

UNITED STATES
DEPARTMENT OF COMMERCE
WASHINGTON

SURVEY OF
CURRENT BUSINESS

MARCH, 1929

No. 91



IMPORTANT NOTICE

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

INTRODUCTION

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

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

WEEKLY SUPPLEMENT

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

RELATIVE AND INDEX NUMBERS

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

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

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

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

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

RATIO CHARTS

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

RECORD BOOK

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

METHODS OF USE

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

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



SURVEY OF CURRENT BUSINESS



PUBLISHED BY

UNITED STATES DEPARTMENT OF COMMERCE

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

No. 91

WASHINGTON

March, 1929

CONTENTS

SUMMARIES		INDEX BY SUBJECTS	
	Page		Text page Table page
Preliminary summary for February	1	Textiles	9 22
Business conditions in January	4	Metals and metal products	10 24
Monthly business indicators (table and chart)	2, 3	Fuels	11 28
Wholesale prices (table and charts)	6, 7	Automobiles and rubber	11 27, 29
Indexes of business	15	Hides and leather	11 30
Automobiles, building, mining, manufacturing (charts) ..	8	Paper and printing	30
Electric power, transportation (charts)	8	Building construction and housing	12 31
		Lumber products	12 32
		Stone, clay, and glass products	12 34
		Chemicals and oils	34
		Foodstuffs and tobacco	13 36, 39
		Transportation and public utilities	14 40
		Employment and wages	5 42
		Distribution movement (trade, etc.)	14 43
		Banking, finance, and insurance	14 44
		Foreign exchange and trade	14 46
NEW DETAILED TABLES			
Fabricated structural steel	18		
Steel castings	19		
Steel boilers	20		
Malleable castings	20		
Census of manufactures, 1927	21		
Agricultural machinery	21		

PRELIMINARY SUMMARY FOR FEBRUARY

The volume of money turnover during the early weeks of February, as indicated by check payments, was greater than in the corresponding period of the previous year. Industrial activity, as reflected by steel-plant operations, was greater than in either the previous month or January, 1928. Activity in automobile factories, as indicated by Detroit employment, showed expansion over both the preceding month and the same month of last year. The volume of new building contracts awarded during February was lower than in either the preceding month or February, 1928. Bituminous coal output was higher in February than in either the previous month or the same month of last year. The production of lumber showed declines from both periods.

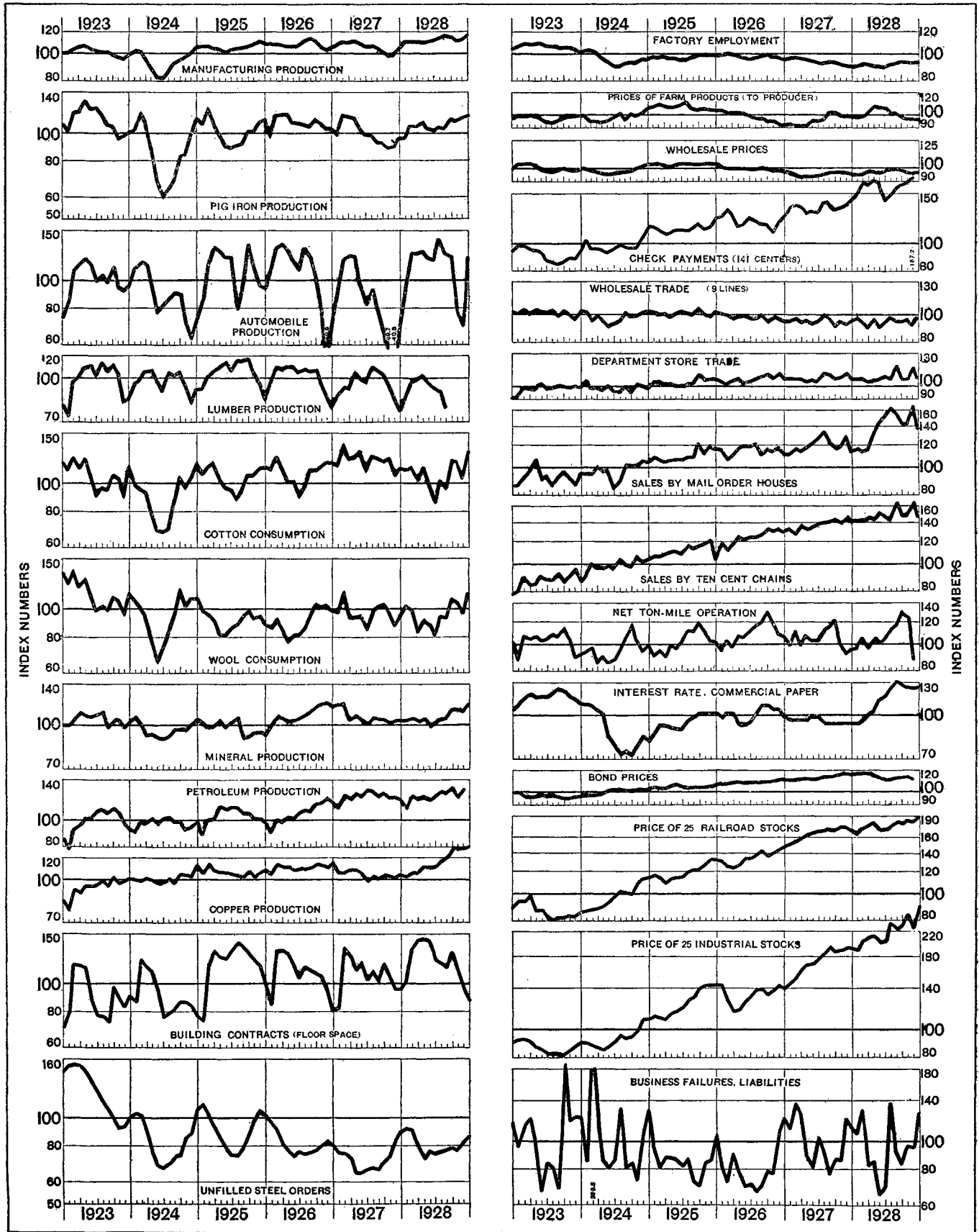
Loans and discounts of Federal reserve member banks at the end of February were somewhat higher than at the end of the preceding month, showing a gain also over a year ago. Interest rates on call money showed practically no change from the previous month, but were higher than a year ago. Time-money rates averaged lower than in January, but were higher than in

February, 1928. Stock prices reached a new high point during the month and on the whole averaged higher than in the previous month or February of last year. Prices for bonds averaged lower than in either prior period, reflecting higher interest rates. Brokers' loans reached a new high point during February but declined toward the close of the month. On the whole, brokers' loans were higher, however, than in the preceding month or February of last year. The Federal reserve ratio at the end of the month was higher than at the end of the preceding month but showed a decline from a year ago.

The primary distribution of goods, as indicated by carloadings, was greater than in either the previous month or the corresponding period a year ago. The general index of wholesale prices showed practically no change from the previous month but was higher than a year ago. Prices for wheat averaged higher than in January but were lower than a year ago. Prices for cotton and iron and steel showed practically no change from the level which prevailed in January but reflected gains over a year ago.

MONTHLY BUSINESS INDICATORS, 1923-1928

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



MONTHLY BUSINESS INDICATORS

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

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

ITEM	MONTHLY AVERAGE						1928												1929	
	1923	1924	1925	1926	1927	1928	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
	1923-1925 monthly average=100																			
Industrial production:																				
• Total manufacturing.....	101.0	94.0	105.0	108.0	106.0	111.0	99.0	107.0	111.0	110.0	110.0	110.0	110.0	111.0	113.0	116.0	114.0	111.0	113.0	117.0
• Total minerals.....	105.0	96.0	99.0	107.0	106.0	103.0	103.0	103.0	105.0	103.0	105.0	105.0	99.0	101.0	105.0	108.0	114.0	113.0	112.0	118.0
Pig iron.....	111.7	86.7	101.5	109.0	101.0	105.5	90.2	96.1	97.1	107.1	106.6	109.9	103.1	102.8	105.0	102.5	112.9	110.5	112.8	115.2
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	120.2	91.9	115.4	117.0	130.4	124.5	121.6	108.3	110.3	120.9	120.0	134.5	123.2	116.3	129.9
Automobiles.....	101.7	90.8	107.5	108.4	85.7	109.8	40.4	70.1	97.9	125.0	124.0	128.8	120.0	118.6	139.5	125.6	120.1	77.7	70.7	121.6
Cement.....	92.1	99.8	103.1	110.0	115.3	118.0	96.5	78.8	70.8	82.3	108.4	139.3	140.8	140.6	150.9	143.9	141.1	124.5	98.1	78.7
Lumber (5 species).....	98.6	96.2	105.2	101.5	94.9	-----	82.9	75.8	86.7	96.3	98.4	101.2	97.4	92.7	90.4	79.1	-----	-----	-----	-----
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.2	106.8	105.0	114.2	111.6	113.3	102.3	112.5	99.5	85.7	102.6	95.9	120.6	119.0	104.1	130.2
Wool (consumption).....	112.8	94.6	92.6	89.7	97.0	94.7	88.0	95.2	102.0	98.7	82.0	92.7	87.1	80.4	95.2	91.8	108.6	105.7	96.8	114.0
Raw material output:																				
Animal products.....	100.0	104.0	96.0	96.0	97.0	99.0	88.0	96.0	94.0	97.0	95.0	108.0	116.0	108.0	97.0	92.0	102.0	93.0	92.0	96.0
Crops.....	92.0	104.0	104.0	109.0	113.0	119.0	120.0	98.0	81.0	77.0	81.0	72.0	52.0	87.0	114.0	178.0	251.0	179.0	152.0	114.0
Forest products.....	99.0	97.0	104.0	98.0	93.0	88.2	86.0	81.0	87.0	96.0	90.0	101.0	87.0	88.0	90.0	78.0	84.0	84.0	76.0	84.0
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.2	122.1	117.8	110.9	122.2	117.5	122.5	118.1	122.9	126.8	124.5	129.5	123.8	129.4	133.5
Bituminous coal.....	108.0	92.5	99.5	109.7	99.0	94.3	94.4	101.5	94.9	100.9	73.9	84.1	82.6	83.3	94.4	94.8	115.6	105.7	99.6	118.1
Copper.....	93.4	100.2	106.4	110.2	104.9	114.9	101.9	103.8	102.2	106.6	105.7	111.8	111.0	111.3	116.7	118.8	131.1	129.5	129.8	131.4
Power and construction:																				
Electric power.....	92.5	98.1	109.5	122.6	133.3	146.0	143.8	144.9	137.0	144.5	136.7	142.2	139.8	142.4	149.8	145.2	158.0	154.6	157.7	163.9
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	121.4	95.2	96.0	103.7	132.7	142.4	143.5	142.2	123.7	118.8	114.2	129.1	111.1	98.2	88.6
Unfilled orders:																				
General index.....	121.7	87.0	91.3	84.6	74.0	76.2	71.5	81.2	81.6	81.4	76.8	73.9	75.2	77.1	74.7	74.7	71.5	72.7	71.0	79.0
U. S. Steel Corporation.....	125.8	83.6	90.6	82.1	71.1	80.7	83.2	89.5	92.1	90.8	81.1	71.6	76.2	74.8	75.9	77.4	78.6	76.9	83.3	86.1
Stocks:																				
General index.....	94.5	102.0	103.5	114.6	120.8	122.7	133.3	128.7	129.9	126.8	122.4	116.3	108.3	105.0	107.5	116.0	132.9	138.4	141.3	137.2
Manfd. commodities (28).....	93.8	103.2	103.0	106.3	127.0	116.7	111.6	114.7	120.0	120.2	118.5	120.2	117.3	118.3	115.4	111.3	110.7	113.7	119.7	124.0
Cotton.....	102.5	91.4	106.2	145.6	153.1	123.8	195.9	178.8	159.1	135.8	117.7	95.5	74.7	58.6	52.4	89.5	155.1	181.4	187.7	169.8
Copper (refined).....	106.4	113.9	73.1	64.8	85.4	58.4	84.2	85.2	76.8	77.1	64.4	58.6	52.0	48.5	48.4	45.8	40.3	46.1	57.8	55.4
Employment:																				
Factories.....	106.6	96.3	97.2	98.0	94.3	91.9	90.7	89.8	91.2	91.8	91.4	91.2	91.3	90.3	91.7	93.1	93.9	93.5	93.6	93.4
Prices:																				
Farm products, to producers.....	97.8	97.1	106.5	98.6	94.9	100.7	99.3	99.3	97.8	99.3	101.4	107.2	105.1	105.1	100.7	102.2	99.3	97.1	97.1	96.4
Wholesale, all commodities.....	99.9	97.4	102.8	99.3	94.7	97.0	96.1	95.6	95.7	95.3	96.7	97.9	96.9	97.6	98.2	99.4	97.1	96.0	96.0	96.5
Retail food.....	97.6	97.6	104.9	107.6	103.6	102.9	104.2	103.6	101.3	101.2	101.6	102.8	102.0	102.1	103.0	105.4	104.8	105.1	104.1	103.3
Cost of living (including food).....	98.1	99.9	102.3	102.3	99.9	98.7	99.9	99.2	98.4	98.1	97.9	98.4	98.0	98.0	98.0	99.3	99.3	99.3	98.7	98.0
Distribution (values):																				
• Bank debts, 141 cities.....	91.2	96.7	111.9	119.6	132.5	158.2	136.9	142.1	149.6	164.8	161.8	168.8	165.4	140.4	149.9	156.9	161.0	165.1	172.3	187.2
• Wholesale trade.....	101.0	98.0	101.0	98.0	95.0	94.1	95.3	96.3	99.1	95.6	91.6	98.7	92.5	94.2	100.6	96.4	97.4	100.0	94.9	101.3
• Department stores, sales.....	98.0	99.0	103.0	106.0	108.0	111.0	105.0	105.0	105.0	103.0	104.0	104.0	108.0	106.0	120.0	105.0	107.0	117.0	107.0	107.0
• Mail-order houses, sales.....	92.0	98.0	110.0	115.0	120.0	137.0	128.0	112.0	116.0	113.0	117.0	132.0	144.0	153.0	160.0	154.0	140.0	141.0	165.0	136.0
• 10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	150.0	147.0	140.0	142.0	142.0	147.0	144.0	153.0	148.0	144.0	165.0	148.0	151.0	163.6	145.8
Imports.....	97.8	93.1	109.0	114.3	108.0	105.5	102.5	104.6	108.7	117.8	106.9	109.6	98.2	98.4	107.3	99.0	110.0	101.1	105.0	114.1
Exports.....	91.5	100.8	107.8	105.5	106.8	112.6	107.4	108.2	97.8	110.8	95.9	111.1	102.3	99.8	100.1	111.1	145.1	143.5	125.3	129.3
Transportation:																				
• Car loadings.....	99.8	97.6	102.8	106.8	105.1	104.7	96.8	98.0	101.8	129.0	83.0	106.4	127.0	82.0	102.9	132.4	85.2	105.8	102.4	101.5
Freight, net ton-miles.....	102.2	95.9	101.9	109.1	106.0	106.5	92.7	97.2	95.7	105.8	96.1	105.2	100.0	105.0	113.6	117.3	129.2	124.6	88.4	-----
Finance:																				
Member bank loans and discounts.....	94.1	98.5	107.4	112.9	117.3	126.8	123.2	121.9	120.9	123.3	127.3	126.9	128.4	126.6	125.6	127.3	128.3	129.8	135.4	128.7
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	112.8	92.8	92.8	95.8	101.6	104.4	113.2	119.0	124.8	130.6	127.6	124.8	124.8	124.8	124.8
Federal reserve ratio.....	99.0	104.1	96.9	96.0	99.1	89.1	86.5	95.5	96.6	90.9	89.2	84.7	88.9	90.0	86.5	87.0	84.5	80.2	89.9	-----
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	113.0	115.6	115.9	115.8	115.7	116.0	115.0	112.3	110.9	109.8	111.0	111.3	112.0	110.7	-----
Price, railroad stocks.....	86.0	96.1	117.9	133.4	162.7	174.5	171.1	169.1	164.7	170.1	176.0	178.9	169.6	170.3	173.8	178.5	176.4	186.0	180.3	189.3
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	214.8	193.7	193.5	191.2	204.8	210.4	213.6	202.1	206.1	213.4	226.9	234.5	252.6	229.0	275.0
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.2	95.0	120.3	112.3	106.3	129.3	82.5	85.2	70.3	69.8	137.3	80.1	82.5	95.8	96.2	127.1

* Seasonal adjustments.

BUSINESS CONDITIONS IN JANUARY

The index of manufacturing production for January, allowing for seasonal conditions, showed a gain over the previous month and January last year. The principal gains over a year ago occurred in the output in automobiles, rubber tires, and iron and steel. Mineral production, after adjustment for seasonal conditions, also showed gains over the previous month and January of last year.

COMMODITY STOCKS

Stocks of commodities held at the end of January were lower than at the end of the preceding month, but were higher than a year ago. Contrasted with a

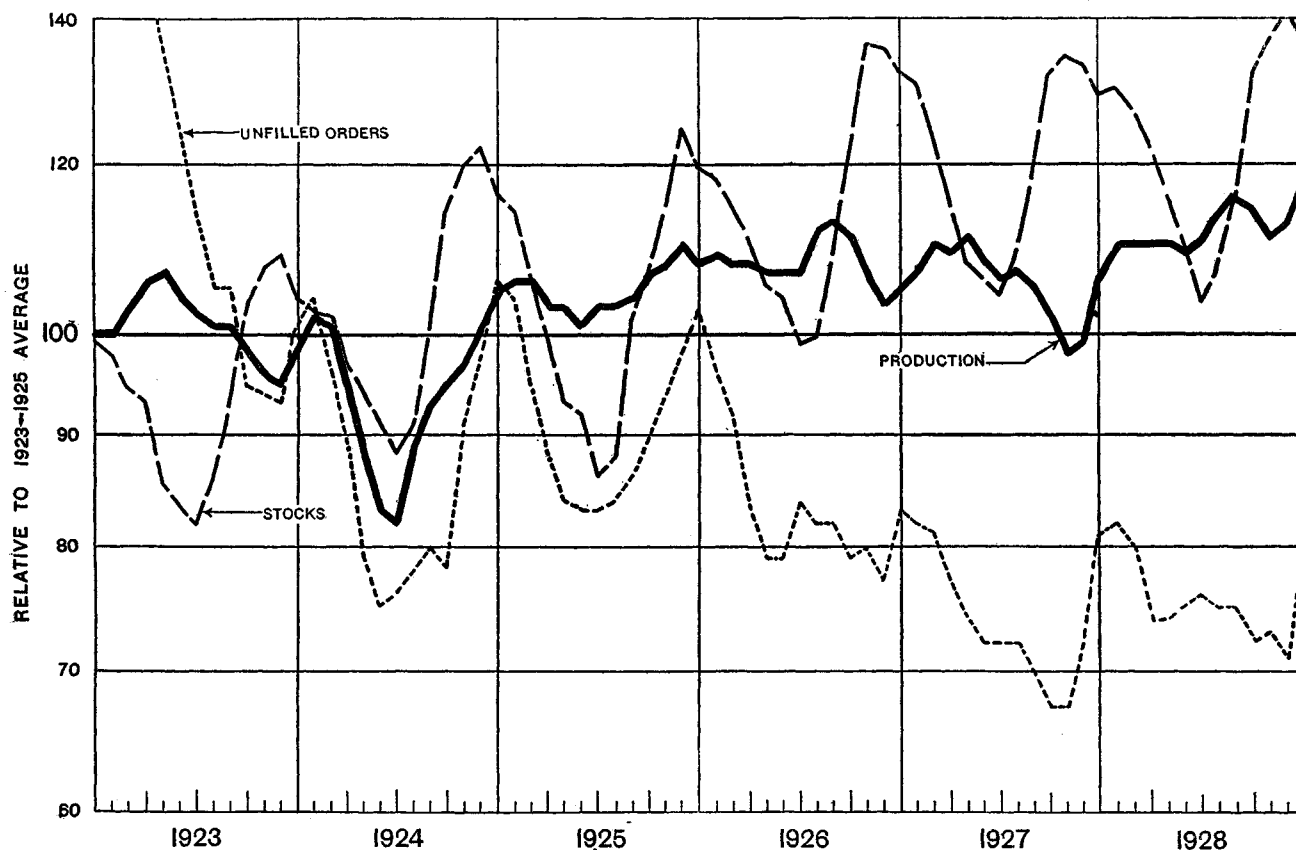
tribution of goods, as indicated by car loadings, was greater than a year ago.

Wholesale trade showed larger volume than in either the preceding month or the corresponding month of 1928. All lines of wholesale business showed gains as compared with December except hardware and furniture, which declined. Wholesale trade was greater in all lines than in January, 1928, except dry goods and men's clothing, which declined, and hardware, which showed no change.

Sales by department stores showed gains over both the preceding month and January of last year. Merchandise stocks, held by department stores at the end

PRODUCTION STOCKS AND UNFILLED ORDERS FOR MANUFACTURED COMMODITIES

[1923-1925 monthly average=100. Adjustment has been made for the seasonal movement and relative number of working days for production. Unfilled orders are principally those of iron, steel, building materials, and textiles. January, 1929, is the latest month plotted]



year ago, stocks of textiles, lumber, and chemicals and oils, among the manufactured commodities, declined.

SALES

The general index of unfilled orders showed a substantial gain over the preceding month, but was lower than a year ago. All groups entering into the index showed larger forward business than at the end of the preceding month. With the exception of textiles, all groups showed declines from a year ago. New orders for basic materials and machinery and equipment placed in January was generally greater than in either the preceding month or January of 1928. The dis-

tribution of goods, as indicated by car loadings, was greater than a year ago. Sales by mail-order houses showed a seasonal decline from the preceding month, but were considerably larger than a year ago. The volume of business, transacted by 10-cent chains, also showed a seasonal decline from the preceding month, but were considerably greater than a year ago. Sales by grocery chains showed gains over both the preceding month and January of last year. Business of other chains showed declines from December, but in all cases increased business was recorded as compared with January of the preceding year.

PRICES

Wholesale prices, although showing no change from December, averaged 1 per cent higher than in January, 1928. As compared with the preceding month, gains in prices for farm products, foods, metals and metal products, house-furnishing goods, and certain miscellaneous items were counterbalanced by declines in prices for hides and leather and fuel and lighting. Compared with a year ago, gains in prices for fuel and lighting, metals and metal products, and building materials were more than sufficient to offset declines in hides and leather, textiles, and house-furnishing goods. Classified by state of manufacture, prices for raw materials and finished products advanced as compared with the

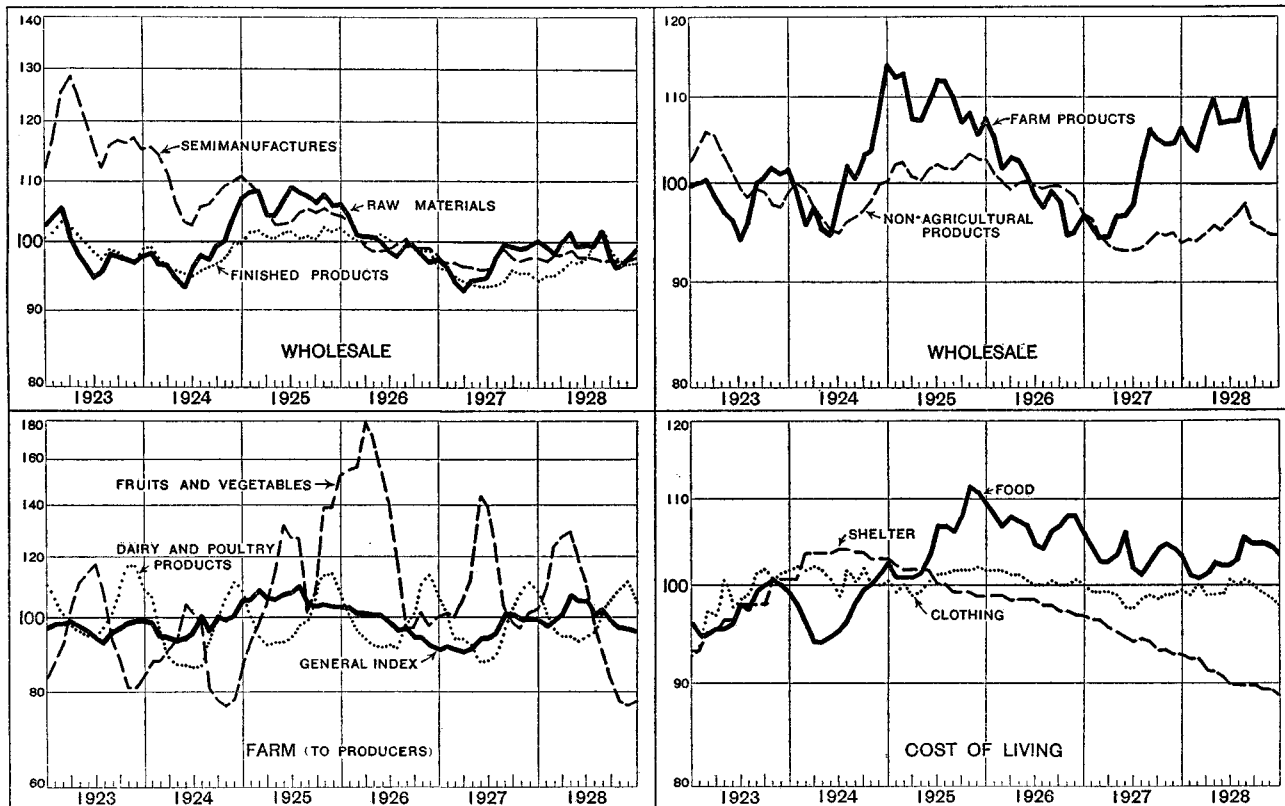
The cost-of-living index showed a decline from both the preceding month and January of last year. As compared with the previous month, all items showed lower prices, except fuel and light, which showed no change. As compared with last year, all items were lower except food and fuel, which showed no change.

EMPLOYMENT

The general index of factory employment showed a seasonal decline from the preceding month, but was 3 per cent higher than a year ago. It is to be noted that this index does not include any of the newer industries, such as aircraft, radio, rayon, etc., where employment conditions are known to be good. Compared with the previous month, declines in employ-

PRICE COMPARISONS

[Prices at wholesale are relative to 1926; farm prices and the cost of living are relative to the average for 1923-1925. January, 1929, is latest month plotted]



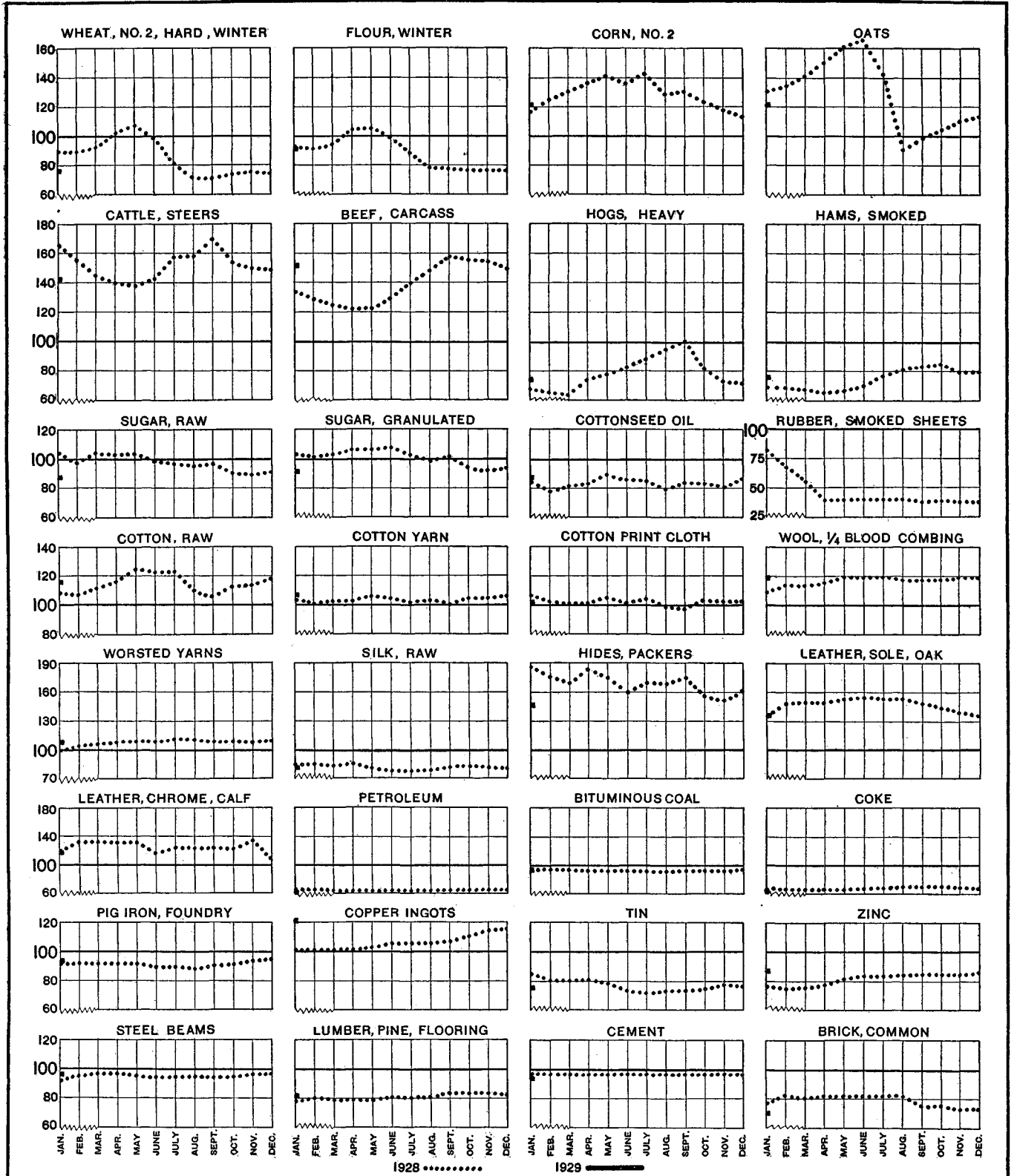
preceding month, while prices for nonagricultural commodities and semimanufactures showed no change. As compared with last year, prices for nonagricultural commodities and finished manufactured products were higher, while raw materials and semimanufactures were lower.

The index for prices received by farmers for their produce was lower than in either the previous month or January of last year. As compared with the preceding month, all price gains recorded in fruits and vegetables, grains, meat animals, and certain unclassified items were insufficient to offset the decline in the prices for dairy and poultry products.

ment in food factories, textiles, lumber, paper and printing, chemicals, stone, clay and glass, nonferrous metals and tobacco manufactures were more than sufficient to offset unemployment in leather factories and automobile factories. As compared with a year ago all groups showed larger employment except textiles, leather, stone, clay and glass, and tobacco, which declined, and lumber and paper and printing, which showed no change. Factory pay-roll payments in January were likewise lower than in the preceding month, but were almost 6 per cent higher than a year ago. As compared with the preceding month, pay-roll payments were lower in all industrial groups, except leather, which showed a gain.

WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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



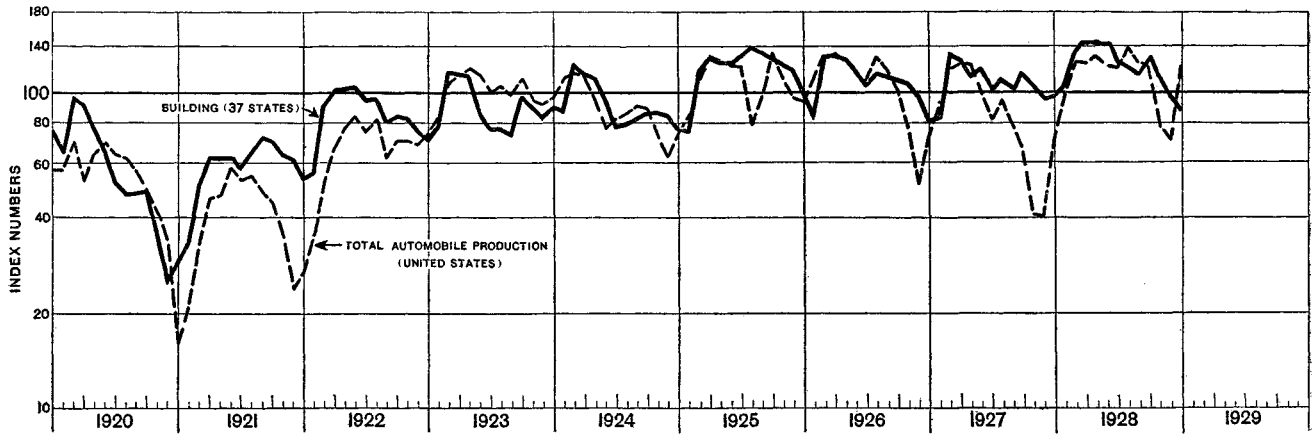
WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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

COMMODITIES	Unit	ACTUAL PRICE (dollars)			RELATIVE PRICE 1926 average=100				
		December, 1928	January, 1929	January, 1928	November, 1928	December, 1928	January, 1929	December, 1927	January, 1928
		FARM PRODUCTS—AVERAGE PRICE TO PRODUCER							
Wheat.....	Bushel.....	0.982	0.985	1.152	72	73	73	84	85
Corn.....	Bushel.....	.761	.802	.752	108	109	115	107	108
Potatoes.....	Bushel.....	.579	.589	.936	31	31	32	51	50
Cotton.....	Pound.....	.180	.179	.186	118	119	119	124	123
Cottonseed.....	Ton.....	37.74	38.05	37.40	137	139	140	137	138
Cattle, beef.....	Pound.....	.0894	.0897	.0848	143	138	139	129	131
Hogs.....	Pound.....	.0793	.0818	.0781	72	67	69	69	66
Lambs.....	Pound.....	.1141	.1223	.1134	99	99	106	98	98
FARM PRODUCTS—MARKET PRICE									
Wheat, No. 1, northern spring (Minneapolis).....	Bushel.....	1.172	1.217	1.293	77	76	79	82	84
Wheat, No. 2, red, winter (Chicago).....	Bushel.....	1.414	1.405	1.425	87	92	91	90	92
Corn, contract grade No. 2, cash (Chicago).....	Bushel.....	.858	.915	.886	118	113	121	114	117
Oats, contract grades, cash (Chicago).....	Bushel.....	.486	.523	.564	110	113	122	129	131
Barley, feeding (Chicago).....	Bushel.....	.574	.600	.932	80	83	87	126	134
Rye, No. 2, cash (Chicago).....	Bushel.....	1.059	1.044	1.085	112	111	109	114	114
Tobacco, leaf, average sales, warehouse (Kentucky).....	Cwt.....	25.691	28.136	23.227	117	303	332	239	274
Cotton, middling upland (New York).....	Pound.....	.205	.202	.190	114	117	115	112	108
Wool, 1/4 blood combing, Ohio and Pennsylvania fleeces (Boston).....	Pound.....	.55	.55	.50	120	120	120	107	106
Cattle, steers, good to choice, corn fed (Chicago).....	Cwt.....	14.175	13.531	15.800	150	149	142	163	166
Hogs, heavy (Chicago).....	Cwt.....	8.780	9.100	8.320	73	71	74	70	67
Sheep, ewes (Chicago).....	Cwt.....	6.275	6.388	6.050	81	95	127	85	92
Sheep, lambs (Chicago).....	Cwt.....	13.775	15.594	12.650	93	101	114	95	92
FOOD									
Flour, standard patents (Minneapolis).....	Barrel.....	6.131	6.340	7.450	74	73	75	84	88
Flour, winter straights (Kansas City).....	Barrel.....	5.500	5.519	6.700	76	76	78	91	92
Sugar, 96° centrifugal (New York).....	Pound.....	.039	.038	.045	89	91	88	106	104
Sugar, granulated, in barrels (New York).....	Pound.....	.052	.050	.057	92	94	92	101	104
Cottonseed oil, prime yellow (New York).....	Pound.....	.103	.103	.101	81	87	87	84	85
Beef, fresh, carcass, good native steers (Chicago).....	Pound.....	.245	.240	.220	154	149	146	136	134
Beef, fresh, carcass, steers (New York).....	Pound.....	.245	.245	.230	154	144	144	139	135
Pork, smoked hams (Chicago).....	Pound.....	.244	.232	.212	79	79	76	70	69
Butter, creamery, 92 score (New York).....	Pound.....	.51	.48	.49	113	113	107	116	109
Oleomargarine, standard, uncolored (Chicago).....	Pound.....	.235	.235	.235	103	103	103	103	103
TEXTILES									
Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston).....	Pound.....	.378	.382	.369	105	106	107	104	103
Cotton-print cloth, 64 x 60-38 1/2"-5.35-yards to pound.....	Yard.....	.078	.076	.080	103	103	101	105	106
Cotton sheeting, brown 4/4 Trion (New York).....	Yard.....	.091	.090	.098	97	97	97	113	105
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....	Pound.....	1.575	1.575	1.425	108	110	110	98	99
Woman's dress goods, French, 39 inches at mills, serge.....	Yard.....	.975	.975	1.000	94	94	94	97	97
Suitings, unfinished worsted—13-ounce, mill.....	Yard.....	2.008	2.008	1.935	100	100	100	96	97
Suitings, serge, 11-ounce, 56-58 inch.....	Yard.....	1.998	1.998	2.093	92	92	92	96	97
Silk, Japan, 18-15.....	Pound.....	4.998	4.998	5.145	82	81	81	81	83
Hosiery, women's, pure silk, mill.....	Dozen pair.....	10.290	10.290	10.290	85	85	85	86	85
LEATHER									
Hides, green salted, packers' heavy native steers (Chicago).....	Pound.....	.226	.205	.261	159	161	146	178	186
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....	Pound.....	.250	.219	.300	140	144	126	144	173
Leather, chrome calf, dull or bright "B" grades (Boston).....	Square foot.....	.500	.500	.535	108	110	117	118	118
Leather, sole, oak, scoured backs, heavy (Boston).....	Pound.....	.590	.590	.590	135	135	135	135	135
Boots and shoes, men's black calf, blucher (Massachusetts).....	Pair.....	6.750	6.750	6.750	106	106	106	102	106
Boots and shoes, men's dress welt tan calf oxford (St. Louis).....	Pair.....	4.85	4.85	4.75			100		98
FUEL									
Coal, bituminous, mine-run (composite price).....	Net ton.....	4.006	4.005	4.121	93	93	93	96	96
Coal, bituminous, prepared sizes (composite price).....	Net ton.....	4.547	4.514	4.619	96	95	94	99	96
Coal, anthracite, chestnut (composite price).....	Long ton.....	13.040	12.987	13.130	95	95	94	97	95
Coke, Connellsville (range of prompt and future) furnace—at ovens.....	Short ton.....	2.750	2.750	2.780	70	67	67	68	68
Petroleum, crude, Kansas-Oklahoma—at wells.....	Barrel.....	1.210	1.185	1.220	64	64	63	65	65
METALS									
Pig iron, foundry No. 2, northern (Pittsburgh).....	Long ton.....	19.510	19.260	19.010	94	95	93	92	92
Pig iron, basic, valley furnace.....	Long ton.....	17.500	17.000	17.000	94	94	94	92	92
Steel billets, Bessemer (Pittsburgh).....	Long ton.....	33.000	33.000	33.000	94	94	94	94	94
Copper ingots, electrolytic, early delivery (New York).....	Pound.....	.1584	.1660	.1385	114	115	120	100	100
Brass, sheets, mill.....	Pound.....	.206	.213	.188	108	108	112	99	99
Lead, pig, desilverized, for early delivery (New York).....	Pound.....	.0650	.0665	.0650	76	77	79	77	77
Tin, Straits (New York).....	Pound.....	.5021	.4916	.5564	78	77	75	90	85
Zinc, slab, western (St. Louis).....	Pound.....	.0635	.0635	.0564	85	87	87	78	77
BUILDING MATERIAL AND MISCELLANEOUS									
Lumber, pine, southern, yellow flooring, mill.....	M feet.....	37.19	36.55	35.26	83	82	81	79	78
Brick, common red, domestic building (New York).....	Thousand.....	12.00	11.50	12.75	73	73	70	68	78
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district).....	Barrel.....	1.650	1.650	1.683	97	95	95	97	97
Steel beams, mill (Pittsburgh).....	Cwt.....	1.900	1.900	1.800	97	97	97	92	92
Rubber, smoked sheets (New York).....	Pound.....	.179	.198	.402	38	37	41	84	83
Sulphuric acid, 66° (New York).....	Ton.....	15.500	15.500	15.500	107	107	107	107	107
Wood pulp, sulphite, domestic, unbleached, news grade (New York).....	Cwt.....	2.488	2.450	2.525	88	87	86	88	88
Newsprint, rolls, contract, mill.....	Cwt.....	3.250	3.250	3.250	94	94	94	94	94

