874	7 13,886	20,464	-----	15,686	16,736	-----	-----	6 80,169	6 108,110	+34.9
Asia and Oceania—												
Total.....thous. of dolls..	7 79,810	69,491	7 61,535	61,667	-----	63,528	61,979	-----	-----	6 378,619	6 422,888	+11.7
Japan.....thous. of dolls..	23,086	7 20,522	7 17,380	16,966	-----	21,637	17,987	-----	-----	6 122,922	6 126,540	+2.9
Africa, total.....thous. of dolls..	7 14,395	7 11,156	7 8,541	12,289	-----	10,546	9,950	-----	-----	6 54,956	6 67,183	+22.2
By economic classes:												
Total domestic exports only.....thous. of dolls..	7 481,716	7 418,080	7 376,919	386,827	394,296	380,305	371,471	+1.9	+6.1	2,696,150	2,972,754	+10.3
Crude materials.....thous. of dolls..	7 86,458	71,247	7 57,407	56,130	50,445	74,918	60,177	-10.1	-16.2	598,264	534,631	-10.6
Foodstuffs, crude and food animals.....thous. of dolls..	21,651	15,814	21,212	14,534	20,286	7 17,243	7 14,217	+39.6	+42.7	111,361	147,217	+32.2
Manufactured foodstuffs.....thous. of dolls..	42,996	7 37,448	7 35,922	34,011	35,852	7 31,137	7 30,661	+5.4	+16.9	252,612	273,392	+8.2
Seminufactures.....thous. of dolls..	7 66,896	7 65,429	7 59,662	62,134	60,539	7 63,046	61,397	-2.6	-1.4	430,379	443,326	+3.0
Finished manufactures.....thous. of dolls..	7 263,715	7 228,141	7 202,717	220,018	227,202	7 193,961	205,019	+3.3	+10.8	1,303,534	1,574,188	+20.8
Agricultural exports, (quantities):												
All commodities.....rel. to 1910-1914.	102	86	79	69	70	76	64	+1.4	+9.4	-----	-----	-----
All commodities except cotton.....rel. to 1910-1914.	129	112	122	102	117	91	84	+14.7	+39.3	-----	-----	-----
CANADIAN FOREIGN TRADE												
Total trade:												
Imports.....thous. of dolls..	135,290	97,517	125,615	111,949	114,201	110,694	103,404	+2.0	+10.4	692,026	778,573	+12.5
Exports.....thous. of dolls..	117,520	67,154	109,436	114,492	105,686	109,139	127,369	-7.7	-17.0	701,079	695,396	-0.8

* Cumulative through June 30.

† Revised.

PUBLICATIONS OF THE DEPARTMENT OF COMMERCE

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

OFFICE OF THE SECRETARY

Air Commerce Bulletin, July 15, 1929.—29 pages. Issued semimonthly by the Aeronautics Branch of the Department of Commerce and contains short articles on aviation developments. Also contains a list of air transport routes and airway maps of the United States.

Same, August 1, 1929. 23 pages.

Radio Service Bulletin, June, 1929.—33 pages. Issued monthly by the Radio Division of the Department of Commerce. Contains list of radio stations and references to current radio literature. Price, 15¢.

Sap Stains of Wood and Their Prevention, by Ernest E. Hubert. —viii+77 pages, 37 illustrations. One of a series of reports on the marketing and use of lumber issued by the National Committee on Wood Utilization. Price, 35¢.

BUREAU OF THE CENSUS

Census of Manufactures, 1927.

Caskets, Coffins, Burial Cases, and Morticians' Goods. 7 pages. Price, 1¢.
Prime Movers, Motors, and Generators; Coal Consumed. 23 pages. Price, 5¢.

Statistics for Cities. 86 pages. Gives statistics for industries in towns of 100,000 inhabitants or more. Price, 15¢.

Cotton Production in United States, Crop of 1928.—40 pages. Contains tables showing the amount of the cotton crop, the number of ginneries in operation, and the amount of cotton ginned in the various cotton-growing States. Price, 10¢.

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

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

Commerce Yearbook, 1929: Vol. I, United States.—xvii+720 pages, 1 illus., 152 charts, 2 maps. This volume of the Commerce Yearbook contains statistics concerning business conditions in the United States and its noncontiguous possessions. Price, \$1.

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

Motion Pictures in Japan, Philippine Islands, Netherland East Indies, Siam, British Malaya, and French Indo-China.—Trade Information Bulletin No. 634; ii+27 pages. Survey indicating the degree of development of the local industry, the tastes of audiences, and the market outlook for American films. Price, 10¢.

Flour Markets of Central America.—Trade Information Bulletin No. 635; ii+11 pages. Information relative to methods of sale, customs duties, size of packages, and kinds of flour preferred. Price, 10¢.

Banking and Trade Financing in United Kingdom.—Trade Information Bulletin No. 636; ii+32 pages. A review of the British banking and credit system, with a description of the methods used in the financing of trade and industry. A bibliography is included. Price, 10¢.

Foreign Trade of United States in Calendar Year 1928, According to International Statistical Classification.—Trade Information Bulletin No. 637; ii+9 pages. Price, 10¢.

Industrial Machinery in Italy.—Trade Information Bulletin No. 638; ii+34 pages. Deals with the machinery industry of Italy, the amount of capital invested, the growth of trade in this class of manufactures, and the market outlook for American products. Price, 10¢.

Iron and Steel Trade and Industry of Great Britain.—Trade Information Bulletin No. 639; ii+20 pages. Describes the iron and steel industry and trade of Great Britain, with a brief account of the beginnings of this industry in the time of the Roman occupation. Price, 10¢.

BUREAU OF STANDARDS

Brass Pipe Nipples.—Commercial Standard CS10-29; iv+14 pages, 1 illus. Price, 5¢.

