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DEPARTMENT OF COMMERCE
WASHINGTON

SURVEY OF
CURRENT BUSINESS

NOVEMBER, 1930

No. 111



ISSUED BY
BUREAU OF FOREIGN AND DOMESTIC COMMERCE

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 140-143 of the August, 1930, semiannual issue.

INTRODUCTION

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

At semiannual intervals detailed tables are published giving, for each item, monthly figures for the past two years and yearly comparisons where available, back to 1913; also blank lines sufficient for six months have been left at the bottom of each table, enabling those who care to do so to enter new figures as soon as they appear (see August, 1930 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 of 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

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

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

METHODS OF USE

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



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. 111

WASHINGTON

November, 1930

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PRELIMINARY SUMMARY FOR OCTOBER

Early reports on industrial conditions in October indicate greater activity than in the previous month. Increased output over a month ago was noted in the coal and coke and building industries. Receipts of cattle, calves, and hogs were seasonally larger than during September, as were the receipts of cotton. Grain receipts, however, indicated a loss from the receipts of the preceding month. The distribution of commodities through primary channels as measured by carloadings was greater for the first three weeks of October than for a similar number of weeks in September. The production of steel ingots during October was lower than the previous month and a year ago. The output of crude petroleum receded somewhat from September and was lower than in 1929. Lumber production was considerably lower than both the preceding month and September last year.

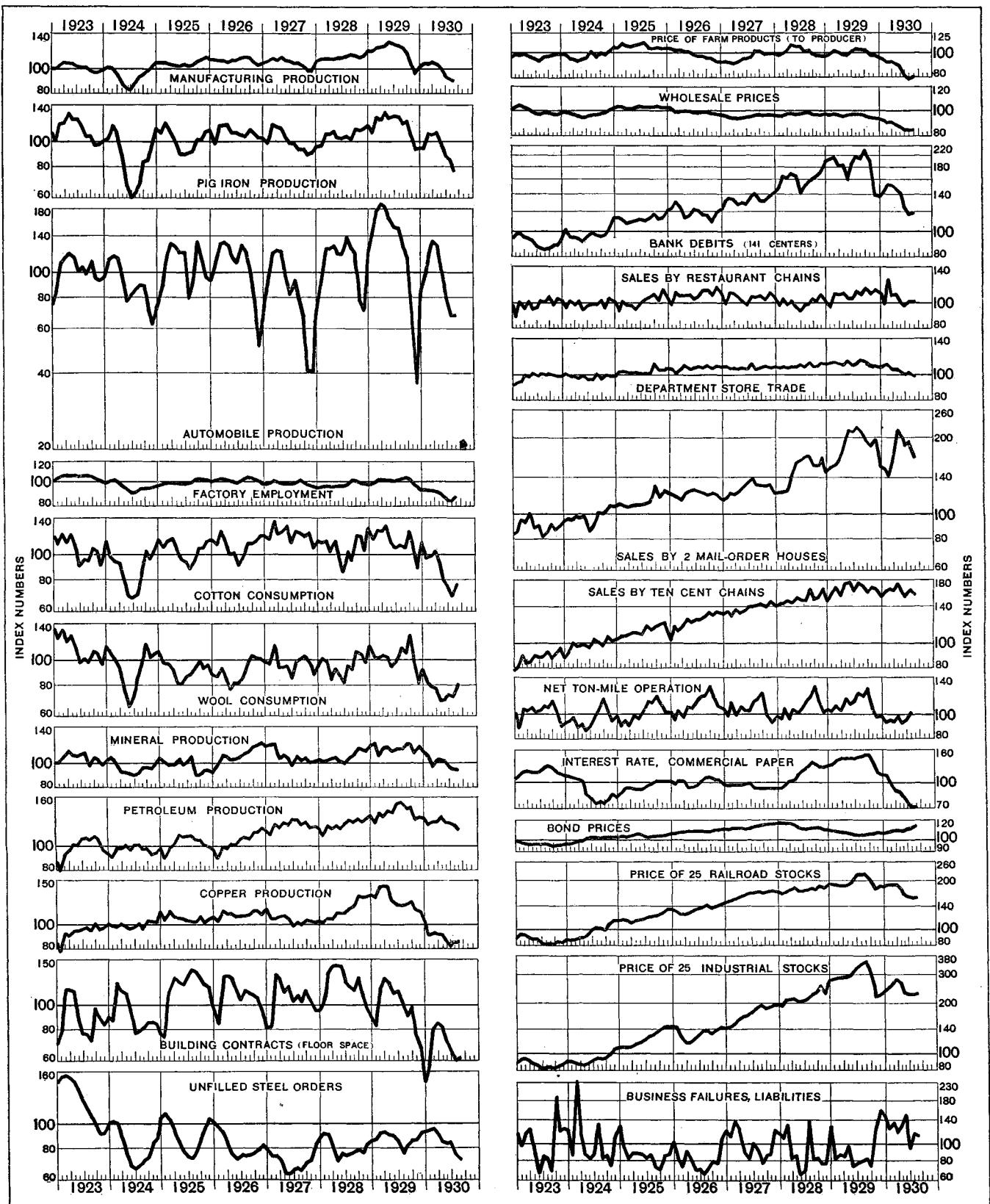
Wholesale prices in general continued to maintain the level of a month ago and showed somewhat a tendency to recover, but prices for wheat, copper, and

cotton receded slightly from the prices that ruled a month ago. Iron and steel prices showed but little change from the preceding month, but were lower than a year ago.

Loans and discounts of Federal reserve member banks were substantially higher than at the end of September. Bank debits, outside of New York City, showed a greater volume than a month ago, but were considerably lower than in 1929. Prices for representative railroad and industrial stocks averaged lower than both the preceding month and a year ago. Bond prices were fractionally lower than the month of September. Loans to brokers, secured by stocks and bonds, were at a lower level than the preceding month. Interest rates, although showing but slight change from a month ago, were much lower than in October last year. The number of defaulting firms for the early weeks of October were more numerous than for the corresponding period in September.