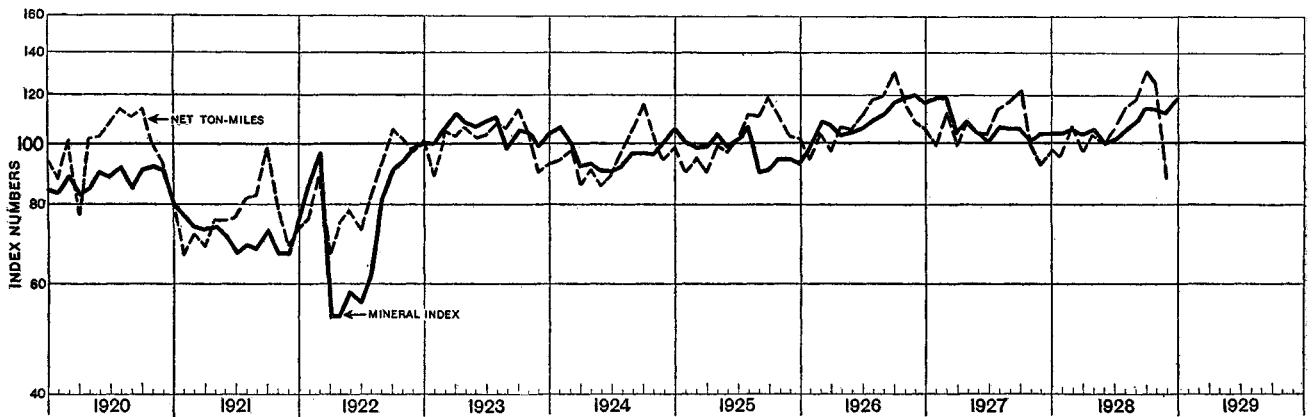
NEW BUILDING CONTRACTS AND AUTOMOBILE PRODUCTION

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



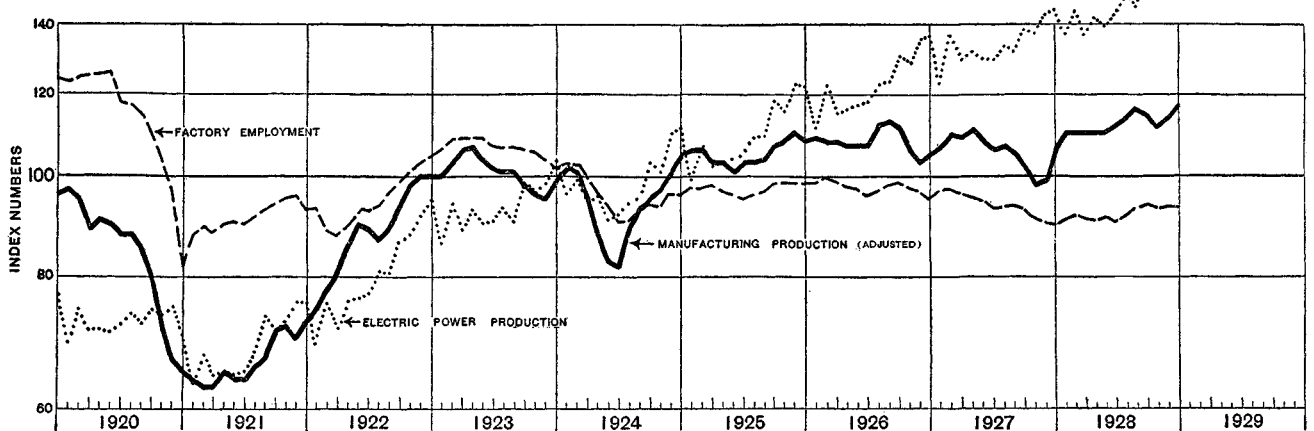
MINERAL PRODUCTION AND RAILROAD TON-MILEAGE

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



FACTORY EMPLOYMENT, MANUFACTURING, AND ELECTRIC-POWER PRODUCTION

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



REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

TEXTILES

Imports of wool in January showed sizeable gains over both the preceding month and January, 1928. The consumption of wool by textile mills was likewise greater than in either prior period. Stocks of wool at the end of 1928 were about 2 per cent greater than at the end of the preceding year.

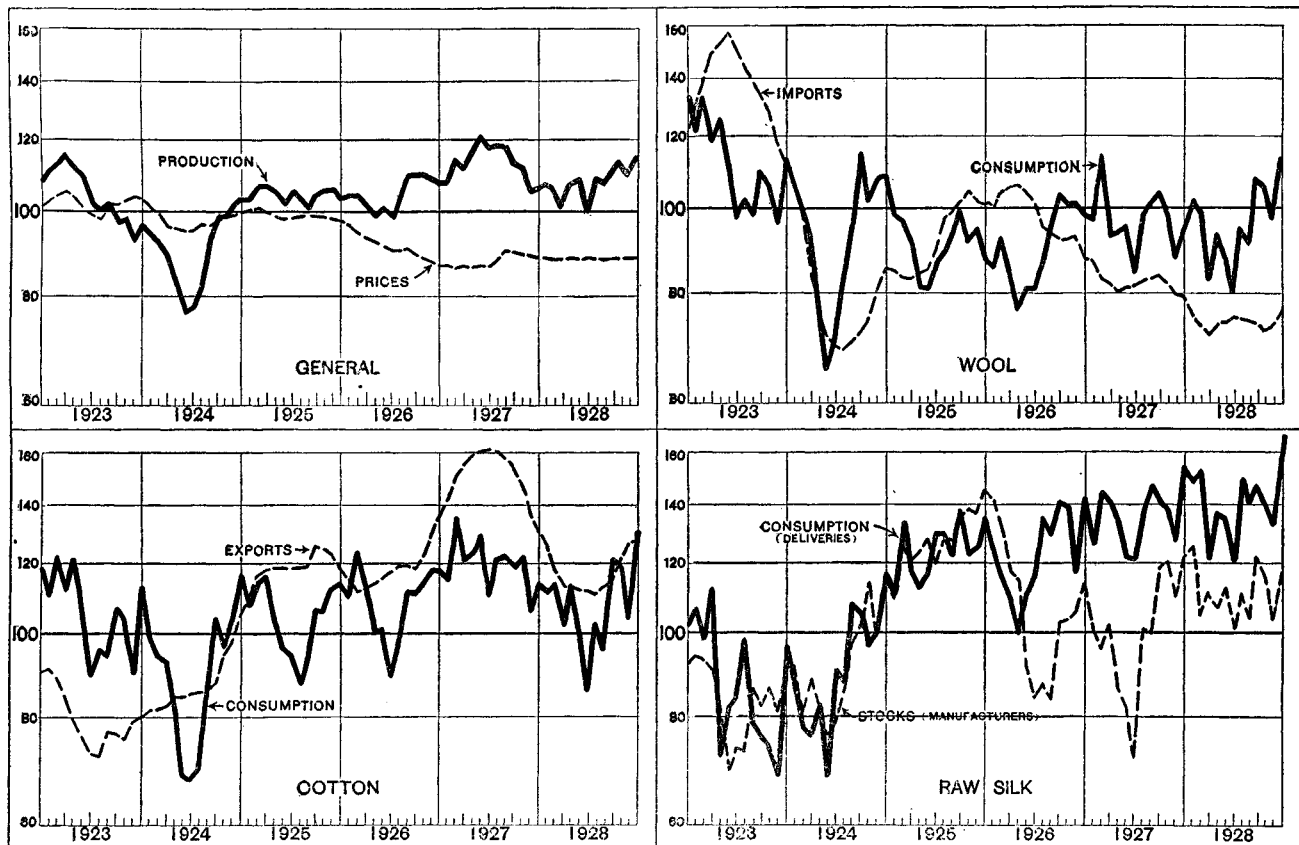
The consumption of cotton was considerably greater than in either prior period. Stocks of cotton held at the end of January, both at mills and in public storage, were lower than a year ago. Raw cotton exports in January showed a gain of 12 per cent over the same month of 1928. Cotton prices paid to producers were lower than in either the previous month

Stocks of raw silk, both at manufacturing plants and at warehouses, were greater at the end of January than at the end of the preceding month. Warehouse stocks were greater also than a year ago, but inventories at mills were lower. The price index for silk goods showed no change from the previous month but was lower than a year ago. Imports of rayon were lower than in December but 25 per cent greater than a year ago. Rayon prices showed no change from either the previous month or January of last year.

More men's and boys' suits were cut in December than in November, but a decline was registered from the output of 1927.

THE TEXTILE INDUSTRIES

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



or January a year ago, but the wholesale price for cotton, showing a decline from December, averaged higher than a year ago. Spindle activity at cotton mills, reduced to a ratio to plant capacity, was higher than in either the previous month or January of last year.

Imports of silk were greater than in either period. Deliveries of silk to consuming establishments were also larger than in either the previous month or January a year ago, while machinery activity in silk mills also showed gains over both periods.

The production of hosiery in December showed a decline from both the preceding month and December, 1927. Net shipments of hosiery by manufacturers likewise declined from both periods. Hosiery stocks held by manufacturers at the end of 1928 were lower than at the end of 1927.

Textiles spread with pyroxylin during January showed a substantial gain over both the preceding month and the corresponding month of 1928. Unfilled orders for pyroxylin-coated textiles at the end of January were greater than at the end of December.

METALS

The consumption of iron ore by furnaces was greater in January than in either the preceding month or January of last year. Pig-iron production likewise showed gains over both periods. Wholesale prices for pig-iron, though showing no appreciable change from the preceding month, averaged higher than a year ago.

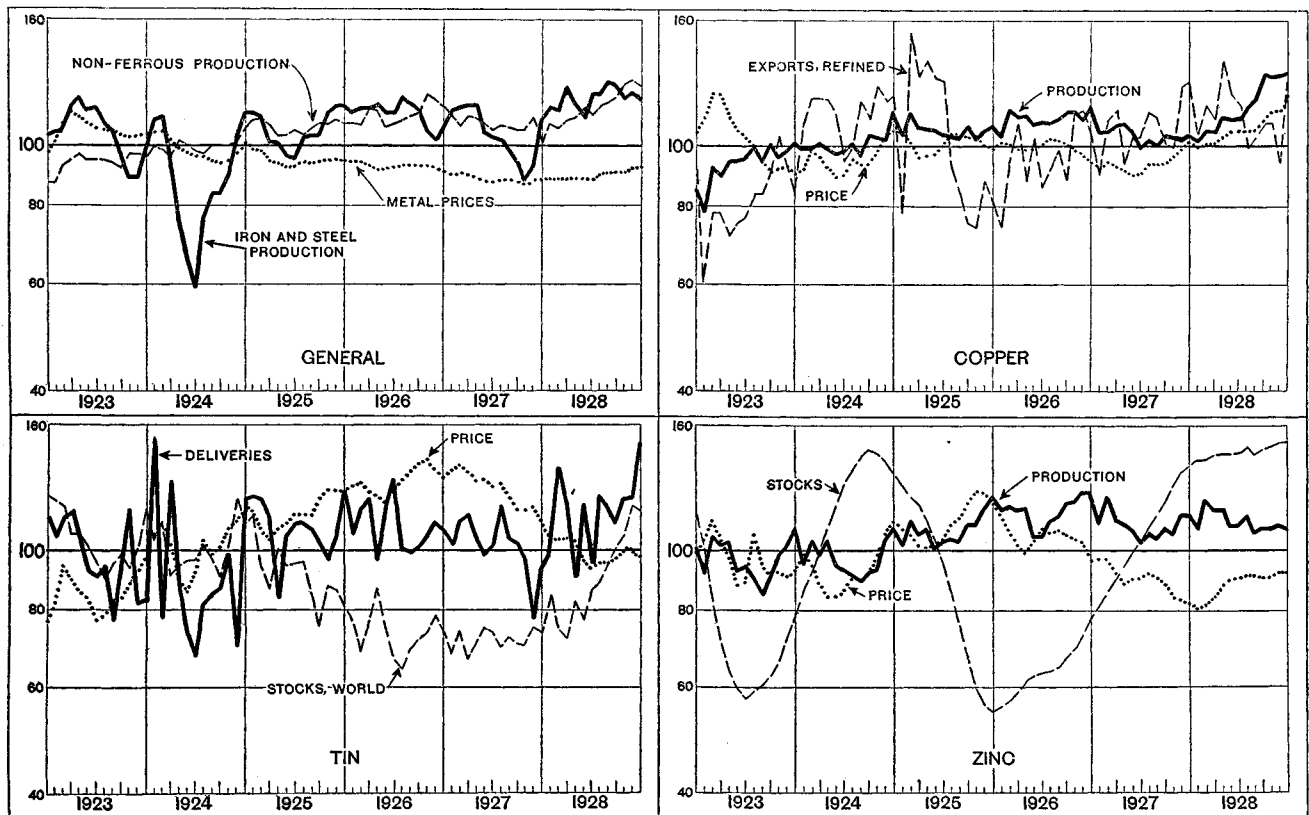
The production of steel ingots was greater than in either the previous month or January of last year. Reduced to a ratio to plant capacity the output of steel ingots showed a gain of almost 9 per cent over January, 1928. Unfilled steel orders at the end of January were greater than at the end of the previous

New orders for fabricated steel plate were smaller than in either the preceding month or January of last year. Shipments of cold finished steel bars showed gains over both periods. New orders for steel boilers, measured in square feet of heating surface, showed a decline from the previous month but were 25 per cent greater than a year ago. Production of steel barrels was larger than in either period. Shipments of lock washers also showed gains over both periods.

New orders for machine tools were larger than in either the preceding month or January of last year, with shipments also showing gains over both prior periods. New orders for foundry equipment were like-

THE METAL INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. January, 1929, is latest month plotted. Curve covering zinc stocks is plotted from 12 months' moving monthly averages plotted on the end month]



month, but showed a decline from the same month of last year. Earnings of the United States Steel Corporation for the year 1928 showed a gain of almost 18 per cent over the preceding year. The output of steel sheets by independent manufacturers showed a gain in January over both the preceding month and the same month of 1928. Reduced to ratio to capacity, steel sheet production in January was 23 per cent greater than in January of last year. Unfilled orders for steel sheets at the end of January showed a gain of 10 per cent over the previous month, but declined six per cent from a year ago.

The production of track work in January was smaller than in December but greater than a year ago.

wise larger than in either the previous month or January, 1928. Unfilled orders for foundry equipment at the end of January were almost three times as large as a year ago. New orders for mechanical stokers were likewise greater than in January, 1928. Domestic shipments of industrial pumps also showed gains over a year ago, while new orders and unfilled orders for industrial pumps were greater than in either the previous month or January of last year. New orders for electric hoists showed gains over both periods. Shipments, new orders, and unfilled orders for electric overhead cranes and new orders and shipments for wood-working machinery also recorded advances over both the preceding month and the same month of 1928.

FUELS

The output of bituminous coal in January showed substantial gains over both the preceding month and January of last year. Anthracite production was likewise greater than in either prior period. Prices for coal, both bituminous and anthracite, averaged lower than in either prior period.

AUTOMOBILES AND RUBBER

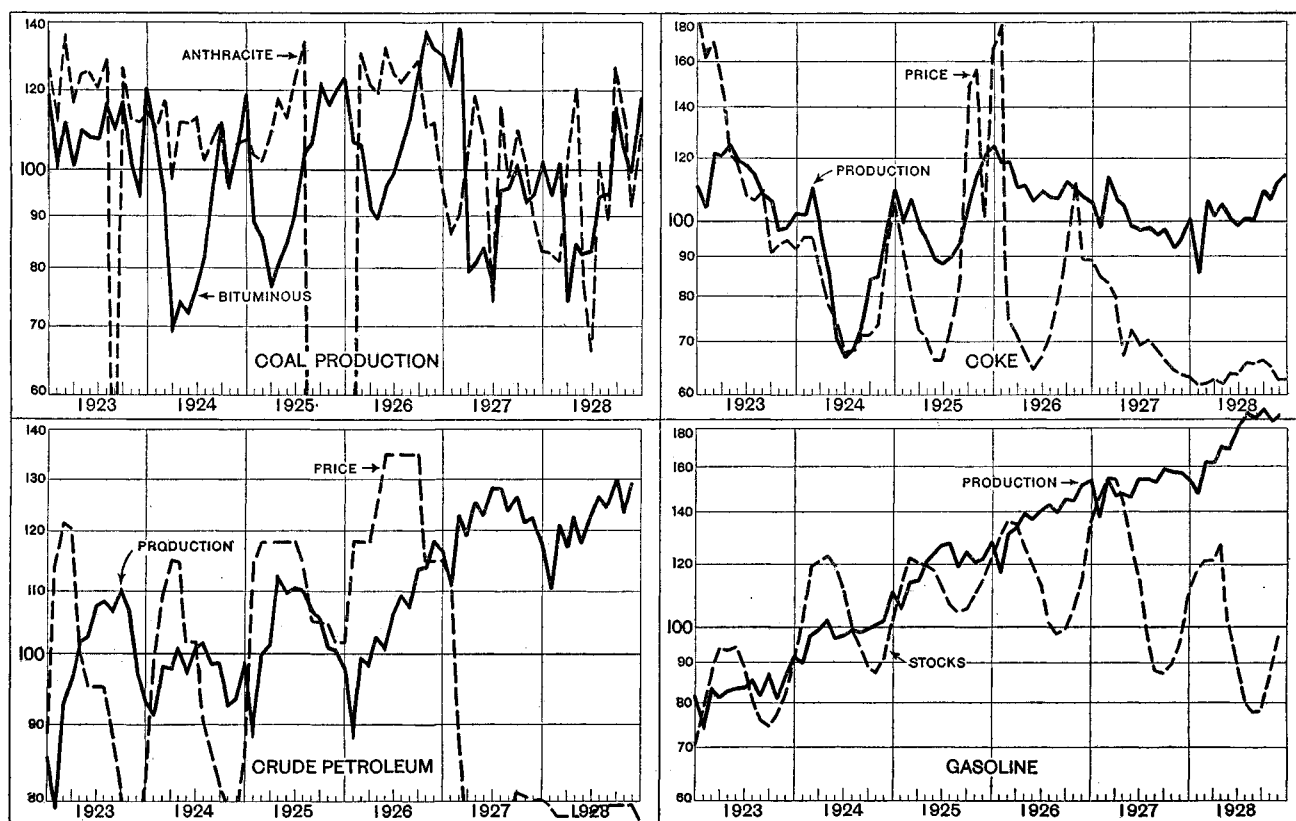
The output of automobiles, both passenger cars and trucks, showed gains of more than 70 per cent over both the preceding month and January of last year.

HIDES AND LEATHER

Imports of hides and skins during January exceeded those of either the previous month or the corresponding month of last year. Increases from December of imports of cattle hides and sheepskins more than offsetting declines in imports of calfskins and goat-skins. Prices of cattle hides and calfskins averaged lower than for either the preceding month or the corresponding month of last year. Leather prices, however, showed little change upper leather being slightly higher than in December and slightly lower than a

THE FUEL INDUSTRIES

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



The gain in the output over a year ago of passenger cars was about 71 per cent, while the production of trucks was almost twice as large as in January of the previous year. The output of automobiles in Canada during January was more than 150 per cent greater than in January of the previous year. Domestic exports of automobiles showed substantial gains over both the previous month and the same month of 1928. Canadian exports were likewise greater than in either period.

The imports of crude rubber in January showed considerable gains over both the previous month and the corresponding period of last year. The wholesale price of rubber averaged higher than in the preceding month but was about 50 per cent lower than a year ago.

year ago, while sole leather was unchanged from either period. The output of sole leather was greater than for either prior period, and exports, although smaller than a year ago, greatly exceeded those for the previous month. Exports of upper leather were smaller than for either prior period. Shoe prices were the same as during the previous month but slightly higher than in January, 1928. Production of boots and shoes was considerably larger than in December and slightly larger than a year ago. Exports also exceeded those of both prior periods. More cattle, calves, and sheep were slaughtered during January than during the previous month and more cattle and hogs than in January, 1928. The number of hogs slaughtered in January, however, was slightly less than during the previous month.

BUILDING AND CONSTRUCTION

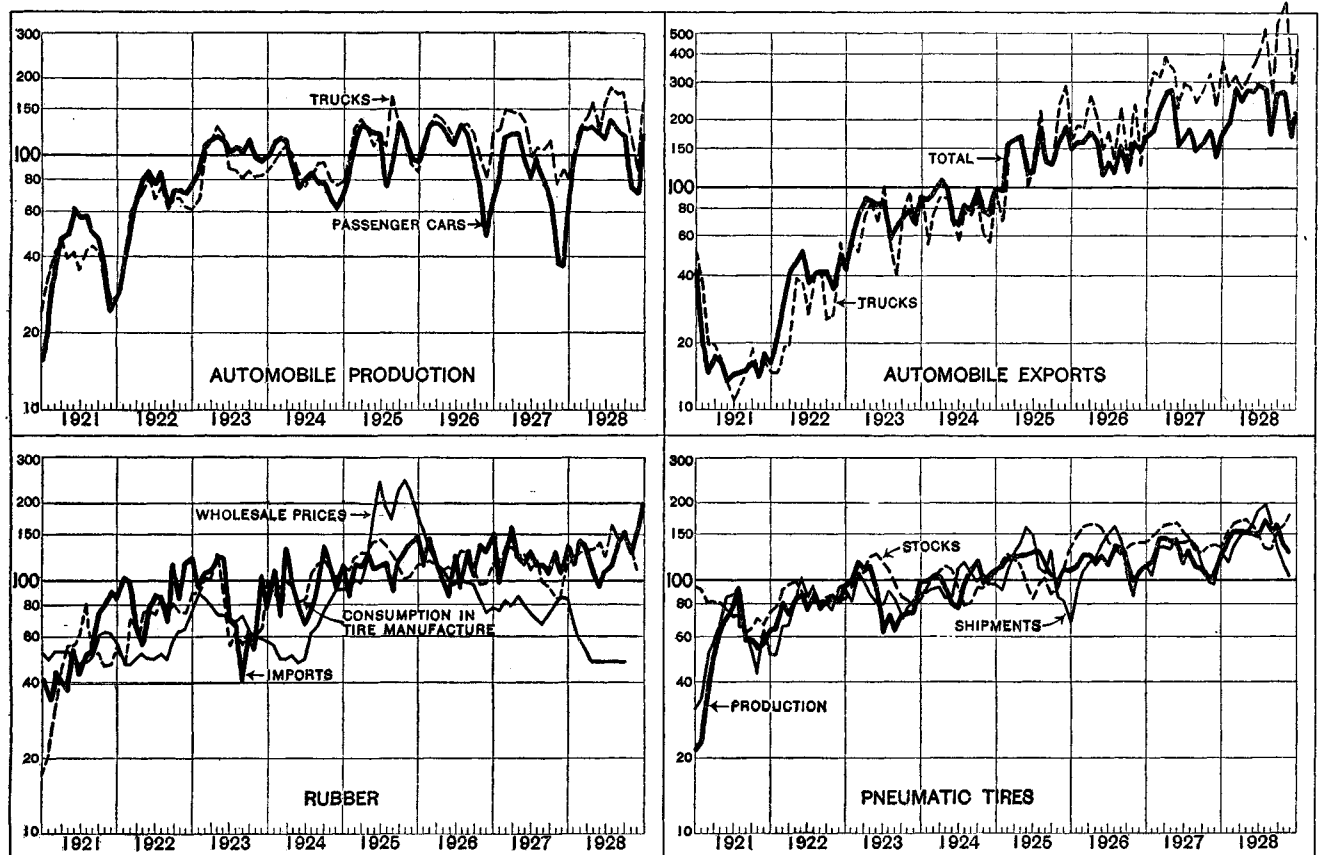
Construction costs on the whole averaged slightly above those for the previous month but showed no uniform tendency as compared with January, 1928. Contracts awarded for new buildings were smaller both in square footage and in value than for either the previous month or for January, 1928, increases in contracts for commercial and industrial buildings as compared with both periods being more than offset

STONE AND CLAY PRODUCTS

The production and shipments of Portland cement, while slightly larger than a year ago, declined seasonally from the previous month. Stocks of cement were larger than at the end of either prior period and prices, while the same as in December, were slightly over than a year ago. New contracts let for concrete pavements during January were slightly smaller than during the previous month despite the substantial

THE AUTOMOBILE AND RUBBER INDUSTRIES

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



by declines in contracts for residential and public buildings.

LUMBER AND LUMBER PRODUCTS

The production of lumber was generally greater than for either the previous month or for the corresponding month of last year, declines for the previous month being recorded only in the case of California redwood and California white pine, while the output of Douglas fir, California redwood, Northern pine, and walnut was less than a year ago. Lumber shipments were greater during January in most instances than for either prior period, North Carolina pine being the only species for which shipments were less than during the previous month, while Southern pine and Douglas fir showed declines from January, 1928. New orders for lumber were also greater in most instances than during the previous month.

increase in road contracts, but were much larger than a year ago. Federal aid highways completed also greatly exceeded those finished during January, 1928.

New orders and shipments of porcelain plumbing fixtures considerably exceeded those of the previous month, but were smaller than in January, 1928. Unfilled orders and stocks, on the other hand, were less than at the end of December, but much greater than a year ago. New orders and shipments for vitreous china fixtures were greater than during either prior period. Unfilled orders also exceeded those at the end either of December or January, 1928, and stocks, while less than at the end of the previous month, were greater than a year ago. New orders for terra cotta were greater both in quantity and in value than during December, the value of such orders also exceeding those of January, 1928.

FOODSTUFFS AND TOBACCO

The visible supply of wheat at the end of January in both the United States and Canada was considerably larger than a year ago. Receipts of wheat at principal domestic markets showed a decline from the previous year, but shipments showed gains. Exports of wheat, including flour, showed declines from both the preceding month and January of last year. Prices for wheat, averaging higher than in December, were lower than a year ago.

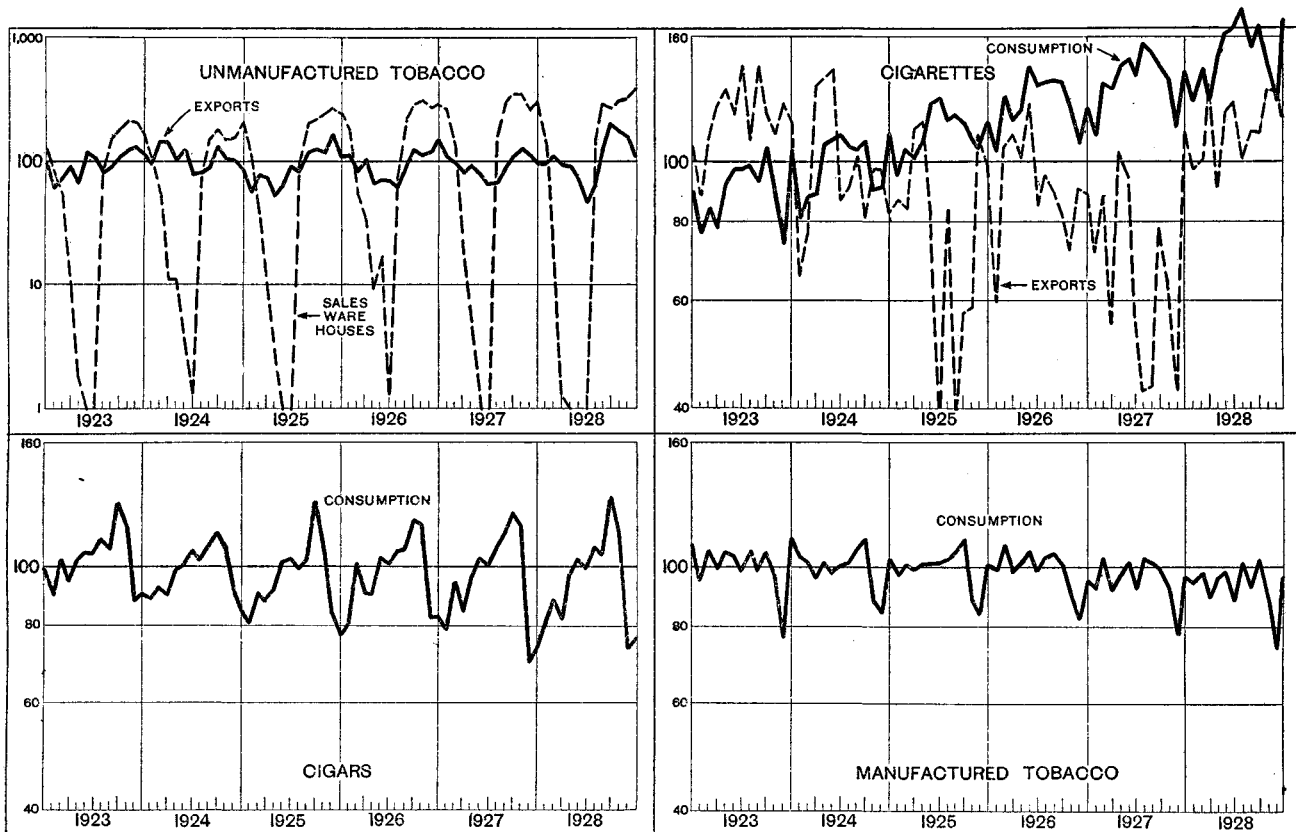
The visible supply of corn at the end of January was 7 per cent smaller than a year ago. Corn exports, including meal, were considerably greater than a year

ago. Receipts of butter at the principal markets showed gains over both the previous month and January a year ago. Storage holdings of butter at the end of January were 13 per cent lighter than a year ago. The wholesale price of butter averaged lower than in either the previous month or the same month of last year. Receipts of cheese at primary markets showed a decline from a year ago. Storage holdings of cheese were 33 per cent greater than last year.

Imports of raw sugar were greater in January than in either the previous month or January a year ago. Meltings of sugar at refineries were also greater than in either prior period. Stocks of raw sugar held at

THE TOBACCO INDUSTRIES

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



ago. Receipts and shipments of corn at principal primary markets showed gains over last year.

Receipts and shipments of cattle at principal markets showed a decline from last year. Local slaughter of cattle was also smaller than in January, 1928. The output of inspected beef was greater than in either the preceding month or January of last year, the indicated consumption of beef also showing gains over both periods. Exports of beef products were greater than in either the previous month or January of last year. Cold storage holdings of beef at the end of the month were considerably larger than a year ago. Prices for beef averaged higher than for last year. Receipts of hogs at primary markets were smaller than in January of last year, but shipments showed a gain.

refineries at the end of January were 15 per cent heavier than a year ago. Shipments of refined sugar by refineries showed gains over both the previous month and the same month a year earlier.

Imports of coffee were larger than in December, but showed a decline from a year ago. The world's visible supply of coffee at the end of January was 4 per cent greater than a year ago. Clearances of coffee for the United States showed a gain over the previous month, but were smaller than a year ago. The price of coffee averaged higher than in either the previous month or January, 1928. Imports of tea and cocoa showed gains over the previous month. Tea imports were also greater than a year ago but cocoa imports declined from the previous month.

TRANSPORTATION

Freight carloadings in January showed a gain of almost 4 per cent over a year ago. As compared with January, 1928, increases were registered in the loadings of coal and coke, ores, and miscellaneous merchandise, all other groups showing declines. Freight car surplusages were considerably smaller than a year ago. Shipments of railroad locomotives by manufacturers were more than 50 per cent smaller than a year ago.

BANKING AND FINANCE

Check payments outside New York City showed a gain of 13 per cent over a year ago. Loans and discounts of Federal reserve member banks at the end of

DISTRIBUTION MOVEMENT

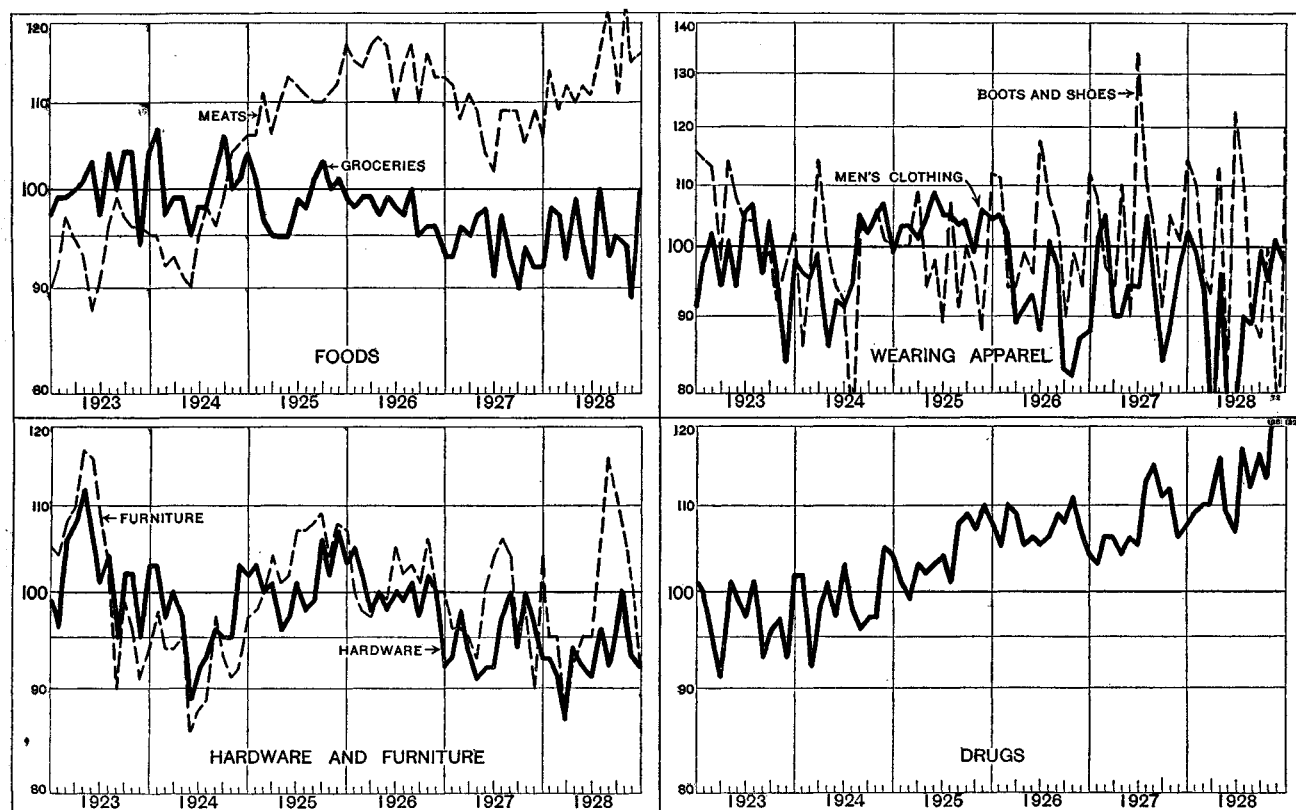
Sales by mail-order houses and chain 10-cent stores showed substantial gains over January, 1928. Magazine advertising also showed a considerable gain. Advertising in newspapers was greater than in January of last year. Postal receipts in 100 representative cities were greater than a year ago. Mail dispatched by air continued to show further growth in business volume.

