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DEPARTMENT OF COMMERCE
WASHINGTON

SURVEY OF
CURRENT BUSINESS

DECEMBER, 1929

No. 100



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

Survey of Current Business No. 100



WITH this issue the editors present the one-hundredth numbered edition. At this time it appears fitting to briefly review the growth of this publication since its inception in the spring of 1921. To understand the reason for its growth is to understand the growth itself. When America entered the World War we were confronted with an amazing lack of facts pertaining to the fundamental necessities such as steel, copper, cotton, wool, leather, cement, etc. This was the beginning of a new era in our economic life in that it compelled American mobilization officers, in cooperation with the Nation's business and industrial executives, to obtain facts hitherto unavailable in order to set up properly the policies of government.

The business depression of 1920-21, consequent upon a post-war boom, also left its impress upon the minds of business leaders everywhere. Out of these conditions, and in the realization that the new order of business required facts and not guesses, the *Survey of Current Business* found its origin.

In 1921 this publication carried data on about 200 individual statistical series, the most of which had very little historical background. With this number there are more than 1,800 individual series, each of which has considerable history for comparative purposes. Were it not for the almost immediate appreciation of the worth of business data on the part of Government, trade, and industry, as represented by trade associations and individual firms, this vast growth in current statistical information would not have been possible.

During the eight years which have elapsed since the first issue of the *Survey of Current Business*, which, incidentally, was only a sample mimeographed set of sheets numbering 10, evidences have been accumulating of the large and growing interest in current business statistics. During this period the Bureau of the Census has undertaken, at the request of about 50 industries, the collection of current information covering such items as production, stocks, orders, unfilled orders, shipments, etc., while correspondence concerning the services of the Department of Commerce in connection with these facts has multiplied many fold.

The monthly *Survey of Current Business* has appropriately been called the "clearing house of business statistics" in that it brings together the current reports on business activities issued by this bureau, as well as those compiled by other governmental agencies and private organizations, including trade associations. The data which are published in the volume cover more than 240 commodities.

In addition to the publication of the monthly number, the *Survey of Current Business* is now issued in the form of weekly supplements in the realization that current statistics are highly perishable and to be of use they must reach the business man at the earliest possible moment. The monthly information contained in these bulletins is republished in the *Survey*, except for the weekly chart, "Weekly Business Indicators," which has become one of the most important single features. In connection with the weekly business indicators, press statements are issued which have wide publication throughout the country. Services to the press and other interested parties have expanded tremendously over the period so that at the present time much of the work finds expression only in these services.

The *Survey of Current Business*, as at the time of origin, is to-day an important governmental adjunct. It provides current weekly and monthly statistical information on the state of the Nation's business to many branches of Government, including the War Department, the Federal Reserve Board, the Department of Agriculture, and the Treasury Department. Paralleling the demands of the Government are the growing needs of business. Together these are providing, more and more, the facts which are so essential for the setting-up and execution of forward-looking policies.

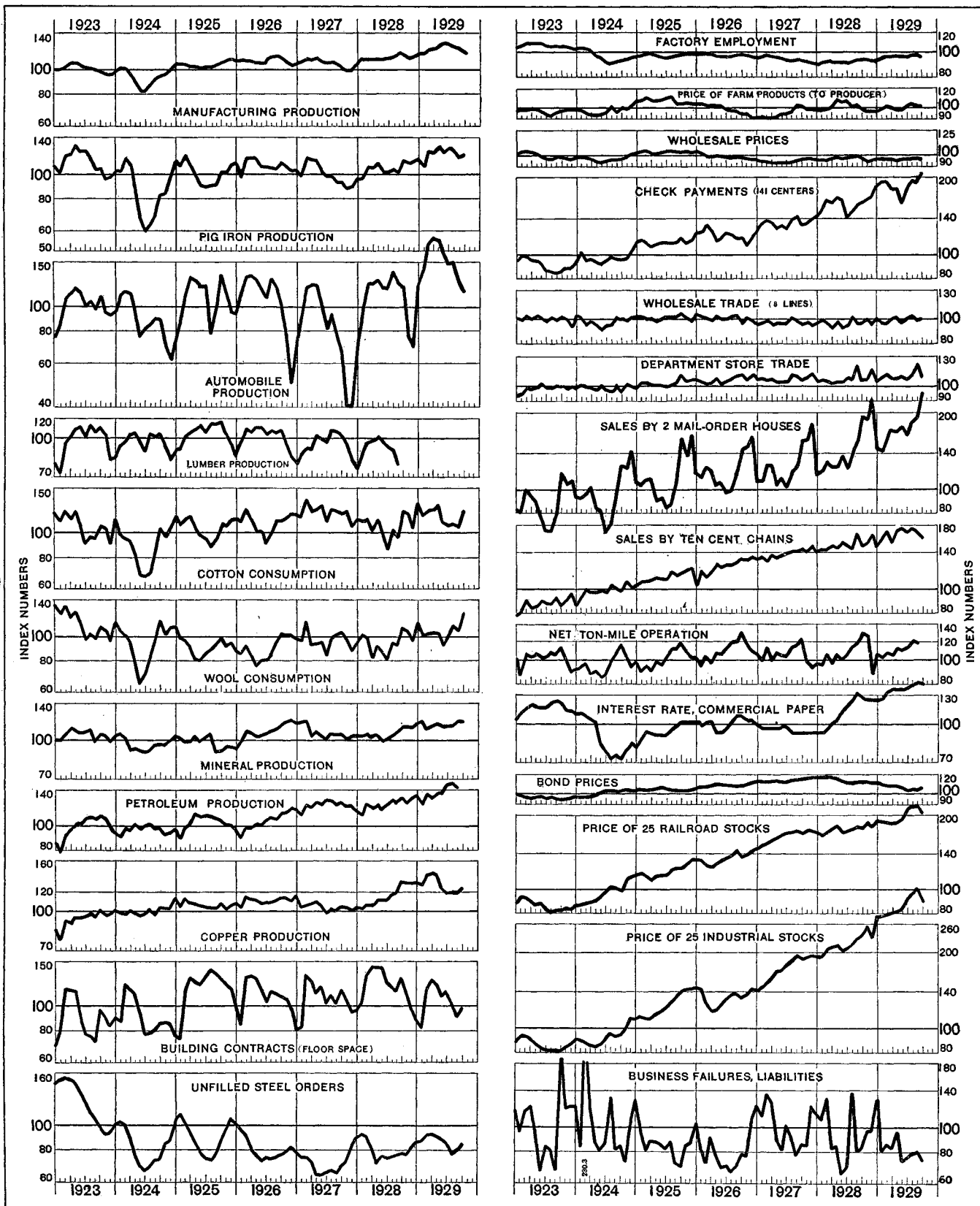
While it may be too early to say that the utilization of business data has entirely eliminated the business cycle, there is agreement to-day among business leaders everywhere that the wider use of facts will mitigate in a large degree many of the disastrous effects of the one-time recurrent business cycle.

The Nation's business executives, as in 1921, are now engaged in formulating plans to provide an enduring soundness for our economic fabric. It is a singular coincidence and yet entirely fitting that Nos. 1 and 100 of this publication should have reached their readers at a time when interest in business conditions has been so similarly keen, though circumstances are not at all parallel.

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

MONTHLY BUSINESS INDICATORS, 1923-1929

atio 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	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	
	1923-1925 monthly average=100																				
Industrial production:																					
• Total manufacturing.....	101.0	94.0	105.0	108.0	106.0	111.0	116.0	114.0	111.0	113.0	117.0	117.0	120.0	123.0	124.0	128.0	125.0	124.0	122.0	117.0	
• Total minerals.....	105.0	96.0	99.0	107.0	107.0	106.0	108.0	114.0	113.0	112.0	117.0	120.0	107.0	115.0	116.0	112.0	114.0	115.0	118.0	118.0	
Pig iron.....	111.7	86.7	101.5	109.0	101.0	105.5	102.5	112.9	110.5	112.8	115.2	107.3	124.3	122.6	130.5	124.4	126.7	125.7	117.1	120.1	
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	120.2	120.0	134.5	123.2	116.3	129.9	125.1	146.3	142.8	150.5	141.2	139.9	142.5	130.5	130.5	
Automobiles.....	101.7	90.8	107.5	108.4	85.7	109.9	125.6	120.2	77.8	70.8	121.3	141.1	177.0	187.9	182.7	164.9	151.3	150.7	125.7	114.9	
Cement.....	92.1	99.8	108.1	110.0	115.8	118.0	143.9	141.1	124.5	98.1	79.5	68.6	80.2	110.6	129.9	135.2	139.0	149.5	138.6	134.6	
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.2	106.8	95.9	120.6	119.0	104.1	130.2	116.5	123.3	123.1	130.2	111.1	106.5	108.7	106.3	124.9	
Wool (consumption).....	112.8	94.6	92.6	89.7	97.0	94.7	91.8	108.6	105.7	96.8	114.0	101.3	102.7	103.8	102.9	93.0	99.8	111.1	105.0	125.3	
Raw material output:																					
Animal products.....	100.0	104.0	96.0	96.0	97.0	99.0	92.0	102.0	93.0	92.0	96.0	80.0	88.0	99.7	108.9	111.8	116.0	100.0	98.7	105.2	
Crops.....	92.0	104.0	104.0	109.0	113.0	119.0	178.3	252.1	179.7	152.2	112.5	81.9	72.5	57.4	51.1	55.7	90.4	135.0	180.3	245.9	
Forest products.....	99.0	97.0	104.0	98.0	93.0	88.2	78.0	84.0	84.0	76.0	82.0	74.0	86.0	90.2	98.6	89.9	88.3	91.8	80.3	92.1	
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.2	124.5	129.5	123.8	129.4	133.5	123.3	134.4	130.5	137.5	135.9	148.8	150.3	142.2	143.5	
Bituminous coal.....	108.0	92.5	99.5	109.7	99.0	95.8	96.3	117.5	107.4	101.2	118.1	108.5	90.3	84.7	92.2	87.4	93.3	100.7	102.2	117.6	
Copper.....	93.4	100.2	106.4	110.2	104.9	114.9	118.8	131.1	129.5	129.8	130.9	128.5	142.1	143.9	141.6	124.9	120.1	119.6	120.4	125.2	
Power and construction:																					
Electric power.....	92.5	98.1	109.5	122.6	133.3	146.0	145.2	158.0	154.6	157.8	164.3	148.1	159.3	157.1	161.2	154.9	159.8	166.6	160.7	173.2	
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	121.4	114.2	129.1	111.1	98.2	88.6	81.9	117.1	128.0	122.4	109.7	113.7	100.5	90.2	98.9	
Unfilled orders:																					
General index.....	121.7	87.0	91.3	84.6	74.0	76.2	74.7	71.5	72.7	71.0	76.8	79.5	85.5	93.1	88.4	83.4	82.1	76.0	76.8	73.9	
U. S. Steel Corporation.....	125.8	83.6	90.6	82.1	71.1	80.7	77.4	78.6	76.9	83.3	86.1	86.8	92.4	92.7	90.1	89.2	85.6	76.6	81.7	85.6	
Stocks:																					
General index.....	94.5	102.0	103.5	114.6	120.8	122.7	116.0	132.9	137.0	141.5	138.4	137.0	133.6	127.8	122.3	119.8	121.5	126.9	138.6	153.4	
Manfd. commodities (28).....	93.8	103.2	103.0	106.3	112.5	116.7	111.3	110.7	113.7	120.4	125.2	126.4	123.2	120.5	119.5	120.2	119.6	115.0	113.1	110.7	
Cotton.....	102.5	91.4	106.2	145.5	153.1	123.8	89.5	155.1	131.4	187.7	169.8	149.5	130.5	109.9	88.4	70.9	54.2	58.2	106.8	177.5	
Copper (refined).....	106.4	113.9	73.1	84.8	85.4	58.4	45.8	40.3	46.1	57.8	55.4	48.8	46.8	50.8	62.2	73.4	86.3	92.2	83.7	78.1	
Employment:																					
Factories.....	108.6	96.2	97.2	97.9	94.4	91.9	93.0	93.9	93.4	93.5	93.2	95.4	96.6	97.1	97.2	96.8	96.2	96.6	97.3	96.3	
Prices:																					
Farm products, to producers.....	97.8	97.1	106.5	98.6	94.9	100.7	102.2	99.3	97.1	97.1	96.4	98.6	101.4	100.0	98.6	97.8	101.4	103.6	102.2	101.4	
Wholesale, all commodities.....	99.9	97.4	102.8	99.3	94.7	97.0	99.4	97.1	96.0	96.0	96.5	96.0	96.8	96.1	95.1	95.7	97.3	97.0	96.8	95.6	
Retail food.....	97.6	97.6	104.9	107.6	103.6	102.9	105.4	104.8	105.1	104.1	103.3	103.2	102.2	101.3	102.4	103.4	105.9	107.0	107.4	107.2	
Cost of living (including food).....	98.2	99.4	102.4	102.4	100.0	98.7	99.4	99.4	99.4	98.8	98.2	98.2	97.6	97.0	97.0	97.6	98.8	99.4	99.4	99.4	
Distribution, (values):																					
• Bank debits, 141 cities.....	91.2	96.7	111.9	119.6	132.5	158.2	156.9	161.8	165.1	172.3	187.2	194.3	195.1	180.6	180.5	159.0	184.8	198.2	192.8	211.1	
• Wholesale trade.....	101.0	98.0	102.0	101.0	97.0	96.0	96.4	97.4	99.0	94.9	101.1	96.3	97.0	100.0	102.0	97.0	101.0	103.0	99.0	100.0	
• Department stores, sales.....	98.0	99.0	103.0	106.0	107.0	108.0	119.0	105.0	106.0	116.0	105.0	110.0	113.0	105.0	107.0	112.0	106.0	112.0	123.0	109.0	
Mail-order sales, 2 houses.....	89.2	98.1	112.7	120.2	126.2	147.6	155.4	194.4	188.4	227.4	144.9	141.8	163.3	170.0	168.2	176.4	163.0	183.7	192.8	242.3	
• 10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	150.0	165.0	148.0	151.0	163.6	145.8	158.9	167.4	153.0	172.0	174.0	162.0	174.0	168.0	159.0	
Imports.....	97.8	93.1	109.0	114.3	108.0	105.5	99.0	110.0	101.1	105.0	114.2	114.4	118.8	127.1	123.9	109.4	109.6	114.3	108.8	121.1	
Exports.....	91.5	100.8	107.8	105.5	108.8	112.6	111.1	145.1	143.5	125.3	123.5	116.4	129.0	112.2	101.4	103.6	106.2	100.4	115.3	137.0	
Transportation:																					
Freight, net ton-miles.....	102.2	95.9	101.9	109.1	106.0	106.5	117.4	129.2	124.6	88.4	104.8	102.2	107.8	102.7	112.6	109.1	112.5	120.4	118.5	-----	
Finance:																					
Member bank loans and discounts.....	94.1	98.5	107.4	112.9	117.3	126.8	127.3	128.3	129.8	135.4	128.7	130.6	132.4	131.3	129.3	135.1	136.2	135.3	139.1	151.1	
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	112.8	130.6	127.6	124.8	124.8	124.8	127.6	136.4	139.2	139.2	139.2	139.2	142.2	145.0	145.0	
Federal reserve ratio.....	99.0	104.1	96.9	96.0	99.1	89.1	86.5	87.0	84.5	80.2	89.9	90.5	92.6	94.9	96.5	94.4	96.4	97.7	94.2	89.9	
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	113.0	111.0	111.3	112.0	110.7	110.8	109.6	108.0	107.6	106.7	105.4	104.9	104.1	103.9	105.2	
Price, railroad stocks.....	86.0	96.1	117.9	133.4	162.7	174.5	178.5	176.4	186.0	180.3	189.3	188.3	184.9	183.7	184.4	192.1	213.4	216.3	217.7	203.5	
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	214.8	226.9	234.5	252.6	229.0	275.0	280.3	283.7	285.8	290.3	297.8	330.8	344.5	358.5	316.3	
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.2	95.6	80.1	82.5	95.8	96.2	127.1	80.3	85.7	83.2	97.2	74.0	76.5	79.6	80.5	73.9	

* Seasonal adjustments.

BUSINESS CONDITIONS IN OCTOBER

PRODUCTION

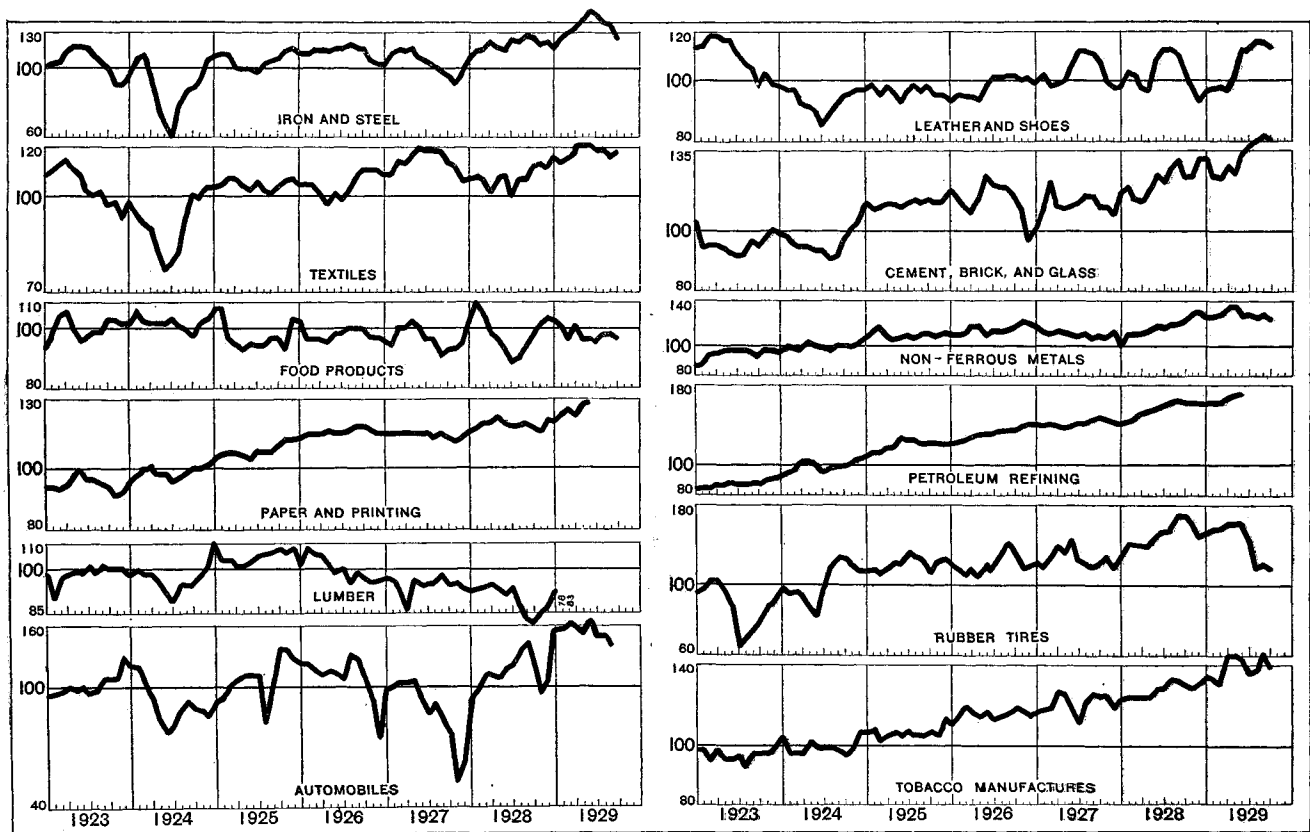
According to the weighted index of the Federal Reserve Board industrial production in October after adjustments for seasonal variations, showed a decline from the previous month but was greater than a year ago. Manufacturing output showed a decrease from September amounting to 4 per cent but was about 3 per cent greater than a year ago. The output of minerals remained the same as the previous month but was more than 6 per cent greater than in October, 1928.

in iron and steel and transportation equipment as contrasted with last year more than offset declines in textiles and lumber.

Wholesale trade in October was greater than in either the previous month or the corresponding period of last year. Declines from September in dry goods, men's clothing, and boots and shoes were more than offset by gains in groceries, meats, hardware, drugs, and furniture. Gains over a year ago were general in all enumerated lines, except men's clothing, which showed a decline.

MANUFACTURING PRODUCTION BY MAJOR GROUPS

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



COMMODITY STOCKS

Stocks of commodities held at the end of October showed gains over both the preceding month and October a year ago, the increases over both periods being due to larger holdings of raw materials. Manufactured goods in the hands of manufacturers were held in smaller quantities than in the preceding month and showed no change from a year ago.

SALES

The general index of unfilled orders for manufactured goods showed a decline from the previous month but was greater than a year ago. Declines from the preceding month in the unfilled orders for textiles and lumber more than offset gains in iron and steel and transportation equipment, principally railroad. Gains

The volume of sales transacted by department stores was substantially greater than in either the preceding month or October, 1928. The value of merchandise stocks held by department stores at the end of the month, though showing a gain over the preceding month, showed no change from a year ago.

Sales by mail-order houses were considerably larger than in either the preceding month or October of last year. Ten-cent chain stores also registered large gains in sales volume as compared with both periods. The volume of business reported by grocery and drug chains was likewise greater in October than in either the preceding month or the corresponding period of a year ago.

PRICES

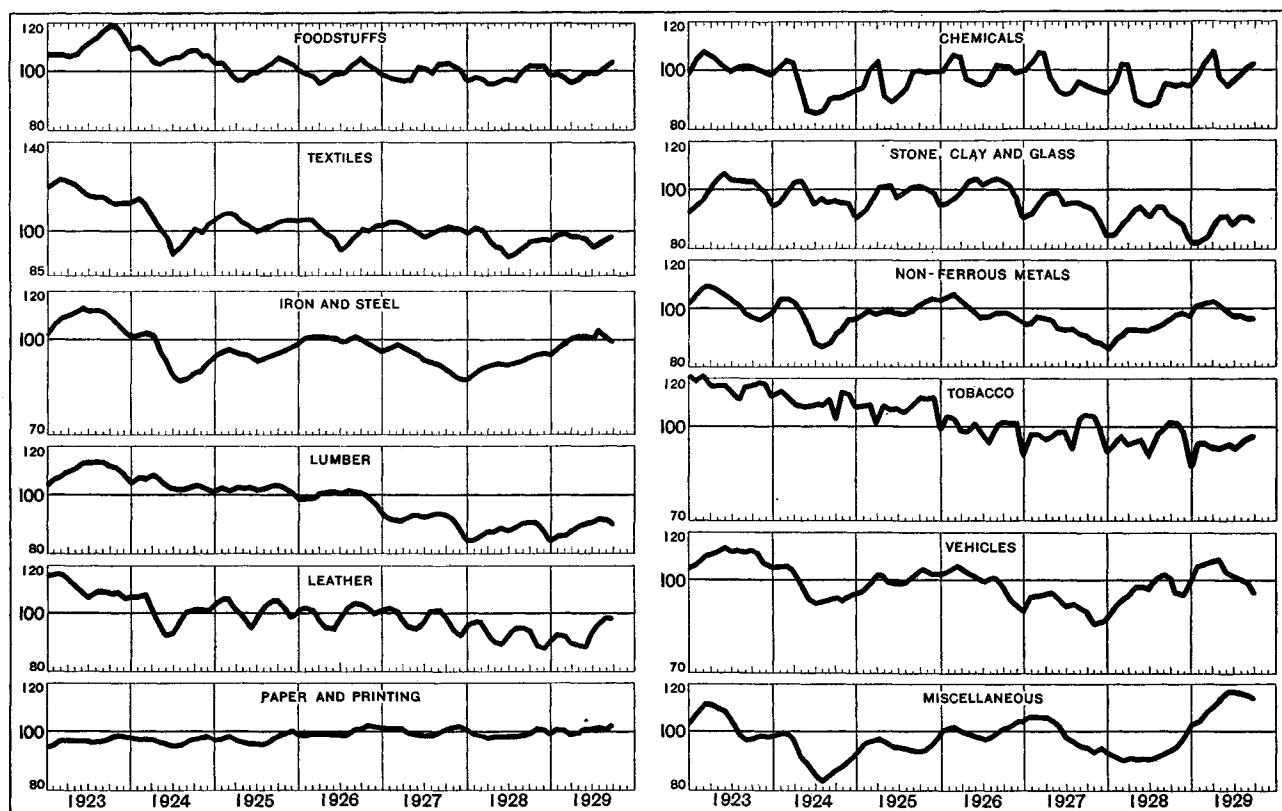
The general level of wholesale prices showed a decline of 2 per cent in October from both the preceding month and the corresponding period of last year. Prices for all major groups of commodities were either lower than in September or showed no change except fuel and lighting, which advanced. Wholesale prices for all groups were lower or unchanged from a year ago, except metals, building materials, and certain miscellaneous items, which advanced.

Classified according to condition wholesale prices for semimanufactures were unchanged from September and showed a gain of 1 per cent over a year ago. Finished manufactures declined 1 per cent from September and 3 per cent from last year. Raw materials showed a decline of 2 per cent from the previous month and no change from a year ago.

than in October, 1928. Increased employment was registered, as compared with September, in factories producing foods, textiles, chemicals, and tobacco products, but the gains were insufficient to offset decreased employment reported by factories producing iron and steel, lumber, stone, clay, and glass, and vehicles. The principal declines from the previous month, amounting to 2 per cent or more, were registered in vehicles and stone, clay, and glass. The gains over a year ago in factory employment were general, increases of 5 per cent or more being registered in factories producing iron and steel, chemicals, and certain miscellaneous products, including automobile tires. Declines in factory employment were reported however, from last year in factories producing stone, clay, and glass products, tobacco products, and vehicles, principally automotive.

FACTORY EMPLOYMENT, BY GROUPS

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



Farm prices, though declining from the previous month, were more than 2 per cent above the level which prevailed a year ago. The cost of living index showed no change from either the preceding month or the corresponding month of last year. As compared with a year ago, gains in food costs were offset by declines in shelter, clothing, light, and sundries.

EMPLOYMENT

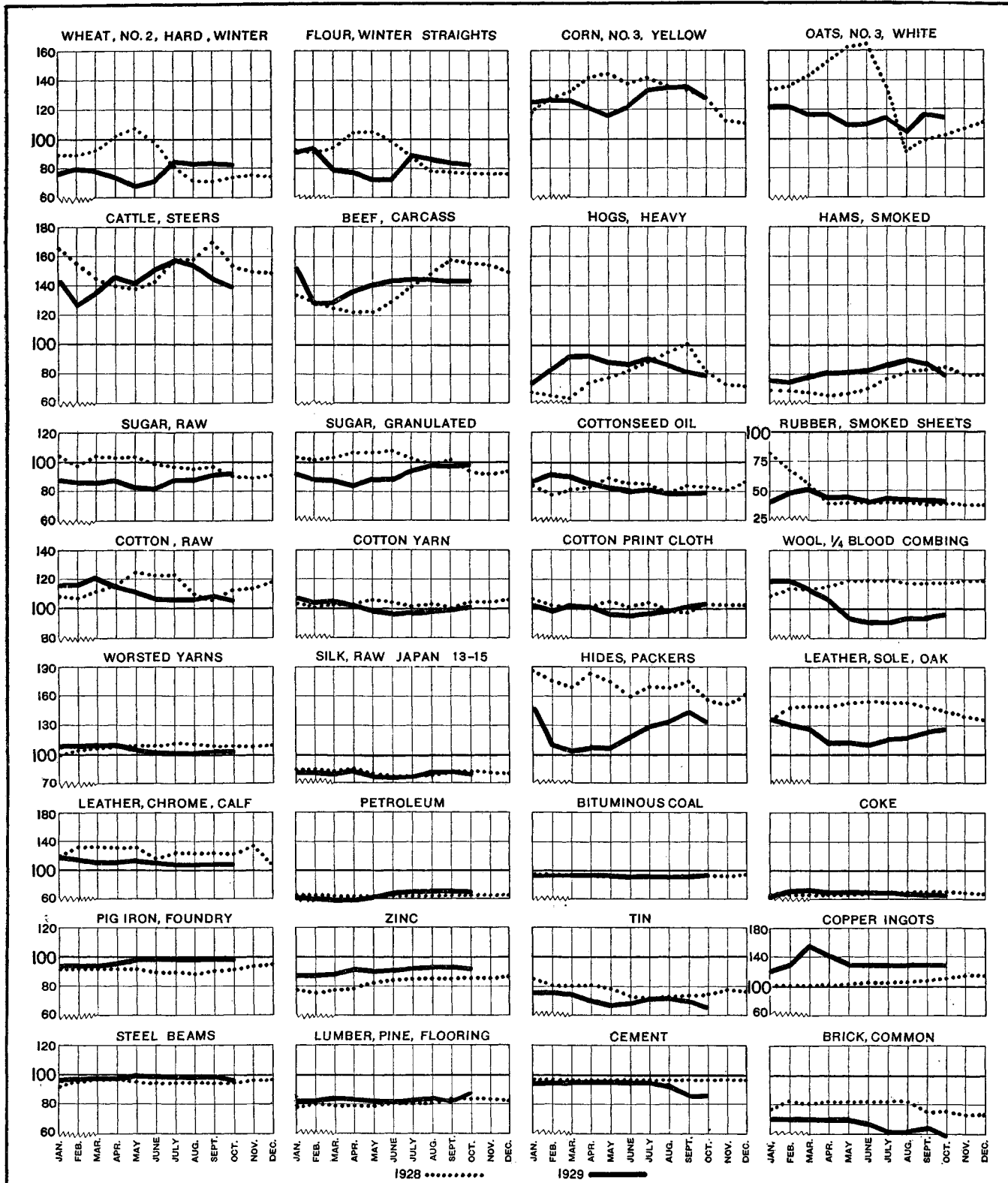
Factory employment, as reflected by the general index, showed a decline from the preceding month amounting to 1 per cent, but was 2 per cent greater

than in October, 1928. Increased employment was registered, as compared with September, in factories producing foods, textiles, chemicals, and tobacco products, but the gains were insufficient to offset decreased employment reported by factories producing iron and steel, lumber, stone, clay, and glass, and vehicles. The principal declines from the previous month, amounting to 2 per cent or more, were registered in vehicles and stone, clay, and glass. The gains over a year ago in factory employment were general, increases of 5 per cent or more being registered in factories producing iron and steel, chemicals, and certain miscellaneous products, including automobile tires. Declines in factory employment were reported however, from last year in factories producing stone, clay, and glass products, tobacco products, and vehicles, principally automotive.

Factory pay-roll payments in October were likewise 1 per cent lower than in the preceding month, but showed a gain of 3 per cent over October, 1928. Pay-roll payments were larger than in September in factories producing food products, textiles, paper and printing, chemicals, nonferrous metals, and tobacco products. Factory pay-roll payments were larger than in October, 1928, in all groups except stone, clay, and glass, nonferrous metals, tobacco products, and vehicles, which declined, and textiles, which showed no change.

WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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



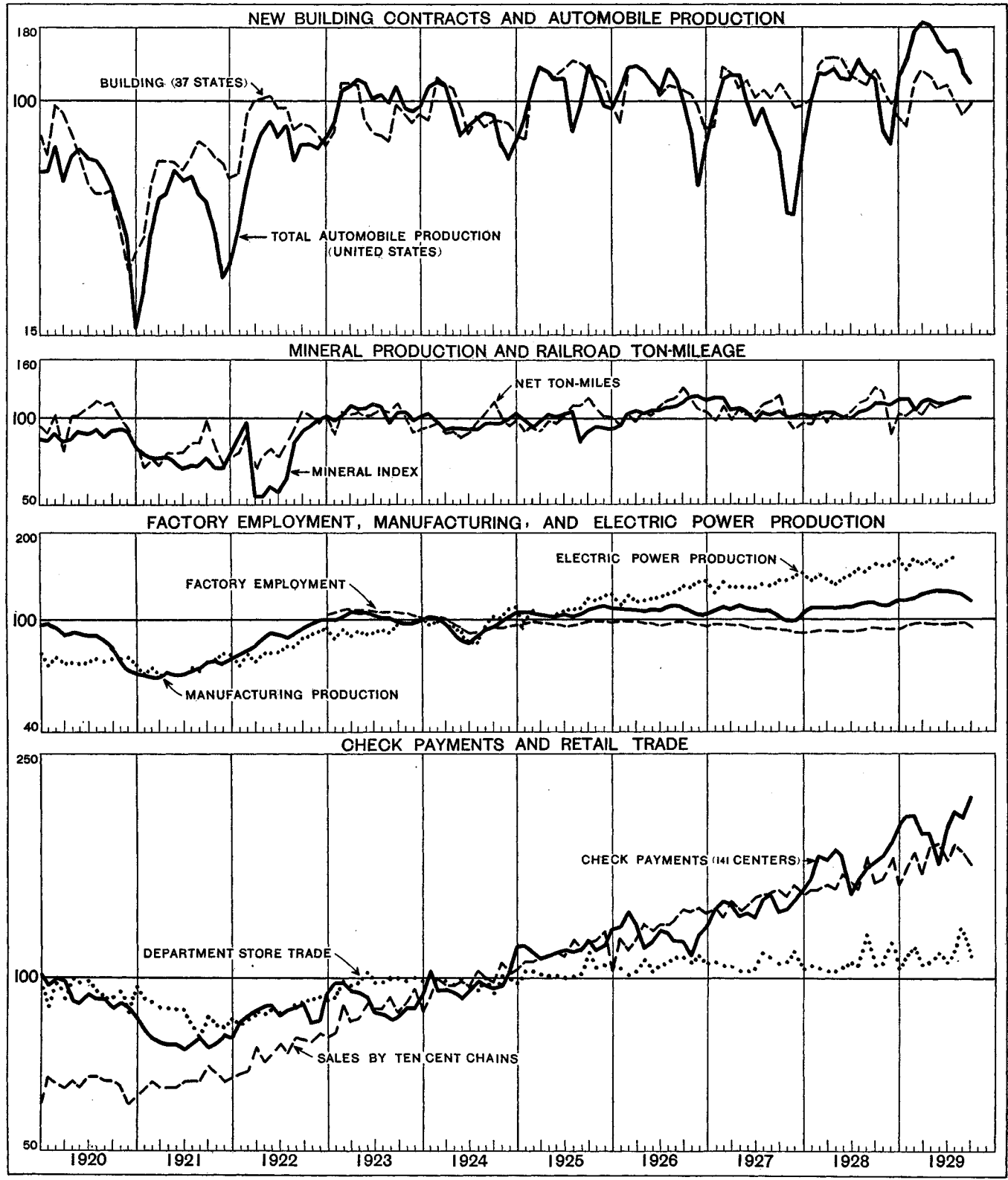
WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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					
		September, 1929	October, 1929	October, 1928	1926 average=100					
					August, 1929	September, 1929	October, 1929	September, 1928	October, 1928	
FARM PRODUCTS—AVERAGE PRICE TO PRODUCER										
Wheat.....	Bushel.....	1.121	1.115	.987	82	83	83	70	73	
Corn.....	Bushel.....	.972	.919	.847	137	139	132	136	121	
Potatoes.....	Bushel.....	1.355	1.382	.580	75	73	74	35	31	
Cotton.....	Pound.....	.182	.175	.181	119	121	116	117	120	
Cottonseed.....	Ton.....	31.03	31.40	34.08	120	114	115	114	125	
Cattle, beef.....	Pound.....	.0922	.0892	.0963	149	143	138	154	149	
Hogs.....	Pound.....	.0953	.0910	.0955	87	81	77	95	81	
Lambs.....	Pound.....	.1108	.1097	.1157	98	96	95	103	100	
FARM PRODUCTS—MARKET PRICE										
Wheat, No. 1, northern spring (Minneapolis).....	Bushel.....	1.35	1.31	1.16	85	85	83	75	73	
Wheat, No. 2, red, winter (St. Louis).....	Bushel.....	1.35	1.32	1.44	85	87	85	94	93	
Wheat, No. 2, hard, winter (Kansas City).....	Bushel.....	1.24	1.22	1.10	83	83	82	72	74	
Corn, No. 3, yellow (Chicago).....	Bushel.....	1.01	.95	.96	135	135	127	133	128	
Oats, No. 3, white (Chicago).....	Bushel.....	.48	.47	.42	105	117	115	100	102	
Barley, No. 2, (Minneapolis).....	Bushel.....	.60	.59	.63	95	94	92	98	98	
Rye, No. 2, (Minneapolis).....	Bushel.....	.97	.97	.94	107	105	105	102	102	
Cotton, middling upland (New York).....	Pound.....	.189	.186	.196	106	108	106	105	112	
Wool, 1/4 blood combing, Ohio and Pennsylvania fleeces (Boston).....	Pound.....	.43	.44	.54	93	93	96	117	117	
Cattle, steers, good to choice, corn fed (Chicago).....	Cwt.....	13.800	13.313	14.625	154	145	140	170	154	
Hogs, heavy (Chicago).....	Cwt.....	9.955	9.650	10.030	86	81	78	101	81	
Sheep, ewes (Chicago).....	Cwt.....	4.675	4.625	5.350	78	71	70	83	81	
Sheep, lambs (Chicago).....	Cwt.....	12.550	12.094	13.075	94	92	88	103	95	
FOOD										
Flour, standard patents (Minneapolis).....	Barrel.....	7.169	6.905	6.410	87	85	82	78	76	
Flour, winter straights (Kansas City).....	Barrel.....	6.100	6.006	5.588	86	84	83	78	77	
Sugar, 96° centrifugal (New York).....	Pound.....	.040	.040	.039	88	92	93	97	91	
Sugar, granulated, in barrels (New York).....	Pound.....	.053	.054	.052	98	97	98	102	94	
Cottonseed oil, prime yellow (New York).....	Pound.....	.093	.093	.099	79	78	79	84	83	
Beef, fresh, carcass, good native steers (Chicago).....	Pound.....	.236	.236	.255	145	144	144	158	155	
Beef, fresh, carcass, steers (New York).....	Pound.....	.250	.238	.282	147	147	139	166	165	
Pork smoked hams (Chicago).....	Pound.....	.267	.242	.260	89	87	79	83	84	
Butter, creamery, 92 score (New York).....	Pound.....	.46	.46	.48	96	102	102	109	107	
Oleomargarine, standard, uncolored (Chicago).....	Pound.....	.235	.235	.235	103	103	103	96	103	
TEXTILES										
Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston).....	Pound.....	.357	.359	.372	97	100	100	100	104	
Cotton-print cloth 64 x 60-38 1/2"-5.35-yards to pound.....	Yard.....	.076	.078	.078	100	101	103	98	103	
Cotton sheeting, brown 4/4 Trion (New York).....	Yard.....	.086	.087	.090	90	93	94	96	96	
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....	Pound.....	1.475	1.475	1.575	101	103	103	110	110	
Women's dress goods, French, 39 inches, at mills, serge.....	Yard.....	.975	.975	.975	94	94	94	96	94	
Suitings, unfinished worsted—13-ounce, mill.....	Yard.....	1.901	1.901	2.008	95	95	95	100	100	
Suitings, serge, 11 ounce, 56-58 inch.....	Yard.....	1.959	1.959	1.998	90	90	90	92	92	
Silk, Japan, 13-15.....	Pound.....	5.122	4.925	5.145	82	83	80	82	83	
Hosiery, women's pure silk, mill.....	Dozen pair.....	9.250	9.250	9.500	80	80	80	85	82	
LEATHER										
Hides, green salted, packers' heavy native steers (Chicago).....	Pound.....	.196	.186	.219	134	140	132	175	156	
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....	Pound.....	.204	.197	.246	114	118	114	159	142	
Leather, chrome calf, dull or bright "B" grades (Boston).....	Square foot.....	.490	.490	.550	108	108	108	125	121	
Leather, sole, oak, scoured backs, heavy (Boston).....	Pound.....	.535	.545	.630	119	122	124	148	144	
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	102	103	
FUEL										
Coal, bituminous, mine-run (composite price).....	Net ton.....	3.930	3.961	4.020	91	91	92	93	93	
Coal, bituminous prepared sizes (composite price).....	Net ton.....	4.437	4.525	4.639	90	93	94	94	97	
Coal, anthracite, chestnut (composite price).....	Long ton.....	12.924	12.999	13.040	93	94	94	95	95	
Coke, Connellsville (range of prompt and future), furnace—at ovens.....	Short ton.....	2.700	2.700	2.910	67	66	66	70	71	
Petroleum, crude, Kansas-Oklahoma—at wells.....	Barrel.....	1.300	1.300	1.210	69	69	69	64	64	
METALS										
Pig iron, foundry No. 2, northern (Pittsburgh).....	Long ton.....	20.260	20.260	18.860	98	98	98	90	92	
Pig iron, basic, valley furnace.....	Long ton.....	18.500	18.500	17.100	100	100	100	87	92	
Steel billets, Bessemer (Pittsburgh).....	Long ton.....	35.000	35.000	32.800	100	100	100	91	94	
Copper ingots, electrolytic, early delivery (New York).....	Pound.....	.1778	.1778	.1520	129	129	129	107	110	
Brass, sheets, mill.....	Pound.....	.233	.233	.199	122	122	122	102	105	
Lead, pig, desilverized, for early delivery (New York).....	Pound.....	.0689	.0687	.0650	80	82	82	77	77	
Tin, straits (New York).....	Pound.....	.4538	.4235	.4001	71	69	65	74	75	
Zinc, slab, western (St. Louis).....	Pound.....	.0680	.0674	.0625	93	93	92	85	85	
BUILDING MATERIAL AND MISCELLANEOUS										
Lumber, pine, southern, yellow flooring, mill.....	M feet.....	36.760	39.500	37.730	83	82	88	84	84	
Brick, common red, domestic building (New York).....	Thousand.....	10.500	9.500	12.500	62	64	58	76	76	
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district).....	Barrel.....	1.500	1.493	1.650	92	86	86	97	95	
Steel beams, mill (Pittsburgh).....	Cwt.....	1.950	1.900	1.850	100	100	97	95	95	
Rubber, smoked sheets (New York).....	Pound.....	.202	.196	.187	43	42	40	38	39	
Sulphuric acid, 86° (New York).....	Ton.....	15.500	15.500	15.500	107	107	107	107	107	
Wood pulp, sulphite, domestic, unbleached, news grade (New York).....	Cwt.....	2.600	2.600	2.525	91	91	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 BY PRINCIPAL BRANCHES OF COMMERCE AND INDUSTRY

TEXTILES

The consumption of wool in October showed gains over both the preceding month and October, 1928. For the first 10 months of the year wool consumption showed a gain of 13 per cent over the same period of last year.

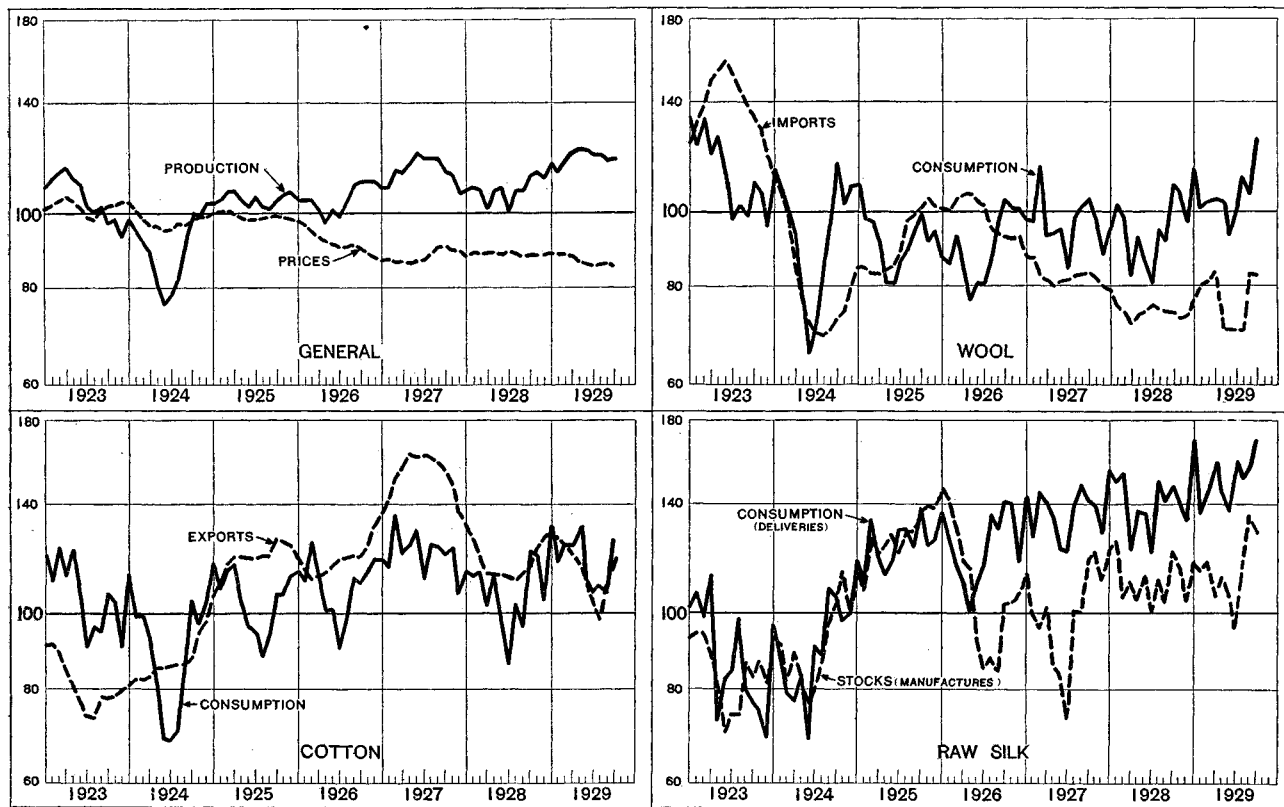
Cotton receipts into sight for the year to date were 9 per cent heavier than in the same period of 1928. Exports of raw cotton in October showed gains over both the previous month and October of last year, but for the year to date cotton exports were almost 10 per cent smaller than in the same period of last year. Consumption of cotton by domestic mills showed substantial gains over both the previous month and October a year ago, while for the first 10 months cotton

Silk machinery showed generally larger activity in the case of broad and narrow looms than in October, 1928, but spinning spindles were less active. Prices for silk averaged lower than in either the preceding month or October a year ago, while the composite price for silk goods, showing no change from the preceding month, was higher than a year ago. Rayon imports in October showed substantial gains over both the preceding month and October of last year. Prices for rayon, showing no change from the previous month, were lower than a year ago.