MONTHLY BUSINESS INDICATORS, 1923-1930

R]atio charts—see explanations on inside front cover. The curves on check payments, wholesale trade, 10-cent chains, and department stores have been adjusted for normal seasonal variations, and manufacturing production for the varying number of working days in the month as well. [1923-1925 monthly average=100]



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				1930				
	1923	1924	1925	1926	1927	1928	1929	June	July	Aug.	Sept.	June	July	Aug.	Sept.	May	June	July	Aug.	Sept.
	1923-1925 monthly average=100																			
Industrial production:																				
• Total manufacturing.....	101.0	94.0	105.0	108.0	106.0	111.0	119.0	111.0	111.0	113.0	115.0	120.0	126.0	125.0	122.0	104.0	101.0	93.0	90.0	90.0
• Total minerals.....	105.0	96.0	99.0	108.0	107.0	106.0	115.0	101.0	101.0	105.0	107.0	113.0	114.0	115.0	118.0	103.0	100.0	97.0	96.0	94.0
Pig iron.....	111.7	86.7	101.5	109.0	101.0	105.5	117.9	103.1	102.8	105.0	102.5	124.4	126.7	125.7	117.1	108.2	98.2	88.4	84.5	76.2
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	120.2	130.9	108.3	110.1	120.9	120.0	141.8	140.3	142.9	131.0	116.4	99.5	84.8	89.5	83.0
Automobiles.....	101.7	90.8	107.5	108.4	85.7	109.9	135.1	120.0	118.6	139.5	125.6	165.1	151.5	150.8	125.8	126.2	101.5	79.4	67.5	67.4
Cement.....	92.1	99.8	108.1	110.0	115.3	118.0	114.1	140.8	140.6	143.9	135.2	139.3	149.5	138.6	138.8	138.7	137.4	143.4	129.7	
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.2	106.7	114.6	99.5	85.7	102.6	95.9	111.0	106.6	108.9	106.4	92.3	79.0	73.8	68.7	76.8
Wool (consumption).....	112.8	94.6	92.6	89.7	97.0	94.7	103.1	87.1	80.4	95.2	91.8	93.0	99.8	111.1	105.0	88.9	69.2	73.2	71.3	80.4
Raw material output:																				
Animal products.....	100.0	104.0	96.0	96.0	97.0	99.0	99.2	116.2	108.4	96.7	91.6	111.8	116.0	100.0	98.7	110.5	116.7	111.8	91.4	90.1
Crops.....	91.9	104.0	104.0	109.0	113.3	117.0	114.2	51.8	86.8	115.0	178.3	56.3	91.1	134.5	177.1	55.0	45.3	86.6	115.3	156.0
Forest products.....	99.0	97.0	104.0	98.0	93.0	88.2	85.4	94.5	87.1	88.6	76.8	89.9	88.3	91.8	80.3	84.9	70.0	64.7	65.5	60.8
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.4	136.5	118.4	123.1	126.7	124.6	135.9	148.7	150.1	142.5	130.6	124.6	125.0	121.9	115.6
Bituminous coal.....	108.0	92.5	99.5	109.7	99.0	95.8	102.3	83.9	84.6	95.9	96.3	80.0	95.0	102.6	104.1	82.5	77.4	70.7	81.9	88.7
Copper.....	93.4	100.2	105.4	110.2	104.9	114.9	127.1	111.0	111.3	116.7	118.8	124.9	120.1	119.6	120.4	91.3	86.0	82.3	85.1	85.8
Power and construction:																				
Electric power.....	92.5	98.1	109.5	122.6	123.3	146.0	161.8	139.5	142.4	149.8	145.1	154.9	161.0	166.6	160.8	159.8	154.6	156.9	157.1	154.8
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	121.4	99.6	142.2	123.7	118.8	114.2	108.2	113.7	100.5	90.2	81.0	72.6	67.2	60.2	62.1
Unfilled orders:																				
General index.....	121.7	87.0	91.8	84.6	74.6	76.2	80.8	75.3	76.8	74.6	74.6	83.4	81.8	76.0	76.9	75.0	75.9	74.5	69.6	69.3
U. S. Steel Corporation.....	125.6	83.6	90.6	82.1	71.1	80.7	87.1	76.2	74.8	75.9	77.4	89.2	85.6	76.6	81.7	85.0	83.1	84.2	75.0	71.7
Stocks:																				
General index.....	94.5	102.0	103.5	114.6	120.8	123.0	136.8	108.7	105.8	107.9	116.3	120.2	122.0	127.5	139.5	127.7	125.0	125.6	132.7	148.8
Mand. commodities (28).....	93.8	103.2	103.0	106.3	112.5	117.4	120.1	118.0	119.3	116.3	112.1	121.1	120.7	116.2	114.2	117.7	125.3	124.6	120.6	118.9
Cotton.....	102.5	91.4	106.2	145.5	153.1	123.6	126.8	74.7	58.6	52.4	89.3	70.9	54.2	58.1	106.4	129.5	118.7	108.0	119.1	165.3
Copper (refined).....	106.4	113.9	73.1	84.8	85.4	58.4	78.4	52.0	48.5	48.4	45.8	73.4	86.3	92.2	83.7	272.6	279.8	284.5	307.1	318.6
Employment:																				
Factories.....	104.2	96.2	99.7	101.4	98.8	97.2	100.4	96.2	95.7	98.3	100.3	101.2	100.7	102.0	105.4	90.4	88.2	84.6	85.1	86.5
Prices:																				
Farm products, to producers.....	97.8	97.1	106.5	98.6	94.9	100.7	100.0	105.1	105.1	100.7	102.2	97.8	101.4	103.6	102.2	89.9	89.1	80.4	78.3	80.4
Wholesale, all commodities.....	99.9	97.4	102.8	99.3	94.7	97.0	95.8	96.9	97.6	98.2	99.4	95.7	97.3	97.0	96.8	88.5	86.2	83.2	83.4	83.6
Retail food.....	97.6	97.6	104.9	107.6	103.6	102.9	104.6	102.0	102.1	103.0	105.3	103.4	105.9	107.0	107.4	100.3	98.8	96.2	96.0	97.3
Cost of living (including food).....	98.2	99.4	102.4	102.4	100.0	98.7	98.4	98.0	98.1	98.0	99.3	97.6	98.8	99.4	99.2	95.0	94.4	92.6	92.6	93.2
Distribution (values):																				
• Bank debits, 141 cities.....	91.2	96.7	111.9	119.6	132.5	158.2	184.5	165.4	140.4	149.9	156.9	159.0	184.9	198.2	192.8	145.8	142.2	125.7	117.8	120.8
• Department stores, sales.....	98.0	99.0	103.0	106.0	107.0	108.0	110.0	107.0	110.0	107.0	112.0	113.0	109.0	111.0	114.0	105.0	103.0	100.0	102.0	99.0
• Mail-order sales, 2 houses.....	80.3	97.2	111.9	120.6	126.2	147.7	188.6	160.8	163.6	168.7	170.8	215.1	211.2	223.3	212.1	216.6	200.2	190.8	198.2	167.1
• 10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	150.0	164.0	153.0	148.0	147.0	165.0	174.0	162.0	174.0	168.0	174.0	160.0	152.0	163.0	156.0
Postal receipts.....	93.6	98.5	107.9	114.5	117.3	117.7	121.1	111.9	99.6	105.0	109.3	109.3	109.1	110.0	114.5	117.3	104.9	101.2	98.1	107.9
Imports.....	97.8	93.1	109.0	114.3	108.0	105.5	113.5	98.2	98.4	107.3	98.9	109.4	109.3	114.3	108.8	88.1	77.5	68.2	67.6	70.3
Exports.....	91.5	100.8	107.8	106.5	106.8	112.6	115.2	102.4	99.8	99.8	111.0	103.6	106.1	100.2	115.1	84.3	77.6	70.2	78.5	83.8
Transportation:																				
Freight, net ton-miles.....	102.2	95.9	101.9	109.1	106.0	106.5	109.9	100.0	104.9	113.7	117.4	109.2	112.6	120.5	118.5	99.0	92.2	95.4	100.3	-----
Finance:																				
Member bank loans and discounts.....	94.1	98.5	107.4	112.9	117.3	126.8	135.9	128.4	126.6	125.6	127.3	135.1	136.2	135.3	130.1	134.4	135.4	135.3	134.3	135.8
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	112.8	135.7	113.2	119.0	124.8	130.6	139.2	139.2	142.2	145.0	87.0	81.2	75.4	69.6	69.6
Federal reserve ratio.....	99.0	104.1	96.9	96.0	99.1	89.1	93.4	84.7	88.9	90.0	86.5	94.4	96.4	97.7	94.2	108.7	104.5	108.2	104.3	105.7
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	113.0	106.5	112.3	110.9	109.8	111.0	105.4	104.9	104.1	103.9	109.2	109.1	109.5	111.5	113.3
Price, railroad stocks.....	86.0	96.1	117.9	133.4	162.7	174.5	194.3	169.6	170.3	178.8	178.5	192.1	213.4	216.3	217.7	176.7	162.8	162.6	157.8	157.5
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	214.8	292.6	202.1	206.1	213.4	226.9	297.8	330.8	344.5	358.5	261.3	227.2	225.8	225.9	226.0
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.2	96.2	95.0	70.3	69.8	137.3	80.1	74.0	76.5	79.6	80.5	131.0	148.9	93.9	116.0	110.7