GOLD, SILVER, AND FOREIGN EXCHANGE

Receipts of gold at the mint were smaller than in either the previous month or January, 1928. The output of gold at the Rand mines was greater than in either prior period. Imports of gold showed gains over both periods, while gold exports showed declines.

WHOLESALE TRADE

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



January were 5 per cent smaller than at the end of the preceding month but were greater than a year ago. The Federal reserve ratio showed a substantial gain during the month, but was lower than a year ago. Interest rates on time loans averaged higher than in either period, while call-loan renewal rates, averaging lower than in December, were higher than in January, 1928. New sales of life insurance were almost 19 per cent larger than in January, 1928. Prices for stocks, both industrial and railroads, averaged higher than in either the previous month or the same month of last year. Bond prices averaged lower than a year ago. Dividend and interest payments scheduled for February were considerably larger than a year ago.

The price of silver at New York averaged lower than in either the previous month or January of last year.

Exchange on the principal currencies showed only slight change from the preceding month, the principal changes being downward. Exchange on Netherlands, Sweden, and Japan showed declines from December. Contrasted with a year ago, exchange rates were generally lower, declines occurring in the British pound, the Italian lira, the Dutch guilder, the Swedish krone, the Swiss franc, the Japanese yen, the Indian rupee, the Argentine peso, the Brazilian milreis, and the Chilean peso. Imports of merchandise showed gains over both the preceding month and January a year ago. Merchandise exports likewise showed gains over both previous periods.

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	1927		1928			1929	PER CENT INCREASE (+) OR DECREASE (-)	
			November	December	January	November	December	January	January, 1929, from December, 1928	January, 1929, from January, 1928
PRODUCTION										
TOTAL INDUSTRIAL										
Unadjusted, except for working days.....	117	81	101	95	105	114	109	116	+6.4	+10.5
Adjusted for seasonal variations.....	117	83	99	99	106	112	113	117	+3.5	+10.4
MANUFACTURING										
Total (adjusted for working days only).....	116	79	101	95	106	113	109	116	+6.4	+9.4
Total (adjusted for seasonal variations).....	117	82	98	99	105	111	113	117	+3.5	+11.4
Iron and steel.....	127	59	88	93	108	119	123	117	-4.9	+8.3
Textiles.....	121	77	112	105	107	114	111	116	+4.5	+8.4
Food products.....	106	92	94	95	103	103	104	103	-1.0	0.0
Paper and printing.....	119	91	110	113	115	117	120	119	-0.8	+3.5
Lumber.....	110	80	96	93	92	80	87	92	+5.7	0.0
Automobiles.....	139	47	47	53	92	90	98	96	-2.0	+4.3
Leather and shoes.....	134	86	97	96	99	99	92	134	+45.7	+35.4
Cement, brick, and glass.....	130	92	107	105	114	118	130	124	-4.6	+8.8
Nonferrous metals.....	129	87	106	111	100	126	129			
Petroleum refining.....	162	84	140	137	135	159	159	159	0.0	+17.8
Rubber tires.....	166	66	117	110	124	150	143	147	+2.8	+18.5
Tobacco manufactures.....	131	93	122	113	119	125	127	131	+3.1	+10.1
MINERALS										
Total (adjusted for working days only).....	124	84	105	103	99	118	112	113	+0.9	+14.1
Total (adjusted for seasonal variations).....	120	90	101	103	103	115	112	117	+4.5	+3.9
Bituminous coal.....	125	77	85	87	92	98	96	103	+7.3	+12.0
Anthracite coal.....	133	1	105	91	89	115	99	110	+11.1	+23.6
Crude petroleum.....	138	88	124	124	121	127	132	138	+4.5	+14.0
Iron-ore shipments.....	134	0	49			105				
Copper.....	129	82	106	105	102	133	133	129	-3.0	+26.5
Zinc.....	124	93	107	109	105	110	106	100	-5.7	-4.8
Lead.....	125	75	110	109	103	114	113	112	-0.9	+8.7
Silver.....	123	85	100	95	93	91	103	91	-11.7	-2.2
ANIMAL PRODUCTS (Marketings)										
Total.....	124	79	92	88	96	93	92	96	+4.3	0.0
Wool.....	421	26	68	66	61	70	55	35	-36.4	-42.6
Livestock.....	131	76	101	92	107	98	95	102	+7.4	-4.7
Poultry and eggs.....	148	68	114	126	80	110	126	85	-32.5	+6.3
Dairy products.....	160	64	71	71	89	77	78	95	+21.8	+6.7
Fish.....	187	44	119	79	81	131	119	87	-26.9	+6.9
CROPS (Marketings)										
Total.....	251	45	168	121	98	179	152	114	-25.0	+16.3
Grains *.....	205	38	109	104	99	122	124	104	-16.1	+5.1
Vegetables *.....	199	60	107	74	100	94	69	94	+36.2	-6.0
Fruits *.....	266	55	96	57	45	119	70	72	+2.9	+60.0
Cotton products *.....	353	11	231	148	81	258	206	100	-51.5	+23.5
Miscellaneous crops *.....	266	22	237	169	193	205	192	238	+24.0	+23.3
FOREST PRODUCTS										
Total.....	112	76	93	86	81	84	76	81	+6.6	0.0
Lumber.....	112	71	91	83	80	80	71	78	+9.9	-2.5
Pulpwood.....	151	54	111	111	99	116	111	111	0.0	+12.1
Gum (rosin and turpentine) *.....	161	18	109	98	38	119	122	41	-66.4	+7.9
Distilled wood.....	148	65	100	95	97	104	104	101	-2.9	+4.1

* 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	1927		1928			1929	PER CENT INCREASE (+) OR DECREASE (-)	
			November	December	January	November	December	January	January, 1929, from December, 1928	January, 1929, from January, 1928
PRODUCTION—Continued										
NEW ORDERS										
Total.....	138	73	91	111	100	102	80			
Textiles.....	179	70	94	179	94	113	88			
Iron and steel.....	143	71	101	133	104	114	111			
Lumber.....	141	67	98	78	112	99	67			
Paper and printing.....	118	85	90	94	103	114	98			
Stone and clay products.....	129	75	89	75	87	101	82			
STOCKS										
Grand total.....	134	82	135	133	129	137	141	137	-2.8	+6.2
Total manufactured goods.....	120	88	111	112	115	114	120	124	+3.3	+7.8
Foodstuffs.....	129	79	81	79	85	87	96	108	+12.5	+27.1
Textiles.....	138	78	113	127	134	118	129	124	-3.9	-7.5
Iron and steel.....	152	78	123	128	141	143	147	152	+3.4	+7.8
Nonferrous metals.....	133	74	118	119	114	125	125	125	0.0	+9.6
Lumber.....	125	78	123	125	119	107	113	112	-0.9	-5.9
Stone, clay, etc.....	178	64	130	154	169	136	154	173	+12.3	+2.4
Leather.....	123	66	70	69	68	75	77	76	-1.3	+11.8
Rubber.....	185	77	132	133	128	156	164	157	-4.3	+22.7
Paper.....	155	46	109	80	99	133	132	145	+9.8	+46.5
Chemicals and oils.....	125	84	107	109	115	107	111	114	+2.7	-0.9
Total raw materials.....	157	69	152	150	139	154	157	147	-6.4	+5.8
Foodstuffs.....	163	68	135	136	127	155	163	155	-4.9	+22.0
Textiles.....	202	43	187	183	168	170	174	161	-7.5	-4.2
Metals.....	136	54	113	104	105	126	97	89	-8.2	-15.2
Chemicals and oils.....	153	73	144	137	128	135	135	124	-8.1	-3.1
UNFILLED ORDERS										
Total.....	167	67	68	72	81	74	71	80	+12.7	-1.2
Textiles.....	154	62	76	69	77	72	72	83	+15.3	+7.8
Iron and steel.....	157	66	71	85	89	76	83	86	+3.6	-3.4
Transportation equipment.....	204	49	51	57	64	49	35	64	+82.9	0.0
Lumber.....	142	56	63	52	79	84	62	78	+25.8	-1.3
WHOLESALE TRADE										
Grand total, all classes.....	124	82	97	85	88	99	85	93	+9.4	+5.7
Groceries.....	119	86	100	90	85	100	88	92	+4.5	+8.2
Meats.....	130	87	101	103	106	117	108	116	+7.4	+9.4
Dry goods.....	128	71	88	70	85	90	69	84	+21.7	-1.2
Men's clothing.....	167	43	61	48	76	66	52	75	+44.2	-1.3
Boots and shoes.....	128	68	110	82	94	105	59	99	+67.8	+5.3
Hardware.....	118	82	98	90	82	98	86	82	-4.7	0.0
Drugs.....	125	88	113	99	106	114	120	130	+8.3	+22.6
Furniture.....	131	72	105	83	78	110	94	81	-13.8	+3.8
RETAIL TRADE										
MAIL-ORDER HOUSES (4 houses).....	208	64	149	167	105	176	208	132	-36.5	+25.7
CHAIN STORES:										
Ten-cent.....	305	62	146	279	104	158	305	112	-63.3	+7.7
Grocery.....	224	77	188	204	187	218	220	222	+0.9	+18.7
Wearing apparel.....	413	47	250	350	121	289	413	140	-66.1	+15.7
Drug.....	224	82	144	182	146	169	224	177	-21.0	+21.2
Cigar.....	160	79	105	156	90	107	155	91	-41.3	+1.0
Candy.....	170	70	125	164	100	130	170	106	-37.6	+6.0
Shoe.....	184	55	118	178	87	130	184	102	-44.6	+17.2
DEPARTMENT STORES:										
Sales.....	187	71	122	186	88	122	187	93	-50.3	+5.7
Stocks.....	117	83	116	96	91	113	92	88	-4.3	-3.3

INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1927		1928			1929	PER CENT INCREASE (+) OR DECREASE (-)	
			November	December	January	November	December	January	January, 1929, from December, 1928	January, 1929, from January, 1928
EMPLOYMENT										
(Relative to 1926 monthly average as 100)										
Number employed, by industries:										
Total, all classes.....	111	92	94	93	92	95	96	95	-1.0	+3.3
Food products.....	119	96	101	100	97	102	102	98	-3.9	+1.0
Textiles.....	122	92	101	101	100	97	98	97	-1.0	-3.0
Iron and steel.....	113	86	88	87	86	95	95	95	0.0	+10.5
Lumber.....	113	85	91	88	85	90	88	85	-3.4	0.0
Leather.....	117	88	94	92	96	87	88	91	+3.4	-5.2
Paper and printing.....	103	94	101	102	100	101	101	100	-1.0	0.0
Chemicals.....	107	85	93	92	91	94	95	94	-1.1	+3.3
Stone, clay, and glass.....	106	84	93	89	84	89	87	82	-5.7	-2.4
Metal products other than iron and steel.....	109	86	89	88	86	98	99	97	-2.0	+12.8
Tobacco products.....	120	90	104	99	91	101	98	86	-12.2	-5.5
Vehicles.....	113	84	84	85	87	96	95	100	+5.3	+14.9
Miscellaneous.....	111	83	93	93	92	94	98	103	+5.1	+12.0
Amount of pay roll, by industries:										
Total, all classes.....	109	84	92	93	90	96	98	95	-3.1	+5.6
Food products.....	114	93	101	101	98	102	104	100	-3.8	+2.0
Textiles.....	124	87	101	102	99	97	100	96	-4.0	-3.0
Iron and steel.....	111	75	84	85	83	98	98	96	-2.0	+15.7
Lumber.....	108	82	94	90	81	92	88	82	-6.8	+1.2
Leather.....	123	79	86	87	93	79	84	87	+3.6	-6.5
Paper and printing.....	105	86	103	105	102	103	105	103	-1.9	+1.0
Chemicals.....	108	86	95	97	94	97	97	95	-2.1	+1.1
Stone, clay, and glass.....	106	81	93	89	82	91	88	78	-11.4	-4.9
Metal products other than iron and steel.....	109	81	86	88	85	106	108	102	-5.6	+20.0
Tobacco products.....	119	85	104	100	90	99	100	81	-19.0	-10.0
Vehicles.....	115	84	85	87	84	98	96	96	0.0	+14.3
Miscellaneous.....	111	81	91	98	93	92	100	102	+2.0	+9.7
PRICE INDEX NUMBERS										
FARM PRICES										
(Relative to 1909-1914 average as 100)										
All groups.....	152	125	137	137	137	134	134	133	-0.7	-2.9
Grains.....	178	108	120	123	125	110	112	115	+2.7	-8.0
Fruits and vegetables.....	253	108	136	141	144	109	108	109	+0.9	-24.3
Meat animals.....	162	98	141	138	138	150	143	146	+2.1	+5.8
Dairy and poultry.....	166	122	153	158	154	155	159	149	-6.3	-3.2
Cotton and cottonseed.....	252	81	162	153	152	146	148	148	0.0	-2.6
Unclassified.....	108	79	86	90	91	86	90	92	+2.2	+1.1
WHOLESALE PRICES										
Department of Labor Indexes										
(Relative to 1926 monthly average as 100)										
All commodities.....	105	94	97	97	96	97	97	97	0.0	+1.0
Farm products.....	114	94	104	104	106	102	104	106	+1.9	0.0
Food, etc.....	107	85	102	101	99	100	98	99	+1.0	0.0
Hides and leather products.....	127	98	114	117	121	116	116	114	-1.7	-5.8
Textile products.....	114	94	98	97	97	96	96	96	0.0	-1.0
Fuel and lighting.....	112	81	83	83	81	84	84	83	-1.2	+2.5
Metals and metal products.....	113	97	97	98	98	102	103	104	+1.0	+6.1
Building materials.....	116	90	90	90	91	96	97	97	0.0	+6.6
Chemicals.....	104	95	97	97	96	96	96	96	0.0	0.0
House-furnishing goods.....	111	97	99	99	99	96	96	97	+1.0	-2.0
Miscellaneous.....	127	79	88	89	89	80	80	81	+1.3	-9.0
Classified by state of manufacture:										
Semimanufactured articles.....	128	96	97	98	98	97	97	97	0.0	-1.0
Finished products.....	103	93	95	95	94	97	96	97	+1.0	+3.2
Raw materials.....	109	93	99	99	100	96	97	99	+2.1	-1.0
Nonagricultural commodities.....	106	93	95	95	94	95	95	95	0.0	+1.1
Commercial Indexes										
(Relative to 1926 monthly average as 100)										
Dun's.....	106	85	103	102	102	103	102	103	+1.0	+1.0
Bradstreet's.....	112	95	105	105	105	102	100	101	+1.0	-3.8

INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1927		1928			1929	PER CENT INCREASE (+) OR DECREASE (-)	
			November	December	January	November	December	January	January, 1929, from December, 1928	January, 1929, from January, 1928
PRICE INDEX NUMBERS—Contd.										
COST OF LIVING										
National Industrial Conference Board Indexes (Relative to July, 1914)										
All items weighted.....	172	158	164	164	163	163	162	161	-0.6	-1.2
Food (Department of Labor).....	167	141	157	156	155	157	156	155	-0.6	0.0
Shelter.....	186	161	167	166	166	160	160	159	-0.6	-4.2
Clothing.....	177	160	171	171	172	172	171	169	-1.2	-1.7
Fuel and light (combined).....	179	156	163	163	163	162	163	163	0.0	0.0
Fuel.....	208	174	184	184	184	183	184	184	0.0	0.0
Light.....	123	118	122	122	122	121	121	121	0.0	-0.8
Sundries.....	176	171	173	173	172	171	171	170	-0.6	-1.2

FABRICATED STRUCTURAL STEEL ¹

MONTH	NEW ORDERS													
	1922	1923	1924	1925	1926	1927	1928	1923	1923	1924	1925	1926	1927	1928
	Short tons							Per cent of capacity						
January.....		227,760	224,940	187,380	208,800	195,000	211,750		73	69	54	58	52	55
February.....		243,360	228,200	194,320	208,800	243,750	265,650		78	70	56	58	65	69
March.....		290,160	221,680	225,550	234,000	232,500	257,950		93	68	65	65	62	67
April.....	258,400	243,360	208,640	256,780	252,000	262,500	234,850	85	78	64	74	70	70	61
May.....	240,160	180,960	192,340	229,020	266,400	232,500	308,000	79	58	59	66	74	62	80
June.....	221,920	165,360	208,640	284,540	262,800	225,000	300,000	73	53	64	82	73	60	78
July.....	206,720	162,240	224,940	274,130	248,400	341,250	296,450	68	52	69	79	69	91	77
August.....	206,720	184,080	192,340	267,190	284,400	270,000	354,200	68	59	59	77	79	72	92
September.....	194,560	165,360	211,900	270,660	216,000	262,500	319,550	64	53	65	78	60	70	83
October.....	176,320	159,120	211,900	298,420	230,400	238,750	250,250	58	51	65	86	64	77	65
November.....	152,000	171,600	267,320	239,430	223,200	236,250	242,550	50	55	82	69	62	63	63
December.....	185,440	249,600	247,760	253,310	259,200	262,500	256,400	61	80	76	73	72	70	64
Total.....	2,842,240	2,442,960	2,640,600	2,080,730	2,894,400	3,052,500	3,287,600							
Monthly average.....	204,693	203,580	220,050	248,394	241,200	254,375	273,967	67	65	68	72	67	68	71

MONTH	SHIPMENTS										YEAR	MONTHLY CAPACITY		ANNUAL ORDERS	
	1924	1925	1926	1927	1928	1924	1925	1926	1927	1928		Reported by 435 firms	Total	Per cent of capacity	Short tons
	Short tons					Per cent of capacity						Short tons			
January.....	195,600	190,850	234,000	195,000	204,050	60	55	65	52	53	1913....	213,500	225,000	45	1,215,000
February.....	189,080	201,260	216,000	198,750	173,250	58	58	60	53	45	1914....	215,390	227,000	52	1,416,480
March.....	202,120	239,430	277,200	217,500	227,150	62	69	77	58	59	1915....	218,400	231,000	72	1,987,200
April.....	221,680	246,370	277,200	228,750	238,700	68	71	77	61	62	1916....	226,600	238,000	72	2,056,320
May.....	221,680	253,310	270,000	228,750	261,800	68	73	75	61	68	1917....	231,200	242,000	59	1,713,360
June.....	237,980	256,780	298,800	255,000	261,800	73	74	83	68	68	1918....	247,400	258,000	56	1,733,760
July.....	254,280	274,130	298,800	255,000	265,650	78	79	83	68	69	1919....	255,800	266,000	54	1,723,680
August.....	231,460	267,190	280,800	281,250	288,760	71	77	78	75	75	1920....	265,100	276,000	54	1,788,480
September.....	254,280	267,190	284,400	266,250	273,350	78	77	79	71	71	1921....	271,500	283,000	35	1,188,600
October.....	247,760	291,480	284,400	247,500	319,550	76	84	79	66	83	1922....	291,300	304,000	64	2,334,720
November.....	211,900	246,370	252,000	243,750	281,050	65	71	70	65	73	1923....	300,300	312,000	65	2,433,600
December.....	202,120	263,720	241,200	236,250	277,200	62	76	67	63	72	1924....	313,400	326,000	68	2,660,160
Total.....	2,669,940	2,998,080	3,214,800	2,853,750	3,072,300						1925....	329,900	347,000	72	2,998,080
Monthly average.....	222,495	249,840	267,900	237,813	256,025	68	72	74	63	67	1926....	343,700	360,000	67	2,894,400
											1927....	363,000	375,000	68	3,060,000
											1928....	373,500	385,000	71	3,280,200

¹ Fabricated structural steel data compiled by the *Bridge Builders and Structural Society* up to April, 1922, and since then by *U. S. Department of Commerce, Bureau of the Census*, including reports from the *Structural Steel Society*. Percentages of capacity calculated from reports of the *Bridge Builders and Structural Society* up to April, 1922, and applied to estimated total capacity each year based on a special annual survey by the *Bureau of the Census*. Beginning with April, 1922, reports received from 212 firms (and in addition 30 firms now out of business) with a total capacity of 245,140 tons in 1922, 253,020 tons in 1923, 266,155 tons in 1924, 282,675 tons in 1925, 291,315 tons in 1926, 312,895 tons in 1927, and 322,960 tons in 1928, have been prorated to the estimated total capacity of the United States, 304,000 tons in 1922 and 312,000 tons in 1923, 326,000 tons in 1924, 347,000 tons in 1925, 360,000 tons in 1926, 375,000 tons in 1927, and 385,000 tons in 1928 for comparison with previous figures.

² Nine months.

STEEL CASTINGS ¹

MONTH	NEW ORDERS, TOTAL																	
	Short tons									Per cent of capacity								
	1920	1921	1922	1923	1924	1925	1926	1927	1928	1920	1921	1922	1923	1924	1925	1926	1927	1928
January	81,290	39,608	45,724	126,481	69,872	104,179	112,322	108,063	91,448	65	32	37	98	52	76	80	75	62
February	85,849	37,230	48,687	112,399	91,502	81,930	101,495	94,938	91,076	69	30	40	87	68	60	73	66	62
March	128,363	32,709	62,454	172,101	126,986	83,812	113,770	90,353	83,755	103	26	51	133	94	61	81	62	57
April	101,371	26,045	89,822	118,196	93,518	87,556	91,540	81,403	84,086	81	21	73	92	69	64	66	56	57
May	100,088	24,118	95,513	117,834	79,988	78,417	84,451	73,043	86,796	80	19	76	91	59	57	60	50	59
June	88,252	23,983	106,175	109,756	68,019	66,437	73,785	91,199	72,107	71	19	86	85	50	48	53	63	49
July	82,188	21,830	83,996	73,600	54,538	72,294	79,798	74,569	66,992	66	17	68	57	40	53	57	52	45
August	81,443	25,408	82,613	76,208	50,321	71,160	71,325	63,938	81,286	65	20	67	59	37	52	51	44	55
September	83,142	29,697	116,437	71,506	76,005	62,198	69,740	52,742	82,762	67	24	94	55	56	45	50	36	56
October	62,057	39,847	98,319	64,677	83,221	80,510	77,836	52,160	78,860	50	32	80	50	61	59	56	36	54
November	55,313	50,391	82,393	63,870	91,388	86,957	73,477	63,075	84,742	44	40	67	50	67	63	53	44	58
December	48,002	41,299	89,892	61,016	115,605	105,893	90,143	77,436	96,373	39	33	73	47	85	77	65	54	65
Total	997,358	392,165	1,002,025	1,167,644	1,000,963	981,343	1,039,682	922,919	1,000,283	67	26	68	75	62	60	62	53	57
Monthly average	83,113	32,680	83,502	97,304	83,414	81,779	86,640	76,910	83,357									

MONTH	RAILWAY SPECIALTIES									MISCELLANEOUS								
	Short tons									Short tons								
	1920	1921	1922	1923	1924	1925	1926	1927	1928	1920	1921	1922	1923	1924	1925	1926	1927	1928
January	29,608	15,968	26,469	63,633	29,658	52,392	53,368	53,461	41,276	51,682	23,640	19,255	62,848	40,214	51,787	58,954	54,602	50,172
February	30,147	17,636	24,970	52,272	44,804	38,299	46,455	41,355	41,096	55,702	19,594	23,717	60,127	46,698	43,631	55,010	53,583	49,980
March	67,272	13,446	32,112	93,690	75,929	35,012	50,229	34,680	30,992	61,091	19,263	30,342	78,411	51,057	48,800	63,541	55,673	52,763
April	45,356	9,065	55,124	55,613	49,896	39,797	27,678	32,279	32,810	56,015	16,980	34,698	62,583	43,622	47,759	63,862	49,124	51,276
May	44,965	8,105	52,132	55,137	42,490	34,877	33,323	28,946	34,995	55,123	16,013	41,381	62,697	37,498	43,540	51,128	44,097	51,801
June	31,974	8,775	61,149	55,903	36,985	24,277	18,180	39,455	22,597	56,278	15,208	45,026	53,853	31,034	42,160	55,605	51,744	49,510
July	34,789	7,691	43,127	28,092	25,309	28,050	30,969	31,011	20,483	47,399	14,139	40,869	45,508	29,229	44,244	48,829	43,558	46,509
August	37,640	10,291	33,273	34,210	21,705	27,259	24,413	21,144	25,171	43,803	15,117	49,340	24,998	28,616	43,901	46,912	42,794	56,115
September	41,187	13,140	68,106	37,028	36,092	21,268	22,761	18,396	35,234	41,955	16,557	48,331	34,478	39,913	40,930	46,979	34,346	47,528
October	24,793	20,961	49,223	27,532	39,405	29,734	28,980	16,625	26,736	37,264	18,886	49,096	37,145	43,816	50,776	48,856	35,535	52,124
November	23,144	26,362	35,554	27,985	50,857	39,459	28,678	27,639	34,535	32,169	24,029	46,839	35,885	40,531	47,498	44,799	35,436	50,197
December	18,768	21,005	40,521	27,379	63,947	53,223	39,881	39,112	43,228	29,234	20,294	49,371	33,637	51,658	52,670	50,262	38,324	52,445
Total	429,643	172,445	521,760	558,474	517,077	423,647	404,945	384,103	389,863	567,715	219,720	478,265	609,170	483,886	557,696	634,737	538,816	610,420
Mo. av.	35,804	14,370	43,480	46,540	43,090	35,304	33,745	32,009	32,489	47,310	18,310	39,855	50,764	40,324	46,475	52,895	44,901	50,868

MONTH	PRODUCTION											CAPACITY			NEW ORDERS			PER CENT OF CAPACITY				
	Total			Railway specialties			Miscellaneous					Total	Railway specialties	Miscellaneous	Total	Railway specialties	Miscellaneous					
	1926	1927	1928	1926	1927	1928	1926	1927	1928	1926	1927							1928				
	Short tons			Per cent capacity			Short tons					Short tons (average monthly)										
January	96,947	87,307	74,454	69	60	51	38,935	34,037	28,714	58,009	53,333	45,740	1913--	87,800	38,500	49,300	60,764	30,638	30,126	69	80	61
February	95,795	89,170	87,727	69	62	60	42,044	35,322	37,719	52,851	53,848	50,008	1914--	88,700	38,700	50,000	45,814	22,857	22,957	52	59	46
March	115,503	103,148	93,989	83	71	64	40,995	41,232	38,448	65,608	61,916	55,541	1915--	92,500	42,200	50,300	66,501	31,537	34,964	72	75	79
April	113,719	95,036	86,016	81	66	58	45,718	39,189	32,619	68,001	55,847	53,397	1916--	98,000	42,400	55,600	106,454	59,002	47,452	109	139	85
May	103,080	87,241	93,333	74	60	63	46,063	35,236	36,599	57,017	52,005	56,734	1917--	107,200	46,400	60,800	95,457	40,379	55,078	89	87	91
June	99,070	88,065	91,746	71	61	62	36,564	34,596	30,742	62,506	53,469	61,004	1918--	111,700	46,400	65,300	113,971	51,084	62,887	102	110	96
July	90,897	80,045	78,648	65	55	53	32,677	32,576	27,501	58,220	47,469	51,147	1919--	116,600	46,600	70,000	48,171	16,788	31,383	41	36	45
August	85,067	87,418	87,742	61	60	60	28,163	32,397	27,157	56,904	55,021	60,585	1920--	124,800	51,800	73,000	83,113	35,803	47,310	67	69	65
September	82,870	70,409	75,761	59	49	51	24,424	25,618	25,311	58,446	44,791	50,450	1921--	125,400	51,800	73,600	62,680	14,370	18,310	26	28	25
October	83,087	82,813	87,952	59	43	60	26,915	21,947	29,471	56,172	40,866	58,481	1922--	123,300	54,300	69,000	83,335	43,480	39,856	68	80	58
November	88,757	59,387	82,385	64	41	56	25,024	19,146	30,799	63,733	40,241	51,586	1923--	129,100	57,300	71,800	97,303	46,539	50,764	75	81	71
December	85,067	58,708	82,203	61	40	56	29,591	19,358	26,484	55,476	39,350	55,719	1924--	135,700	61,500	74,200	83,413	43,090	40,323	61	70	54
Total	1,139,859	968,810	1,021,956	68	56	58	427,016	370,654	371,564	712,843	598,156	650,392	1925--	137,300	61,600	75,700	81,778	35,304	46,474	60	67	61
Mo. av.	94,988	80,734	85,163	68	56	58	35,585	30,888	30,964	59,404	49,846	54,199	1926--	139,800	63,500	76,300	86,640	33,745	52,895	62	53	69
													1927--	144,800	66,600	78,200	76,910	32,008	44,902	53	48	57
													1928--	147,400	67,700	79,700	83,357	32,489	50,868	57	48	64

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census, from reports of 130 identical firms, including reports collected through the Steel Founders' Society. These firms have a monthly capacity of 147,400 tons, at present representing over 80 per cent of the capacity of the industry for commercial castings (as distinguished from castings used in further manufacture in the same plant), of which 67,700 tons is usually devoted to railway specialties and represents the complete capacity of that branch, while 79,700 tons is generally devoted to miscellaneous castings. New orders for 1925 were 6 per cent larger than the production of direct steel castings manufactured for sale and interplant transfer by steel works and rolling mills, and represented 83 per cent of the total of these direct steel castings and of steel castings manufactured in the foundry and machine shop industry according to the census of manufacture for 1925. Railway specialties include such items as bolsters, side arms, draft arms, couplers, and cast steel car wheels. Owing to reports from additional firms, these figures represent revisions of those shown in the Record Book of Business Statistics, Metals and Machinery Section. This table revises all data previously shown on this subject in the SURVEY OF CURRENT BUSINESS.

STEEL BOILERS, NEW ORDERS ¹

MONTH	GRAND TOTAL		TOTAL		WATER TUBE		HORIZONTAL RETURN TUBULAR		STEEL HEATING		MISCELLANEOUS	
	1927	1928	1927	1928	1927	1928	1927	1928	1927	1928	1927	1928
Number												
January.....	1,347	1,244	1,328	1,229	114	84	115	89	559	769	13	19
February.....	1,250	1,171	1,236	1,137	110	98	106	87	595	682	5	4
March.....	1,700	1,462	1,682	1,440	132	132	199	113	853	859	11	16
April.....	1,775	1,567	1,765	1,539	121	132	188	106	1,059	1,020	19	13
May.....	1,672	1,836	1,663	1,828	122	114	169	141	1,064	1,269	7	13
June.....	1,795	1,887	1,773	1,861	147	138	194	156	1,071	1,215	6	9
July.....	1,822	1,932	1,770	1,911	113	138	189	148	1,088	1,299	16	8
August.....	1,907	2,018	1,881	2,001	142	122	191	199	1,135	1,288	11	18
September.....	1,597	1,749	1,575	1,731	79	104	174	135	1,023	1,151	11	17
October.....	1,538	1,803	1,529	1,793	72	86	124	160	1,062	1,195	11	6
November.....	1,459	1,660	1,445	1,650	97	95	116	108	944	1,055	18	43
December.....	1,246	1,343	1,223	1,321	80	72	117	71	750	883	14	8
Total.....	19,108	19,672	18,870	19,441	1,329	1,315	1,882	1,513	11,203	12,685	142	174
Monthly average.....	1,592	1,639	1,573	1,620	111	110	157	126	934	1,057	12	15
Thousands of square feet												
January.....	1,431	993	1,411	974	672	347	133	141	255	359	6	12
February.....	1,488	1,285	1,462	1,084	795	525	142	123	286	320	2	1
March.....	1,665	1,470	1,634	1,448	714	725	217	132	419	437	4	9
April.....	1,645	1,460	1,639	1,406	714	595	233	128	522	536	9	9
May.....	1,529	1,661	1,526	1,654	677	770	187	176	504	568	2	3
June.....	1,524	1,666	1,500	1,635	581	649	240	188	526	568	2	5
July.....	1,984	1,738	1,954	1,683	537	587	244	198	549	685	9	4
August.....	1,825	1,691	1,763	1,677	739	560	237	233	566	632	5	8
September.....	1,327	1,453	1,308	1,418	445	436	220	154	495	591	9	8
October.....	1,088	1,500	1,079	1,482	338	514	153	193	468	567	9	2
November.....	1,266	1,460	1,257	1,454	534	593	133	131	445	497	14	11
December.....	1,024	1,308	1,011	1,230	396	609	142	87	326	392	7	4
Total.....	17,796	17,685	17,144	17,145	7,142	6,910	2,281	1,884	5,361	6,152	78	76
Monthly average.....	1,483	1,474	1,429	1,429	595	576	190	157	447	513	7	6

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census, from reports of 72 firms estimated to represent about 90 per cent of the capacity of the industry. Data for classifications included in these totals, covering the principal types of stationary and marine boilers are given in press releases. This table revises all data previously shown on this subject in the SURVEY OF CURRENT BUSINESS and in the Record Book of Business Statistics, Metals and Machinery Section.

MALLEABLE CASTINGS ¹

[Short tons]

MONTH	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928
	PRODUCTION											
Total						Ratio to capacity (per cent)						
January.....	75,550	71,188	66,776	56,627	61,072	62.7	58.9	57.4	52.0	62.7	62.7	62.7
February.....	77,203	64,825	71,161	62,335	65,359	65.2	53.9	61.1	57.8	66.8	66.8	66.8
March.....	80,600	65,889	80,116	72,205	70,070	68.5	54.8	68.9	65.7	73.0	73.0	73.0
April.....	66,923	67,608	72,241	64,612	63,380	56.6	56.4	62.7	59.1	66.0	66.0	66.0
May.....	76,818	57,583	65,714	65,106	62,747	73.6	48.9	55.2	56.9	57.2	70.7	70.7
June.....	75,810	39,985	63,343	66,358	64,310	69.2	34.1	52.7	57.3	58.5	69.9	69.9
July.....	68,306	36,562	61,727	60,384	53,046	61.1	31.0	51.3	52.9	49.3	63.1	63.1
August.....	80,030	40,188	61,042	62,218	57,096	68.7	33.9	50.6	54.6	52.4	72.1	72.1
September.....	71,654	45,105	62,798	63,399	50,807	62.1	38.0	52.2	56.4	47.6	66.3	66.3
October.....	74,724	54,638	73,195	62,321	52,458	63.6	45.6	61.8	55.5	50.0	73.4	73.4
November.....	63,057	51,862	65,248	50,046	46,698	52.6	43.4	55.8	45.9	44.4	66.8	66.8
December.....	58,488	63,523	70,622	55,561	53,824	47.7	52.9	59.9	49.4	51.2	63.4	63.4
Total.....	² 568,887	689,722	793,199	76,587	696,765	779,481	² 62.3	48.4	55.3	56.6	53.8	67.9
Monthly average.....	² 71,111	57,477	66,100	64,716	58,064	64,957						
SHIPMENTS						NEW ORDERS						
January.....	77,261	63,980	60,817	54,747	55,432	88,232	67,312	74,545	61,597	62,328	62,328	62,328
February.....	70,257	65,135	68,628	60,775	61,011	76,221	55,638	67,188	68,767	64,419	64,419	64,419
March.....	73,916	71,199	76,151	71,609	71,224	72,319	64,619	69,174	66,376	70,288	70,288	70,288
April.....	65,361	70,829	72,322	66,811	65,001	56,645	66,360	63,096	64,427	62,056	62,056	62,056
May.....	75,214	62,263	69,721	64,379	63,885	65,823	39,705	59,232	50,109	57,311	63,847	63,847
June.....	75,565	44,213	67,668	68,128	62,316	66,737	30,191	55,693	55,796	54,456	61,071	61,071
July.....	70,470	42,109	62,573	60,552	54,240	60,084	51,976	35,941	65,220	53,484	60,964	60,964
August.....	76,522	40,601	60,242	62,420	57,193	66,962	54,731	38,548	56,511	62,264	51,368	66,128
September.....	59,649	44,055	62,347	60,067	52,722	61,736	48,958	53,163	58,098	57,155	46,161	61,163
October.....	71,619	49,417	69,100	58,993	48,724	63,510	63,893	59,946	75,039	55,085	48,062	65,780
November.....	59,498	47,934	64,043	49,618	44,983	58,346	50,438	53,304	63,895	47,345	43,202	59,664
December.....	55,450	56,112	67,337	49,663	49,989	56,861	56,828	62,249	63,144	49,558	57,579	61,319
Total.....	² 543,987	673,499	794,174	751,738	687,494	752,727	² 444,507	666,464	750,761	712,770	672,790	759,027
Monthly average.....	² 67,998	56,125	66,181	62,645	57,291	62,727	² 55,563	55,539	62,563	59,398	56,066	63,252

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census, representing reports from 137 establishments covering most of the industry. New orders were furnished by 133 firms. This table revises all data on malleable castings previously shown, on this subject, in the SURVEY OF CURRENT BUSINESS and the Record Book of Business Statistics, Metals and Machinery Section.