Determination of Source and Means of Prevention of Stones in Glass, by Herbert Insley. Research Paper No. 71. Reprint from Bureau of Standards Journal of Research, vol. 2, June, 1929, pp. 1077-1084; 7 pages of plates, 2 diagrams. Study of the materials used in making glass in an endeavor to discover the sources of stones formed and methods of preventing their occurrence. Price, 5¢.

Simplified Practice Recommendations:

R96-28. Ice Cake Boxes. ii+15 pages, 1 chart. Price, 5¢.
R98-29. Photographic Paper. 5+12 pages, 1 chart. Price, 10¢.

Technical News Bulletin, July, 1929.—Pages 61-72. Monthly. Contains a brief account of the laboratory activities of the bureau and gives a list of pamphlets issued and magazine articles published during the preceding month. Annual subscription, 25¢.

BUREAU OF MINES

Tests of Strength of Roof Supports Used in Anthracite Mines of Pennsylvania.—Bulletin 303; iv+44 pages, 36 illustrations. Report of the United States Bureau of Mines to the Pennsylvania State Anthracite Mine Cave Commission and a review of the compressive strength of anthracite, bituminous coals, and mine supports. Price, 15¢.

Mineral Resources of United States, 1927.—The reports on mineral resources are first issued in the form of bulletins, of which the following have been released since the August announcement and may be obtained at the price indicated:

Gold and Silver in 1927. (Pt. I, pp. 599-636.) Price, 10¢.
Gold, Silver, Copper, Lead, and Zinc in Colorado in 1927. (Pt. I, pp. 527-572.) Price, 10¢.
Gold, Silver, Copper, Lead, and Zinc in Idaho and Washington in 1927. (Pt. I, pp. 573-593.) Price, 5¢.
Gold, Silver, Copper, Lead, and Zinc in Nevada in 1927. (Pt. I, pp. 594-525.) Price, 5¢.

Mineral Resources of United States, 1928.

Fluorspar and Cryolite in 1928. (Pt. II, pp. 13-30.) Price, 5¢.

Permissible Junction Boxes, by L. C. Insley and R. A. Kearns. Technical Paper 454; ii+19 pages, 3 illustrations, 2 plates. Report on investigation of junction boxes used to protect electrical cables, with description of types declared permissible in mines. Price, 10¢.

BUREAU OF NAVIGATION

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

PATENT OFFICE

General Information Concerning Patents.—24 pages, 2 illus. Price, 5¢.

STEAMBOAT INSPECTION SERVICE

Pilot Rules for Certain Inland Waters of Atlantic and Pacific Coasts and of Coast of Gulf of Mexico.—Edition, May 10, 1929. Form 804; iv+36 pages, illus.

CHIEF FUNCTIONS OF THE DEPARTMENT OF COMMERCE

R. P. LAMONT, Secretary of Commerce

JULIUS KLEIN, Assistant Secretary of Commerce.

EPHRAIM F. MORGAN, Solicitor

AERONAUTICS BRANCH

WILLIAM P. MACCRACKEN, JR., Assistant Secretary of Commerce for Aeronautics

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

BUREAU OF THE CENSUS

WILLIAM M. STEUART, Director

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

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

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

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

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

Director

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

The maintenance of commodity, technical, and regional divisions to afford special service to American exporters and manufacturers.

The compilation and distribution of lists of possible buyers and agents for American products in all parts of the world and publication of weekly lists of specific sales opportunities abroad.

The publicity of statistics on imports and exports.

The study of the processes of domestic trade and commerce.

BUREAU OF STANDARDS

GEORGE K. BUNAGASS, Director

Custody, development, and construction of standards of measurement, quality, performance, or practice; comparison of standards used by scientific or other institutions; determination of physical constants and properties of materials; researches and tests on materials and processes; and publication of scientific and technical bulletins reporting results of researches and fundamental technical data.

Preparation of specifications for Government purchases, through the Federal Specifications Board.

Collection and dissemination of information concerning building codes and the planning and construction of houses.

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

BUREAU OF MINES

SCOTT TURNER, Director

Technical investigations in the mining, preparation, and utilization of minerals, including the study of mine hazards and safety methods and of improved methods in the production and use of minerals.

Testing of Government fuels and management of the Government Fuel Yard at Washington.

Research on helium and operation of plants producing it. Studies in the economics and marketing of minerals and collection of statistics on mineral resources and mine accidents.

The dissemination of results of technical and economic researches in bulletins, technical papers, mineral resources series, miners' circulars, and miscellaneous publications.

BUREAU OF FISHERIES

HENRY O'MALLEY, Commissioner

The propagation and distribution of food fish and shellfish, in order to prevent the depletion of the fisheries; investigations to promote conservation of fishery resources; the development of commercial fisheries and agriculture; study of fishery methods; improvements in merchandising and collection of fishery statistics; administration of Alaska fisheries and fur seals; and the protection of sponges off the coast of Florida.

BUREAU OF LIGHTHOUSES

GEORGE R. PUTNAM, Commissioner

Maintenance of lighthouses and other aids to water navigation. Establishment and maintenance of aids to navigation along civil airways.

Publication of Light Lists, Buoy Lists, and Notices to Mariners, giving information regarding these aids to navigation.

COAST AND GEODETIC SURVEY

RAYMOND S. PATTON, Director

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

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

BUREAU OF NAVIGATION

ARTHUR J. TYRER, Commissioner

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

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

STEAMBOAT INSPECTION SERVICE

DICKERSON N. HOOVER, Supervising Inspector General

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

UNITED STATES PATENT OFFICE

THOMAS E. ROBERTSON, Commissioner

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

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

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

RADIO DIVISION

W. D. TERRELL, Chief

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