* Seasonal adjustments.

BUSINESS CONDITIONS IN SEPTEMBER

PRODUCTION

Industrial production, after adjustment for seasonal variations, remained at the same level as in August, but was considerably lower than a year ago. Although the general index showed no change from the previous month, increased output over a month ago occurred in the output of textiles, food products, and nonferrous metals. Among the groups showing declines from August were iron and steel, leather and shoes, cement and tobacco. As compared with a year ago, all groups, without exception, showed decreased output. Mineral production after adjustment for seasonal conditions declined slightly from the previous month and the corresponding period in 1929. However, the output of bituminous coal and copper, two groups included in the mineral total, showed increases over a month ago.

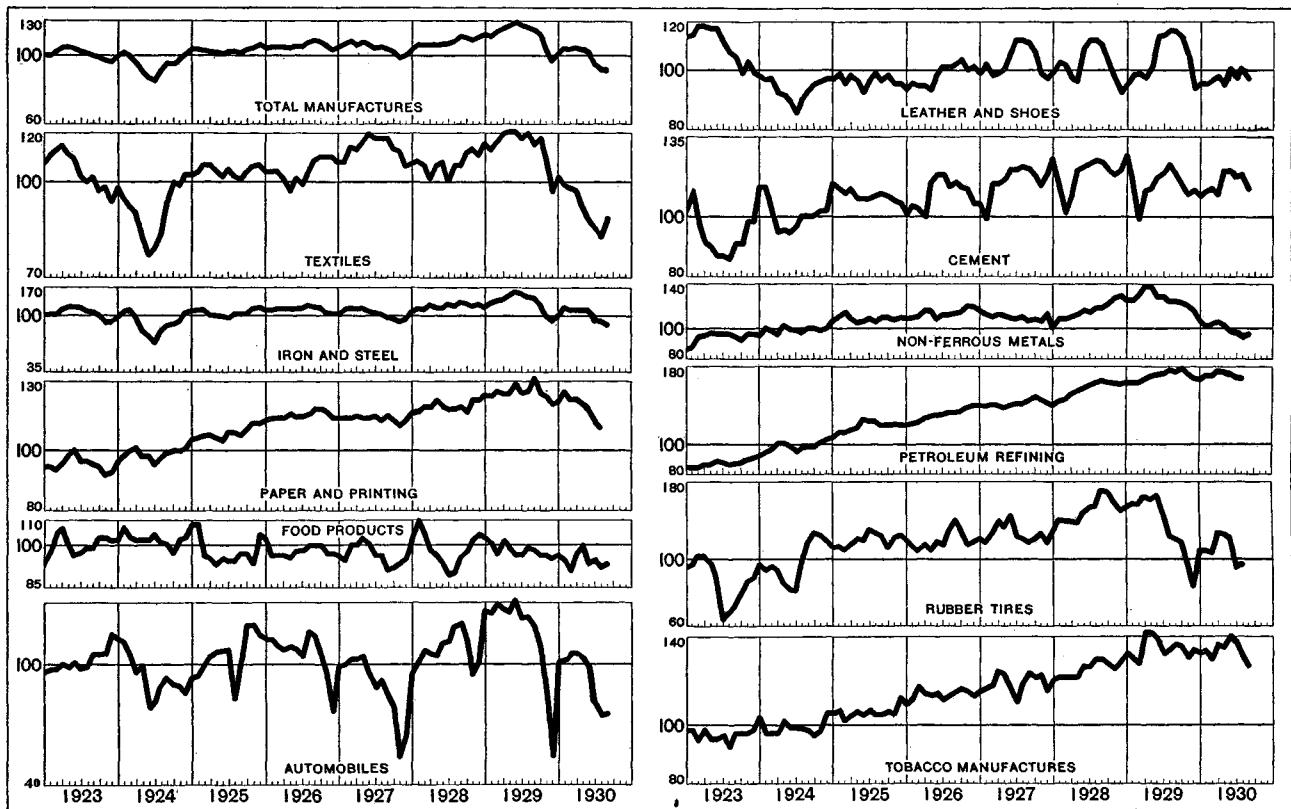
while those for iron and steel and transportation equipment declined. In comparison with September a year ago, unfilled orders for equipment increased while orders for iron and steel and lumber declined.