² Eight months.

AGRICULTURAL MACHINERY ¹

[Relative numbers, 1923-25 monthly average=100]

MONTH	PRODUCTION						SHIPMENTS																	
							Total						Domestic						Foreign					
	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928
January.....	108.9	96.1	98.5	130.7	119.6	130.7	72.4	69.9	86.4	119.0	103.7	115.7	81.5	75.1	85.6	119.4	105.6	116.8	24.6	42.5	90.8	116.9	93.5	109.9
February.....	113.5	98.9	103.6	130.7	121.4	136.5	79.5	93.2	103.2	152.2	140.4	168.8	86.7	97.4	108.9	147.4	133.5	159.4	42.1	70.8	73.1	177.3	176.2	218.2
March.....	118.0	97.4	106.6	133.4	119.1	143.9	107.2	109.0	135.6	176.4	187.4	216.0	117.8	107.3	142.8	176.7	185.1	216.8	52.1	118.3	98.0	175.0	199.8	211.4
April.....	118.1	98.5	105.8	133.5	122.7	148.3	101.3	105.1	138.4	146.3	152.3	187.2	107.0	100.4	137.8	147.5	154.8	184.4	71.2	129.6	141.4	140.3	139.2	201.8
May.....	115.9	88.6	104.9	129.4	119.3	146.0	107.6	88.2	121.9	154.1	149.1	186.6	108.9	91.0	126.6	155.9	153.9	186.2	100.9	73.9	96.9	144.4	124.0	188.3
June.....	108.0	80.1	103.4	125.8	116.7	142.6	113.0	90.6	126.3	180.7	167.6	219.3	118.6	95.2	133.9	191.4	176.2	222.5	83.9	66.4	86.3	124.4	123.0	202.7
July.....	103.3	74.6	101.9	122.8	113.8	142.5	109.2	98.7	138.0	156.4	158.5	211.7	112.7	105.0	141.9	162.5	158.5	206.1	90.4	65.7	117.6	124.5	158.8	241.0
August.....	95.6	76.3	108.0	122.6	115.6	146.1	113.5	104.4	142.9	154.3	177.6	219.7	102.9	105.3	135.7	141.8	166.8	187.5	169.3	99.5	180.4	219.7	234.0	387.5
September...	91.8	79.6	114.9	122.3	106.2	145.5	95.8	101.1	132.0	123.5	157.2	179.2	76.4	96.5	114.4	112.4	134.4	145.7	197.5	125.3	233.8	182.1	277.0	354.0
October.....	90.2	79.3	112.9	118.8	112.4	148.5	81.7	79.6	104.9	84.7	121.5	153.4	76.5	77.4	100.9	81.8	110.7	129.1	109.4	91.2	125.7	99.8	178.0	280.3
November.....	92.9	87.6	116.9	118.5	115.0	154.6	60.5	64.3	84.5	77.0	87.3	108.2	59.2	63.4	81.0	68.4	80.0	79.6	67.1	69.2	103.0	121.9	125.6	257.4
December.....	92.9	92.6	127.0	117.1	127.5	159.1	63.4	73.0	103.8	82.8	90.7	124.3	61.3	71.7	95.4	80.4	82.4	88.9	74.3	79.7	147.9	95.8	133.8	294.0
Mo. av....	104.1	87.2	108.7	125.5	117.4	145.4	92.1	89.8	118.2	134.0	141.1	174.2	92.5	90.5	117.1	132.1	136.8	160.3	90.2	86.0	123.7	143.5	163.6	245.5

¹ Compiled by the Federal Reserve Bank of Chicago covering 83 manufacturers estimated to represent 80 per cent of the industry. The production figures are based on the employment data of 82 firms and the figures on the value of goods shipped by 83 firms (56 reporting foreign shipments). The total shipment group is made up of three separate groups, the heavy, light, and barn equipment groups. The heavy group is comprised of threshers, tractors, and combines; the light group consists of all classes of agricultural machinery and equipment not included in the heavy machinery and barn equipment groups. For the 3-year period, July, 1925, to June, 1928, inclusive, the average distribution of total sales were as follows: Heavy group, 45.1 per cent; light group, 52.7; and barn equipment, 2.2. Details for each class, segregated as to foreign and domestic shipments, are shown separately in the monthly summaries of the Federal Reserve Bank of Chicago. These data revise all previously shown, on this subject, in the SURVEY OF CURRENT BUSINESS and the Record Book of Business Statistics, Metals and Machinery Section.

ADDITIONAL PRELIMINARY RETURNS, CENSUS OF MANUFACTURES, 1927 ¹

INDUSTRY	VALUE OF PRODUCTS			PERSONS EMPLOYED			INDUSTRY	VALUE OF PRODUCTS			PERSONS EMPLOYED		
	1927	1925	Per cent in-crease (?)	1927	1925	Per cent in-crease (?)		1927	1925	Per cent in-crease (?)	1927	1925	Per cent in-crease (?)
	Thousands of dollars			Number				Thousands of dollars			Number		
Acids.....	87,129	80,151	8.7				Motion pictures.....	134,343	93,636	43.5	8,415	5,573	51.0
Adding machines, calculating machines, and cash registers.....	106,845	98,384	8.6	14,372	13,296	8.1	Mattresses and bed springs.....	98,834			13,474		
Aluminum manufactures.....	123,557	127,831	-3.3	14,798	14,353	3.1	Mechanical refrigerators.....	96,514			11,285		
Artificial limbs.....	3,216	3,021	6.4	592	562	5.3	Men's straw hats.....	21,718			3,263		
Bags, other than paper.....	162,950	175,082	-6.9	11,164	11,404	-2.1	Men's collars.....	13,264	27,588	-51.9	3,270	7,187	-54.5
Buttons.....	29,130	32,458	-10.3	9,642	11,513	-16.3	Mirror and picture frames.....	19,489	19,170	1.7	4,460	4,230	5.4
Clay products and nonclay refractories.....	429,972	444,808	-3.3				Metal doors, shutters, and window sash and frames.....	65,280	50,078	30.4	8,042	6,791	18.4
Clocks, watches, and parts.....	85,392	81,790	4.4	25,822	25,841	-0.1	Motor-vehicle bodies and motor-vehicle parts.....	1,151,426	1,523,280	-24.4	181,489	228,382	-20.5
Cloth hats and caps.....	41,214	43,823	-6.0	6,250	6,552	-4.6	Mirrors.....	31,425	34,949	-10.1	4,308	4,153	3.7
Compressed and liquified gases.....	50,547	46,003	9.9	38,549	36,299	6.2	Musical instruments.....	75,491	101,181	-25.4	16,582	20,079	-17.4
Confectionery.....	391,927	379,081	3.4	63,163	63,600	-0.7	Millinery.....	209,495			33,311		
Cast-iron pipe.....	95,089	100,919	-5.8	22,892	23,033	-0.6	Nitrogen and fixed-nitrogen compounds.....	25,254	29,659	-18.2			
Cordage and twine, jute goods, and linen goods.....	122,736	139,122	-11.8	22,972	24,319	-5.5	Paper and wood pulp.....	1,138,090			123,360		
Corsets and allied garments.....	77,218	77,115	0.1	13,778	14,525	-5.1	Peanuts, walnuts, and other nuts, processed.....	55,647			7,345		
Cutlery (not including silver and plated cutlery) and edge tools.....	76,688	80,263	-4.5	17,178	16,407	4.7	Phonographs.....	94,816	61,057	55.3	14,066	11,267	24.8
Brooms.....	18,445	21,714	-15.1	4,450	4,725	-5.8	Plated ware.....	56,720	54,330	4.4	11,752	11,290	4.1
Domestic oil burners.....	10,904						Potassium compounds.....	9,228	6,071	52.0			
Druggists' preparations.....	110,309	95,420	15.6	10,138	9,685	4.7	Rice cleaning and polishing.....	54,130	53,498	1.2	1,524	1,296	17.6
Explosives.....	72,490	69,669	4.0	5,803	5,697	1.9	Rubber goods, other than tires, inner tubes, and boots and shoes.....	230,646	219,869	4.9	36,876	41,886	-12.0
Ethyl alcohol.....	33,971	57,706	-41.1	1,180	1,395	-15.4	Saddlery and harness.....	27,356	30,084	-9.1	4,023	4,570	-12.0
Felt goods.....	41,895	43,776	-4.3	5,452	5,146	5.9	Safes and vaults, not including burial vaults.....	18,440	20,277	-9.1	3,386	3,616	-6.4
Bone black, carbon black, and lamp black.....	14,262	14,565	-2.1	1,553	1,505	3.2	Saws.....	22,628	24,709	-8.4	4,182	4,710	-11.2
Files.....	12,974	13,541	-4.2	3,948	4,209	-6.2	Silversmithing and silverware.....	30,204	32,532	-7.2	4,896	5,587	-12.4
Cottonseed products.....	275,651			18,384			Soda-water apparatus.....	23,929	22,032	8.6	2,838	2,372	19.6
Flags and banners.....	4,536	4,588	-1.1	1,046	1,031	1.5	Shirts.....	241,650	225,963	6.9	57,216	49,864	14.7
Fertilizers.....	190,385	206,773	-7.9	18,612	19,644	-5.3	Sodium compounds.....	109,632	109,522	0.1			
Flavoring extracts and flavoring sirups.....	107,219	94,212	13.8	5,011	3,890	28.8	Slaughtering and meat packing, wholesale.....	3,057,216	3,050,286	0.2	119,095	120,422	-1.1
Excelsior.....	4,821	4,901	-1.6	1,272	1,300	-2.2	Stereotyping and electrotyping.....	25,549	22,361	14.3	4,502	4,283	5.1
Fountain and stylographic pens.....	23,255	24,035	-3.2	3,360	3,490	-3.7	Stoves and ranges, domestic-heating apparatus, and steam fittings.....	483,444	493,233	-2.0	87,664	89,774	-2.4
Bread and other bakery products.....	1,377,731	1,268,195	8.6	171,899	160,411	7.2	Suspenders, garters, and other elastic woven goods.....	26,985	27,504	-1.9	4,061	3,835	5.9
Fur-felt hats.....	99,300	80,066	24.0	15,927	15,156	5.1	Tin plate and terneplate.....	193,894	190,918	1.6			
Furniture, store and office fixtures.....	879,706	868,146	1.3	186,303	180,895	3.0	Textile machinery and parts.....	117,018	121,653	-3.8	26,155	27,869	-6.2
Lithographing.....	97,050	98,721	-1.7	16,348	16,957	-3.6	Tin cans and utensils.....	253,479	260,360	-2.6	29,721	29,901	-0.6
Generators, transformers, motors, and electric fans.....	115,130	110,185	4.5				Tin and other foils, not including gold and silver; collapsible tubes.....	32,302	30,060	7.5	3,642	3,618	0.7
Hardware.....	208,254			47,834			Tobacco pipes.....	7,274	7,299	-0.3	1,807	1,970	-8.3
Glue and gelatin.....	31,196	25,764	21.1	3,226	3,325	-3.0	Umbrellas, parasols, and canes.....	23,157	27,299	-15.2	3,308	3,731	-11.3
Handkerchiefs.....	31,588			6,659			Wall plaster, wall board, and floor composition.....	83,856	90,957	-7.8	10,014	10,978	-8.8
Gold leaf.....	3,571	3,746	-4.7	1,146	1,148	-0.2	Washing machines, wringers, driers, and ironing machines, for household use.....	74,951	69,568	7.7	7,789	7,077	10.1
Lumber and timber products.....	1,214,646	1,421,162	-14.5	418,166	467,090	-10.5	Wood turned and shaped and other wooden goods.....	42,091	35,491	18.6	11,856	10,352	14.5
Ice cream.....	301,512	286,176	5.4	21,912	23,043	-4.9							
Ice refrigerators.....	58,163	57,666	0.9	9,551	9,360	2.0							
Jewelry and instrument cases.....	8,810	10,114	-12.9	2,673	2,748	-2.7							
Macaroni, spaghetti, vermicelli, and noodles.....	45,353	43,489	4.3	4,587	4,560	0.6							
Manufactured fuel.....	7,203	6,019	19.7	274	246	11.4							
Jewelry.....	164,865	166,816	-1.2	24,116	23,837	1.2							
Manufactured ice.....	184,290	186,969	-1.4	22,089	24,915	-11.3							

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census, from reports collected in connection with the census of manufactures. Data for other industries will appear as they are completed. Statistics in greater detail may be obtained from the bureau's preliminary statements on the respective industries.

² A minus sign (-) denotes decrease.

TREND OF BUSINESS MOVEMENTS

The following table contains a summary of the monthly figures, designed to show the trend in important industrial and commercial movements. These data represent continuations of the figures presented in the latest semiannual number (February, 1929), in which monthly figures for 1927 and 1928 may be found, together with explanations as to the sources and exact extent of the figures quoted. The figures given below should always be read in connection with those explanations. Data on stocks, unfilled orders, etc., are given as of the end of the month referred to. For explanations or relative numbers, including base periods, see introduction on inside front cover.

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey".	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
TEXTILES												
Wool												
Receipts at Boston:												
Total.....thous. of lbs.	29,720	10,315	8,090	12,746	14,524	19,673	17,281	+35.5	+13.8	343,549	300,892	-12.4
Domestic.....thous. of lbs.	25,802	7,156	4,598	9,322	7,293	4,532	8,044	-37.9	-43.7	219,139	210,521	-4.0
Foreign.....thous. of lbs.	3,918	3,159	3,492	3,424	7,231	15,141	9,237	+109.4	+63.9	124,360	90,371	-27.3
Imports:												
In condition imported.....thous. of lbs.	14,472	14,510	20,730	15,587	20,293	36,523	24,759	+80.0	+47.5	266,659	244,603	-8.3
Grease equivalent.....thous. of lbs.	16,078	17,015	24,193	18,488	24,411	38,835	28,353	+59.1	+37.0	304,825	278,255	-8.7
Consumption by textile mills, grease equivalent.....thous. of lbs.	45,103	43,492	51,477	50,079	45,888	54,031	45,087	+17.7	+19.8	551,529	538,354	-2.4
Stocks, grease equivalent, end of quarter:												
Total.....thous. of lbs.		2 369,816			2 309,566		2 303,668	-16.3	+1.9			
Held by manufacturers.....thous. of lbs.		2 158,346			2 152,394		2 168,458	-3.8	-9.5			
Held by dealers.....thous. of lbs.		2 211,470			2 157,171		2 135,210	-25.7	+16.2			
Machinery, activity, hourly:												
Looms:												
Wide.....per ct. of hours active	55	59	67	70	69	69	62	0.0	+11.3			
Narrow.....per ct. of hours active	48	53	66	66	55	63	52	+14.5	+21.2			
Carpet and rug.....per ct. of hours active	63	62	67	68	62	65	68	+4.8	-4.4			
Sets of cards.....per ct. of hours active	77	85	93	89	83	84	78	+1.2	+7.7			
Combs.....per ct. of hours active	65	74	82	81	74	83	75	+12.2	+10.7			
Spinning spindles:												
Woolen.....per ct. of hours active	74	80	88	85	80	82	78	+2.5	+5.1			
Worsted.....per ct. of hours active	58	62	68	72	66	69	66	+4.5	+4.5			
Prices:												
Raw, territory, fine, scoured.....dolls. per lb.	1.14	1.14	1.10	1.12	1.14	1.12	1.17	-1.8	-4.3			
Raw, Ohio and Pa. fleeces.....dolls. per lb.	.54	.54	.54	.55	.55	.55	.50	0.0	+10.0			
1/4 blood, combing, grease.....dolls. per lb.	1.60	1.58	1.58	1.55	1.58	1.58	1.43	0.0	+10.5			
Worsted yarn.....dolls. per lb.												
Women's dress goods, French serge, 39-in.....dolls. per yd.	1.03	.99	.98	.98	.98	.98	1.00	0.0	-2.0			
Suiting, 13-oz.....dolls. per yd.	2.008	2.008	2.008	2.008	2.008	2.008	1.935	0.0	+3.8			
Cotton												
Receipts into sight.....thous. of bales	509	2,027	3,927	2,902	2,343	1,112	915	-52.5	+21.5	16,211	16,069	-0.9
Imports, unmanufactured.....bales	25,258	18,508	27,840	39,213	39,630	54,939	41,445	+38.6	+32.6	411,217	342,996	-16.6
Exports, unmanufactured (including lintners).....bales	259,489	814,569	1,251,966	1,451,505	1,088,253	815,871	728,935	-25.0	+11.9	9,477,744	8,731,933	-7.9
Consumption by textile mills.....bales	526,729	492,221	618,788	610,884	534,352	668,389	586,142	+25.1	+14.0	7,405,021	6,575,685	-11.2
Stocks, domestic, end of month:												
Total, mills and w'houses.....thous. of bales	1,971	3,366	5,831	6,820	7,056	6,383	6,722	-9.5	-5.0			
Mills.....thous. of bales	782	720	1,195	1,567	1,741	1,768	1,709	+1.6	+3.5			
Warehouses.....thous. of bales	1,189	2,646	4,636	5,253	5,315	4,615	5,014	-13.2	-8.0			
Stocks, world visible, end of month:												
Total.....thous. of bales	3,480	4,114	6,198	7,130	7,766	7,607	7,163	-2.0	+6.2			
American.....thous. of bales	1,790	2,563	4,645	5,438	5,900	5,510	5,470	-6.6	+0.7			
Prices:												
To producer.....dolls. per lb.	.188	.176	.181	.178	.180	.179	.186	-0.6	-3.8			
In New York, middling.....dolls. per lb.	.193	.185	.196	.199	.205	.202	.190	-1.5	+6.3			
Cotton Yarn												
Machinery activity of spindles:												
Active spindles.....thousands	28,244	28,277	30,315	30,597	30,622	30,758	31,717	+0.4	-3.0			
Total activity.....millions of hours	7,431	6,961	8,694	8,524	7,711	9,225	8,263	+19.6	+11.6			
Activity per spindle.....hours	269	196	246	241	219	261	227	+19.2	+15.0			
Ratio capacity.....per cent.	87.7	90.6	103.9	108.1	99.1	111.6	101.0	+12.6	+10.5			
Carded sales yarn:												
Production.....thous. of lbs.	14,046	18,839	17,621	18,675	20,157	18,311	18,934	-9.2	-3.3		214,544	
Stocks, end of month.....thous. of lbs.	11,574	10,248	8,476	8,568	8,204	8,836	13,444	+7.7	-34.3			
Unfilled orders, end of mo.....thous. of lbs.	27,044	34,836	39,041	44,752	43,618	43,246	38,287	-0.9	+13.0			
Prices:												
22/1 cones, Boston.....dolls. per lb.	.369	.358	.372	.375	.378	.382	.369	+1.1	+3.5			
40/1s, southern spinning.....dolls. per lb.	.514	.501	.495	.511	.506	.510	.523	+0.8	-2.5			
Cotton Goods												
Cotton textiles:												
Production.....thous. of yds.	302,470	253,688	284,899	341,841	279,207	342,806	297,669	+22.8	+15.2	3,334,232	3,563,096	+6.9
New orders.....thous. of yds.	340,810	387,151	401,953	375,163	225,189	317,078	194,114	+40.8	+63.3	3,302,466	3,589,989	+8.7
Shipments.....thous. of yds.	324,073	278,110	307,402	347,949	276,098	345,354	266,947	+25.1	+29.4	3,261,613	3,507,854	+7.5
Stocks, end of month.....thous. of yds.	441,667	417,245	394,742	388,634	391,743	389,195	367,223	-0.7	+6.0			
Unfilled orders, end of mo.....thous. of yds.	288,964	398,005	492,556	519,770	468,561	440,585	313,893	-6.0	+40.4			
Fine cotton goods, production.....pieces	136,237	113,627	282,763	348,712	363,206	403,300	401,676	+11.0	+4.4	5,770,419	3,135,814	-45.7
Cotton cloth:												
Imports.....thous. of sq. yds.	3,753	3,139	3,676	4,389	5,840	6,069	6,472	+3.9	-6.2	63,016	61,248	-2.8
Exports.....thous. of sq. yds.	43,928	34,694	56,087	54,248	50,661	51,337	34,963	+1.3	+46.8	551,846	524,525	-5.0

² Quarter ending in month indicated.

³ Quarter ending Dec. 31, 1927.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		or ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929	Jan., 1929	1927	1928	
								from Dec., 1928	from Jan., 1928			
TEXTILES—Continued												
Cotton Goods—Continued												
Fabric for tire manufacture, consumption.....thous. of lbs..	21,854	17,797	20,295	17,038	15,373	16,040				177,979	222,246	+24.9
Elastic webbing, shipments.....thous. of dolls..	1,399	1,478	1,624	1,462	1,260	1,412	1,159	+12.1	+21.8		16,725	
Prices:												
Print cloth, 64 x 60.....dolls. per yd..	.075	.074	.078	.078	.078	.076	.080	-2.6	-5.0			
Sheeting, brown.....dolls. per yd..	.091	.089	.090	.091	.091	.090	.098	-1.1	-8.2			
Cotton goods (Fairchild), rel. to 1911-1913..	163	160	163	164	165	165	166	0.0	-0.6			
Cotton Finishing												
White, dyed and printed (outside mills):												
Billings, finished goods.....thous. of yds..	70,748	69,805	83,935	82,700	79,112	82,518	68,737	+4.3	+20.0	1,013,493	901,194	-11.1
New orders, gray yardage.....thous. of yds..	71,743	74,483	87,175	82,657	74,417	87,082	75,665	+17.0	+15.1	980,525	891,586	-9.1
Shipments, finished goods.....cases..	46,283	45,767	50,984	49,136	47,587	54,576	44,673	+14.7	+22.2	593,138	558,750	-5.8
Stocks, finished goods, end mo.....cases..	35,819	33,410	32,046	36,566	38,678	36,374	40,751	-6.0	-10.7			
Operating activity.....per ct. of capacity..	54	61	66	65	62	65	62	+4.8	+4.8			
Unfilled orders, end of month.....days..	4.4	5.0	6.0	5.5	5.6	5.6	4.7	0.0	+19.1			
Printed only (mills and outside):												
Production.....thous. of yds..	54,495	66,079	77,320	76,289	73,753	82,259	49,826	+11.5	+65.1		794,192	
Stocks, end of month.....thous. of yds..	74,682	75,161	73,687	79,437	83,995	80,212		-4.5				
Silk												
Imports, raw.....thous. of lbs..	9,320	7,202	8,272	7,441	7,631	9,105	7,405	+19.3	+23.0	86,379	88,353	+2.3
Deliveries (consumption).....bales..	50,821	47,797	49,940	47,709	45,026	57,349	52,420	+27.4	+9.4	551,379	571,010	+3.6
Stocks, end of month:												
At warehouses.....bales..	50,975	50,464	49,381	49,806	48,908	49,943	47,528	+2.1	+5.1			
At manufacturing plants.....bales..	24,429	22,786	26,676	25,373	22,836	25,778	26,700	+12.9	-3.5			
Silk machinery activity:												
Broad looms.....per cent of normal..	89.8	92.7	102.0	94.5	92.7	94.7	94.6	+2.2	+0.1			
Narrow looms.....per cent of normal..	54.1	54.0	50.5	51.8	52.6	48.0	50.7	-8.7	-5.3			
Spinning spindles.....per cent of normal..	52.1	66.9	69.3	60.3	58.5	61.0	77.3	+4.3	-21.1			
Prices:												
Raw, Japanese, 13-15, N. Y.dolls. per lb..	4.851	5.096	5.145	5.047	4.998	4.998	5.145	0.0	-2.9			
Silk goods, Fairchild index.....dolls. per yd..	1.16	1.16	1.16	1.16	1.16	1.16	1.19	0.0	-2.5			
Rayon												
Imports.....thous. of lbs..	1,248	924	1,238	1,004	1,759	1,707	1,366	-3.0	+25.0	16,210	12,880	-20.5
Stocks, bonded, end of month.....thous. of lbs..	2,976	2,814	2,663	2,434	2,850	2,915	2,915					
Price, 150 denier, A grade, N. Y.dolls. per lb..	1.50	1.50	1.50	1.50	1.50	1.50	1.50					
Clothing												
Men's and boys' garments cut:												
Suits.....thous. of garments..	2,045	1,601	1,562	1,515	1,758	2,207	2,021			24,291	22,564	-7.1
Separate trousers.....thous. of garments..	1,895	1,852	1,884	1,543	1,501	2,021	2,021			24,752	21,844	-11.7
Overcoats.....thous. of garments..	666	647	711	463	304	269	269			5,579	5,147	-7.7
Overalls:												
Cut.....thous. of dozen garments..	394	385	404	343	274	354	354				4,327	
Net shipments.....thous. of dozen garments..	360	358	340	297	262	294	294				3,801	
Unfilled orders end of mo.....thous. of dozen garments..	159	161	174	230	263	99	99					
Hosiery												
Production.....thous. of dozen pairs..	4,374	3,255	3,852	3,810	3,002	3,578	3,578			44,985	41,230	-8.3
Net shipments.....thous. of dozen pairs..	4,735	3,755	4,166	4,144	3,360	3,038	3,038			45,357	42,160	-7.0
Stocks, end of month.....thous. of dozen pairs..	8,656	8,128	7,849	7,699	7,510	7,983	7,983					
New orders.....thous. of dozen pairs..	4,207	3,810	4,342	4,751	3,386	3,109	3,109			46,908	42,616	-9.1
Unfilled orders, end of mo.....thous. of dozen pairs..	4,079	3,957	3,888	4,609	4,403	5,380	5,380					
Knit Underwear												
Production.....thous. of dozen garments..	1,098	1,016	1,297	1,147	951	1,041	1,022	+9.5	+1.9	12,738	13,171	+3.4
Net shipments.....thous. of dozen garments..	1,306	1,402	1,514	1,168	873	917	917	+7.3	+2.2	13,245	13,340	+0.7
Stocks, end of mo.....thous. of dozen garments..	1,570	1,370	1,228	1,164	1,210	1,253	1,202	+3.6	+4.2			
New orders.....thous. of dozen garments..	1,236	1,213	1,483	1,163	819	1,428	1,309	+7.4	+9.1	13,482	13,164	-2.4
Unfilled orders, end of month.....thous. of dozen garments..	1,896	1,696	1,645	1,605	1,508	1,987	2,313	+31.8	-14.1			
Burlaps and Fibers												
Imports:												
Burlaps.....thous. of lbs..	47,766	43,617	30,874	31,503	51,656	57,109	48,922	+10.6	+16.7	569,671	619,969	+8.8
Fibers (unmanufactured).....long tons..	20,657	21,004	25,615	25,651	36,496	34,109	30,268	-6.5	-13.1	303,598	313,715	+3.3
Pyroxylin Coated Textiles												
Pyroxylin spread.....thous. of lbs..	5,596	4,844	5,712	5,366	4,763	5,389	4,093	+13.1	+31.7	42,713	61,134	+43.1
Shipments billed.....thous. of linear yards..	4,241	3,914	4,499	4,419	3,875	4,303	3,077	+11.0	+39.8	32,682	47,995	+46.9
Unfilled orders, end mo.....thous. of linear yards..	3,853	4,561	3,824	3,316	3,543	4,286	3,609	+21.0	+18.8			
Fur												
sales by dealers.....thous. of dollars..	12,110	10,244	12,576	7,960	5,553	7,081	7,081			170,723	134,088	-21.5
Buttons												
Fresh-water pearl buttons:												
Production.....ratio to capacity..	43.6	47.7	51.0	53.0	44.6	48.8	48.8					
Stocks, end of month.....thous. of gross..	10,746	10,593	10,621	10,815	10,865	10,902	10,902					

† Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929 from Dec., 1928	Jan., 1929 from Jan., 1928	1927	1928	
IRON AND STEEL												
Iron												
Manganese ore, imports...thous. of long tons..	26	15	26	16	21	15	9	-28.6	+66.7	309	209	-32.4
Iron ore:												
Imports.....thous. of long tons..	226	211	170	223	205	180	251	-12.2	-28.3	2,622	2,487	-5.1
Consumption.....thous. of long tons..	4,761	4,608	5,025	4,897	4,997	5,195	4,303	+4.0	+20.7	52,933	56,823	+7.3
Stocks, end of month—												
Total.....thous. of long tons..	31,754	35,808	39,555	40,080	35,147	30,189	33,350	-14.1	-9.5	-----	-----	-----
At furnaces.....thous. of long tons..	26,036	29,708	33,082	33,626	29,452	24,878	27,062	-15.5	-8.1	-----	-----	-----
On Lake Erie docks.....thous. of long tons..	5,718	6,100	6,473	6,454	5,695	5,311	6,288	-6.7	-15.5	-----	-----	-----
Pig-iron production:												
Total, United States.....thous. of long tons..	3,137	3,062	3,374	3,302	3,370	3,442	2,870	+2.1	+19.9	36,232	37,838	+4.4
Merchant furnaces.....thous. of long tons..	675	585	644	648	722	791	715	+9.6	+10.6	8,886	7,626	-14.2
Canada.....thous. of long tons..	92	91	93	95	103	88	65	-14.6	+4.8	709	1,037	+46.3
Furnaces in blast, end of month:												
Furnaces.....number..	183	197	197	194	201	202	185	+0.5	+9.2	-----	-----	-----
Capacity.....long tons per day..	98,730	106,755	108,800	108,575	110,675	111,985	96,640	+1.2	+15.9	-----	-----	-----
Per cent of total.....per cent..	54.0	58.1	58.5	57.6	60.9	62.2	52.9	+2.1	+17.6	-----	-----	-----
Ohio gray-iron foundries:												
Meltings—												
Actual.....long tons..	12,932	14,586	20,112	17,249	14,284	-----	13,977	-----	-----	184,766	194,040	+5.0
Normal.....long tons..	12,497	16,155	19,349	18,849	18,182	-----	16,097	-----	-----	223,441	197,329	-11.7
Ratio to normal.....per cent of normal..	103.4	90.2	103.9	91.6	72.5	-----	86.8	-----	-----	-----	-----	-----
Stocks, end of month.....per cent of normal..	129	131	134	130	124	-----	129	-----	-----	-----	-----	-----
Receipts.....per cent of normal..	99	90	103	95	85	-----	88	-----	-----	-----	-----	-----
Malleable castings:												
Production.....short tons..	68,606	62,665	70,054	63,560	59,432	73,169	61,072	+23.1	+19.8	696,765	779,481	+11.9
Operating activity.....per ct. of capacity..	72.1	66.3	73.4	66.8	63.4	77.5	62.7	+22.2	+23.6	-----	-----	-----
Shipments.....short tons..	66,962	61,736	63,510	58,346	56,861	77,188	55,432	+35.7	+39.2	687,494	752,727	+9.5
New orders.....short tons..	66,128	61,163	65,780	59,664	61,319	77,091	62,328	+25.7	+23.7	672,790	759,027	+12.8
Wholesale prices:												
Foundry, No. 2,												
northern.....dolls. per long ton..	18.26	18.64	18.86	19.39	19.51	19.26	19.01	-1.3	+1.3	-----	-----	-----
Basic (valley furnace).....dolls. per long ton..	16.00	16.19	17.10	17.50	17.50	17.50	17.00	0.0	+2.9	-----	-----	-----
Composite pig iron.....dolls. per long ton..	17.78	18.04	18.40	18.96	19.06	19.05	18.37	-0.1	+3.7	-----	-----	-----
Cast-Iron Boilers and Radiators												
Round boilers:												
Production.....thous. of lbs..	12,881	13,655	17,953	16,846	9,345	11,248	9,037	+20.4	+24.5	245,340	158,048	-35.6
Shipments.....thous. of lbs..	14,422	17,021	22,621	17,362	12,281	9,605	11,009	-21.8	-12.8	226,795	162,562	-28.3
New orders.....thous. of lbs..	12,551	14,504	19,819	13,252	12,096	8,224	11,511	-32.0	-28.6	226,131	157,694	-30.3
Stocks, end of month.....thous. of lbs..	86,141	82,931	78,349	77,785	74,352	77,015	79,400	+3.6	-3.0	-----	-----	-----
Square boilers:												
Production.....thous. of lbs..	38,693	26,760	30,098	26,770	12,542	32,938	24,743	+162.6	+33.1	278,267	339,781	+22.1
Shipments.....thous. of lbs..	36,212	41,989	52,505	36,328	25,368	17,888	19,292	-29.5	-7.3	257,461	335,734	+30.4
New orders.....thous. of lbs..	31,809	36,527	53,522	28,502	26,268	15,866	18,230	-39.6	-13.0	251,679	337,876	+34.2
Stocks, end of month.....thous. of lbs..	182,367	167,063	145,051	135,889	122,487	136,986	120,522	+11.8	+13.7	-----	-----	-----
Radiators:												
Production.....thous. sq. ft. heating surface..	15,914	13,770	12,853	10,825	6,670	14,512	12,581	+117.6	+15.3	177,430	160,341	-9.6
Shipments.....thous. sq. ft. heating surface..	16,951	18,092	23,062	19,219	13,932	9,407	10,661	-32.5	-11.8	162,041	161,489	-0.3
New orders.....thous. sq. ft. heating surface..	15,753	16,533	23,394	16,931	14,798	8,998	9,990	-39.2	-9.9	164,608	168,068	+2.1
Stocks, end of month.....thous. sq. ft. heating surface..	77,267	72,902	63,082	54,776	47,572	52,599	48,714	+10.6	+8.0	-----	-----	-----
Gas-fired boilers:												
Shipments.....dollars..	288,954	395,265	351,367	250,315	153,744	115,100	96,589	-25.1	+19.2	-----	2,663,937	-----
Shipments.....thous. B. t. u..	239,048	322,000	274,760	202,868	128,380	88,463	86,892	-31.1	+1.8	-----	2,153,533	-----
Production.....thous. B. t. u..	168,547	169,376	187,196	233,073	83,300	202,075	132,733	+142.6	+52.2	-----	1,943,973	-----
Stocks, end of month.....thous. B. t. u..	778,337	622,687	596,143	598,518	581,451	704,044	846,845	+21.1	-16.9	-----	-----	-----
Crude Steel												
Steel ingots, production:												
United States, total.....thous. of long tons..	4,178	4,148	4,648	4,259	4,019	4,489	3,991	+11.7	+12.5	43,398	49,857	+14.9
Ratio to capacity.....per cent..	82	88	91	87	85	88	81	+3.5	+8.6	-----	-----	-----
Canada.....thous. of long tons..	89	100	109	108	103	116	84	-12.6	+38.1	907	1,241	+36.8
U. S. Steel Corporation:												
Unfilled orders, end of month.....thous. of long tons..	3,624	3,698	3,751	3,673	3,977	4,109	4,276	+3.3	-3.9	-----	-----	-----
Earnings.....thous. of dolls..	18,597	17,418	19,399	17,365	16,423	-----	11,900	-----	-----	164,297	193,203	+17.6
Steel castings:												
Production—												
Total.....short tons..	87,742	75,761	87,952	82,385	82,203	93,410	74,454	+13.6	+25.5	968,810	1,021,956	+5.5
Ratio to capacity.....per cent..	60	51	60	56	56	64	51	+14.3	+25.5	-----	-----	-----
Railroad specialties.....short tons..	27,157	25,311	29,471	30,799	26,484	35,689	28,714	+34.8	+24.3	370,654	371,564	+0.2
Miscellaneous.....short tons..	60,585	50,450	58,481	51,586	55,719	57,721	45,740	+3.6	+26.2	598,156	650,392	+8.7
New orders—												
Total.....short tons..	81,286	82,762	78,860	84,742	96,373	125,800	91,448	+30.5	+37.6	922,919	1,000,283	+8.4
Ratio to capacity.....per cent..	55	56	54	58	65	86	62	+32.3	+38.7	-----	-----	-----
Railroad specialties.....short tons..	25,171	35,234	26,736	34,545	43,928	66,293	41,276	+50.9	+60.6	384,103	389,863	+1.5
Miscellaneous.....short tons..	56,115	47,528	52,124	50,197	52,445	59,507	50,172	+13.5	+18.6	538,816	610,420	+13.3
Sheets, black, blue, galvanized, and full finished:												
Production—												
Total.....net tons..	329,396	318,907	369,243	358,402	302,182	391,404	316,541	+29.5	+23.7	3,287,276	3,947,953	+20.1
Ratio to capacity.....per cent..	92.8	101.0	103.5	104.8	95.1	109.9	89.6	+15.6	+22.7	-----	-----	-----
Stocks, end of month—												
Total.....net tons..	154,461	146,832	150,600	174,028	191,429	198,874	170,453	+3.9	+16.7	-----	-----	-----
Unsold.....net tons..	51,636	44,519	49,800	63,014	66,750	63,739	59,508	-4.5	+7.1	-----	-----	-----
Shipments.....net tons..	324,691	322,876	354,925	307,790	296,687	362,229	274,126	+22.1	+32.1	3,152,173	3,780,096	+19.9
New orders.....net tons..	254,397	370,936	344,614	346,041	323,421	438,390	302,921	+35.5	+44.7	3,354,694	3,794,626	+13.1
Unfilled orders, end of month.....net tons..	498,023	539,960	525,161	565,739	592,094	652,602	694,197	+10.2	-6.0	-----	-----	-----