Imports of burlaps and unmanufactured fibers were larger in October than in either the previous month or the same period of 1928. For the first 10 months of

THE TEXTILE INDUSTRIES

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



consumption was 12 per cent larger than in the same period of 1928.

Silk imports were substantially larger in October than in either the previous month or the corresponding period of last year. For the calendar year to date imports of silk showed a gain of more than 10 per cent over the corresponding period of a year ago. Deliveries of silk to manufacturing establishments, indicative of silk consumption, were greater in October than in either prior comparative period.

the year burlap imports showed a gain of about 4 per cent and fiber imports an increase of 10 per cent over the corresponding period of a year ago.

Production of pyroxylin-coated textiles was larger than in September but lower than a year ago. For the first 10 months of the year textiles spread with pyroxylin showed a decline of 2 per cent from the same period last year. Unfilled orders for pyroxylin-coated textiles at the end of October were considerably lower than a year ago.

METALS

Pig-iron production in October was greater than in either the previous month or October of last year. During the calendar year to date the output of pig iron showed an increase of 16 per cent over the same period of last year. Prices for pig iron showed practically no change from the previous month.

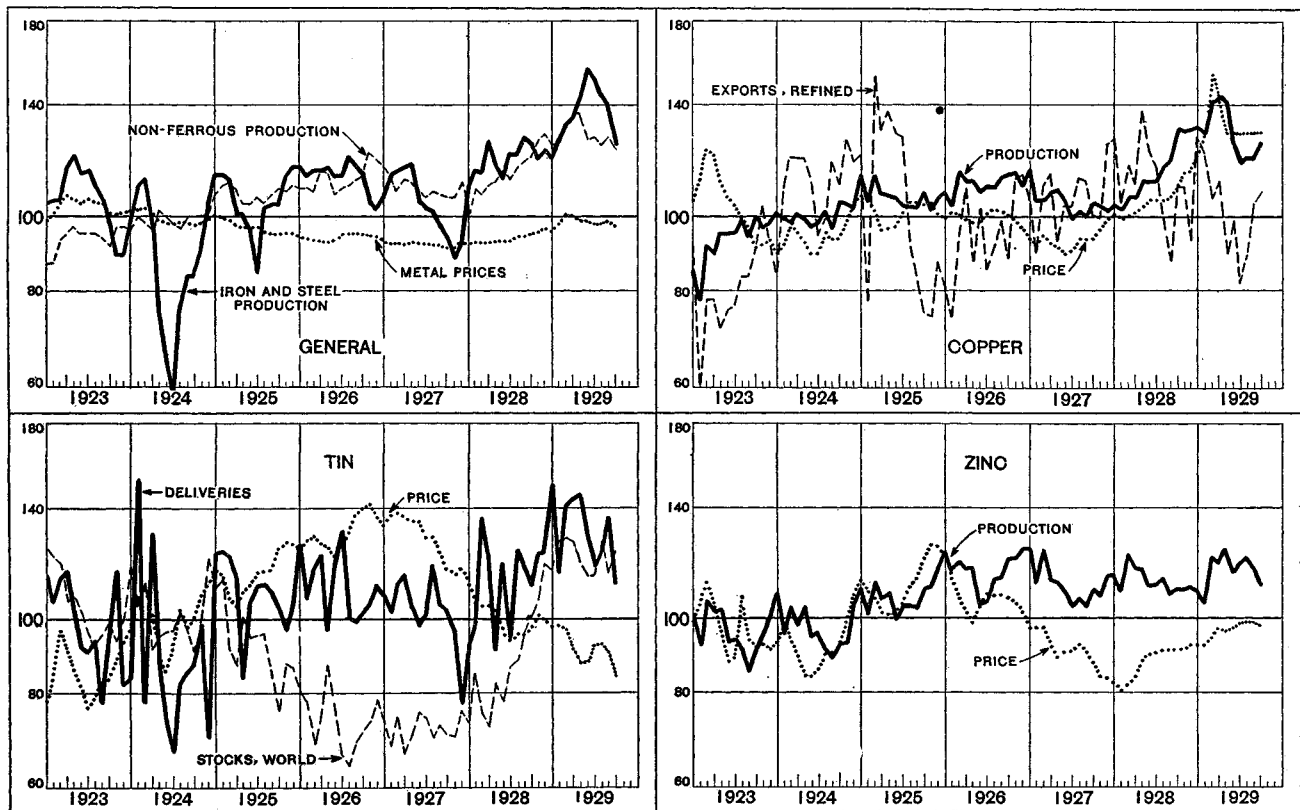
The production of steel ingots showed no change from the previous month but was lower than a year ago, while for the first 10 months of the year steel-ingot output was 15 per cent greater than in the corresponding period of 1928. Unfilled steel orders at the end of October were greater than at the end of either the preceding month or October, 1928.

first 10 months of the year structural-steel bookings showed a gain of 18 per cent over the same period of last year. New orders for fabricated steel plate, on the other hand, showed declines in October from both the previous month and October of last year, but for the year to date fabricated-steel plate bookings were about 2 per cent greater than in the same period of 1928. The output of malleable castings showed a gain over September but declined from a year ago, with new orders making similar comparisons. New orders for machine tools showed a gain in October as compared with the previous month.

Shipments and new orders of electric overhead cranes and electric hoists were substantially greater

THE METAL INDUSTRIES

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



The output of steel sheets by independent steel manufacturers showed a gain over the previous month but was lower than a year ago. Steel-sheet production for the first 10 months of the year was 7 per cent greater than in the same period of last year. Prices for steel were generally lower than in the previous month, but showed only slight change from a year ago.

New orders and production of steel castings were larger than in either the previous month or October of last year, while for the year to date similar conditions prevailed, when compared with the corresponding 10 months of 1928.

New bookings for fabricated structural steel also showed gains in October as compared with both the previous month and October of last year. For the

than in October, 1928. Shipments of electric industrial trucks and tractors were also larger than a year ago. Shipments of motorized fire-extinguisher equipment showed declines in October from both the previous month and the corresponding month of a year ago. Sales of mechanical stokers were substantially greater in October than in either the previous month or October, 1928.

Production of copper by domestic smelters was greater than in September but smaller than a year ago, while for the first 10 months of the year the smelter output of October showed a gain of almost 17 per cent over the same period of last year. Wholesale prices for copper showed no change from the previous month but were higher than a year ago.

FUELS

The production of bituminous coal showed gains over both the previous month and the same month of 1928. Bituminous-coal prices at the mine averaged higher than in either period.

The output of anthracite coal was larger than in September but somewhat smaller than a year ago. The production of coke, both types, was greater than in either the preceding month or the same period of last year.

AUTOMOBILES AND RUBBER

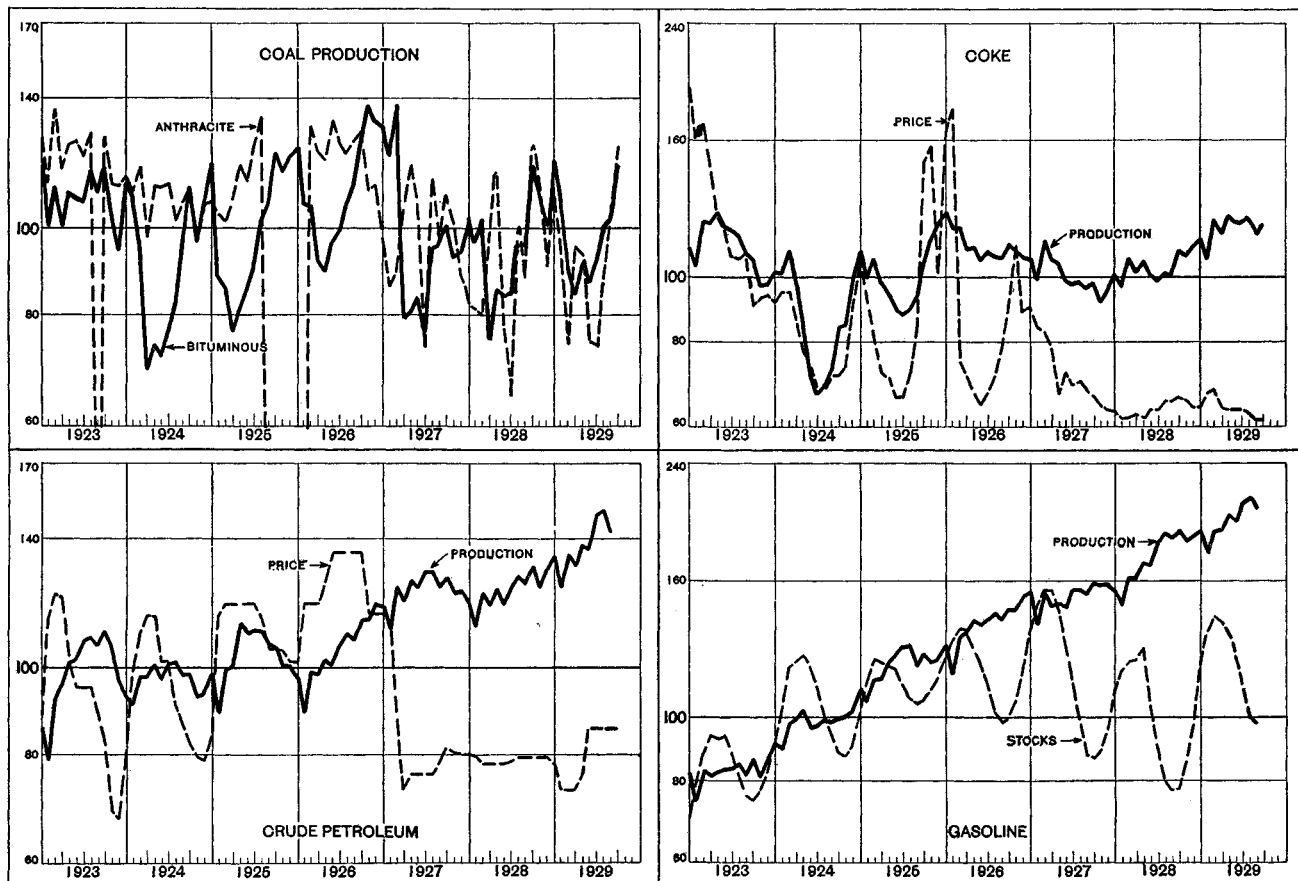
Automobile production in the United States showed declines from both the preceding month and October,

period of 1928. More animals were slaughtered under Federal inspection during October than in the previous month. For the first 10 months of the year declines in slaughtering were registered except for sheep, where an increase of about 5 per cent was shown over the same period of last year.

The output of sole leather in October showed a gain of 10 per cent over the preceding month but was lower by a like percentage than in October, 1928. For the first 10 months of the year sole-leather output showed a decline approximating 12 per cent. Exports of sole and belting leather, although greater than in September, were substantially lower than a year ago,

THE FUEL INDUSTRIES

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



1928, but for the year to date the total was 30 per cent greater than in the corresponding 10 months of 1928.

Imports of rubber were larger than in September but smaller than a year ago. For the first 10 months of the year rubber imports showed a gain of 34 per cent over the same period of last year.

HIDES AND LEATHER

Hide and leather imports in October were smaller than in the previous month but showed a gain over last year. Imports were 6 per cent smaller during the first 10 months of the year than in the corresponding

but for the first 10 months of the year exports showed a gain of 6 per cent over the same period of 1928.

The output of upper leather in September showed a decline from the preceding month but was greater than a year ago. October exports of upper leather were larger than those reported for September but showed a decline from a year ago, amounting to 19 per cent.

The production of shoes was larger in October than in either the previous month or the corresponding period of last year. For the first 10 months of the year shoe production showed a gain of almost 5 per cent over the same period of 1928.

BUILDING AND CONSTRUCTION

Building costs were generally lower in October than a year ago, as indicated by indexes of construction.

The volume of new building contracts awarded in October, measured in floor space, was greater than in the preceding month but showed a substantial decline from a year ago. Measured in value, new contracts let in October showed declines from both periods. For the first 10 months of the year new awards showed a decline of 12 per cent in value and 16 per cent in floor space from the corresponding period of 1928. The decline in total awards from a year ago was very largely due to a decrease in the 10-month's total for residential construction, amounting to almost \$700,000,000.

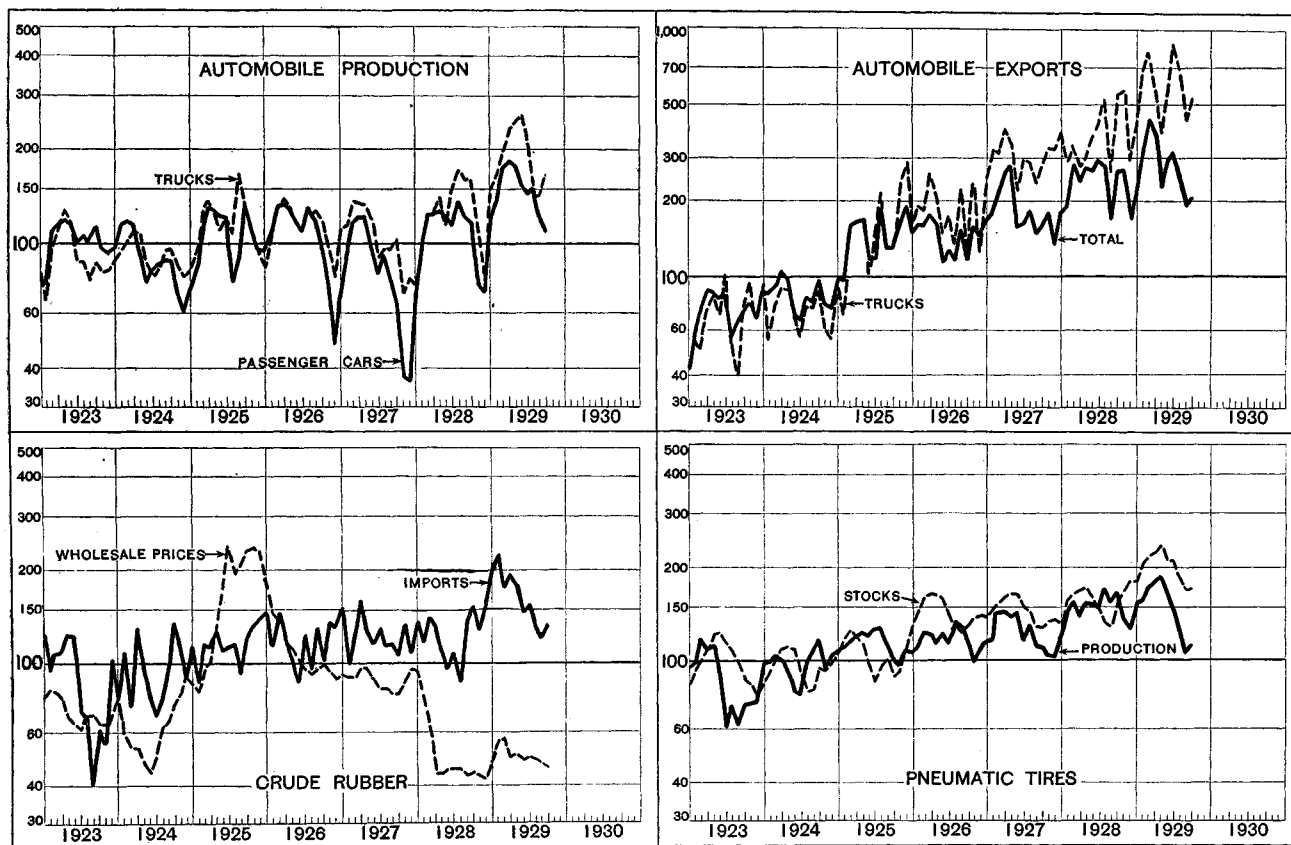
October, 1928, while for the first 10 months of the year a decrease of almost 3 per cent was registered from the same period of last year. Stocks of Portland cement at the mills at the end of October were somewhat more than 5 per cent greater than a year ago.

New contracts let for concrete paving were larger than in either the preceding month or October of last year, but for the calendar year to date a decline of almost 4 per cent was recorded from the same period of 1928.

Shipments of porcelain plumbing fixtures during October were lower than in either the previous month or the same month of last year, with new orders making similar comparisons. For the first 10 months of

THE AUTOMOBILE AND RUBBER INDUSTRIES

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



LUMBER AND LUMBER PRODUCTS

The production of Southern pine lumber showed a decline from the corresponding period of last year. The output of California redwood and California white pine, on the other hand, was greater than a year ago. Northern pine lumber production and the output of Northern hemlock were smaller than in October, 1928. The production of flooring, both oak and maple, showed declines from October of last year.

STONE, CLAY, AND GLASS PRODUCTS

The output of Portland cement during October showed declines from both the previous month and

the year shipments showed a decline of 36 per cent from the corresponding period of a year ago. Shipments of vitreous-china plumbing fixtures in October were likewise smaller than in either comparative period, while the total for the calendar year to date showed a decrease of 5 per cent from the same period of last year. New orders for terra cotta were smaller in October than in either the previous month or the same month of a year ago, while the total for the first 10 months, measured in tonnage, was 20 per cent less than in the same period of 1928. The production and shipments of sand-lime brick in October were smaller than in either the preceding month or the same period of 1928.

FOODSTUFFS AND TOBACCO

The estimated domestic crop of wheat was substantially lower than the production of last year. The visible supply at the end of October, both in the United States and Canada, was considerably larger than a year ago. Receipts and shipments of wheat at the principal primary domestic markets were smaller than a year ago. Prices were generally higher than a year ago.

The estimated corn crop for the current year was smaller than a year ago. The visible supply of corn at the end of October was substantially greater than a year ago. Receipts and shipments of primary

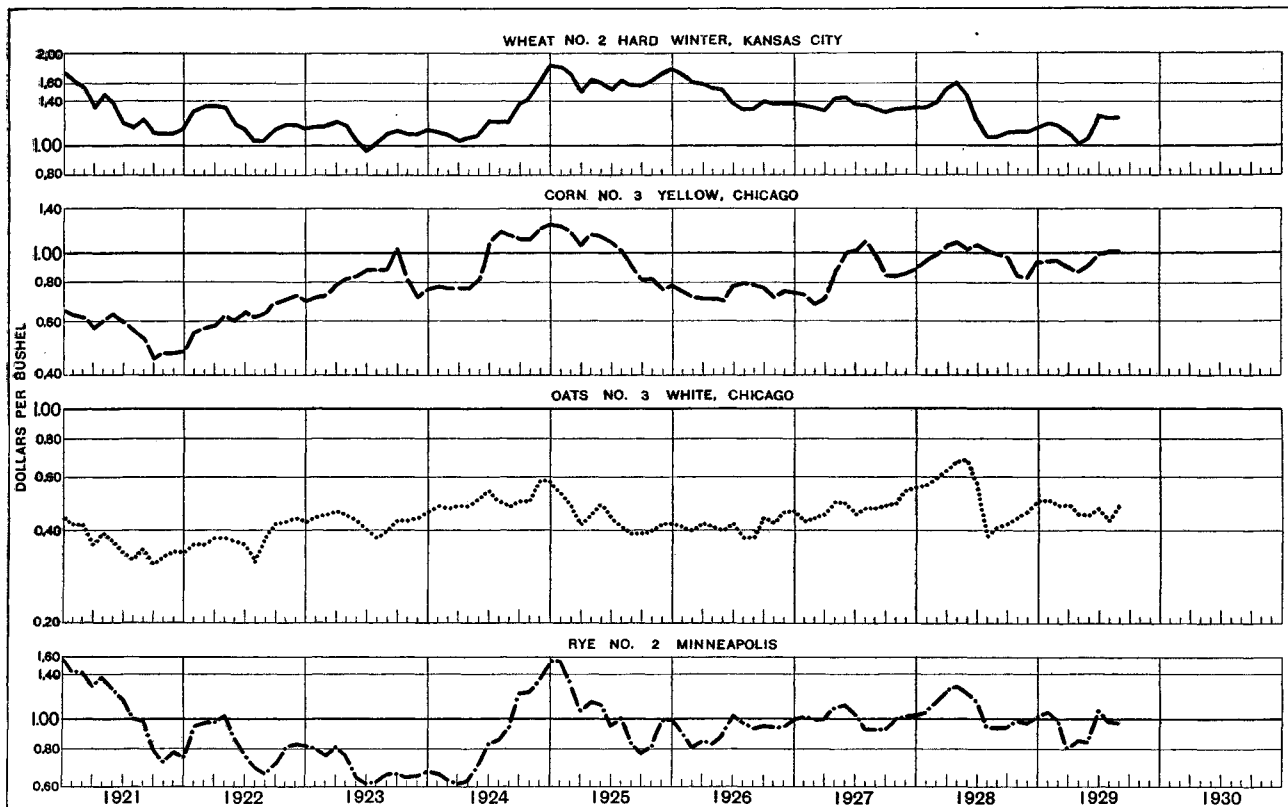
Receipts and shipments of hogs at primary markets were larger than last year, the output of pork products under Federal inspection also showing a gain over last year. Cold-storage holdings were substantially larger than at this time last year. Prices for hogs and pork were generally lower than a year ago.

Receipts of poultry at primary markets were greater than a year ago, while the total catch of fish at the principal fishing ports showed a substantial gain over October of last year. Storage holdings of fish and poultry were larger than a year ago.

The production of creamery butter was greater than a year ago, with storage holdings showing a substan-

MOVEMENT OF GRAIN PRICES

[Weighted price per bushel. October, 1929, is latest month plotted]



markets were larger than in October of last year. Corn prices were generally lower than a year ago.

The visible supply of oats and barley was greater than a year ago. Oat receipts at principal markets were greater than last year, while receipts of barley showed a decline.

Receipts and shipments of cattle at primary markets were lower than a year ago. The output of beef products under Federal inspection in October showed a gain over last year. Storage holdings at the end of October were considerably greater than a year ago. Prices for cattle and beef were generally lower than a year ago.

tial increase. Prices for butter were unchanged from the previous month but showed a decline from last year. The factory production of cheese was smaller than a year ago. Storage holdings of cheese at the end of October were smaller than last year. Wholesale prices for cheese were generally unchanged from the previous month but showed a decline from a year ago. Egg receipts at the principal markets were lower than a year ago, while storage holdings of case eggs showed a substantial decline from October of last year.

Coffee imports were larger than a year ago, while prices for coffee averaged lower. Tea imports were greater than a year ago, but prices for tea showed no change.

TRANSPORTATION

The movement of goods by rail during October, as reflected by freight-car loadings, showed a gain over the previous month but was fractionally lower than a year ago. For the first 10 months of the year freight-car loadings showed a gain of about 4 per cent over the same period of 1928. Net operating income of railroads during September was smaller than a year ago.

DISTRIBUTION MOVEMENT

The volume of trade transacted by mail-order houses and chain stores in October was generally greater than in either the preceding month or October of last year with the totals for the first 10 months of the year likewise showing gains over the corresponding period of

dividend payments showed a gain of 14 per cent over the same period of 1928. Prices for stocks showed a drastic decline from the preceding month but the October averages were above those which prevailed in October, 1928.

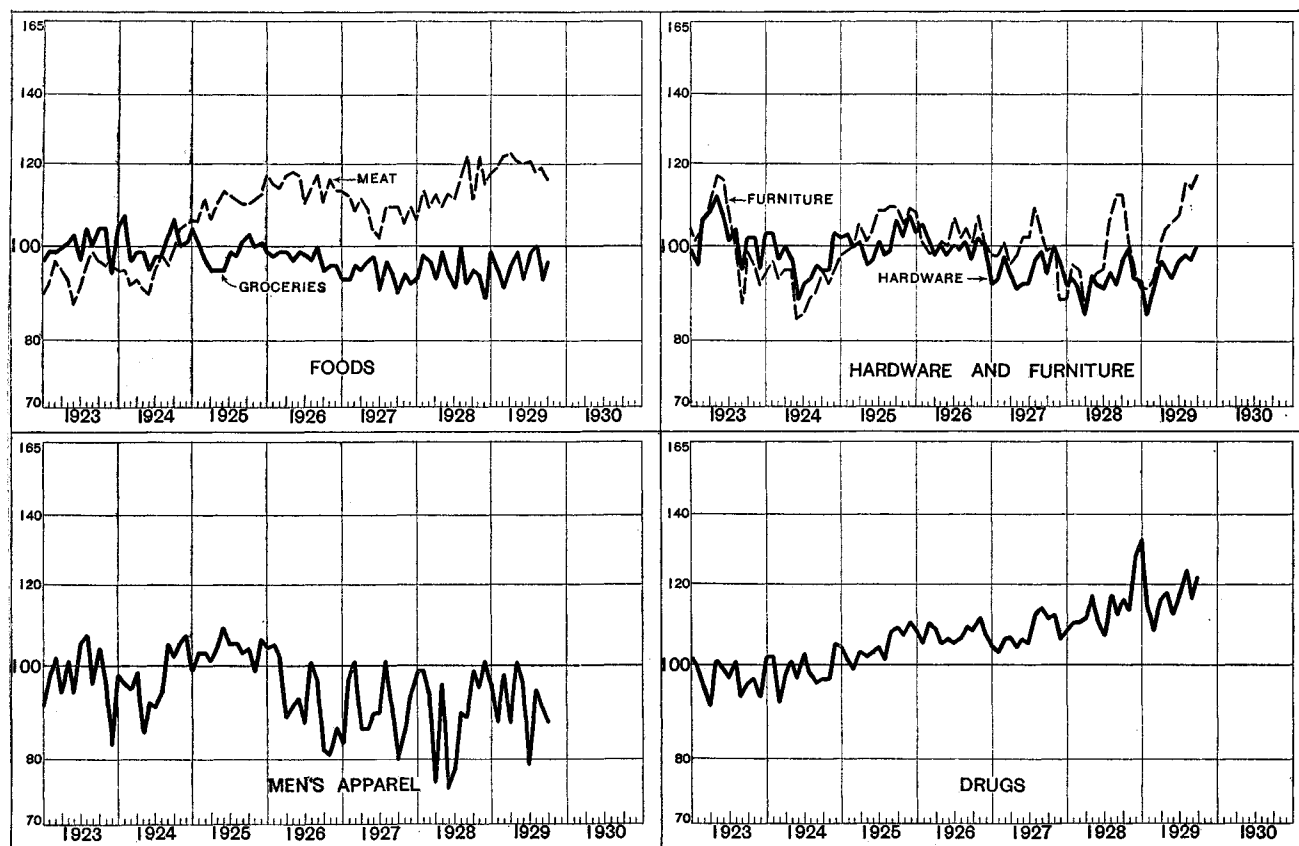
GOLD, SILVER, AND FOREIGN EXCHANGE

Domestic receipts of gold at the mint were slightly lower than a year ago but showed a large gain over the previous month. Gold imports continued to exceed those reported for the corresponding period of last year. Gold exports were still substantially smaller than the import movement.

The domestic production of silver was greater than in either the preceding month or October of last year.

WHOLESALE TRADE

[Relative numbers, monthly average 1923-1925 taken as 100. October, 1929, is latest month plotted. Curves are adjusted for seasonal variation]



1928. Advertising in newspapers and magazines in October also showed gains over both prior comparative periods, while expenditures for radio broadcasting by advertisers also showed gains over both periods.

BANKING AND FINANCE

Check payments were greater than in either the previous month or October a year ago. Loans and discounts of Federal reserve member banks reached a new high level during the month.

Dividend and interest payments were substantially greater than in either the preceding month or October of last year. For the first 10 months of the year

Exchange upon the principal foreign currencies showed only slight movement from the rates which prevailed in the previous month. Among the gains reported the English pound, Belgian franc, the Dutch guilder, the Japanese yen, and the Indian rupee were the most prominent; declines were registered in the Canadian dollar and Argentine peso. Contrasted with last year increases were registered in October in the British pound the Belgian franc, the Dutch guilder, the Swedish krone, the Swiss franc, and the Japanese yen, while declines were recorded in the Indian rupee, the Canadian dollar, the Argentine peso and the Brazilian milreis.

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 (-)	
			August	September	October	August	September	October	October, 1929, from September, 1929	October, 1929, from October, 1928
PRODUCTION										
TOTAL INDUSTRIAL										
Unadjusted, except for working days.....	125	81	110	115	117	121	123	119	-3.3	+1.7
Adjusted for seasonal variations.....	123	83	112	114	114	123	121	117	-3.3	+2.6
MANUFACTURING										
Total (adjusted for working days only).....	127	79	110	115	116	121	123	118	-4.1	+1.7
Total (adjusted for seasonal variations).....	128	82	113	115	114	124	122	117	-4.1	+2.6
Iron and steel.....	155	59	121	128	126	143	139	124	-10.8	-1.6
Textiles.....	121	77	107	107	112	120	116	118	+1.7	+5.4
Food products.....	110	90	90	95	98	99	98	97	-1.0	-1.0
Paper and printing.....	128	91	117	118	116	125	128			
Lumber.....	110	78	87	82	81	88				
Automobiles.....	166	47	133	139	122	146	136			
Leather and shoes.....	134	86	112	110	103	116	115	113	-1.7	+9.7
Cement, brick, and glass.....	143	92	126	130	122	142	143	141	-1.4	+15.6
Nonferrous metals.....	137	87	117	117	121	122	126	122	-3.2	+0.8
Petroleum refining.....	176	84	160	162	160	176	174			
Rubber tires.....	169	66	151	169	167	114	117	114	-2.6	-1.7
Tobacco manufactures.....	143	93	129	128	126	133	143	135	-5.6	+7.1
MINERALS										
Total (adjusted for working days only).....	128	84	110	115	122	121	127	126	-0.8	+3.3
Total (adjusted for seasonal variations).....	120	90	105	107	114	115	118	118	0.0	+6.8
Bituminous coal.....	125	77	91	94	99	97	101	101	0.0	+2.0
Anthracite coal.....	133	1	94	95	119	81	106	116	+9.4	-2.5
Crude petroleum.....	147	88	123	124	127	146	141	140	+0.7	+10.2
Iron-ore shipments.....	143	0	104	110	114	121	121	107	-11.6	-6.1
Copper.....	139	82	116	123	128	119	121	123	+1.7	+3.9
Zinc.....	127	93	120	114	110	127	124	112	-9.7	+1.8
Lead.....	125	75	107	115	108	107	119	115	-3.4	+6.5
Silver.....	123	85	87	79	79	106	89	92	+3.4	+16.5
ANIMAL PRODUCTS (Marketings)										
Total.....	124	79	97	92	102	100	99	105	+6.1	+2.9
Wool.....	421	14	195	54	35	268	128	52	-59.4	+48.6
Livestock.....	131	76	79	92	95	77	96	113	+17.7	+18.9
Poultry and eggs.....	148	67	80	76	86	89	83	86	+3.6	0.0
Dairy products.....	160	64	117	95	89	116	94	91	-3.2	+2.2
Fish.....	302	44	170	137	153	247	283	302	+6.7	+97.4
CROPS (Marketings)										
Total.....	252	45	115	178	252	135	180	246	+36.7	-2.4
Grains *.....	218	38	186	165	174	214	117	103	-12.0	-40.8
Vegetables *.....	199	60	83	133	151	88	145	171	+17.9	+13.2
Fruits *.....	266	43	165	206	266	130	173	245	-41.6	-7.9
Cotton products *.....	373	11	45	184	353	72	218	373	+71.1	+5.7
Miscellaneous crops *.....	266	18	116	206	208	102	207	212	+2.4	+1.9

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

INDEXES OF BUSINESS—Continued

Relative to 1923-1925 monthly average as 100	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			PER CENT INCREASE (+) OR DECREASE (-)	
			August	September	October	August	September	October	October, 1929, from September, 1929	October, 1929, from October, 1928
PRODUCTION—Continued										
FOREST PRODUCTS										
Total.....	112	74	89	77	87	92	80	93	+16.3	+6.9
Lumber.....	112	71	88	77	84	91	79	89	+12.7	+6.0
Pulpwood.....	151	54	82	68	108	77	74	118	+59.5	+9.3
Gum (rosin and turpentine) *.....	204	18	161	129	129	189	157	130	-17.2	+0.8
Distilled wood.....	148	65	78	70	93	100	90	104	+15.6	+11.8
NEW ORDERS										
Total.....	138	73	98	95	95	92	90			
Textiles.....	179	70	92	99	116	91	91			
Iron and steel.....	143	71	118	125	116	127	110			
Lumber.....	141	67	100	92	87	83	81			
Paper and printing.....	118	85	108	109	113	115	116			
Stone and clay products.....	129	75	97	93	119	85	89			
STOCKS										
Grand total.....	153	82	107	116	133	127	139	153	+10.1	+15.0
Total manufactured goods.....	125	88	115	111	111	115	113	111	-1.8	0.0
Foodstuffs.....	136	79	117	105	93	136	129	106	-16.3	+14.0
Textiles.....	138	78	125	118	113	122	115	116	+0.9	+2.7
Iron and steel.....	157	78	131	130	135	128	135	135	0.0	0.0
Nonferrous metals.....	140	74	121	125	123	125	135	140	+3.7	+11.4
Lumber.....	125	78	105	104	103	103	104	106	+1.9	+2.9
Stone, clay, etc.....	192	64	140	130	116	132	116	106	-8.6	-8.6
Leather.....	123	66	72	73	74	70	69	69	0.0	-6.8
Rubber.....	199	77	134	130	149	155	143	146	+2.1	-2.0
Paper.....	156	46	156	137	139	98	101	102	+1.0	-26.6
Chemicals and oils.....	125	84	91	97	103	101	107	111	+3.7	+7.8
Total raw materials.....	184	69	101	119	149	136	157	184	+17.2	+23.5
Foodstuffs.....	229	68	136	145	157	212	222	229	+3.2	+45.9
Textiles.....	202	43	65	95	149	71	111	173	+55.9	+16.1
Metals.....	136	54	92	116	133	105	111	119	+7.2	-10.5
Chemicals and oils.....	153	73	93	108	139	97	115	135	+17.4	-2.9
UNFILED ORDERS										
Total.....	167	67	75	75	72	76	77	74	-3.9	+2.8
Textiles.....	154	59	66	69	73	67	64	59	-7.8	-19.2
Iron and steel.....	157	66	75	75	75	76	79	80	+1.3	+6.7
Transportation equipment.....	204	49	60	60	62	79	86	94	+9.3	+51.6
Lumber.....	142	56	88	84	69	86	84	66	-21.4	-4.3
WHOLESALE TRADE										
Grand total, all classes.....	124	82	110	111	112	113	114	115	+0.9	+2.7
Groceries.....	119	83	101	100	108	101	101	110	+8.9	+1.9
Meats.....	130	87	118	130	125	120	127	129	+1.6	+3.2
Dry goods.....	128	70	110	105	99	111	110	102	-7.3	+3.0
Men's clothing.....	167	43	148	137	123	156	139	110	-20.9	-10.6
Boots and shoes.....	130	68	119	110	108	130	129	114	-11.6	+5.6
Hardware.....	118	76	95	100	108	99	105	112	+6.7	+3.7
Drugs.....	141	88	115	119	134	121	124	141	+13.7	+5.2
Furniture.....	140	72	108	126	133	117	129	140	+8.5	+5.3
RETAIL TRADE										
Mail order houses (2 houses).....	193	68	141	155	194	184	193	242	+25.4	+24.7
CHAIN STORES:										
Ten-cent.....	305	62	136	144	164	161	147	176	+19.7	+7.3
Grocery.....	257	77	204	202	230	233	216	257	+19.0	+11.7
Drug.....	224	82	169	164	169	214	200	209	+4.5	+23.7
DEPARTMENT STORES:										
Sales.....	187	71	85	107	124	90	109	128	+17.4	+3.2
Stocks.....	117	83	97	103	112	96	103	112	+8.7	0.0

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

INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			PER CENT INCREASE (+) OR DECREASE (-)	
			August	September	October	August	September	October	October, 1929, from September, 1929	October, 1929, from October, 1928
EMPLOYMENT										
(Relative to 1926 monthly average as 100)										
Number employed, by industries:										
Total, all classes.....	111	92	94	95	96	99	99	98	-1.0	+2.1
Food products.....	119	95	97	100	102	99	102	104	+2.0	+2.0
Textiles.....	122	91	92	94	97	95	97	98	+1.0	+1.0
Iron and steel.....	113	86	92	93	94	100	101	100	-1.0	+6.4
Lumber.....	113	85	89	90	90	92	91	90	-1.1	0.0
Leather.....	117	88	95	95	94	97	98	98	0.0	+4.3
Paper and printing.....	103	94	98	98	100	101	103	103	0.0	+3.0
Chemicals.....	108	85	88	95	95	98	102	103	+1.0	+8.4
Stone, clay, and glass.....	106	82	94	93	92	91	91	89	-2.2	-3.3
Metal products other than iron and steel.....	109	86	93	94	96	97	96	96	0.0	0.0
Tobacco products.....	120	86	97	99	101	95	96	97	+1.0	-4.0
Vehicles.....	113	84	100	102	100	101	100	95	-5.0	-5.0
Miscellaneous.....	116	83	90	92	93	115	115	113	-1.7	+21.5
Amount of pay roll, by industries:										
Total, all classes.....	109	84	94	95	99	102	103	102	-1.0	+3.0
Food products.....	114	93	98	101	103	102	105	106	+1.0	+2.9
Textiles.....	124	87	90	93	100	95	98	100	+2.0	0.0
Iron and steel.....	111	75	93	93	98	105	104	104	0.0	+6.1
Lumber.....	108	82	90	92	94	93	95	95	0.0	+1.1
Leather.....	123	79	97	96	93	101	101	97	-4.0	+4.3
Paper and printing.....	109	86	99	101	103	104	108	109	+0.9	+5.8
Chemicals.....	108	86	93	97	99	102	105	107	+1.9	+8.1
Stone, clay, and glass.....	106	78	94	92	94	89	90	89	-1.1	-5.3
Metal products other than iron and steel.....	112	81	97	98	105	102	101	102	+1.0	-2.9
Tobacco products.....	119	81	94	98	101	96	99	100	+1.0	-1.0
Vehicles.....	120	84	102	101	106	109	105	101	-3.8	-4.7
Miscellaneous.....	119	81	89	92	93	113	115	114	-0.9	+22.6
PRICE INDEX NUMBERS										
FARM PRICES										
(Relative to 1909-1914 average as 100)										
All groups.....	152	125	139	141	137	143	141	140	-0.7	+2.2
Grains.....	178	108	120	117	116	129	131	128	-2.3	+10.3
Fruits and vegetables.....	253	108	137	127	114	160	160	168	+5.0	+47.4
Meat animals.....	167	98	162	174	160	165	156	151	-3.2	-5.6
Dairy and poultry.....	166	122	136	145	150	141	146	151	+3.4	+0.7
Cotton and cottonseed.....	252	81	153	142	147	146	146	141	-3.4	-4.1
Unclassified.....	108	79	87	85	83	86	85	89	+4.7	+7.2
WHOLESALE PRICES										
Department of Labor Indexes										
(Relative to 1926 monthly average as 100)										
All commodities.....	105	94	99	100	98	98	98	96	-2.0	-2.0
Farm products.....	114	94	107	109	104	107	107	104	-2.8	0.0
Food, etc.....	107	85	104	107	102	103	103	101	-1.9	-1.0
Hides and leather products.....	127	98	121	121	118	110	111	111	0.0	-5.9
Textile products.....	114	93	96	96	96	93	93	93	0.0	-3.1
Fuel and lighting.....	112	81	85	85	85	81	81	82	+1.2	-3.5
Metals and metal products.....	113	97	100	101	101	104	104	104	0.0	+3.0
Building materials.....	116	90	95	95	95	97	98	98	0.0	+3.2
Chemicals.....	104	93	95	95	96	94	94	94	0.0	-2.1
House-furnishing goods.....	111	97	97	97	97	97	97	97	0.0	0.0
Miscellaneous.....	127	79	79	80	80	81	82	81	-1.2	+1.3
Classified by state of manufacture:										
Semimanufactured articles.....	128	94	97	97	97	96	98	98	0.0	+1.0
Finished products.....	103	93	99	101	99	97	97	96	-1.0	-3.0
Raw materials.....	109	93	99	101	97	99	99	97	-2.0	0.0
Nonagricultural commodities.....	106	93	97	98	96	94	95	94	-1.1	-2.1
Commercial Indexes										
(Relative to 1926 monthly average as 100)										
Dun's.....	106	85	103	103	102	102	102	101	-1.0	-1.0
Bradstreet's.....	112	95	103	102	101	98	98	96	-2.0	-5.0

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 (-)	
			August	September	October	August	September	October	October, 1929, from September, 1929	October, 1929, from October, 1928
PRICE INDEX NUMBERS—Contd.										
COST OF LIVING										
National Industrial Conference Board Indexes (Relative to July, 1914)										
All items weighted.....	172	158	161	163	163	163	163	163	0.0	0.0
Food (Department of Labor).....	167	141	154	158	157	160	161	161	0.0	+2.5
Shelter.....	186	159	161	161	161	159	160	160	0.0	-0.6
Clothing.....	177	160	173	174	173	169	168	168	0.0	-2.9
Fuel and light (combined).....	179	156	159	160	161	158	159	161	+1.3	0.0
Fuel.....	208	174	178	180	182	177	180	182	+1.1	0.0
Light.....	123	118	121	121	121	120	120	120	0.0	-0.8
Sundries.....	176	168	171	171	171	169	169	170	+0.6	-0.6

PAINT, VARNISH, AND LACQUER PRODUCTS¹

MONTH	1928				1929			
	Total sales	Trade sales	Industrial sales	Not specified	Total sales	Trade sales	Industrial sales	Not specified
January.....	\$23,211,240	\$8,546,848	\$8,419,843	\$6,244,549	\$24,935,873	\$8,973,955	\$9,743,238	\$6,218,680
February.....	24,565,971	9,700,662	8,756,602	6,108,707	25,133,727	9,283,254	9,787,126	6,063,347
March.....	29,765,549	11,717,124	10,307,140	7,741,285	32,260,827	12,163,386	11,514,538	8,582,903
April.....	30,537,081	12,539,099	9,965,905	8,032,077	34,840,099	13,910,259	12,067,469	8,862,371
May.....	36,498,142	15,887,801	11,007,815	9,602,526	37,619,643	15,909,955	12,446,351	9,263,337
June.....	33,585,807	14,020,418	10,799,480	8,765,909	33,569,795	13,644,988	11,114,415	8,810,392
July.....	26,694,736	9,478,450	9,365,880	7,840,406	28,456,902	9,613,489	10,386,267	8,457,146
August.....	30,901,278	11,332,886	11,411,735	8,156,657	34,428,941	13,501,266	11,982,991	8,944,684
September.....	27,967,064	10,204,927	10,330,227	7,431,910	29,694,051	10,804,088	10,710,541	8,179,422

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census and represents the total sales of paint, varnish, and lacquer products as reported by 388 firms. Trade sales include shipments to dealers, jobbers, painters, and consumers. Industrial sales are those to manufacturers, railroads, the Government, marine, and all other similar users.

AUTOMOBILE FINANCING¹

MONTH	TOTAL		NEW CARS FINANCED		USED CARS FINANCED		UNCLASSIFIED	
	Number of cars	Volume in dollars	Number of cars	Volume in dollars	Number of cars	Volume in dollars	Number of cars	Volume in dollars
January.....	147,008	\$71,939,872	76,157	\$47,188,573	66,400	\$22,702,351	4,451	\$2,048,948
February.....	177,960	85,263,846	101,712	60,485,230	71,520	22,597,517	4,728	2,181,099
March.....	290,422	136,287,410	164,648	96,505,505	118,281	36,526,060	7,493	3,255,845
April.....	363,339	168,844,566	203,224	119,630,526	151,498	45,381,285	8,617	3,832,755
May.....	381,810	176,227,801	210,303	123,691,554	163,500	49,048,413	8,007	3,487,834
June.....	369,965	171,883,530	202,457	120,771,728	160,736	48,116,003	6,775	2,995,799
July.....	363,226	165,310,672	205,369	117,936,478	151,555	44,704,872	6,302	2,669,322
August.....	323,429	151,595,703	177,204	107,052,134	141,598	42,499,925	4,627	2,043,644
September.....	282,818	131,723,060	155,075	92,008,795	123,445	37,853,924	4,298	1,860,341
Total (9 months).....	2,699,981	1,259,076,460	1,496,149	885,270,523	1,148,533	349,430,350	55,298	24,375,587

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census, from reports of 369 automobile-financing organizations. Forty-six of the smaller firms found it impossible to segregate their operations, their totals being shown in the unclassified group. This summary is subject to revision in subsequent issues as reports are received from additional firms.