Wholesale trade as reported by the Federal Reserve Board indicated that firms selling groceries, dry goods, hardware, and drugs did considerably less business in September in these lines than a year ago.

Department-store trade showed an increase of 34 per cent, when allowance is made for the number of trading days. However, after adjustment for seasonal variations a decline of 3 per cent occurred. As compared with the month of September, 1929, sales were 12 per cent lower. This loss was partly due to the reduction in the level of prices of the goods sold. Merchandise stocks held by department stores, although

MANUFACTURING PRODUCTION BY MAJOR GROUPS

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



COMMODITY STOCKS

Total stocks of commodities held at the end of September were higher than at the end of August and a year ago. As compared with the previous month, raw material stocks were higher, while stocks of manufactured goods were smaller. Both groups were higher than at the end of September, 1929.

SALES

Total unfilled orders for manufactured goods at the end of September showed declines from both prior periods. As compared with the month of August, unfilled orders for textiles and lumber showed increases,

greater than the month of August, were lower than a year ago. Mail order business, while much greater than the preceding month, declined from the sales of September last year. Sales by principal 10-cent chains registered increases without exception over the sales of the month of August, but were smaller than the same month in 1929. Restaurant sales were practically the same as last month, but were smaller than last year. Postal receipts and the issuances and payments of money orders in principal cities showed increases over the preceding month, but when compared with the same month last year, were lower in each case.

PRICES

The general index of wholesale prices was fractionally higher than the preceding month, but was still considerably lower than in September of last year. As compared with the preceding month, increases occurred in the prices of farm products, foods, and fuel and lighting, while declines occurred in the prices of textiles, metals, building materials, chemicals, house-furnishing goods, and miscellaneous items. As compared with last year, all groups, without exception, were considerably lower. Classified by State of manufacture, prices for raw materials and finished products increased over the preceding month, while the prices for semimanufactured articles declined. All three groups were much lower than in September of last year.

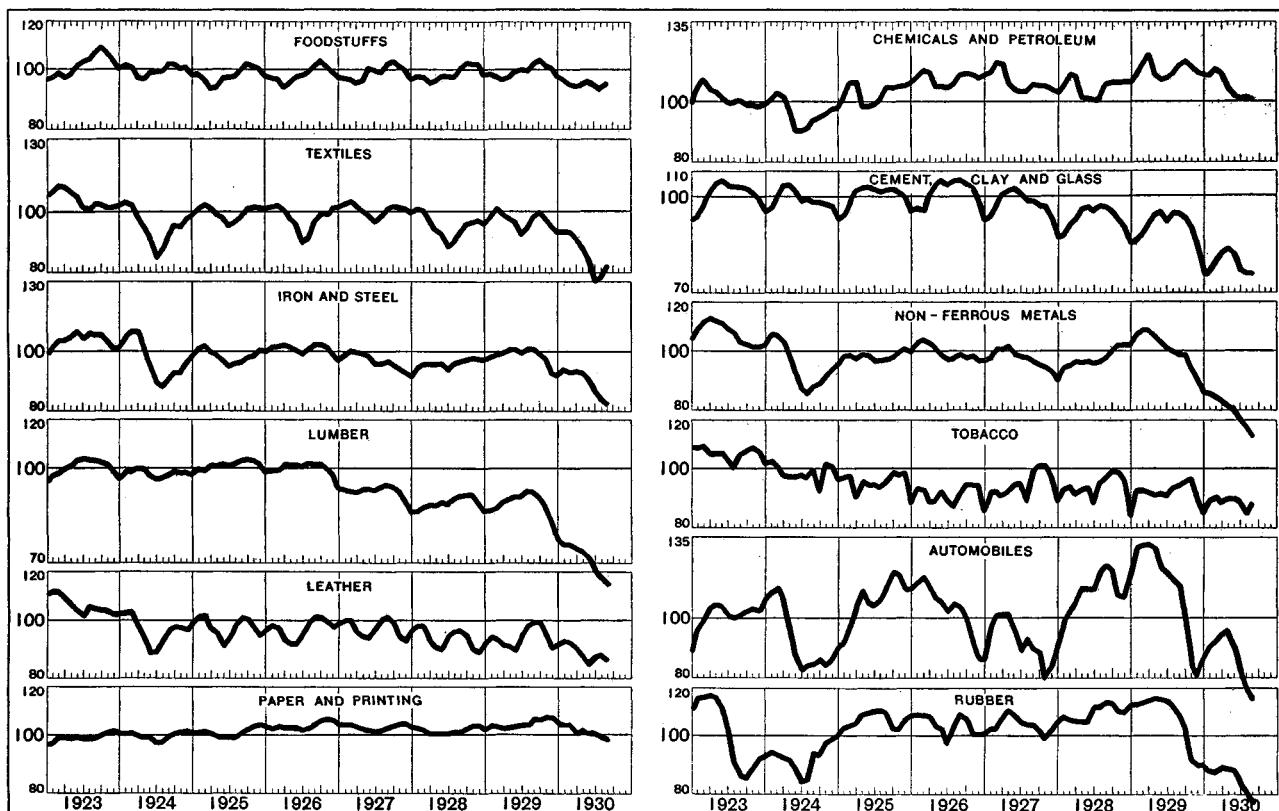
Prices received by farmers for their goods showed, in the main, an increase over the previous month, but like prices in general were below the level of a year ago.

preceding month, but as compared with last year employment was lower. Among the industrial groups to show increased employment over the preceding month were the textile, food, chemical, and tobacco, while the iron and steel machinery, paper and printing, lumber, transportation, leather, cement, nonferrous, and rubber groups showed decreased employment. Compared with a year ago, all groups showed smaller numbers employed.