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929 from Dec., 1928	Jan., 1929 from Jan., 1928	1927	1928	
	IRON AND STEEL—Continued											
Crude Steel—Continued												
Steel barrels:												
Production.....barrels	677,313	593,255	656,021	563,647	551,113	558,492	475,906	+1.3	+17.4	6,630,569	7,397,785	+11.6
Ratio to capacity.....per cent	57.8	50.2	56.4	48.0	47.1	48.4	43.7	+2.8	+10.8			
Shipments.....barrels	675,600	595,640	661,009	568,353	549,913	548,581	474,159	-0.2	+15.7	6,624,753	7,403,726	+11.8
Stocks, end of month.....barrels	57,544	55,059	50,071	45,365	46,465	56,376	54,353	+21.3	+3.7			
Unfilled orders, end of month.....barrels	1,064,358	996,820	823,872	957,117	1,357,443	1,661,710	1,351,797	+22.4	+22.9			
Track work, production.....short tons	11,040	10,767	9,493	8,379	11,061	9,996	9,332	-9.6	+7.1	160,631	139,645	-13.1
Iron, steel, and heavy hardware												
Sales.....rel. to Jan., 1921	215	207	236	210	221	290	157					
Lock washers, shipments.....thous. of dolls.	282	257	269	255	221	219	219	+31.2	+32.4			
Wholesale prices:												
Steel billets, Bessemer.....dolls. per long ton	32.00	32.00	32.80	33.00	33.00	33.00	33.00	0.0	0.0			
Iron and steel, comp.....dolls. per long ton	34.93	35.17	35.48	35.92	36.20	36.24	35.27	+0.1	+2.8			
Structural steel beams.....dolls. per 100 lbs.	1.85	1.85	1.85	1.90	1.90	1.90	1.80	0.0	+5.6			
Composite finished steel.....dolls. per 100 lbs.	2.48	2.50	2.52	2.52	2.53	2.55	2.47	+0.8	+3.2			
Fabricated Steel Products												
Structural steel, fabricated:												
New orders (prorated).....short tons	350,350	319,550	250,250	242,550	246,400	265,650	211,750	+7.8	+25.5	3,052,500	3,284,050	+7.6
Ratio to capacity.....per cent	91	83	65	63	64	69	55	+7.8	+25.5			
Shipments (prorated).....short tons	288,750	273,350	319,550	281,050	273,350	273,350	204,050	0.0	+34.0	2,853,750	3,068,450	+7.5
Ratio to capacity.....per cent	75	71	83	73	71	71	53	0.0	+34.0			
Steel plate, fabricated, new orders:												
Total.....short tons	47,245	40,281	53,983	54,418	40,441	32,724	35,787	-19.1	-8.6	497,707	532,810	+7.1
Ratio to capacity.....per cent	60	50	68	68	51	41	45	-19.6	-8.9			
Oil-storage tanks.....short tons	24,807	18,572	23,960	32,381	15,152	11,055	11,101	-27.0	-0.4	210,974	242,763	+15.1
Steel bars, cold finished, shipments.....short tons	42,993	43,893	50,867	46,902	40,045	50,276	45,010	+25.5	+11.7	408,369	504,908	+23.6
Steel boilers, new orders:												
Quantity.....number	2,018	1,749	1,803	1,660	1,343	1,075	1,244	-20.0	-13.6	19,108	19,672	+3.0
Area.....thous. of sq. ft.	1,691	1,453	1,500	1,460	1,308	1,243	993	-5.0	+25.2	17,796	17,685	-0.6
Steel furniture:												
Business group—												
Shipments.....thous. of dolls.	2,565	2,754	3,159	2,854	3,117	3,626	2,713	+16.3	+33.7	31,106	35,043	+12.7
New orders.....thous. of dolls.	2,619	2,689	3,193	2,676	3,611	3,906	3,248	+8.2	+20.3	30,760	35,974	+17.0
Unfilled orders, end mo.....thous. of dolls.	2,118	2,062	2,095	1,917	2,410	2,579	2,000	+7.0	+29.0			
Shelving:												
Shipments.....thous. of dolls.	836	678	954	916	791	971	680	+22.8	+42.8	7,264	9,297	+28.0
New orders.....thous. of dolls.	863	800	959	875	829	1,099	769	+32.6	+42.9	7,351	9,601	+30.6
Unfilled orders, end mo.....thous. of dolls.	734	754	760	721	757	819	680	+8.2	+20.4			
Iron and steel:												
Exports.....long tons	287,297	228,056	256,870	256,886	221,810	274,296	205,766	+23.7	+33.3	2,180,970	2,862,997	+31.3
Imports.....long tons	54,062	47,685	50,176	50,038	41,628	45,573	49,903	+9.5	-8.7	552,907	589,716	+6.7
Enameled Ware												
Baths:												
Shipments.....pieces	109,878	86,342	939,174	68,783	58,425	69,415	471,519	+18.8	-2.9	1,131,207	1,116,352	-1.3
Stocks, end of month.....pieces	122,167	134,749	147,656	165,738	175,104	188,738	155,418	+7.8	+21.4			
New orders.....pieces	96,876	76,074	90,665	72,677	63,756	66,991	78,190	+5.1	-14.3	1,146,807	1,220,800	+6.4
Unfilled orders, end of month.....pieces	68,263	53,303	44,842	45,561	39,182	35,073	36,473	-10.5	-3.8			
Lavatories:												
Shipments.....pieces	114,070	94,383	99,250	79,218	71,607	93,321	486,529	+14.1	-5.6	1,251,657	1,265,220	+1.1
Stocks, end of month.....pieces	161,276	168,211	180,651	195,323	207,940	230,527	202,755	+10.9	+13.7			
New orders.....pieces	102,140	89,126	91,575	81,693	68,293	80,614	93,951	+18.0	-14.2	1,272,225	1,369,278	+7.6
Sinks:												
Shipments.....pieces	116,497	101,777	111,740	89,309	73,623	93,321	493,158	+26.8	+0.2	1,313,952	1,317,163	+0.2
Stocks, end of month.....pieces	216,338	216,255	230,725	242,837	258,426	276,037	234,675	+6.8	+17.6			
New orders.....pieces	96,830	99,749	110,396	92,490	74,700	86,866	96,509	+16.3	-10.0	1,335,008	1,426,336	+6.8
Miscellaneous sanitary ware:												
Shipments.....pieces	54,003	44,910	46,129	44,159	34,971	41,197	439,744	+17.8	+3.7	563,731	558,671	-0.9
Stocks, end of month.....pieces	95,958	103,509	116,110	125,108	128,259	137,588	131,427	+7.3	+4.7			
New orders.....pieces	41,692	44,707	43,899	37,852	28,838	42,036	39,798	+45.8	+5.6	558,381	562,623	+0.8
Small ware (all except baths):												
Unfilled orders, end of month.....pieces	174,072	155,483	129,154	130,873	118,100	111,258	100,160	-5.8	+11.1			
Enameled sheet-metal ware:												
Shipments.....dozen pieces	358,811	352,484	417,387	328,875	324,445	319,871	319,871			3,916,930	4,193,867	+7.1
Porcelain flat ware:												
New orders—												
Total.....thous. of sq. ft.	6,233	6,551	7,428	6,839	5,101	5,421	5,421			73,108	70,967	-2.9
Ratio to capacity.....per cent	55	58	66	61	45	45	45					
Shipments—												
Total.....thous. of sq. ft.	5,495	6,108	7,700	6,602	5,153	5,473	5,473			76,818	72,011	-6.3
Ratio to capacity.....per cent	49	54	68	59	46	46	46					
Machinery												
Vacuum cleaners, shipments.....number	65,164	89,222	96,528	90,427	114,272	71,335	78,342	-37.6	-8.9	1,038,614	1,019,460	-1.8
Washing machines, shipments:												
Total.....number	92,955	98,065	92,971	85,798	62,533	82,976	68,840	+32.7	+20.5	944,506	1,000,204	+5.9
Electric.....number	74,253	80,770	76,577	75,252	53,442	67,297	56,728	+25.9	+18.6	775,661	820,430	+5.8
Water softeners, shipments.....units	1,402	1,187	1,505	1,125	928	1,080	1,268	+16.4	-14.8	18,118	16,189	-10.6
Water systems, shipments.....units	11,243	10,190	11,333	9,867	8,048	7,930	7,943	-1.5	-0.2	100,843	117,736	+16.8
Pumps:												
Domestic shipments—												
Pitcher, hands, etc.....units	50,963	42,538	42,315	37,563	44,285	50,723	50,408	+14.7	+0.6	521,653	550,386	+5.5
Power, horizontal type.....units	2,531	2,017	2,732	2,093	2,124	2,265	1,591	+6.6	+42.4	13,133	25,980	+97.8
Steam, power, and centrifugal—												
New orders.....thous. of dolls.	1,405	1,708	2,084	1,424	1,424	1,695	1,137	+19.0	+49.1	17,179	17,998	+4.8
Shipments.....thous. of dolls.	1,520	1,369	1,634	1,494	1,593	1,481	1,138	-7.0	+30.1	16,799	17,364	+3.4
Unfilled orders, end mo.....thous. of dolls.	3,023	3,056	3,128	3,714	3,538	3,800	3,112	+7.4	+22.1			

* Revised.

TERND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
	IRON AND STEEL—Continued											
Machinery—Continued												
Agricultural machinery and equipment:												
Shipments—												
Total.....rel. to 1923-25..	219.7	179.2	153.4	108.2	123.9	155.0	115.7	+25.1	+34.0			
Domestic.....rel. to 1923-25..	187.5	145.7	129.1	79.6	93.8	142.3	116.8	+51.7	+21.8			
Foreign.....rel. to 1923-25..	387.5	354.0	280.3	257.4	280.8	229.5	109.9	-18.3	+108.8			
Production.....rel. to 1923-25..	146.1	145.5	148.5	154.6	168.1	171.5	130.7	+2.0	+31.2			
Foundry equipment:												
New orders.....rel. to 1922-24..	278.0	170.0	185.0	197.8	166.5	180.5	132.7	+8.4	+36.0			
Shipments.....rel. to 1922-24..	154.1	129.7	254.3	264.0	234.6	177.3	116.4	-24.4	+52.3			
Unfilled orders, end of mo....rel. to 1922-24..	467.2	529.5	462.6	403.9	333.8	336.1	120.6	+0.7	+178.7			
Stokers, mechanical, sales:												
Quantity.....number..	162	161	100	116	102	97	75	-4.9	+29.3	1,374	1,490	+8.4
Power.....horsepower..	51,572	65,000	27,219	30,938	49,212	42,392	26,572	-13.9	+59.5	483,602	508,687	+5.2
Machine tools:												
New orders.....rel. to 1922-24..	241	265	284	290	274	292	218	+6.6	+33.9			
Shipments.....rel. to 1922-24..	208	205	221	242	245	255	149	+4.1	+71.1			
Unfilled orders, end of mo....rel. to 1922-24..	428	441	504	563	596	676	293	+13.4	+130.7			
Electric hoists:												
New orders—												
Quantity.....number..	402	447	405	522	475	533	346	+12.2	+54.0	3,293	5,245	+59.3
Value.....dollars..	180,365	228,510	209,594	258,867	188,693	253,194	160,852	+34.2	+57.4	1,619,782	2,447,970	+51.1
Shipments.....dollars..	193,248	172,986	202,829	215,863	211,815	213,663	133,842	+0.9	+59.6	1,540,300	2,263,935	+47.0
Electric overhead cranes:												
Shipments.....thous. of dolls..	564	464	806	701	623	852	432	+36.8	+97.2	9,308	7,126	-23.4
New order.....thous. of dolls..	821	713	775	725	559	1,383	358	+147.4	+286.3	7,976	7,598	-4.7
Unfilled orders, end of mo....thous. of dolls..	1,952	2,188	2,165	2,189	2,092	2,547	1,735	+21.7	+46.8			
Woodworking machinery:												
New orders.....thous. of dolls..	1,641	1,639	1,585	1,295	1,360	1,949	1,145	+43.3	+70.2	15,037	16,961	+12.8
Cancellations.....thous. of dolls..	6	26	140	21	36	50	23	+38.9	+117.4	182	325	+78.6
Unfilled orders, end of mo....thous. of dolls..	2,058	2,205	2,035	1,838	1,792	2,367	1,456	+32.1	+62.6			
Shipments.....thous. of dolls..	1,436	1,413	1,666	1,502	1,353	1,420	1,130	+5.0	+25.7	15,508	16,216	+4.6
Shipments.....number of machines..	1,170	1,050	1,170	985	957	998	920	+4.3	+8.5	12,243	12,022	-18.
Electric industrial trucks and tractors:												
Shipments, domestic—												
Tractors.....number of vehicles..	5	11	5	9	10	4	5	-60.0	-20.0	135	106	-21.5
All other types.....number of vehicles..	85	102	109	117	126	125	98	-0.8	+27.6	994	1,215	+22.2
Exports.....number of vehicles..	6	5	20	6	17	19	9	+11.8	+111.1	130	145	+11.5
Fire-extinguishing equipment, shipments:												
Motor vehicles.....number..	125	143	139	126	100	90	73	-10.0	+23.3	1,434	1,315	-8.3
Hand types.....number..	47,490	42,193	49,128	41,954	41,596	45,067	43,175	+8.3	+4.4	588,583	557,317	-5.3
Patents issued:												
Total, all classes.....number..	3,390	3,039	4,323	3,494	3,309	3,835	3,504	+15.9	+9.4	41,731	42,375	+1.5
Agricultural implements.....number..	29	40	59	39	34	47	45	+38.2	+4.4	616	496	-19.5
Internal-combustion engines.....number..	43	42	67	63	54	51	51	-5.6	0.0	777	640	-17.6
NONFERROUS METALS												
Copper												
Production:												
Mines.....short tons..	76,952	78,341	86,480	85,382	85,577	86,681	68,469	+1.3	+26.6	829,978	909,051	+9.5
Smelter.....short tons..	88,517	85,795	100,720	103,137	103,386	101,151	77,429	-2.2	+30.6	968,657	1,060,094	+9.4
Refined (N. and S. America).....short tons..	143,560	137,018	149,199	155,448	147,905	154,472	122,723	+4.4	+25.9	1,476,506	1,627,849	+10.3
World production, blister.....short tons..	161,838	157,518	176,623	183,813	179,240	178,083	143,546	-0.6	+24.1	1,694,346	1,916,471	+13.1
Domestic shipments, refined.....short tons..	83,398	88,707	100,371	99,822	84,889	100,135	64,824	+18.0	+54.5	824,844	983,460	+19.2
Exports.....short tons..	41,186	36,190	45,168	45,171	38,635	52,523	52,095	+35.9	+0.8	523,572	550,080	+5.1
Stocks (North and South America), end of mo:												
Refined.....short tons..	54,793	51,812	45,648	52,153	65,466	62,749	96,476	-4.2	-35.0			
Blister.....short tons..	238,923	239,142	241,732	244,854	249,995	250,096	223,500	0.0	+11.9			
Wholesale price, electrolytic.....dolls. per lb..	.1453	.1472	.1520	.1578	.1584	.1660	.1385	+4.8	+19.9			
Wire Cloth												
Production.....thous. of sq. ft..	430	403	466	423	425	461	449	+8.5	+2.7	5,463	5,226	-4.3
Shipments.....thous. of sq. ft..	387	423	442	395	391	412	425	+5.4	-3.1	5,042	4,909	-2.6
Stocks, end of month.....thous. of sq. ft..	1,120	1,099	1,068	1,092	1,099	1,064	1,189	-3.2	-10.5			
New orders.....thous. of sq. ft..	408	412	419	422	419	376	414	-10.3	-9.2		4,719	
Unfilled orders, end of mo....thous. of sq. ft..	285	320	266	301	449	302	315	-32.7	-4.1			
Make and hold orders, end of month.....thous. of sq. ft..	457	453	459	482	469	486	441	+3.6	+10.2			
Tin												
Deliveries (consumption).....long tons..	7,200	6,885	6,475	7,145	7,155	8,795	5,415	+22.9	+62.4	72,490	78,865	+8.8
Stocks, end of month:												
World visible supply.....long tons..	18,456	19,924	20,907	22,067	24,563	24,237	15,244	-1.3	+59.0			
United States.....long tons..	1,718	3,508	4,598	3,603	2,428	2,611	2,518	+7.5	+3.7			
Imports.....long tons..	6,584	8,187	8,048	6,221	5,250	9,498	5,727	+80.9	+65.8	71,205	80,508	+13.1
Wholesale price, Straits, N. Y.....dolls. per lb..	4.808	.4807	.4901	.5085	.5021	.4916	.5564	-2.1	-11.6			
Zinc												
Reports in operation, end of month.....number..	66,428	61,965	59,832	61,544	61,544	63,314	72,204	-2.9	-12.3			
Per cent of total.....per cent..	57.4	53.4	51.5	53.0	53.0	54.5	67.0	+2.8	-4.4			
Production.....short tons..	52,157	49,361	50,259	50,260	50,591	49,709	52,414	-1.7	-5.2	613,548	619,595	+1.0
Stocks, end of month.....short tons..	44,416	47,915	46,068	46,542	45,441	45,418	42,163	-0.1	+7.7			
Ore, Joplin district:												
Shipments.....short tons..	43,466	41,429	41,165	49,246	79,308	48,777	37,612	-38.5	+29.7	689,036	597,382	-13.3
Stocks, mines, end of month.....short tons..	39,303	48,474	53,209	51,013	25,760	27,309	49,905	+6.0	-45.3			
Price, slab, prime western.....dolls. per lb..	.0625	.0625	.0625	.0626	.0635	.0635	.0564	0.0	+12.6			

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per cent increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
	NONFERROUS METALS—Continued											
Lead												
Production.....short tons..	53,403	55,167	58,118	58,021	57,225	58,897	54,406	+2.9	+8.3	687,273	651,130	-5.3
Ore shipments:												
Joplin district.....short tons..	6,125	9,326	10,514	9,102	10,374	6,097	7,463	-41.2	-18.3	104,099	98,683	-5.2
Utah.....short tons..	78,811	65,353	71,887	91,538	67,395	71,412	75,855	+6.0	-5.9	822,352	853,817	+3.8
Receipts in U. S. ore.....short tons..	53,575	51,978	55,610	55,660	53,953	53,881	55,970	-0.1	-3.7	660,125	638,337	-3.3
Stocks, U. S. and Mexico, end mo.....short tons..	156,976	155,482	152,746	156,879	161,460	155,270	157,417	-3.8	-1.4			
Price, pig, desilverized, N. Y.....dolls. per lb..	.0625	.0645	.0650	.0639	.0650	.0665	.0650	+2.3	+2.3			
Other Metal Products												
Babbitt metal, consumption:												
Total apparent.....thous. of lbs..	4,756	5,308	5,796	5,630	4,986	6,093	4,929	+22.2	+23.6	60,112	59,677	-0.7
Direct by producers.....thous. of lbs..	939	999	1,191	1,274	837	1,217	894	+45.4	+36.1	13,108	12,338	-5.9
Sale to consumers.....thous. of lbs..	3,817	4,309	4,605	4,357	4,149	4,877	4,034	+17.5	+20.9	47,004	47,339	+0.7
Band instruments, shipments:												
Total.....dollars..	325,688	448,155	579,715	469,884	528,391	322,284	283,049	-39.0	+13.9	5,458,232	4,822,010	-11.7
Cup mouthpieces.....dollars..	147,470	188,711	244,512	197,028	199,785	135,704	114,059	-32.1	+19.0	2,028,983	1,963,904	-3.2
Saxophones.....dollars..	161,034	216,481	270,417	242,561	275,400	145,252	146,786	-47.3	-1.0	3,130,703	2,473,896	-21.0
Wood wind.....dollars..	17,184	42,963	64,786	30,295	53,206	41,328	22,204	-22.3	+86.1	298,546	384,210	+28.7
Pails and tubs, galvanized:												
Production.....dozens..	127,797	150,845	153,813	131,792	112,923	151,106	125,536	+33.8	+20.4	1,668,725	1,795,625	+7.6
Shipments.....dozens..	142,487	139,183	152,258	103,290	102,802	165,745	149,304	+61.2	+11.0	1,688,162	1,763,401	+4.5
Other galvanized ware:												
Production.....dozens..	37,846	55,850	56,469	33,553	36,042	40,649	32,678	+12.8	+24.4	425,080	515,428	+21.3
Shipments.....dozens..	44,377	50,606	54,596	34,012	23,567	36,896	35,689	+56.6	+3.4	421,161	481,421	+14.3
Electrical Equipment												
Electrical mfrs., new orders (quarterly).....thous. of dolls..		2 264,466			2 281,988		3 232,878	+6.6	+21.1	926,725	1,029,483	+11.1
Electrical porcelain, shipments:												
Standard.....dollars..	111,803	112,210	128,255	152,143	92,359		77,212			924,437	1,091,391	+18.1
Special.....dollars..	129,813	129,587	148,999	146,476	129,835		115,394			1,713,685	1,553,294	-9.4
High tension.....dollars..	649,599	493,067	539,810	518,956	440,079		408,401			6,147,103	6,147,103	
Glazed nail knobs.....thous. of pieces..	4,328	4,213	5,257	5,350	3,767		3,363			29,426	41,071	+39.6
Unglazed nail knobs.....thous. of pieces..	2,401	2,796	3,042	2,644	1,614		1,091			12,943	21,963	+69.7
Tubes.....thous. of pieces..	2,542	2,694	2,807	3,111	1,997		1,127			14,588	22,844	+56.6
Laminated phenolic products, shipments.....dollars..												
	1,356,179	1,243,476	1,365,690	1,139,205	1,062,194		677,861			7,823,380	12,282,199	+57.0
Outlet boxes and covers, shipments.....pieces..												
	3,049,567	2,915,560	3,123,321	3,071,288	1,784,587		2,139,038			27,050,375	32,795,023	+21.2
Vulcanized fiber:												
Shipments, total.....thous. of dolls..	591	568	649	585	577		663			8,912	7,450	-16.4
Consumption.....thous. of lbs..	2,805	2,362	2,971	2,731	2,748		2,355			28,851	32,875	+13.9
Industrial reflectors, sales.....units..	122,124	126,151	156,243	163,491	128,077		137,417			1,534,634	1,539,606	+0.3
Power cables, shipments.....thous. of ft..	2,138	2,197	2,384	2,405	2,151		1,710				24,041	
Electrical Equipment												
Flexible cord:												
Shipments.....thous. of ft..	51,062	43,854	54,973	63,726	44,544		35,082				527,251	
Stocks, end of month.....thous. of ft..	47,351	44,193	43,214	39,013	41,461		51,396					
Welding sets, new orders:												
Single operator.....units..	228	234	297	218	291		128			1,620	2,830	+74.7
Multiple operator.....units..	8	7	58	24	90		7			182	297	+63.2
Panel boards and cabinets, shipments (quarterly).....thous. of dolls..												
		2 1,357			2 1,564		3 821	+15.3	+90.5	3,247	5,043	+55.3
Nonmetallic conduits, shipments.....thous. of ft..												
	6,960	7,376	8,804	7,543	4,733		8,085			113,846	89,343	-21.5
Electric furnaces, new orders.....kilowatts..												
	6,493	4,226	4,719	7,171	8,109	10,769	2,937	+32.8	+266.7		64,132	
Manufactured mica:												
Shipments.....thous. of dolls..	283	247	302	267	259		284		+9.7			
Unfilled orders, end of mo.....thous. of dolls..	290	285	326	244	254		305		+20.1			
Delinquent accounts, electrical trade:												
Amount.....dollars..	167,136	141,101	163,281	147,737	170,226	131,447	184,500	-22.8	-28.8			
Delinquent firms.....number..	1,384	1,223	1,257	1,107	1,107	1,056	1,361	-4.6	-22.4			
AUTOMOBILES *												
Production:												
United States—												
Total.....number of cars..	461,298	415,293	397,112	425,933	423,907	402,154	231,728	+71.9	+73.5	3,401,826	4,358,150	+28.1
Passenger cars.....number of cars..	400,593	358,872	339,976	421,254	405,793	350,617	205,646	+70.4	+70.5	2,946,601	3,827,260	+29.9
Trucks.....number of cars..	60,705	56,421	57,136	39,679	28,114	51,537	26,082	+83.3	+97.6	454,725	530,890	+16.7
Canada—												
Total.....number of cars..	31,245	21,193	18,536	11,769	9,425	21,501	8,463	+128.1	+154.1	179,054	242,382	+35.4
Passenger cars.....number of cars..	24,274	16,572	13,016	8,154	6,734	17,164	6,705	+154.9	+156.0	146,827	196,741	+34.0
Trucks.....number of cars..	6,971	4,621	5,520	3,615	2,691	4,337	1,758	+61.2	+146.7	32,227	45,641	+41.6
Exports (assembled):												
From United States—												
Total.....number of cars..	49,007	30,559	46,524	46,893	29,954	37,665	32,060	+25.7	+17.5	384,195	507,954	+32.2
Passenger cars.....number of cars..	32,815	22,494	29,951	29,684	20,945	24,631	20,476	+17.6	+20.3	278,748	369,073	+32.4
Trucks.....number of cars..	16,192	8,065	16,573	17,209	9,009	13,034	11,584	+44.7	+12.5	105,447	138,872	+31.7
From Canada—												
Total.....number of cars..	11,011	8,670	9,705	8,783	6,646	8,971	3,502	+35.0	+156.2	57,414	79,748	+38.9
Passenger cars.....number of cars..	7,985	6,279	6,696	4,906	4,510	5,640	1,838	+25.1	+206.9	39,900	55,972	+40.3
Trucks.....number of cars..	3,026	2,391	3,009	3,877	2,136	3,331	1,664	+55.9	+100.2	17,514	23,776	+35.8
Shipments (General Motors Co.):												
To dealers.....number of cars..	186,653	167,460	120,876	47,587	35,441	127,580	125,181	+260.0	+1.9	1,562,748	1,810,806	+15.9
To users.....number of cars..	187,463	148,784	140,883	91,410	33,442	104,488	107,278	+212.4	-2.6	1,554,577	1,842,443	+18.5

² Quarter ending in month indicated.
³ Quarter ending Dec. 31, 1927.

⁴ Revised.

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

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
	AUTOMOBILES—Continued											
Accessories and parts:												
Shipments—												
Original equipment...rel. to Jan., 1925	230	218	200	163	164		163					
Replacement parts...rel. to Jan., 1925	176	185	184	149	131		137					
Accessories...rel. to Jan., 1925	147	122	91	78	73		79					
Service parts...rel. to Jan., 1925	148	140	141	122	120		142					
Exports...thous. of dolls.	13,858	10,079	17,522	13,151	11,182	20,068	7,604	+70.5	+163.9	106,343	143,610	+35.0
Rim production...thous. of rims	2,319	2,316	2,115	1,213	1,101	1,835	1,812	+66.7	+1.3	20,011	24,243	+21.1
New passenger-car registrations:												
Total...number of cars	329,827	271,782	284,656	212,065	154,603		135,843			2,623,538	3,133,196	+19.4
Highest price group...number of cars	11,482	11,600	12,264	7,950	6,914		6,817			110,125	128,138	+16.4
Second highest group...number of cars	76,968	60,730	56,936	35,084	27,966		32,515			640,708	654,627	+2.2
Third highest group...number of cars	76,158	61,579	59,451	52,294	37,283		43,330			662,258	832,974	+25.8
Lowest price group...number of cars	164,682	137,403	155,514	115,981	82,045		52,630			1,195,806	1,509,897	+26.3
Miscellaneous...number of cars	537	470	491	756	395		551			14,641	7,560	-48.4
FUELS												
Coal and Coke												
Bituminous:												
Production—												
United States...thous. of short tons	41,108	41,301	50,360	46,041	43,380	51,456	44,208	+18.6	+16.4	517,763	492,755	-4.8
Canada...thous. of short tons	1,552	1,410	1,702	1,695	1,519		1,698			17,427	17,487	+0.3
Exports...thous. of long tons	1,618	1,577	1,497	1,617	1,093	917	850	-16.1	+7.9	16,095	14,439	-10.3
Consumption—												
By vessels...thous. of long tons	356	313	333	334	301	284	319	-5.6	-11.0	4,076	3,834	-5.9
By electric-power plants...thous. of short tons	3,441	3,421	3,828	3,740	3,838		3,695			41,888	41,336	-1.3
By railroads...thous. of short tons	7,403	7,627	8,433	8,084			8,304					
By coke plants—												
United States...thous. of short tons	6,194	6,180	6,726	6,595	6,830	7,021	6,168	+2.8	+13.8	74,115	76,137	+2.7
Canada...thous. of short tons	269	270	294	284	296	300	257	+1.4	+16.7	2,884	3,213	+11.4
Stocks held by consumers...thous. of short tons												
		41,100	42,400		41,800		51,500					
Prices—												
Mine aver. (spot)...dolls. per short ton	4 1.74	1.81	1.83	1.85	1.81	1.85	1.85	+2.2	0.0			
Wholesale, comp...dolls. per short ton	4 0.09	4 0.19	4 0.20	4 0.08	4 0.06	4 0.05	4 0.03	0.0	-2.2			
Retail, composite...dolls. per short ton	8.74	8.84	8.96	9.07	9.11	9.09	9.21	-0.2	-1.3			
Anthracite:												
Production...thous. of short tons	6,883	6,036	8,554	7,457	6,226	7,337	5,690	+17.8	+28.9	80,096	76,734	-4.2
Exports...thous. of long tons	278	265	405	306	259	298	233	+15.1	+27.9	2,982	2,983	0.0
Stocks, end of mo. in yds. of dealers...no. of days' supply												
		57	53		54							
Prices—												
Wholesale, comp...dolls. per long ton	12.853	13.040	13.040	13.040	13.040	12.987	13.130	-0.4	-1.1			
Retail, composite...dolls. per short ton	14.76	14.93	14.98	15.06	15.07	15.06	15.08	-0.1	-0.1			
Coke:												
Production, U. S.—												
Beehive...thous. of short tons	288	312	421	416	398	479	376	+20.4	+27.4	7,207	4,376	-39.3
By-product...thous. of short tons	3,995	3,959	4,219	4,133	4,317	4,360	3,897	+1.0	+11.9	43,885	47,715	+8.7
Production, Canada...thous. of short tons	191	194	210	205	213	221	182	+3.8	+21.4	1,981	2,308	+16.5
Exports...thous. of long tons	70	77	100	121	98	104	65	+6.1	+60.0	719	1,037	+44.2
Price, furnace, Connellsville...dolls. per short ton	2.88	2.88	2.91	2.87	2.75	2.75	2.78	0.0	-1.1			
Crude petroleum:												
Production...thous. of bbls.	77,829	76,404	79,662	76,031	79,448	81,979	72,713	+3.2	+12.7	901,129	900,364	-0.1
Stocks at end of month—												
Total (comparable)...thous. of bbls.	4 368,816	4 366,750	4 367,907	4 367,619	368,431	372,913	4 359,260	+1.2	+3.8			
Tank farms and pipe lines...thous. of bbls.	326,399	326,153	328,101	326,852	327,902	330,395	317,680	+0.8	+4.0			
Refineries...thous. of bbls.	4 42,417	4 40,597	4 39,806	4 40,767	40,529	42,518	4 41,580	+4.9	+2.2			
California—												
Light...thous. of bbls.	18,310	16,870	16,670	16,524	16,995	19,196	20,493	+13.0	-6.3			
Heavy...thous. of bbls.	95,057	96,563	97,097	98,529	99,975	99,738	94,327	-0.2	+5.7			
Imports...thous. of bbls.	6,141	7,140	6,703	6,908	6,807	8,075	6,145	+18.6	+31.4	58,383	79,583	+36.3
Consumption (run to stills)...thous. of bbls.	81,582	79,894	79,607	77,149	79,520	76,830	69,067	-3.4	+11.2	828,835	912,713	+10.1
Refinery operation...per ct. of capacity	83	84	82	81	78	76	72	-2.6	+5.6			
Price, Kansas-Oklahoma...dolls. per bbl.	1.210	1.210	1.210	1.210	1.210	1.185	1.220	-2.0	-2.9			
Oil wells completed...number	1,247	1,192	1,224	1,195	1,059	1,205	764	+13.8	+57.7	14,442	12,540	-13.2
Mexico—												
Production...thous. of bbls.	4,047	3,716	3,904	3,724	3,748		4,770			64,121	50,144	-21.8
Exports...thous. of bbls.	2,212	2,244	2,731	2,199	1,808		2,955			48,421	33,622	-30.6
Venezuela—												
Production...thous. of bbls.	9,031	9,478	10,520	11,291	12,270	11,521	6,994	-6.1	+64.7	64,437	108,099	+67.8
Exports...thous. of bbls.	8,933	8,615	9,283	9,660	10,010	9,982	6,837	-0.3	+46.0	54,593	100,617	+84.3
Gasoline:												
Production—												
Raw (at refineries)...thous. of bbls.	4 34,101	4 33,669	4 34,403	4 33,171	33,907	34,335	4 27,981	+1.3	+22.7	330,435	377,183	+14.2
Natural gas (at plants)...thous. of bbls.	4 3,445	4 3,488	4 3,731	4 3,769	4 3,929	3,983	4 3,405	+1.4	+17.0	38,657	42,286	+9.4
Exports...thous. of bbls.	4 4,452	4 4,670	4 3,919	4 4,610	4 3,675	4,506	3,692	+22.6	+22.0	43,103	52,422	+21.6
Consumption...thous. of bbls.	4 33,336	4 29,722	4 30,680	4 26,052	4 26,644	22,602	4 20,778	-15.2	+8.8	297,780	328,832	+10.4
Stocks, end of month—												
Raw (at refineries)...thous. of bbls.	4 27,075	4 26,378	4 26,640	4 29,185	4 33,066	40,648	4 37,368	+22.9	+8.8			
Natural gas (at plants)...thous. of bbls.	414	436	402	404	608	741	740	+21.9	+0.1			
Prices—												
Wholesale, New York...dolls. per gal.	.180	.180	.180	.180	.180	.178	.170	1.1	+4.7			
Retail, wagon 50 cities...dolls. per gal.	.160	.163	.163	.160	.160	.160	.143	0.0	+11.9			
Retail distribution, 41 States...thous. of gals.	4 988,358	4 915,036	4 896,934	4 807,565	777,079		612,219			8,777,249	9,724,013	+10.8
Kerosene:												
Production...thous. of bbls.	5,389	5,060	5,190	4,908	4,968	4,700	5,058	-5.4	-7.1	56,114	60,156	+7.2
Exports...thous. of bbls.	1,653	2,068	1,749	2,087	1,229	1,896	2,350	+54.3	-19.3	19,278	21,494	+11.5
Consumption...thous. of bbls.	4 3,269	4 3,264	4 3,469	4 2,545	4 3,632	2,956	4 2,799	-18.6	+5.6	37,491	37,008	-1.3
Stocks at refineries, end mo...thous. of bbls.	4 8,887	4 8,593	4 8,614	4 8,886	4 9,001	8,865	4 7,670	-1.5	+15.6			
Price, 150° water white...dolls. per gal.	.072	.086	.082	.080	.078	.077	.070	-1.3	+10.0			

† Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928.	Jan., 1929, from Jan., 1928.	1927	1928	
FUELS—Continued												
Coal and Coke—Continued												
Gas and fuel oils:												
Production.....thous. of bbls..	37,390	37,004	36,941	35,771	37,293	36,838	33,013	-1.2	+11.6	393,066	425,755	+8.3
Consumption—												
By vessels.....thous. of bbls..	4,564	4,053	4,558	4,235	4,235	3,915	3,783	-7.6	+3.5	50,050	51,126	+2.1
By electric pow. plants.....thous. of bbls..	612	612	621	632	844	876	589	+3.8	+48.7	6,779	7,121	+5.0
By railroads.....thous. of bbls..	4,087	4,363	4,877	4,490	4,907	4,047	4,047			48,703		
Stocks at refineries, end mo. thous. of bbls..	39,236	39,900	39,599	37,878	34,926	32,522	30,665	-6.9	+6.1			
Price, Okla. 24-26, refineries.....dolls. per bbl..	.650	.650	.650	.650	.625	.625	.800	0.0	-21.9			
Lubricating oil:												
Production.....thous. of bbls..	2,891	2,833	2,979	2,748	2,993	2,945	2,654	-1.6	+11.0	31,701	34,659	+9.3
Consumption.....thous. of bbls..	2,035	1,995	2,123	1,763	1,699	1,521	1,592	-10.5	-4.5	21,669	23,136	+6.8
Stocks at refineries, end mo. thous. of bbls..	7,711	7,442	7,830	7,921	8,340	8,649	7,988	+3.7	+8.3			
Price, cylinder oil.....dolls. per gal..	.229	.236	.240	.246	.271	.299	.245	+10.3	+22.0			
Asphalt:												
Production.....thous. of short tons..	316	306	320	244	170	188	202	+10.6	-6.9	3,419	3,298	-3.5
Stocks, end of month.....thous. of short tons..	226	203	213	228	236	229	249	-3.0	-8.0			
Imports.....thous. of short tons..	13	4	11	11	11	12	7	+9.1	+71.4	156	102	-34.6
Coke:												
Production.....thous. of short tons..	136	119	125	131	132	138	103	+4.5	+34.0	1,145	1,425	+24.5
Stocks, end of month.....thous. of short tons..	402	402	404	419	437	404	331	-7.6	+22.1			
Wax:												
Production.....thous. of lbs..	54,429	50,428	54,546	56,665	54,685	58,885	55,378	+7.7	+6.3	584,347	630,144	+7.8
Stocks, end of month.....thous. of lbs..	79,622	85,417	92,814	103,949	110,344	123,521	149,725	+11.9	-17.5			
RUBBER												
Crude Rubber												
World shipments, plantation.....long tons..	58,345	45,338	43,748	91,860	90,150		48,134			602,196	646,802	+7.4
Imports (including latex).....long tons..	30,874	39,732	44,058	36,624	43,519	57,586	39,108	+32.3	+47.2	426,257	435,989	+2.3
Consumption by tire mfrs.....thous. of lbs..	62,224	55,351	58,302	48,819	41,604		43,709			514,995	600,423	+16.6
World stocks, end of month:												
World total.....long tons..	201,078	198,481	178,876	228,185	230,497		276,670					
United States.....long tons..	68,995	68,851	66,421	61,957	66,166		110,243					
Europe.....long tons..	35,755	35,243	27,966	22,328	24,161		69,594					
Producing countries.....long tons..	21,828	17,687	16,589	34,500	37,870	36,540	27,453	-3.5	+33.1			
Afloat.....long tons..	74,500	76,700	67,900	109,400	102,300		69,380					
Wholesale price, smoked sheets,												
New York.....dolls. per pound..	.193	.182	.187	.182	.179		.400					
Tires and Tubes												
Pneumatic tires:												
Production.....thousands..	5,607	5,101	5,495	4,556	4,204		4,026			48,536	58,539	+20.6
Stocks, end of month.....thousands..	7,539	7,324	8,640	9,434	10,218		7,491					
Shipments—												
Domestic.....thousands..	6,131	5,191	4,096	3,539	3,201		3,924			46,199	53,781	+16.4
Export.....thousands..	179	168	191	209	242		132			2,017	2,022	-0.2
Inner tubes:												
Production.....thousands..	6,294	5,327	5,197	4,198	3,888		4,086			52,697	60,175	+14.2
Stocks, end of month.....thousands..	10,466	10,158	11,464	11,820	12,087		9,760					
Shipments—												
Domestic.....thousands..	6,886	5,245	4,138	3,618	3,466		4,469			53,556	56,574	+5.6
Export.....thousands..	132	121	108	133	178		90			1,198	1,315	+9.8
Solid and cushion:												
Production.....thousands..	52	43	47	36	32		37			570	514	-9.8
Stocks, end of month.....thousands..	149	151	153	151	152		164					
Shipments—												
Domestic.....thousands..	49	42	43	34	28		31			509	478	-6.1
Exports.....thousands..	5	2	3	3	3		3			63	43	-31.7
Other Rubber Products												
Rubber-proofed fabrics:												
Production—												
Total.....thous. of yds..	4,613	4,966	5,914				2,177					
Auto fabrics.....thous. of yds..	764	780	609				600					
Raincoat fabrics.....thous. of yds..	2,598	3,179	4,009	2,447	984		874			21,996	21,632	-1.7
All other.....thous. of yds..	1,251	1,007	1,296	1,025	797		703			6,515	10,746	+64.9
New orders, auto fabrics.....thous. of yds..	688	1,085	1,222				773					
Production, relative to capacity.....per cent..	39.1	40.0	31.2				29.6					
Rubber heels:												
Production.....thous. of pairs..	21,289	21,451	21,932	18,686	15,811		17,682			200,308	235,152	+17.4
Shipments—												
To shoe manufacturers.....thous. of pairs..	11,642	9,207	9,813	8,602	7,321		10,786			102,165	117,028	+14.5
To repair trade.....thous. of pairs..	9,244	9,199	9,580	7,921	5,586		6,314			83,493	94,131	+12.7
For export.....thous. of pairs..	729	875	1,262	1,317	1,108		793			10,944	11,404	+4.2
Stocks, end of month.....thous. of pairs..	49,511	49,751	50,111	48,691	50,903		43,796					
Rubber soles:												
Production.....thous. of pairs..	3,461	2,725	2,297	2,649	2,771		3,431			27,162	37,645	+38.6
Shipments—												
To shoe manufacturers.....thous. of pairs..	2,209	1,703	1,655	1,906	1,730		2,243			18,607	22,478	+20.8
To repair trade.....thous. of pairs..	917	893	958	885	805		916			7,945	10,990	+38.3
For export.....thous. of pairs..	46	29	328	63	143		675			1,014	2,452	+141.8
Stocks, end of month.....thous. of pairs..	5,633	5,501	5,212	4,723	4,534		3,148					
Mechanical rubber goods, shipments:												
Total.....thous. of dolls..	6,306	5,393	5,837	5,201			5,630					
Belting.....thous. of dolls..	1,888	1,412	1,387	1,203			1,388					
Hose.....thous. of dolls..	2,068	1,731	2,026	1,811			2,257					
All other.....thous. of dolls..	2,360	2,250	2,424	2,186			1,984					
Rubber bands, shipments.....thous. of lbs..	193	186	216	201	188		218					
Rubber flooring, shipments.....thous. of sq. ft..	583	754	559	566	623		433					

4 Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927	
	August	September	October	November	December	January	January	Jan. 1929, from Dec., 1928	Jan. 1929, from Jan., 1928	1927	1928		
	HIDES AND LEATHER												
Hides													
Imports:													
Total hides and skins.....	thous. of lbs.	47,056	34,448	35,982	34,720	30,228	38,679	36,409	+28.0	+6.2	446,116	505,750	+13.4
Calfskins.....	thous. of lbs.	4,053	2,707	4,310	1,900	3,395	2,608	3,410	-23.2	-23.5	44,208	47,436	+7.3
Cattle hides.....	thous. of lbs.	26,540	18,504	17,883	10,103	13,118	21,456	18,856	+63.6	+13.8	236,159	275,481	+16.7
Goatskins.....	thous. of lbs.	7,951	6,728	7,993	5,773	6,537	5,911	5,448	-9.6	+8.5	81,294	90,765	+11.7
Sheepskins.....	thous. of lbs.	6,773	4,902	3,785	4,517	4,110	5,060	5,117	+22.9	-1.1	57,307	63,265	+10.4
Stocks, end of month:													
Total hides and skins.....	thous. of lbs.	243,591	249,272	253,921	259,330	267,503		244,242					
Cattle hides.....	thous. of lbs.	197,086	203,227	209,902	215,668	221,679		204,224					
Calf and kip skins.....	thous. of lbs.	25,758	24,059	23,118	22,946	24,733		23,825					
Sheep and lamb skins.....	thous. of lbs.	20,747	21,986	20,901	20,716	21,091		16,193					
Prices:													
Green salted, packers' heavy native steers.....	dolls. per lb.	.236	.246	.219	.203	.226	.205	.261	-9.3	-21.5			
Calfskins, country, No. 1.....	dolls. per lb.	.275	.275	.246	.242	.250	.219	.300	-12.4	-27.0			
Inspected slaughter of livestock:													
United States—													
Cattle.....	thous. of animals	717	764	801	762	667	736	711	+10.3	+3.5	9,519	8,467	-11.1
Calves.....	thous. of animals	369	352	405	378	341	369	383	+8.2	-3.7	4,878	4,683	-4.0
Swine.....	thous. of animals	2,545	2,508	3,713	4,455	5,782	5,738	5,479	-0.8	+4.7	43,636	49,714	+13.9
Sheep.....	thous. of animals	1,196	1,307	1,409	1,189	1,053	1,150	1,151	+9.2	-0.1	12,883	13,487	+4.7
Canada—													
Cattle and calves.....	thous. of animals	105	96	111	106	72	71	66	-1.4	+7.6	1,148	1,115	-2.9
Swine.....	thous. of animals	140	161	200	232	239	249	271	+4.2	-8.1	2,540	2,547	+0.3
Sheep.....	thous. of animals	62	86	142	135	50	35	26	-30.0	+34.6	618	639	+3.4
Leather													
Sole and belting leather:													
Production—													
Sole only.....	thous. of backs, bends, sides	1,463	1,324	1,447	1,264	1,212	1,284	1,223	+5.9	+5.0	15,829	16,136	+1.9
Sole and belting.....	thous. of lbs.	25,701	23,510	25,711	23,184	22,277		23,095			296,802	292,074	-1.6
Stocks, end of month—													
In process of tanning.....	thous. of lbs.	80,508	85,990	83,388	80,931	78,632		85,396					
Finished.....	thous. of lbs.	72,439	72,243	75,188	77,363	80,061		54,828					
Exports.....	thous. of lbs.	996	733	825	1,063	775	1,054	1,265	+36.0	-16.7	9,833	10,176	+3.5
Price oak, scoured backs.....	dolls. per lb.	.67	.65	.63	.59	.59	.59	.59	0.0	0.0			
Upper leather:													
Production.....	thous. of sq. ft.	73,150	66,380	72,092	62,619	62,804		71,415			809,041	810,329	+0.2
Stocks, end of month—													
In process of tanning.....	thous. of sq. ft.	147,602	146,010	143,265	138,803	136,922		149,952					
Finished.....	thous. of sq. ft.	253,854	247,386	251,350	253,470	251,406		245,931					
Exports.....	thous. of sq. ft.	9,000	9,093	11,174	10,263	11,030	10,998	15,532	-0.3	-29.2	148,256	135,559	-8.6
Chrome calf, "B" grades.....	dolls. per sq. ft.	.57	.57	.55	.49	.50	.53	.54	+6.0	-1.9			
Leather Products													
Shoes:													
Production.....	thous. of pairs	34,974	31,000	33,393	26,443	21,909		26,210			343,608	344,352	+0.2
Exports.....	thous. of pairs	331	275	340	403	355	423	388	+19.2	+9.0	5,514	4,331	-21.5
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	5.00	5.00	5.00	4.85	4.85	4.85	4.75	0.0	+2.1			
Women's black kid, dress welt, lace, oxford.....	dolls. per pair	4.00	4.00	4.00	4.00	4.25	4.25	4.03	0.0	+5.5			
Gloves, cut.....	dozen pairs	237,043	213,945	236,907	223,500	179,330		177,884			2,614,580	2,551,900	-2.4
PAPER AND PRINTING													
Wood Pulp													
Mechanical:													
Production.....	short tons	114,668	108,166	131,558	145,120	135,785	150,363	142,034	+10.7	+5.9	1,589,679	1,605,919	+1.0
Consumption and shipments.....	short tons	138,309	122,771	146,383	141,775	129,322	144,069	139,851	+11.4	+3.0	1,650,716	1,637,233	-0.8
Stocks, end of month.....	short tons	147,611	133,006	118,182	118,548	125,011	131,898	159,575	+5.5	-17.3			
Imports.....	short tons	17,233	21,953	23,884	19,627	27,171	25,832	21,082	-4.9	+22.5	245,599	250,379	+2.1
Chemical:													
Production.....	short tons	222,116	201,646	228,434	222,934	208,564	234,062	209,106	+12.2	+11.9	2,587,992	2,583,126	-0.2
Consumption and shipments.....	short tons	221,008	204,378	231,800	221,262	207,355	235,326	210,016	+13.5	+17.1	2,581,014	2,589,862	+0.3
Stocks, end of month.....	short tons	44,682	42,510	40,032	40,242	40,684	41,364	44,726	+2.8	-7.5			
Imports.....	short tons	120,643	124,048	149,112	126,790	179,548	115,240	156,164	-35.8	-26.2	1,431,169	1,493,521	+4.4
Price, sulphite.....	dolls. per 100 lbs.	2.53	2.53	2.53	2.53	2.49	2.45	2.53	-1.6	-3.2			
Newsprint Paper													
Production:													
United States, total.....	short tons	116,120	102,821	122,415	123,646	115,049	123,822	119,525	+7.6	+3.6	1,485,495	1,414,952	-4.7
Ratio to capacity.....	per cent	77	74	81	90	84	84	84					
Canada.....	short tons	200,480	186,396	217,290	223,645	208,484	212,191	187,848	+1.8	+13.0	2,086,949	2,381,102	+14.1
Consumption by publishers.....	short tons	162,184	169,625	189,240	207,056	185,121		172,952			2,075,972	2,126,391	+2.4
Shipments:													
United States.....	short tons	114,768	107,834	120,927	122,761	115,033	120,263	114,211	+4.5	+5.3	1,474,521	1,397,393	-5.2
Canada.....	short tons	197,224	197,532	222,430	233,924	215,133	209,020	186,829	-2.8	+11.9	2,062,749	2,399,030	+16.3
Imports.....	short tons	173,872	164,648	206,362	201,416	207,727	196,882	177,808	-5.2	+10.7	1,987,065	2,153,930	+8.4
Exports:													
Canada.....	short tons	179,334	170,840	214,228	196,187	213,162	195,047	157,466	-8.5	+23.9	1,881,866	2,206,587	+17.3
Stocks, end of month:													
At mills—													
United States.....	short tons	40,838	35,687	36,380	34,691	34,469	38,003	25,905	+10.3	+46.7			
Canada.....	short tons	52,108	43,800	37,018	26,254	19,139	21,406	37,731	+11.8	-43.3			
At publishers.....	short tons	209,044	191,287	188,980	187,223	195,322		207,449					
In transit to publishers.....	short tons	39,744	48,229	45,289	53,674	52,624		46,522					
Price, roll, f. o. b. mill.....	dolls. per cwt.	3.25	3.25	3.25	3.25	3.25	3.25	3.25	0.0	0.0			

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Perct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan. 1929, from Dec., 1928	Jan. 1929, from Jan., 1928	1927	1928	
	PAPEE AND PRINTING—Continued											
Printing												
Book publication:												
American manufacture.....no. of titles..	551	835	933	765	797	507				8,799	8,491	-3.5
Imported.....no. of titles..	169	261	160	104	264	118				1,354	1,863	+37.6
Sales books:												
New orders.....thous. of books..	12,538	11,837	13,958	12,730	11,123	12,866	12,329	+15.7	+4.4	145,599	148,804	+2.2
Shipments.....thous. of books..	13,738	11,976	14,605	13,080	12,462	12,167	11,897	-2.4	+2.3	143,172	147,948	+3.3
Printing activity.....weighted index number..	97	105	113	112	114	108						
Cash checks, shipments.....thous. of checks..	68,482	85,489	86,889	81,204	77,008	90,616	75,144	+17.7	+20.6	912,461	935,919	+2.6
Blank forms, new orders.....thous. of sets..	58,108	50,114	67,957	59,429	63,614	43,173				414,290	611,429	+47.6
Box Board												
Operation.....thous. of inch hours..	9,236	8,344	9,365	8,666	7,632	8,958	7,833	+17.4	+14.4	96,756	101,295	+4.7
Operation.....per ct. of capacity..	81.6	83.0	82.3	82.2	72.4	78.7	75.5	+8.7	+4.2			
Production.....short tons..	230,950	224,971	243,794	241,924	205,046	247,962	203,882	+25.9	+21.6	2,477,324	2,682,845	+8.3
New orders.....short tons..	236,682	234,449	240,391	248,147	197,148	237,095	204,128	+20.3	+16.2	2,476,241	2,695,047	+8.8
Unfilled orders, end of month.....short tons..	81,816	87,097	81,022	93,203	94,174	83,661	80,417	-11.2	+4.0			
Consumption of waste paper.....short tons..	213,626	217,361	240,930	222,693	196,164	230,738	189,744	+17.6	+21.6	2,379,475	2,512,059	+5.6
Shipments.....short tons..	233,104	228,880	245,133	235,228	197,029	247,085	196,984	+25.4	+25.4	2,481,135	2,667,207	+7.5
Stocks, end of month.....short tons..	47,709	45,271	43,627	47,693	55,624	56,999	49,032	+2.5	+16.2			
Stocks of waste paper, end of month:												
On hand.....short tons..	117,009	116,197	127,989	136,100	148,906	135,392	153,747	-9.1	-11.9			
In transit and unshipped purchases.....tons..	48,108	53,344	73,235	49,982	43,447	49,304	62,181	+13.5	-20.7			
Other Paper												
Binder's board, production.....short tons..	3,092	2,431	2,644	2,196	2,718	2,547				29,686	35,664	+20.1
Book paper:												
Production.....short tons..	130,416	117,374	132,633	126,001	122,221	131,999	121,509	-8.0	+8.6	1,331,551	1,506,934	+13.2
Ratio to capacity.....per cent..	89	86	87	90	87	95	90	+9.2	+5.6			
Shipments.....short tons..	133,024	120,895	133,429	124,615	122,221	132,791	125,033	+8.6	+6.2	1,324,016	1,499,184	+13.2
Stocks, end of month.....short tons..	85,836	82,403	81,579	82,395	82,395	79,699	68,265	-4.0	+15.9			
New orders—												
Coated.....p. ct. of normal production..	77	81	83	84	77	81	83	+5.2	-2.4			
Uncoated.....p. ct. of normal production..	79	80	86	80	82	82	87	0.0	-5.7			
Unfilled orders, end of month—												
Coated.....p. ct. of normal production..	8	10	10	10	7	10	11	+42.9	-9.1			
Uncoated.....p. ct. of normal production..	7	7	8	7	6	8	9	+33.3	-11.1			
Wrapping paper:												
Production.....short tons..	100,779	83,582	96,053	96,907	90,979	101,604	96,223	+11.7	+5.6	1,087,155	1,127,981	+3.8
Ratio to capacity.....per cent..	89	84	85	87	81	81	91	0.0	-11.0			
Shipments.....short tons..	100,174	86,173	94,900	91,286	88,159	91,240	93,144	+3.5	-2.0	1,057,467	1,111,259	+5.1
Stocks, end of month.....short tons..	93,340	91,977	93,416	93,930	96,123	96,740	87,895	+0.6	+10.1			
Fine paper:												
Production.....short tons..	39,331	34,885	39,680	37,463	35,263	40,020	37,471	+13.5	+6.8	446,717	458,763	+2.4
Ratio to capacity.....per cent..	84	80	84	88	80	92	93	+15.0	-1.1			
Shipments.....short tons..	38,938	34,885	39,839	36,076	33,817	34,001	35,550	+0.5	-4.4	447,853	453,299	+1.2
Stocks, end of month.....short tons..	53,535	53,361	53,788	54,418	55,805	52,445	52,410	-6.0	+0.1			
All other grades:												
Production.....short tons..	110,677	100,138	112,529	102,703	93,374	106,160	99,588	+13.7	+6.6	1,197,896	1,221,547	+2.0
Shipments.....short tons..	109,154	102,437	115,563	101,483	91,785	104,397	98,946	+13.7	+5.5	1,193,456	1,223,549	+2.5
Stocks, end of month.....short tons..	72,438	70,140	61,422	61,340	62,015	62,474	60,838	+0.7	+2.3			
Total paper (inc. newsprint and box board):												
Production.....short tons..	728,073	663,771	747,104	728,644	661,932	751,565	678,198	+13.5	+10.8	8,022,452	8,413,777	+4.9
Ratio to capacity.....per cent..	78	84	83	90	79	91	82	+15.2	+11.0			
Shipments.....short tons..	728,162	681,104	749,791	712,949	648,044	729,777	663,868	+12.6	+9.9	8,025,944	8,344,849	+4.0
Stocks, end of month.....short tons..	393,696	378,839	370,212	374,467	386,431	385,755	344,345	-0.2	+12.0			
Paper Board Shipping Boxes												
Production:												
Total.....thous. of sq. ft..	441,792	434,371	454,662	454,354	415,958	433,141	347,622	+4.1	+24.6	4,720,249	5,012,380	+6.2
Corrugated.....thous. of sq. ft..	364,756	359,553	374,342	370,302	348,090	354,992	227,280	+2.0	+56.2	3,784,861	4,047,919	+7.0
Solid fiber.....thous. of sq. ft..	77,036	74,818	80,320	84,052	67,868	78,149	70,342	+15.1	+11.1	935,388	915,802	-2.1
Operating activity:												
Total.....per cent of normal..	79	79	88	82	71	78	69	+9.9	+13.0			
Corrugated.....per cent of normal..	77	78	89	82	72	78	67	+8.3	+16.4			
Solid fiber.....per cent of normal..	84	80	83	79	68	77	75	+13.2	+2.7			
Other Paper Products												
Rope paper sacks, shipments.....index number..	111	102	113	107	93	106						
Abrasive paper and cloth:												
Domestic shipments.....reams..	99,789	95,131	98,576	91,405	97,708	94,916	80,505	-2.9	+17.9	979,981	1,090,303	+11.1
Foreign shipments.....reams..	17,875	18,281	20,085	18,601	19,214	17,184	17,112	-10.6	+0.4	192,596	222,960	+15.8
BUILDING CONSTRUCTION AND HOUSING												
Rental advertisements, Minneapolis.....number..	7,712	7,930	6,454	4,886	3,328	2,672	2,473	-19.7	+8.0	60,243	58,279	-3.3
Building Costs												
Building materials:												
Frame house, 6-room.....rel. to 1913..	177	177	179	177	175	177	178	+1.1	-0.6			
Brick house, 6-room.....rel. to 1913..	181	181	184	182	181	183	183	+1.1	0.0			
Concrete factory costs (Aberthaw).....rel. to 1913..	191	191	191	190	190	190	192	0.0	-1.0			
Building costs (Eng. News Record).....rel. to 1913..	207	208	209	210	209	205	205	+0.5	+2.4			
Building costs (A. G. C.).....rel. to 1913..	200	201	202	202	202	203	199	+0.5	+2.0			
Plumbing fixtures, 6 pieces.....dollars..	101.21	101.13	100.67	100.79	101.23	100.30	98.59	-0.9	+10.2			
Construction costs (Am. Appraisal):												
Frame.....rel. to 1913..	204	204	204	204	204	204	205	0.0	-0.5			
Brick, wood frame.....rel. to 1913..	213	213	213	213	212	212	214	0.0	-0.9			
Brick, steel frame.....rel. to 1913..	198	198	197	197	197	197	196	0.0	+0.5			
Reinforced concrete.....rel. to 1913..	201	201	201	201	201	201	200	0.0	+0.5			

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
	LUMBER PRODUCTS—Continued											
Hardwood Lumber—Continued												
Lower Michigan hardwoods:												
Production..... M ft. b. m.	5,502	4,915	4,411	5,541	6,257		7,934			80,339	83,169	+3.5
Shipments..... M ft. b. m.	7,349	6,467	6,137	7,280	5,695		8,147			90,048	82,454	-8.4
Stocks, end of month..... M ft. b. m.	23,509	20,915	19,434	23,206	23,502		30,821					
Gum:												
Stocks, total, end of month..... mill. ft. b. m.	543	529	532	518	517		543					
Stocks, unsold, end of month..... mill. ft. b. m.	410	396	398	376	372		400					
Unfilled orders, end of month..... mill. ft. b. m.	132	133	134	142	145		143					
Oak:												
Stocks, total, end of month..... mill. ft. b. m.	959	954	918	907	938		1,051					
Stocks, unsold, end of month..... mill. ft. b. m.	800	775	746	741	768		865					
Unfilled orders, end of month..... mill. ft. b. m.	159	161	171	166	170		186					
All hardwoods:												
Production..... mill. ft. b. m.	263	270	285	289	274		315			3,960	3,216	-18.8
Shipments..... mill. ft. b. m.	285	263	315	308	293		296			3,701	3,306	-10.7
New orders..... mill. ft. b. m.	289	293	323	323	274		330			3,795	3,415	-10.0
Stocks, total, end of month..... mill. ft. b. m.	2,771	2,731	2,722	2,696	2,757		2,954					
Stocks, unsold, end of month..... mill. ft. b. m.	2,211	2,164	2,132	2,107	2,142		2,331					
Unfilled orders, end of month..... mill. ft. b. m.	557	566	589	589	615		624					
Production, 10 species..... M ft. b. m.	2,206,862	1,927,716	2,114,273	1,991,913	1,785,505	2,052,155	2,002,727	+14.9	+2.5	27,909,648	26,104,320	-6.5
Exports, planks, joists, etc..... M ft. b. m.	162,221	170,457	204,979	184,054	208,045	240,384	239,145	+15.5	+0.5	2,159,316	2,323,681	+7.6
Retail yards, Minneapolis district:												
Sales..... M ft. b. m.	17,632	17,860	18,242	13,302	47,807	5,489	44,764	-29.7	+63.9	133,401	158,604	+18.9
Stocks, end of month..... M ft. b. m.	86,807	84,984	81,035	75,810	72,771	79,400	84,686	+9.1	-6.2			
Retail yards, Kansas City district:												
Sales..... M ft. b. m.	6,140	6,497	7,008	5,494	4,035	4,333	4,763	+7.4	-9.0	69,284	67,998	-1.9
Stocks, end of month..... M ft. b. m.	45,326	45,529	45,361	42,505	44,458	45,364	41,842	+2.0	+8.4			
Flooring												
Maple flooring:												
Production..... M ft. b. m.	8,413	7,675	8,204	8,721	8,866	7,771	7,346	-12.4	+5.8	114,759	94,369	-17.7
Shipments..... M ft. b. m.	9,515	7,929	8,543	6,230	5,784	5,114	7,252	-11.6	-29.5	109,952	93,124	-15.3
Stocks, end of month..... M ft. b. m.	23,232	22,554	21,852	21,960	24,674	24,733	28,721	+0.2	-13.9			
New orders..... M ft. b. m.	8,851	7,110	7,230	6,537	5,382	5,999	8,161	+11.5	-26.5	104,349	89,760	-14.0
Unfilled orders, end of month..... M ft. b. m.	10,187	10,106	7,940	7,157	7,988	8,019	9,154	+0.4	-12.4			
Oak flooring:												
Production..... M ft. b. m.	51,529	45,926	51,225	45,794	38,747		35,947			526,000	531,429	+1.0
Shipments..... M ft. b. m.	51,860	45,020	45,652	37,232	31,665		38,080			513,074	531,008	+3.5
Stocks, end of month..... M ft. b. m.	67,864	68,456	72,689	80,331	87,856		82,239					
New orders..... M ft. b. m.	49,427	43,141	38,132	43,753	29,093		53,888			506,436	533,563	+5.4
Unfilled orders, end of month..... M ft. b. m.	47,026	47,099	41,151	48,052	30,956		45,925					
Doors at Wholesale												
Fir, manufacturing plants:												
Production..... number	314,154	273,076	372,158	244,857	203,776	253,005		+24.2				
Shipments..... number	344,643	305,555	362,004	254,110	166,886	268,826		+61.1				
Stocks, end of month..... number	267,118	238,999	243,946	251,837	277,431	216,207		-22.1				
New orders..... number	227,311	237,769	285,147	253,418	247,799	311,347		+25.6				
Unfilled orders, end of month..... number	344,094	300,106	215,872	217,608	295,919	219,981		-25.7				
Wooden Furniture												
Household furniture and case goods:												
Shipments.....dolls., average per firm.....	65,947	65,010	70,030	59,855	41,962		41,335			655,804	626,782	-4.4
Unfilled orders.....dolls., average per firm.....	57,288	58,576	50,266	51,136	45,885		51,033					
Grand Rapids district:												
Unfilled order, end of month.....No. of days' production.....	53	49	38	50	39		44					
New orders.....No. of days' production.....	30	31	31	50	18		40					
Shipments.....No. of days' production.....	31	30	37	35	26		23					
Outstanding accounts, end of month.....No. of days' sales.....	56	65	65	65	59		55					
Cancellations.....per cent of new orders.....	7.0	9.0	10.0	6.0	17.0		7.0					
Plant operation.....per cent of full time.....	92.0	101.0	103.0	100.0	99.0		95.0					
Piano benches and stools:												
New orders (average per firm).....dollars.....	6,396	9,508	9,929	7,812	8,044		7,043			107,819	85,000	-21.1
Unfilled orders, end of month (average per firm).....dollars.....	2,323	3,012	3,178	2,385	1,066		2,851					
Shipments—Value (average per firm).....dollars.....	5,251	8,343	9,760	8,594	9,315		5,918			106,180	84,578	-20.3
Quantity (total).....pieces.....	6,020	9,826	10,972	9,790	10,519		7,617			137,005	102,918	-24.9
Plywood and Veneer												
Douglas fir plywood:												
Production.....thous. of sq. ft. of surface.....	11,094	9,426	13,079	9,291	8,426	12,743		+51.2				
Shipments.....thous. of sq. ft. of surface.....	10,988	9,257	12,003	9,135	7,921	13,530		+70.8				
New orders (sales).....thous. of sq. ft. of surface.....	11,030	10,245	12,654	8,336	9,212	16,030		+74.0				
Unfilled orders, end of month.....thous. of sq. ft. of surface.....	8,024	7,715	6,628	5,307	6,863	9,001		+31.2				
Stocks, end of month.....thous. of sq. ft. of surface.....	7,358	7,309	7,704	7,747	8,433	7,316		-13.2				
Other plywood:												
New orders.....thous. of sq. ft. of surface.....	4,239	3,381	4,411	5,773	3,749	3,426	2,469	-8.6	+38.8	34,509	41,138	+19.2
Shipments.....thous. of sq. ft. of surface.....	2,961	3,177	4,235	4,147	2,973	3,746	2,575	+26.0	+45.5	34,956	36,583	+4.7
Unfilled orders, end of month.....thous. of sq. ft. of surface.....	5,131	5,469	5,817	6,778	6,811	5,971	2,863	-12.3	+108.6			
Bushel baskets:												
Production.....dozens.....	243,056	177,982	156,521	114,184	81,302	135,090	95,832	+66.2	+41.0	2,715,339	2,171,713	-20.0
Shipments.....dozens.....	262,810	285,813	156,407	75,337	111,244	126,602	58,896	+13.8	+115.0	2,562,088	2,234,611	-12.8
Stocks, end of month.....dozens.....	570,726	409,110	420,671	464,733	434,942	331,992	406,694	-23.7	-18.4			
Rotary-cut veneer:												
Receipts.....number of carloads.....	259	244	337	222	206	175	80	-15.0	+118.8	98	185	+88.8
Purchases.....number of carloads.....	325	199	255	190	178	241	132	-35.4	+82.6	97	206	+112.4

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. Increase (+) or decrease (-) cumulative 1928 from 1927		
	August	September	October	November	December			January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928		1927	1928
STONE, CLAY, AND GLASS PRODUCTS														
Clay Products														
Face brick, averages per plant:														
Production.....	890	900	902	658	735	707	482	-3.8	+46.7	8,929	8,758	-1.9		
Shipments.....	841	850	819	840	532	436	402	-18.0	+8.5	7,959	8,801	+10.6		
Stocks, end of month.....	2,282	2,323	2,320	2,553	2,755	3,568	2,958	+29.5	+20.0					
Unfilled orders, end of month.....	989	1,101	855	145,427	843	891	761	-0.1	+17.1					
Common brick:														
Stocks, end of month—														
Burned.....	491,088	498,691	454,931	537,712	461,357		517,897							
Unburned.....	206,938	257,692	91,226	287,162	106,440		68,611							
Shipments.....	218,339	167,078	122,078	180,360	136,033		131,338			2,211,243	2,230,660	+0.9		
Unfilled orders, end of month.....	221,625	213,274	145,427	204,189	182,791		219,233							
Plants closed down.....	14	21	49	67	84		91							
Price, red, New York.....	13.50	12.50	12.50	12.00	12.00	11.50	12.75	-4.2	-9.8					
Porcelain plumbing fixtures:														
Net new orders—														
Shipments.....	12,960	9,939	22,665	11,715	12,195	13,471	18,545	+10.5	-27.4					
Shipments.....	22,970	16,525	17,018	14,657	9,350	11,849	13,239	+26.7	-10.5					
Unfilled orders, end of month.....	65,029	54,583	50,558	38,268	35,545	35,497	22,639	-0.1	+56.8					
Stocks, end of month.....	47,690	50,953	50,956	47,550	47,044	45,296	37,374	-3.7	+21.2					
Vitreous china plumbing fixtures:														
New orders—														
Shipments.....	217,305	180,758	222,190	221,575	231,771	276,144	237,727	+19.1	+16.2	2,685,034	3,079,675	+14.7		
Shipments.....	267,710	215,284	236,781	201,925	165,712	260,829	240,829	+57.4	+8.3	2,933,371	3,012,173	+2.7		
Unfilled orders, end of month.....	353,034	318,508	303,917	323,567	339,626	404,941	329,482	+3.9	+22.9					
Stocks, end of month.....	477,593	510,864	531,119	554,422	622,590	570,141	544,461	-8.4	+4.7					
Terra cotta, new orders:														
Quantity.....	12,058	10,870	15,597	9,998	9,453	10,056	10,850	+6.4	-7.3	147,135	148,755	+1.1		
Value.....	1,123	1,005	1,460	949	982	1,086	949	+10.6	+14.4	14,479	14,171	-2.1		
Portland Cement														
Production.....														
Operation.....	18,739	17,484	17,533	15,068	12,189	9,781	9,768	-19.8	+0.1	171,908	175,968	+2.4		
Shipments.....	93.1	91.7	87.1	77.4	60.4	46.5	49.4	-23.0	-5.9					
Stocks, end of month.....	21,970	20,460	19,836	11,951	7,394	5,735	6,541	-22.3	+12.9	170,922	175,455	+2.7		
Stocks, end of month.....	19,374	16,749	14,579	17,769	22,650	26,696	25,116	+17.9	+6.3					
Stocks, end of month.....	9,357	7,566	5,944	5,953	7,422	9,627	9,672	+29.7	-0.5					
Wholesale prices, composite.....	1.683	1.650	1.650	1.650	1.650	1.650	1.683	0.0	-2.0					
Highways														
Federal-aid highways:														
Completed—														
Cost.....	12,145	26,105	13,413	19,025	41,962	16,057	10,728	-61.7	+49.7	189,349	193,913	+2.4		
Distance.....	599	1,169	698	845	1,076	557	458	-48.2	+21.6	8,285	7,628	-7.9		
Under construction, end of month.....	9,547	9,427	9,337	8,692	8,163	7,835	8,480	-4.0	-7.6	115,918	106,550	-8.1		
Concrete pavements, new contracts:														
Total.....	16,889	14,752	7,068	8,430	8,080	7,461	5,902	-7.7	+26.4	125,768	148,078	+17.7		
Roads.....	9,254	9,630	3,856	5,213	5,166	6,089	4,103	+17.9	+48.4	73,952	93,502	+26.4		
Plate Glass														
Production, polished.....														
	12,159	10,897	11,140	11,640	10,579	11,426	8,825	+8.0	+29.5	111,390	130,648	+17.3		
Glass Containers														
Actual production:														
Quantity.....	2,686	2,322	2,389	2,146	1,970	2,367	2,207	+20.2	+7.2	25,316	28,447	+12.4		
Relation to capacity.....	80.9	78.7	71.6	66.8	63.8	73.6	76.9	+15.4	-4.3					
New orders.....	1,909	2,122	2,721	2,950	2,599	3,089	2,680	+18.9	+15.3	27,068	29,317	+8.3		
Shipments.....	2,654	2,433	2,261	1,990	1,874	2,435	1,958	+29.9	+24.4	25,495	28,012	+9.9		
Stocks, end of month.....	8,467	8,084	8,415	8,872	9,510	9,306	10,140	-2.1	-8.2					
Unfilled orders, end of month.....	6,297	6,173	6,302	6,455	6,542	6,460	6,327	-1.3	+2.1					
Illuminating Glassware														
Production:														
Total.....	2,985	3,190	4,193	4,245	3,949		2,685			34,916	39,044	+11.8		
Ratio to capacity.....	36.5	43.0	50.5	54.2	54.6		34.8							
New orders.....	44.5	44.2	53.2	51.1	39.0		39.7							
Shipments.....	42.5	43.0	51.9	51.9	45.0		36.5							
Unfilled orders, end of month.....	1.8	1.7	1.7	1.6	1.5		1.2							
Stocks, end mo.....	4.3	4.3	4.1	4.2	4.7		4.2							
CHEMICALS AND OILS														
Chemicals														
Sulphuric acid:														
Exports.....														
Price, wholesale.....	291,035	581,760	441,867	632,942	322,787	429,264	559,952	+33.0	-23.3	7,512,347	7,001,959	-6.8		
	.78	.78	.78	.78	.78	.78	.78	0.0	0.0					
Nitrate of soda:														
Imports.....														
Production in Chile.....	75,318	36,644	48,385	45,575	85,391	83,698	69,867	-2.0	+19.8	736,025	1,032,909	+40.3		
Production in France.....	275,000	259,400	282,300	285,900	293,600	274,500	242,800	-6.5	+13.1	1,611,342	3,163,500	+96.3		
Potash salts:														
Imports (commercial).....														
Production in France (K ₂ O content).....	57,327	43,313	28,242	24,639	22,412	24,724	31,646	+10.3	-21.9	268,997	357,703	+33.0		
Sales in Germany (K ₂ O content).....	34,300	35,200	40,000	37,400	38,538		31,290			372,040	410,316	+10.3		
Superphosphate (acid phosphate):														
Production.....														
Stocks, end of month.....	294,381	276,811	350,958	322,452	349,685	372,817	358,008	+6.6	+4.1	3,293,543	3,892,320	+18.2		
Shipments.....	1,414,615	1,424,169	1,566,402	1,832,363	2,288,284	2,288,258	2,196,736	+11.2	+4.2					
Shipments.....	82,876	154,443	91,165	75,680	107,008	123,248	101,540	+15.2	+21.4	1,615,084	1,911,908	+18.4		
Fertilizer:														
Exports.....														
Consumption, Southern States.....	103,575	99,149	86,289	94,085	66,134	99,751	87,632	+50.8	+13.8	1,273,176	1,210,426	-4.9		
	62,903	138,470	151,128	84,947	112,659	450,600	626,560	+300.0	-28.1	4,579,369	5,603,846	+22.4		
Dyes and dyestuffs, exports:														
Vegetable.....														
Coal tar.....	237	157	231	400	146	92	239	-37.0	-61.5	3,771	3,158	-16.3		
	1,335	1,330	5,194	2,436	1,926	58	1,715			26,763	32,271	+20.6		