FACTORY EMPLOYMENT: INDEXES BY GROUPS ¹

[Monthly average, 1923-1925=100. Without seasonal adjustment]

YEAR AND MONTH	Total	Iron and steel	Machinery	Textiles	Food products	Paper and printing	Lumber and products	Transportation equipment		Leather and products	Cement, clay, and glass	Non-ferrous metals	Chemicals		Rubber products	Tobacco products
								Group	Automobiles				Group	Petroleum refining		
1919																
January	105.4	112.1	121.0	90.7	113.1	96.1	83.3	92.9	74.3	104.3	68.6	108.1	129.8			126.1
February	101.9	106.0	118.2	84.7	110.2	95.4	83.6	91.5	75.1	104.5	66.1	107.9	127.4			124.6
March	102.3	103.4	114.5	87.4	109.3	95.5	86.2	91.0	76.6	103.9	70.8	107.6	118.8			124.8
April	102.6	100.1	113.2	91.1	105.4	94.3	86.2	91.1	79.7	102.4	81.8	107.5	111.6			122.4
May	103.1	96.4	110.2	94.9	103.5	92.7	88.4	91.9	81.2	104.0	91.3	110.0	105.8			120.6
June	104.2	95.5	107.9	97.9	104.4	95.0	88.9	93.3	84.9	105.0	94.2	112.0	104.0			111.2
July	106.6	99.8	108.7	102.2	106.4	96.3	92.0	96.3	88.7	105.7	87.1	117.5	100.2			97.6
August	109.2	104.2	114.2	102.3	108.0	97.2	96.4	97.2	91.0	108.9	94.5	120.8	99.2			87.9
September	111.5	104.8	117.9	103.7	110.3	98.0	100.1	100.7	95.3	110.4	90.0	119.6	100.3			97.3
October	109.1	79.3	122.4	105.0	110.8	98.2	103.5	102.6	98.0	111.4	93.1	120.3	100.0			103.4
November	110.4	90.1	126.8	105.3	112.4	100.2	104.3	103.5	98.1	113.7	90.5	121.7	101.0			119.7
December	112.9	101.8	131.2	107.8	114.0	103.1	105.2	103.5	95.9	115.6	88.9	122.5	102.1			119.2
Monthly average	106.6	99.5	117.2	97.8	109.0	96.8	93.2	96.3	86.6	107.5	84.7	114.6	108.3			112.9
1920																
January	114.0	110.3	134.8	109.5	109.0	104.4	102.4	106.4	100.2	117.0	85.0	124.8	101.8			115.7
February	113.1	111.3	133.0	108.5	105.1	102.9	102.6	105.7	101.7	114.7	81.8	122.9	100.1			110.1
March	115.2	113.4	135.6	110.8	105.6	104.6	103.2	107.3	102.2	115.3	85.1	131.2	99.8			112.3
April	113.9	112.0	134.2	109.9	103.1	104.1	97.3	106.5	100.5	112.4	88.7	129.3	98.8			113.0
May	111.7	106.4	132.0	107.7	103.2	103.8	91.1	107.0	97.4	109.2	94.7	124.4	96.4			109.2
June	110.9	109.3	133.0	104.1	104.3	103.7	95.2	107.7	94.7	104.2	94.8	128.8	96.1			109.8
July	108.4	109.0	133.7	96.2	104.9	105.4	78.4	107.4	95.1	96.1	93.2	127.0	97.8			107.2
August	108.6	107.0	131.0	94.0	104.9	105.5	86.9	107.4	88.9	93.8	90.1	125.8	98.3			106.9
September	107.1	107.6	128.0	94.0	104.3	105.8	83.5	105.1	83.2	84.4	89.0	125.5	95.8			112.3
October	103.5	106.4	123.2	90.7	102.9	105.9	81.3	101.4	73.4	81.7	87.8	122.8	98.3			111.8
November	97.5	101.2	117.8	81.3	101.2	104.8	75.3	96.9	65.4	77.5	90.9	107.7	94.5			115.8
December	90.3	89.7	110.4	73.1	97.6	101.6	69.7	91.7	61.6	75.5	87.5	85.7	87.9			116.4
Monthly average	107.9	107.0	128.9	98.3	103.8	104.4	88.1	104.2	88.7	98.5	89.1	121.3	97.1			111.7
1921																
January	81.3	72.7	103.0	71.4	90.1	96.5	69.3	72.0	31.9	74.0	72.2	76.8	81.4			109.0
February	82.7	75.4	94.8	84.1	91.8	95.2	71.9	69.0	38.8	80.4	62.6	69.9	76.0			105.0
March	83.1	72.7	89.7	89.3	93.3	93.9	73.6	67.5	47.2	83.2	67.1	70.7	75.5			101.7
April	82.1	65.8	84.0	92.7	89.7	88.7	74.4	67.8	58.5	82.5	73.1	72.1	70.9			108.0
May	82.2	65.6	78.6	93.7	90.8	83.2	75.0	70.3	61.9	85.8	78.1	73.4	69.3			110.5
June	81.3	61.1	74.3	94.3	91.4	83.6	75.2	68.4	59.1	89.0	78.0	72.6	68.8			112.7
July	79.9	63.8	68.6	94.6	93.5	84.1	73.2	70.1	59.2	90.8	76.8	68.7	66.3			109.3
August	81.4	57.5	67.0	96.0	94.5	85.5	73.5	72.8	59.6	94.2	74.9	74.7	64.7			109.9
September	83.3	59.8	66.0	100.4	98.5	87.0	74.6	74.5	59.3	94.3	76.3	75.5	65.0			114.6
October	84.0	63.9	65.0	101.5	102.1	88.8	76.0	76.5	59.0	93.0	74.9	79.9	70.2			116.3
November	84.2	67.7	65.4	99.3	103.1	91.0	78.6	77.1	57.0	91.9	75.0	80.6	72.6			114.7
December	83.3	68.3	67.3	98.9	98.3	91.5	78.1	74.4	53.6	94.0	74.7	78.9	69.0			113.7
Monthly average	82.4	65.4	77.0	93.0	94.8	89.1	74.5	71.7	53.8	87.8	73.6	74.5	70.8			110.5
1922																
January	82.6	65.2	70.0	98.7	92.3	93.4	84.7	70.3	52.8	96.0	70.0	76.7	69.5			99.4
February	84.4	70.5	71.0	100.7	93.0	92.7	89.1	71.5	56.5	96.9	69.0	78.6	70.5			104.2
March	85.6	73.2	74.5	97.2	94.1	91.4	93.1	74.2	60.6	94.6	77.0	81.3	73.5			106.0
April	85.4	78.5	76.9	93.9	89.1	88.7	92.4	75.5	65.6	90.3	84.8	81.7	74.5			100.0
May	87.6	81.7	79.8	92.6	90.0	90.8	97.2	79.7	62.8	90.0	93.4	86.1	76.6			103.4
June	89.5	85.9	80.6	92.0	91.4	90.3	100.3	83.6	77.5	91.6	94.0	88.7	76.6			104.1
July	87.0	86.9	80.8	91.7	94.4	90.6	99.2	58.3	79.2	95.3	93.6	92.1	80.6			109.8
August	90.3	88.1	82.0	94.2	97.7	92.5	90.5	66.4	78.4	99.8	94.3	95.5	83.6			109.0
September	93.6	88.5	87.1	97.9	97.3	93.8	97.7	77.6	80.2	102.3	94.9	95.9	86.7			111.8
October	96.5	92.9	90.3	100.3	100.3	94.9	98.5	90.1	78.8	102.7	95.0	98.7	90.2			113.2
November	98.5	96.2	94.1	102.8	103.7	95.7	98.5	94.9	80.0	105.0	96.1	102.5	94.0			112.7
December	100.0	99.0	99.0	105.6	102.3	97.4	95.8	97.9	81.9	107.2	95.1	103.2	95.8			112.8
Monthly average	90.1	83.9	82.2	97.3	95.5	92.7	95.5	78.3	72.0	97.6	88.1	90.1	81.0			107.2
1923																
January	100.6	99.2	100.7	106.9	96.4	96.8	95.6	101.8	87.4	110.5	91.7	104.7	99.7	97.5	110.4	108.0
February	102.4	101.7	104.0	108.1	97.4	97.3	97.6	103.5	95.4	111.6	92.7	108.1	104.4	98.8	115.1	107.4
March	104.9	103.8	108.2	110.5	98.7	99.6	98.6	106.6	99.5	111.4	96.3	111.3	108.5	100.7	116.3	108.6
April	105.2	104.3	110.1	109.7	97.3	99.7	100.2	107.5	103.8	109.1	101.5	112.5	104.8	105.5	116.9	105.4
May	105.3	105.5	110.5	108.1	98.2	99.0	101.5	108.3	105.1	106.5	105.1	111.9	103.9	109.3	116.4	105.4
June	105.9	107.8	110.8	105.9	101.5	99.6	103.4	109.8	104.6	103.6	106.2	111.1	101.4	108.3	111.2	105.5
July	104.8	105.1	111.2	101.8	103.2	99.0	103.9	107.9	101.1	101.7	104.4	108.9	99.8	107.8	102.1	103.2
August	105.5	107.3	110.6	101.6	104.3	98.9	103.6	108.3	100.2	105.2	104.2	107.3	99.9	106.6	90.6	100.0
September	105.9	106.6	109.6	103.1	106.4	99.1	103.1	107.8	101.3	104.7	103.6	103.4	100.0	104.0	86.0	105.1
October	104.8	106.3	107.2	103.0	109.1	100.1	102.4	108.7	102.9	103.9	102.9	102.4	98.7	101.0	85.3	106.4
November	103.4	104.2	105.6	102.0	107.3	100.8	101.6	107.9	103.3	103.7	101.3	101.5	98.8	98.6	87.9	107.7
December	101.3	100.8	103.4	102.3	103.7	101.4	99.4	104.1	102.7	102.1	99.4	101.5	98.1	96.5	91.6	106.7
Monthly average	104.2	104.4	107.7	105.3	102.0	99.3	100.9	106.9	100.6	106.2	100.8	107.1	101.5	102.9	102.5	105.8

¹ Compiled by the Federal Reserve Board from data collected by the U. S. Department of Labor, Bureau of Labor Statistics, U. S. Department of Commerce, Bureau of the Census and several other Federal and State governmental agencies. The indexes represent in their long-time fluctuations employment and pay rolls in all manufacturing industries, as shown by the Census of Manufactures from 1919 to 1927. Necessary adjustments will be made to succeeding censuses. In their current monthly fluctuations they represent 50 industries employing in the aggregate in 1927, 6,600,000 wage earners or about 78 per cent of the total engaged in manufacturing and accounted for about 80 per cent of the factory pay rolls of wage earners for that year. The industries are classified into 14 industrial groups, of which 13 are shown here. Each of the individual industry series, of which the indexes are composed, is adjusted to fluctuations shown by the census. For full description of these indexes see the *Federal Reserve Bulletin* for November, 1929, pp. 706-716.

FACTORY EMPLOYMENT: INDEXES BY GROUPS—Continued

[Monthly average, 1923-1925=100. Without seasonal adjustment]

YEAR AND MONTH	Total	Iron and steel	Machinery	Textiles	Food products	Paper and printing	Lumber and products	Transportation equipment		Leather and products	Cement, clay, and glass	Non-ferrous metals	Chemicals		Rubber products	Tobacco products
								Group	Automobiles				Group	Petroleum refining		
1924																
January	99.9	101.8	100.3	102.4	100.4	100.9	96.5	102.8	107.5	102.4	94.9	102.0	99.2	95.9	92.4	101.9
February	101.1	106.3	99.6	103.6	101.7	100.6	98.9	102.5	109.8	102.9	95.5	106.4	100.8	96.7	93.7	102.6
March	101.4	108.0	100.0	102.9	100.5	100.7	99.0	102.9	111.8	103.1	100.3	106.4	103.1	96.8	93.3	101.1
April	99.7	107.4	99.2	98.3	97.3	100.1	100.0	101.3	107.1	97.6	103.9	103.7	102.1	97.7	92.1	97.5
May	96.3	100.2	95.1	94.1	98.9	99.6	99.9	96.4	96.8	93.2	104.3	98.0	96.0	98.0	91.1	97.0
June	93.5	94.7	92.2	91.1	98.9	98.9	97.4	91.6	86.4	88.2	102.1	91.8	89.7	98.0	88.2	96.6
July	90.5	89.0	88.3	84.1	99.5	97.2	96.4	89.5	82.2	88.4	98.2	87.0	89.6	98.2	84.0	97.7
August	91.8	87.8	88.0	86.9	99.7	97.2	96.4	89.3	83.3	92.9	90.1	85.3	90.2	97.2	84.6	97.0
September	94.3	90.1	88.1	91.8	102.1	99.6	97.5	89.7	83.9	96.4	97.9	87.3	93.0	95.6	93.7	99.5
October	95.1	92.8	89.2	95.1	102.2	100.3	98.7	91.0	85.0	97.6	97.9	88.7	94.4	94.5	93.0	92.3
November	94.6	92.8	90.1	94.6	100.4	100.9	98.2	89.9	83.1	97.1	97.3	91.0	95.2	94.6	97.2	101.5
December	95.9	96.0	92.8	97.5	100.8	101.5	98.2	91.4	85.5	96.2	96.5	93.4	96.9	94.5	98.5	100.6
Monthly average	96.2	97.2	93.6	95.2	100.0	99.8	98.1	94.9	93.5	96.3	99.0	95.1	95.9	96.5	91.8	98.8
1925																
January	96.4	98.9	93.9	98.8	98.1	100.8	97.8	93.2	89.4	99.5	91.8	95.3	97.3	94.1	99.6	95.9
February	98.2	101.3	95.8	101.4	98.4	100.8	99.6	94.2	90.6	101.3	93.2	98.1	101.2	95.2	102.9	96.7
March	99.5	101.9	96.8	102.8	96.2	101.5	99.3	97.0	97.1	101.2	97.5	98.5	107.2	95.2	103.7	97.4
April	99.3	99.8	97.7	101.6	93.2	100.6	100.7	99.8	104.9	97.2	102.2	97.3	107.2	96.6	104.9	89.7
May	98.4	98.4	97.3	99.0	93.7	99.7	100.5	100.0	110.9	95.0	103.4	98.7	98.3	97.2	108.2	95.4
June	98.2	96.6	97.4	97.6	97.1	99.5	101.2	97.7	105.8	90.8	103.7	98.5	98.1	100.1	109.1	93.9
July	98.1	94.5	97.0	94.8	97.2	99.5	100.7	97.3	105.1	93.8	102.8	96.6	99.5	103.0	107.9	94.0
August	99.8	95.6	97.7	96.2	97.6	99.3	101.3	97.9	106.9	98.7	101.8	96.5	100.5	104.1	110.1	93.0
September	102.0	96.3	99.3	97.9	100.1	100.4	103.0	99.2	111.5	100.6	102.4	97.1	105.2	105.7	109.0	95.2
October	102.4	97.9	101.8	101.2	102.7	102.2	103.5	101.7	118.6	100.3	102.6	97.5	105.3	105.2	102.6	98.4
November	101.9	98.8	104.0	101.7	101.5	103.3	102.9	101.2	117.4	97.3	101.5	99.6	105.7	105.4	102.2	97.7
December	101.6	100.4	105.9	101.6	100.4	103.9	101.7	100.4	111.7	94.2	99.8	100.6	106.1	105.9	106.4	98.0
Monthly average	99.7	98.4	98.7	99.6	98.0	101.0	101.0	98.3	105.8	97.5	100.2	97.9	102.6	100.6	105.7	95.4
1926																
January	100.8	100.0	107.0	101.6	97.9	103.5	99.0	100.6	111.8	96.4	94.8	99.8	107.5	104.7	108.1	88.0
February	101.9	102.0	108.8	102.0	97.2	102.7	99.4	102.3	114.0	98.4	95.4	102.7	109.2	105.7	108.6	92.6
March	102.6	102.0	109.5	102.4	96.4	103.3	99.6	104.2	116.4	97.2	97.3	104.4	112.2	105.5	108.0	92.2
April	101.9	102.8	108.7	100.4	93.8	102.7	101.4	102.9	112.5	92.7	100.8	103.2	111.6	107.5	107.5	88.6
May	100.9	101.7	107.9	97.9	95.3	102.7	101.5	100.8	107.9	91.4	104.6	100.8	106.1	107.9	104.2	88.5
June	100.7	100.6	108.9	95.1	97.7	102.6	101.6	99.3	105.8	91.4	106.5	98.4	105.7	110.7	102.6	91.7
July	99.3	99.4	107.7	89.0	98.1	102.2	101.0	97.5	102.8	95.0	104.8	96.9	105.0	112.1	97.3	89.0
August	101.1	100.9	107.9	90.7	98.7	102.4	102.0	97.8	105.0	99.6	106.0	97.4	106.3	112.4	104.1	86.8
September	103.5	102.6	108.1	96.3	101.6	104.0	101.6	97.8	104.4	101.3	106.4	98.5	110.9	113.9	107.8	91.1
October	103.2	102.7	108.5	99.3	103.7	105.2	101.4	95.4	100.0	101.1	104.8	97.5	111.3	114.4	106.5	93.8
November	101.2	101.6	106.1	99.2	101.6	106.3	100.0	91.8	91.4	99.7	103.1	98.0	110.7	113.9	100.8	93.8
December	100.0	99.1	106.1	100.9	99.4	105.9	97.8	89.5	85.7	97.5	98.5	96.6	109.2	113.7	100.1	93.6
Monthly average	101.4	101.3	107.9	97.9	98.5	103.6	100.5	98.3	104.8	96.8	101.9	99.5	108.8	110.2	104.6	90.8
1927																
January	98.1	97.0	104.2	101.1	97.4	104.0	93.1	88.1	85.5	99.5	91.7	96.5	110.2	115.0	100.8	85.2
February	99.7	98.9	105.3	103.0	97.2	104.1	92.2	92.4	96.5	100.2	92.8	97.4	111.5	116.1	102.2	91.5
March	100.4	100.1	104.8	103.8	96.4	104.0	91.9	93.5	100.6	100.0	97.1	100.5	115.1	117.1	102.8	91.7
April	99.8	99.9	103.3	102.1	95.4	103.2	91.7	93.7	101.1	95.4	100.7	100.4	115.0	114.7	106.9	90.2
May	99.1	99.4	101.4	100.1	96.2	102.2	92.6	93.4	101.1	93.8	102.2	101.7	106.7	112.3	110.1	91.5
June	99.0	98.2	101.1	98.8	100.7	101.9	92.7	91.0	95.1	93.7	102.6	99.0	104.5	111.3	108.4	94.1
July	98.0	95.7	99.0	96.4	99.8	101.2	92.5	87.6	88.5	97.2	100.6	98.0	103.6	111.3	105.0	94.5
August	99.2	95.7	98.7	98.4	99.1	101.8	93.4	88.0	92.1	100.6	98.8	97.7	104.0	109.4	104.3	88.6
September	100.6	96.1	97.5	101.4	102.5	102.8	94.1	86.1	88.8	101.1	98.6	96.0	106.9	107.3	104.3	98.6
October	99.3	95.2	96.7	102.1	103.1	103.4	93.5	85.1	87.5	99.2	96.8	95.1	106.3	104.3	101.9	101.0
November	96.9	93.6	94.4	101.5	101.3	104.3	91.9	80.5	79.2	94.0	96.1	93.9	105.9	102.0	99.2	100.5
December	95.5	92.2	93.6	100.7	100.2	104.5	88.5	81.2	82.7	92.3	91.7	92.8	104.5	101.2	102.2	96.3
Monthly average	98.8	96.8	100.0	100.8	99.1	103.1	92.3	88.4	91.6	97.3	97.5	97.4	107.9	110.2	104.0	93.6
1928																
January	94.2	91.0	92.8	99.7	96.8	103.0	85.3	83.0	89.7	96.2	85.9	89.8	103.3	101.1	105.1	88.5
February	95.7	94.0	94.1	100.7	97.8	102.4	85.4	86.1	98.3	97.9	86.5	93.6	106.5	100.8	107.6	92.4
March	96.6	95.4	95.5	100.3	97.4	101.4	86.7	88.2	102.6	97.3	89.4	94.6	110.4	101.0	106.0	93.5
April	96.0	95.3	95.9	97.0	95.6	100.3	87.5	89.7	105.2	92.4	91.8	95.9	109.9	99.4	105.7	81.1
May	95.7	95.7	97.4	93.4	96.1	100.6	87.4	92.4	111.3	89.8	95.3	95.9	101.5	99.2	105.4	92.2
June	96.2	95.5	98.2	91.8	97.6	100.5	88.3	92.4	111.3	89.7	96.2	96.0	101.0	101.5	105.4	93.0
July	95.7	93.6	97.9	87.8	97.9	100.5	87.5	91.6	111.2	94.0	94.6	95.3	100.4	102.6	110.7	88.0
August	98.3	95.9	99.5	89.4	97.4	100.8	89.5	94.2	118.1	95.9	96.6	96.0	101.3	103.9	111.6	94.7
September	100.3	96.4	101.4	92.6	100.5	101.1	90.4	95.4	121.5	96.1	96.0	97.6	106.8	105.8	113.4	96.7
October	100.2	96.9	102.8	95.7	102.6	102.4	90.6	94.4	119.8	94.6	94.1	100.0	107.4	104.3	113.2	99.1
November	98.8	97.7	103.8	96.2	101.9	103.7	90.5	90.2	109.1	89.3	91.8	102.2	107.3	104.0	109.8	98.9
December	98.1	97.1	105.2	97.0	102.0	103.6	88.2	89.9	107.7	88.6	89.5	102.4	107.8	104.7	109.6	95.7
Monthly average	97.2	95.4	98.7	95.1	98.6	101.7	88.1	90.6	108.8	93.5	92.3	96.6	105.3	102.4	108.6	93.8
1929																
January	97.4	97														

FACTORY PAY ROLLS: INDEXES BY GROUPS¹

[Monthly average, 1923-1925=100. Without seasonal adjustment]

YEAR AND MONTH	Total	Iron and steel	Machinery	Textiles	Food products	Paper and printing	Lumber and products	Transportation equipment		Leather and products	Cement, clay, and glass	Non-ferrous metals	Chemicals		Rubber products	Tobacco products
								Group	Automobiles				Group	Petroleum refining		
1919																
January	97.2	115.5	103.7	73.5	96.5	70.0	74.2	95.9	59.8	93.4	59.1	107.5	112.1			110.0
February	91.0	108.0	99.9	64.8	95.8	69.3	73.3	85.1	64.1	90.2	56.2	99.8	105.5			105.0
March	91.6	102.3	98.6	69.9	96.5	69.8	74.4	85.8	65.3	89.0	61.3	91.6	97.9			106.4
April	90.9	94.6	95.8	74.9	92.4	69.3	77.8	85.0	67.7	86.1	66.6	89.2	93.6			102.5
May	91.4	87.5	92.7	80.3	92.9	68.2	83.4	86.1	71.3	90.0	69.6	89.7	90.7			107.4
June	93.0	88.4	88.7	89.1	95.2	72.9	87.7	82.2	69.2	93.6	79.5	77.6	91.4			97.1
July	95.8	91.0	90.2	97.1	95.1	74.5	92.1	83.8	73.0	97.5	73.8	81.9	92.3			89.7
August	100.9	106.7	100.4	101.7	97.0	77.3	94.8	81.9	74.9	104.1	78.0	88.4	90.9			84.6
September	105.9	106.3	110.0	105.0	100.5	81.6	98.9	90.1	83.7	105.8	81.2	109.7	98.9			101.9
October	100.8	78.8	113.7	102.3	99.9	71.0	99.1	93.9	92.5	108.1	81.6	115.2	104.6			106.1
November	105.4	90.7	123.7	103.7	104.8	74.0	105.4	97.7	90.5	110.7	83.5	118.1	110.7			134.5
December	113.4	106.9	131.5	117.9	109.1	91.9	109.4	97.6	86.6	119.8	80.6	122.5	112.8			138.3
Monthly average	98.1	98.1	104.1	90.0	98.0	74.2	89.2	88.8	74.9	99.0	72.6	99.3	100.1			107.2
1920																
January	117.3	117.5	134.9	122.9	107.2	94.3	115.9	100.5	96.6	122.9	79.4	124.5	114.5			126.8
February	115.9	122.9	128.5	121.4	103.0	93.0	114.4	99.4	94.7	116.4	74.6	125.1	110.5			115.5
March	124.2	132.0	141.3	127.8	108.6	98.8	121.3	107.3	101.1	122.4	80.7	138.9	115.7			129.2
April	121.6	125.7	139.1	124.4	100.8	96.7	114.6	106.5	97.3	120.7	88.7	137.9	115.5			126.5
May	123.3	122.4	139.7	121.3	111.7	100.3	113.6	116.2	102.8	118.3	98.6	133.5	114.0			128.9
June	125.2	128.8	144.0	119.2	115.2	100.9	113.2	116.9	97.7	118.7	101.7	140.6	116.2			130.0
July	120.3	121.6	145.6	107.1	114.1	101.0	108.3	111.2	97.2	110.0	99.5	140.8	116.3			118.3
August	123.0	124.0	143.4	105.4	112.8	103.6	113.6	124.6	96.9	106.7	99.2	138.1	118.9			117.3
September	121.1	129.7	139.1	102.7	111.9	104.3	109.1	121.1	92.6	92.0	99.0	143.7	113.4			123.7
October	117.2	132.2	130.2	93.0	111.0	106.5	105.1	120.6	88.1	84.8	100.9	134.2	119.0			125.2
November	108.4	123.6	124.1	79.0	109.6	104.8	94.4	108.6	62.5	79.9	103.3	118.2	113.3			128.6
December	99.6	105.4	117.6	69.6	104.2	99.3	87.3	104.7	56.9	78.1	97.7	88.7	97.1			125.2
Monthly average	118.1	123.8	135.6	107.8	109.2	100.3	109.2	111.5	90.4	105.9	93.6	130.4	113.7			124.6
1921																
January	84.0	81.0	105.7	66.1	96.3	93.3	68.6	78.9	25.2	72.0	74.6	74.7	86.6			108.4
February	82.3	79.1	88.2	82.2	96.6	89.2	71.1	71.9	28.4	85.9	60.6	67.2	73.9			101.0
March	82.4	72.5	84.5	90.4	96.9	88.4	72.6	72.1	38.7	85.1	64.0	64.8	73.2			101.0
April	79.6	59.4	79.3	92.1	89.8	83.1	70.9	74.4	57.7	81.7	69.3	66.0	68.0			102.6
May	78.0	57.1	73.3	90.4	92.5	76.4	69.0	74.6	61.9	83.2	73.0	67.0	66.2			110.6
June	76.1	47.9	66.1	91.8	90.8	78.3	71.9	72.8	60.4	89.2	72.0	66.8	64.5			112.6
July	72.2	37.4	60.0	91.4	91.9	78.7	63.9	71.0	60.4	89.5	65.0	60.0	63.4			105.0
August	74.4	42.6	57.6	94.4	91.0	79.7	69.9	73.3	58.0	94.8	68.1	65.9	58.7			104.6
September	73.9	42.1	56.1	97.4	93.6	80.8	65.8	71.4	55.3	92.9	66.0	64.0	58.2			108.6
October	73.1	47.3	53.5	91.8	97.1	82.2	63.5	72.7	50.0	88.8	65.3	67.5	63.5			104.0
November	72.0	50.1	54.1	88.4	93.6	83.2	64.6	70.8	46.0	85.7	65.2	69.1	64.8			95.9
December	73.6	52.5	56.6	94.0	89.5	85.9	65.9	68.8	42.6	95.5	66.4	67.7	62.3			100.5
Monthly average	76.8	55.8	69.6	89.2	93.3	83.3	68.0	72.7	48.7	87.0	67.4	66.7	66.9			104.6
1922																
January	69.7	47.6	57.3	90.4	85.4	83.5	68.9	57.2	31.0	97.2	58.3	66.2	62.3			87.3
February	72.7	53.2	59.4	95.0	84.4	80.9	73.9	64.2	46.6	98.1	54.0	65.7	62.3			85.9
March	74.8	56.5	62.9	91.0	86.1	84.6	78.5	69.2	50.0	92.7	58.5	71.7	64.8			92.6
April	73.8	60.1	64.6	83.8	80.4	82.5	77.6	71.0	60.0	86.8	64.1	72.5	66.1			80.7
May	77.2	64.9	68.2	83.1	85.7	84.4	81.1	76.9	68.1	86.2	74.0	77.2	67.6			93.6
June	80.4	69.6	71.0	84.4	88.9	84.5	84.4	82.3	73.3	89.5	77.4	81.0	68.3			98.9
July	77.6	65.9	71.9	87.3	90.4	83.7	82.3	62.5	73.2	92.5	79.1	81.6	73.3			104.4
August	82.4	72.6	74.8	90.1	90.1	85.6	86.4	72.9	78.7	98.5	79.9	86.5	77.4			104.1
September	86.5	77.9	78.3	94.1	94.3	88.5	86.3	81.0	76.1	100.2	81.6	91.2	79.6			107.9
October	89.4	85.2	83.0	93.9	96.2	90.0	87.5	88.9	77.1	99.3	81.7	92.8	84.2			108.0
November	93.1	91.1	87.5	97.9	101.2	91.2	89.4	93.9	79.0	103.2	84.2	98.9	87.8			113.9
December	95.6	93.9	94.8	100.5	99.0	93.8	89.3	96.3	80.9	108.4	85.1	101.8	91.2			113.3
Monthly average	81.1	69.9	72.8	91.0	90.2	86.1	82.1	76.4	66.2	96.0	73.2	82.3	73.7			99.2
1923																
January	94.1	93.3	91.8	103.2	93.5	92.1	87.4	92.7	77.0	110.9	83.1	96.5	93.1	96.5	106.0	108.8
February	97.8	98.8	97.1	106.0	94.0	93.0	89.9	99.0	92.6	113.1	84.4	101.2	95.6	96.6	112.9	104.3
March	102.8	101.9	103.5	111.2	96.5	96.0	93.9	106.6	101.0	115.7	90.5	108.5	101.2	101.5	118.0	107.9
April	103.9	100.0	108.5	108.9	95.3	96.7	98.1	108.8	106.1	112.2	98.5	114.7	102.2	105.4	121.3	103.1
May	107.3	109.7	112.3	111.0	97.5	97.5	102.1	112.0	108.0	110.4	104.2	116.1	103.3	107.6	119.4	101.9
June	107.5	111.5	113.8	108.0	101.0	97.2	104.8	111.4	102.2	105.8	105.2	113.0	101.6	108.3	114.2	104.7
July	103.2	98.8	111.3	102.2	101.8	96.2	103.7	107.4	99.4	99.4	99.9	109.2	102.0	110.3	94.5	100.7
August	104.2	106.6	110.2	102.6	100.3	92.8	103.0	109.1	101.9	104.0	104.0	102.9	98.7	103.7	85.1	90.9
September	104.8	105.4	109.6	104.2	105.0	95.6	103.5	106.7	98.9	103.8	104.2	101.2	100.4	104.4	84.7	101.0
October	107.2	110.2	110.1	106.2	106.3	98.0	105.2	114.2	110.1	103.1	106.6	98.8	102.4	102.5	84.1	108.4
November	104.9	107.0	107.7	101.7	106.3	98.1	105.2	112.9	109.9	99.9	105.0	99.3	98.9	94.5	86.7	108.3
December	103.1	102.9	107.9	104.1	103.9	100.3	103.0	104.7	102.6	102.7	101.8	102.1	98.7	94.1	90.8	110.9
Monthly average	103.4	103.8	107.0	105.8	100.1	96.1	100.0	107.1	100.8	106.8	98.9	105.3	99.8	102.1	101.5	104.2

¹ See footnote on p. 19.

FACTORY PAY ROLLS: INDEXES BY GROUPS¹—Continued

[Monthly average 1923-1925=100. Without seasonal adjustment]

YEAR AND MONTH	Total	Iron and steel	Machinery	Textiles	Food products	Paper and printing	Lumber and products	Transportation equipment		Leather and products	Cement, clay, and glass	Non-ferrous metals	Chemicals		Rubber products	Tobacco products
								Group	Automobiles				Group	Petroleum refining		
1924																
January	98.4	102.2	99.4	104.6	99.8	99.9	94.1	93.8	91.8	103.1	95.8	101.5	96.3	89.8	91.6	103.7
February	103.6	111.9	100.3	107.7	101.4	100.3	100.8	105.2	114.9	104.3	99.9	108.1	98.8	93.0	94.3	102.7
March	103.8	114.1	101.2	105.5	100.3	101.0	101.5	104.1	113.0	103.3	103.8	110.1	102.1	95.9	93.8	102.1
April	101.4	111.3	100.6	97.6	97.1	100.8	102.6	104.0	109.2	94.4	107.6	104.3	101.2	95.8	93.4	93.6
May	96.8	102.1	96.3	90.1	95.3	99.8	101.4	97.5	96.7	89.4	107.9	97.7	97.6	97.7	92.9	96.0
June	91.7	82.5	91.8	85.5	100.8	98.5	99.4	89.4	79.4	85.1	105.7	89.1	92.7	93.3	86.4	96.3
July	85.1	77.2	83.3	77.2	101.4	94.6	92.5	82.1	72.3	84.1	97.2	81.3	90.0	95.7	82.4	96.6
August	88.9	83.5	83.6	84.3	99.4	95.0	94.5	85.8	77.8	94.6	98.5	83.0	92.0	96.3	84.2	96.6
September	92.3	86.5	84.2	92.2	103.5	99.1	97.0	86.3	80.8	96.7	97.4	86.9	93.3	94.0	95.9	100.5
October	95.2	92.5	87.6	96.6	101.0	101.1	99.6	91.2	84.4	100.1	100.1	88.2	95.3	92.4	97.3	91.5
November	83.5	91.6	88.5	92.3	100.6	101.4	98.2	88.7	80.2	91.9	96.9	91.1	97.8	97.9	99.2	104.3
December	97.6	98.9	94.4	99.4	102.7	104.3	99.6	90.9	82.5	95.7	98.2	96.3	98.2	94.1	100.9	106.6
Monthly average	95.7	96.7	92.6	94.4	100.5	99.7	98.4	93.2	90.2	95.5	100.7	94.8	96.3	95.2	92.7	99.4
1925																
January	95.4	101.7	94.0	100.9	99.0	103.0	93.2	83.5	71.5	99.6	88.8	98.9	97.7	92.9	99.4	99.6
February	104.9	104.9	98.2	105.3	98.2	102.8	99.6	98.1	95.2	104.2	94.5	101.6	102.5	97.4	104.9	92.9
March	103.0	105.4	99.7	103.1	97.2	104.3	101.1	101.8	103.1	104.6	98.6	101.6	100.8	106.2	106.2	94.0
April	100.4	101.2	98.4	101.5	93.1	102.8	100.3	103.4	112.8	96.0	102.0	97.1	104.8	97.8	107.2	79.1
May	100.7	101.1	100.2	97.5	96.3	102.5	101.2	104.2	118.7	95.0	104.4	101.6	102.2	102.5	112.0	96.5
June	98.7	95.8	99.1	94.3	99.9	102.7	102.7	98.8	108.9	89.9	103.4	101.6	105.5	103.2	109.1	95.9
July	97.1	89.7	97.2	93.1	99.3	100.7	99.4	96.4	107.9	93.7	99.7	97.3	100.6	102.7	110.2	94.4
August	99.5	94.8	97.7	96.2	99.1	101.0	100.7	95.8	104.7	103.9	99.5	99.6	101.8	108.0	110.4	95.5
September	99.4	92.8	97.0	94.1	99.9	102.3	103.2	96.8	111.5	99.8	100.1	94.6	102.8	104.4	105.8	95.5
October	105.2	101.0	104.3	102.5	104.1	107.5	106.8	106.3	128.1	101.1	104.7	98.2	107.5	108.2	99.8	102.9
November	105.1	100.1	107.6	101.7	103.3	109.9	105.7	107.6	128.7	93.4	103.7	101.7	109.1	108.6	99.0	104.5
December	105.5	104.8	111.3	102.4	103.0	112.2	104.9	103.2	117.1	92.1	101.0	105.9	109.1	105.8	106.5	105.1
Monthly average	100.9	99.4	100.4	99.8	99.4	104.2	101.6	99.7	109.1	97.8	100.3	99.9	103.9	102.7	105.8	96.3
1926																
January	101.2	101.6	109.5	102.9	100.2	109.7	95.8	92.0	97.4	95.7	92.2	103.2	109.6	107.0	108.1	91.2
February	105.6	105.4	113.8	105.2	99.4	109.1	100.8	104.3	118.9	100.7	94.8	105.0	109.7	105.1	111.3	89.5
March	107.4	107.4	115.6	106.3	88.9	111.0	101.4	107.0	121.9	99.8	97.6	100.0	113.2	107.4	109.2	94.0
April	105.3	106.5	113.8	100.5	85.6	110.2	101.4	106.2	118.0	90.7	99.4	106.6	109.8	108.8	109.5	87.7
May	103.8	104.2	112.8	95.8	99.4	110.0	101.9	103.2	112.0	87.7	105.3	104.9	109.8	110.6	105.1	87.2
June	103.8	103.6	114.6	92.4	102.0	109.8	103.3	100.8	105.1	92.3	107.9	102.0	110.5	113.9	102.8	92.9
July	99.3	97.9	108.6	85.4	101.6	107.3	98.6	94.0	97.1	97.6	101.6	99.2	106.9	110.0	100.0	89.5
August	103.6	101.0	111.0	90.3	101.2	107.8	103.3	100.7	108.5	105.7	103.9	100.3	108.2	114.4	104.1	88.7
September	105.9	104.4	108.7	96.5	104.2	109.4	104.2	97.2	105.4	105.7	103.9	99.1	110.6	114.7	112.1	93.9
October	108.3	108.9	113.3	102.6	106.0	112.5	104.2	100.7	107.1	105.8	106.0	102.4	114.0	114.9	109.2	98.0
November	104.6	105.6	109.6	99.6	103.4	113.2	104.8	94.0	92.7	98.8	103.5	102.0	113.2	114.6	100.6	97.1
December	103.8	103.7	112.0	103.7	102.8	114.6	101.3	88.6	78.3	97.1	99.3	102.3	113.2	115.7	103.0	95.0
Monthly average	104.3	104.2	111.9	98.4	101.2	110.4	102.0	99.1	105.2	98.1	101.5	103.0	111.0	111.4	106.2	92.1
1927																
January	98.6	97.2	107.1	103.9	100.1	110.8	91.4	79.5	65.8	98.9	87.1	100.9	111.0	113.3	102.4	82.5
February	104.8	102.3	111.5	109.7	100.0	111.2	93.9	99.9	98.8	105.1	92.8	103.2	114.8	120.0	109.2	85.7
March	106.3	106.3	111.5	110.9	99.3	112.0	95.1	90.0	108.0	102.9	97.6	99.4	118.1	121.2	108.2	87.4
April	105.0	106.3	108.7	104.5	98.3	110.6	93.9	101.0	111.0	96.5	101.2	101.0	116.5	118.5	115.0	84.4
May	104.3	102.6	107.3	101.2	101.1	110.1	96.4	101.6	110.9	93.9	104.1	106.8	109.3	113.2	118.1	90.4
June	102.5	102.6	106.0	100.4	105.2	108.4	96.3	92.1	91.9	90.0	101.9	103.5	110.3	116.6	114.3	93.8
July	98.6	91.7	99.7	97.1	104.1	106.3	92.8	87.4	87.4	100.6	96.2	98.8	104.6	110.8	108.5	93.9
August	102.2	96.5	101.8	101.6	102.6	107.7	96.4	91.6	95.3	108.6	97.7	99.4	105.6	110.5	108.7	86.9
September	101.9	94.9	97.5	105.7	105.1	108.7	97.5	86.9	89.6	106.1	95.9	97.7	106.3	107.6	108.2	98.0
October	102.5	95.7	98.8	107.3	105.4	110.4	98.8	89.8	93.0	99.5	96.3	98.4	107.3	105.9	105.0	99.0
November	98.5	92.6	95.0	102.4	103.8	111.4	96.3	84.1	81.5	87.5	94.0	95.6	105.8	103.7	98.4	98.1
December	99.4	93.4	97.6	104.1	103.3	113.6	92.3	86.8	88.7	88.8	89.9	98.9	107.3	103.5	106.2	94.8
Monthly average	102.0	98.5	103.5	104.1	102.4	110.1	95.1	91.3	93.5	98.6	96.2	100.3	109.7	112.2	108.5	91.1
1928																
January	95.7	89.9	94.5	101.0	100.3	110.6	83.2	83.4	88.2	95.3	82.5	95.7	104.2	104.0	109.4	85.0
February	101.1	100.3	99.0	105.0	102.0	109.7	87.2	94.1	111.0	101.4	84.3	101.5	106.4	103.5	115.7	85.1
March	102.5	101.6	101.9	104.0	101.3	109.8	89.5	97.9	117.2	99.9	87.3	102.5	108.8	103.4	114.6	86.3
April	100.3	99.7	101.8	95.3	97.5	109.0	89.6	99.4	119.3	86.0	90.5	102.4	108.7	104.2	113.0	80.3
May	100.8	102.1	104.2	92.0	100.2	108.9	90.5	100.9	124.2	82.9	94.0	105.3	103.4	101.6	109.3	84.1
June	100.9	99.6	106.1	90.9	102.8	109.0	91.3	98.5	117.6	87.1	94.0	104.8	102.9	104.2	112.5	89.7
July	93.3	83.8	102.5	85.8	103.1	107.3	88.3	94.8	115.2	94.3	91.0	101.2	102.5	107.1	114.8	84.9
August	102.5	99.8	105.3	90.2	101.5	107.5	91.5	100.4	128.3	100.4	95.1	106.7	103.6	108.6	117.9	88.7
September	104.2	99.1	106.0	94.9	104.3	100.2	93.4	100.1	126.0	99.6	92.8	109.4	103.3	109.3	123.8	92.9
October	107.5	105.1	111.3	101.0	106.0	111.5	95.8	104.7	134.1	95.9	94.1	116.6	109.2	107.8	120.4	95.2
November	103.6	105.1	110.3	96.7	104.9	111.7	94.4	96.1	114.5	80.1	90.7	118.5	108.2	107.1	112.4	94.1
December	104.2	103.3	114.0	100.3	106.3	113.7	90.8	95.8	112.4	86.0	88.4	120.5	108.1	107.2	114.1	94.3
Monthly average	101.8	99.9	104.7	96.4	102.5	109.8	90.5	97.2	117.6	92.4	90.4	107.1</				

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.

The cumulatives shown are through October, 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 OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
TEXTILES												
Wool												
Receipts at Boston:												
Total.....thous. of lbs.	47,795	56,981	40,476	19,444	12,148	10,315	8,090	-37.5	+50.2	273,622	276,513	+1.1
Domestic.....thous. of lbs.	40,596	53,652	35,594	16,975	6,931	7,156	4,598	-59.2	+50.7	193,906	185,404	-2.8
Foreign.....thous. of lbs.	7,199	3,329	4,882	2,469	5,217	3,159	3,492	+111.3	+49.4	79,716	88,109	+10.6
Imports:												
In condition imported.....thous. of lbs.	16,592	18,815	17,068	18,158	19,463	14,510	20,730	+7.2	-6.1	208,718	240,711	+15.3
Grease equivalent.....thous. of lbs.	17,903	21,931	19,015	21,450	23,066	17,015	24,193	+7.5	-4.7	235,192	270,581	+15.0
Consumption by textile mills, grease equivalent.....thous. of lbs.												
	44,066	47,296	52,644	49,755	59,352	43,492	51,477	+19.3	+15.3	442,387	501,763	+13.4
Machinery, activity, hourly:												
Looms—												
Wide.....per ct. of hours active	65	62	60	64	65	59	67	+1.6	-3.0			
Narrow.....per ct. of hours active	61	60	62	63	66	63	66	+4.8	0.0			
Carpet and rug.....per ct. of hours active	69	61	66	66	71	62	67	+7.6	+6.0			
Sets of cards.....per ct. of hours active	85	80	80	83	85	85	93	+2.4	-8.6			
Combs.....per ct. of hours active	78	86	93	94	91	74	82	-3.2	+11.0			
Spinning spindles—												
Woolen.....per ct. of hours active	82	78	77	77	78	80	88	+1.3	-11.4			
Worsted.....per ct. of hours active	65	62	69	70	72	62	68	+2.9	+5.9			
Prices:												
Raw, territory, fine, scoured.....dolls. per lb.	.97	.93	.93	.92	.90	1.14	1.10	-2.2	-18.2			
Raw, Ohio and Pa. fleeces, 1/4 blood, combing, grease.....dolls. per lb.	.42	.42	.43	.43	.43	.54	.54	0.0	-20.4			
Worsted yarn.....dolls. per lb.	1.45	1.45	1.45	1.48	1.48	1.58	1.58	0.0	-6.3			
Women's dress goods, French serge, 39-in.....dolls. per yd.	.96	.98	.98	.98	.98	.99	.98	0.0	0.0			
Suiting, 13-oz.....dolls. per yd.	2.008	1.996	1.901	1.901	1.901	2.008	2.008	0.0	-5.3			
Stocks, grease equivalent, end of quarter:												
Total.....thous. of lbs.	2 348,496			2 369,642		2 369,816		+6.1	0.0			
Held by manufacturers.....thous. of lbs.	2 156,796			2 163,651		2 158,346		+4.4	+3.4			
Held by dealer.....thous. of lbs.	2 191,670			2 205,991		2 211,470		+7.5	-2.6			
Cotton												
Production, crop estimate.....thous. of bales												
					15,009	14,478						
Ginnings.....thous. of bales					11,898	11,321						
Receipts into sight.....thous. of bales	222	126	823	2,431	4,184	2,078	3,883	+72.1	+5.0	10,237	11,184	+9.3
Imports, unmanufactured.....bales	26,113	21,369	24,793	23,974	19,815	18,508	27,840	-17.3	-28.8	264,153	374,954	+41.9
Exports, unmanufactured (including lint).....bales												
	308,947	246,983	235,914	731,613	1,263,202	814,569	1,252,066	+72.7	+0.9	6,192,275	5,602,076	-9.5
Consumption by textile mills.....bales	570,281	546,457	558,113	545,649	640,798	492,307	616,238	+17.4	+4.0	5,427,596	6,060,532	+11.7
Stocks, domestic, end of month:												
Total, mills and warehouses.....thous. of bales	2,665	2,038	2,189	4,017	6,672	3,358	5,828	+66.1	+14.5			
Mills.....thous. of bales	1,289	1,052	802	792	1,360	720	1,196	+71.7	+13.7			
Warehouses.....thous. of bales	1,376	986	1,387	3,225	5,312	2,638	4,632	+64.7	+14.7			
Stocks, world visible, end of month:												
Total.....thous. of bales	4,476	3,651	3,458	4,381	6,677	4,114	6,198	+52.4	+7.7			
American.....thous. of bales	2,302	1,693	1,629	2,652	4,982	2,563	4,645	+87.9	+7.3			
Prices:												
To producer.....dolls. per lb.	.179	.178	.180	.182	.175	.176	.181	-3.8	-3.3			
In New York, middling.....dolls. per lb.	.188	.186	.187	.189	.186	.185	.196	-1.6	-5.1			
Cotton Yarn												
Machinery activity of spindles:												
Active spindles.....thousands	30,628	30,396	30,237	30,038	30,135	28,209	30,302	+0.3	-0.6			
Total activity.....millions of hours	8,155	7,744	8,130	7,881	9,004	6,961	8,694	+14.2	+3.6			
Activity per spindle.....hours	232	222	234	226	238	196	246	+14.2	+4.9			
Ratio to capacity.....per cent	104.8	100.3	97.7	104.0	108.7	90.1	103.5	+4.5	+5.0			
Carded spindles yarn:												
Production.....thous. of lbs.	20,272	13,211	19,639	17,122	18,199	18,839	17,621	+6.3	+3.3	175,712	185,055	+5.3
Stocks, end of month.....thous. of lbs.	8,785	8,901	8,185	7,423	7,173	10,248	8,476	-3.4	-15.4			
Unfilled orders, end of month.....thous. of lbs.	32,650	32,472	32,175	35,833	40,749	34,836	39,041	+13.7	+4.4			
Prices:												
22/1 cones, Boston.....dolls. per lb.	.348	.348	.349	.357	.359	.358	.372	+0.6	-3.5			
40/1s, southern spinning.....dolls. per lb.	.499	.515	.510	.510	.503	.501	.495	-1.4	+1.6			
Cotton Goods												
Cotton textiles:												
Production.....thous. of yds.	285,928	234,439	307,538	268,611	283,064	253,688	284,899	+5.4	-0.6	2,942,048	2,938,501	-0.1
New orders.....thous. of yds.	228,244	262,889	312,635	371,485	222,196	387,151	401,953	-40.2	-44.7	2,989,637	2,894,424	-3.2
Shipments.....thous. of yds.	252,008	252,779	326,398	287,628	265,450	278,110	307,402	-7.7	-13.6	2,888,807	2,967,587	+2.9
Stocks, end of month.....thous. of yds.	401,260	382,920	364,060	345,043	362,657	417,245	394,742	+5.1	-8.1			
Unfilled orders, end of mo.....thous. of yds.	358,748	368,858	365,095	438,952	395,098	398,005	492,556	-9.9	-19.7			
Fine cotton goods, production.....pieces	465,658	408,659	485,437	381,760	454,524	113,627	282,763	+19.1	+60.7	2,428,896	4,427,145	+82.6
Cotton cloth:												
Imports.....thous. of sq. yds.	4,880	5,175	3,927	3,972	5,936	3,139	3,676	+49.4	+61.5	51,064	51,582	+1.0
Exports.....thous. of sq. yds.	44,730	50,412	42,355	42,274	43,709	34,694	56,087	+3.4	-22.1	429,637	484,130	+12.7
Fabric for tire manufacture, consumption.....thous. of lbs.												
	20,359	18,126	15,803			17,797	20,295					
Elastic webbing, shipments.....thous. of dolls.	1,473	1,357	1,399	1,419	1,600	1,478	1,624	+12.8	-1.5	14,003	15,592	+11.3
Prices:												
Print cloth, 64 x 60.....dolls. per yd.	.072	.073	.075	.076	.078	.074	.078	+2.6	0.0			
Sheeting, brown.....dolls. per yd.	.084	.083	.086	.086	.087	.089	.090	+1.2	-3.3			
Cotton goods (Fairchild) rel. to 1911-1913.....	159	159	160	160	160	160	163	0.0	-1.8			

¹ Quarter ending in month indicated.