Factory pay rolls in September were also greater than the preceding month, but like employment were smaller than in September, 1929. In comparison with the month of August, increased payments occurred in factories producing textiles, food, lumber, transportation equipment, nonferrous metals, and tobacco, while smaller payments than August were made in establishments producing automobiles, leather, and rubber. Little change was noted from the pre-

FACTORY EMPLOYMENT, BY GROUPS

[1926 monthly average=100. September, 1930, is latest month plotted]



Prices received by producers of meat animals, dairy and poultry products, showed increases over a month ago, while prices for grains, fruits, and vegetables, cotton and cottonseed, and miscellaneous items showed declines. All prices to the producer were lower than in September, 1929.

Retail prices for food, although averaging higher than in the preceding month, were generally lower than a year ago.

EMPLOYMENT

Factory employment in September showed a larger number of employees on the pay rolls than in the

preceding month in the pay-roll payments of the iron and steel, machinery, paper and printing, cement, clay and glass, and chemicals groups.

COST OF LIVING

The index of the cost of living as compiled by the National Industrial Conference Board showed a slight increase, in September, over the preceding month. As compared with August increases were noted in the fuel, shelter, clothing and fuel groups, while the light and sundries groups showed no change. As compared with a year ago, all cost of living items were lower.

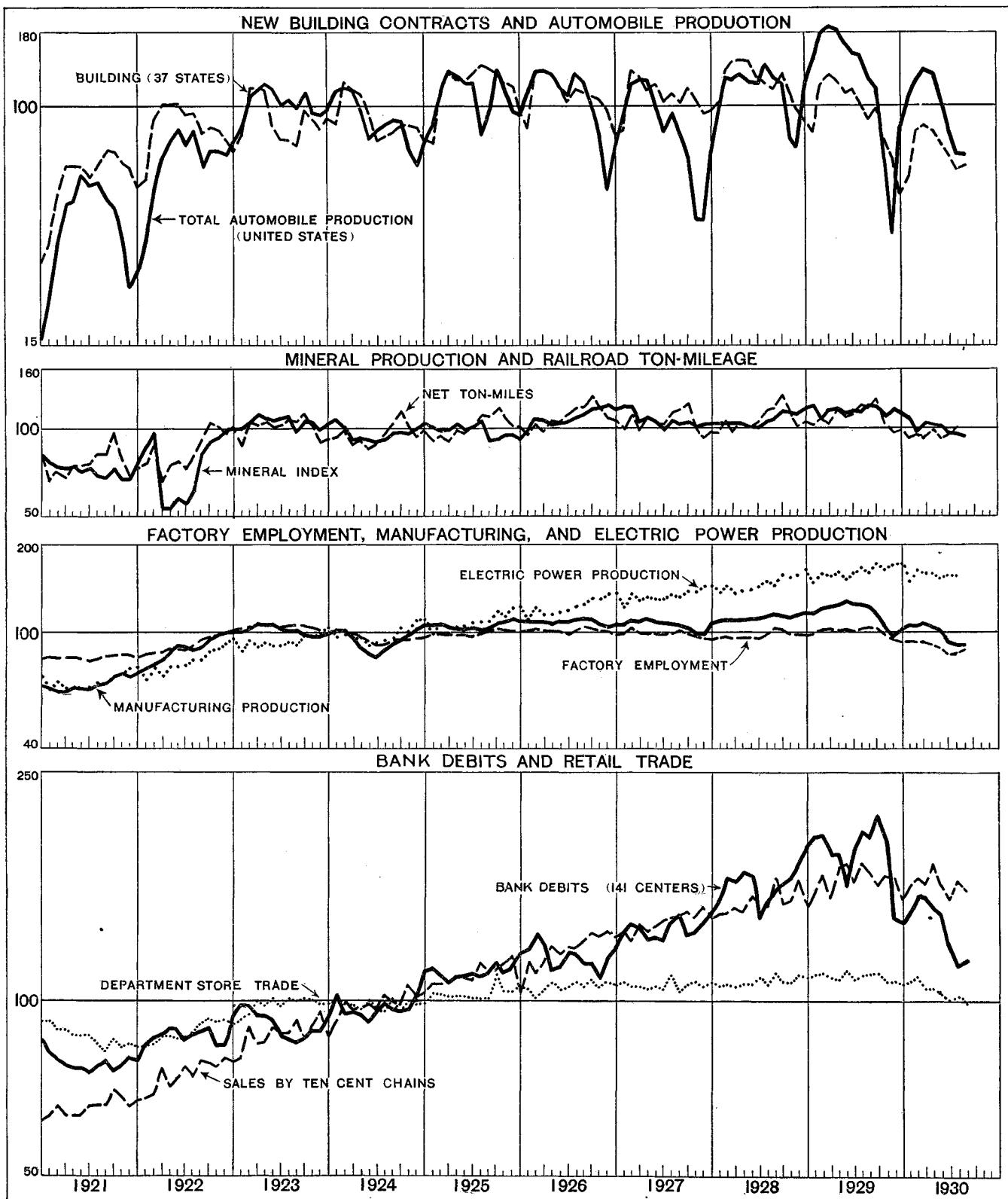
WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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