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
	CHEMICALS AND OILS—Continued											
Roofing												
Roofing, felt:												
Production, dry felt..... tons..	25,574	24,343	23,930	17,424	14,475		21,743			303,311	281,420	-7.2
Stocks, end of month, dry felt..... tons..	3,356	3,427	3,367	4,045	4,600		3,088					
Prepared roofing:												
Shipments..... thous. of roof squares..	2,447	3,774										
Fats and Oils												
Total vegetable oils and copra:												
Exports..... thous. of lbs..	1,444	3,222	3,681	5,570	3,928	2,884	9,405	-26.6	-69.3	70,713	55,006	-22.2
Imports..... thous. of lbs..	56,364	80,914	82,176	71,918	70,010	74,261	59,870	+6.1	+24.0	704,365	762,773	+8.3
Copra, imports..... short tons..	19,716	20,754	22,897	30,955	57,087	46,949	26,872	-17.8	+74.7	225,519	276,271	+22.5
Copra or coconut oil:												
Imports..... thous. of lbs..	12,581	34,008	31,534	29,672	36,444	35,164	32,751	-3.5	+7.4	293,369	290,638	-0.9
Consumption in oleomargarine..... thous. of lbs..	11,910	14,452	15,714	16,026	14,839	15,455	13,191	+4.2	+17.2	122,575	159,852	+30.4
Oleomargarine:												
Production..... thous. of lbs..	23,610	28,446	30,631	30,569	28,899	29,474	26,205	+2.0	+12.5	276,714	316,489	+14.4
Consumption..... thous. of lbs..	24,965	29,002	30,137	32,755	28,526	27,847	27,729	-2.4	+0.4	274,577	317,475	+15.6
Animal glues:												
Shipments..... thous. of lbs..	6,780	6,256	7,528	6,958	6,325	6,108	6,814	-3.4	-10.4	75,140	79,441	+5.7
Cottonseed												
Cottonseed:												
Receipts at mills..... short tons..	169,498	869,738	1,519,076	1,010,791	707,392	420,026	318,741	-40.6	+31.8	5,616,815	4,930,020	-12.2
Consumption (crush)..... short tons..	73,795	420,883	903,031	869,599	701,116	748,093	570,704	+6.7	+31.1	5,902,232	4,612,930	-21.8
Stocks at mills, end of month..... short tons..	117,484	566,530	1,182,175	1,323,367	1,328,703	991,366	760,990	-25.4	+30.3			
Cottonseed oil, crude:												
Production..... thous. of lbs..	20,863	126,584	280,383	272,893	219,532	237,127	182,334	+8.0	+30.1	1,806,754	1,460,201	-19.2
Stocks, end of month..... thous. of lbs..	15,346	67,951	123,167	143,080	133,837	141,595	170,499	+5.8	-17.0			
Cottonseed oil, refined:												
Production..... thous. of lbs..	19,677	61,889	204,255	223,886	217,211	205,804	143,230	-5.3	+43.7	1,592,888	1,328,463	-16.6
Stocks, end of month..... thous. of lbs..	236,200	159,629	220,449	322,857	431,694	511,162	539,445	+18.4	-5.2			
Price, yellow, prime, N. Y.....dolls. per lb..	.094	.099	.099	.096	.103	.103	.101	0.0	+2.0			
Consumption in oleomarg..... thous. of lbs..	2,062	2,437	2,678	2,621	2,522	2,283	2,162	-9.5	+5.6	24,621	26,933	+9.4
Cottonseed cake and meal:												
Production..... short tons..	34,760	185,723	405,150	387,160	315,442	337,989	258,150	+7.1	+30.9	2,648,053	2,085,350	-21.2
Stocks, end of month..... short tons..	19,794	61,350	124,196	160,899	182,173	237,067	176,416	+30.1	+34.4			
Exports..... short tons..	944	22,013	60,015	40,482	60,272	34,135	53,249	-43.4	-35.9	440,550	290,510	-34.1
Flaxseed												
Minneapolis and Duluth:												
Receipts..... thous. of bush..	1,025	3,812	6,600	2,140	770	369	723	-52.1	-49.0	20,163	18,104	-20.0
Shipments..... thous. of bush..	426	1,260	2,348	2,862	199	253	577	+42.2	-51.0	11,692	10,624	-9.1
Stocks, end of month..... thous. of bush..	310	615	2,585	1,243	1,257	1,063	3,312	-15.4	-67.9			
Mill receipts at Duluth—												
Superior..... thous. of bush..	137	62	1,014	515	115	69	101	-40.0	-31.7	2,929	2,240	-23.5
Imports..... thous. of bush..	1,068	1,254	1,209	1,417	1,533	1,411	1,181	-8.0	+19.5	21,820	17,619	-10.3
Linseed oil:												
Shipments from Minneapolis.....thous. of lbs..	13,571	14,443	15,437	13,622	8,375		13,023			127,407	170,859	+34.1
Price, New York.....dolls. per lb..	.098	.098	.101	.102	.101	.100	.098	-1.0	+2.0			
Linseed cake and meal:												
Shipments from Minneapolis.....thous. of lbs..	16,051	26,257	30,071	31,468	26,141		27,056			206,416	274,837	+33.1
Exports..... thous. of lbs..	52,392	38,772	51,894	44,131	46,569	22,859	44,367	-50.9	-48.5	663,299	561,549	-15.3
FOODSTUFFS												
Wheat												
Visible supply, end of month:												
United States..... thous. of bush..	92,108	114,523	138,239	140,775	142,532	130,063	82,368	-8.7	+57.9			
Canada..... thous. of bush..	32,728	78,069	158,204	173,890	197,219	188,742	152,560	-4.3	+23.7			
Receipts, principal markets.....thous. of bush..	84,221	73,322	84,423	43,532	32,963	22,537	23,542	-31.6	-4.3	481,256	522,787	+8.6
Shipments, principal markets.....thous. of bush..	46,105	39,508	30,365	35,627	21,415	16,762	14,284	-21.7	+17.3	314,495	305,522	-2.9
Exports:												
United States—												
Wheat only..... thous. of bush..	10,394	17,939	22,058	10,561	7,641	3,399	5,956	-55.5	-42.9	168,307	96,270	-42.8
Including wheat flour.....thous. of bush..	14,588	22,528	28,272	15,955	11,866	9,559	11,560	-19.4	-17.3	226,011	150,036	-33.6
Canada—												
Including wheat flour.....thous. of bush..	20,220	30,928	48,957	80,633	53,242	25,032	18,647	-53.0	+34.2	296,741	413,746	+39.4
Prices:												
No. 1, Northern spring,												
Minneapolis.....dolls. per bush..	1.19	1.19	1.16	1.16	1.15	1.21	1.35	+5.2	-10.4			
No. 2 Red Winter,												
St. Louis.....dolls. per bush..	1.38	1.45	1.44	1.45	1.39	1.42	1.51	+2.2	-6.0			
No. 2 Hard Winter,												
Kansas City.....dolls. per bush..	1.06	1.07	1.10	1.12	1.11	1.14	1.33	+2.7	-14.3			
Wheat Flour												
Grinding of wheat:												
United States..... thous. of bush..	47,657	48,014	52,890	45,289	42,246	45,759	42,823	+8.3	+6.9	500,850	521,448	+4.1
Canada..... thous. of bush..	7,330	8,554	9,473	9,690	7,600	7,794	7,246	+2.6	+7.6	80,788	90,380	+11.9
Production:												
United States, actual.....thous. of bush..	410,370	410,512	411,587	49,909	49,269	10,022	9,242	+8.1	+8.5	109,178	113,129	+3.6
United States, prorated.....thous. of bush..	11,563	11,197	13,316	11,200	10,229		10,502			123,812	126,736	+2.4
Canada.....thous. of bush..	1,590	1,892	2,130	2,175	1,672	1,698	1,579	+1.6	-7.5	17,702	19,791	+11.8

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
	FOODSTUFFS—Continued											
Wheat Flour—Continued												
Production, grain offal.....thous. of lbs..	4 819,994	4 820,934	4 910,900	4 780,189	4 727,305	791,828	4 745,242	+8.9	+6.3	8,665,202	9,105,982	+5.1
Capacity operated, flour mills.....per cent..	58	66	66	61	57	59	55	+3.5	+7.3	111,596	113,521	+1.7
Consumption (computed).....thous. of bbls..	10,431	9,077	12,536	10,401	9,420	8,207	8,207	-----	-----	-----	-----	-----
Stocks, all positions, end of month (computed).....thous. of bbls..	7,400	8,500	7,900	7,500	7,730	-----	7,150	-----	-----	-----	-----	-----
Exports:												
United States.....thous. of bbls..	932	1,020	1,381	1,199	939	1,369	1,245	+45.8	+10.0	12,814	11,949	-6.8
Canada.....thous. of bbls..	925	890	1,171	1,159	4 933	933	766	0.0	+21.8	9,262	10,747	+16.0
Wholesale prices:												
Standard patents, Minn.....dolls. per bbl..	6.62	6.59	6.41	6.23	6.13	6.34	7.45	+3.4	-14.9	-----	-----	-----
Winter, straights												
Kansas City.....dolls. per bbl..	5.66	5.65	5.50	5.53	5.50	5.52	6.70	+0.4	-17.6	-----	-----	-----
Corn												
Exports, including meal.....thous. of bushs..	1,018	668	870	2,124	6,288	12,357	1,661	+96.5	-----	14,976	26,900	+79.6
Visible supply, end of month.....thous. of bushs..	9,985	7,114	2,271	7,223	17,790	28,012	30,078	+57.5	-6.9	-----	-----	-----
Receipts, principal markets.....thous. of bushs..	21,467	19,658	13,323	26,921	42,712	39,876	36,001	-6.6	+10.8	247,412	331,047	+33.8
Shipments, prin. markets.....thous. of bushs..	15,778	11,949	9,044	11,868	18,564	19,838	19,551	+6.9	+1.5	137,093	212,465	+55.0
Grindings (starch, glucose).....thous. of bushs..	5,193	6,541	7,725	7,535	6,550	8,364	8,330	+27.7	+0.4	85,548	86,922	+1.6
Price, No. 2, Chicago.....dolls. per bush..	.97	.99	.94	.90	.86	.92	.89	+7.0	+3.4	-----	-----	-----
Oats												
Receipts, principal markets.....thous. of bushs..	27,271	14,375	13,872	10,834	11,196	9,919	10,495	-11.4	-5.5	148,787	154,281	+3.7
Visible supply, end of month.....thous. of bushs..	15,687	18,004	17,882	16,935	17,118	16,212	21,519	-5.3	-24.7	-----	-----	-----
Exports, including meal.....thous. of bushs..	2,403	2,308	1,653	822	951	703	623	-26.1	+12.8	10,179	10,583	+4.0
Price, contract grades, Chi.....dolls. per bush..	.39	.43	.45	.47	.49	.52	.56	+6.1	-7.1	-----	-----	-----
Grindings, Canada.....thous. of bushs..	988	1,100	1,292	1,112	896	824	1,040	-8.0	-20.8	10,245	11,403	+11.3
Production, oatmeal and rolled oats, Canada.....thous. of lbs..	15,968	16,499	17,760	13,988	11,580	9,956	12,461	-14.0	-20.1	121,366	149,620	+23.3
Barley												
Receipts, principal markets.....thous. of bushs..	23,611	21,710	16,797	7,377	6,476	-----	6,401	-----	-----	65,507	102,498	+56.5
Visible supply, end of month.....thous. of bushs..	6,313	8,084	8,962	9,627	9,250	8,932	2,359	-3.4	+278.6	-----	-----	-----
Exports.....thous. of bushs..	8,758	14,830	11,639	5,263	6,873	2,277	1,901	-66.9	+19.8	40,555	57,597	+42.0
Price, fair to good, malting, Chicago.....dolls. per bush..	.73	.67	.62	.55	.57	.60	.93	+5.3	-35.5	-----	-----	-----
Rye												
Receipts, principal markets.....thous. of bushs..	2,636	6,001	6,770	1,515	2,083	-----	1,477	-----	-----	41,751	27,925	-33.1
Visible supply, end of month.....thous. of bushs..	1,440	1,927	4,437	4,143	5,726	-----	3,656	-----	-----	-----	-----	-----
Exports, including flour.....thous. of bushs..	709	2,471	3,098	1,401	499	197	519	-60.5	-62.0	36,173	14,671	-59.4
Price, No. 2, Chicago.....dolls. per bush..	.98	1.00	1.05	1.06	1.06	1.04	1.09	-1.9	-4.6	-----	-----	-----
Total Grains												
Total grain exports, incl. flour.....thous. of bushs..	27,476	42,805	45,533	25,564	26,477	25,093	12,264	-5.2	+104.6	327,898	255,778	-22.0
Rice												
Southern paddy, receipts at mills.....bbls..	338,269	1,197,924	2,113,697	1,935,761	947,584	-----	853,581	-----	-----	9,208,835	10,252,010	+11.3
Shipments:												
Total from mills.....pockets (100 lbs.)..	346,076	777,583	1,245,714	1,277,631	1,053,585	-----	1,118,120	-----	-----	9,634,168	10,247,434	+6.4
New Orleans.....pockets (100 lbs.)..	96,643	147,464	202,697	251,453	205,384	146,342	158,323	-28.7	-7.6	2,103,510	2,016,420	-4.1
Stocks, end of month.....pockets (100 lbs.)..	695,660	1,108,564	2,142,144	2,886,600	2,792,141	-----	2,106,310	-----	-----	-----	-----	-----
Exports.....pockets (100 lbs.)..	126,668	152,906	228,255	408,917	542,283	504,921	469,435	-6.9	+7.6	3,099,943	3,793,709	+22.4
Imports.....pockets (100 lbs.)..	6,026	15,412	8,864	16,663	29,774	76,593	52,744	+157.2	+45.2	522,071	335,984	-35.6
Other Crops												
Apples:												
Cold-storage holdings, end of month.....thous. of bbls..	84	1,631	8,733	10,392	4 9,052	6,859	5,307	-24.2	+29.2	-----	-----	-----
Car-lot shipment.....carloads..	4,170	18,085	44,034	19,331	8,161	7,656	5,305	-6.2	+44.3	98,505	116,102	+17.9
Potatoes:												
Car-lot shipments.....carloads..	15,538	20,267	28,921	17,593	12,872	19,479	19,665	+51.3	-0.9	246,151	250,626	+1.8
Onions, car-lot shipments.....carloads..	2,561	6,009	4,115	2,158	1,611	2,436	3,114	+51.2	-21.8	32,368	33,759	+4.3
Citrus fruits, car-lot shipments.....carloads..	4,254	3,636	5,868	11,671	13,314	15,226	9,057	+14.4	+68.1	105,993	94,176	-11.1
Hay, all tame, receipts.....tons..	59,774	64,511	60,558	54,962	42,958	65,854	63,009	+53.3	+4.5	696,008	642,987	-7.6
Cattle and Beef												
Cattle movements, primary markets:												
Receipts.....thousands..	1,829	2,191	4 2,541	4 1,963	1,510	1,635	1,771	+8.3	-7.7	22,764	21,477	-5.7
Shipments, total.....thousands..	814	1,067	1,327	4 944	598	567	660	-5.2	-14.1	9,173	9,008	-1.8
Shipments, stocker and feeder.....thousands..	336	563	799	4 497	253	178	234	-29.6	-23.9	3,612	3,966	+9.8
Local slaughter.....thousands..	1,007	1,069	4 1,195	4 1,038	910	1,051	1,080	+15.5	-2.7	13,459	12,307	-8.6
Beef products:												
Production, inspected.....thous. of lbs..	398,056	418,882	430,688	410,226	366,012	419,676	387,750	+14.5	+8.2	5,277,126	4,727,008	-10.4
Apparent consumption.....thous. of lbs..	407,512	4 433,958	4 421,850	4 397,635	4 355,846	431,078	397,395	+21.1	+8.5	5,359,806	4,813,352	-10.2
Exports.....thous. of lbs..	4 1,419	647	4 1,276	4 934	4 867	1,119	974	+29.1	+14.9	19,358	13,314	-31.2
Cold-storage holdings, end of month.....thous. of lbs..	31,065	37,223	58,036	4 79,633	4 98,913	93,932	4 71,651	-5.0	+31.1	-----	-----	-----
Prices:												
Cattle, corn-fed, Chicago.....dolls. per 100 lbs..	15.11	16.19	14.63	14.28	14.28	13.53	15.80	-5.3	-14.4	-----	-----	-----
Steer rounds, No. 2.....dolls. per lb..	.244	.259	.255	.253	.245	.240	.220	-2.0	+9.1	-----	-----	-----
Western dressed steers, N. Y.....dolls. per lb..	.260	.284	.282	.262	.245	.245	.230	0.0	+6.5	-----	-----	-----

4 Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
	FOODSTUFFS—Continued											
Hogs and Pork												
Hog movements, primary markets:												
Receipts.....thousands.....	2,523	2,600	3,666	4,075	4,773	5,061	5,306	+6.0	-4.6	41,410	46,527	+12.4
Shipments, total.....thousands.....	1,160	1,093	1,341	1,475	1,529	1,891	1,849	+23.7	+2.3	15,045	17,190	+14.3
Shipments, stocker and feeder.....thousands.....	43	55	65	62	48	47	77	-2.1	-39.0	922	735	-20.3
Local slaughter.....thousands.....	1,363	1,500	2,311	2,602	3,230	3,166	3,443	-2.0	-8.0	26,345	29,284	+11.2
Pork products, total:												
Production, inspected.....thous. of lbs.....	406,696	424,296	623,716	741,385	969,121	974,060	935,467	+0.5	+4.1	7,730,761	8,579,288	+11.0
Apparent consumption.....thous. of lbs.....	550,185	588,472	675,222	641,378	633,827	627,668	676,377	-1.0	-7.2	6,705,555	7,330,460	+9.3
Exports.....thous. of lbs.....	81,924	65,617	75,384	85,592	109,671	123,577	98,794	+11.8	+24.1	984,349	1,084,785	+10.2
Cold-storage holdings, end of month:												
Total.....thous. of lbs.....	859,903	641,977	516,634	529,019	755,256	979,643	739,045	+29.7	+32.4			
Fresh and cured.....thous. of lbs.....	682,015	515,087	433,160	461,762	670,039	838,072	655,638	+25.1	+27.8			
Lard (included in pork products):												
Production.....thous. of lbs.....	92,401	80,133	113,968	141,720	196,500		190,557			1,556,747	1,749,749	+12.4
Exports.....thous. of lbs.....	50,658	46,158	59,365	67,716	86,358	89,932	70,660	+4.1	+27.3	681,303	759,686	+11.5
Cold-storage holdings, end of month.....thous. of lbs.....												
	177,888	126,890	83,474	67,257	85,217	141,571	84,007	+66.1	+68.5			
Prices:												
Hogs, heavy, Chicago.....dolls. per 100 lbs.....	11.71	12.43	10.00	9.02	8.78	9.10	8.32	+3.6	+9.4			
Hams, smoked, Chicago.....dolls. per lb.....	.249	.254	.260	.243	.244	.232	.212	-4.9	+9.4			
Lard, prime contract, N. Y.....dolls. per lb.....	.128	.132	.124	.121	.117	.124	.124	+3.4	-2.4			
Sheep and Lambs												
Sheep movement, primary market:												
Receipts.....thousands.....	2,362	3,386	3,938	2,053	1,610	1,876	1,705	+16.5	+10.0	23,939	25,597	+6.9
Shipments, total.....thousands.....	1,250	2,161	2,485	1,091	693	837	705	+20.8	+18.7	12,482	13,323	+6.7
Shipments, stocker and feeder.....thousands.....	564	1,080	1,466	544	193	188	116	-2.6	+62.1	4,901	5,009	+2.2
Local slaughter.....thousands.....	1,097	1,213	1,403	1,016	917	1,040	994	+13.4	+4.6	11,459	12,252	+6.9
Lamb and mutton:												
Production, inspected.....thous. of lbs.....	44,525	49,237	54,107	45,546	41,079	45,485	47,081	+10.7	-3.4	501,746	522,549	+4.1
Apparent consumption.....thous. of lbs.....	44,443	49,042	52,077	44,756	41,051	47,140	47,055	+14.8	+0.2	503,569	523,560	+4.0
Cold-storage holdings, end mo.....thous. of lbs.....	1,691	2,113	4,321	5,472	5,623	4,009	4,404	-28.7	-9.0			
Prices:												
Sheep, ewes, Chicago.....dolls. per 100 lbs.....	5.72	5.50	5.35	5.31	6.28	8.39	6.05	+33.6	+38.7			
Sheep, lambs, Chicago.....dolls. per 100 lbs.....	14.31	14.16	13.08	12.69	13.78	15.59	12.65	+13.1	+23.2			
Miscellaneous Meats												
Cold-storage holdings, end mo.....thous. of lbs.....												
	56,888	49,798	52,201	60,392	82,915	88,715	64,219	+7.0	+38.1			
Total Meats												
Production, inspected.....thous. of lbs.....	909,277	902,414	1,108,511	1,197,158	1,376,212	1,439,221	1,370,298	+4.6	+5.0	13,509,707	13,827,884	+2.4
Cold-storage holdings, end mo.....thous. of lbs.....	949,547	731,111	631,192	674,516	942,707	1,166,299	879,919	+23.7	+32.5			
Apparent consumption.....thous. of lbs.....	1,002,140	1,074,207	1,149,147	1,083,627	1,030,724	1,105,886	1,120,118	+7.3	-1.3	12,568,779	12,668,257	+0.8
Poultry												
Receipts at 5 markets.....thous. of lbs.....												
	22,361	23,859	35,613	60,812	69,965	30,969	29,347	-55.7	+5.5	344,209	355,904	+3.4
Cold-storage holdings, end mo.....thous. of lbs.....												
	40,749	43,578	58,093	79,173	109,684	102,431	118,154	-6.6	-13.3			
Fish												
Total catch, prin. ports.....thous. of bbls.....												
	30,130	24,284	27,129	23,236			14,300					
Cold-storage holdings, 15th of mo.....thous. of lbs.....												
	66,170	71,352	73,410	77,677	78,090	62,389	53,921	-20.1	+15.7			
Canned salmon:												
Shipments, United States.....cases.....	832,632	1,113,495	810,723	504,854			254,394					
Exports, Canada.....cases.....	121,152	168,963	253,265	145,725	170,690	205,096	168,946	+20.2	+21.4	1,144,242	1,340,415	+17.1
Butter												
Production (factory).....thous. of lbs.....												
	142,688	119,084	104,702	87,522	92,594	102,827	106,295	+11.1	-3.3	1,496,495	1,456,709	-2.7
Receipt, 5 markets.....thous. of lbs.....												
	55,339	44,969	41,884	36,616	36,863	44,925	42,271	+21.9	+6.3	582,456	578,773	-0.6
Cold-storage holdings, creamery, end of month.....thous. of lbs.....												
	136,175	128,071	105,811	70,985	43,783	24,750	28,273	-43.5	-12.5			
Apparent consumption.....thous. of lbs.....												
	186,461	168,408	148,598	158,627	166,048	1574,57	159,687	-5.2	-1.4	2,088,221	2,047,769	-1.9
Wholesale price, New York.....dolls. per lb.....												
	.47	.49	.48	.51	.51	.48	.49	-5.9	-2.0			
Cheese												
Total, all varieties:												
Production (factory).....thous. of lbs.....												
	41,578	37,431	39,003	24,351	24,690	21,510	29,238	-12.9	-26.7	482,095	468,883	-2.7
Receipts, 5 markets.....thous. of lbs.....												
	18,727	18,222	18,665	14,180	11,691	13,781	14,409	+17.9	-4.4	218,164	196,614	-9.9
Apparent consumption.....thous. of lbs.....												
	35,189	41,291	48,357	40,872	37,340	40,192	37,408	+7.6	+7.4	491,093	471,966	-3.9
Cold-storage holdings, end mo.....thous. of lbs.....												
	101,498	98,339	97,421	89,970	85,730	74,095	55,862	-13.6	+32.6			
Imports.....thous. of lbs.....												
	5,597	6,744	9,410	9,379	8,836	7,291	5,347	-17.5	+36.4	79,797	81,402	+2.0
Exports, United States.....thous. of lbs.....												
	215	141	204	278	190	244	257	+28.4	-5.1	3,387	2,601	-23.2
Exports, Canada.....thous. of lbs.....												
	15,788	17,123	24,282	15,431	5,573	1,500	1,324	-73.1	+13.3	110,534	114,152	+3.3
American whole milk:												
Cold-storage holdings, end of month.....thous. of lbs.....												
	83,906	81,833	82,318	74,325	68,075	57,832	41,793	-15.0	+38.4			
Wholesale price, New York.....dolls. per lb.....												
	.26	.27	.26	.25	.26	.26	.29	-3.8	-13.8			
Eggs												
Receipts, 5 markets.....thous. of cases.....												
	1,076	939	794	546	606	918	862	+51.5	+6.5	16,204	16,138	-0.4
Cold-storage holdings, end of month:												
Case.....thous. of cases.....												
	9,944	8,542	6,247	3,542	1,415	246	26	-82.6				
Frozen.....thous. of lbs.....												
	89,196	82,255	73,327	64,201	56,181	48,084	38,575	-14.4	+24.7			

4 Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
TRANSPORTATION—Continued												
Railway Equipment—Continued												
Freight cars (<i>Am. Ry. Assn.</i>):												
Owned, end of month—												
Quantity.....cars..	2,299,157	2,296,273	2,292,096	2,287,563	2,282,133	2,276,289	2,309,577	-0.3	-1.4			
Capacity.....mills. of lbs..	210,483	210,335	210,092	209,826	209,539	209,091	210,649	-0.2	-0.7			
In bad order, end of month—												
Quantity.....cars..	149,252	148,333	138,238	139,053	134,267	136,319	136,115	+1.5	+0.1			
Per cent of total in use.....per cent..	6.6	6.6	6.2	6.2	6.0	6.2	6.0	+3.3	+3.3			
New orders.....cars..	767	1,236	1,635	6,100	4,668	12,452	2,098	+166.8	+493.5	58,959	37,039	-37.2
Shipments—												
Total.....cars..	5,295	3,220	2,507	1,640	1,639	1,814	774	+10.7	+134.4	54,291	39,436	-27.4
Domestic.....cars..	5,261	3,000	2,345	1,549	1,327	525	576	-60.4	-8.9	53,524	37,984	-29.0
Unfilled orders (railroads)—												
Total.....cars..	8,177	6,619	5,437	13,850	12,671	28,121	18,464	+121.9	+52.3			
From manufacturers.....cars..	5,673	3,878	1,880	10,271	10,109	24,109	15,459	+138.5	+56.0			
In railroad shops.....cars..	2,504	2,741	3,557	3,579	2,562	4,012	3,005	+56.6	+33.5			
Passenger cars:												
New orders.....cars..												
Shipments—	589	2	56	2	11	228	615	+107.3	-62.9	1,195	1,773	+48.4
Total.....cars..	147	146	68	166	181	111	78	-38.7	+42.3	1,420	1,232	-13.2
Domestic.....cars..	144	143	68	166	150	109	68	-27.3	+60.3	1,378	1,131	-17.9
Owned or leased, end of quarter.....cars..		² 52,949			² 52,812		³ 53,495	-0.3	-1.3			
Unfilled orders, end of quarter.....cars..		² 1,173			² 853		³ 364	-27.3	+134.3			
Passenger Travel												
National parks:												
Visitors.....number..	499,633	222,698	68,997	39,517	40,910	46,242	50,591	+13.0	-8.6	1,976,367	2,059,824	+4.2
Automobiles entered.....number..	98,523	44,873	10,466	4,875	5,001	7,473	6,679	+49.4	+11.9	373,495	388,002	+3.9
Arrivals from abroad:												
Immigrants.....number..	24,629	29,317	29,917	24,805	18,357	18,146	18,146			323,855	290,297	-10.4
United States citizens.....number..	63,191	80,233	49,831	23,198	18,911	19,909	19,909			412,485	442,599	+7.3
Departures abroad:												
Emigrants.....number..	6,488	8,093	7,479	6,540	8,264	5,323	5,323			70,122	77,599	+10.7
United States citizens.....number..	50,323	42,105	34,643	22,380	25,173	27,126	27,126			405,989	451,972	+11.3
Passports issued.....number..	9,866	8,056	8,494	9,441	8,051	9,513	8,896	+18.2	+6.9	182,430	189,305	+3.8
Pullman company operations:												
Revenue.....thous. of dolls..	7,593	7,297	6,650	5,751	6,529	6,963	6,963			80,953	80,846	-0.1
Passengers carried.....thousands..	3,312	3,081	2,738	2,466	2,758	2,886	2,886			35,198	33,924	-3.6
Hotel room occupancy.....per ct. of capacity..	63	68	72	70	67	73	72	+9.0	+1.4			
Warehouses												
Public merchandise warehouses, space occupied.....per ct. of total..												
	67.9	66.1	66.4	68.8	68.1		67.6					
PUBLIC UTILITIES												
Telephone companies:												
Operating revenue.....thous. of dolls..	68,784	68,432	72,464	71,213			66,026					
Operating income.....thous. of dolls..	15,985	16,496	18,565	17,649			16,788					
Telegraph companies:												
Commercial telegraph tolls.....thous. of dolls..	11,530	11,010	11,765	10,623	11,386	9,956	9,956			127,490	130,648	+2.5
Operating revenue.....thous. of dolls..	14,328	13,911	14,928	13,661	14,514	12,467	12,467			158,288	164,361	+3.8
Operating income.....thous. of dolls..	1,887	1,918	2,247	1,770	1,811	1,137	1,137			21,506	21,404	-0.5
Gas and electric companies:												
Gross earnings.....thous. of dolls..	417,952	178,346	186,000	193,000	198,000	196,573	196,573			2,113,073	2,214,724	+4.8
Net earnings.....thous. of dolls..	461,810	67,967	72,000	78,000	85,000	79,013	79,013			775,177	857,399	+10.6
Electric railways (212 companies):												
Passengers carried.....thous. of persons..	736,223	717,810	795,140	759,254	796,280	790,843	814,172	+0.4	-1.8	9,394,314	9,268,039	-1.3
Average fare.....cents..	8.121	8.121	8.129	8.137			8.025					
Electric power production:												
Total.....mills. of kw. hours..	7,510	47,282	47,922	47,750	7,870	7,265	7,265			80,205	87,852	+9.5
By water power.....mills. of kw. hours..	3,045	42,792	42,873	42,786	2,755	2,739	2,739			29,873	34,750	+16.3
By fuels.....mills. of kw. hours..	4,465	4,490	4,509	4,964	5,115	4,526	4,526			50,332	53,103	+5.5
In street railways, manfg. plants, etc.:												
In central stations.....mills. of kw. hours..	382	355	374	373	407	598	598			5,451	5,025	-7.8
Electric power production (Canada):	7,128	46,927	47,548	47,377	7,463	6,667	6,667			74,754	82,827	+10.8
Total.....mills. of kw. hours..	1,308	1,278	1,457	1,438	1,438	1,324	1,324			14,218	15,898	+11.8
By water power.....mills. of kw. hours..	1,292	1,260	1,436	1,413	1,411	1,304	1,304			14,017	15,673	+11.8
Exported.....mills. of kw. hours..	146	130	155	137	123	124	124			1,633	1,588	-2.8
Electric power, gross revenue.....thous. of dolls..	148,200	156,100	165,200				171,700					
Consumption of electrical energy												
By geographical divisions:												
United States.....rel. to 1923-25..	120.8	134.5	132.0	133.3	127.3	132.5	118.4	+4.1	+11.9			
New England.....rel. to 1923-25..	102.2	115.3	119.3	126.0	120.2	127.6	115.2	+6.2	+10.8			
North Central.....rel. to 1923-25..	132.4	149.7	143.5	145.7	133.8	138.8	117.0	+3.7	+18.6			
Middle Atlantic.....rel. to 1923-25..	118.3	136.0	133.4	138.9	126.8	126.7	116.2	-0.1	+9.0			
Southern.....rel. to 1923-25..	112.8	127.5	129.7	127.6	121.2	120.5	124.8	-0.6	-3.4			
Western.....rel. to 1923-25..	127.5	150.8	148.7	156.7	124.0		115.0					
By industry:												
All industry.....rel. to 1923-25..	120.8	134.5	132.0	133.3	127.3	132.5	118.4	+4.1	+11.9			
Chemical and allied products.....rel. to 1923-25..	119.2	132.0	129.4	135.7	132.8	129.2	124.2	-2.7	+4.0			
Food and kindred products.....rel. to 1923-25..	128.3	142.0	138.0	130.0	113.7	128.0	102.4	+12.6	+25.0			
Rolling mills and steel plants.....rel. to 1923-25..	125.4	141.2	144.7	148.8	142.2	153.5	131.3	+7.9	+16.9			
Metal working plants.....rel. to 1923-25..	125.8	144.2	144.5	140.5	137.5	135.8	117.4	-1.2	+15.7			
Metal groups.....rel. to 1923-25..	125.5	143.0	144.6	143.5	139.2	142.6	124.4	+2.4	+14.6			