² As of Nov. 1

³ Final estimate for 1928.

⁴ As of Nov. 14.

⁵ Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	June	July	August	Septem-ber	October	Septem-ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	TEXTILES—Continued											
Cotton Finishing												
White, dyed and printed (outside mills):												
Billings, finished goods.....thous. of yds..	78,964	75,582	75,845	73,116	81,549	69,805	83,935	+11.5	-2.8	739,382	832,059	+12.5
New orders, gray yardage.....thous. of yds..	65,462	69,475	69,168	67,991	78,806	74,483	87,175	+15.9	-9.6	734,512	790,233	+7.6
Shipments, finished goods.....cases..	45,674	44,809	45,238	43,586	46,173	45,767	50,984	+5.9	-9.4	462,027	509,456	+10.3
Stocks, finished goods, end mo.....cases..	35,487	37,299	36,320	35,062	37,635	33,410	32,046	+7.3	+17.4			
Operating activity.....per ct. of capacity..	60	57	60	61	65	61	66	+6.6	-1.5			
Unfilled orders, end of month.....days..	5.1	4.9	4.9	4.6	3.9	5.0	6.0	-15.2	-35.0			
Printed only (mills and outside):												
Production.....thous. of yds..	72,808	60,902	69,315	66,766	82,724	66,079	77,320	+23.9	+7.0	644,150	780,154	+21.1
Stocks, end of month.....thous. of yds..	78,492	87,397	87,918	88,864	87,446	75,161	73,687	-1.6	+18.7			
Silk												
Imports, raw.....thous. of lbs..	7,596	7,858	9,620	8,811	9,396	7,212	8,272	+6.6	+13.6	73,185	80,773	+10.4
Deliveries (consumption).....bales..	46,504	51,624	59,704	53,274	57,489	47,797	49,940	+7.9	+15.1	478,275	525,026	+9.8
Stocks, end of month:												
At warehouses.....bales..	47,425	42,596	48,408	55,104	64,129	50,464	49,381	+16.4	+29.9			
At manufacturing plants.....bales..	23,162	20,985	25,854	29,594	28,200	22,786	26,676	-4.7	+5.7			
Silk machinery activity:												
Broad looms.....per cent of normal..	100.7	99.7	101.9	100.7	102.6	92.7	102.0	+1.9	+0.6			
Narrow looms.....per cent of normal..	67.8	65.1	65.5	63.1	58.1	54.0	50.5	-7.9	+15.0			
Spinning spindles.....per cent of normal..	63.1	63.8	65.2	66.8	66.9	66.9	69.3	+0.1	-3.5			
Prices:												
Raw, Japanese, 13-15, N. Y.....dolls. per lb..	4.925	4.876	5.073	5.122	4.925	5.096	5.145	-3.8	-4.3			
Silk goods, composite.....dolls. per yd..	1.19	1.18	1.18	1.18	1.18	1.16	1.16	0.0	+1.7			
Rayon												
Imports.....thous. of lbs..	1,582	858	990	1,044	1,540	924	1,238	+47.5	+24.4	10,227	14,161	+38.5
Stocks, bonded, end of month.....thous. of lbs..	2,902	2,802	2,747	2,451		2,814	2,663					
Price, 150 denier, A grade, N. Y.....dolls. per lb..	1.23	1.15	1.15	1.15	1.15	1.50	1.50	0.0	-23.3			
Clothing												
Men's and boys' garments cut:												
Suits.....thous. of garments..	2,198	2,202	2,132	1,797		1,876	1,816			7,19,444	7,19,496	0.2
Separate trousers.....thous. of garments..	2,221	2,307	2,353	2,156		2,173	2,251			7,18,883	7,20,270	+7.3
Overcoats.....thous. of garments..	507	631	763	763		728	812			7,4,061	7,4,444	+9.4
Overalls:												
Cut.....thous. of dozen garments..	362	380	416	419	477	385	404	+13.8	+18.1	3,710	3,971	+7.0
Net shipments.....thous. of dozen garments..	317	361	408	403	396	358	340	-1.7	+16.5	3,242	3,599	+11.0
Unfilled orders, end of mo.....thous. of dozen garments..	161	220	144	172	171	161	174	-0.6	-1.7			
Hosiery												
Production.....thous. of dozen pairs..	3,543	3,068	3,417	3,577	4,184	3,255	3,852	+17.0	+8.6	34,414	35,801	+4.0
Net shipments.....thous. of dozen pairs..	3,567	3,075	3,485	4,039	4,332	3,755	4,166	+7.3	+4.0	34,654	35,677	+3.0
Stocks, end of month.....thous. of dozen pairs..	8,413	7,943	8,139	7,887	7,730	8,128	7,849	-2.0	-1.5			
New orders.....thous. of dozen pairs..	8,513	2,813	3,427	4,025	4,426	3,810	4,342	+10.0	+1.9	34,477	36,323	+5.4
Unfilled orders, end of month.....thous. of dozen pairs..	4,841	4,437	4,234	4,139	4,066	3,957	3,888	-1.8	+4.6			
Knit Underwear												
Production.....thous. of dozen garments..	1,187	1,091	1,152	1,100	1,398	1,016	1,297	+27.1	+7.8	11,073	11,895	+7.4
Net shipments.....thous. of dozen garments..	1,126	1,064	1,382	1,532	1,528	1,402	1,514	-0.3	+0.9	11,209	12,021	+6.4
Stocks, end of mo.....thous. of dozen garments..	1,735	1,797	1,689	1,422	1,190	1,370	1,228	-16.3	-3.1			
New orders.....thous. of dozen garments..	1,157	891	1,149	1,461	1,372	1,213	1,483	-6.1	-7.5	11,182	12,322	+10.2
Unfilled orders, end of month.....thous. of dozen garments..	2,293	2,103	1,870	1,783	1,607	1,696	1,645	-9.9	-2.3			
Burlaps and Fibers												
Imports:												
Burlaps.....thous. of lbs..	51,216	41,526	74,698	33,568	42,067	43,617	30,874	+25.3	+36.3	536,817	555,905	+3.6
Fibers (unmanufactured).....long tons..	21,182	20,469	25,048	22,210	26,613	21,004	25,615	+19.8	+3.9	250,706	276,499	+10.3
Pyroxylin Coated Textiles												
Pyroxylin spread.....thous. of lbs..	4,615	4,331	4,294	3,812	3,875	4,844	5,712	+1.7	-32.2	51,006	49,817	-2.3
Shipments billed.....thous. of linear yards..	4,007	3,509	3,540	3,315	3,529	3,914	4,499	+6.5	-21.6	39,701	41,829	+5.4
Unfilled orders, end mo.....thous. of linear yards..	2,910	2,805	2,468	2,599	2,403	4,561	3,824	-7.5	-37.2			
Fur												
Sales by dealers.....thous. of dollars..	8,546	8,135	11,335	11,434	8,187	10,244	12,576	-28.4	-34.9	120,576	118,726	-1.5
Buttons												
Fresh-water pearl buttons:												
Production.....ratio to capacity..	50.1	40.9	45.5	46.6	48.1	47.5	51.0	+3.2	-5.7			
Stocks, end of month.....thous. of gross..	11,351	11,170	10,951	10,836	10,686	10,593	10,521	-1.4	+1.6			
IRON AND STEEL												
Iron												
Manganese ore, imports.....thous. of long tons..	51	48	33	13	25	15	26	+92.3	-3.8	173	284	+64.2
Iron ore:												
Imports.....thous. of long tons..	244	301	298	247	270	211	170	+9.3	+58.8	2,025	2,585	+27.7
Shipments from mines.....thous. of long tons..	10,174	10,671	10,807	9,647	7,989	8,748	8,454	-16.3	-5.5	49,720	61,253	+23.2
Receipts—												
Lake Erie ports and furnaces.....thous. of long tons..												
Other ports.....thous. of long tons..	6,985	7,509	7,518	6,619	6,052	5,827	6,002	-8.6	+0.8	33,344	42,627	+27.8
Consumption.....thous. of long tons..	2,805	3,127	3,284	2,710	2,267	2,710	2,580	-16.3	-12.1	14,900	17,107	+14.8
Stocks, end of month—	5,677	5,808	5,779	5,362	5,383	4,608	5,025	+0.4	+7.1	46,929	54,885	+17.0
Total.....thous. of long tons..	23,701	28,697	33,831	38,125	41,135	35,808	39,555	+7.9	+4.0			
At furnaces.....thous. of long tons..	29,619	24,245	28,720	32,360	34,770	29,708	33,082	+7.4	+5.1			
On Lake Erie docks.....thous. of long tons..	4,082	4,452	5,111	5,765	6,365	6,100	6,473	+10.4	-1.7			

* Revised.

* Cumulative through Sept. 30

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
IRON AND STEEL—Continued												
Iron—Continued												
Pig-iron production:												
Total, United States.....thous. of long tons..	3,717	3,785	3,756	3,498	3,588	3,062	3,374	+2.6	+6.3	31,166	36,267	+16.4
Merchant furnaces.....thous. of long tons..	717	746	690	635	685	585	644	+7.9	+6.4	6,256	7,356	+17.6
Canada.....thous. of long tons..	90	100	613	699	91	91	93	-8.1	-2.2	830	921	+9.8
Furnaces in blast, end of month:												
Furnaces.....number	218	216	210	205	203	197	197	-1.0	+3.0			
Capacity.....long tons per day	122,590	121,965	119,130	116,405	113,600	106,755	108,800	-2.4	+4.4			
Ohio gray-iron foundries:												
Meltings—												
Actual.....long tons	21,214	19,508	18,670	20,081	23,855	14,586	20,112	+18.8	+18.6	162,507	214,028	+31.7
Normal.....long tons	19,164	18,535	17,104	19,595	20,627	16,155	19,349	+5.3	+6.6	160,298	196,732	+22.7
Ratio to normal.....per cent of normal	110.6	105.3	109.1	102.5	115.6	90.2	103.9	+12.8	+11.3			
Stocks, end of month.....per cent of normal	131	131	120	130	117	131	134	-10.0	-12.7			
Receipts.....per cent of normal	105	99	113	100	112	90	104	+12.0	+7.7			
Malleable castings:												
Production.....short tons	72,282	70,625	68,651	69,589	60,165	62,665	70,054	+1.0	-14.1	656,489	727,146	+10.8
Operating activity.....per ct. of capacity	75.0	73.5	70.0	62.0	62.4	66.3	73.4	+0.6	-15.0			
Shipments.....short tons	72,378	69,665	69,240	63,049	52,092	61,736	63,510	-17.4	-18.0	637,520	717,344	+12.5
New orders.....short tons	65,247	61,401	61,982	52,957	58,051	61,163	65,780	+9.6	-11.7	638,044	698,880	+9.5
Wholesale prices:												
Foundry, No. 2												
northern.....dolls. per long ton	20.26	20.26	20.26	20.26	20.26	18.64	18.86	0.0	+7.4			
Basic (valley furnace).....dolls. per long ton	18.50	18.50	18.50	18.50	18.50	16.19	17.10	0.0	+8.2			
Composite pig iron.....dolls. per long ton	19.35	18.31	19.18	19.00	19.03	18.04	18.40	0.2	+3.4			
Cast-iron Boilers and Radiators												
Round boilers:												
Production.....thous. of lbs.	10,578	8,997	12,189	11,602	15,407	13,655	17,953	+32.8	-14.2	131,857	116,153	-11.9
Shipments.....thous. of lbs.	10,171	13,553	15,092	18,263	23,487	17,021	22,621	+28.6	+3.8	132,919	123,340	-7.2
New orders.....thous. of lbs.	9,059	14,490	13,916	16,936	19,583	14,504	19,819	+15.6	-1.2	132,346	112,493	-15.0
Stocks, end of month.....thous. of lbs.	89,437	84,027	81,162	74,254	66,509	82,931	78,349	-10.4	-15.1			
Square boilers:												
Production.....thous. of lbs.	16,119	11,598	19,014	20,766	32,819	26,760	30,098	+58.0	+9.0	300,469	232,738	-22.5
Shipments.....thous. of lbs.	17,458	22,927	28,757	34,671	43,185	41,989	52,505	+24.6	-17.8	274,038	217,841	-20.5
New orders.....thous. of lbs.	18,421	26,039	27,242	36,481	35,715	36,527	53,522	-2.1	-33.3	283,106	213,369	-24.6
Stocks, end of month.....thous. of lbs.	179,900	169,044	159,661	145,716	135,030	167,063	145,051	-7.3	-6.9			
Radiators:												
Production.....thous. sq. ft. heating surface	9,364	6,756	10,365	9,545	12,299	13,770	12,853	+28.9	-4.3	142,846	111,671	-21.8
Shipments.....thous. sq. ft. heating surface	9,226	11,729	13,665	14,980	18,214	18,092	23,062	+21.6	-21.0	129,238	104,996	-18.8
New orders.....thous. sq. ft. heating surface	9,603	13,621	14,267	15,680	16,148	16,533	23,394	+3.0	-31.0	136,339	108,110	-20.7
Stocks, end of month.....thous. sq. ft. heating surface	74,189	69,277	65,792	59,794	53,715	72,902	63,082	-10.2	-14.8			
Gas-fired boilers:												
Shipments.....dollars	285,223	315,696	486,659	549,424	522,400	395,265	351,367	-4.9	+48.7	2,259,878	3,097,556	+37.1
Shipments.....thous. B. t. u.	213,780	254,856	365,280	459,124	427,629	322,000	274,760	-6.9	+55.6	1,822,285	2,432,981	+33.5
Production.....thous. B. t. u.	271,330	248,993	235,877	306,158	317,234	169,376	187,196	+3.6	+69.5	1,627,600	2,595,015	+59.4
Stocks, end of month.....thous. B. t. u.	1,197,768	1,115,865	951,598	885,625	808,223	622,687	596,143	-8.7	+35.6			
Crude Steel												
Steel ingots, production:												
United States, total.....thous. of long tons..	4,881	4,838	4,927	4,511	4,512	4,148	4,650	0.0	-3.0	41,580	47,754	+14.8
Ratio to capacity.....per cent	100	95	93	92	85	88	91	-7.6	-6.6			
Canada.....thous. of long tons..	120	130	120	99	116	100	109	+17.2	+6.4	1,030	1,203	+16.8
U. S. Steel Corporation:												
Unfilled orders, end of month.....thous. of long tons..	4,257	4,088	3,658	3,903	4,087	3,698	3,751	+4.7	+9.0			
Steel castings:												
Production—												
Total.....short tons	116,221	117,187	119,310	106,909	121,450	75,761	87,952	+13.6	+38.1	857,368	1,136,351	+32.5
Ratio to capacity.....per cent	80	80	82	73	83	51	60	+13.7	+38.3			
Railroad specialties.....short tons	54,154	51,989	51,400	44,609	49,950	25,311	29,471	+12.0	+69.5	314,281	489,729	+55.8
Miscellaneous.....short tons	62,067	65,198	67,910	62,300	71,500	50,450	58,481	+14.8	+22.3	543,087	646,622	+19.1
New orders—												
Total.....short tons	95,201	102,443	99,291	86,413	135,400	82,762	78,860	+56.7	+71.7	819,168	1,147,481	+40.1
Ratio to capacity.....per cent	65	70	68	59	93	56	54	+57.6	+72.2			
Railroad specialties.....short tons	34,947	37,731	36,500	33,463	72,400	35,234	26,736	+116.4	+170.8	311,390	520,040	+67.0
Miscellaneous.....short tons	60,254	64,712	62,791	52,950	63,000	47,528	52,124	+19.0	+20.9	507,778	627,441	+23.6
Sheets, black, blue, galvanized, and full finished:												
Production—												
Total.....net tons	337,841	323,905	366,734	302,490	319,660	318,907	369,243	+5.7	-13.4	3,287,309	3,501,390	+6.5
Ratio to capacity.....per cent	110.4	98.1	109.7	97.7	95.3	101.0	103.5	-2.5	-7.9			
Stocks, end of month—												
Total.....net tons	163,607	154,854	143,323	154,928	169,390	146,832	150,600	+9.3	+12.5			
Unsold.....net tons	52,274	47,103	34,436	43,886	63,174	44,519	49,800	+44.0	+26.9			
Shipments.....net tons	347,989	344,676	365,649	301,330	291,135	322,876	354,925	-3.4	-18.0	3,175,619	3,471,114	+9.3
New orders.....net tons	307,911	337,222	282,107	274,568	258,810	370,936	344,614	-5.7	-24.9	3,125,164	3,430,790	+9.8
Unfilled orders, end of month.....net tons	676,568	658,155	570,613	522,803	478,038	539,960	525,161	-8.6	-9.0			
Steel barrels:												
Production.....barrels	774,853	790,175	806,574	668,224	629,904	593,255	656,021	-5.7	-4.0	6,283,025	7,145,901	+13.7
Ratio to capacity.....per cent	61.8	64.2	65.2	54.5	51.3	50.2	56.4	+5.9	-9.0			
Shipments.....barrels	779,567	782,411	809,860	658,583	638,609	595,640	661,009	-3.0	-3.4	6,285,460	7,134,730	+13.5
Stocks, end of month.....barrels	52,222	59,986	56,700	66,341	57,636	55,059	50,071	-13.1	+15.1			
Unfilled orders, end of month.....barrels	1,548,999	1,372,697	1,205,659	1,098,650	901,621	996,820	823,872	-17.9	+9.4			
Track work, production.....short tons	14,838	13,844	14,818	12,962	12,902	10,767	9,493	-0.5	+35.9	120,205	139,963	+16.4
Iron, steel, and heavy hardware												
sales.....rel. to Jan., 1921	220	223	240	229	243	207	236	+6.1	+3.0			
Lock washers, shipments.....thous. of dolls.	397	391	320	298	263	257	269	-11.7	-2.2	2,652	3,372	+27.1
Wholesale prices:												
Steel billets, Bessemer.....dolls. per long ton	35.25	35.00	35.00	35.00	35.00	32.00	32.80	0.0	+6.7			
Iron and steel comp.....dolls. per long ton	37.01	36.72	36.57	36.50	36.27	35.17	35.48	-0.6	+2.2			
Structural steel beams.....dolls. per 100 lbs.	1.95	1.95	1.95	1.95	1.90	1.85	1.85	-2.6	+2.7			
Composite finished steel.....dolls. per 100 lbs.	2.56	2.56	2.56	2.54	2.51	2.50	2.52	-1.2	-0.4			

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
IRON AND STEEL—Continued												
Fabricated Steel Products												
Structural steel, fabricated:												
New orders (prorated).....short tons..	346,500	350,350	365,750	° 319,550	342,650	319,550	° 257,950	+7.2	+32.8	2,798,950	3,299,450	+17.9
Ratio to capacity.....per cent..	90	91	95	° 83	89	83	° 67	+7.2	+32.8			
Shipments (prorated).....short tons..	292,600	304,150	° 342,650	319,550	354,200	273,350	319,550	+10.8	+10.8	2,571,800	3,022,250	+17.5
Ratio to capacity.....per cent..	76	79	° 89	83	92	71	83	+10.8	+10.8			
Steel plate, fabricated, new orders:												
Total.....short tons..	45,918	48,968	39,702	° 41,653	30,669	40,281	53,983	-26.4	-43.2	437,951	444,606	+1.5
Ratio to capacity.....per cent..	58	62	° 53	39	50	50	68	-26.4	-42.6			
Oil storage tanks.....short tons..	6,890	14,963	11,150	° 15,189	8,607	18,572	23,960	-43.3	-64.1	195,230	126,063	-35.4
Steel bars, cold finished, shipments.....short tons..	51,181	49,910	46,747	° 40,889	39,296	43,893	50,867	-3.9	-22.7	417,961	512,666	+22.7
Steel boilers, new orders:												
Quantity.....number..	1,685	2,052	1,859	° 1,910	1,712	1,749	1,803	-10.4	-5.0	16,669	16,258	-2.5
Area.....thous. of sq. ft..	1,823	2,075	1,781	° 1,957	1,871	1,453	1,500	-4.4	+24.7	14,917	17,427	+16.8
Fabricated-Steel Products												
Steel furniture:												
Business group—												
Shipments.....thous. of dolls..	2,574	2,625	2,483	° 2,334	2,971	2,754	3,159	+27.3	-6.0	29,972	28,397	-2.3
New orders.....thous. of dolls..	2,522	2,560	2,418	° 2,290	2,856	2,689	3,193	+24.7	-10.6	29,687	28,177	-5.1
Unfilled orders, end mo.....thous. of dolls..	2,320	2,240	2,171	° 2,055	2,067	2,062	2,095	+0.6	-1.3			
Shelving—												
Shipments.....thous. of dolls..	920	867	890	° 843	979	678	954	+16.1	+2.6	7,590	9,605	+26.5
New orders.....thous. of dolls..	959	939	931	° 880	928	800	959	+5.5	-3.2	7,897	10,019	+26.9
Unfilled orders, end mo.....thous. of dolls..	934	999	1,041	° 1,079	1,015	754	760	-5.9	+38.6			
Iron and steel:												
Exports.....long tons..	247,811	270,532	242,856	222,408	247,646	228,056	256,870	+11.3	-3.6	2,384,301	2,575,281	+8.0
Imports.....long tons..	46,397	51,275	61,547	46,346	49,502	47,685	50,176	+6.8	-1.3	497,538	484,242	-2.7
Enameled Ware												
Baths:												
Shipments.....pieces..	89,388	99,705	101,050	77,374	65,861	86,342	93,174	-14.9	-29.3	989,144	840,257	-15.1
Stocks, end of month.....pieces..	181,677	162,694	152,349	152,107	161,648	134,749	147,656	+6.3	+9.5			
New orders.....pieces..	82,349	119,670	116,532	58,574	57,397	76,074	90,665	-2.0	-36.7	1,084,367	863,563	-20.4
Unfilled orders, end of month.....pieces..	41,644	61,118	74,973	55,984	47,554	53,303	44,842	-15.1	+6.0			
Lavatories:												
Shipments.....pieces..	101,900	108,077	125,920	° 96,210	86,323	94,383	99,250	-10.3	-13.0	1,114,395	983,542	-11.7
Stocks, end of month.....pieces..	246,575	223,657	192,213	° 172,442	177,104	168,211	180,651	+2.7	-2.0			
New orders.....pieces..	92,709	140,109	146,983	° 72,088	72,763	89,126	91,575	+0.9	-20.5	1,219,292	1,018,821	-16.4
Sinks:												
Shipments.....pieces..	102,709	114,051	120,018	° 103,097	93,896	101,777	111,740	-8.9	-16.0	1,154,231	1,021,512	-11.5
Stocks, end of month.....pieces..	298,739	273,463	254,210	° 233,532	246,148	216,255	230,725	+5.4	+6.7			
New orders.....pieces..	94,446	138,064	142,536	° 83,672	79,432	99,749	110,396	-5.1	-28.0	1,259,146	1,060,999	-15.7
Miscellaneous sanitary ware:												
Shipments.....pieces..	42,061	44,762	48,554	° 37,205	38,881	44,910	46,129	+4.5	-15.7	479,541	398,946	-16.8
Stocks, end of month.....pieces..	142,411	133,265	126,626	° 119,359	131,672	103,509	116,110	+10.3	+13.4			
New orders.....pieces..	41,817	54,131	53,402	° 28,924	34,653	44,707	43,899	+19.8	-21.1	495,933	411,518	-17.0
Small ware (all except baths):												
Unfilled orders, end of month.....pieces..	154,243	214,996	259,787	207,826	174,626	155,483	129,154	-16.0	+35.2			
Enameled sheet-metal ware:												
Shipments.....dozen pieces..	337,375	290,532	385,162	338,169	371,292	352,484	417,387	+9.8	-11.0	3,540,547	3,806,865	+7.5
Machinery												
Vacuum cleaners, shipments.....number..	87,951	62,750	92,537			89,222	96,528					
Water softeners, shipments.....units..	1,228	1,177	1,581	1,484	1,450	1,187	1,505	-2.3	-3.7	14,136	14,064	-0.5
Water systems, shipments.....units..	13,031	° 12,268	° 14,200	12,600	12,254	10,200	11,367	-2.7	+7.8	99,967	111,438	+11.5
Pumps:												
Domestic shipments—												
Pitcher, hand, etc.....units..	39,898	39,586	52,451	48,039	41,566	42,538	42,315	-13.5	-1.8	469,355	454,316	-3.2
Power, horizontal type.....units..	2,989	2,768	2,902	2,262	2,532	2,017	2,732	+11.9	-7.3	22,273	25,160	+13.0
Steam, power, and centrifugal—												
New orders.....thous. of dolls..	2,014	1,778	1,819	1,628	1,868	1,405	1,708	+14.7	+9.4	14,490	18,059	+24.6
Shipments.....thous. of dolls..	1,715	1,849	1,978	1,774	1,934	1,369	1,634	+9.0	+18.4	14,277	17,543	+22.9
Unfilled orders, end mo.....thous. of dolls..	4,364	4,282	4,115	4,052	3,981	3,056	3,128	-1.8	+27.3			
Agricultural machinery and equipment:												
Shipments—												
Total.....rel to 1923-25.....	240.1	231.2	229.3	° 172.8	146.5	179.1	153.4	-15.2	-4.5			
Domestic.....rel to 1923-25.....	233.3	224.9	218.4	° 152.8	127.2	145.7	129.1	-16.8	-1.5			
Foreign.....rel to 1923-25.....	275.3	263.8	285.7	° 275.9	246.3	353.7	280.3	-10.7	-12.1			
Production.....rel to 1923-25.....	174.2	167.7	156.4	° 155.1	154.4	145.5	148.5	-0.5	+4.0			
Foundry equipment:												
New orders.....rel. to 1922-24.....	177.3	219.3	229.5	216.3	245.3	170.0	185.0	+13.4	+32.5			
Shipments.....rel. to 1922-24.....	172.7	182.1	150.8	176.8	214.1	129.7	254.3	+21.1	-15.8			
Unfilled orders, end of mo.....rel. to 1922-24.....	300.8	368.7	441.1	480.8	492.5	529.5	462.6	+2.4	+6.5			
Stokers, mechanical, sales:												
Quantity.....number..	203	186	199	° 155	178	161	100	+14.8	+78.0	1,272	1,530	+20.3
Power.....horsepower..	67,322	65,197	54,929	° 45,635	56,108	65,060	27,219	+22.8	+106.1	428,538	515,140	+20.2
Machine tools:												
New orders.....rel. to 1922-24.....	292	259	298	241	322	265	284	+33.6	+13.4			
Shipments.....rel. to 1922-24.....	296	278	277	257	315	205	221	+22.6	+42.5			
Unfilled orders, end of mo.....rel. to 1922-24.....	722	694	693	709	697	441	504	-1.7	+38.3			
Electric hoists:												
New orders—												
Quantity.....number..	600	504	437	423	461	447	405	+9.0	+13.8	4,248	5,352	+26.0
Value.....dollars..	283,170	249,447	264,888	230,543	231,372	228,510	209,594	+0.4	+10.4	2,000,410	2,659,005	+33.0
Shipments.....dollars..	269,978	290,141	339,881	281,439	233,215	172,986	202,829	-17.1	+15.0	1,836,257	2,572,193	+40.1
Electric overhead cranes:												
Shipments.....thous. of dolls..	1,091	1,146	1,060	1,048	1,322	464	806	+26.1	+64.0	5,802	9,748	+68.0
New orders.....thous. of dolls..	1,189	1,157	1,165	701	1,142	713	775	+62.9	+47.4	6,314	12,480	+97.7
Unfilled orders, end of mo.....thous. of dolls..	5,047	5,118	5,193	4,879	4,696	2,188	2,165	-3.7	+117.0			
Woodworking machinery:												
New orders.....thous. of dolls..	1,678	1,691	1,748	1,297	1,351	1,639	1,585	-3.5	-21.1	14,306	16,695	+16.7
Shipments.....thous. of dolls..	1,612	1,767	1,974	1,555	1,568	1,413	1,666	+0.8	-5.9	13,361	16,862	+26.2
Shipments.....number of machines..	1,056	1,232	1,386	1,129	1,246	1,050	1,170	+10.4	+6.5	10,080	11,880	+17.9
Cancellations.....thous. of dolls..	27	18	25	15	47	26	140	+213.3	-66.4	367	338	-7.9
Unfilled orders, end of mo.....thous. of dolls..	2,445	2,369	2,130	1,829	1,461	2,265	2,035	-20.1	-28.2			

° Revised.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	June	July	August	Septem-ber	October	Septem-ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
IRON AND STEEL—Continued												
Machinery—Continued												
Electric industrial trucks and tractors:												
Shipments, domestic—												
Tractors.....number of vehicles.....	17	18	15	21	14	11	5	-33.3	+180.0	87	153	+75.9
All other types.....number of vehicles.....	168	145	129	132	123	102	109	-6.8	+12.8	972	1,477	+52.0
Exports.....number of vehicles.....	16	5	10	7	32	5	20	+357.1	+60.0	122	124	+1.6
Fire-extinguishing equipment, shipments:												
Motor vehicles.....number.....	120	* 131	* 116	* 122	113	143	139	-7.4	-18.7	1,089	1,101	+1.1
Hand types.....number.....	51,929	62,266	63,806	51,197	47,840	42,193	49,128	-6.6	-2.6	473,767	538,441	+13.7
Patents issued:												
Total, all classes.....number.....	3,591	4,054	3,533	3,081	4,462	3,039	4,323	+44.8	+3.2	35,572	37,168	+4.5
Agricultural implements.....number.....	51	53	51	51	63	40	59	+23.5	+6.8	423	523	+23.6
Internal-combustion engines.....number.....	39	92	55	44	86	42	67	+95.5	+28.4	523	569	+8.8
NONFERROUS METALS												
Copper												
Production:												
Mines.....short tons.....	82,354	79,229	78,885	* 79,402	82,575	78,341	86,480	+4.0	-4.5	738,092	855,497	+15.9
Smelter.....short tons.....	95,339	94,690	91,735	92,538	97,405	85,795	100,720	+5.3	-3.3	853,571	994,619	+16.5
Refined (N. and S. America).....short tons.....	156,447	153,513	148,648	134,343	152,840	137,018	149,199	+13.8	+2.4	1,324,496	1,528,278	+15.4
World production, blister.....short tons.....	174,586	174,347	174,329	* 174,553	178,269	157,518	176,623	+2.1	+0.9	1,553,418	1,804,158	+16.1
Domestic shipments, refined.....short tons.....	95,258	98,720	96,970	98,043	105,729	88,707	100,371	+7.8	+5.2	798,749	992,280	+24.2
Exports.....short tons.....	40,852	33,876	36,811	42,978	44,502	36,190	45,168	+3.5	-1.5	466,380	427,974	-8.2
Stocks (North and South America), end mo.:												
Refined.....short tons.....	83,140	97,729	104,372	94,751	88,401	51,812	45,648	-6.7	+93.7			
Blister.....short tons.....	251,481	239,470	241,678	* 253,519	254,598	239,142	241,732	+0.4	+5.3			
Wholesale price, electrolytic.....dolls. per lb.....	.1778	.1778	.1778	.1778	.1778	.1472	.1520	0.0	+17.0			
Wire Cloth												
Production.....thous. of sq. ft.....	456	438	498	373	422	403	466	+13.1	-9.4	4,378	4,577	+4.5
Shipments.....thous. of sq. ft.....	404	461	434	394	417	423	442	+5.8	-5.7	4,123	4,225	+2.5
Stocks, end of month.....thous. of sq. ft.....	1,084	1,049	978	928	933	1,099	1,068	+0.5	-12.6			
New orders.....thous. of sq. ft.....	244	345	302	333	454	412	419	+36.3	+8.4	3,878	4,145	+6.9
Unfilled orders, end of month.....thous. of sq. ft.....	249	405	211	242	257	320	266	+6.2	-3.4			
Make and hold orders, end of month.....thous. of sq. ft.....	563	507	480	435	499	453	459	+14.7	+8.7			
Tin												
Deliveries (consumption).....long tons.....	7,455	6,865	7,185	8,120	6,515	6,885	6,475	-19.8	+0.3	64,565	76,775	+18.9
Stocks, end of month:												
World visible supply.....long tons.....	23,751	23,789	26,400	24,556	25,580	19,924	20,907	+4.2	+22.4			
United States.....long tons.....	3,820	3,087	2,858	2,479	2,720	3,508	4,598	+9.7	-40.8			
Imports.....long tons.....	7,150	5,621	9,737	7,712	6,201	8,187	8,048	-19.6	-22.9	66,464	78,319	+17.8
Price, pig, New York.....dolls. per lb.....	.4426	.4640	.4665	.4538	.4235	.4807	.4901	-6.7	-13.6			
Zinc												
Retorts in operation, end of month.....number.....	72,087	72,329	58,800	68,828	66,996	61,965	59,832	-2.7	+12.0			
Per cent of total.....per cent.....	60.2	60.1	49.2	57.4	55.9	53.4	51.5	-2.6	+8.5			
Production.....short tons.....	52,953	54,441	55,290	53,285	50,938	49,361	50,259	-4.4	+1.4	518,743	531,852	+2.5
Stocks, end of month.....short tons.....	36,932	44,142	47,833	53,362	57,116	47,915	46,068	+7.0	+24.0			
Ore, Joplin district:												
Shipments.....short tons.....	60,119	48,995	63,127	45,084	48,810	41,429	41,165	+8.3	+18.6	468,828	530,748	+13.2
Stocks, mines, end of month.....short tons.....	47,458	39,813	42,876	43,832	44,622	48,474	53,209	+1.8	-16.1			
Price, slab, prime western.....dolls. per lb.....	.0669	.0677	.0680	.0680	.0674	.0625	.0625	-0.9	+7.8			
Lead												
Production.....short tons.....	57,579	50,924	53,316	* 56,807	61,491	55,167	58,118	+8.2	+5.8	535,884	576,871	+7.6
Ore shipments:												
Joplin district.....short tons.....	8,491	5,373	7,808	7,461	7,588	9,326	10,514	+1.7	-27.8	79,207	85,115	+7.5
Utah.....short tons.....	76,003	60,083	92,068	75,927	77,699	65,353	71,887	+2.3	+8.1	694,884	805,454	+15.9
Receipts in U. S. ore.....short tons.....	53,542	54,865	54,365	54,623	51,978	51,978	55,610			7,473,114	7,495,016	+4.6
Stocks, U. S. and Mexico, end mo. ....short tons.....	173,612	173,549	175,641	168,707		155,432	152,746					
Price, pig, desilvered, N. Y. ....dolls. per lb.....	.0700	.0680	.0675	.0689	.0687	.0645	.0650	-0.3	+5.7			
Other Metal Products												
Babbitt metal, consumption:												
Total apparent.....thous. of lbs.....	5,928	5,361	5,433	5,225	5,481	5,308	5,796	+4.9	-5.4	49,060	57,231	+16.7
Direct by producers.....thous. of lbs.....	1,107	1,313	1,435	1,337	1,512	999	1,191	+13.1	+27.0	10,227	12,710	+24.3
Sale to consumers.....thous. of lbs.....	4,821	4,048	3,997	3,888	3,969	4,309	4,605	+2.1	-13.8	38,833	44,521	+14.6
Pails and tubs, galvanized:												
Production.....dozens.....	98,857	105,454	107,004	113,698	129,282	150,845	153,813	+13.7	-15.9	1,550,910	1,409,449	-9.1
Shipments.....dozens.....	104,762	109,841	108,461	120,297	135,197	139,183	152,258	+12.4	-11.2	1,557,309	1,448,855	-7.0
Other galvanized ware:												
Production.....dozens.....	37,479	42,384	53,250	46,504	45,117	55,850	56,469	-3.2	-20.1	445,833	475,147	+6.6
Shipments.....dozens.....	35,334	44,117	54,860	52,970	49,511	50,606	54,596	-6.5	-9.3	424,242	460,795	+8.6
Electrical Equipment												
Electrical mfrs., new orders (quarterly).....thous. of dolls.....	* 340,898			* 336,806		* 264,466		-1.2	+27.4	747,495	1,000,129	+33.8
Electrical porcelain, shipments:												
Standard.....dollars.....	101,013	139,240	97,631	135,487		112,210	128,255			7,718,634	7,104,258	+45.1
Special.....dollars.....	172,704	168,066	165,385	171,698		129,587	148,999			7,127,984	7,144,120	+28.0
High tension.....dollars.....	677,099	632,172				493,067	539,810					
Glazed nail knobs.....thous. of pieces.....	3,794	8,301	2,794	4,146		4,213	5,257			7,26,697	7,38,813	+45.4
Unglazed nail knobs.....thous. of pieces.....	1,998	2,426	1,868	2,250		2,796	3,042			7,14,663	7,21,887	+49.3
Tubes.....thous. of pieces.....	1,746	3,330	1,870	1,729		2,694	2,807			7,14,929	7,10,804	+12.6
Laminated phenolic products, shipments.....dollars.....	1,456,335	1,732,023	1,915,381	1,514,902		1,243,476	1,365,690			7,8,715,110	7,13,425,531	+54.0

* Quarter ending in month indicated.

* Revised.

* Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929	Oct., 1929	1928	1929	
								from Sept., 1929	from Oct., 1928			
NONFERROUS METALS—Continued												
Electrical Equipment—Continued												
Motors:												
New orders.....dollars	1,098,864	811,575	1,082,845			957,093	926,133					
Billings (shipments).....dollars	883,821	854,986	853,961			781,472	950,707					
Power switching equipment, new orders:												
Indoor.....dollars	133,418	208,495	169,384	181,078	175,077	118,301	108,478	-3.3	+61.4	1,390,636	1,760,141	+26.6
Outdoor.....dollars	598,645	520,058	605,273	400,343	503,226	281,502	313,285	+25.7	+60.6	3,796,602	4,706,297	+24.0
Outlet boxes and covers, shipments.....pieces	2,114,582	2,587,786	2,719,688	2,542,931		2,915,560	3,123,321			7,248,155	8,227,243	+13.2
Vulcanized fiber:												
Shipments, total.....thous. of dolls.	814	878	1,029	883		568	649			7,563	7,597	+34.7
Consumption.....thous. of lbs.	3,470	3,489	3,803	3,411		2,362	2,971			7,242	7,302	+25.0
Industrial reflectors, sales.....units	130,413	124,466	157,473			126,151	156,243					
Power cables, shipments.....thous. of ft.	2,112	2,366	2,411	2,676	3,288	2,197	2,384	+22.9	+37.9	19,485	22,819	+17.1
Flexible cords:												
Shipments.....thous. of ft.	40,588	45,114	50,538	45,422		43,854	54,973			7,364,008	7,423,021	+16.2
Stocks, end of month.....thous. of ft.	66,831	58,486	57,202	55,980		44,193	43,214					
Welding sets, new orders:												
Single operator.....units	296	282	296	341	302	234	297	-11.4	+1.7	2,321	3,327	+43.3
Multiple operator.....units	9	5	7	9	7	7	58	-22.2	-99.9	183	74	-59.6
Nonmetallic conduits, shipments.....thous. of ft.	6,684	7,320	6,364	6,954		7,376	8,804			7,688,263	7,613,313	-10.2
Electric furnaces, new orders.....kilowatts	6,237	6,932	5,114	4,105	7,208	4,226	4,719	+75.6	+52.7	48,852	80,779	+65.4
Manufactured mica:												
Shipments.....thous. of dolls.	252	254	274	263	274	247	302	+4.2	-9.3		2,821	
Stocks, end of month.....thous. of dolls.	294	326	275	235	206	285	326	-12.3	-36.8			
Delinquent accounts, electrical trade:												
Amount.....dollars	168,724	146,166	174,438	128,059	167,129	140,637	162,564	+30.5	+2.8			
Delinquent firms.....number	1,223	1,027	1,176	1,117	1,392	1,220	1,245	+24.6	+11.8			
AUTOMOBILES												
Production:												
United States—												
Total.....number of cars	6,545,356	6,500,392	6,498,375	6,415,697	379,942	415,314	397,284	-8.6	-4.4	3,867,503	5,017,806	+29.7
Passenger cars.....number of cars	452,598	426,137	441,942	364,786	320,327	358,615	339,487	-12.2	-5.6	3,399,425	4,325,504	+27.2
Taxicabs.....number of cars	1,378	1,054	1,040	865	868	276	659	+0.3	+31.7	4,977	14,460	+190.5
Trucks.....number of cars	6,91,380	6,73,201	6,55,393	6,50,046	58,747	56,423	57,138	+17.4	+2.8	463,101	677,842	+46.4
Canada—												
Total.....number of cars	21,492	17,461	14,214	13,817	14,523	21,193	18,536	+5.1	-21.6	221,188	248,376	+12.3
Passenger cars.....number of cars	16,511	13,600	11,037	10,710	8,975	16,572	13,016	-16.2	-31.0	181,853	195,935	+7.7
Trucks.....number of cars	4,981	3,861	3,177	3,107	5,548	4,621	5,520	+78.6	+0.5	39,335	52,441	+33.3
Exports (assembled):												
From United States—												
Total.....number of cars	50,976	55,545	42,849	33,919	32,443	30,559	46,524	-4.4	-30.3	431,098	489,167	+13.5
Passenger cars.....number of cars	34,106	29,082	22,123	20,934	20,931	22,494	29,951	0.0	-30.1	318,444	314,713	-1.2
Trucks.....number of cars	16,870	26,463	20,706	12,985	11,512	8,065	16,573	-11.3	-30.5	112,654	174,454	+54.9
From Canada—												
Total.....number of cars	8,219	7,319	7,629	6,641	9,637	8,670	9,705	+45.1	-0.7	64,319	90,940	+41.4
Passenger cars.....number of cars	5,346	4,732	4,901	4,292	5,635	6,279	6,696	+31.3	-15.8	46,556	58,326	+25.3
Trucks.....number of cars	2,873	2,587	2,728	2,348	4,002	2,391	3,009	+70.4	+33.0	17,763	32,614	+83.6
Shipments (General Motors Co.):												
To dealers.....number of cars	200,754	189,428	168,185	146,483	122,104	167,460	120,876	-16.6	+1.0	1,727,778	1,798,068	+4.1
To users.....number of cars	194,705	181,851	173,884	145,171	139,319	148,784	140,883	-4.0	-1.1	1,717,591	1,721,279	+0.2
Accessories and parts, shipments:												
Original shipment.....rel. to Jan., 1925	231	205	193	186	160	218	200	-14.0	-20.0			
Replacement parts.....rel. to Jan., 1925	150	152	169	173	166	185	184	-4.0	-9.8			
Accessories.....rel. to Jan., 1925	90	92	88	84	91	122	91	+8.3	0.0			
Service parts.....rel. to Jan., 1925	186	170	170	147	147	140	141	0.0	+4.3			
Rim production.....thous. of rims	2,184	1,897	1,570	2,110	1,647	2,316	2,115	-21.9	-22.1	21,930	21,425	-2.3
New passenger-car registrations:												
Total.....number of cars	386,441	432,609	376,882	304,359	288,782	271,821	284,939	-5.1	+1.3	2,766,960	3,557,833	+28.6
Highest price group.....number of cars	11,447	11,240	12,326	11,463	11,561	11,600	12,264	+0.9	-5.7	113,275	113,965	+0.6
Second highest group.....number of cars	57,915	64,768	67,177	52,325	47,606	60,475	56,707	-9.0	-16.0	586,624	561,083	-4.4
Third highest group.....number of cars	85,913	87,685	66,834	52,424	47,795	64,326	62,698	-8.8	-23.8	785,803	740,531	-5.8
Lowest price group.....number of cars	230,801	267,878	230,023	187,846	181,450	134,688	152,533	-3.4	+19.0	1,269,872	2,137,195	+68.3
Miscellaneous.....number of cars	365	1,038	522	301	370	732	737	+22.9	-49.8	11,386	4,620	-59.4
FUELS												
Coal and Coke												
Bituminous:												
Production—												
United States.....thous. of short tons	38,073	40,635	43,889	44,515	51,235	41,971	51,176	+15.1	+0.1	409,874	433,481	+5.8
Canada.....thous. of short tons	1,348	1,290	1,344	1,379		1,412	1,739			7,12,574	7,12,660	+0.7
Exports.....thous. of long tons	1,721	1,735	1,441	1,631	1,596	1,577	1,497	-2.1	+6.6	11,732	13,171	+12.3
Consumption—												
By vessels.....thous. of long tons	314	352	339	347	343	313	333	-1.2	+3.0	3,199	3,228	+0.9
By electric-power plants.....thous. of short tons	3,403	3,603	3,885	3,855		3,418	3,826			7,29,916	7,32,966	+10.2
By railroads.....thous. of short tons	7,071	7,155	7,500	7,580		6,735	8,433			7,68,314	7,69,381	+1.6
By coke plants—												
United States.....thous. of short tons	7,442	7,588	7,571	7,153	7,389	6,180	6,726	+3.3	+9.9	62,712	73,057	+16.5
Canada.....thous. of short tons	306	317	315	310		270	294			7,2,339	7,2,768	+18.3
Stocks, end of month, held by consumers.....thous. of short tons	33,100			37,500		41,100	42,400					
Prices—												
Mine aver. (spot).....dolls. per short ton	1.67	1.67	1.77	1.83	1.90	1.81	1.83	+3.8	+3.8			
Wholesale, comp.....dolls. per short ton	3.905	3.906	3.913	3.930	3.961	4.019	4.020	+0.8	-1.5			
Retail, composite.....dolls. per short ton	8.50	8.62	8.69	8.87	8.98	8.84	8.96	+1.2	+0.2			
Anthracite:												
Production.....thous. of short tons	5,069	4,993	5,954	6,792	8,332	5,927	8,400	+22.7	-0.8	61,912	62,940	+1.7
Exports.....thous. of long tons	189	203	222	323	396	265	405	+22.6	-2.2	2,415	2,462	+1.9
Stocks, end of mo. in yards of dealers.....no. of days' supply	59	57		55		57	53					
Prices—												
Wholesale, comp.....dolls. per long ton	12.628	12.754	12.848	12.924	12.999	13.040	13.040	+0.6	-0.3			
Retail, composite.....dolls. per short ton	14.48	14.63	14.67	14.87	14.98	14.93	14.98	+0.7	0.0			