COMMODITIES	Unit	ACTUAL PRICE (dollars)			RELATIVE PRICE				
		1926 average=100							
		August, 1930	Septem- ber, 1930	Septem- ber, 1929	July, 1930	August, 1930	Septem- ber, 1930	August, 1929	Septem- ber, 1929
FARM PRODUCTS—AVERAGE PRICE TO PRODUCER									
Wheat.....	Bushel.....	0.74	0.703	0.112	52	55	52	82	83
Corn.....	Bushel.....	.900	.917	.972	110	129	131	137	139
Potatoes.....	Bushel.....	1.088	1.099	1.355	70	59	59	75	73
Cotton.....	Pound.....	.114	.099	.182	79	75	66	119	121
Cottonseed.....	Ton.....	23.99	23.89	31.03	101	88	88	120	114
Cattle, beef.....	Pound.....	.0626	.0661	.0922	110	97	102	149	143
Hogs.....	Pound.....	.0851	.0944	.0953	71	72	80	87	81
Lambs.....	Pound.....	.0682	.0667	.1108	70	59	58	99	96
FARM PRODUCTS—MARKET PRICE									
Wheat, No. 1, northern spring (Minneapolis).....	Bushel.....	.91	.87	1.35	58	58	55	85	85
Wheat, No. 2, red, winter (St. Louis).....	Bushel.....	.89	.88	1.35	55	57	57	85	87
Wheat, No. 2, hard, winter (Kansas City).....	Bushel.....	.81	.78	1.24	54	54	52	83	83
Corn, No. 3, yellow (Chicago).....	Bushel.....	.99	.94	1.01	109	132	125	135	135
Oats, No. 3, white (Chicago).....	Bushel.....	.39	.38	.48	85	95	93	105	117
Barley, No. 2 (Minneapolis).....	Bushel.....	.52	.53	.60	73	81	83	95	94
Rye, No. 2 (Minneapolis).....	Bushel.....	.60	.55	.97	60	65	60	107	105
Cotton, middling upland (New York).....	Pound.....	.121	.109	.189	75	69	62	106	108
Wool, $\frac{1}{4}$ blood combing, Ohio and Pennsylvania fleeces (Boston).....	Pound.....	.31	.31	.43	67	67	67	93	93
Cattle, steers, good to choice, corn fed (Chicago).....	Cwt.....	9.138	10.325	13.800	97	96	108	154	145
Hogs, heavy (Chicago).....	Cwt.....	9.775	10.580	9.955	73	79	86	86	81
Sheep, ewes (Chicago).....	Cwt.....	3.094	3.075	4.675	47	47	47	78	71
Sheep, lambs (Chicago).....	Cwt.....	7.719	7.350	12.550	59	56	54	94	92
FOOD									
Flour, standard patents (Minneapolis).....	Barrel.....	5.344	5.080	7.169	65	63	60	87	85
Flour, winter straights (Kansas City).....	Barrel.....	4.555	4.444	6.100	64	63	61	86	84
Sugar, 96° centrifugal (New York).....	Pound.....	.032	.031	.040	75	73	72	88	92
Sugar, granulated, in barrels (New York).....	Pound.....	.044	.043	.053	84	80	79	98	97
Cottonseed oil, prime yellow (New York).....	Pound.....	.084	.081	.093	67	71	69	79	78
Beef, fresh, carcass, good native steers (Chicago).....	Pound.....	.168	.191	.236	106	102	116	145	144
Beef, fresh, carcass, steers (New York).....	Pound.....	.173	.203	.250	104	101	119	147	147
Pork, smoked hams (Chicago).....	Pound.....	.229	.227	.267	75	74	74	89	87
Butter, creamery, 92 score (New York).....	Pound.....	.39	.40	.46	78	87	89	96	102
Oleomargarine, standard, uncolored (Chicago).....	Pound.....	.205	.205	.235	90	90	90	103	103
TEXTILES									
Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston).....	Pound.....	.252	.242	.357	73	70	67	97	100
Cotton-print cloth 64 x 60-334"-5.35—yards to pound.....	Yard.....	.050	.053	.076	72	67	70	100	101
Cotton sheeting, brown 4/4 Trion (New York).....	Yard.....	.070	.070	.086	75	75	75	92	93
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....	Pound.....	1.200	1.200	1.475	84	84	84	101	103
Women's dress goods, French, 39 inches, at mills, serge.....	Yard.....	.900	.900	.975	87	87	87	94	94
Suitings, unfinished worsted—13-ounce, mill.....	Yard.....	1.601	1.601	1.901	85	80	80	95	95
Suitings, serge, 11-ounce, 56-58 inch.....	Yard.....	1.746	1.746	1.959	83	81	81	90	90
Silk, Japan, 13-15.....	Pound.....	2.955	2.413	5.122	48	48	39	82	83
Hosiery, women's pure silk, mill.....	Dozen pair.....	7.500	7.250	9.250	69	65	63	80	80
LEATHER									
Hides, green salted, packers' heavy native steers (Chicago).....	Pound.....	.136	.146	.196	100	97	104	134	140
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....	Pound.....	.161	.165	.204	95	93	95	114	118
Leather, sole, oak, scoured backs, heavy (Boston).....	Pound.....	.460	.440	.535	105	105	100	119	122
Boots and shoes, men's black calf, blucher (Massachusetts).....	Pair.....	6.750	6.750	6.750	108	106	106	106	106
Boots and shoes, men's dress welt tan calf oxford (St. Louis).....	Pair.....	4.850	4.850	100	100	100	100	100	100
FUEL									
Coal, bituminous, mine-run (composite price).....	Net ton.....	3.892	3.897	3.930	90	90	90	91	91
Coal, bituminous, prepared sizes (composite price).....	Net ton.....	4.180	4.303	4.437	87	87	90	90	93
Coal, anthracite, chestnut (composite price).....	Long ton.....	12.578	12.707	12.924	90	91	92	93	94
Coke, Connellsburg (range of prompt and future), furnace—at ovens	Short ton.....	2.550	2.600	2.700	61	62	63	67	66
Petroleum, crude, Kansas-Oklahoma—at wells.....	Barrel.....	1.178	1.178	1.300	63	63	63	69	69
METALS									
Pig iron, foundry No. 2, northern (Pittsburgh).....	Long ton.....	19.760	19.560	20.260	96	96	95	98	98
Pig iron, basic, valley furnace.....	Long ton.....	18.000	17.600	18.500	98	97	95	100	100
Steel billets, Bessemer (Pittsburgh).....	Long ton.....	31.000	31.000	35.000	89	89	89	100	100
Copper ingots, electrolytic, early delivery (New York).....	Pound.....	.1069	.1031	.1778	80	77	75	129	129
Brass, sheets, mill.....	Pound.....	.179	.176	.233	96	94	93	122	122
Lead, pig, desilverized, for early delivery (New York).....	Pound.....	.0549	.0550	.0689	62	65	65	80	82
Tin, straits (New York).....	Pound.....	.3002	.2964	.4538	46	46	45	71	69
Zinc, slab, western (St. Louis).....	Pound.....	.0436	.0427	.0680	59	59	58	93	93
BUILDING MATERIAL AND MISCELLANEOUS									
Lumber, pine, southern, yellow flooring, mill.....	M feet.....	31.720	33.480	36.760	75	70	74	83	82
Brick, common red, domestic building (New York).....	Thousand.....	9.500	9.500	10.500	61	58	58	62	64
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district).....	Barrel.....	1.600	1.600	1.500	92	92	92	92	86
Steel beams, mill (Pittsburgh).....	Cwt.....	1.650	1.600	1.950	84	84	82	100	100
Rubber, smoked sheets (New York).....	Pound.....	.099	.084	.202	24	20	17	42	42
Sulphuric acid, 66° (New York).....	Ton.....	15.500	15.500	15.500	107	97	107	107	107
Newsprint, rolls, contract, mill.....	Cwt.....	3.250	3.250	3.250	94	94	94	94	94