² Quarter ending in month indicated.³ Quarter ending Dec. 31, 1927.⁴ Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
PUBLIC UTILITIES—Continued												
Consumption of electrical energy—Con.												
By industry—Continued												
Leather and its products...rel. to 1923-25...	94.7	106.9	103.8	94.0	93.7	94.3	112.2	+0.6	-16.0			
Lumber and its products...rel. to 1923-25...	111.6	111.3	109.3	111.8	107.3	107.4	107.7	+0.1	-0.3			
Paper and pulp...rel. to 1923-25...	129.1	132.0	133.3	135.2	127.4	126.2	121.3	-0.9	+4.0			
Rubber and its products...rel. to 1923-25...	138.4	151.2	146.4	143.8	124.8	148.2	120.4	+18.8	+23.1			
Shipbuilding...rel. to 1923-25...	67.3	72.3	73.8	102.2	91.8	108.2	94.2	+17.9	+14.9			
Stone, clay, and glass...rel. to 1923-25...	135.8	152.0	144.7	149.1	136.6	137.4	105.2	+0.6	+30.6			
Textiles...rel. to 1923-25...	97.3	112.5	121.0	132.5	126.3	129.4	116.7	+2.5	+10.9			
Automobiles, including repair parts...rel. to 1923-25...	143.2	161.0	141.2	127.1	130.0	149.4	135.2	+14.9	+10.5			
EMPLOYMENT AND WAGES												
Employment in factories:												
Massachusetts...rel. to 1919-23...	74.2	75.6	78.8	79.3	78.9	78.1	82.3	-1.0	-5.1			
New York State...rel. to 1923...	82.5	84.3	86.0	85.8	85.3	84.8	82.6	-0.6	+2.7			
New Jersey...rel. to 1923...	91	94	95	97	98	97	91	-1.0	+6.6			
Pennsylvania...rel. to 1923...	81	81	82	82	80	81	80	+1.3	+1.3			
Delaware...rel. to 1923...	74	77	74	74	75	75	75	0.0	0.0			
Maryland...rel. to 1924...	88.1	89.0	90.4	88.0	87.7	85.7	85.4	-2.3	+0.4			
Iowa...rel. to 1923...	124.0	124.0	126.0	125.3	122.3		117.9					
Illinois...rel. to 1923...	85.6	86.8	86.9	87.3	88.1	87.2	80.5	-1.0	+8.3			
Wisconsin...rel. to 1923...	97.9	97.1	97.0	95.7			90.3					
Detroit...rel. to 1923...	134.7	135.4	131.3	126.0	123.3		102.6					
Detroit...number...	293,457	294,829	285,936	274,397	268,601	289,611	223,602	+7.8	+29.6			
Milwaukee...number...	37,385	38,077	38,090	38,179	38,995	40,707	35,492	+4.4	+14.7			
New York State...number...	456,303	466,357	475,753	475,043	472,054	469,125	457,275	-0.6	+2.0			
Oklahoma...number...	31,137	30,812	31,960				25,615					
Ohio...rel. to 1923...	106	109	110	110	109	108	97	-0.9	+11.3			
Total pay roll:												
New York State (weekly)...thous. of dolls.	13,411	13,862	14,168	14,094	14,217	13,938	13,361	-2.0	+4.3			
Oklahoma (weekly)...thous. of dolls.	877	865	868				685					
Wisconsin...rel. to 1923...	108.7	106.5	110.2	107.3			88.9	-1.9	+4.4			
New York State...rel. to 1923...	89.0	92.0	94.0	93.5	94.3	92.5	88.6	-1.8	+10.2			
New Jersey...rel. to 1923...	99	102	105	107	110	108	98	-3.5	+3.8			
Pennsylvania...rel. to 1923...	83	83	87	85	85	82	79	-3.7	+3.9			
Delaware...rel. to 1923...	76	76	78	77	82	79	76					
Employment, Canada...rel. to Jan. 1920...	119.5	118.9	119.1	116.7			100.8					
Ohio construction...rel. to 1923...	139.4	135.0	137.7	128.1	108.7	89.3	79.6	-17.8	+12.2			
Employment, trade-unions:												
United States...per cent of total...	91.0	90.0	91.0	90.0	87.0	85.0	82.2	-2.3	+3.4			
Canada...per cent of total...	97.6	97.8	96.9	95.8	93.4		93.2					
Anthracite mines:												
Employment...rel. to 1923-25...	107.9	110.8	112.8	113.4	114.6		120.2					
Pay roll...rel. to 1923-25...	86.7	92.5	119.8	108.8	106.8		98.7					
Federal civilian employees, Washington, D. C., end of month...												
Average weekly earnings, factories:												
Illinois...dolls.	29.13	28.31	28.57	28.38	29.55		27.49					
New York State...dolls.	29.39	29.72	29.78	29.67	30.12	29.71	29.22	-1.4	+1.7			
Wisconsin...dolls.	26.60	26.30	27.25	26.87	28.40		23.60					
Oklahoma...dolls.	28.15	28.08	27.16				26.73					
Massachusetts...rel. to 1914...	234.4	230.9	230.2	225.6	229.9	225.8	232.1	-1.8	-2.7			
New York...rel. to 1914...	235.5	238.1	238.6	237.7	241.3	238.1	234.1	-1.3	+1.7			
New Jersey...rel. to 1923...	109	110	112	111	113	112	109	-0.9	+2.8			
Pennsylvania...rel. to 1923...	102	101	105	104	105	102	98	-2.9	+4.1			
Delaware...rel. to 1923...	102	101	104	103	108	104	104	-3.7	+4.0			
Illinois...rel. to 1923...	107.6	104.6	105.5	104.8	109.2		101.6					
Wisconsin...rel. to 1923...	111.0	109.7	113.7	112.1	118.5		98.4					
Average weekly earnings (National Industrial Conference Board)												
Grand total (both sexes)...dollars.	27.35	27.76	27.76	27.42	27.73		27.24					
Total male...dollars.	30.30	30.93	30.70	29.75	30.06		29.80					
Skilled male...dollars.	31.77	32.42	35.26	31.21	31.47		31.22					
Unskilled male...dollars.	24.78	25.27	24.72	24.34	24.76		24.66					
Total women...dollars.	17.04	17.33	17.34	17.16	17.24		17.23					
Average weekly hours:												
Nominal (both sexes)...hours.	49.6	49.8	49.6	49.6	49.6		49.5					
Actual (both sexes)...hours.	47.9	48.2	48.0	47.8	48.5		47.9					
Wages, road labor, by districts:												
New England...cents per hour.	48	48	51	50	51	52	53	+2.0	-1.9			
Middle Atlantic...cents per hour.	41	42	41	41	44	45	48	+2.3	-6.2			
South Atlantic...cents per hour.	34	24	26	27	28	29	24	-17.9	-4.2			
East South Central...cents per hour.	25	25	26	27	26	26	25	0.0	+4.0			
West South Central...cents per hour.	29	26	30	31	30	31	26	+3.3	+19.2			
East North Central...cents per hour.	39	38	40	40	41	45	39	+9.8	+15.4			
West North Central...cents per hour.	38	39	39	40	38	38	37	0.0	+2.7			
Mountain...cents per hour.	50	52	49	42	46	44	41	-4.3	+7.3			
Pacific...cents per hour.	53	54	54	53	53	52	50	-1.9	+4.0			
United States, average...cents per hour.	42	43	42	42	39	36	37	-7.7	-2.7			
Wages, U. S. Steel Corp...cents per hour.	50	50	50	50	50	50	50	0.0	0.0			
Wages, steel sheet workers...per cent of base.	125.5	125.5	125.5	125.5	125.5	125.5	125.5	0.0	0.0			
Applicants per 100 jobs, employment agencies:												
United States...number.	129	107	117	134	100	156	170	+56.0	-8.2			
Eastern States...number.	223	120	128	142	146	154	192	+5.5	-19.8			
Central States...number.	132	126	133	125	146	164	203	+12.3	-19.2			
Southern States...number.	121	91	142	153	193	283	188	+46.6	+50.5			
Western States...number.	69	63	62	71	69	80	87	+15.9	-8.0			
Canada...number.	109	98	114	143	135		101					

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
EMPLOYMENT AND WAGES—Contd.												
Factory Labor Turnover												
(Percentage of number on pay roll)												
Departures:												
Total.....	42.3	50.6	41.9	35.3	29.2	34.8	27.8	+19.2	+25.2			
Voluntary quits.....	31.9	40.3	31.9	25.6	20.1	25.1	15.9	+24.9	+57.9			
Lay offs.....	5.1	5.0	4.7	4.8	4.7	4.7	8.3	0.0	-43.4			
Discharges.....	5.3	5.3	5.3	4.9	4.4	5.0	3.6	+13.6	+38.9			
Accessions.....	55.7	56.9	57.1	50.1	38.1	56.2	33.4	+47.5	+68.3			
Industrial disputes:												
Disputes.....	59	48	43	45	42		62					
Workers involved.....	129,210	63,650	41,420	39,665	39,713		81,676					
Man-days lost in month.....	3,577,599	2,605,713	1,304,647	1,304,285	1,016,427		2,135,092					
DISTRIBUTION MOVEMENT												
Retail Sales												
Mail-order houses:												
Total sales, 2 houses.....	45,944	50,814	63,587	61,628	74,386	47,400	37,465	-36.3	+26.5	495,304	579,328	+17.0
Sears, Roebuck & Co.....	28,986	30,004	37,002	36,172	42,434	29,271	24,240	-31.0	+20.8	292,901	346,973	+18.5
Montgomery Ward & Co.....	17,008	20,810	26,585	25,456	31,952	18,129	13,225	-43.3	+37.1	202,403	232,355	+14.8
Ten-cent chain stores:												
Total sales (4 chains).....	41,050	42,906	48,992	46,799	89,445	33,512	31,895	-62.5	+5.1	503,916	539,757	+7.1
Total stores operated (4 chains).....	2,552	2,586	2,615	2,637	2,655	2,659	2,431	+0.2	+9.4			
F. W. Woolworth & Co.....	21,812	22,637	26,895	24,660	45,439	17,658	17,108	-61.1	+3.2	272,752	287,317	+5.3
Stores operated.....	1,675	1,698	1,718	1,725	1,727	1,728	1,591	+0.1	+8.6			
S. S. Kresge Co.....	11,272	11,914	12,925	13,034	24,844	9,019	8,658	-63.7	+4.2	133,767	147,363	+10.2
Stores operated.....	468	474	481	492	506	509	436	+0.6	+16.7			
McCrorry Stores Corp.....	3,116	3,344	3,471	3,444	7,216	2,692	2,369	-62.7	+13.6	39,336	41,031	+4.3
Stores operated.....	224	224	224	226	228	229	221	+0.4	+3.6			
S. H. Kress & Co.....	4,850	5,011	5,701	5,661	11,946	4,143	3,760	-65.3	+10.2	58,061	65,046	+12.0
Stores operated.....	185	190	192	194	194	193	183	-0.5	+5.5			
Metropolitan.....	985	1,116	1,232	1,271	2,774	798	692	-71.2	+15.3	12,271	13,559	+10.5
Stores operated.....	97	100	104	106	109	109	91	0.0	+19.8			
F. & W. Grand.....	1,236	1,443	1,756	1,719	3,388	1,096	800	-67.7	+37.0	12,882	17,160	+33.2
Stores operated.....	74	76	80	81	82	82	62	0.0	+32.3			
W. T. Grant Co.....	3,996	4,708	5,418	5,515	10,328	3,328	2,624	-67.8	+26.8	43,325	54,988	+26.9
Stores operated.....	191	199	203	207	213	221	158	+3.8	+39.9			
Restaurant chains:												
Total sales (3 chains).....	4,577	4,590	4,802	4,617	4,987	4,704	4,808	-5.7	-2.2	58,111	55,576	-4.4
Stores operated.....	369	366	367	369	371	372	372	+0.3	+0.8			
Average per store.....	12,404	12,541	13,084	12,512	13,442	12,645	13,019	-5.9	-2.9			
Childs Co., sales.....	2,217	2,190	2,266	2,160	2,369	2,184	2,346	-7.8	-6.9	28,802	26,376	-8.4
Waldorf System (Inc.), sales.....	1,170	1,215	1,267	1,250	1,363	1,296	1,227	-4.9	+5.6	14,960	14,622	-2.3
J. R. Thompson Co. sales.....	1,190	1,185	1,269	1,207	1,255	1,224	1,235	-2.5	-0.9	14,349	14,585	+1.6
Other chain stores:												
Isaac Silver & Bros.....	460	512	610	632	1,305	365	312	-72.0	+17.0	5,611	6,658	+18.7
Stores operated.....	26	29	30	31	31	31	22	0.0	+40.9			
Hartman Corporation.....	1,416	2,192					907					
Stores operated.....	19	19					19					
J. C. Penny Co.....	12,886	16,477	19,443	19,301	25,104	8,621	7,729	-65.7	+11.5	151,964	176,066	+16.3
Stores operated.....	981	1,006	1,020	1,021	1,023	1,023	914	0.0	+11.9			
United Cigar Stores Co.....	6,627	6,622	6,797	6,816	9,700	5,736	5,562	-40.9	+3.1	80,179	80,903	+0.9
Stores operated.....	3,271	3,288	3,315	3,227	3,348	3,331	3,151	-0.5	+5.7			
A. Schulte (Inc.).....	1,912	1,962	1,955	1,935	2,995	1,665	1,826	-44.4	-8.8	29,040	24,512	-15.6
Stores operated.....	300	299	298	299	299	300	300	+0.3	0.0			
G. C. Murphy Co.....	873	1,046	1,056	1,132	2,450	814	598	-66.8	+36.1	10,224	12,119	+18.5
Stores operated.....	118	119	120	130	133	133	113	0.0	+17.7			
Installment sales in New England dept. stores; ratio to total sales.....	12.1	8.2	9.0	7.5	6.2		8.6					
Advertising												
Magazine advertising.....	1,755	2,279	2,871	2,845	2,580	2,093	1,954	-18.9	+7.1	29,889	29,532	-1.2
Newspaper advertising.....	83,354	99,897	112,783	110,012	105,516	97,443	94,156	-7.7	+3.5	1,115,229	1,194,284	+7.1
Air mail, weight dispatched.....	419,047	423,991	465,635	424,465	541,561		144,289			1,065,498	3,542,232	+232.4
Postal Business												
Postal receipts:												
50 selected cities.....	27,951	29,261	34,196	31,713	39,972	31,615	30,579	-20.9	+3.4	376,039	377,344	+0.3
50 industrial cities.....	3,115	3,074	3,583	3,202	4,331	3,466	3,438	-20.0	+0.8	40,312	40,569	+0.6
Money orders:												
Domestic paid (50 cities)—												
Quantity.....	10,183	9,748	12,020	11,591	12,841	10,967	10,468	-14.6	+4.8	133,434	132,579	-0.6
Value.....	81,180	79,877	99,310	94,191	100,025	83,154	78,220	-16.9	+6.3	1,037,893	1,036,095	-0.2
Domestic issued (50 cities)—												
Quantity.....	3,165	2,879	3,669	3,480	3,950	3,626	3,416	-8.2	+6.1	39,508	41,103	+4.0
Value.....	32,886	32,382	37,554	35,711	39,046	36,025	34,117	-7.7	+5.6	408,719	417,831	+2.2

4 Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per ct. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
BANKING AND FINANCE—Continued												
Agricultural Finances												
Loans outstanding, end mo.:												
Federal farm loan banks.....thous. of dolls..	1,187,365	1,189,345	1,190,278	1,191,724	1,193,846	1,195,089	1,158,717	+0.1	+3.1			
Joint-stock land banks.....thous. of dolls..	608,706	608,451	607,632	605,595	605,199	604,375	608,708	-0.1	-0.7			
Federal intermediate credit banks.....thous. of dolls..	66,978	68,619	76,547	78,685	81,277	79,462	74,888	-2.2	+6.1			
War finance corporation.....thous. of dolls..	747	583	558	497	455	445	1,244	-2.2	-64.2			
Stocks and Bonds												
Stock prices, average daily closing:												
25 industrials, average.....dolls. per share..	267.16	283.99	293.51	316.15	286.66	344.17	242.25	+20.1	+42.1			
25 railroads, average.....dolls. per share..	121.57	124.82	123.40	130.07	126.10	132.40	118.29	+5.0	+11.9			
103 stocks, average.....dolls. per share..	151.24	154.87	154.95	175.63	187.33	179.25	142.13	-4.3	+26.1			
Southern cotton mills.....dolls. per share..	104.82	103.31	103.19	102.58	101.97	101.04	112.25	-0.9	+10.0			
Stock sales, N. Y. Stock Exch.....thous. of shares..	67,704	90,907	99,077	115,435	92,837	110,804	56,963	+19.4	+94.5	584,491	920,551	+57.5
Bond sales:												
Miscellaneous.....thous. of dolls..	173,561	190,582	226,621	210,897	190,010	235,427	269,374	+23.9	-12.6	3,390,462	2,783,471	-17.9
Liberty-Treasury.....thous. of dolls..	9,988	10,467	11,949	10,569	16,947	13,772	20,864	-18.7	-34.0	289,901	178,315	-38.5
Total.....thous. of dolls..	183,549	201,049	238,570	221,466	206,957	249,199	290,238	+20.4	-14.1	3,680,363	2,961,786	-19.5
Bond prices:												
Highest-grade rails p. ct. of par, 4% bond..	89.66	91.05	90.72	91.30	89.83	90.09	97.04	+0.3	-7.2			
Second-grade rails p. ct. of par, 4% bond..	80.99	82.51	81.98	83.11	81.87	81.27	88.75	-0.7	-8.4			
Public utility.....p. ct. of par, 4% bond..	79.08	79.51	81.12	81.30	80.34	80.16	79.66	-0.2	+0.6			
Industrial.....p. ct. of par, 4% bond..	77.97	78.18	78.34	78.57	78.23	78.89	81.28	+0.8	-2.9			
Comb. price index p. ct. of par, 4% bond..	81.68	82.53	82.79	83.31	82.34	82.39	86.15	+0.1	-4.4			
Bond prices, 1st of following month:												
5 Liberty bonds.....p. ct. of par..	103.88	103.11	103.85	103.75	103.45	102.49	105.94	-0.9	-3.3			
16 foreign govt. and city.....p. ct. of par..	104.77	104.55	104.59	104.20	103.77	104.52	105.90	+0.7	-1.3			
Comb. price index, 66 bonds.....p. ct. of par..	100.36	100.40	100.53	100.57	100.09	100.08	102.60	0.0	-2.5			
Bond yields:												
Municipal (20).....per cent..	4.18	4.16	4.16	4.14	4.17	4.19	3.87	+0.5	+8.3			
U. S. Treasury notes and certificates, 3-6 months.....per cent..	4.36	4.57	4.70	4.25	4.35	4.65	3.31	+6.9	+40.5			
Liberty and Treasury bonds.....per cent..	3.56	3.54	3.55	3.48	3.53	3.59	3.35	+1.7	+7.2			
Long-term real-estate bonds issued:												
Grand total.....thous. of dolls..	21,947	52,116	64,864	61,360	37,952	61,065	61,167	+60.9	-0.2	570,742	682,265	+19.5
Purpose of issue—												
Finance construction.....thous. of dolls..	9,970	4,460	33,290	12,590	12,530	13,610	32,759	+8.6	-58.5	270,198	252,920	-6.4
Real-estate mortgage.....thous. of dolls..	5,590	32,955	11,898	14,980	7,622	11,245	12,900	+47.5	-12.8	137,215	212,829	+55.1
Acquisitions and improvements.....thous. of dolls..	3,252	530	1,509	26,550	11,750	26,200	6,533	+123.0	+301.0	63,843	89,537	+40.2
Kind of structure—												
Office and commercial.....thous. of dolls..	4,785	2,510	15,018	11,995	11,325	12,535	29,000	+10.7	-56.8	186,503	200,109	+7.3
Hotels.....thous. of dolls..	2,200	400	9,900	300	300		650			48,266	44,760	-7.3
Apartments.....thous. of dolls..	3,145	270	8,423	1,970	1,530	2,905	4,309	+89.9	-32.6	61,495	42,202	-31.4
Corporation Stockholders												
<i>(Quarterly)</i>												
Pennsylvania Railroad Co.:												
Domestic.....number.....		² 154,415				² 154,008	³ 142,622	-0.3	+8.0			
Foreign.....number.....		² 3,032				² 2,963	³ 2,854	-2.3	+3.8			
U. S. Steel Corp. common stock:												
Domestic.....number.....		² 102,457				² 99,174	³ 94,756	-3.2	+4.7			
Foreign.....number.....		² 1,748				² 1,612	³ 1,539	-7.8	+4.7			
Shares held by brokers.....per ct. of total..		² 23.95				² 24.15	³ 25.11	+0.8	-3.8			
American Telephone & Telegraph Co.:												
Domestic.....number.....		² 451,603				² 449,077	³ 418,295	-0.6	+7.4			
Foreign.....number.....		² 5,426				² 5,432	³ 5,247	+0.1	+3.5			
FOREIGN EXCHANGE RATES												
Europe:												
England.....dolls. per £ sterling..	4.85	4.85	4.85	4.85	4.85	4.85	4.88	0.0	-0.6			
France.....dolls. per franc..	.039	.039	.039	.039	.039	.039	.039	0.0	0.0			
Italy.....dolls. per lira..	.052	.052	.052	.052	.052	.052	.053	0.0	-1.9			
Belgium.....dolls. per franc..	.139	.139	.139	.139	.139	.139	.139	0.0	0.0			
Netherlands.....dolls. per guilder..	.401	.401	.401	.401	.402	.401	.403	-0.2	-0.5			
Sweden.....dolls. per krona..	.268	.268	.267	.267	.268	.267	.269	-0.4	-0.7			
Switzerland.....dolls. per franc..	.193	.193	.192	.193	.193	.192	.193	-0.5	-0.5			
Asia:												
Japan.....dolls. per yen..	.451	.458	.462	.464	4.59	4.56	.469	-0.7	-2.8			
India.....dolls. per rupee..	.363	.363	.365	.365	.365	.365	.367	0.0	-0.5			
America:												
Canada.....dolls. per Canadian doll..	1.000	1.000	1.000	1.000	.998	.998	.998	0.0	0.0			
Argentina.....dolls. per gold peso..	.959	.957	.956	.958	.958	.958	.971	0.0	-1.3			
Brazil.....dolls. per milreis..	.119	.119	.120	.119	.119	.119	.120	0.0	-0.8			
Chile.....dolls. per paper peso..	.121	.121	.121	.121	.121	.121	.122	0.0	-0.8			

² Quarter ending in month indicated.³ Quarter ending Dec. 31, 1927.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey"	1928					1929	1928	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31		Per cent. increase (+) or decrease (-) cumulative 1928 from 1927
	August	September	October	November	December	January	January	Jan., 1929, from Dec., 1928	Jan., 1929, from Jan., 1928	1927	1928	
	U. S. FOREIGN TRADE											
Imports												
Grand total.....thous. of dolls..	346,715	319,617	353,359	326,493	339,036	368,636	337,943	+8.7	+9.1	4,184,743	4,091,120	-2.2
By grand divisions:												
Europe—												
Total.....thous. of dolls..	107,785	102,511	121,231	107,368	110,655	97,153				1,264,072	1,248,898	-1.2
France.....thous. of dolls..	15,074	13,780	17,220	15,076	14,028	12,126				167,800	158,565	-5.4
Germany.....thous. of dolls..	21,011	18,569	22,298	18,672	18,499	15,856				200,554	221,979	+10.7
Italy.....thous. of dolls..	6,875	6,543	10,071	10,618	10,952	8,846				108,970	101,812	-6.6
United Kingdom.....thous. of dolls..	27,517	26,408	33,436	28,140	29,186	23,089				357,931	348,435	-2.7
North America—												
Total.....thous. of dolls..	78,190	76,891	84,399	78,757	74,928	76,518				985,458	960,264	-2.6
Canada.....thous. of dolls..	43,236	42,168	47,403	41,632	40,692	37,027				475,028	488,999	+2.9
South America—												
Total.....thous. of dolls..	51,079	37,540	41,610	41,229	50,029	47,192				518,275	569,507	+9.9
Argentina.....thous. of dolls..	8,965	6,296	6,745	5,555	6,778	6,747				97,240	99,485	+2.3
Asia and Oceania—												
Total.....thous. of dolls..	100,886	97,431	100,954	92,868	96,798	107,507				1,323,682	1,222,354	-7.7
Japan.....thous. of dolls..	38,991	33,679	35,324	31,942	32,823	32,001				402,105	384,346	-4.4
Africa, total.....thous. of dolls..	8,782	5,257	7,239	6,270	6,615	9,573				93,255	90,092	-3.4
By classes and commodities:												
Crude materials.....thous. of dolls..	122,186	110,289	117,624	108,427	117,691	142,049	133,395	+20.7	+6.5	1,601,647	1,466,544	-8.4
Foodstuffs, crude, and food animals.....thous. of dolls..	45,940	37,207	42,007	44,563	45,013	47,659	48,302	+5.9	-1.3	504,571	549,542	+8.9
Manufactured foodstuffs.....thous. of dolls..	30,060	33,776	35,370	30,605	28,810	28,780	28,724	-0.1	+0.2	450,596	405,496	-10.0
Semimanufactures.....thous. of dolls..	66,337	63,365	71,182	62,506	71,233	70,591	61,221	-0.9	+15.3	749,651	762,622	+1.7
Finished manufactures.....thous. of dolls..	82,192	74,980	89,177	80,392	76,283	79,557	66,302	+4.3	+20.0	878,278	906,916	+3.3
Exports												
Grand total, including reexports.....thous. of dolls..	379,872	421,647	550,894	544,863	475,602	491,000	410,778	+3.2	+19.5	4,865,375	5,128,809	+5.4
By grand division:												
Europe—												
Total.....thous. of dolls..	149,196	192,860	269,352	274,429	238,865	207,577				2,310,403	2,374,836	+2.8
France.....thous. of dolls..	15,167	20,048	28,928	31,111	26,385	20,670				228,781	240,691	+5.2
Germany.....thous. of dolls..	24,579	46,291	57,961	65,563	44,679	42,648				481,681	467,205	-3.0
Italy.....thous. of dolls..	9,955	14,275	16,936	16,173	16,030	14,530				131,651	162,135	+23.2
United Kingdom.....thous. of dolls..	52,826	59,173	97,991	105,462	94,840	74,392				840,059	847,277	+0.9
North America—												
Total.....thous. of dolls..	118,926	115,403	126,812	118,425	103,668	87,319				1,253,027	1,322,882	+5.6
Canada.....thous. of dolls..	85,851	87,288	89,478	77,373	69,001	54,180				836,532	916,156	+9.5
South America—												
Total.....thous. of dolls..	43,766	33,805	49,094	49,837	42,695	34,812				438,159	480,696	+9.7
Argentina.....thous. of dolls..	17,348	11,457	19,719	18,396	14,938	12,557				163,486	178,899	+9.4
Asia and Oceania—												
Total.....thous. of dolls..	59,973	71,805	93,006	90,075	78,908	72,255				756,699	833,738	+10.2
Japan.....thous. of dolls..	15,517	27,542	39,136	37,195	27,755	26,108				257,570	288,054	+11.8
Africa, total.....thous. of dolls..	8,011	7,544	12,630	12,099	11,406	8,814				107,088	116,656	+8.9
Total domestic exports only.....thous. of dolls..	371,312	414,859	543,041	538,324	465,987	480,317	401,913	+3.1	+19.5	4,758,864	5,029,682	+5.7
By classes of commodities:												
Crude materials.....thous. of dolls..	52,375	120,188	176,354	194,006	152,077	120,631	112,058	-20.7	+7.7	1,192,776	1,293,264	+8.4
Foodstuffs, crude, and food animals.....thous. of dolls..	29,308	42,363	52,381	31,532	27,390	28,667	18,077	+4.7	+58.6	421,107	293,487	-30.3
Manufactured foodstuffs.....thous. of dolls..	34,751	35,762	51,645	45,887	45,530	48,524	43,291	+6.6	+12.1	463,299	467,033	+0.8
Semimanufactures.....thous. of dolls..	55,873	51,095	59,999	60,861	58,153	67,653	63,851	+16.3	+6.0	699,727	716,512	+2.4
Finished manufactures.....thous. of dolls..	199,005	165,451	202,662	206,038	182,837	214,842	164,636	+17.5	+30.5	1,981,955	2,259,386	+14.0
Agricultural exports (quantities):												
All commodities.....rel. to 1910-14..	75	138	201	192	160	133	113	-16.9	+17.7			
All commodities except cotton.....rel. to 1910-14..	126	168	232	172	166	155	127	-6.6	+22.0			
CANADIAN FOREIGN TRADE												
Total trade:												
Imports.....thous. of dolls..	114,175	106,066	112,341	102,967	94,621	96,958	79,506	+2.5	+22.0	1,087,864	1,222,196	+12.3
Exports.....thous. of dolls..	113,904	111,856	143,955	170,092	133,245	97,296	84,428	-27.0	+15.2	1,238,798	1,374,131	+10.9

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

Airports and Landing Fields. Aeronautics Bulletin No. 5 (formerly Information Bulletin No. 5); 11 pages. January edition. Lists all existing and proposed airports and landing fields in the United States, showing their classification.

Aeronautical Publications. Aeronautics Bulletin No. 6 (formerly Information Bulletin No. 6); 5 pages. Issue of January 1, 1929.

Radio Service Bulletin, January, 1929. 28 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¢.

Report of Airway Marking Committee. ii+10 pages, 6 illus. Report by a committee of the Aeronautics Branch of the Department of Commerce on the requirements for airway marking, with recommendations for a standard system of such marking for use throughout the country.

Survey of Nonutilized Wood in Virginia, Report of Subcommittee of National Committee on Wood Utilization. vi+60 pages, 19 illus., map. Study of wood waste from the forests of Virginia, with suggestions for the utilization of this kind of lumber. There is included a bibliography. Price, 20¢.

BUREAU OF THE CENSUS

(For information concerning the plan of publication and distribution of Census publications, address the Director of the Census)

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

- African Orthodox Church of New York. Paper, 5 pages, price 5¢.
- Church of Christ (Holiness). Paper, 8 pages, price 5¢.
- Churches of God (Holiness). Paper, 8 pages, price 5¢.
- Congregational Holiness Church. Paper, 8 pages, price 5¢.
- Eastern Orthodox Churches. Paper, 43 pages, price 10¢.
- Free Christian Zion Church of Christ. Paper, 7 pages, price 5¢.
- Free Church of God in Christ. Paper, 8 pages, price 5¢.
- Lutherans. Paper, 148 pages, price 20¢.
- Pentecostal Assemblies of the World. Paper, 9 pages, price 5¢.
- Social Brethren. Paper, 6 pages, price 5¢.
- Churches of Christ. Paper, 11 pages, price 5¢.
- Polish National Catholic Church of America. Paper, 11 pages, price 5¢.

Birth, Stillbirth, and Infant Mortality Statistics, 1926, Part I. This volume contains only rate tables and general tables. Text will be presented in Part II.

Financial Statistics of Cities having a population of over 30,000, 1927. Preliminary summary showing assessed valuation and tax levies, revenues, governmental-cost payments, comparison of revenue receipts and governmental-cost payments indebtedness, etc.

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

(The publications of this bureau may also be purchased from the bureau or its district offices)

Monthly Summary of Foreign Commerce of United States, Dec., 1928. Parts I and II. Part I contains statistics of exports of domestic merchandise, and imports by articles for December, 1927 and 1928, and for 12 months ended December, 1927 and 1928. Part II contains summaries of export and import trade; monthly average import and export prices; statistics of trade with Alaska, Hawaii, and Porto Rico. Single copies, Part I, 10¢; Part II, 5¢. Annual subscription, \$1.25.

Trade Financing and Exchange in Porto Rico and Haiti, by H. H. Dashiell, assistant trade commissioner, and Samuel H. Honaker, consul. Trade Information Bulletin No. 595; ii+17 pages. Discusses the manner of financing trade in Porto Rico and Haiti; banking facilities of the two countries, and exchange operations in Haiti. Price, 10¢.

Electrical Equipment Market in Spain. Trade Information Bulletin No. 596; ii+41 pages. Shows the amount of electricity generated, its various uses, and the rates charged, with a list of hydroelectric plants in operation in Spain. Price, 10¢.

French and German Inland Waterways, by E. T. Chamberlain. Trade Information Bulletin No. 597; ii+12 pages. Contains a comparison of the traffic on the inland waterways of France and Germany for the years 1913 and 1925. Price, 10¢.

BUREAU OF STANDARDS

Bureau of Standards Journal of Research, Feb., 1929. Pages 335-465, illustrations, plates, charts. This journal contains the papers formerly issued as the Technologic and Scientific Papers series, which series have been discontinued. The articles in the journal are known as the Research Papers series and are issued separately after publication in the journal. Single copies, 25¢; annual subscription, \$2.75.

Reprints from *Bureau of Standards Journal of Research*, vol. 2, Feb., 1928

Technical Method of Using Mercury Arc to Obtain Data at Wave Length 560 mμ in Spectrophotometric Analysis of Sugar Products, by H. H. Peters and F. P. Phelps. Research Paper No. 38. pp. 335-342. 1 chart. Price, 5¢.

Reflecting Power of Beryllium, Chromium, and Several Other Metals, by W. W. Coblenz and R. Stair. Research Paper No. 39. pp. 343-354, 1 illus., 6 charts. Contains data on the ultra-violet reflecting power of various metals. Price, 5¢.

Note on Piezo-Electric Generator for Audio-Frequencies, by August Hund. Research Paper No. 40. pp. 355-358, 1 illus., 1 plate. Describes experiments in producing audible frequencies by use of small crystals differing in their periods of vibration. Price, 5¢.

BUREAU OF FISHERIES

Alaska Fishery and Fur-Seal Industries in 1927, by Ward T. Bower. Document No. 1040. (Appendix IV to Report of U. S. Commissioner of Fisheries for 1928; pp. 61-171, 16 illus.) Price, 25¢.

BUREAU OF MINES

Precipitation of Lead and Copper from Solution on Sponge Iron, by G. L. Oldright, H. E. Keyes, Virgil Miller, and W. A. Sloan. Bulletin 281; viii+131 pages, 2 illus., 6 pages plates, 35 charts. Description of experiments in use of sponge iron as a precipitant of lead and copper. Price, 35¢.

Subsidence and Ground Movement in Copper and Iron Mines of Upper Peninsula of Michigan, by W. R. Crane. Bulletin 295; vi+66 pages, 40 illus., 8 plates. Study of cause and nature of subsidence of land over copper and iron mines in Michigan. Price, 40¢.

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

- Gold, Silver, Copper, Lead, and Zinc in California and Oregon in 1927. (Pt. I, pp. 255-296.) Price, 10¢.
- Natural Gas in 1927. (Pt. II, pp. 129-137.) Price, 5¢.
- Talc and Soapstone in 1927. (Pt. II, pp. 181-186.) Price, 5¢.
- Tin in 1927. (Pt. I, pp. 119-155.) Price, 10¢.

BUREAU OF NAVIGATION

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

Merchant Vessels of United States (Including Yachts and Government Vessels), Year Ended June 30, 1928. 998 pages. Gives the name, dimensions, tonnage, place where built, name of owner, and home port of each vessel in the merchant marine. Price, \$2.

COAST AND GEODETIC SURVEY

Tide Table, New York Harbor and Vicinity for Year 1929. Serial No. 429; ii+23 pages. Price, 5¢.

LIGHTHOUSE SERVICE

Light List, Lower Mississippi River and Tributaries, Fifteenth Lighthouse District, 1928, corrected to Dec. 15. Contains all aids to navigation maintained by the United States on the Mississippi River below the mouth of the Missouri River, and on the Yazoo Canal and Red River. Price, 20¢.

PATENT OFFICE

Index of Patents Issued from United States Patent Office, 1928. 1066 pages.

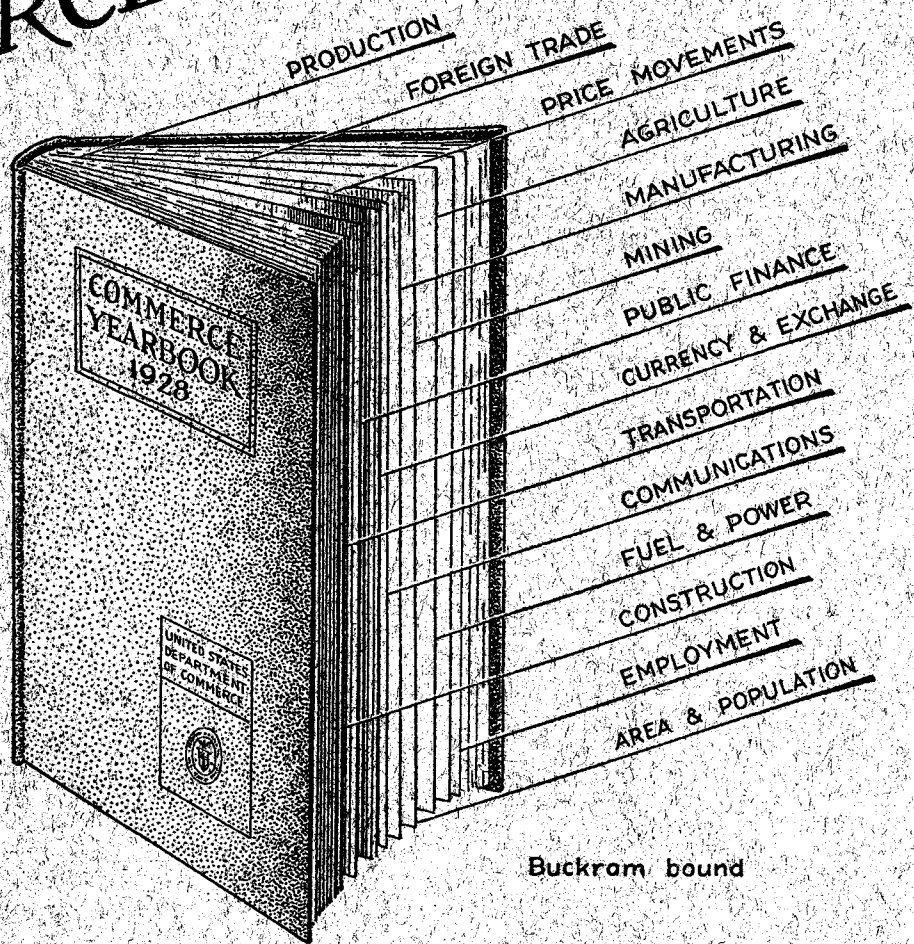
Index of Trade-Marks Issued from United States Patent Office, 1928. 648 pages. Contains lists of trade-mark registrants and applicants, labels registrants, and a classified list of trade-marks and prints.

Now ready
 The complete
COMMERCE YEARBOOK
 1928

WITH the release of Volume II, the latest facts and figures showing the **COMMERCIAL, INDUSTRIAL, and FINANCIAL DEVELOPMENT** of 66 countries are available in the most convenient statistical form.

VOLUME I, published earlier this year, consists of 708 pages and 137 charts, recording in considerable detail the economic position of the United States in both its domestic activities and relations with foreign countries.

VOLUME II, just issued, gives comparative data for 65 foreign countries, in 750 pages of reviews and tables, 66 charts, and 10 large colored maps.



Buckram bound

Everywhere that authoritative economic information is desired

—in business office, factory, importing and exporting establishment, bank, advertising agency, university, study—wherever it is important to have the exact data—

THE COMMERCE YEARBOOK *is regarded as indispensable*

PART I and PART II

are obtainable upon remittance of \$2.25 for the complete set, or \$1.00 for Volume I and \$1.25 for Volume II, to the Superintendent of Documents, United States Government Printing Office, Washington, D. C. or any district office of the Bureau of Foreign and Domestic Commerce