6 Revised.

7 Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929, from Sept., 1929	Oct., 1929, from Oct., 1928	1928	1929	
FUELS—Continued												
Coal and Coke—Continued												
Coke:												
Production, U. S.—												
Beehive.....thous. of short tons..	602	600	562	504	470	322	6 431	-6.7	+9.0	3,598	5,256	+46.1
By-product.....thous. of short tons..	4,510	4,614	4,643	4,413	4,610	3,959	4,219	+4.5	+9.3	39,755	44,974	+13.1
Production, Canada.....thous. of short tons..	221	225	227	220	220	194	210			7 1,680	7 1,995	+18.7
Exports.....thous. of long tons..	92	84	86	98	126	77	100	+28.6	+26.0	761	896	+17.7
Price, nrmace, Conellsville.....dolls. per short ton..	2.80	2.80	2.76	2.70	2.70	2.88	2.91	0.0	-7.2			
Petroleum												
Crude Petroleum:												
Production.....thous. of bbls..	83,403	91,327	92,288	87,269	88,104	76,474	6 79,751	+1.0	+10.5	745,848	847,103	+13.6
Stocks at end of month—												
Total (comparable).....thous. of bbls..	379,089	383,343	386,677	386,662	384,502	366,720	6 367,949	-0.6	+4.5			
Tank farms and pipe lines.....thous. of bbls..	331,786	335,232	339,679	341,557	339,639	326,123	6 328,143	-0.6	+3.5			
Refineries.....thous. of bbls..	47,303	48,111	46,998	45,105	44,863	40,597	6 39,806	-0.5	+12.7			
California—												
Light.....thous. of bbls..	32,667	34,430	37,685	40,433	42,041	16,870	6 16,684	+4.0	+152.0			
Heavy.....thous. of bbls..	103,660	105,646	108,362	110,010	111,076	96,563	6 97,025	+1.0	+14.5			
Imports.....thous. of bbls..	6,591	6,122	5,800	6,953	5,766	7,139	6,703	-17.1	-14.0	66,052	68,403	+3.7
Consumption (run to stills).....thous. of bbls..	84,400	85,919	86,733	84,099	83,390	79,894	6 79,663	+5.1	+11.0	756,626	825,984	+9.2
Refinery operation.....per ct. of capacity	83	81	81	80	79	84	82	-1.2	-3.7			
Price, Kansas-Oklahoma.....dolls. per bbl.	1.300	1.300	1.300	1.300	1.300	1.210	1.210	0.0	+7.4			
Oil wells completed.....number	1,316	1,420	1,671	1,440	1,535	1,185	6 1,206	+6.6	+27.3	10,269	13,145	+28.0
Mexico—												
Production.....thous. of bbls..	3,648	3,906	4,091	3,986	3,716	3,716	3,904			7 38,768	7 32,941	-15.0
Exports.....thous. of bbls..	2,961	2,483	2,511	2,586	2,244	2,244	2,731			7 26,884	7 20,886	-22.3
Venezuela—												
Production.....thous. of bbls..	12,101	10,793	11,394	11,338	11,591	9,478	10,520	+2.2	+10.2	84,538	113,147	+33.8
Exports.....thous. of bbls..	10,564	10,731	10,897	10,146	10,717	8,615	9,283	+5.6	+15.4	80,947	101,443	+25.3
Gasoline:												
Production—												
Raw (at refineries).....thous. of bbls..	35,606	37,855	38,510	37,152	39,663	33,670	6 34,415	+6.8	+15.2	309,946	359,758	+16.1
Natural gas (at plants).....thous. of bbls..	4,250	4,417	4,507	4,574	4,912	3,488	6 3,931	+7.4	+25.0	34,828	43,310	+24.4
Exports.....thous. of bbls..	5,658	5,925	5,491	4,233	5,896	4,670	3,919	+39.3	+50.4	43,333	49,840	+15.0
Consumption.....thous. of bbls..	33,163	36,860	37,759	34,193	32,816	29,766	6 30,696	-4.0	+6.9	275,972	313,800	+13.7
Stocks, end of month—												
Raw (at refineries).....thous. of bbls..	41,991	37,880	33,788	33,222	35,042	26,378	6 26,435	+5.5	+32.6			
Natural gas (at plants).....thous. of bbls..	1,357	1,156	893	661	490	436	402	-25.9	+21.9			
Retail distribution, 41 States.....thous. of gals..	944,989	1,025,073	1,101,808	982,555	982,555	919,055	893,735	+10.8	+9.9	7 8,206,714	7 7,912,938	-3.6
Prices—												
Wholesale, New York.....dolls. per gal..	.190	.190	.188	.166	.165	.180	.180	-0.6	-8.3			
Retail, wagon, 50 cities.....dolls. per gal..	.160	.158	.157	.160	.158	.163	.163	-1.2	-3.1			
Kerosene:												
Production.....thous. of bbls..	4,928	4,406	5,111	4,667	5,379	4,900	6 5,145	+15.3	+4.5	49,650	47,477	-4.4
Exports.....thous. of bbls..	1,761	1,281	2,034	1,101	2,237	2,068	1,749	+103.2	+27.9	18,536	16,838	-9.2
Consumption.....thous. of bbls..	2,547	2,684	3,189	3,387	3,136	3,164	6 3,405	-7.4	-7.9	30,207	30,750	+1.8
Stocks at refineries, end mo.....thous. of bbls..	8,348	8,797	8,689	8,864	8,865	8,593	6 8,633	0.0	+2.7			
Retail distribution, 13 States.....thous. of bbls..	31,266	35,213	37,068	33,070	35,072	39,713	33,083					
Price, 150° water white.....dolls. per gal..	.074	.089	.088	.070	.072	.086	.082	+2.9	-12.2			
Gas and fuel oils:												
Production.....thous. of bbls..	37,338	37,980	39,011	37,468	38,974	37,104	6 37,029	+4.0	+5.3	353,873	375,499	+6.1
Consumption—												
By vessels.....thous. of bbls..	4,544	4,593	4,734	4,424	4,540	4,053	4,558	+2.6	-0.4	42,803	44,068	+3.0
By electric pow. plants.....thous. of bbls..	616	701	793	6 820	1,061	612	619	+29.4	+71.4	5,680	7,781	+37.0
By railroads.....thous. of bbls..	4,170	4,477	4,326	4,375	3,969	6 4,371	4,877			7 36,528	7 39,091	+7.0
Stocks at refineries, end mo.....thous. of bbls..	37,332	40,075	39,316	40,646	38,717	39,900	39,599	-4.7	-2.2			
Price Okla. 24-26, refineries.....dolls. per bbl.	.675	.695	.744	.775	.838	.650	.650	+8.1	+28.9			
Lubricating oil:												
Production.....thous. of bbls..	2,928	2,936	3,143	2,852	2,885	2,833	2,979	+1.2	-3.2	28,915	29,039	+0.4
Consumption.....thous. of bbls..	2,446	2,167	2,268	2,054	1,378	1,995	6 2,122	-32.9	-35.1	19,675	19,930	+1.3
Stocks at refineries, end mo.....thous. of bbls..	7,869	7,524	7,478	7,589	8,021	7,742	7,830	+5.7	+2.4			
Prices, cylinder oil.....dolls. per gal..	.400	.388	.238	.369	.365	.236	.240	-1.1	+52.1			
Asphalt:												
Production.....thous. of short tons..	327	386	379	365	356	306	320	-32.9	+11.3	2,884	3,035	+5.2
Stocks, end of month.....thous. of short tons..	247	243	247	231	227	203	210	-1.7	+8.1			
Imports.....thous. of short tons..	13	3	18	11	16	4	11	+45.5	+45.5	80	93	+16.3
Coke:												
Production.....thous. of short tons..	154	158	169	161	172	119	125	+6.8	+37.6	1,162	1,481	+27.5
Stocks, end of month.....thous. of short tons..	498	564	608	649	672	402	404	+3.5	+66.3			
Wax:												
Production.....thous. of lbs..	52,714	46,171	53,377	44,513	56,377	50,428	54,546	+26.7	+3.4	518,794	530,195	+2.2
Stocks, end of month.....thous. of lbs..	188,764	191,298	190,878	183,714	189,094	85,417	6 92,814	+2.9				
RUBBER												
Crude Rubber												
World shipments, plantation.....long tons..	61,390	71,562	70,532	77,997	—	48,338	43,748			7 424,044	7 646,505	+52.3
Imports (including latex).....long tons..	41,828	44,318	37,851	34,814	38,454	39,838	44,072	+10.5	-12.7	356,513	476,683	+33.7
Consumption by tire mfrs.....thous. of lbs..	56,861	52,249	45,459	—	—	55,351	58,302					
World stocks, end of month:												
World total.....long tons..	245,553	255,247	259,583	270,284	—	198,481	177,776					
United States.....long tons..	92,062	95,536	90,769	84,362	88,483	68,851	66,421	+4.9	+33.2			
Europe.....long tons..	37,135	37,168	44,976	54,417	—	35,243	27,966					
Producing countries.....long tons..	36,336	39,131	36,802	37,753	37,902	17,687	15,489	+0.4	+144.7			
Afloat.....long tons..	80,020	83,412	87,217	94,252	—	76,600	67,900					
Wholesale price, smoked sheets, New York.....dolls. per pound..	.206	.213	.206	.202	.196	.182	.187	-3.0	+4.8			

6 Revised.

7 Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	June	July	August	Septem-ber	October	Septem-ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
RUBBER—Continued												
Tires and Tubes												
Pneumatic tires:												
Production..... thousands.....	5,478	4,856	4,354	3,557	3,706	5,101	5,495	+4.2	-32.6	49,779	49,838	+0.1
Stocks, end of month..... thousands.....	13,468	11,872	10,669	9,635	9,674	7,324	8,640	+0.4	+12.0			
Shipments—												
Domestic..... thousands.....	5,288	5,891	5,884	4,343	3,542	5,191	4,096	-18.4	-13.5	47,041	48,650	+3.4
Export..... thousands.....	153	168	217	158	199	168	191	+25.9	+4.2	1,571	1,864	+18.7
Inner tubes:												
Production..... thousands.....	5,234	4,634	4,385	4,113	4,062	5,327	5,197	-1.2	-21.8	52,089	49,464	-5.0
Stocks, end of month..... thousands.....	14,056	14,055	10,618	9,923	10,296	10,158	11,464	+3.8	-10.2			
Shipments—												
Domestic..... thousands.....	5,115	5,993	6,137	4,624	3,708	5,245	4,138	-19.8	-10.4	49,490	49,918	+0.9
Export..... thousands.....	98	91	109	117	119	121	108	+1.7	+10.2	1,004	1,196	+19.1
Solid and cushion:												
Production..... thousands.....	40	39	32	27	34	43	47	+25.9	-27.7	446	349	-21.7
Stocks, end of month..... thousands.....	133	129	118	113	109	151	153	-3.5	-28.8			
Shipments—												
Domestic..... thousands.....	38	39	40	35	34	42	43	-2.9	-20.9	416	365	-12.3
Exports..... thousands.....	3	2	3	2	2	2	3	0.0	-33.3	37	24	-35.1
Other Rubber Products												
Rubber-proofed fabrics, production:												
Total..... thous. of yds.....	4,409	4,260	5,085	5,507	4,966	5,914	5,914			7 29,034	7 37,929	+30.6
Auto fabrics..... thous. of yds.....	1,199	1,188	1,349	1,120	778	780	609	-30.5	+27.8	7,823	9,845	+25.8
Raincoat fabrics..... thous. of yds.....	1,948	1,864	2,419	3,063	3,063	3,179	4,009			7 9,800	7 13,194	+34.6
All other..... thous. of yds.....	1,262	1,208	1,317	1,324	1,007	1,007	1,296			7 12,020	7 15,668	+30.3
Rubber heels:												
Production..... thous. of pairs.....	20,007	19,315	23,095	21,702	21,451	21,932	21,932			7 178,471	7 177,096	-0.8
Shipments—												
To shoe manufacturers..... thous. of pairs.....	12,262	13,755	14,942	13,645	9,207	9,813	9,813			7 91,292	7 110,075	+20.6
To repair trade..... thous. of pairs.....	8,256	6,337	8,025	7,859	9,199	9,580	9,580			7 71,044	7 66,058	-7.0
For export..... thous. of pairs.....	926	794	1,098	1,054	875	1,262	1,262			7 7,717	7 9,708	+25.8
Stocks, end of month..... thous. of pairs.....	44,581	44,243	43,960	42,958	49,751	50,111	50,111					
Rubber soles:												
Production..... thous. of pairs.....	2,502	1,295	2,948	2,841	2,725	2,297	2,297			7 29,928	7 24,594	-17.8
Shipments—												
To shoe manufacturers..... thous. of pairs.....	2,185	1,272	2,548	2,185	1,703	1,655	1,655			7 17,187	7 19,531	+13.6
To repair trade..... thous. of pairs.....	522	163	517	693	893	958	958			7 8,342	7 5,474	-34.4
For export..... thous. of pairs.....	17	70	78	47	29	328	328			7 1,918	7 481	-74.9
Stocks, end of month..... thous. of pairs.....	3,843	2,895	3,319	3,241	5,501	5,212	5,212					
Mechanical rubber goods, shipments:												
Total..... thous. of dolls.....	6,792	6,306	6,792	5,906	5,393	5,837	5,837			7 52,795	7 59,201	+12.1
Belting..... thous. of dolls.....	1,613	1,645	1,940	1,490	1,412	1,387	1,387			7 13,090	7 14,418	+10.1
Hose..... thous. of dolls.....	2,658	2,355	2,196	1,964	1,731	2,026	2,026			7 19,772	7 21,928	+10.9
All other..... thous. of dolls.....	2,521	2,305	2,656	2,452	2,250	2,424	2,424			7 19,952	7 22,855	+14.5
Rubber bands, shipments..... thous. of lbs.....	187	192	196	189	216	186	216	+14.3	0.0	1,935	2,163	+11.8
Rubber flooring, shipments..... thous. of sq. ft.....	525	566	598	630	543	754	559	-13.8	-2.9	5,819	5,644	-3.0
Calendered rubber clothing:												
Production..... no. coats and sundries.....	87,530	89,871	96,281	93,444	99,588	92,588	106,005	+6.6	-6.1	1,018,344	854,308	-16.1
Net orders..... no. coats and sundries.....	98,444	60,921	37,906	49,940	76,194	108,156	75,482	+52.6	+0.9	709,038	599,557	-15.4
HIDES AND LEATHER												
Hides												
Imports:												
Total hides and skins..... thous. of lbs.....	41,509	49,910	47,956	51,903	48,489	34,448	35,982	-6.6	+34.8	450,802	422,576	-6.3
Calfskins..... thous. of lbs.....	6,559	5,636	4,900	3,178	4,886	2,707	4,310	+53.7	+13.4	38,351	39,855	+3.4
Cattle hides..... thous. of lbs.....	17,450	24,259	28,137	29,132	28,264	18,504	17,883	-3.0	+58.0	252,260	211,331	-16.2
Goatskins..... thous. of lbs.....	3,309	9,361	7,692	8,893	6,434	6,728	7,993	-27.7	-19.5	78,455	83,960	+7.0
Sheepskins..... thous. of lbs.....	6,824	6,849	4,405	7,336	5,091	4,902	3,785	-30.6	+34.5	54,632	56,949	+4.2
Stocks, end of month:												
Total..... thous. of lbs.....	250,025	248,549	253,415	253,680	249,272	253,921	253,921					
Cattle hides..... thous. of lbs.....	196,202	194,453	202,564	203,304	203,227	209,002	209,002					
Calf and kid skins..... thous. of lbs.....	32,525	30,951	28,141	27,071	24,059	23,118	23,118					
Sheep and lamb skins..... thous. of lbs.....	21,298	23,145	22,710	23,305	21,986	20,901	20,901					
Prices:												
Green, salted, packers' heavy native steers..... dolls. per lb.....	.168	.181	.188	.196	.186	.246	.219	-5.1	-15.1			
Calfskins, country, No. 1..... dolls. per lb.....	.186	.199	.198	.204	.197	.275	.246	-3.4	-19.9			
Inspected slaughter of livestock:												
United States—												
Cattle..... thous. of animals.....	636	706	726	753	839	764	801	+11.4	+4.7	7,038	6,935	-1.5
Calves..... thous. of animals.....	344	363	388	365	398	352	405	+9.0	-1.7	3,961	3,834	-3.2
Swine..... thous. of animals.....	3,756	3,597	3,130	3,104	3,857	2,508	3,713	+24.3	+3.9	39,477	38,864	-1.6
Sheep..... thous. of animals.....	1,108	1,255	1,298	1,317	1,365	1,307	1,409	+3.6	-3.1	11,245	11,773	+4.7
Canada—												
Cattle and calves..... thous. of animals.....	93	105	99	98	120	96	111	+22.4	+8.1	938	932	-0.6
Swine..... thous. of animals.....	161	159	160	142	207	161	200	+45.8	+3.5	2,077	1,897	-8.7
Sheep..... thous. of animals.....	25	55	77	93	178	86	142	+91.4	+25.4	454	541	+19.2
Leather												
Sole and belting leather:												
Production—												
Sole only..... thous. of backs, bends, sides.....	1,244	1,176	1,300	1,178	1,301	1,324	1,447	+10.4	-10.1	13,660	12,054	-11.8
Sole and belting..... thous. of lbs.....	24,911	23,965	25,323	23,291	23,510	23,510	25,711			7 220,902	7 210,191	-4.8
Stocks, end of month—												
In process of tanning..... thous. of lbs.....	79,153	80,641	80,587	81,574	85,990	83,388	83,388					
Finished..... thous. of lbs.....	70,616	68,538	66,276	61,974	72,243	75,188	75,188					
Exports..... thous. of sq. ft.....	758	832	782	539	583	733	825	+8.2	-29.3	8,346	8,842	+5.9
Price oak, scoured backs..... dolls. per lb.....	.49	.61	.52	.54	.55	.65	.63	+1.9	-12.7			
Upper leather:												
Production..... thous. of sq. ft.....	66,425	71,323	82,954	70,054	66,380	72,092	72,092			7 612,814	7 615,071	+0.4
Stocks, end of month—												
In process of tanning..... thous. of sq. ft.....	135,198	141,207	147,678	147,478	146,010	143,265	143,265					
Finished..... thous. of sq. ft.....	235,150	230,871	216,406	209,520	247,386	251,350	251,350					
Exports..... thous. of lbs.....	8,491	9,267	7,736	8,264	9,007	9,093	11,174	+9.0	-19.4	114,261	96,144	-13.9
Chrome calf, "B" grades..... dolls. per sq. ft.....	.50	.49	.49	.49	.49	.57	.55	0.0	-10.9			

* Revised.

† Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. increase (+) or decrease (-) cumulative, 1929, from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	HIDES AND LEATHER—Continued											
Leather Products												
Shoes:												
Production.....thous. of pairs.....	28,120	30,223	36,445	34,489	426	31,000	33,393			7 262,607	7 273,670	+4.2
Exports.....thous. of pairs.....	357	320	291	321	426	275	340	+32.7	+25.3	3,573	3,645	+2.0
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	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.....	252,703	255,711	292,545	285,094	318,041	213,945	236,907	+11.6	+34.2	2,149,070	2,637,961	+2.27
PAPER AND PRINTING												
Wood Pulp												
Mechanical:												
Production.....short tons.....	142,915	122,946	111,878	102,202		108,166	131,558			7 1,193,456	7 1,231,941	+3.2
Consumption and shipments.....short tons.....	136,669	136,695	145,432	135,514		122,771	146,383			7 1,819,753	7 1,250,164	-31.3
Stocks, end of month.....short tons.....	185,209	171,535	137,982	106,669		133,006	118,182					
Imports.....short tons.....	24,014	18,724	24,731	20,666	27,020	21,953	23,884	+30.7	+13.1	204,081	216,054	+5.9
Chemical:												
Production.....short tons.....	225,940	221,388	237,762	218,980		201,646	228,434			7 1,923,194	7 2,061,220	+7.2
Consumption and shipments.....short tons.....	223,016	220,714	235,310	219,842		204,378	231,800			7 1,929,502	7 2,059,014	+6.7
Stocks, end of month.....short tons.....	36,188	35,940	37,354	35,796		42,510	40,032					
Imports.....short tons.....	153,956	161,185	142,502	134,533	145,878	124,048	149,112	+8.4	-2.2	1,187,183	1,338,360	+12.7
Price, sulphite.....dolls. per 100 lbs.....	2.53	2.60	2.60	2.60	2.60	2.53	2.53	0.0	+2.8			
Newsprint Paper												
Production:												
United States, total.....short tons.....	113,407	111,578	120,868	108,155	122,009	102,821	122,415	+12.8	-0.3	1,170,017	1,160,252	-0.8
Ratio to capacity.....per cent.....	82	81	77	80		74	81					
Canada.....short tons.....	225,055	229,045	225,873	227,665	251,914	186,396	217,290	+10.7	+15.9	1,949,853	2,244,518	+15.1
Consumption by publishers.....short tons.....	192,424	173,375	172,239	193,045		169,625	189,240			1,644,974	1,674,983	+8.4
Shipments:												
United States.....short tons.....	114,558	112,616	118,789	107,495	122,040	107,834	121,729	+13.5	+0.3	1,153,359	1,170,527	+1.5
Canada.....short tons.....	233,920	227,502	224,254	226,623	252,591	197,532	222,430	+11.5	+13.6	1,950,852	2,147,763	+10.1
Imports.....short tons.....	202,398	210,497	209,901	196,123	221,010	164,648	200,362	+12.7	+10.3	1,745,787	1,969,248	+12.8
Exports:												
Canada.....short tons.....	219,895	199,692	217,638	201,249	232,441	170,840	214,228	+15.5	+8.5	1,797,238	2,061,321	+14.7
Stocks, end of month:												
At mills—												
United States.....short tons.....	24,602	23,603	25,656	26,490	26,573	35,687	36,380	+0.3	-27.0			
Canada.....short tons.....	24,199	28,993	29,785	30,742	30,064	43,800	37,018	-2.2	-18.8			
At publishers.....short tons.....	161,318	191,647	205,532	190,331		191,287	188,980					
In transit to publishers.....short tons.....	48,716	44,781	44,676	52,535		48,229	45,289					
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.....	695	501	819	739		835	933			7 5,996	7 6,176	+3.0
Imported.....no. of titles.....	125	131	177	57		261	160			7 1,335	7 1,197	-10.3
Sales books:												
New orders.....thous. of books.....	12,332	11,476	12,839	12,977	13,834	11,837	13,958	+6.6	-0.9	124,951	125,864	+0.7
Shipments.....thous. of books.....	12,445	13,737	13,691	12,226	14,147	11,976	14,605	+15.7	-3.1	122,400	127,081	+3.8
Blank forms, new orders.....thous. of sets.....	58,687	57,225	54,054	56,428	75,622	50,114	67,957	+34.0	+11.3	488,386	605,363	+24.0
Box Board												
Operation.....thous. of inch hours.....	9,171	9,045	9,590	8,528		8,344	9,430			7 75,632	7 82,827	+8.8
Operation.....per ct. of capacity.....	83.5	79.2	80.9	80.9		83.0	82.8					
Production.....short tons.....	241,028	236,377	264,365	237,759		224,971	244,894			7 1,962,076	2,227,945	+11.8
New orders.....short tons.....	231,230	240,617	257,318	246,801		234,449	241,491			7 2,009,361	2,202,301	+9.6
Shipments.....short tons.....	235,865	235,863	262,899	242,421		228,880	246,233			7 1,989,817	2,218,402	+11.5
Stocks, end of month.....short tons.....	62,384	63,333	61,853	58,664		45,271	43,627					
Stocks of waste paper, end of month:												
On hand.....short tons.....	159,005	175,306	171,360	174,526		116,197	127,989					
In transit and unshipped purchases.....tons.....	56,904	64,359	61,571	89,280		53,344	73,235					
Unfilled orders, end of month.....short tons.....	81,880	88,275	82,909	87,304		87,097	81,022					
Consumption of waste paper.....short tons.....	234,119	215,537	256,560	230,146		217,361	240,930			7 1,852,272	7 2,214,431	+14.2
Other Paper												
Binder's board, production.....short tons.....	3,092	2,828	3,443	2,903	2,682	2,431	2,644	-7.6	+1.4	30,750	30,103	-2.1
Book paper:												
Production.....short tons.....	129,743	130,768	138,614	135,842		117,374	132,633			7 1,126,079	7 1,201,689	+6.7
Ratio to capacity.....per cent.....	94	91	98	103		86	87					
Shipments.....short tons.....	130,132	130,245	136,951	135,434		120,895	133,429			7 1,118,919	7 1,207,524	+7.9
Stocks, end of month.....short tons.....	74,255	74,998	77,248	78,020		82,403	81,579					
New orders—												
Coated.....p. ct. of normal production.....	84	82	85	87	89	81	83	+2.3	+7.2			
Uncoated.....p. ct. of normal production.....	82	81	77	86	92	80	86	+7.0	+7.0			
Unfilled orders, end of month—												
Coated.....p. ct. of normal production.....	9	10	9	10	11	10	10	+10.0	+10.0			
Uncoated.....p. ct. of normal production.....	8	9	8	8	8	7	8	0.0	0.0			
Wrapping paper:												
Production.....short tons.....	87,191	84,093	91,849	83,168		83,582	96,907			7 844,042	7 811,721	-3.8
Ratio to capacity.....per cent.....	85	79	83	84		84	85					
Shipments.....short tons.....	86,406	85,775	90,655	83,750		86,173	94,900			7 827,914	7 813,878	-1.7
Stocks, end of month.....short tons.....	88,091	86,233	87,104	86,514		91,977	93,416					

7 Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	PAPER AND PRINTING—Continued											
Other Paper—Continued												
Fine paper:												
Production.....short tons.....	38,513	37,624	38,943	36,166	-----	34,885	39,680			7 346,357	7 362,091	+4.5
Ratio to capacity.....per cent.....	90	85	84	88	-----	80	84					
Shipments.....short tons.....	37,897	36,608	39,644	34,936	-----	34,885	39,839			7 785,626	7 765,064	-2.6
Stocks, end of month.....short tons.....	50,103	47,683	46,840	-----	-----	53,361	53,788					
All other grades:												
Production.....short tons.....	100,897	100,503	105,055	97,715	-----	100,138	112,529			7 919,941	7 930,599	+1.2
Shipments.....short tons.....	100,098	101,783	104,638	97,209	-----	102,437	115,563			7 914,718	7 922,911	+0.9
Stocks, end of month.....short tons.....	59,875	57,592	58,009	58,515	-----	70,140	61,340					
Total paper (inc. newsprint and box board):												
Production.....short tons.....	710,779	700,943	760,144	699,165	-----	663,771	749,058			7 6,276,097	7 7,359,013	+17.3
Ratio to capacity.....per cent.....	86	86	85	85	-----	84	83					
Shipments.....short tons.....	704,956	702,890	753,565	701,245	-----	681,104	751,693			7 6,244,965	7 6,564,329	+5.1
Stocks, end of month.....short tons.....	359,310	353,342	356,710	356,261	-----	378,839	370,130					
Paper Board and Shipping Boxes												
Production:												
Total.....thous. of sq. ft.....	506,830	481,762	558,845	548,131	574,171	434,371	454,662	+4.9	+26.3	4,142,068	5,108,085	+23.3
Corrugated.....thous. of sq. ft.....	406,908	384,885	448,920	434,351	457,425	359,553	374,342	+5.3	+22.2	3,329,527	4,040,315	+21.3
Solid fiber.....thous. of sq. ft.....	99,922	96,877	109,925	113,780	116,746	74,818	80,320	+2.6	+45.4	763,882	1,067,770	+39.8
Operating activity:												
Total.....per cent of normal.....	85	80	89	89	91	79	88	+2.2	+3.4			
Corrugated.....per cent of normal.....	87	82	91	91	93	78	89	+2.2	+4.5			
Solid fiber.....per cent of normal.....	77	74	82	82	86	80	83	+4.9	+3.6			
Abrasive paper and cloth:												
Domestic shipments.....reams.....	90,355	88,566	100,924	99,221	91,782	95,131	98,576	-7.5	-6.9	901,190	948,404	+5.2
Foreign shipments.....reams.....	16,696	11,400	20,564	17,819	24,238	18,281	20,085	+36.0	+20.7	185,145	202,803	+9.5
Rope paper sacks, shipments.....index number.....	96	85	101	95	115	102	113	+21.1	+1.8			
BUILDING CONSTRUCTION AND HOUSING												
Building Costs												
Building materials:												
Frame house, 6-rm. 1st of mo. rel. to 1913.....	176	177	177	176	178	177	179	+1.1	-0.6			
Brick house, 6-rm. 1st of mo. rel. to 1913.....	181	182	182	182	183	181	184	+0.5	-0.5			
Bldg. cost, 1st of mo. rel. to 1913.....	205.7	204.8	205.9	207.6	206.3	207.3	207.7	-0.6	-0.7			
Bldg. cost (A. G. C.), 1st of mo. rel. to 1913.....	203	202	203	201	202	201	202	+0.5	0.0			
Plumbing fixtures, 6 pieces.....dollars.....	97.54	97.94	98.84	98.97	99.20	101.13	100.67	+0.2	-1.5			
Construction costs (Am. Appraisal):												
Frame.....rel. to 1913.....	204	204	204	205	205	204	204	0.0	+0.5			
Brick, wood frame.....rel. to 1913.....	214	214	214	214	215	213	213	+0.5	+0.9			
Brick, steel frame.....rel. to 1913.....	197	197	197	197	198	198	197	+0.5	+0.5			
Reinforced concrete.....rel. to 1913.....	201	200	201	201	202	201	201	+0.5	+0.5			
Contracts and Losses												
Contracts awarded (36 States):												
Commercial buildings.....thous. of sq. ft.....	13,353	12,873	13,481	12,612	12,611	11,442	13,194	0.0	-4.4	126,352	133,756	+5.9
Industrial buildings.....thous. of sq. ft.....	8,341	9,563	10,148	7,585	9,041	10,348	9,705	+19.2	-6.8	78,928	86,166	+9.2
Residential buildings.....thous. of sq. ft.....	36,227	36,161	28,339	24,354	27,478	38,744	48,298	+12.8	-43.1	471,606	334,613	-29.0
Educational buildings.....thous. of sq. ft.....	6,349	6,525	5,190	4,914	5,461	5,651	4,876	+11.1	+12.0	52,200	51,388	-1.6
Other public and semi-public buildings.....thous. of sq. ft.....	5,195	5,743	5,896	6,958	7,255	6,278	6,477	+4.3	+12.0	60,143	52,882	-12.1
Grand total.....thous. of sq. ft.....	70,297	71,320	63,875	57,152	62,590	73,146	82,906	+9.5	-24.5	794,028	666,103	-16.1
Contracts awarded, value (36 States):												
Commercial buildings.....thous. of dolls.....	78,625	88,137	68,365	71,590	63,682	58,525	63,263	-11.0	+0.7	717,735	760,241	+5.9
Industrial buildings.....thous. of dolls.....	69,621	66,318	71,820	52,090	59,507	112,925	61,170	+14.2	-2.7	533,522	634,824	+19.0
Residential buildings.....thous. of dolls.....	185,328	194,754	142,049	114,184	131,809	196,850	234,654	+15.4	-43.8	2,346,352	1,650,445	-29.7
Educational buildings.....thous. of dolls.....	41,745	46,333	31,149	29,034	35,970	37,088	30,746	+23.9	+17.0	332,738	325,909	-2.1
Other public and semi-public buildings.....thous. of dolls.....	39,324	49,537	42,762	49,307	54,998	51,317	46,820	+11.5	+17.5	481,539	432,732	-10.1
Public works and utilities.....thous. of dolls.....	117,426	179,897	114,766	114,146	80,206	115,808	146,041	-29.7	-45.1	1,124,857	1,065,935	-5.2
Grand total.....thous. of dolls.....	532,069	624,976	470,910	430,351	426,171	572,513	582,693	-1.0	-26.9	5,536,742	4,871,380	-12.0
Contracts awarded, Canada.....thous. of dolls.....	72,420	57,941	58,622	46,959	57,084	45,439	44,585	+21.6	+2.8	424,090	498,728	+17.6
Building volume (A. G. C.).....rel. to 1913.....	231	218	239	259	233	266	243	-10.0	-4.1			
Fire losses:												
United States and Canada, (Journal of Commerce).....thous. of dolls.....	26,631	31,528	27,504	21,422	29,072	17,183	22,414	+35.7	+29.7	249,476	273,200	+9.5
Canada (Monetary Times).....thous. of dolls.....	3,079	5,027	3,776	2,040	3,777	1,739	1,795	+85.1	+110.4	23,971	30,417	+45.0
LUMBER PRODUCTS												
Softwood Lumber												
Southern pine:												
Production (computed).....M ft. b. m.....	369,971	393,932	400,274	359,757	384,227	386,671	427,623	+6.8	-10.1	4,216,208	3,922,648	-7.0
Operation.....per cent of full time.....	83	81	83	83	82	88	90	-1.2	-8.9			
Shipments (computed).....M ft. b. m.....	370,310	377,571	384,203	347,704	375,228	423,218	464,558	+7.9	-19.2	4,469,377	3,862,580	-13.6
New orders (computed).....M ft. b. m.....	343,106	379,217	378,878	344,703	368,296	434,884	444,566	+6.8	-17.2	4,486,463	3,855,600	-14.1
Stocks, end of mo. (computed).....M ft. b. m.....	985,538	1,001,899	1,017,970	1,030,023	1,039,022	991,781	954,846	+0.9	+8.8			
Unfilled orders, end mo. (comp.).....M ft. b. m.....	293,147	294,793	289,468	286,467	279,535	340,875	320,883	-2.4	-12.9			
Exports, lumber.....M ft. b. m.....	59,263	57,275	52,630	43,087	51,811	40,837	75,504	+20.2	-31.4	584,911	568,363	-2.8
Exports, timber.....M ft. b. m.....	9,311	17,474	9,300	14,874	11,315	14,897	14,104	-23.9	-19.8	146,756	106,599	-27.4
Price, flooring.....dolls. per M ft. b. m.....	37.04	37.27	37.43	36.76	39.50	37.73	37.73	+7.5	+4.7			
Douglas fir:												
Production.....M ft. b. m.....	334,841	302,162	353,642	315,592	-----	296,343	337,527			7 3,988,066	7 2,981,336	-25.2
Shipments (computed).....M ft. b. m.....	371,995	319,621	333,498	293,209	-----	315,144	301,267			7 4,307,944	7 3,137,392	-27.2
New orders.....M ft. b. m.....	354,537	306,639	327,678	293,209	-----	322,754	302,610			7 4,377,966	7 3,088,322	-29.5
Unfilled orders.....M ft. b. m.....	278,437	328,574	245,311	299,924	-----	293,657	297,686					
Exports, lumber.....M ft. b. m.....	83,966	98,179	72,811	64,085	80,888	64,265	65,795	+26.2	+22.9	647,605	779,895	+20.4
Exports, timber.....M ft. b. m.....	51,571	43,932	48,303	38,493	50,558	44,264	39,330	+31.3	+28.5	466,687	469,594	+0.6
Price, No. 1 common, dolls. per M ft. b. m.....	18.74	18.77	18.57	18.36	17.82	17.32	18.06	-2.9	-1.3			
Price, flooring, 1 x 4, "B" and better, V. G.....dolls. per M ft. b. m.....	42.69	42.73	42.96	42.79	42.42	38.85	40.61	-0.9	+4.5			

* Revised.

7 Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
LUMBER PRODUCTS—Continued												
Softwood Lumber—Continued												
California redwood:												
Production (computed).....M ft. b. m.	37,866	28,435	44,923	35,291	36,745	34,329	27,851	+4.1	+31.9	383,428	376,781	-1.7
Shipments (computed).....M ft. b. m.	41,507	28,672	48,648	37,363	36,064	33,107	32,744	-3.5	+10.1	377,614	381,562	+1.0
New orders (computed).....M ft. b. m.	38,776	35,657	44,930	34,086	33,080	33,519	33,115	-3.0	-0.1	383,601	394,690	+2.9
Unfilled orders, end of month (computed).....M ft. b. m.	40,257	47,235	44,590	41,837	37,097	47,916	40,350	-11.3	-8.1	-----	-----	-----
California white pine:												
Production.....M ft. b. m.	118,422	120,968	126,934	94,983	131,790	122,708	126,086	38.8	+4.5	1,043,799	1,009,720	-3.3
Shipments.....M ft. b. m.	98,779	97,302	102,334	93,900	88,363	105,246	119,074	-5.9	-25.8	1,029,727	997,507	-3.1
Stocks, end of month.....M ft. b. m.	463,175	486,416	516,220	523,772	567,326	538,136	552,422	+8.3	+2.7	-----	-----	-----
New orders.....M ft. b. m.	105,832	88,208	95,986	80,250	71,398	86,716	100,760	-11.0	-29.1	901,105	925,301	+2.7
Unfilled orders, end of month.....M ft. b. m.	156,475	150,643	162,494	153,701	172,154	188,747	183,493	+12.0	-6.2	-----	-----	-----
North Carolina pine:												
Production (computed).....M ft. b. m.	53,270	47,831	48,993	48,132	45,878	37,457	48,090	-4.7	-4.6	489,412	552,447	+12.9
Shipments (computed).....M ft. b. m.	59,080	50,946	48,230	45,605	47,264	39,900	51,590	+3.6	-8.4	511,839	540,974	+5.7
Northern pine:												
Lumber—												
Production.....M ft. b. m.	50,537	50,733	49,846	41,822	38,422	51,618	55,031	-8.3	-30.2	451,017	398,340	-11.7
Shipments.....M ft. b. m.	44,197	44,825	43,764	37,054	43,737	44,618	51,378	+18.0	-14.9	425,869	410,789	-3.5
New orders.....M ft. b. m.	37,142	40,012	42,485	30,291	35,578	44,209	41,109	+17.5	-13.5	395,520	371,858	-6.0
Lath—												
Production.....M ft. b. m.	6,818	8,822	8,442	6,268	5,739	12,419	11,777	-8.4	-51.3	96,031	64,428	-32.9
Shipments.....M ft. b. m.	10,256	10,083	9,258	6,509	6,892	8,897	8,937	+5.9	-22.9	85,563	80,086	-6.4
Northern hemlock:												
Production.....M ft. b. m.	13,527	15,359	14,908	17,079	11,943	15,315	16,425	-30.1	-27.3	166,712	148,971	-10.6
Shipments.....M ft. b. m.	16,262	18,614	16,020	12,859	12,378	19,951	21,042	-3.7	-41.2	171,740	135,094	-21.0
Hardwood Lumber												
Walnut lumber:												
Production.....M ft. b. m.	4,532	3,839	4,608	4,649	5,284	2,749	2,857	+13.7	+84.9	29,251	39,891	+36.4
Shipments.....M ft. b. m.	3,699	3,570	3,607	3,289	4,017	3,299	3,419	+22.1	+17.5	29,848	36,530	+22.4
Stocks, end of month.....M ft. b. m.	12,960	12,640	14,303	15,347	15,817	12,625	12,249	+3.1	+29.1	-----	-----	-----
New orders.....M ft. b. m.	3,625	2,627	3,266	3,398	3,313	2,635	4,174	-2.5	-20.6	30,170	35,500	+17.7
Unfilled orders, end of month.....M ft. b. m.	7,636	6,474	6,892	7,000	6,562	4,741	5,483	-6.3	+19.7	-----	-----	-----
Walnut logs:												
Purchased.....M ft. log measure..	3,711	2,951	3,667	3,367	4,158	2,274	2,702	+23.5	+53.9	24,809	31,007	+25.0
Made into lumber and veneer.....M ft. log measure..	3,241	3,217	3,358	3,724	3,996	2,643	2,606	+7.3	+53.3	25,309	30,543	+20.7
Stocks, end of month.....M ft. log measure..	2,253	2,773	2,441	2,148	2,265	2,684	2,636	+5.4	-14.1	-----	-----	-----
Lower Michigan hardwoods:												
Production.....M ft. b. m.	4,882	6,179	2,595	2,929	-----	4,915	4,411	-----	-----	766,960	746,859	-30.0
Shipments.....M ft. b. m.	4,672	5,875	4,094	6,851	-----	6,467	6,137	-----	-----	763,342	750,184	-20.8
Stocks, end of month.....M ft. b. m.	24,364	26,121	17,880	24,606	-----	20,915	19,434	-----	-----	-----	-----	-----
Northern hardwoods:												
Production.....M ft. b. m.	31,348	24,961	22,459	17,195	14,643	16,624	16,727	-14.8	-12.5	324,748	296,397	-8.7
Shipments.....M ft. b. m.	24,444	24,413	27,469	24,275	22,604	25,086	31,473	-6.9	-28.2	302,409	265,991	-12.0
Gum:												
Stocks, total, end of month.....mill. ft. b. m.	475	465	469	482	482	529	532	0.0	-9.4	-----	-----	-----
Stocks, unsold, end of month.....mill. ft. b. m.	325	318	325	328	339	396	398	+3.4	-14.8	-----	-----	-----
Unfilled orders, end of month.....mill. ft. b. m.	150	147	144	154	143	133	134	-7.1	+6.7	-----	-----	-----
Oak:												
Stocks, total, end of month.....mill. ft. b. m.	923	955	982	1,004	1,022	954	918	+1.8	+11.3	-----	-----	-----
Stocks, unsold, end of month.....mill. ft. b. m.	747	785	802	808	823	775	746	+1.9	+10.3	-----	-----	-----
Unfilled orders, end of month.....mill. ft. b. m.	176	169	181	195	199	161	171	+2.1	+16.4	-----	-----	-----
All hardwoods:												
Production.....mill. ft. b. m.	300	311	324	334	296	270	265	-11.4	+3.9	2,653	3,132	+18.1
Shipments.....mill. ft. b. m.	285	278	296	311	278	293	315	+10.6	-11.7	2,735	3,024	+10.6
New orders.....mill. ft. b. m.	277	278	300	323	281	293	323	-3.0	-13.0	2,818	3,080	+9.3
Stocks, total, end of month.....mill. ft. b. m.	2,681	2,731	2,772	2,848	2,887	2,731	2,722	+1.4	+6.1	-----	-----	-----
Stocks, unsold, end of month.....mill. ft. b. m.	2,031	2,088	2,122	2,289	2,227	2,164	2,132	-0.5	+4.5	-----	-----	-----
Unfilled orders, end of month.....mill. ft. b. m.	657	643	650	678	660	566	589	-2.7	+12.1	-----	-----	-----
Exports, planks, joists, etc.....M ft. b. m.	211,952	231,516	181,897	163,427	194,083	170,457	204,979	+18.8	-5.3	1,931,582	2,023,742	+4.8
Flooring												
Maple flooring:												
Production.....M ft. b. m.	5,418	6,450	6,918	7,334	7,813	7,675	8,204	+6.5	-4.8	76,812	66,904	-12.9
Shipments.....M ft. b. m.	6,420	7,883	8,435	7,239	6,896	7,929	8,543	-4.7	-19.3	81,110	68,612	-15.4
Stocks, end of month.....M ft. b. m.	20,964	21,913	20,480	20,827	22,421	22,554	21,352	+7.7	+5.0	-----	-----	-----
New orders.....M ft. b. m.	3,822	6,159	6,927	4,750	4,297	7,110	7,230	-9.5	-40.6	77,841	61,827	-20.6
Unfilled orders, end of month.....M ft. b. m.	10,600	10,431	8,881	7,641	7,095	10,106	7,940	-7.1	-10.6	-----	-----	-----
Oak flooring:												
Production.....M ft. b. m.	36,722	37,638	36,382	33,055	35,813	45,926	51,225	+8.3	-30.1	446,888	352,107	-21.2
Shipments.....M ft. b. m.	39,979	37,002	37,631	31,464	29,704	45,020	45,652	-5.6	-34.9	463,111	360,627	-22.1
Stocks, end of month.....M ft. b. m.	72,147	70,435	70,198	72,141	76,342	68,456	72,689	+5.8	+5.0	-----	-----	-----
New orders.....M ft. b. m.	34,479	25,901	30,972	37,388	19,743	43,141	38,132	-47.2	-48.2	460,777	336,775	-26.9
Unfilled orders, end of month.....M ft. b. m.	50,832	43,895	35,937	40,417	30,887	47,099	41,151	-23.6	-24.9	-----	-----	-----
Doors at Wholesale												
Fir, manufacturing plants:												
Production.....number..	322,987	302,452	177,332	216,004	200,107	273,056	372,158	-7.4	-46.2	-----	-----	-----
Shipments.....number..	258,041	340,978	177,111	193,576	209,259	305,555	362,004	+8.1	-42.2	-----	-----	-----
Stocks, end of month.....number..	282,150	217,547	206,382	228,810	145,596	238,399	243,946	-36.4	-40.3	-----	-----	-----
New orders.....number..	261,271	204,745	164,355	225,779	194,782	237,769	285,147	-13.7	-31.7	-----	-----	-----
Unfilled orders, end of month.....number..	477,349	315,566	254,210	284,191	171,315	300,106	215,872	-39.7	-20.6	-----	-----	-----
Wooden Furniture												
Household furniture and case goods:												
Shipments.....dolls., average per firm..	47,831	53,748	70,482	75,319	82,440	65,010	70,030	+9.5	+17.7	524,965	617,364	+17.6
Unfilled orders.....dolls., average per firm..	36,232	64,573	77,568	84,138	62,355	58,576	50,266	+25.9	+24.1	-----	-----	-----

† Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	June	July	August	Septem-ber	October	Septem-ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
LUMBER PRODUCTS—Continued												
Wooden Furniture—Continued												
Grand Rapids district:												
Unfilled orders, end of month.....No. of days' production...	58	68	64	58	45	49	38	-22.4	+18.4			
Shipments.....No. of days' production...	22	24	30	32	35	30	37	+9.4	-5.4			
New orders.....No. of days' production...	20	36	30	31	29	31	31	-6.5	-6.5			
Outstanding accounts, end of month.....No. of days' sales...	44	46	53	58	61	65	65	+5.2	-6.2			
Cancellations.....per cent of new orders...	11.0	5.0	5.0	6.0	23.0	9.0	10.0	+283.3	+130.0			
Plant operation.....per cent of full time...	88.0	90.0	97.0	101.0	104.0	101.0	103.0	+3.0	+1.0			
Plywood and Veneer												
Douglas-fir plywood:												
Production.....thous. of sq. ft. of surface...	13,169	15,567	12,713	11,625	9,292	9,426	13,079	-20.1	-29.0			
Shipments.....thous. of sq. ft. of surface...	12,778	14,113	12,661	11,698	7,517	9,257	12,003	-35.7	-37.4			
New orders (sales).....thous. of sq. ft. of surface...	10,525	12,149	7,863	10,377	7,134	10,245	12,654	-31.3	-43.6			
Unfilled orders, end of month.....thous. of sq. ft. of surface...	14,120	12,308	8,691	5,971	4,850	7,715	6,628	-18.8	-26.8			
Stocks, end of month.....thous. of sq. ft. of surface...	5,702	7,158	7,201	7,415	9,190	7,309	7,704	+23.9	+19.3			
Other plywood:												
New orders.....thous. of sq. ft. of surface...	6,135	10,159	5,103	7,198	8,167	3,381	4,411	+13.5	+85.2	31,616	62,277	+97.0
Shipments.....thous. of sq. ft. of surface...	4,234	4,533	5,608	5,309	6,070	3,177	4,235	+14.3	+43.3	29,463	46,167	+56.7
Unfilled orders, end of month.....thous. of sq. ft. of surface...	9,724	14,934	13,123	14,691	10,748	5,469	5,817	-26.8	+84.8			
Rotary-cut veneer:												
Receipts.....number of carloads...	169	272	174	223	251	244	337	+12.6	-25.5	1,791	2,074	+15.8
Purchases.....number of carloads...	181	260	122	287	306	199	255	+6.6	+20.0	2,106	2,447	+16.2
Bushel baskets:												
Production.....dozens...	202,426	232,860	264,212	190,939	225,014	177,982	156,521	+17.8	+43.8	1,976,227	2,042,620	+3.4
Shipments.....dozens...	200,814	232,154	360,050	314,904	257,904	285,813	156,407	-18.1	+64.9	2,048,030	2,002,655	-2.2
Stocks, end of month.....dozens...	665,881	674,339	584,410	461,717	428,789	409,110	420,671	-7.1	+1.9			
STONE, CLAY, AND GLASS PRODUCTS												
Common brick:												
Stocks, end of month—												
Burned.....thousands...	308,257	290,044	290,265	217,451		498,691	454,931					
Unburned.....thousands...	154,185	95,756	110,904	224,530		257,692	91,226					
Shipments.....thousands...	154,021	118,834	130,982	93,677		167,078	122,078			7,179,189	7,170,773	-34.7
Unfilled orders, end of month.....thousands...	163,126	148,289	109,564	110,215		213,174	145,429					
Plants closed down.....number...	50	17	56	26		21	49					
Price, red, New York.....dolls. per thous.	11.00	10.13	10.13	10.50	9.50	12.50	12.50	-9.5	-24.0			
Porcelain plumbing fixtures:												
Net new orders.....pieces...	9,669	12,153	12,168	9,524	8,548	9,939	22,665	-10.2	-62.3	232,498	113,874	-51.0
Shipments.....pieces...	10,807	11,845	13,873	9,569	8,269	16,525	17,018	-13.6	-51.4	165,806	106,893	-35.5
Unfilled orders, end of month.....pieces...	31,234	30,088	26,911	26,115	25,376	54,883	50,558	-2.8	-49.8			
Stocks, finished glost, end of month.....pieces...	45,848	37,947	40,343	39,708	40,682	50,953	50,956	+2.5	-20.2			
Vitreous china plumbing fixtures:												
New orders.....pieces...	196,707	244,351	242,596	195,931	242,879	180,758	222,190	+24.0	+9.3	2,626,329	2,498,199	-4.9
Shipments.....pieces...	246,071	271,411	268,639	237,788	217,108	215,284	236,781	-8.7	-8.3	2,644,536	2,518,279	-4.8
Unfilled orders, end of month.....pieces...	438,715	411,655	385,632	343,775	369,546	318,508	303,917	+7.5	+21.6			
Stocks, end of month.....pieces...	591,633	582,314	559,418	566,776	602,352	510,864	531,119	+6.3	+13.4			
Floor and wall tile:												
Production.....thous. of sq. ft.	6,247	6,244	6,390	5,629		6,621	7,636			7,51,798	7,54,847	+5.9
Shipments, quantity.....thous. of sq. ft.	6,424	6,450	6,813	5,469		6,755	7,239			7,52,578	7,51,551	-2.0
Shipments, value.....thous. of dolls.	2,412	2,505	2,690	2,180		2,572	2,730			7,19,995	7,20,014	+0.1
Stocks, end of month.....thous. of sq. ft.	18,092	18,301	17,929	18,311		12,253	12,627					
Terra cotta, new orders:												
Quantity.....net tons...	10,798	11,756	8,606	7,784	6,566	10,570	15,597	-15.6	-57.9	129,304	103,119	-20.3
Value.....thous. of dolls.	1,178	1,183	940	817	716	1,005	1,460	-12.4	-51.0	12,240	11,251	-8.1
Sand-lime brick:												
Production.....thousands...	17,578	16,061	16,838	14,121	11,024	17,267	21,590	-21.9	-48.9	170,772	134,159	-21.4
Shipments by rail.....thousands...	5,412	4,263	4,684	3,960	2,602	6,767	5,562	-34.3	-63.2	57,325	39,512	-31.1
Shipments by truck.....thousands...	13,757	12,266	11,615	10,951	7,055	11,281	15,802	-35.6	-55.4	116,537	103,977	-10.8
Stocks, end of month.....thousands...	10,447	8,854	9,714	9,326	7,857	15,304	14,446	-15.8	-45.6			
Unfilled orders, end of month.....thousands...	14,968	14,739	9,925	13,286	7,020	14,455	13,435	-47.2	-47.7			
Portland Cement												
Production.....thous. of bbls.	16,803	17,281	18,585	17,223	16,731	17,884	17,533	-2.9	-4.6	148,711	144,896	-2.6
Operation.....per ct. of capacity...	80.9	80.4	86.1	81.8	77.0	91.7	87.1	-5.9	-11.6			
Shipments.....thous. of bbls.	18,949	20,295	23,652	19,950	18,695	20,400	19,836	-6.3	-5.8	156,120	152,240	-2.5
Stocks, end of month.....thous. of bbls.	27,457	24,525	20,056	17,325	15,361	16,799	14,579	-11.3	+5.4			
Stocks, clinker, end of month.....thous. of bbls.	13,586	11,619	8,989	6,985	5,914	7,566	5,944	-15.3	-0.5			
Wholesale prices, composite.....dolls. per bbl.	1,650	1,650	1,604	1,500	1,493	1,650	1,650	-0.5	-9.5			
Highways												
Concrete pavements, new contracts:												
Total.....thous. of sq. yds.	16,421	18,022	11,969	10,220	13,151	14,752	7,068	+28.7	+86.1	131,568	126,843	-3.6
Roads.....thous. of sq. yds.	10,410	11,344	7,010	5,945	9,157	9,630	3,856	+54.0	+137.5	83,153	84,303	+1.4
Federal-aid highways:												
Completed—												
Cost.....thous. of dolls.	15,552	16,445	9,729	22,469	27,504	26,105	13,413	+22.4	+105.1	132,926	143,233	+7.8
Distance.....miles...	520	693	442	830	996	1,169	598	+20.0	+66.6	5,707	5,108	-10.5
Under construction, end of month.....miles...	8,359	8,494	8,724	8,584	8,322	9,427	9,337	-3.1	-10.9			
Plate Glass												
Production, polished.....thous. of sq. ft.	12,278	13,057	14,722	14,011	14,621	10,897	11,140	+4.4	+31.2	108,423	129,879	+19.8

* Revised.

† Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
STONE, CLAY, AND GLASS PRODUCTS—Continued												
Glass Containers												
Actual production:												
Quantity.....thous. of gross.....	2,561	2,396	2,715	2,246	2,572	2,322	2,389	+14.5	+7.7	24,331	24,894	+2.3
Relation to capacity.....per cent.....	81.5	73.3	77.5	74.5	75.6	78.7	71.6	+1.5	+5.6	.....	.....	.....
New orders.....thous. of gross.....	2,023	2,224	1,922	2,942	2,996	2,122	2,721	+1.8	+10.1	23,768	25,547	+7.5
Shipments.....thous. of gross.....	2,679	2,507	2,656	2,700	2,445	2,433	2,261	-9.4	+8.1	24,148	25,294	+4.7
Unfilled orders, end of month.....thous. of gross.....	9,278	8,824	8,079	8,072	8,320	8,084	8,415	+3.1	-1.1	.....	.....	.....
Stocks, end of month.....thous. of gross.....	6,500	6,388	6,447	5,994	6,121	6,173	6,302	+2.1	-2.9	.....	.....	.....
Illuminating Glassware												
Production:												
Total.....number of turns.....	3,239	1,818	2,819	3,225	4,265	3,190	4,193	+32.2	+1.7	30,850	32,715	+6.0
Ratio of capacity.....per ct. of capacity.....	46.3	18.7	36.4	45.3	50.2	43.0	50.5	+10.8	-0.6	.....	.....	.....
New orders.....per ct. of capacity.....	44.6	40.1	42.9	46.8	52.9	44.2	53.2	+13.0	-0.6	.....	.....	.....
Shipments.....per ct. of capacity.....	45.1	35.3	43.8	49.6	51.1	43.0	51.9	+3.0	-1.5	.....	.....	.....
Unfilled orders, end of month.....number of weeks' supply.....	1.6	1.5	1.4	1.4	1.5	1.7	1.7	+7.1	-11.8	.....	.....	.....
Stocks, end of month.....number of weeks' supply.....	6.0	5.4	4.7	4.6	4.6	4.3	4.1	0.0	+12.2	.....	.....	.....
CHEMICALS AND OILS												
Chemicals												
Sulphuric acid:												
Exports.....thous. of lbs.....	693,027	506,758	641,492	516,264	544,462	581,760	441,867	+5.5	+23.2	6,046,230	5,585,050	-7.6
Price, wholesale.....dolls. per 100 lbs.....	.78	.78	.78	.78	.78	.78	.78	0.0	0.0	.....	.....	.....
Nitrate of soda:												
Imports.....long tons.....	64,733	40,501	51,684	31,539	54,821	36,644	43,385	+73.8	+26.4	896,943	821,842	-8.4
Production in Chile—												
Quantity.....metric tons.....	252,600	272,300	270,300	253,200	207,800	250,400	282,300	-17.9	-26.4	2,584,000	2,614,100	+1.2
Potash salts:												
Imports.....long tons.....	9,895	37,126	45,505	40,088	51,757	43,313	28,242	+29.1	+83.3	310,652	305,695	-1.6
Production in France—												
(K ₂ O content).....metric tons.....	39,700	41,000	42,500	39,900	.....	35,200	40,000	.....	.....	.....	.....	.....
Sales in Germany—												
(K ₂ O content).....metric tons.....	97,723	89,190	95,372	123,465	79,159	140,818	76,507	-35.9	+3.5	1,231,607	1,212,235	-1.6
Superphosphate (acid phosphate):												
Production.....short tons.....	302,434	305,808	344,460	250,289	348,793	251,190	343,213	+39.4	+1.6	3,141,077	3,075,178	-2.1
Stocks, end of month.....short tons.....	967,766	1,206,174	1,393,654	1,292,970	1,507,878	1,347,735	1,546,290	+16.6	-2.5	.....	.....	.....
Shipments.....short tons.....	55,459	62,956	86,251	162,587	154,012	149,002	89,767	-5.3	+71.6	1,746,089	1,821,750	+4.3
Fertilizer:												
Exports.....long tons.....	140,090	123,515	112,346	155,103	129,849	99,149	86,289	-16.3	+50.5	1,050,207	1,278,305	+21.7
Consumption, Southern States.....short tons.....	99,407	20,047	45,517	174,347	101,295	131,120	142,828	-41.9	-29.1	5,375,115	5,289,483	-1.6
Dyes and dyestuffs, exports:												
Vegetable.....thous. of lbs.....	264	126	191	422	247	157	231	-41.5	+6.9	2,612	2,049	-21.6
Coal tar.....thous. of lbs.....	21	3,180	13	39	18	1,330	5,194	-53.8	.....	27,909	5,716	.....
Arsenic												
Crude:												
Production.....short tons.....	2,452	1,444	887	1,027	3,113	1,079	1,238	+203.1	+151.5	13,648	15,898	+16.5
Stocks, end of month.....short tons.....	2,161	1,998	1,876	1,777	3,309	2,978	3,024	+86.2	+9.4	.....	.....	.....
Refined:												
Production.....short tons.....	917	812	857	868	1,036	799	835	+19.4	+24.1	7,462	8,863	+18.8
Stocks, end of month.....short tons.....	3,709	3,305	3,414	3,180	3,672	1,971	2,344	+15.5	+56.7	.....	.....	.....
Price index numbers:												
Crude drugs.....rel. to Aug., 1914.....	184	183	179	180	180	193	195	0.0	-7.7	.....	.....	.....
Essential oils.....rel. to Aug., 1914.....	190	191	188	168	161	158	155	-4.2	+3.9	.....	.....	.....
Drugs and pharmaceuticals.....rel. to Aug., 1914.....	163	173	177	177	177	164	164	0.0	+7.9	.....	.....	.....
Chemicals.....rel. to 1913-14.....	113	113	112	112	112	113	113	0.0	-0.9	.....	.....	.....
Oils and fats.....rel. to 1913-14.....	116	117	123	129	136	121	124	+5.4	+9.7	.....	.....	.....
Wood Chemicals												
Acetate of lime:												
Production—												
United States.....thous. of lbs.....	11,935	10,658	11,025	10,154	12,479	8,605	10,526	+22.9	+18.6	107,516	116,817	+8.7
Canada.....thous. of lbs.....	677	720	715	421	367	446	999	-12.8	-63.3	7,608	8,186	+7.6
Shipments—												
United States.....thous. of lbs.....	11,772	11,072	10,862	10,162	12,142	13,355	10,407	+19.5	+16.7	120,551	115,688	-4.0
Canada.....thous. of lbs.....	676	716	821	349	301	348	990	-13.8	-69.6	9,351	8,106	-13.3
Stocks, end of month—												
United States.....thous. of lbs.....	1,755	1,206	1,259	1,241	1,679	3,134	2,863	+35.3	-41.4	.....	.....	.....
Canada.....thous. of lbs.....	102	179	73	147	201	183	349	+36.7	-42.4	.....	.....	.....
Exports.....thous. of lbs.....	.....	120	.....	449	36	.....	.....	.....	.....	.....	.....	.....
Price, wholesale.....dolls. per cwt.....	4.50	4.50	4.50	4.50	4.50	4.00	4.00	0.0	+12.5	.....	.....	.....
Methanol, crude:												
Production—												
United States.....gallons.....	676,193	633,731	656,414	598,548	716,789	495,555	641,823	+19.8	+11.7	6,062,626	6,883,156	+13.5
Canada.....gallons.....	28,291	28,688	25,950	17,581	16,904	18,816	45,768	-3.9	-63.1	311,753	342,506	+9.9
Stocks at crude plants, end of month—												
United States.....gallons.....	227,513	252,749	244,185	256,356	251,704	229,683	314,171	-1.8	-19.9	.....	.....	.....
Canada.....gallons.....	11,533	21,863	20,092	17,061	12,924	13,665	34,399	-24.2	-62.4	.....	.....	.....
Stocks at refineries and in transit—												
United States.....gallons.....	277,376	475,698	526,172	514,572	521,967	164,972	161,723	+1.4	+222.8	.....	.....	.....
Canada.....gallons.....	66,870	78,120	63,702	65,505	47,479	67,314	57,814	-27.5	-17.9	.....	.....	.....
Exports.....gallons.....	16,613	95,755	33,849	49,948	12,329	32,540	20,408	-75.3	-39.6	463,762	419,836	-9.5
Wood at chemical plants:												
Consumption—												
United States.....cords.....	72,217	68,428	70,454	63,460	75,508	49,444	65,182	+19.0	+15.8	613,516	720,407	+17.4
Canada.....cords.....	3,509	3,587	3,228	2,041	1,954	2,160	5,366	-4.3	-63.6	38,447	42,137	+9.6
Stocks, end of month—												
United States.....cords.....	530,111	530,264	565,119	552,338	527,210	514,204	550,412	-4.5	-4.2	.....	.....	.....
Canada.....cords.....	72,586	72,126	72,026	72,040	71,530	73,759	73,119	-0.7	-2.2	.....	.....	.....
Daily capacity—												
Total.....cords.....	3,326	3,276	3,264	3,264	3,246	3,486	3,486	-0.6	-6.9	.....	.....	.....
Shutdown.....cords.....	361	468	475	525	289	1,083	668	-45.0	-56.7

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

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	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	CHEMICALS AND OILS—Continued											
Wood Chemicals—Continued												
Methanol, refined:												
Production—												
United States.....gallons	423,811	259,118	454,160	432,094	445,183	355,353	487,384	+3.0	-8.7	4,778,329	4,378,356	-8.4
Canada.....gallons	36,900	10,400	43,700	27,800	56,300	38,600	56,700	+102.5	-0.7	335,350	415,100	+23.8
Stocks, end of month—												
United States.....gallons	759,740	712,752	783,674	729,932	725,620	300,478	325,914	-0.6	+122.6			
Canada.....gallons	51,787	31,185	37,761	21,888	14,238	33,101	23,339	-35.0	-39.0			
Shipments—												
United States.....gallons	449,245	365,438	487,153	598,551	558,179	415,340	493,712	-6.7	+13.1	4,935,077	4,991,195	+1.1
Canada.....gallons	11,650	21,403	22,188	31,902	48,532	25,396	48,330	+52.1	+0.4	239,586	320,662	+33.8
Price, wholesale, N. Y.....dolls. per gal.	.58	.58	.58	.58	.58	.48	.51	0.0	+13.7			
Ethyl Alcohol												
Production.....thous. of gals.	12,545	16,871	20,026	20,739	25,426	18,613	20,685	-22.6	+22.9	145,863	169,502	+16.3
Withdrawn for denaturation.....thous. of gals.	12,909	15,982	18,688	19,199	24,203	15,269	20,718	+52.1	+16.8	131,025	155,610	+18.8
Warehouse stocks, end of month.....thous. of gals.	11,860	11,166	11,489	11,617	11,932	11,295	9,907	+2.7	+20.4			
Explosives												
(Black powder, permissible, and other high explosives)												
Production.....thous. of lbs.	34,383	35,756	40,584	42,019	42,108	35,310	38,636	+0.2	+9.0	328,253	371,635	+13.2
Shipments.....thous. of lbs.	35,032	36,811	39,163	42,299	40,246	37,465	38,854	-4.9	+3.6	330,509	372,549	+12.7
New orders.....thous. of lbs.	34,202	35,499	39,580	40,141	40,295	33,611	36,347	+0.4	+10.9	313,129	362,584	+15.8
Stocks, end of month.....thous. of lbs.	17,225	16,964	17,529	16,895	17,811	16,274	16,011	+5.4	+11.2			
Naval Stores												
Turpentine (gum):												
Net receipts, southern ports.....barrels	48,658	54,872	49,436	42,127	33,356	34,312	33,924	-20.8	-1.7	284,193	325,154	+14.4
Stocks at ports, end of month.....barrels	57,728	65,570	63,151	65,770	67,038	73,595	79,509	+1.9	-15.7			
Price, southern, New York.....dolls. per gal.	.52	.52	.52	.55	.56	.52	.53	+1.8	+5.7			
Rosin (gum):												
Net receipts, southern ports.....barrels	154,168	181,433	172,670	140,212	120,886	116,029	115,235	-13.8	+4.9	956,387	1,119,427	+17.0
Stocks at 3 ports, end of month.....barrels	123,505	169,420	205,955	233,215	244,767	230,672	216,917	+5.0	+12.8			
Price, B. New York.....dolls. per bbl.	7.88	8.51	8.51	9.01	9.27	9.18	9.31	+2.9	-0.4			
Rosin (wood):												
Production.....barrels	36,123	37,844	38,315	36,905	40,903	35,473	36,942	+10.8	+10.7	351,115	372,226	+6.0
Stocks, end of month.....barrels	113,449	104,492	98,777	90,036	84,111	112,964	111,728	-6.6	-24.7			
Turpentine (wood):												
Production.....barrels	6,505	6,718	6,721	6,695	7,640	6,257	6,486	+14.1	+17.8	61,486	68,893	+12.0
Stocks, end of month.....barrels	4,778	4,628	4,713	4,344	5,569	6,027	5,704	+28.2	-2.4			
Pine oil:												
Production.....gallons	215,153	235,892	229,388	222,112	259,017	211,828	219,525	+16.6	+18.0	2,272,864	2,272,434	
Stocks, end of month.....gallons	873,358	882,037	894,993	888,328	875,424	845,762	845,645	-1.5	+3.5			
Roofing												
Roofing, felt:												
Production, dry felt.....tons	29,981	28,188	26,665	23,997	25,502	24,343	23,930	+6.3	+6.6	249,521	268,169	+7.5
Stocks, end of month, dry felt.....tons	3,077	2,846	3,974	4,465	4,790	3,427	3,367	+7.3	+42.3			
Fats and Oils												
Total vegetable oils and copra:												
Exports.....thous. of lbs.	1,428	541	1,285	2,632	3,061	2,222	3,681	+16.3	-16.8	44,508	21,467	-51.8
Imports.....thous. of lbs.	91,375	73,157	109,091	82,942	88,743	80,914	82,176	+7.0	+8.0	620,845	920,638	+48.3
Copra, imports.....short tons	23,828	21,693	26,022	18,007	17,208	20,754	22,897	-4.4	-24.8	190,990	249,215	+30.5
Copra or coconut oil:												
Imports.....thous. of lbs.	32,571	23,669	36,623	36,952	36,770	34,008	31,534	-0.5	+16.6	224,522	347,434	+54.7
Consump. in oleomargarine.....thous. of lbs.	12,029	12,658	14,715	16,075	19,511	14,452	15,714	+21.4	+24.2	128,987	150,786	+16.9
Oleomargarine:												
Production.....thous. of lbs.	24,276	24,873	28,400	30,562	36,624	28,446	30,631	+19.8	+19.6	257,021	289,931	+12.8
Consumption.....thous. of lbs.	23,379	24,972	25,788	31,423	34,591	29,002	30,137	+10.1	+14.8	256,184	285,048	+11.3
Animal glues, shipments.....thous. of lbs.	6,246	6,376	7,281	6,749		6,256	7,528			758,630	760,456	+3.1
Cottonseed												
Cottonseed:												
Receipts at mills.....short tons	26,041	29,377	239,538	920,318	1,487,577	865,691	1,536,083	+61.6	-3.2	3,230,942	3,452,989	+6.9
Consumption (crush).....short tons	63,274	51,438	121,769	488,946	896,904	421,362	910,576	+83.4	-1.5	3,050,560	3,597,939	+17.9
Stocks at mills, end of month.....short tons	63,401	41,340	159,109	590,747	1,181,420	567,828	1,192,935	+100.0	-1.0			
Cottonseed oil, crude:												
Production.....thous. of lbs.	21,552	18,558	35,453	149,388	276,280	126,787	282,715	+84.9	-2.3	970,361	1,144,217	+17.9
Stocks, end of month.....thous. of lbs.	30,079	19,094	29,232	77,339	121,341	68,856	124,625	+56.9	-2.6			
Cottonseed oil, refined:												
Production.....thous. of lbs.	40,795	27,680	24,376	82,859	206,597	61,637	201,483	+149.3	+2.5	885,677	1,044,779	+18.0
Stocks, end of month.....thous. of lbs.	431,100	338,320	234,922	175,023	232,699	159,588	223,046	+33.0	+4.3			
Price, yellow, prime, N. Y.....dolls. per lb.	.096	.096	.094	.093	.093	.099	.099	0.0	-6.1			
Consumption in oleomarg.....thous. of lbs.	2,124	2,051	2,387	2,362	3,022	2,437	2,678	+27.9	+12.8	21,788	23,810	+9.3
Cottonseed cake and meal:												
Production.....short tons	28,423	25,971	56,311	215,663	398,987	185,728	406,795	+85.0	-1.9	1,384,739	1,623,620	+17.3
Stocks, end of month.....short tons	142,014	80,914	51,727	83,778	162,074	61,411	123,803	+93.5	+30.9			
Exports.....short tons	4,777	11,969	12,837	21,608	33,434	22,013	60,015	+54.7	-44.3	189,756	182,387	-3.9
Flaxseed												
Production, crop estimate.....thous. of bush.												
Minneapolis and Duluth:					16,060		18,690					
Receipts.....thous. of bush.	492	381	1,479	4,111	3,132	3,812	6,600	-23.8	-52.5	15,194	11,262	-25.9
Shipments.....thous. of bush.	271	340	567	1,655	1,697	1,260	2,348	+2.5	-27.7	7,563	5,883	-22.2
Stocks, end of month.....thous. of bush.	764	360	23	909	1,179	615	2,585	+29.7	-54.4			

³ As of Nov. 1.⁴ Final estimate for 1928.⁶ Revised.⁷ Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	CHEMICALS AND OILS—Continued											
Flaxseed—Continued												
Imports.....thous. of bush.	2,366	1,293	1,020	842	2,582	1,254	1,209	+206.7	+113.6	14,649	21,209	+44.8
Mill receipts at Duluth—												
Superior.....thous. of bush.	33	84	42	572	935	62	1,014	+63.5	-7.8	1,610	1,789	+11.1
Price, No. 1, Minneapolis ².....dolls. per bush.	2.48	2.76	2.79	3.23	3.32	2.09	2.28	+2.8	+45.6			
Linseed oil:												
Shipments from Minneapolis.....thous. of lbs.	15,205	14,381	10,787	14,789	13,707	14,443	15,437	-7.3	-11.2	148,862	141,709	-4.8
Price, New York.....dolls. per lb.	.105	.120	.129	.155	.159	.098	.101	+2.6	+57.4			
Linseed, cake and meal:												
Shipments from Minneapolis.....thous. of lbs.	7,632	12,215	15,683	27,415	30,466	26,257	30,071	+11.1	+1.3	217,228	189,712	-12.7
Exports.....thous. of lbs.	30,065	40,428	37,437	29,770	26,211	38,772	51,894	-12.0	-49.5	470,950	316,290	-32.8
FOODSTUFFS												
Wheat												
Production, monthly estimate:												
Winter.....thous. of bush.					³ 568,233		⁴ 578,133					
Spring.....thous. of bush.					³ 223,535		⁴ 324,058					
Total.....thous. of bush.					³ 791,768		⁴ 902,191					
Visible supply, end of month:												
United States.....thous. of bush.	94,060	142,855	190,911	198,982	202,781	114,523	138,239	+1.9	+46.7			
Canada.....thous. of bush.	118,249	103,315	96,224	156,620	213,381	78,069	158,204	+36.2	+34.9			
Receipts, principal markets.....thous. of bush.	25,694	94,158	101,669	47,046	36,256	73,322	84,423	-22.9	-57.1	446,292	419,387	-6.0
Shipments, principal markets.....thous. of bush.	18,644	42,577	60,983	32,134	27,116	39,508	30,365	-15.6	-10.7	248,480	269,591	+8.5
Stocks, millers', end of quarter.....thous. of bush.	² 75,355			³ 174,776		² 151,228		+131.9	+15.6			
Exports:												
United States—												
Wheat only.....thous. of bush.	4,564	8,691	12,094	13,104	8,767	17,939	22,058	-33.1	-60.3	78,068	73,003	-6.5
Including wheat flour.....thous. of bush.	8,814	13,575	16,935	18,335	14,664	22,528	28,272	-20.0	-48.1	122,215	124,610	+2.0
Canada—												
Including wheat flour.....thous. of bush.	29,796	20,538	13,050	9,624	23,215	30,928	48,967	+141.2	-52.6	279,871	210,239	-24.9
Prices:												
No. 1 Northern Spring, Minneapolis ².....dolls. per bush.	1.15	1.43	1.35	1.35	1.31	1.19	1.16	-3.0	+12.9			
No. 2 Red Winter, St. Louis ².....dolls. per bush.	1.21	1.39	1.32	1.35	1.32	1.45	1.44	-2.2	-8.3			
No. 2 Hard Winter, Kansas City ².....dolls. per bush.	1.05	1.25	1.23	1.24	1.22	1.07	1.10	-1.6	+10.9			
Wheat Flour												
Grindings of wheat:												
United States.....thous. of bush.	40,833	42,895	50,725	⁶ 47,583	50,429	48,014	52,890	+6.0	-4.7	433,914	443,741	+2.3
Canada.....thous. of bush.	7,029	7,247	7,178	5,745		8,554	9,473			⁷ 63,617	⁷ 65,071	+2.3
Production:												
United States, actual.....thous. of bbls.	8,912	9,337	11,058	⁶ 10,372	10,965	10,512	11,587	+5.7	-5.4	93,951	96,861	+3.1
United States, prorated.....thous. of bbls.	9,838	10,449	12,562	11,870		11,197	13,316			⁷ 91,995	⁷ 96,525	+4.9
Canada.....thous. of bbls.	1,548	1,603	1,607	1,283		1,892	2,130			⁷ 13,814	⁷ 14,325	+3.7
Production, gain offal.....thous. of lbs.	711,357	746,628	882,931	⁶ 831,523	882,732	820,934	910,900	+6.2	-3.1	7,698,488	7,715,727	+1.5
Capacity operated, flour mills.....per cent	54	55	62	66	62	66	66	-6.1	-6.1			
Consumption (computed).....thous. of bbls.	8,494	8,365	11,686	10,006		9,078	12,536			⁷ 81,168	⁷ 84,244	+3.8
Stocks, all positions, end of month (computed).....thous. of bbls.	8,000	10,084	8,800	9,500		8,500	7,900					
Stocks, millers', end of quarter.....thous. of bbls.	² 3,826			² 4,479		² 4,180		+17.1	+7.2			
Exports:												
United States.....thous. of bbls.	944	1,085	1,076	1,163	1,311	1,020	1,381	+12.7	-5.1	9,811	11,468	+16.9
Canada.....thous. of bbls.	935	782	643	492	554	890	1,171	+12.6	-52.7	8,655	8,377	-3.2
Wholesale prices:												
Standard patents, Minneapolis.....dolls. per bbl.	6.38	7.69	7.31	7.17	6.91	6.59	6.41	-3.6	+7.8			
Winter straights, Kansas City.....dolls. per bbl.	5.26	6.31	6.24	6.10	6.01	5.65	5.59	-1.5	+7.5			
Corn												
Production, crop estimate.....thous. of bush.					² 621,451		² 835,678					
Exports, including meal.....thous. of bush.	981	850	895	693	732	668	870	+5.6	-15.9	18,488	33,226	+79.7
Visible supply, end month.....thous. of bush.	13,932	9,493	5,765	4,638	3,924	7,114	2,271	-15.4	+72.8			
Receipts, principal markets.....thous. of bush.	20,644	21,205	19,023	19,532	18,303	19,658	13,323	-6.3	+37.4	261,414	217,227	-16.9
Shipments, prin. markets.....thous. of bush.	15,160	15,644	13,643	11,082	11,075	11,949	9,044	-0.1	+22.5	182,033	147,807	-18.8
Grindings (starch, glucose).....thous. of bush.	6,697	6,558	7,672	7,913	8,721	6,541	7,725	+10.2	+12.9	72,839	74,111	+1.7
Prices:												
No. 3, Yellow, Chicago ².....dolls. per bush.	.91	.99	1.01	1.01	.95	1.00	.96	-5.9	-1.0			
No. 3, Yellow, Kansas City ².....dolls. per bush.	.88	.93	.99	.99	.92	.94	.86	-7.1	+7.0			
No. 3, White, Chicago ².....dolls. per bush.	.94	1.00	1.01	1.02	.96	1.00	.98	-5.9	-2.0			
Oats												
Production, crop estimate.....thous. of bush.					¹ 226,573		⁴ 1,448,677					
Receipts, principal markets.....thous. of bush.	8,486	10,123	36,320	13,833	15,336	14,375	13,872	+10.9	+10.6	132,251	132,040	-0.2
Visible supply, end of month.....thous. of bush.	8,114	8,129	25,897	28,809	32,069	18,004	17,882	+11.3	+79.3			
Exports, including meal.....thous. of bush.	254	255	837	1,080	917	2,308	1,653	-15.1	-44.5	8,810	5,881	-33.2
Price, No. 3, white, Chicago ².....dolls. per bush.	.45	.47	.43	.48	.47	.41	.42	-2.1	+11.9			
Grindings, Canada.....thous. of bush.	895	854	1,101	975		1,100	1,292					
Production, oatmeal and rolled oats, Canada.....thous. of lbs.	11,360	12,145	14,228	12,263		16,499	17,760			⁷ 106,292	⁷ 103,510	-2.6

² Quarter ending in month indicated.³ As of Nov. 1.⁴ Final estimate for 1928.⁶ Revised.⁷ Cumulative through Sept. 30.⁸ See tables on pp. 21 and 22 of the November, 1929, issue for earlier data.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per ct. in-crease (+) or de-crease (-) cumu-lative, 1929 from 1928
	June	July	August	Septem-ber	October	Septem-ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
FOODSTUFFS—Continued												
Barley												
Production, crop estimate.....thous. of bush.					\$ 313,368		\$ 356,667					
Receipts, principal markets.....thous. of bush.	3,338	4,849	18,666	7,807	5,554	21,710	16,797	-28.9	-66.9	88,645	59,749	-32.6
Visible supply, end mo.....thous. of bush.	5,731	5,518	9,805	9,519	9,877	8,084	8,962	+3.8	+10.2			
Exports.....thous. of bush.	2,783	4,120	4,624	6,209	1,795	14,830	11,639	-71.1	-84.6	45,461	30,391	-33.1
Price, No. 2, Minneapolis ³.....dolls. per bush.	.60	.69	.61	.60	.59	.63	.63	-1.7	-6.3			
Rye												
Production, crop estimate.....thous. of bush.					\$ 41,028		\$ 41,676					
Receipts, principal markets.....thous. of bush.	870	880	5,766	3,720	3,405	6,001	6,770	-8.5	-49.7	24,327	20,247	-16.8
Visible supply, end mo.....thous. of bush.	6,422	6,447	8,015	8,889	9,903	1,927	4,437	+11.4	+123.2			
Exports, including flour.....thous. of bush.	295	106	470	1,220	562	2,471	3,098	-53.9	-81.9	12,771	3,473	-72.8
Price, No. 2, Minneapolis ³.....dolls. per bush.	.84	1.07	.98	.97	.97	.94	.94	0.0	+3.2			
Total Grains												
Total grain exports, incl. flour.....thous. of bush.	13,127	18,907	23,761	27,537	18,671	42,805	45,533	-32.2	-59.0	203,737	197,582	-3.0
Rice												
Production, crop estimate.....thous. of bush.					\$ 39,176		\$ 41,881					
Southern paddy, receipts at mills.....bbls.	191,944	125,737	583,944	1,387,795	2,330,286	1,197,924	2,113,697	+67.9	+10.2	7,368,665	6,933,201	-5.9
Shipments:												
Total from mills.....pockets (100 lbs.)	650,414	515,342	506,895	841,027	1,376,400	777,583	1,245,714	+63.7	+10.5	7,916,218	7,905,843	-0.1
New Orleans.....pockets (100 lbs.)	130,369	113,969	126,470	156,232	249,474	147,464	202,697	+59.7	+23.1	1,559,583	1,418,633	-9.0
Stocks, end of month.....pockets (100 lbs.)	865,117	485,177	506,953	1,099,055	2,173,838	1,102,564	2,142,144	+97.8	+1.5			
Exports.....pockets (100 lbs.)	261,377	231,401	221,314	131,509	229,686	152,906	228,255	+74.7	+0.6	2,842,509	3,099,175	+9.0
Imports.....pockets (100 lbs.)	2,984	6,556	5,549	6,292	6,662	15,412	8,864	+5.9	-24.8	289,547	189,147	-34.7
Other Crops												
Apples:												
Production, crop estimate.....thous. of bush.					\$ 140,099		\$ 185,743					
Cold-storage holdings, end of month.....thous. of bbls.	82	31	79	1,633	7,647	1,631	8,733	+368.3	-12.4			
Car-lot shipments.....carloads.	1,001	1,903	3,532	13,114	36,366	18,085	44,034	+177.3	-17.4	88,610	81,234	-8.3
Potatoes:												
Production, crop estimate.....thous. of bush.					\$ 353,977		\$ 464,483					
Car-lot shipments.....carloads.	24,321	19,359	16,871	23,978	31,253	20,267	28,921	+30.3	+8.1	220,161	216,487	-1.7
Onions, car-lot shipments.....carloads.	1,700	2,351	2,545	5,040	5,484	6,009	4,115	+8.8	+33.3	29,990	30,351	+1.2
Citrus fruits, car-lot shipments.....carloads.	11,820	8,152	7,348	5,684	8,652	3,636	5,868	+52.2	+47.4	69,191	117,601	+70.0
Hay, all time:												
Production, crop estimate.....thous. of tons.					\$ 100,582		\$ 92,983					
Cattle and Beef												
Cattle movements, primary markets:												
Receipts.....thousands.	1,444	1,659	1,616	2,099	2,401	2,191	2,541	+14.4	-5.5	18,004	16,891	-6.2
Shipments, total.....thousands.	528	592	685	883	1,267	1,067	1,327	+43.5	-4.5	7,466	6,744	-9.7
Shipments, stocker and feeder.....thousands.	176	173	267	423	757	563	799	+79.0	-5.3	3,216	2,837	-11.8
Local slaughter.....thousands.	901	1,039	938	1,118	1,168	1,069	1,195	+4.5	-2.3	10,361	9,990	-3.6
Beef products:												
Production, inspected.....thous. of lbs.	364,470	402,501	406,700	419,281	458,439	418,882	430,688	+9.3	+6.4	3,950,769	3,957,466	+0.2
Apparent consumption.....thous. of lbs.	388,426	420,212	419,494	423,701	453,474	433,958	421,850	+7.0	+7.5	4,059,872	3,644,299	-10.2
Exports.....thous. of lbs.	1,496	2,288	1,457	1,259	1,223	647	1,276	-2.9	-4.2	11,513	14,075	+22.3
Cold-storage holdings, end of month.....thous. of lbs.	52,055	45,930	48,014	56,434	72,126	37,223	58,036	+27.8	+24.3			
Prices:												
Cattle, corn-fed, Chicago.....dolls. per 100 lbs.	14.38	14.98	14.69	13.80	13.31	16.19	14.63	-3.6	-9.0			
Steer rounds No. 2.....dolls. per lb.	.234	.238	.238	.236	.236	.259	.255	0.0	-7.5			
Western dressed steers, N. Y.....dolls. per lb.	.238	.255	.251	.250	.238	.284	.282	-4.8	-15.6			
Hogs and Pork												
Hog movements, primary markets:												
Receipts.....thousands.	3,230	3,257	2,930	3,062	3,674	2,600	3,666	+20.0	+0.2	37,679	35,434	-6.0
Shipments, total.....thousands.	1,149	1,199	1,124	1,123	1,377	1,093	1,341	+22.6	+2.7	14,186	13,276	-6.4
Shipments, stocker and feeder.....thousands.	53	38	38	40	50	55	65	+25.0	-23.1	625	517	-17.3
Local slaughter.....thousands.	2,081	2,055	1,810	1,923	2,310	1,500	2,311	+20.1		23,452	22,135	-5.6
Pork products, total:												
Production, inspected.....thous. of lbs.	672,947	675,915	586,150	552,490	651,682	434,296	623,716	+18.0	+4.5	6,868,783	6,840,534	-0.4
Apparent consumption.....thous. of lbs.	582,512	604,320	617,430	614,118	720,196	588,472	675,222	+17.3	+6.7	6,055,255	6,038,474	-0.3
Exports.....thous. of lbs.	100,556	96,298	87,277	84,550	97,081	65,617	75,384	+14.7	+28.8	886,522	972,289	+9.7
Cold-storage holdings, end of month.....thous. of lbs.												
Total.....thous. of lbs.	\$ 1,041,636	\$ 1,017,364	\$ 899,485	\$ 754,188	\$ 589,117	\$ 641,977	\$ 516,634	-21.9	+14.0			
Fresh and cured.....thous. of lbs.	\$ 841,937	\$ 814,354	\$ 719,400	\$ 600,498	\$ 490,007	\$ 515,087	\$ 433,160	-18.4	+13.1			
Lard (included in pork products):												
Production.....thous. of lbs.	144,272	139,693	121,894	114,179		80,135	113,968			7 1,297,561	7 1,312,598	+1.2
Exports.....thous. of lbs.	67,252	64,274	55,487	58,329	70,698	46,158	69,865	+21.2	+18.1	605,612	665,804	+9.9
Cold-storage holdings, end of month.....thous. of lbs.	199,699	203,010	180,085	153,690	99,110	126,890	83,474	-35.5	+18.7			
Prices:												
Hogs, heavy, Chicago.....dolls. per 100 lbs.	10.66	11.20	10.66	9.96	9.65	12.43	10.03	-3.1	-3.8			
Hams, smoked, Chicago.....dolls. per lb.	.254	.267	.275	.267	.242	.254	.260	-9.4	-6.9			
Lard, prime contract, N. Y.....dolls. per lb.	.123	.125	.124	.122	.114	.132	.124	-6.6	-8.1			
Sheep and Lambs												
Sheep movement, primary market:												
Receipts.....thousands.	1,749	2,112	2,537	3,353	4,091	3,386	3,938	+22.0	+3.9	21,934	22,966	+4.7
Shipments, total.....thousands.	740	876	1,384	1,969	2,818	2,161	2,485	+43.1	+13.4	11,539	12,034	+4.3
Shipments, stocker and feeder.....thousands.	226	231	639	1,027	1,831	1,080	1,466	+78.3	+24.9	4,272	4,807	+12.5
Local slaughter.....thousands.	1,020	1,216	1,155	1,301	1,326	1,213	1,403	+1.9	-5.5	10,319	10,882	+5.5

³ As of Nov. 1. ⁴ Final estimate for 1928. ⁵ Revised. ⁷ Cumulative through Sept. 30. ⁸ See tables on pp. 21 and 22 of the November, 1929, issue for earlier data.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	FOODSTUFFS—Continued											
Sheep and Lambs—Continued												
Lamb and mutton:												
Production, inspected.....thous. of lbs..	42,012	46,804	49,096	50,158	52,677	49,237	54,107	+5.0	-2.6	435,926	456,516	+4.7
Apparent consumption.....thous. of lbs..	41,967	47,563	48,743	49,551	51,973	49,042	52,077	+4.9	-0.2	437,753	461,051	+5.
Cold-storage holdings, end of month.....thous. of lbs..	3,061	2,639	3,159	4,113	4,989	2,113	4,321	+21.3	+15.5			
Prices:												
Sheep, ewes, Chicago.....dolls. per 100 lbs..	5.31	5.55	5.16	4.68	4.63	5.50	5.35	-1.1	-13.5			
Sheep, lambs, Chicago.....dolls. per 100 lbs..	12.75	13.80	12.88	12.55	12.09	14.16	13.08	-3.7	-7.6			
Miscellaneous Meats												
Cold-storage holdings, end mo.....thous. of lbs..	81,132	81,068	76,539	71,511	63,594	49,798	52,201	-11.1	+21.8			
Total Meats												
Production, inspected.....thous. of lbs..	1,079,429	1,125,221	1,041,946	1,021,929	1,162,798	902,414	1,108,511	+13.8	+4.9	11,255,475	11,254,517	
Cold-storage holdings, end mo.....thous. of lbs..	1,177,884	1,147,001	1,027,197	886,246	729,826	731,111	631,192	-17.6	+15.6			
Apparent consumption.....thous. of lbs..	1,012,905	1,072,095	1,085,667	1,087,369	1,225,644	1,071,472	1,149,149	+12.7	+6.7	10,552,880	10,597,298	+0.4
Poultry												
Receipts at 5 markets.....thous. of lbs..	20,434	22,548	26,150	23,477	37,725	23,859	35,613	+32.5	+5.9	225,127	238,530	+6.
Cold-storage holdings, end of mo.....thous. of lbs..	42,001	40,896	49,010	61,976	86,854	43,578	58,093	+40.1	+49.5			
Fish												
Total catch, prin. fishing ports.....thous. of lbs..	31,728	43,185	43,903	50,270	33,243	24,284	27,129	-33.9	+22.5	252,189	327,821	+30.0
Cold-storage holdings, 15th of mo.....thous. of lbs..	40,451	51,334	64,723	72,198	75,323	71,352	73,410	+4.3	+2.6			
Canned salmon:												
Shipments, United States.....cases..	217,781	367,842	830,404	937,041	1,113,495	810,723	810,723			3,796,988	3,965,534	+4.4
Exports, Canada.....cases..	42,794	38,983	53,100	118,250	162,831	168,963	253,265	+37.7	-35.7	1,024,000	923,787	-9.8
Butter												
Production (factory).....thous. of lbs..	181,359	173,314	144,436	117,431	109,733	117,790	104,367	-6.6	+5.1	1,289,842	1,391,992	+7.9
Receipts, 5 markets.....thous. of lbs..	69,511	68,104	54,885	44,500	42,963	44,969	41,884	-3.5	+2.6	505,294	524,597	+3.8
Cold-storage holdings, creamery, end of month.....thous. of lbs..	91,962	151,621	168,952	158,541	138,324	128,071	105,811	-12.8	+30.7			
Apparent consumption.....thous. of lbs..	192,045	241,232	185,708	174,193	172,923	176,879	171,922	-0.7	+0.6	1,764,416	1,798,941	+2.0
Wholesale price, New York.....dolls. per lb..	.44	.42	.43	.46	.46	.49	.48	0.0	-4.2			
Cheese												
Total, all varieties:												
Production (factory).....thous. of lbs..	48,854	47,004	37,751	30,373	27,665	45,156	40,654	-8.9	-32.0	458,808	329,703	-28.1
Receipts, 5 markets.....thous. of lbs..	18,404	20,548	18,605	15,289	14,344	18,222	18,665	-6.2	-23.2	170,743	156,192	-8.5
Apparent consumption.....thous. of lbs..	38,625	36,607	39,453	38,414	42,329	48,660	43,522	+10.2	-2.7	414,586	387,207	-6.6
Cold-storage holdings, end of mo.....thous. of lbs..	79,724	98,070	106,009	102,849	94,901	98,339	97,421	-7.7	-2.6			
Imports.....thous. of lbs..	8,608	6,653	5,268	4,929	6,911	6,744	9,410	+16.6	-26.6	63,187	62,506	-1.1
Exports, United States.....thous. of lbs..	209	285	138	284	195	141	204	-31.3	-4.4	2,133	2,273	+6.6
Exports, Canada.....thous. of lbs..	8,403	15,074	11,047	16,954	17,144	17,123	24,282	+1.1	-29.4	93,148	74,058	-20.5
American whole milk:												
Cold-storage holdings, end of mo.....thous. of lbs..	62,737	79,907	86,558	84,815	78,062	81,833	82,318	-8.0	-5.2			
Wholesale price, New York.....dolls. per lb..	.23	.23	.23	.24	.24	.27	.26	0.0	-7.7			
Eggs												
Receipts, 5 markets.....thous. of cases..	1,813	1,409	1,151	944	735	939	794	-22.1	-7.4	14,986	14,545	-2.9
Cold-storage holdings, end of month:												
Case.....thous. of cases..	8,510	8,962	8,547	7,195	4,931	8,542	6,247	-31.5	-21.1			
Frozen.....thous. of lbs..	84,766	91,488	86,693	81,544	70,323	82,255	73,327	-13.8	-4.1			
Milk												
Condensed milk:												
Total stocks, mfrs., end mo.—												
Case goods.....thous. of lbs..	31,459	34,750	32,142	29,893	29,182	27,837	23,949	-2.4	+21.9			
Bulk goods.....thous. of lbs..	25,803	29,890	29,217	30,038	27,271	17,604	14,429	-9.2	+59.0			
Unsold stocks, mfrs., end mo.—												
Case goods.....thous. of lbs..	25,140	28,883	26,950	24,237	23,614	21,821	17,818	-2.6	+32.5			
Bulk goods.....thous. of lbs..	9,296	9,221	8,751	8,019	7,687	6,351	4,840	-4.1	+58.8			
Exports.....thous. of lbs..	3,280	3,865	3,366	3,116	4,019	3,405	2,831	+29.0	+58.8	32,397	35,406	+9.3
Wholesale price, New York.....dolls. per case..	6.13	6.13	6.13	6.13	6.13	6.18	6.18	0.0	-0.8			
Evaporated milk:												
Manufacturers' stocks, end of mo.—												
Total, case goods.....thous. of lbs..	222,956	281,137	272,427	249,936	243,672	165,682	164,989	-2.5	+47.7			
Unsold, case goods.....thous. of lbs..	173,684	215,878	186,717	192,761	191,723	134,259	133,808	-0.5	+38.1			
Exports.....thous. of lbs..	7,121	5,929	4,609	3,703	5,179	5,583	5,264	+39.9	-1.6	65,694	58,816	-10.5
Wholesale price, New York.....dolls. per case..	4.30	4.30	4.30	4.21	3.95	4.58	4.58	-6.2	-13.8			
Production, condensed and evaporated milk.....thous. of lbs..	290,350	261,989	180,084	136,738	124,434	140,388	118,848	-9.0	+4.7	1,709,977	1,826,988	+6.8
Powdered milk:												
Manufacturers' stocks, end of month.....thous. of lbs..	31,103	33,921	33,491	30,775	25,263	18,857	16,864	-17.9	+49.8			
Exports.....thous. of lbs..	488	400	250	329	678	322	313	+106.1	+116.6	3,151	4,335	+37.
Net new orders.....thous. of lbs..	8,228	7,786	8,069	7,780	6,890	5,662	6,284	-11.4	+0.6	59,425	68,650	+15.
Fluid milk:												
Receipts—												
Boston (incl. cream).....thous. of qts..	19,920	20,114	19,115	18,273	17,329	17,329	18,385			162,017	165,439	+2.
Greater New York.....thous. of qts..	122,902	119,886	114,768	116,205	116,449	113,552	116,849	+0.2	-0.3	1,141,036	1,148,849	+0.7
Production—												
Minneapolis, St. Paul.....thous. of lbs..	36,949	32,021	25,737	21,974	21,572	21,572	20,274			247,628	269,737	+8.9
Consumption in manufacture of oleomargarine.....thous. of lbs..	6,487	7,045	8,144	8,824	10,321	8,530	9,151	+17.0	+12.8	75,940	80,186	+5.6

* Revised.

† Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	June	July	August	Septem-ber	October	Septem-ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	FOODSTUFFS—Continued											
Sugar												
Raw:												
Imports—												
From Hawaii, Porto Rico.....long tons..	112, 546	156, 633	90, 922	120, 481	92, 684	89, 047	104, 841	-23.1	-11.6	1, 286, 993	1, 146, 548	-10.9
From foreign countries.....long tons..	338, 905	359, 393	410, 479	292, 699	256, 953	315, 722	257, 825	-12.2	-0.3	3, 019, 787	4, 023, 267	+33.2
Meltings, 8 ports.....long tons..	450, 035	445, 904	504, 207	322, 716	380, 758	417, 983	436, 122	+18.0	-12.7	4, 036, 603	4, 235, 160	+4.9
Stocks at refineries, end month.....long tons..	875, 942	864, 589	830, 508	873, 286	798, 570	465, 386	357, 506	-8.5	+123.5			
Refined:												
Shipments, 2 ports.....long tons..	81, 088	93, 673	89, 294	47, 447	60, 610	66, 428	61, 799	+27.7	-1.9	620, 807	720, 511	+16.1
Stocks, 2 ports.....long tons..	50, 753	42, 889	47, 419	49, 631	39, 375	26, 725	32, 920	-20.7	+19.6			
Exports, including maple.....long tons..	6, 341	11, 631	8, 579	5, 705	5, 674	7, 413	11, 971	-0.5	-52.6	88, 795	84, 079	-5.3
Prices:												
Wholesale, 96° centrif., N. Y. dolls. per lb..	.035	.038	.038	.040	.040	.042	.039	0.0	+2.6			
Wholesale, granulated, N. Y. dolls. per lb..	.049	.052	.054	.053	.054	.056	.052	+1.9	+3.8			
Retail, granulated, N. Y. dolls. per lb..	.056	.057	.060	.061	.061	.063	.062	0.0	-1.6			
Retail average, 51 cities.....relative to 1913..	116	116	120	122	122	127	126	0.0	-3.2			
Cuban movement (raw):												
Receipts at Cuban ports.....long tons..	196, 995	153, 925	211, 090	120, 530	94, 130	168, 638	154, 547	-21.9	-39.1	3, 753, 634	4, 687, 084	+24.9
Exports.....long tons..	356, 616	428, 066	464, 310	349, 972	241, 256	370, 339	323, 317	-31.1	-25.4	3, 429, 724	4, 299, 800	+25.4
Stocks, end of month.....long tons..	1, 298, 387	978, 543	739, 068	503, 592	326, 927	630, 548	446, 210	-35.1	-26.7			
Candy												
Sales by manufacturers.....thous. of dolls..	22, 774	17, 962	26, 174	34, 779	38, 523							
Coffee												
Imports.....thous. of bags..	817	864	875	925	1, 004	1, 655	809	+8.5	+24.1	10, 147	9, 453	-6.8
Visible supply:												
World.....thous. of bags..	5, 352	5, 448	5, 269	5, 227	5, 043	5, 378	5, 390	-3.5	-6.4			
United States.....thous. of bags..	700	760	685	689	686	702	693	-0.4	-1.0			
Receipts, total, Brazil.....thous. of bags..	1, 069	1, 056	1, 191	1, 266	1, 365	1, 040	1, 157	+7.8	+18.0	11, 798	11, 607	-1.6
Clearances:												
Total, Brazil, for world.....thous. of bags..	1, 020	1, 267	1, 242	1, 234	1, 324	997	1, 330	+7.3	-0.5	11, 501	11, 559	+0.4
Total, Brazil, for U. S.....thous. of bags..	488	634	655	642	682	570	667	+6.2	+2.2	6, 082	5, 978	-1.7
Price, Rio No. 7, Brazil grades.....dolls. per lb..	.168	.163	.161	.158	.139	.173	.178	-12.0	-21.9			
Tea												
Imports.....thous. of lbs..	6, 029	6, 734	7, 019	8, 737	10, 555	9, 754	10, 512	+20.8	+0.4	71, 302	71, 606	+0.4
Price, Formosa, fine, New York.....dolls. per lb..	.325	.310	.310	.310	.310	.325	.310	0.0	0.0			
Cocoa												
Shipments from the Gold Coast and												
Nigeria, Africa.....long tons..	9, 889	7, 224	5, 238	4, 459	18, 491	3, 724	15, 326	+314.7	+20.7	187, 901	210, 687	+12.1
Imports.....long tons..	14, 486	18, 862	15, 922	10, 481	16, 147	6, 388	5, 450	+54.1	+196.3	148, 498	189, 504	+27.6
Spot rice, Accra, New York.....dolls..	.1069	.1069	.1081	.1100	.1063	.1163	.1125	-3.4	-5.5			
TOBACCO												
Production, crop estimate.....thous. of lbs..						1, 480, 965	1, 378, 139					
Consumption (tax-paid withdrawals):												
Large cigars.....thousands..	556, 746	589, 282	598, 583	591, 738	701, 711	586, 267	723, 318	+18.6	-3.0	5, 411, 228	5, 517, 882	+2.0
Small cigarettes.....thousands..	10, 839, 673	10, 724, 403	10, 930, 629	10, 350, 544	11, 202, 294	9, 126, 271	9, 921, 537	+8.2	+12.9	89, 864, 438	101, 736, 443	+13.2
Manufac. tobacco and snuff.....thous. of lbs..	32, 353	32, 694	34, 470	32, 260	33, 738	31, 789	35, 333	+4.6	-4.5	328, 597	324, 731	-1.2
Exports:												
Unmanufactured.....thous. of lbs..	28, 588	26, 266	41, 343	55, 965	79, 150	57, 509	88, 509	+41.4	-10.6	437, 107	428, 879	-1.9
Cigarettes.....thousands..	784, 160	504, 565	659, 187	558, 249	586, 767	961, 827	956, 846	+5.1	-38.7	9, 482, 337	7, 338, 350	-22.6
Sales of loose-leaf, warehouses.....thous. of lbs..	48	5, 887	76, 238	133, 771	166, 456	133, 718	122, 627	+24.4	+35.7	533, 066	667, 137	+25.2
TRANSPORTATION												
River and Canal Cargo Traffic												
Panama Canal:												
Total cargo traffic.....thous. of long tons..	2, 424	2, 598	2, 681	2, 433		2, 313	2, 582			721, 595	723, 546	+9.0
In American vessels.....thous. of long tons..	1, 186	1, 335	1, 311	1, 194		1, 140	1, 195			710, 109	711, 011	+8.9
In British vessels.....thous. of long tons..	591	583	639	600		602	679			76, 075	76, 192	+1.9
Sault Ste. Marie canals.....thous. of short tons..	14, 076	14, 120	14, 085	13, 358	11, 213	12, 812	13, 603	-16.1	-17.6	75, 273	85, 188	+13.2
New York State canals.....thous. of short tons..	387	444	380	389	491	411	536	+26.2	-8.4	2, 811	2, 544	-9.5
Cape Cod Canal.....short tons..	161, 143	175, 179	206, 188	199, 955	243, 668	130, 566	160, 903	+21.9	+51.4	1, 111, 480	1, 779, 395	+60.1
Suez Canal.....thous. of metric tons..	2, 590	2, 745	2, 762	2, 772		2, 634	2, 622			724, 201	725, 894	+7.0
Welland Canal.....short tons..	760, 431	628, 041	612, 943	574, 241	623, 651	996, 833	1, 115, 190	+8.6	-44.1	6, 321, 341	4, 274, 113	-32.4
St. Lawrence Canal.....short tons..	927, 933	781, 310	809, 323	775, 772	749, 287	1, 150, 058	1, 270, 051	-3.4	-41.0	7, 244, 159	5, 137, 485	-29.1
Mississippi River Govt. barges.....short tons..	103, 934	94, 141	85, 000	69, 947	137, 000	148, 377	120, 444	+50.6	+13.7	1, 151, 903	1, 115, 456	-3.2
Ohio River, Pittsburgh, Pa., to												
Wheeling, W. Va.....short tons..	1, 056, 795	1, 088, 912	1, 080, 996	1, 144, 682	1, 151, 819	963, 766	1, 010, 860	+0.6	+13.9	8, 469, 721	9, 414, 890	+11.2
Allegheny River.....short tons..	345, 995	396, 514	330, 123	364, 309	366, 351	288, 629	377, 744	+0.6	-3.0	2, 409, 291	2, 720, 808	+12.9
Monongahela River.....short tons..	2, 460, 644	2, 396, 993	2, 500, 617	2, 374, 949	2, 464, 099	2, 305, 681	2, 396, 557	+3.8	+2.8	21, 679, 768	23, 717, 749	+9.4
Ocean Traffic												
Clearances, vessels in foreign trade:												
Total.....thous. of net tons..	7, 664	8, 099	8, 428	7, 559	7, 503	7, 365	7, 806	-0.7	-3.9	66, 012	69, 916	+5.9
American.....thous. of net tons..	2, 985	3, 176	3, 219	2, 833	3, 041	2, 912	3, 252	+7.3	-6.5	25, 804	26, 847	+4.0
Foreign.....thous. of net tons..	4, 679	4, 923	5, 208	4, 726	4, 462	4, 453	4, 554	-5.6	-2.0	40, 208	43, 069	+7.1
Shipbuilding												
Completed during month:												
Total.....gross tons..	37, 616	21, 585	32, 298	28, 325		27, 833	7, 148			7147, 991	7172, 131	+16.3
Steel seagoing.....gross tons..	14, 379	15, 708	21, 497	24, 322		24, 483	4, 318			790, 741	797, 824	+7.8
Building or under contract, end of month:												
Merchant vessels.....thous. of gross tons..	170	160	215	254		242	260			72, 161	71, 838	-14.9
World construction												
(quarterly).....thous. of gross tons..	2, 838			2, 817		2, 521		-0.7	+11.7			
World launchings												
(quarterly).....thous. of gross tons..	715			715		811		0.0	-11.8			

² Quarter ending in month indicated.³ As of Nov. 1.⁴ Final estimate for 1928.⁶ Revised.⁷ Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929, from Sept., 1929	Oct., 1929, from Oct., 1928	1928	1929	
	TRANSPORTATION—Continued											
Freight Cars												
Surplus (daily av. last week of month):												
Total..... cars	217,657	197,923	158,112	118,523	124,194	103,906	105,017	+4.8	+18.3			
Box..... cars	116,657	96,577	87,985	72,612	80,956	53,170	54,263	+11.5	+49.2			
Coal..... cars	55,150	58,485	31,021	12,117	17,066	21,809	21,128	+40.8	-19.2			
Shortage (daily av. last week of month):												
Total..... cars	75	3	12	127	436	279	44	+243.3				
Box..... cars												
Coal..... cars	11			112	34	159	44	-69.6	-22.7			
Car loadings:												
Total..... cars	5,260,571	4,153,220	5,590,853	4,538,575	4,677,375	4,470,541	4,703,982	+3.1	-0.6	42,928,744	44,556,961	+3.8
Grain and grain products..... cars	215,606	246,696	315,570	199,367	185,681	238,470	219,320	-6.9	-15.3	2,061,036	2,042,808	-0.9
Livestock..... cars	116,744	91,969	121,285	123,644	149,101	136,923	154,670	+20.6	-3.6	1,248,500	1,160,262	-7.1
Coal and coke..... cars	842,553	644,715	916,215	811,081	877,576	764,880	869,300	+8.2	+1.0	7,529,178	8,041,394	+6.8
Forest products..... cars	347,917	245,036	343,449	251,726	254,356	254,527	264,690	+1.0	-3.9	2,793,852	2,793,776	
Ore..... cars	379,813	304,962	378,560	274,599	240,164	260,969	240,985	-12.5	-0.3	1,706,043	2,102,338	+23.2
Merchandise and l. c. l..... cars	1,273,002	996,357	1,307,417	1,048,579	1,086,098	1,034,957	1,081,804	+3.6	+0.4	10,944,531	11,016,069	+0.7
Miscellaneous..... cars	2,084,936	1,623,485	2,208,357	1,829,579	1,884,399	1,789,815	1,873,213	+3.0	+0.6	16,645,599	17,400,314	+4.5
Railroad Operations												
Operating revenue:												
Freight..... thous. of dolls.	390,360	416,405	446,001	434,972		424,092	492,275					
Passenger..... thous. of dolls.	79,329	79,551	84,267	75,736		80,200	69,564					
Total operating..... thous. of dolls.	531,748	557,568	586,563	566,720		556,916	617,782					
Operating expenses..... thous. of dolls.	381,596	389,262	395,686	383,349		376,241	401,160					
Net operating income..... thous. of dolls.	105,961	122,783	152,232	133,898		134,491	166,315					
Freight carried..... mills. ton-miles	40,725	41,991	44,944	44,219		43,791	48,206					
Railway Equipment												
Locomotives (Am. Ry. Assn.):												
Owned, end of month—												
Quantity..... number	57,876	57,635	57,477	57,355	57,194	59,600	59,731	-0.3	-4.2			
Tractive power..... mills. of lbs.	2,546	2,541	2,540	2,540	2,538	2,582	2,578	-0.1	-1.6			
In bad order, end of month—												
Quantity..... number	7,453	7,681	7,106	7,668	7,631	7,815	8,177	-0.5	-6.7			
Per cent of total in use..... per cent.	13.0	13.4	12.4	13.5	13.4	13.2	13.9	-0.7	-3.6			
Installed..... number	158	120	153	127	166	93	102	+30.7	+62.7	1,190	1,377	+15.7
Retired..... number	297	369	306	248	327	260	331	+31.9	-1.2	2,600	2,881	+10.8
New orders..... number	181	36	46	87	130	8	4	+49.4		253	826	+226.5
Shipments, manufacturer's (Census)—												
Total..... number	78	69	129	75	96	41	36	+28.0	+166.7	471	688	+46.1
Steam, domestic..... number	58	39	117	60	90	28	26	+50.0	+246.2	311	570	+83.3
Electric, domestic..... number	1	3	6	7	6	2		-14.3		87	38	-56.3
Unfilled orders (railroads), end of mo.—												
From manufacturers..... number	334	365	370	329	248	98	104	-24.6	+138.5			
In railroad shops..... number	55	45	25	25	46	15	17	+84.0	+170.6			
Unfilled orders, manufacturers' (Census)—												
Total..... number	552	539	436	429	423	178	170	-1.4	+148.8			
Steam, domestic..... number	489	490	392	347	347	118	113	0.0	+207.1			
Electric, domestic..... number	21	18	13	55	49	27	29	-10.9	+69.0			
Exports, steam..... number	14	32	30	20	11	33	8	-45.0	+37.5	174	184	+5.7
Freight cars (Am. Ry. Assn.):												
Owned, end of month—												
Quantity..... thous. of cars	2,266	2,267	2,268	2,266	2,265	2,296	2,292		-1.2			
Capacity..... mills. of lbs.	208,867	209,095	208,897	209,001	209,105	210,335	210,092		-0.5			
In bad order, end of month—												
Quantity..... cars	142,064	137,495	134,253	132,611	126,055	145,333	138,238	-4.9	-8.8			
Per cent of total in use..... per cent.	6.4	6.2	6.0	6.0	5.7	6.6	6.2	-5.0	-8.1			
New orders..... cars	5,869	442	2,585	4,257	17,249	1,236	1,635	+305.2		26,271	83,662	+218.5
Shipments—												
Total..... cars	6,517	7,109	7,811	7,614	7,818	3,320	2,507	+2.7	+211.8	36,157	57,403	+58.8
Domestic..... cars	6,514	6,963	7,633	7,239	7,363	3,000	2,345	+1.7	+214.0	35,108	54,363	+54.8
Unfilled orders (railroads)—												
Total..... cars	30,173	36,014	31,671	29,317	33,123	6,619	5,437	+13.0				
From manufacturers..... cars	34,145	31,590	27,289	25,654	29,857	3,878	1,880	+16.8				
In railroad shops..... cars	5,028	4,424	4,382	3,763	3,266	2,741	3,557	-13.2	-8.2			
Passenger cars:												
New orders..... cars	176	97	149		51	2	56		-8.9	1,760	1,156	-34.3
Shipments—												
Total..... cars	94	64	76	96	69	146	68	-28.1	+1.5	885	821	-7.2
Domestic..... cars	82	53	64	77	69	143	68	-10.4	+1.5	215	753	+250.2
Passenger Travel												
National parks:												
Visitors..... number	273,059	593,324	523,623	220,766	67,012	222,698	68,997	-69.6	-2.9	1,979,397	2,006,922	+1.4
Automobiles entered..... number	59,412	131,511	112,574	49,102	12,415	44,873	10,466	-74.7	+18.6	338,126	423,470	+25.2
Arrivals from abroad:												
Immigrants..... number	22,490	20,068	22,778	28,020		29,317	29,917			1,217,218	1,202,837	-6.6
United States citizens..... number	28,119	37,636	70,783	85,946		80,233	49,831			1,350,659	1,375,982	+7.2
Departures abroad:												
Emigrants..... number	4,881	5,086	5,571	5,150		8,093	7,479			1,531,307	1,403,333	-27.1
United States citizens..... number	42,846	56,339	70,551	49,429		42,105	34,643			1,369,776	1,365,074	-1.3
Passports issued..... number	29,508	18,115	11,295	9,135	8,485	8,056	8,494	-7.1	-0.1	171,813	180,175	+4.9
Pullman company operations:												
Revenue..... thous. of dolls.	7,763	7,230	7,927	7,483		7,297	6,650			1,611,916	1,633,355	+2.3
Passengers carried..... thousands	3,000	2,939	3,287	3,081		3,081	2,738			1,259,962	1,255,546	-1.6
Trend of business in hotels:												
Room occupancy..... per ct. of capacity	66	63	65	69	75	68	72	+8.7	+4.2			
Average sale per occupied room..... dollars	3.97	3.94	4.13	4.02	4.11	3.98	4.07	+2.2	+1.0			

* Revised.

† Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
TRANSPORTATION—Continued												
Warehouses												
Public merchandise warehouses, space occupied.....per ct. of total.....	71.0	71.2	71.0	74.4		66.1	66.4					
PUBLIC UTILITIES												
Telephone companies:												
Operating revenues.....thous. of dolls....	74,622	75,141	75,898	75,606		68,432	72,464			7 609,002	672,976	+10.5
Operating income.....thous. of dolls....	18,194	15,905	17,601	18,197		16,496	18,565			7 149,041	61,390	+8.3
Telegraph companies:												
Commercial telegraph tolls.....thous. of dolls....	11,396	11,679	12,067	11,531		11,010	11,765			7 96,874	7 103,163	+6.5
Operating revenues.....thous. of dolls....	14,446	14,843	15,316	14,751		13,911	14,928			7 121,259	7 130,820	+7.9
Operating income.....thous. of dolls....	1,516	1,528	1,688	1,724		1,918	2,247			7 15,576	7 14,910	-4.3
Gas and electric companies:												
Gross earnings.....thous. of dolls....	183,000	178,000	179,500	185,000		179,346	190,796			7 1,638,724	7 1,697,250	+3.6
Net earnings.....thous. of dolls....	79,000	71,000	73,000	80,000		68,236	73,671			7 622,668	7 731,500	+17.5
Electric railways (212 companies):												
Passengers carried.....thous. of persons...	744,310	722,289	724,812	704,818	774,466	717,810	795,140	+9.9	-2.6	7 7,712,505	7 7,599,377	-1.5
Average fare.....cents.....	8.228	8.244	8.260	8.260	8.272	8.121	8.129	+0.1	+1.8			
ELECTRIC POWER												
Electric power production:												
United States—												
Total.....mills. of kw. hours.....	7,768	8,013	8,285	7,998		7,276	7,922			7 68,263	7 71,688	+5.0
By water power.....mills. of kw. hours.....	3,066	3,054	2,839	2,479		2,788	2,873			7 26,275	7 26,505	+0.9
By fuels.....mills. of kw. hours.....	4,702	4,959	5,446	5,519		4,488	5,049			7 37,988	7 45,195	+19.0
In street railways, manf. plants, etc.....mills. of kw. hours.....	362	368	390	380		355	374			7 3,871	7 3,455	-10.7
In central stations.....mills. of kw. hours.....	7,406	7,645	7,895	7,618		6,927	7,548			7 60,439	7 68,233	+12.9
Canada—												
Total.....mills. of kw. hours.....	1,377	1,411	1,447	1,477		1,280	1,460			7 11,588	7 12,902	+11.3
By water power.....mills. of kw. hours.....	1,360	1,393	1,428	1,455		1,262	1,439			7 11,439	7 12,681	+10.9
Exported.....mills. of kw. hours.....	119	129	133	136		130	155			7 1,173	7 1,092	-6.9
Electric power, gross revenue.....thous. of dolls....	162,300	159,300				156,100	164,900					
Consumption of electrical power:												
By geographic divisions—												
United States.....rel. to 1923-25.....	135.2	129.0	128.2	135.8	134.6	134.5	132.0	-0.9	+2.0			
New England.....rel. to 1923-25.....	123.5	113.4	108.7	118.2	126.2	115.3	119.3	+6.8	+5.8			
North Central.....rel. to 1923-25.....	142.0	141.3	135.5	140.6	136.9	149.7	143.5	-2.6	-4.6			
Middle Atlantic.....rel. to 1923-25.....	129.5	127.9	127.9	138.0	133.0	136.0	133.4	-3.6	-0.3			
Southern.....rel. to 1923-25.....	128.4	114.7	132.7	126.3	131.2	127.5	129.7	+3.9	+1.2			
Western.....rel. to 1923-25.....	134.2	129.4	127.0	143.1	133.8	150.8	148.7	-6.5	-10.0			
By industry—												
All industry.....rel. to 1923-25.....	135.2	129.0	128.2	135.8	134.6	134.5	132.0	-0.9	+2.0			
Chemicals and allied products.....rel. to 1923-25.....	133.8	127.0	125.0	139.9	145.0	132.0	129.4	+3.6	+12.1			
Food and kindred products.....rel. to 1923-25.....	121.8	129.9	132.2	141.2	131.7	142.0	138.0	-6.7	-4.6			
Rolling mills and steel plants.....rel. to 1923-25.....	154.3	144.4	150.9	152.3	144.8	141.2	144.7	-4.9	+0.1			
Metal-working plants.....rel. to 1923-25.....	143.4	144.4	134.6	147.4	145.0	144.2	144.5	-1.6	+0.3			
Metal groups.....rel. to 1923-25.....	147.9	144.2	140.7	149.2	145.1	143.0	144.6	-2.7	+0.3			
Leather and its products.....rel. to 1923-25.....	98.7	82.0	102.2	105.4	93.0	106.9	103.8	-11.8	-10.4			
Lumber and its products.....rel. to 1923-25.....	113.8	103.2	102.3	111.4	109.8	111.3	109.3	-1.4	+0.5			
Paper and pulp.....rel. to 1923-25.....	137.3	122.3	123.6	127.0	141.0	132.0	133.3	+11.0	+5.8			
Rubber and its products.....rel. to 1923-25.....	158.1	136.7	120.2	133.7	135.1	151.2	146.4	+1.0	-7.7			
Shipbuilding.....rel. to 1923-25.....	106.9	107.7	96.3	114.9	134.4	72.3	73.8	+17.0	+82.1			
Stone, clay and glass.....rel. to 1923-25.....	170.3	154.7	157.7	165.7	159.2	152.0	144.7	-3.9	+10.0			
Textiles.....rel. to 1923-25.....	123.0	113.4	110.0	115.5	129.8	112.5	121.0	+12.4	+7.3			
Automobiles, including repair parts.....rel. to 1923-25.....	154.0	139.5	143.0	138.1	122.4	161.0	141.2	-11.4	-13.3			
EMPLOYMENT AND WAGES												
Employment in factories:												
Massachusetts.....rel. to 1919-23.....	77.2	77.0	77.8	79.8	79.6	75.6	78.8	-0.3	+1.0			
New York State.....rel. to 1923.....	87.6	87.3	87.7	89.3	89.7	84.3	86.0	+0.4	+4.3			
New Jersey.....rel. to 1923.....	101	102	103	104	103	94	95	-1.0	+8.4			
Pennsylvania.....rel. to 1923.....	86	86	87	88	87	81	82	-1.1	+6.1			
Delaware.....rel. to 1923.....	78	81	84	85	83	77	74	-2.4	+12.2			
Iowa.....rel. to 1923.....	130.8	129.7	133.2	133.4	133.6	124.0	126.0	+0.1	+6.0			
Maryland.....rel. to 1924.....	93.9	93.0	93.0	94.2	93.1	89.0	90.4	-1.2	+3.0			
Illinois.....rel. to 1925-27.....	104.1	103.4	105.1	105.8	103.8	97.7	97.8	-1.9	+6.1			
Wisconsin.....rel. to 1923.....	98.2	100.3	99.2	97.7	98.1	97.1	97.0	+0.4	+1.1			
Ohio.....rel. to 1923.....	116	116	116	115	115	109	110					
Cleveland.....rel. to Jan., 1921.....	123.9	124.2	125.0	124.0		114.5	110.6					
Milwaukee.....number.....	43,814	43,761	43,736	41,555	40,599	38,077	38,090	-2.3	+6.6			
New York State.....number.....	484,637	483,142	485,330	494,311	496,578	466,357	475,753	+0.5	+4.4			
Oklahoma.....number.....	36,795	34,984	38,978	38,239		30,812	31,960					
Total pay roll:												
New York State (weekly).....thous. of dolls....	14,549	14,988	14,599	15,063	14,938	13,862	14,168	-0.8	+5.4			
Oklahoma (weekly).....thous. of dolls....	1,005	965	1,074	1,015		865	868					
Wisconsin.....rel. to 1923.....	107.0	100.2	105.3	99.2	106.0	106.5	110.2	+6.9	-3.8			
New York State.....rel. to 1923.....	96.5	95.5	96.8	99.9	99.1	92.0	94.0	-0.8	+5.4			
New Jersey.....rel. to 1923.....	114	111	115	116	118	102	105	+1.7	+12.4			
Pennsylvania.....rel. to 1923.....	93	88	93	91	93	83	87	+2.2	+6.9			
Delaware.....rel. to 1923.....	86	84	90	88	90	77	78	+2.3	+15.4			
Illinois.....rel. to 1925-27.....	107.5	102.7	106.0	105.0	105.8	97.1	98.3	+0.8	+7.6			

* Revised.

7 Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. in-crease (+) or de-crease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	EMPLOYMENT AND WAGES—Contd.											
Employment, Canada.....rel. to calendar year 1928	122.2	124.7	127.8	128.8	125.6	119.1	118.8	-0.9	+5.7			
Ohio, construction.....rel. to 1923	132.9	139.6	141.3	136.5		135.0	137.7					
Employment, trade-unions:												
United States.....per cent of total	91.0	91.0	91.0	90.0	89.0	90.0	91.0	-1.1	-2.2			
Canada.....per cent of total	97.1	97.0	96.5	96.3		97.8	96.9					
Anthracite mines:												
Employment.....rel. to 1923-25	95.4	85.6	93.6	105.5	109.8	112.7	135.9	+4.1	-19.2			
Pay roll.....rel. to 1923-25	71.0	56.8	68.9	83.4	118.6	112.5	134.7	+39.8	-13.4			
Federal civilian employees, Washington, D. C., end month	63,904	63,372	63,632	63,516	63,713	62,010	62,016	+0.3	+2.7			
Average weekly earnings, factories:												
Illinois.....dollars	29.46	28.16	28.57	25.40	26.09	28.31	28.57	+2.7	-8.7			
New York State.....dollars	30.02	29.80	30.08	30.47	30.08	29.72	29.78	-1.3	+1.0			
Wisconsin.....dollars	26.03	23.96	26.51	25.17	26.70	26.30	27.25	+6.1	-2.0			
Oklahoma.....dollars	27.31	27.57	27.55	26.50		28.08	27.16					
Massachusetts.....rel. to 1914	231.5	231.0	234.2	234.4	231.6	230.9	230.2	-1.2	+0.6			
New York.....rel. to 1914	240.5	238.8	241.0	244.2	241.0	238.1	238.6	-1.3	+1.0			
New Jersey.....rel. to 1913	113	110	113	112	115	110	112	+2.7	+2.7			
Pennsylvania.....rel. to 1923	108	101	107	104	107	101	106	+2.9	+0.9			
Delaware.....rel. to 1923	108	102	105	103	107	101	104	+3.9	+2.9			
Illinois.....rel. to 1925-27	103.8	99.2	100.7	89.5	92.0	99.8	100.7	+2.8	-8.6			
Wisconsin.....rel. to 1923	109.0	100.0	106.3	101.6	108.1	109.7	113.7	+6.4	-4.9			
Average weekly earnings (National Industrial Conference Board):												
Grand total (both sexes).....dollars	28.28	28.09	27.94	28.58		27.76	27.76					
Total male.....dollars	31.16	31.01	30.69	31.56		30.93	30.70					
Skilled male.....dollars	32.66	32.52	32.18	33.06		32.42	32.26					
Unskilled male.....dollars	25.45	25.23	25.09	25.82		25.27	24.72					
Total women.....dollars	17.86	17.54	17.47	17.81		17.33	17.34					
Average weekly hours:												
Nominal (both sexes).....hours	49.7	49.6	49.4	49.6		49.8	49.6					
Actual (both sexes).....hours	48.5	48.8	48.4	49.0		48.2	48.0					
Wages, road labor, by districts:												
New England.....cents per hour	51	49	51	51	51	48	51	0.0	0.0			
Middle Atlantic.....cents per hour	42	42	42	43	42	42	41	-2.3	+2.4			
South Atlantic.....cents per hour	29	30	30	29	27	24	26	-6.9	+3.8			
East South Central.....cents per hour	26	25	25	25	26	25	26	+4.0	0.0			
West South Central.....cents per hour	32	30	30	31	30	26	30	-3.2	0.0			
East North Central.....cents per hour	38	40	39	39	38	38	40	-2.6	-5.0			
West North Central.....cents per hour	37	36	37	37	37	39	39	0.0	-5.1			
Mountain.....cents per hour	47	47	48	48	48	52	49	0.0	-2.0			
Pacific.....cents per hour	52	53	52	54	53	54	54	-1.9	-1.9			
United States, average.....cents per hour	40	39	40	41	40	43	42	-2.4	-4.8			
Wage rates, U. S. Steel Corp.....cents per hour	50	50	50	50	50	50	50	0.0	0.0			
Wages, steel sheet workers.....per cent of base	127.0	127.0	127.0	127.0	127.0	125.5	125.5	0.0	+1.2			
Applicants per 100 jobs, employment agencies:												
United States.....number	128	131	124	114	127	107	117	+11.4	+8.5			
Eastern States.....number	127	139	136	121	132	120	128	+9.1	+3.1			
Central States.....number	140	141	135	132	148	126	133	+12.1	+11.3			
Southern States.....number	185	174	178	148	164	91	142	+10.8	+15.5			
Western States.....number	71	83	75	67	71	63	62	+6.0	+14.5			
Illinois.....number	139	148	137	136	147	130	133	+8.1	+10.5			
Wisconsin.....number	120	115	117	117	117	104	116					
Canada.....number	130	134	119	129	143	110	123	+10.9	+16.3			
Factory Labor Turnover												
(Percentage of number on pay roll)												
Departures:												
Total.....per cent (annual basis)	51.1	46.5	48.5	50.6	41.9	50.6	41.9	-17.2	0.0			
Voluntary quits.....per cent (annual basis)	39.5	35.7	38.4	38.2	28.0	40.3	31.9	-26.7	-12.2			
Lay offs.....per cent (annual basis)	5.4	5.0	4.8	6.3	9.2	5.0	4.7	+46.0	+95.7			
Discharges.....per cent (annual basis)	6.2	5.8	5.3	6.1	4.7	5.3	5.3	-23.0	-11.3			
Accessions.....per cent (annual basis)	60.9	61.4	54.3	59.7	44.7	56.9	57.1	-25.1	-21.7			
Industrial disputes:												
Disputes.....number	71	75	71	74		34	42					
Workers involved.....number	54,584	21,872	13,245	16,415		62,862	41,474					
Man-days lost in month.....number	1,526,627	1,116,557	530,023	413,928		2,571,982	1,304,913					
DISTRIBUTION MOVEMENT												
Retail Sales												
Mail-order houses:												
Total sales, 2 houses.....thous. of dolls.	57,702	53,309	60,088	63,078	79,256	50,814	63,587	+25.6	+24.6	443,314	571,267	+28.9
Sears, Roebuck & Co.....thous. of dolls.	35,748	33,501	35,133	36,950	47,075	30,004	37,002	+27.4	+27.2	268,367	345,387	+28.7
Montgomery Ward & Co.....thous. of dolls.	21,954	19,808	24,955	26,128	32,181	20,810	26,585	+23.2	+21.0	174,947	225,880	+29.1
Ten-cent chain stores:												
Total sales (4 chains).....thous. of dolls.	44,401	42,604	46,613	43,169	51,061	42,906	48,992	+18.3	+4.2	403,502	434,702	+7.7
Total stores operated (4 chains).....number	2,744	2,767	2,787	2,816	2,834	2,586	2,615	+0.6	+8.4			
F. W. Woolworth & Co.....thous. of dolls.	23,609	22,522	24,446	22,253	27,678	22,637	26,896	+24.4	+2.9	217,206	232,707	+7.1
Stores operated.....number	1,775	1,789	1,802	1,815	1,823	1,698	1,718	+0.4	+6.1			
S. S. Kresge Co.....thous. of dolls.	12,572	11,687	13,001	11,971	13,761	11,914	12,925	+15.0	+6.5	109,485	118,065	+7.8
Stores operated.....number	537	542	547	560	568	474	481	+1.4	+18.1			
McCrary Stores Corp.....thous. of dolls.	3,335	3,300	3,853	3,582	3,798	3,344	3,471	+6.0	+9.4	30,372	33,562	+10.5
Stores operated.....number	238	239	240	241	243	224	224	+0.8	+8.5			
S. H. Kress & Co.....thous. of dolls.	4,885	5,095	5,317	5,363	5,824	5,011	5,701	+8.6	+2.2	47,440	50,372	+6.2
Stores operated.....number	194	197	198	200	200	190	192	0.0	+4.2			
Metropolitan.....thous. of dolls.	1,467	1,537	1,612	1,471	1,663	1,109	1,231	+13.1	+35.1	9,513	12,870	+35.3
Stores operated.....number	120	123	131	134	141	100	104	+5.2	+35.6			
F. & W. Grand.....thous. of dolls.	1,889	1,635	1,731	1,731	2,016	1,443	1,756	+16.5	+14.8	12,053	16,261	+34.9
Stores operated.....number	89	90	89	90	91	76	80	+1.1	+13.8			
W. T. Grant Co.....thous. of dolls.	5,374	4,524	5,066	4,777	6,164	4,708	5,418	+29.0	+13.8	39,144	47,400	+21.1
Stores operated.....number	241	244	252	258	263	199	203	+1.9	+29.6			

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928
	June	July	August	Septem-ber	October	Septem-ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	DISTRIBUTION MOVEMENT—Con.											
Retail Sales—Continued												
Restaurant chains:												
Total sales (3 chains).....thous. of dolls.	4,763	4,821	5,151	4,953		4,591	4,802					
Stores operated.....number	374	372	369	367		366	367					
Childs Co., sales.....thous. of dolls.	2,177	2,259	2,478	2,348	2,412	2,191	2,266	+2.7	+6.4	21,850	22,816	+4.4
Stores operated.....number	114	114	113	112	109	113	110	-2.7	-0.9			
J. R. Thompson Co., sales.....thous. of dolls.	1,313	1,302	1,331	1,282		1,185	1,269					
Stores operated.....number	124	124	122	122		121	123					
Waldorf Wystem (Inc.), sales.....thous. of dolls.	1,273	1,260	1,342	1,323	1,477	1,215	1,267	+11.6	+16.6	12,065	13,233	+9.7
Stores operated.....number	136	134	134	133	143	132	134	+7.5				
Other chain stores:												
Isaac Silver & Bros.....thous. of dolls.	613	650	718	679	919	512	610	+35.3	+50.7	4,676	6,132	+31.1
Stores operated.....number	39	41	43	43	45	29	30	+4.7	+50.0			
J. C. Penny Co.....thous. of dolls.	17,121	14,554	16,491	18,243	23,302	16,478	19,595	+27.7	+19.8	132,289	153,237	+15.8
Stores operated.....number	1,215	1,215	1,292	1,337	1,373	1,006	1,020	+2.7	+34.6			
G. C. Murphy Co.....thous. of dolls.	1,229	1,148	1,273	1,336	1,403	1,046	1,056	+5.0	+32.9	8,537	11,616	+36.1
Stores operated.....number	145	145	148	150	150	119	120	0.0	+25.0			
Installment sales in New England dept. stores; ratio to total sales.....per cent	4.1	6.7	12.5	7.6		8.2	9.0					
Advertising												
Magazine advertising.....thous. of lines	2,895	2,346	1,978	2,542	3,046	2,302	2,904	+19.8	+4.9			
Magazine advertising, total cost.....thous. of dolls.	17,756	15,437	12,076	16,063	19,750	14,349	19,595	+23.0	+0.8	157,407	166,201	+5.6
Newspaper advertising.....thous. of lines	101,200	83,930	85,136	105,702	118,616	99,839	112,053	+12.2	+5.9	971,287	1,015,964	+4.6
Radio broadcast:												
Cost of facilities.....thous. of dolls.	1,309	1,312	1,330	1,599	1,948	814	1,362	+21.8	+43.0	7,985	14,851	+86.0
National advertising in newspapers:												
Total.....thous. of lines	56,118	48,023	44,095	52,869	64,037	43,402	52,955	+21.1	+20.9	424,885	504,745	+18.8
Passenger cars.....thous. of lines	6,603	6,219	7,088	6,884	7,396	6,720	6,523	+7.4	+13.4	68,199	73,394	+7.6
Tires, trucks, and accessories.....thous. of lines	7,926	7,565	6,745	5,502	5,719	4,696	5,022	+3.9	+13.9	43,652	54,885	+25.7
Financial.....thous. of lines	7,485	8,672	6,304	7,457	8,812	5,821	7,193	+18.2	+22.5	62,246	74,663	+19.9
Building materials.....thous. of lines	632	275	274	775	769	511	821	-0.8	-6.3	5,818	6,101	+4.9
Electrical appliances supplies.....thous. of lines	1,763	1,093	888	1,560	1,354	895	893	-13.2	+51.6	8,514	11,854	+39.2
Foods and beverages.....thous. of lines	8,230	6,676	5,895	6,440	7,713	5,678	6,628	+19.8	+16.4	58,607	64,007	+9.2
Heating and plumbing equipment.....thous. of lines	381	319	422	782	817	979	879	+4.5	-7.1	5,064	5,147	+1.6
Medical.....thous. of lines	2,830	2,285	2,190	3,019	5,595	2,920	5,224	+85.3	+7.1	35,972	40,129	+11.6
Radio.....thous. of lines	1,885	2,515	3,017	6,205	7,109	3,759	3,924	+14.6	+81.2	14,376	29,576	+105.7
Tobacco.....thous. of lines	4,264	2,484	2,107	3,217	4,617	2,006	2,653	+43.5	+74.0	27,135	32,793	+20.9
Toilet requisites.....thous. of lines	3,123	2,592	2,372	3,020	3,807	2,139	3,831	+26.1	-0.6	24,692	28,376	+14.9
Transportation.....thous. of lines	4,667	3,756	3,121	2,321	2,530	1,734	1,996	+9.0	+26.8	23,304	28,742	+23.3
All other.....thous. of lines	6,291	3,572	2,672	5,686	7,800	5,245	7,366	+37.2	+5.9	47,240	54,046	+14.4
Postal Business												
Postal receipts:												
50 selected cities.....thous. of dolls.	29,280	29,069	29,251	30,549	35,743	29,261	34,196	+17.0	+4.5	305,659	314,673	+2.9
50 industrial cities.....thous. of dolls.	3,061	3,189	3,289	3,303	3,737	3,074	3,583	+13.1	+4.3	33,036	33,701	+2.0
Money orders:												
Domestic issued (50 cities)—												
Quantity.....thousands	3,545	3,602	3,510	3,407	3,843	2,879	3,669	+12.8	+4.7	33,673	36,525	+8.5
Value.....thous. of dolls.	36,198	37,120	37,027	35,916	39,963	32,382	37,554	+11.3	+6.4	343,074	371,909	+8.4
Domestic paid (50 cities)—												
Quantity.....thousands	11,223	10,741	10,862	10,328	12,690	9,748	12,020	+22.9	+5.6	108,147	113,330	+4.8
Value.....thous. of dolls.	86,958	86,573	88,806	86,974	107,699	79,877	99,310	+23.8	+8.4	841,909	892,274	+6.0
Air mail, weight dispatched.....pounds	593,254	645,653	701,538	658,984	701,625	423,991	465,635	+6.5	+50.7	2,576,206	5,836,418	+126.6
BANKING AND FINANCE												
Life Insurance												
<i>(Association of Life Insurance Presidents)</i>												
Policies and certificates new (44 companies):												
Ordinary.....number of policies	277,615	273,099	273,484	245,042	289,055	214,010	263,201	+18.0	+9.8	2,436,986	2,687,547	+10.3
Industrial.....number of policies	880,770	809,110	795,451	805,623	879,483	770,416	946,284	+9.2	-7.1	8,669,891	9,011,761	+3.9
Group.....number of certificates	66,353	72,923	40,622	21,799	49,062	52,943	18,911	+159.4	+159.4	388,799	464,008	+19.3
Total policies and certificates.....number	1,224,738	1,155,132	1,109,557	1,072,464	1,217,600	1,037,369	1,228,396	+13.5	-0.9	11,495,176	12,163,316	+5.8
Amount of new insurance (44 companies):												
Ordinary.....thous. of dolls.	750,228	722,451	698,196	608,869	707,478	534,112	659,844	+16.2	+7.2	6,721,615	7,256,335	+8.0
Industrial.....thous. of dolls.	242,166	223,680	219,144	221,006	240,489	198,949	233,530	+8.8	+3.0	2,243,529	2,414,866	+7.6
Group.....thous. of dolls.	106,589	147,658	99,773	75,151	105,393	277,943	72,119	+40.2	+46.1	1,058,429	938,686	-11.3
Total insurance.....thous. of dolls.	1,068,983	1,093,789	1,017,113	905,026	1,053,360	1,011,004	965,493	+16.4	+9.1	10,023,573	10,609,887	+5.8
Premium collections (44 companies):												
Ordinary.....thous. of dolls.	158,733	169,773	154,206	143,078	169,724	135,743	154,489	+18.6	+9.9	1,537,150	1,639,216	+6.6
Industrial.....thous. of dolls.	55,801	57,932	56,143	56,773	51,705	49,343	55,961	-8.9	-7.6	516,758	548,261	+6.1
Group.....thous. of dolls.	7,345	11,494	7,129	6,485	8,497	5,738	6,447	+31.0	+31.8	74,324	91,090	+22.6
Total.....thous. of dolls.	221,879	239,199	217,478	206,336	229,926	190,824	216,627	+11.4	+6.1	2,127,962	2,278,567	+7.4
Admitted life insurance assets (40 companies):												
Grand total.....mills. of dolls.	13,469	13,594	13,691	13,798		12,510	12,634					
Mortgage loans—												
Total.....mills. of dolls.	5,792	5,849	5,887	5,925		5,429	5,484					
Farm.....mills. of dolls.	1,599	1,607	1,600	1,600		1,604	1,606					
All other.....mills. of dolls.	4,193	4,242	4,287	4,325		3,825	3,878					
Bonds and stocks (book value):												
Total.....mills. of dolls.	5,119	5,171	5,188	5,208		4,718	4,752					
Government.....mills. of dolls.	1,048	1,048	1,062	1,070		930	939					
Railroad.....mills. of dolls.	2,507	2,517	2,526	2,527		2,406	2,410					
Public utility.....mills. of dolls.	1,261	1,267	1,274	1,281		1,151	1,163					
All other.....mills. of dolls.	303	339	326	330		231	240					
Policy loans and premium notes.....mills. of dolls.												
	1,652	1,670	1,688	1,707		1,497	1,510					