MEASURES OF INDUSTRIAL AND COMMERCIAL ACTIVITY

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



REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

TEXTILES

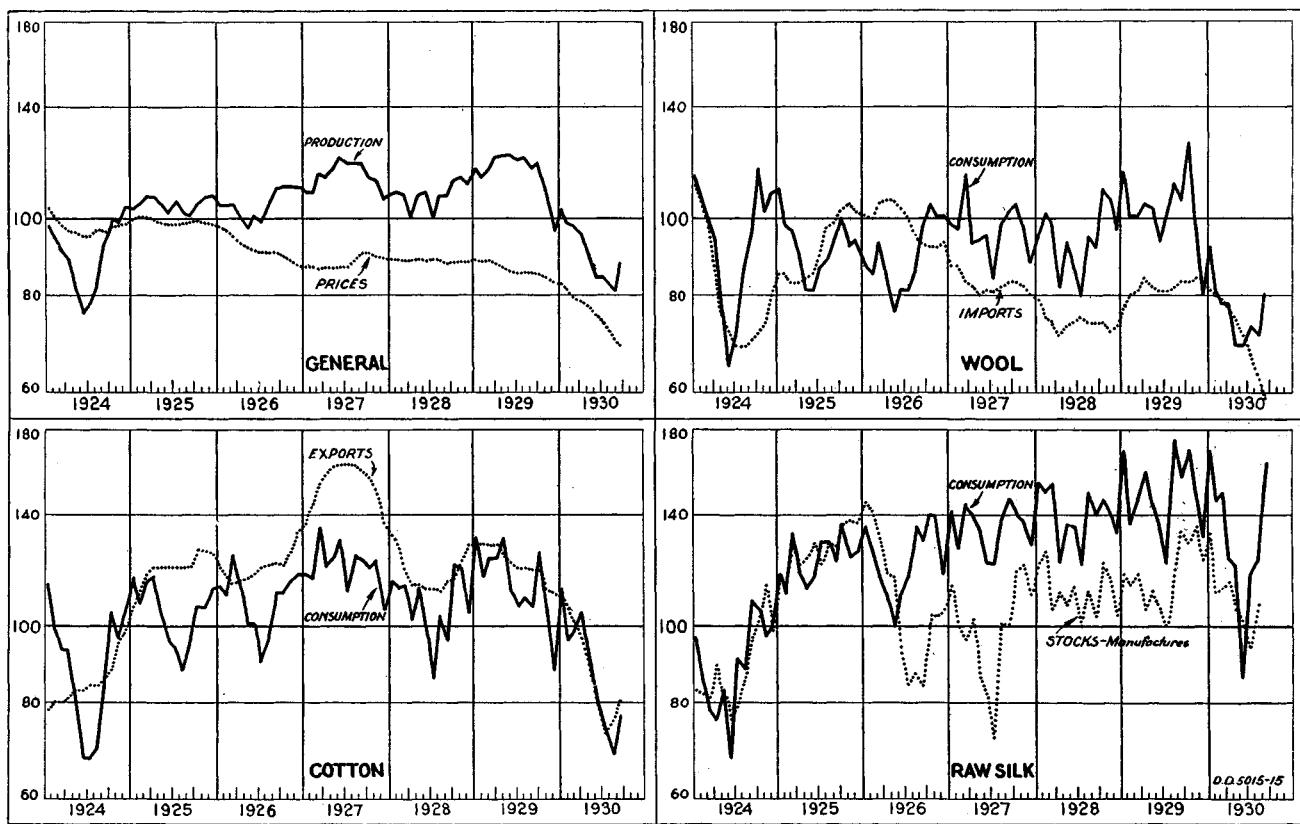
Receipts of foreign and domestic wool at Boston during September were seasonally smaller than the preceding month. They were also considerably less than the month of September of last year. For the first nine months of the year total receipts of wool at this city were 282,118,000 pounds; this compares with 264,365,000 pounds and 265,532,000 pounds for the corresponding periods of 1929 and 1928, respectively. Consumption of wool by textile mills, although greater than during August, declined from the month of September, 1929.

were lower except stocks. Prices for cotton goods, in the main, showed small change from the prices of August.