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. in-crease (+) or de-crease (-) cumulative 1929 from 1928
	June	July	August	Septem-ber	October	Septem-ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
BANKING AND FINANCE—Continued												
Life Insurance—Continued												
<i>(Life Insurance Sales Research Bureau)</i>												
Sales of ordinary life insurance:												
United States total.....thous. of dolls.	829,202	796,900	765,702	677,104	787,133	578,193	764,577	+16.2	+3.0	7,328,122	7,942,407	+8.4
Eastern manuf. dist.....thous. of dolls.	334,551	319,437	300,810	261,657	309,637	218,788	316,574	+18.3	-2.2	2,998,291	3,245,561	+8.2
Western manuf. dist.....thous. of dolls.	189,447	182,763	177,990	161,222	184,974	136,379	176,739	+14.7	+4.7	1,638,420	1,836,694	+12.1
Western agric. district.....thous. of dolls.	125,349	121,224	116,749	104,534	121,985	90,916	112,916	+16.7	+8.0	1,107,889	1,164,539	+5.1
Southern district.....thous. of dolls.	97,104	90,924	90,526	77,810	89,697	71,371	85,408	+15.3	+5.0	865,386	897,141	+3.7
Far western district.....thous. of dolls.	82,751	82,522	79,627	71,881	80,840	60,739	72,940	+12.5	+10.8	718,136	798,472	+11.2
Canada total, 15 companies.....thous. of dolls.	54,700	56,078	42,468	43,911	52,985	38,872	55,743	+20.7	-4.9	469,162	502,182	+7.0
<i>(Life Insurance Lapses) *</i>												
Total.....rel. to 1925-26.	2 95			2 102		2 98		+7.4	+4.1			
New England.....rel. to 1925-26.	2 101			2 110		2 103		+8.9	+6.8			
Middle Atlantic.....rel. to 1925-26.	2 99			2 112		2 109		+13.1	+2.8			
East No. Central.....rel. to 1925-26.	2 95			2 107		2 104		+12.6	+2.9			
West No. Central.....rel. to 1925-26.	2 87			2 96		2 89		+10.3	+7.9			
South Atlantic.....rel. to 1925-26.	2 103			2 105		2 101		+1.9	+4.0			
East So. Central.....rel. to 1925-26.	2 109			2 109		2 101		0.0	+7.9			
West So. Central.....rel. to 1925-26.	2 93			2 91		2 86		-2.2	+5.8			
Mountain.....rel. to 1925-26.	2 88			2 105		2 90		+19.3	+9.4			
Pacific.....rel. to 1925-26.	2 90			2 99		2 94		+10.0	+5.3			
Banking												
Check payments:												
New York City.....mills. of dolls.	43,263	49,215	49,034	50,342	63,325	38,725	45,189	+25.8	+40.1	402,014	509,634	+26.8
Outside New York City.....mills. of dolls.	26,423	28,444	28,339	27,314	32,261	24,450	27,705	+18.1	+16.4	250,656	276,876	+10.5
Canada.....mills. of dolls.	1,817	2,108	1,937	1,884	2,461	1,681	2,395	+30.6	+2.8	19,127	19,966	+4.4
Federal reserve banks:												
Bills discounted.....mills. of dolls.	1,125	1,076	974	931	991	1,026	932	+6.4	+6.3			
Notes in circulation.....mills. of dolls.	1,736	1,779	1,829	1,851	1,880	1,704	1,710	+1.6	+9.9			
Total investments.....mills. of dolls.	226	232	328	484	658	545	671	+36.0	-1.9			
Total reserve.....mills. of dolls.	3,041	3,109	3,149	3,141	3,177	2,751	2,773	+1.1	+14.6			
Total deposits.....mills. of dolls.	2,438	2,398	2,348	2,471	2,696	2,414	2,419	+9.1	+11.5			
Reserve ratio.....per cent.	72.9	74.4	75.4	72.7	69.4	66.8	67.2	-4.5	+3.3			
Federal reserve member banks:												
Total loans and discounts.....mills. of dolls.	16,925	17,058	16,950	17,428	18,934	15,952	16,067	+8.6	+17.8			
Total investments.....mills. of dolls.	5,560	5,549	5,456	5,401	5,496	6,401	6,430	+1.8	-14.5			
Net demand deposits.....mills. of dolls.	13,293	13,395	12,985	13,295	15,110	13,226	13,368	+13.7	+13.0			
Brokers' loans, end of month:												
To N. Y. Stock Ex. members—												
Total.....mills. of dolls.	7,071	7,473	7,882	8,549	6,109	5,513	6 5,879	-28.5	+3.9			
Ratio to market value.....per cent.	9.15	8.87	8.79	9.82	8.51	9.29	9.62	-13.3	-11.5			
By New York F. R. member banks.....mills. of dolls.	5,769	5,960	6,217	6,804	5,538	4,570	4,907	-18.6	+12.9			
Interest rates:												
Time loans, 90 days.....per cent.	8.13	7.75	8.88	8.88	8.00	7.00	7.13	-9.9	+12.2			
Call loans, renewal.....per cent.	7.70	9.23	8.23	8.50	6.43	7.26	6.98	-24.4	-7.9			
Prime com. paper (4-6 mos.).....per cent.	6.00	6.00	6.13	6.25	6.25	5.63	5.50	0.0	+13.0			
Prime bankers' acceptances.....per cent.	5.50	5.13	5.13	5.13	5.13	4.50	4.50	0.0	+14.0			
N. Y. Fed. Res. Bank (redisc.).....per cent.	5.00	5.00	6.00	6.00	5.00	5.00	5.00	-16.7	0.0			
Federal land banks.....per cent.	5.20	5.29	5.31	5.44	5.51	5.04	5.04	+1.3	+9.3			
Intermediate credit banks.....per cent.	5.62	5.67	5.67	5.67	5.68	5.12	5.24	+0.2	+8.4			
Deposits, New York State savings banks, end of month.....mills. of dolls.												
	4,459	4,434	4,426	4,457	4,372	4,352	4,345	-1.9	+0.6			
Public Finance												
Government debt, gross, end mo.....mills. of dolls.	16,931	16,832	16,805	16,720	16,698	17,367	17,544	-0.1	-4.8			
Customs receipts.....thous. of dolls.	52,401	52,144	56,427	52,612	57,607	50,410	59,741	+9.5	-3.6	471,261	519,274	+10.2
Total ordinary receipts.....thous. of dolls.	765,882	769,473	774,502	770,736	775,998	757,398	787,627	-73.8	-6.2	3,125,787	3,356,320	+7.4
Expenditures chargeable to ordinary receipts.....thous. of dolls.												
	420,473	349,825	210,725	399,068	364,678	482,600	368,653	-8.6	-1.1	3,154,557	3,136,635	-0.6
U. S. money in circulation:												
Daily average.....mills. of dolls.	4,687	4,764	4,777	4,811	4,810	4,804	4,836	0.0	-0.5			
Gold and Silver												
Gold:												
Domestic receipts at mint.....fine ounces.	73,468	92,256	100,387	77,029	121,193	83,247	121,539	+57.3	-0.3	801,200	781,858	-2.4
Rand output.....fine ounces.	856,029	839,450	889,601	849,553	880,690	857,731	897,720	+3.7	-1.9	8,626,351	8,701,339	+0.9
Monetary stock of U. S.—												
Daily average.....mills. of dolls.	4,311	4,335	4,351	4,368	4,381	4,125	4,133	+0.3	+6.0			
Imports.....thous. of dolls.	30,762	35,525	19,271	18,781	21,321	4,273	14,331	+13.5	+48.8	114,357	276,405	+141.7
Exports.....thous. of dolls.	550	807	881	1,205	3,805	3,810	992	+215.8	+283.6	536,208	13,7474	-97.4
Silver:												
Production—												
United States.....thous. of fine oz.	4,976	4,523	5 5,006	4 4,634	5 5,053	4 4,087	4 3,352	+9.0	+16.1	46,120	49,706	+7.8
Canada.....thous. of fine oz.	1,146	1,910	2 2,744	2 2,437	2 2,705	2 1,777	2 2,051	+11.0	+31.9	17,054	18,093	+6.1
Stocks, end of month—												
United States.....thous. of fine oz.	1,382	682	1,074	1,112	1,451	872	856	+30.5	+69.5			
Canada.....thous. of fine oz.	543	339	880	914	489	1,457	718	-46.5	-31.9			
Imports.....thous. of dolls.	5,022	4,723	7,345	4,111	5,403	5,739	7,319	+31.4	-26.2	57,551	54,816	-5.6
Exports.....thous. of dolls.	5,445	6 7,795	8,522	4,374	7,314	6,229	7,252	+67.2	+0.9	71,218	68,360	-4.0
Price at New York.....dolls. per fine oz.	.524	.525	.526	.510	.499	.575	.581	-2.2	-14.1			

* Quarter ending in month indicated.

* Revised.

* See table on p. 9 of the February, 1929, issue for earlier data.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1923, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
BANKING AND FINANCE—Continued												
Business Failures												
Liabilities (United States):												
Total commercial.....thous. of dolls.	31,375	32,426	33,746	34,125	31,314	33,957	34,990	-8.2	-10.5	408,184	363,741	-10.9
Manufacturers.....thous. of dolls.	12,721	12,767	13,857	14,914	12,071	14,727	13,490	-19.1	-10.5	149,249	139,289	-6.7
Trade establishments.....thous. of dolls.	13,931	14,605	16,002	16,660	14,464	13,567	17,268	-13.2	-16.2	189,144	180,060	-4.8
Agents and brokers.....thous. of dolls.	4,723	5,053	3,888	2,551	4,778	5,662	4,232	+87.3	+12.9	69,790	44,393	-36.4
Liabilities (Canada).....thous. of dolls.	3,758	2,441	1,376	2,423	2,423	2,577	2,504	+6.4	+2.9	30,185	24,817	-17.8
Firms (United States):												
Total commercial.....number	1,767	1,752	1,762	1,568	1,822	1,635	2,023	+16.2	-9.9	20,061	19,076	-4.9
Manufacturers.....number	496	461	482	427	453	454	528	+13.1	-8.5	4,907	4,967	+1.2
Trade establishments.....number	1,154	1,190	1,163	1,039	1,211	1,073	1,369	+16.6	-11.5	13,945	12,907	-7.4
Agents and brokers.....number	117	101	117	102	128	108	126	+25.5	+1.6	1,203	1,202	-0.1
Firms (Canada).....number	154	176	132	164	178	119	159	+8.5	+11.9	1,486	1,651	+11.1
By groups:												
Manufacturers—												
Metals.....number	40	39	35	29	35	33	33	+20.7	+6.1	367	352	-4.1
Textiles.....number	47	63	48	48	66	74	79	+37.5	-16.5	639	580	-9.2
Lumber.....number	107	88	102	77	94	73	94	+22.1	0.0	758	941	+24.1
Chemicals.....number	19	6	11	8	3	8	13	-62.5	-76.9	79	102	+29.1
Printing and engraving.....number	23	15	11	10	10	6	18	0.0	-44.4	152	150	-1.3
Foodstuffs.....number	45	31	34	38	36	24	47	-5.3	-23.4	421	397	-5.7
Leather, etc.....number	12	10	4	11	17	15	14	+54.5	+21.4	131	127	-3.1
Liquors and tobacco.....number	3	7	6	3	4	4	6	+33.3	-33.3	57	63	+10.5
Stone, clay, and glass.....number	6	9	6	9	8	3	7	-11.1	+14.3	81	82	+1.2
All other.....number	194	193	225	194	210	212	217	+8.2	-3.2	2,222	2,173	-2.2
Traders—												
General stores.....number	68	68	72	60	78	60	87	+30.0	-10.3	838	848	+1.2
Foods and tobacco.....number	373	406	399	363	408	376	503	+12.4	-18.9	4,300	4,132	-3.9
Clothing.....number	202	201	163	168	191	168	225	+13.7	-15.1	2,703	2,211	-18.2
Household furniture.....number	200	180	179	127	167	187	190	+31.5	-12.1	2,392	2,216	-7.4
Chemicals and paints.....number	50	54	64	54	86	43	78	+59.3	+10.3	676	633	-6.4
Books and paper.....number	13	5	15	11	10	13	10	-9.1	0.0	125	121	-3.2
All other.....number	248	276	271	256	271	226	276	+5.9	-1.8	2,908	2,746	-5.6
Dividend and Interest Payments												
Grand total.....thous. of dolls.	558,200	863,356	377,000	480,600	737,450	413,250	624,400	+53.4	+18.1	5,027,264	5,723,951	+13.9
Interest payments.....thous. of dolls.	386,400	515,156	201,000	292,000	424,650	262,000	388,600	+45.4	+9.3	3,066,354	3,433,851	+11.3
Dividend payments:												
Total.....thous. of dolls.	171,800	348,200	176,000	188,600	312,800	151,250	235,800	+65.9	+32.7	1,940,910	2,290,100	+18.0
Industrial and misc.....thous. of dolls.	136,000	250,000	132,000	152,000	241,500	121,100	175,900	+58.9	+37.3	1,426,480	1,712,800	+20.1
Steam railroads.....thous. of dolls.	29,300	55,000	37,100	29,500	43,900	23,400	36,800	+48.8	+19.3	325,280	368,400	+13.3
Street railways.....thous. of dolls.	6,500	13,100	6,900	7,100	15,900	6,750	11,100	+123.9	+43.2	97,150	106,400	+9.5
New Security Issues												
Foreign loans in the U. S.....thous. of dolls.	144,626	48,703	20,250	13,168	60,000	108,949	65,121	+355.7	-7.9	1,254,665	628,544	-49.9
Foreign governments.....thous. of dolls.	6,000	15,000	8,000	3,500	3,500	43,500	36,750	-56.2	-90.5	620,120	68,250	-89.0
Total corporation.....thous. of dolls.	630,102	860,747	776,222	1,507,376	757,254	428,184	655,604	-49.8	+15.5	5,999,083	9,413,451	+56.9
Purpose of issue—												
New capital.....thous. of dolls.	613,880	801,453	751,177	1,200,784	724,166	391,158	600,473	-39.7	+20.6	3,381,037	8,421,923	+149.1
Refunding.....thous. of dolls.	16,222	59,294	25,045	306,592	33,088	37,026	55,131	-89.2	-40.0	1,618,046	1,288,523	-20.4
Type of security—												
Stocks.....thous. of dolls.	357,982	648,504	658,090	1,265,387	471,166	172,047	390,610	-62.8	+20.6	2,434,818	6,635,251	+172.5
Bond and notes.....thous. of dolls.	272,120	212,243	118,132	241,989	286,088	256,137	264,994	+18.2	+8.0	3,564,265	2,908,200	-18.4
Class of industry—												
Railroads.....thous. of dolls.	91,350	27,580	660	81,520	57,220	45,830	45,830	-29.8	+24.9	590,461	618,229	+4.7
Public utilities.....thous. of dolls.	129,552	319,796	111,865	380,291	102,356	202,239	214,466	-73.1	-52.3	2,281,967	2,332,007	+2.2
Industrials.....thous. of dolls.	105,205	127,621	91,282	230,078	98,202	98,234	114,233	-64.9	-14.0	1,173,845	1,928,592	+64.4
Oil.....thous. of dolls.	45,641	17,639	2,105	51,000	109,680	7,000	7,000	+115.1	0.0	109,327	460,195	+320.9
Land and buildings.....thous. of dolls.	40,843	41,269	35,503	6,501	23,723	57,517	85,627	+264.9	-72.3	692,128	495,220	-28.4
Shipping and misc.....thous. of dolls.	217,511	326,844	534,808	707,987	306,075	70,194	163,749	-56.8	+86.9	1,132,926	3,463,982	+205.8
States and municipalities:												
Permanent loans.....thous. of dolls.	162,168	86,745	80,415	100,575	118,285	70,170	98,233	+17.6	+20.4	1,099,854	1,096,913	-0.3
Temporary loans.....thous. of dolls.	48,109	59,321	86,164	95,978	3,655	73,419	82,552	-96.2	-95.6	676,114	700,321	+3.6
Bond issues (Canada):												
Govt. and provincial.....thous. of dolls.	5,226	1,537	1,449	3,700	8,257	9,733	24,060	.....	.....	759,503	1,68,466	+15.1
Municipal.....thous. of dolls.	7,363	39,525	693	5,147	.....	260	5,144	.....	.....	17,370	1,67,744	+280.0
Corporation.....thous. of dolls.	16,080	.....	.....	.....	.....	11,980	15,396	.....	.....	222,724	159,793	-28.3
Tax-exempt securities outstanding, end of month.....mills of dolls.												
	17,523	17,556	17,635	18,277	18,377	16,897	16,954	+0.5	+8.4	.....	.....	.....
Agricultural Finances												
Loans outstanding, end mo.:												
Federal farm loan banks.....thous. of dolls.	1,204,916	1,204,363	1,203,806	1,202,490	1,200,932	1,189,345	1,190,278	-0.1	+0.9	.....	.....	.....
Joint stock land banks.....thous. of dolls.	597,956	596,403	594,876	593,388	590,507	608,451	607,632	-0.5	-2.8	.....	.....	.....
Federal intermediate credit banks.....thous. of dolls.	68,101	68,981	68,882	72,204	75,373	68,619	76,547	+4.4	-1.5	.....	.....	.....
Stocks and Bonds												
Stock prices, average daily closing:												
25 industrials, average.....dolls. per share	372.70	414.04	431.20	448.78	395.95	283.99	293.51	-11.8	+34.9	.....	.....	.....
25 railroads, average.....dolls. per share	134.37	149.27	151.29	152.26	142.30	124.82	123.40	-6.5	+15.3	.....	.....	.....
103 stocks, average.....dolls. per share	82.50	86.25	90.35	82.47	69.91	78.49	78.45	-15.2	-10.9	.....	.....	.....
Southern cotton mills.....dolls. per share	95.15	92.45	90.41	89.37	88.61	103.31	103.19	-0.9	-14.1	.....	.....	.....

* Revised.

† Cumulative through Sept. 30.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through October, 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 OCT. 31		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	
	BANKING AND FINANCE—Continued											
Stocks and Bonds—Continued												
Stock prices, average weekly closing:												
Industrials, rails, and utilities												
(405).....rel. to 1926	190.7	207.2	218.1	225.2	201.6	156.6	159.1	-10.5	+26.7			
All industrial (338).....rel. to 1926	191.0	202.7	210.3	216.1	194.4	162.2	166.2	-10.0	+17.0			
All railroads (33).....rel. to 1926	144.8	160.0	165.4	168.1	157.0	129.6	128.2	-6.6	+22.5			
All utilities (34).....rel. to 1926	233.0	272.8	304.3	321.0	276.5	155.8	154.5	-13.9	+79.0			
Automobiles and trucks (13).....rel. to 1926	241.7	241.0	240.8	240.9	195.6	270.0	283.6	-18.8	-31.0			
Automobile tires and rubber goods (7).....rel. to 1926	184.8	184.9	169.5	163.4	147.4	127.6	137.6	-9.8	+7.1			
Airplane (10).....rel. to 1926	1,069.0	1,131.0	1,130.0	994.4	693.9	693.7	667.4	-30.2	+4.0			
Agricultural implements (4).....rel. to 1926	380.5	418.6	423.9	444.8	373.2	301.3	309.4	-16.1	+20.6			
Chain stores (17).....rel. to 1926	144.5	148.0	148.7	154.6	138.7	150.5	150.9	-10.3	-8.1			
Copper and brass (9).....rel. to 1926	270.8	280.8	288.9	294.4	258.7	172.0	185.1	-12.1	+39.8			
Food, other than meat (20).....rel. to 1926	175.6	189.1	186.7	191.1	176.2	167.1	167.1	-7.8	+5.4			
Machinery and machine equipment (10).....rel. to 1926	159.4	171.8	177.2	191.4	172.3	139.4	140.1	-10.0	+23.0			
Oil producing and refining (16).....rel. to 1926	144.1	149.1	157.5	166.7	161.4	115.7	117.0	-3.2	+37.9			
Railroad equipment (9).....rel. to 1926	141.7	148.5	157.8	157.6	143.6	129.5	126.8	-8.9	+13.2			
Rayon (5).....rel. to 1926	138.0	126.6	126.2	119.8	111.0	160.7	161.3	-7.3	-31.2			
Steel and iron (10).....rel. to 1926	188.2	211.5	238.4	243.9	217.1	155.8	158.7	-11.0	+36.8			
Textiles (30).....rel. to 1926	122.4	120.3	118.1	114.1	103.1	125.9	131.6	-9.6	-21.7			
Theaters, motion pictures, and amusements (7).....rel. to 1926	133.4	139.0	142.5	145.2	131.5	135.1	136.7	-9.4	-3.8			
Tobacco and tobacco products (10).....rel. to 1926	135.1	139.1	141.6	141.5	146.4	142.5	141.8	+3.5	+3.2			
Traction, motor transportation, etc. (9).....rel. to 1926	83.7	83.0	83.1	84.7	80.4	99.5	96.3	-5.1	-16.5			
Stock yields:												
Total common (90).....per cent.	3.38	3.16	3.01	2.92	3.32	3.78	3.72	+13.7	-10.8			
Industrials (50).....per cent.	3.51	3.36	3.26	3.19	3.60	3.72	3.61	+12.9	-0.3			
Public utilities (20).....per cent.	2.22	1.95	1.78	1.69	2.02	3.14	3.19	+19.5	-36.7			
Railroads (20).....per cent.	4.62	4.17	4.04	3.96	4.26	4.98	5.03	+7.6	-15.3			
Preferred, high-grade industrial (20).....per cent.	5.49	5.52	5.54	5.52	5.54	5.41	5.44	+0.4	+1.8			
Stock sales, N. Y. Stock Exch. ....thous. of shares	69,548	93,379	95,705	100,056	141,668	90,907	99,077	+41.6	+43.0	714,279	968,670	+36.0
Bond sales:												
Miscellaneous.....thous. of dolls.	227,676	295,577	251,287	210,995	337,374	190,582	226,621	+59.9	+48.9	2,382,564	2,365,714	-0.7
Liberty-Treasury.....thous. of dolls.	9,848	13,330	8,510	9,267	15,839	10,467	11,949	+70.9	+32.6	150,799	111,040	-26.4
Total.....thous. of dolls.	237,524	308,907	259,797	220,262	353,213	201,049	238,570	+60.4	+48.1	2,533,363	2,476,754	-2.2
Bond prices:												
Highest-grade rails p. ct. of par, 4% bond	86.37	86.06	85.98	85.51	86.69	91.05	90.72	+1.4	-4.4			
Second-grade rails p. ct. of par, 4% bond	78.59	78.55	77.25	77.64	79.35	82.51	81.98	+2.2	-3.2			
Public utility p. ct. of par, 4% bond	74.32	73.25	73.14	73.13	73.31	79.51	81.12	+0.2	-9.6			
Industrial p. ct. of par, 4% bond	75.29	75.24	74.54	73.84	74.88	78.18	78.34	+1.4	-4.4			
Comb. price index p. ct. of par, 4% bond	78.37	77.99	77.43	77.23	78.23	82.53	82.79	+1.3	-5.5			
Bond prices, 1st of following month:												
5 Liberty bonds p. ct. of par	100.87	100.64	100.61	100.34	102.20	103.11	103.85	+1.9	-1.6			
16 foreign govt. and city p. ct. of par	103.30	103.60	103.42	103.16	102.74	104.55	104.59	-0.4	-1.8			
Comb. price index, 66 bonds p. ct. of par	97.69	97.95	97.66	97.48	97.75	100.40	100.53	+0.3	-2.8			
Bond yields:												
Total, 60 high grade.....per cent.	4.73	4.73	4.74	4.76	4.73	4.57	4.57	-0.6	+3.5			
Railroads (15).....per cent.	4.65	4.67	4.67	4.71	4.66	4.43	4.43	-1.1	+5.2			
Industrials (15).....per cent.	5.09	5.09	5.09	5.12	5.08	4.95	4.95	-0.8	+2.6			
Utilities (15).....per cent.	4.90	4.90	4.89	4.90	4.91	4.73	4.74	+0.2	+3.6			
Municipal (15).....per cent.	4.26	4.28	4.31	4.32	4.29	4.17	4.17	-0.7	+2.9			
Municipal bond yield (20).....per cent.	4.33	4.41	4.41	4.49	4.37	4.16	4.16	-2.7	+5.0			
U. S. Treasury notes and certificates, 3-6 months.....per cent.												
Liberty and Treasury bonds.....per cent.	3.71	3.68	3.72	3.70	3.67	3.54	3.55	-0.8	+3.4			
Long-term real-estate bonds issued:												
Grand total.....thous. of dolls.	20,025	36,790	28,403	5,338	19,275	52,116	64,864	+261.1	-70.3	582,953	317,955	-45.5
Purpose of issue—												
Finance construction.....thous. of dolls.	4,295	24,660	16,108	950	13,875	4,460	33,290		-58.3	227,800	127,375	-44.1
Real-estate mortgage.....thous. of dolls.	4,800	4,556	8,485	188	2,250	32,955	11,898		-81.1	190,227	79,688	-58.1
Acquisitions and improvements.....thous. of dolls.	7,485	2,390	105	200	200	530	1,509	0.0	-86.7	51,267	53,005	+3.4
Kind of structure—												
Office and commercial.....thous. of dolls.	10,845	24,860	9,875	880	2,050	2,510	15,018	+133.0	-86.3	177,689	100,235	-43.6
Hotels.....thous. of dolls.	700	1,175	9,995		11,600	400	9,900		+17.2	44,460	36,830	-17.2
Apartments.....thous. of dolls.	2,200	1,582	1,588	215	225	270	8,423	+4.7	-97.3	38,702	15,877	-59.0
FOREIGN EXCHANGE RATES												
Europe:												
England.....dolls. per £ sterling	4.85	4.85	4.85	4.85	4.87	4.85	4.85	+0.4	+0.4			
France.....dolls. per franc	.039	.039	.039	.039	.039	.039	.039	0.0	0.0			
Italy.....dolls. per lira	.052	.052	.052	.052	.052	.052	.052	0.0	0.0			
Belgium.....dolls. per franc	.139	.139	.139	.139	.140	.139	.139	+0.7	+0.7			
Netherlands.....dolls. per guilder	.402	.401	.401	.401	.403	.401	.401	+0.5	+0.5			
Sweden.....dolls. per krone	.268	.268	.268	.268	.268	.267	.267	0.0	+0.4			
Switzerland.....dolls. per franc	.192	.192	.192	.193	.193	.193	.192	0.0	+0.5			
Asia:												
Japan.....dolls. per yen	.439	.456	.467	.473	.478	.458	.462	+1.1	+3.5			
India.....dolls. per rupee	.360	.360	.360	.360	.362	.363	.365	+0.6	-0.8			
America:												
Canadian.....dolls. per Canadian doll.	.992	.995	.994	.992	.988	1.000	1.000	-0.4	-1.2			
Argentina.....dolls. per gold peso	.953	.954	.954	.953	.950	.957	.956	-0.3	-0.6			
Brazil.....dolls. per milreis	.119	.119	.119	.119	.119	.119	.119	0.0	-0.8			
Chile.....dolls. per paper peso	.120	.120	.121	.121	.121	.121	.121	0.0	0.0			

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1929 from 1928	
	June	July	August	September	October	September	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929		
<i>The cumulatives shown are through October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 133 of the August, 1929, "Survey"</i>													
U. S. FOREIGN TRADE													
Imports													
Grand total.....	thous. of dolls.	\$ 353,393	352,981	\$ 369,358	\$ 351,357	391,026	319,618	355,358	+11.3	+10.0	3,425,471	3,751,086	+9.5
By grand divisions:													
Europe—													
Total.....	thous. of dolls.	106,427	115,145	109,783	120,121	-----	102,315	121,234	-----	-----	7,907,456	7,1,000,450	+10.2
France.....	thous. of dolls.	13,267	14,577	14,026	17,512	-----	13,783	17,279	-----	-----	7,112,339	7,126,805	+12.9
Germany.....	thous. of dolls.	19,328	22,806	22,742	21,800	-----	18,661	22,309	-----	-----	7,162,615	7,193,371	+18.9
Italy.....	thous. of dolls.	10,608	8,485	7,657	9,407	-----	6,548	10,072	-----	-----	7,70,077	7,82,165	+17.2
United Kingdom.....	thous. of dolls.	25,378	27,970	25,891	28,982	-----	26,373	33,417	-----	-----	7,257,655	7,252,470	-2.0
North America—													
Total.....	thous. of dolls.	81,898	79,974	82,401	76,933	-----	76,926	84,398	-----	-----	7,722,235	7,761,111	+5.4
Canada.....	thous. of dolls.	44,292	44,671	43,909	42,248	-----	42,209	47,404	-----	-----	7,359,330	7,378,261	+5.3
South America—													
Total.....	thous. of dolls.	50,740	46,630	51,611	45,387	-----	37,560	41,535	-----	-----	7,436,623	7,488,056	+11.8
Argentina.....	thous. of dolls.	8,342	7,416	7,791	6,734	-----	6,313	6,677	-----	-----	7,80,433	7,85,188	+5.9
Asia and Oceania—													
Total.....	thous. of dolls.	107,848	104,963	114,505	102,511	-----	97,554	100,888	-----	-----	7,931,850	7,1,023,603	+9.8
Japan.....	thous. of dolls.	32,483	28,883	40,256	39,973	-----	33,741	35,261	-----	-----	7,284,322	7,310,547	+9.3
Africa, total.....	thous. of dolls.	6,488	7,437	11,140	6,415	-----	5,263	7,302	-----	-----	7,69,974	7,87,028	+24.4
By economic classes:													
Crude materials.....	thous. of dolls.	120,724	119,088	\$ 125,730	\$ 122,062	126,563	110,289	117,624	+3.7	+7.6	1,240,475	1,321,475	+6.5
Foodstuffs, crude and													
food animals.....	thous. of dolls.	\$ 40,951	42,957	\$ 39,357	40,700	47,207	37,207	42,007	+16.0	+12.4	459,967	456,717	-0.7
Manufactured foodstuffs.....	thous. of dolls.	36,527	32,990	\$ 35,538	32,327	35,110	33,771	35,370	+8.6	-0.7	345,914	370,588	+7.1
Semimanufactures.....	thous. of dolls.	\$ 75,550	71,604	\$ 79,465	\$ 70,198	81,622	63,455	71,174	+16.3	+14.7	628,955	757,565	+20.5
Finished manufactures.....	thous. of dolls.	79,637	86,392	\$ 89,247	\$ 86,069	100,525	74,906	89,184	+16.8	+12.7	750,192	844,741	+12.6
Exports													
Grand total, including reexports.....	thous. of dolls.	393,293	403,360	331,365	\$ 437,681	530,000	421,607	550,014	+21.1	-3.6	3,557,585	3,844,405	+8.1
By grand divisions:													
Europe—													
Total.....	thous. of dolls.	153,988	161,005	160,756	201,300	-----	192,840	268,856	-----	-----	7,1,592,650	7,1,642,953	+3.2
France.....	thous. of dolls.	14,603	15,795	17,095	24,028	-----	20,049	28,928	-----	-----	7,153,640	7,179,508	+16.8
Germany.....	thous. of dolls.	21,261	24,634	26,370	39,026	-----	46,298	57,989	-----	-----	7,299,007	7,270,250	-9.6
Italy.....	thous. of dolls.	12,642	8,667	6,764	14,500	-----	14,275	16,936	-----	-----	7,112,996	7,109,169	-3.4
United Kingdom.....	thous. of dolls.	52,824	56,889	58,340	72,609	-----	59,182	97,963	-----	-----	7,548,962	7,590,050	+7.5
North America—													
Total.....	thous. of dolls.	115,653	116,845	112,012	117,659	-----	115,500	126,793	-----	-----	7,973,003	7,1,070,401	+10.0
Canada.....	thous. of dolls.	80,481	79,736	77,338	80,433	-----	87,139	89,492	-----	-----	7,680,007	7,739,481	+8.7
South America—													
Total.....	thous. of dolls.	49,690	49,312	39,441	43,550	-----	33,805	49,251	-----	-----	7,339,041	7,420,287	+24.0
Argentina.....	thous. of dolls.	20,464	20,500	17,363	18,003	-----	11,457	19,848	-----	-----	7,125,710	7,163,957	+30.4
Asia and Oceania—													
Total.....	thous. of dolls.	61,667	63,374	58,610	66,039	-----	71,917	92,484	-----	-----	7,572,572	7,610,936	+6.7
Japan.....	thous. of dolls.	16,966	15,005	11,507	19,121	-----	27,542	39,137	-----	-----	7,183,968	7,172,174	-6.4
Africa.....	thous. of dolls.	12,289	12,824	10,546	9,133	-----	7,544	12,680	-----	-----	7,80,517	7,99,829	+24.0
By economic classes:													
Total domestic exports only.....	thous. of dolls.	\$ 336,800	393,838	\$ 374,725	\$ 432,329	522,278	414,859	543,171	+20.8	-3.8	4,025,492	4,301,569	+6.9
Crude materials.....	thous. of dolls.	56,130	50,015	\$ 50,890	\$ 112,261	174,214	120,188	176,354	+55.2	-1.2	947,181	871,577	-8.0
Foodstuffs, crude, and													
food animals.....	thous. of dolls.	\$ 14,518	20,259	\$ 28,438	\$ 29,943	24,110	42,363	52,383	-19.5	-54.0	235,417	229,671	-2.4
Manufactured foodstuffs.....	thous. of dolls.	\$ 34,017	35,840	\$ 37,107	\$ 40,980	47,744	35,761	51,643	+16.5	-7.5	374,765	399,237	+6.5
Semimanufactures.....	thous. of dolls.	62,119	\$ 60,511	\$ 57,062	\$ 57,948	64,405	51,077	59,967	+11.1	+7.4	597,296	622,688	+4.3
Finished manufactures.....	thous. of dolls.	\$ 220,016	\$ 227,213	\$ 201,228	\$ 191,195	211,804	165,469	202,524	+10.8	+4.4	1,870,832	2,178,395	+16.4
Agricultural exports (quantities):													
All commodities.....	rel. to 1910-14.	69	70	76	121	166	138	201	+37.2	-17.4	-----	-----	-----
All commodities except cotton.....	rel. to 1910-14.	102	117	132	143	147	168	232	+2.8	-36.6	-----	-----	-----
CANADIAN FOREIGN													
Total trade:													
Imports.....	thous. of dolls.	111,949	114,201	111,631	99,380	116,261	106,066	112,341	+17.0	+3.5	1,024,608	1,105,845	+7.9
Exports.....	thous. of dolls.	114,492	105,686	98,395	89,424	121,437	111,856	143,955	+35.8	-15.6	1,070,794	1,004,652	-6.2

Revised

Cumulative through Sept. 30.

PUBLICATIONS OF THE DEPARTMENT OF COMMERCE

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

OFFICE OF THE SECRETARY

Annual Report of Director of Aeronautics to Secretary of Commerce for Fiscal Year Ended June 30, 1929. iv+63 pages, 2 illus., 8 charts.

Air Commerce Bulletin, Nov. 1, 1929. 29 pages, 1 illus. This bulletin is issued semi-monthly by the Aeronautics Branch of the Department of Commerce and contains short articles on aviation developments and a list of air transport routes.

Airports and Landing Fields. Aeronautics Bulletin No. 5; 16 pages. This is a September 30, 1929, revision of a classified list of airports and landing fields issued by the Aeronautics Branch of the Department of Commerce.

Airworthiness Requirements of Air Commerce Regulations. Aeronautics Bulletin No. 7-A; ii+87 pages, 19 illus. Rules for construction of airplanes issued by the Aeronautics Branch of the Department of Commerce, with proposed changes in present requirements.

Customs Ports Authorized to Issue Marine Documents. Ninth edition of Department Circular No. 249; 2 pages.

Radio Service Bulletin, Oct., 1929. 13 pages. Issued monthly by the Radio Division of the Department of Commerce. Contains list of radio stations and references to current radio literature. Single copies, 5¢; annual subscription 25¢.

BUREAU OF THE CENSUS

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

Census of Manufactures, 1927. Reports giving detailed information for various industries, by States:

- Aircraft, Motor vehicles, etc. Paper, 24 pages, price 5¢.
- Artificial leather, Linoleum and Asphalted-Felt-Base Floor Coverings. Olcloth. Paper, 11 pages, price 5¢.
- Asbestos Products and Stone, Clay and Glass Industries not covered by separate reports. Paper, 13 pages, price 5¢.
- Cash registers, Adding Machines, and Calculating machines; Gas machines and gas and water meters; Scales and balances; Typewriters and supplies. Paper, 12 pages, price 5¢.
- Chocolate and cocoa products, Confectionery and Chewing Gum. Paper, 17 pages, price 5¢.
- Cotton manufactures: Cotton Goods; Cotton Small Wares; Cotton Lace. Paper, 59 pages, price 10¢.
- Drug industries; Druggists' Preparations, Patent and proprietary Medicines and Compounds, Perfumes, Cosmetics and other Toilet Preparations; Drug grinding; Essential Oils. Paper, 17 pages, price 5¢.
- Flour and other grain and products, cereal preparations, prepared feeds for animals and fowls, Bread and other bakery products. Paper, 30 pages, price 10¢.
- Hats and millinery; Hats, wool-felt; Hats, fur-felt; Hats, men's straw; Hats and caps, except felt and straw; Hat and cap materials; Millinery. Paper, 20 pages, price 5¢.
- Locomotives; Steam and electric railway cars; Railroad repairs shops. Paper, 20 pages, price 5¢.
- Milk products; Butter, cheese, and condensed and evaporated milk; Ice cream. Paper, 22 pages, price 5¢.
- Miscellaneous fiber and textile products; cordage and twine; Tute goods; Linen goods; Dyeing and Finishing textiles; Flax and hemp, dressed; Haircloth; Mats and matting; Grass and coir; Waste. Paper, 23 pages, price 5¢.
- The Rubber Industries. Rubber tires and inner tubes; Rubber boots and shoes; Rubber goods, other than tires; Inner tubes; and Boots and shoes. Paper, 20 pages, price 5¢.
- Ship and boat building. Paper, 11 pages, price 5¢.
- Stoves and ranges; Heating apparatus and steam fittings; Plumbers' supplies, not including pipe or vitreous-china sanitary ware. Paper, 18 pages, price 5¢.

Women in Gainful Occupations, 1870-1920. Census Monograph No. IX. A study of the trend of recent changes in numbers, occupational distribution, and family relationship of women reported in census as following gainful occupation, by Dr. Joseph A. Hill. Cloth, 432 pages, 8 diagrams, price \$1.50.

Earnings of Factory Workers, 1899-1927. Census Monograph No. X. An analysis of pay-roll statistics in various industries showing estimated amounts of per capita earnings and their fluctuations, estimated average number of workers employed, and changes in earnings and purchasing power from 1899 to 1927, by Paul F. Brissenden. Cloth, 424 pages, 2 illus., 33 diagrams, price \$1.50.

Financial Statistics of Cities having a population of 30,000, 1927. Statistics of receipts, expenditures, and cash balances of municipal governments, with assessed valuation of property subject to taxation in these cities. Cloth, 503 pages, 1 illus., 12 diagrams, price \$1.25.

The Prisoner's Antecedents. Statistics concerning previous life of offenders committed in 1923 to State and Federal Prisons and Reformatories. Supplementary to "Prisoners, 1923." Paper, 77 pages, price 15¢.

Annual Report of the Director of the Census. Showing the work of the Bureau of the Census accomplished, in process, and commenced in the fiscal year 1929. Paper, 21 pages, price 5¢.

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

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

Annual Report of Director of Bureau of Foreign and Domestic Commerce to Secretary of Commerce for Fiscal Year Ended June 30, 1929. iv+57 pages, 1 chart. Reviews the activities of the Bureau during the past year, showing the part taken by each division. Price, 10¢.

Monthly Summary of Foreign Commerce of United States, Sept., 1929. Parts I and II. Part I contains statistics of exports of domestic merchandise, and imports by articles for September, 1928 and 1929, and for nine months ended September, 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.

BUREAU OF STANDARDS

Annual Report of Director of Bureau of Standards to Secretary of Commerce for Fiscal Year Ended June 30, 1929. Miscellaneous Publication No. 102; iv+51 pages, 1 chart. Report on the activities of the Bureau during the past year. Price, 10¢.

Marine Boilers and Pressure Vessels: Rules for Design and Construction, compiled and promulgated by American Marine Standards Committee. American Marine Standard E No. 26-1929; iv+16 pages, illustrations, chart. Price, 10¢.

BUREAU OF FISHERIES

Annual Report of Commissioner of Fisheries to Secretary of Commerce for Fiscal Year Ended June 30, 1929. ii+xxx pages. Price, 5¢.

Laws and Regulations for Protection of Fur Seals and Sea Otters. Second edition of Department Circular No. 285; 10 pages. In addition to the acts of Congress and regulations of the Department of Commerce for the protection of fur seals and sea otters, there is included in this publication the text of an international treaty promulgated for the protection of these animals.

Review of Weakfishes (Cynoscion) of Atlantic and Gulf Coasts of United States, with Description of New Species, by Isaac Ginsburg. Document No. 1058. (From Bulletin of Bureau of Fisheries, Vol. XLV, 1929, pp. 71-85, 7 illustrations.) Study of weakfishes to determine distinguishing characteristics of species which may be recognized at all stages of growth. Price, 10¢.

BUREAU OF MINES

Nineteenth Annual Report of Director of Bureau of Mines to Secretary of Commerce for Fiscal Year Ended June 30, 1929. vi+63 pages, 3 charts. Report on the various activities of the Bureau during the year. Price, 10¢.

Facts Relating to Production and Substitution of Manufactured Gas for Natural Gas, by William W. Odell. Bulletin 301; vi+179 pages, 32 illus., 2 maps. Deals with means of supplying natural gas to consumers, quality of gas supplied, different kinds of gas investigated in search for a substitute for natural gas, some limiting factors affecting the selection of substitute gas, and some possibilities in solving the substitute-gas problem. Price, 35¢.

COAST AND GEODETIC SURVEY

Annual Report of Director United States Coast and Geodetic Survey to Secretary of Commerce for Fiscal Year Ended June 30, 1929. ii+41 pages, 6 plates, 13 maps. Discussion of the functions of the Survey, with report on accomplishments during the past year. Price, 15¢.

United States Coast Pilot, West Indies: Porto Rico and Virgin Islands. Serial No. 446; vi+213 pages, 8 illus., 8 pages of plates, map. Descriptions of and sailing directions for the waters of Porto Rico and Virgin Islands. Price, 75¢.

CHIEF FUNCTIONS OF THE DEPARTMENT OF COMMERCE

R. P. LAMONT, Secretary of Commerce

JULIUS KLEIN, Assistant Secretary of Commerce

EPHRAIM F. MORGAN, Solicitor

AERONAUTICS BRANCH

CLARENCE M. YOUNG, Assistant Secretary of Commerce for Aeronautics

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

BUREAU OF THE CENSUS

WILLIAM M. STEUART, Director

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

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

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

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

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

WILLIAM L. COOPER, Director

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

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

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

The publication of statistics on imports and exports.

The study of the processes of domestic trade and commerce.

BUREAU OF STANDARDS

GEORGE K. BURGESS, Director

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

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

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

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

BUREAU OF MINES

SCOTT TURNER, Director

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

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

Research on helium and operation of plants producing it.

Studies in the economics and marketing of minerals and collection of statistics on mineral resources and mine accidents.

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

BUREAU OF FISHERIES

HENRY O'MALLEY, Commissioner

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

BUREAU OF LIGHTHOUSES

GEORGE R. POTNAM, Commissioner

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

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

COAST AND GEODETIC SURVEY

RAYMOND S. PATTON, Director

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

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

BUREAU OF NAVIGATION

ARTHUR J. TYLER, Commissioner

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

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

STEAMBOAT INSPECTION SERVICE

DICKERSON N. HOOVER, Supervising Inspector General

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

UNITED STATES PATENT OFFICE

THOMAS E. ROBERTSON, Commissioner

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

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

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

RADIO DIVISION

W. D. TERRELL, Chief

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