Silk imports were smaller than in either the previous month or a year ago. Deliveries of silk to mills showed gains over both comparative periods. Silk stocks at warehouses, although greater than at the end of August, were considerably lower when compared with September, 1929. More broad and narrow looms were active in September than in the preceding month. Silk spindle activity was also greater in September than in August. As compared with

THE TEXTILE INDUSTRIES

Relative numbers, monthly average 1923-1925, taken as 100. September, 1930, is latest month plotted. Curves covering imports of wools and exports of cotton are plotted from 12 months' moving monthly average plotted on the end month]



There were 394,321 bales of cotton consumed by mills during September. This compares with 352,335 bales in August and 545,834 bales in September, 1929. Total stocks of cotton at mills and warehouses at the end of September were greater than the preceding month or a year ago.

Spindle activity in the cotton industry, although greater than during August, declined from the month of September a year ago. Production of cotton textiles declined from the month of August and a year ago. New orders, shipments, and unfilled orders were greater than the preceding period, while stocks were less. As compared with a year ago, all trends

September last year, less activity was noted in looms and spindles. Rayon imports were decidedly smaller than either the preceding month or a year ago.

Textiles spread with pyroxylin in September showed an increase over the preceding month, but declined from the amount spread in September last year. Unfilled orders and shipments also showed gains over August. As compared with September 1929, the spread, unfilled orders, and shipments were all less.

Imports of buttons and shells were, on the whole, greater than either prior period. Imports of vegetable ivory, or tagua nuts, while greater than during August, were less than a year ago.

METALS

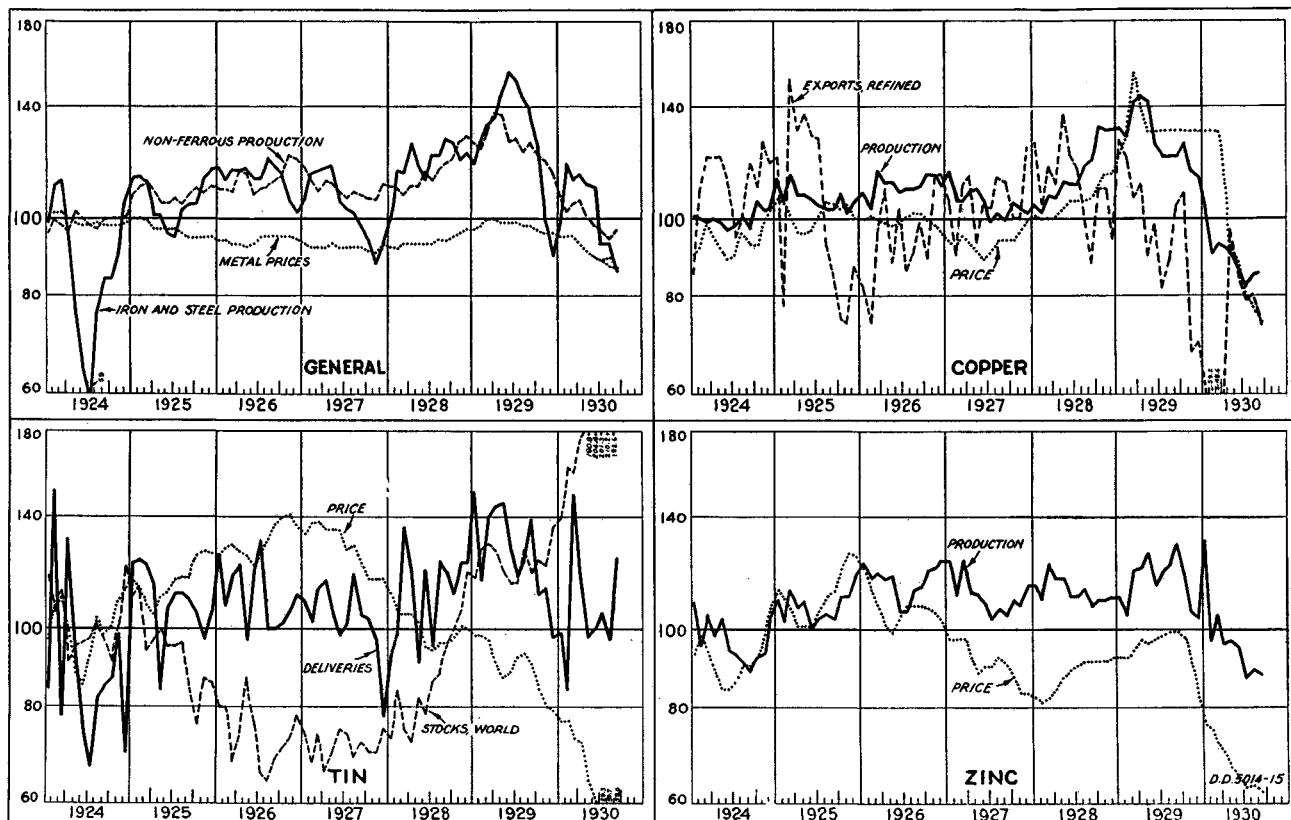
Shipments of iron ore from mines in September were smaller than in August, 1930, or in September a year ago. Receipts of ore at Lake Erie docks and furnaces also showed declines from prior periods. Pig-iron production in the United States during September showed declines from both the preceding month and September a year ago. The number of furnaces in blast at the end of the month, in keeping with the diminished output, were fewer than either comparative month. Wholesale prices for various types of pig iron averaged less than in August and were lower than a year ago.

Steel ingot output registered declines from both the

year to date there were produced 843,707 tons. This compares with 1,017,828 tons in 1929 and 769,416 tons in 1928. Structural steel awards declined from the month of August and a year ago. Shipments also were lower than previous periods. New orders for machine tools showed an increase over the preceding month. Unfilled orders were likewise greater, while shipments declined. As compared with a year ago, September shipments and new and unfilled orders were lower. Shipments and new orders of electric overhead cranes registered increases over the month of August. As compared with September, 1929, declines occurred in each case. New orders for foundry equipment were higher than during the preceding month. The num-

THE METAL INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. September, 1930, is latest month plotted]



preceding month and September, 1929. For the year to date there were produced in the United States 32,689,000 tons. Unfilled orders for steel of the United States Steel Corporation at the end of September stood at 3,424,000 tons as compared with 3,580,000 tons at the end of August and 3,903,000 tons a year ago. The production of steel sheets was considerably greater than the output in August but lower than September, 1929. Stocks of steel sheets on hand, both total and unsold, were greater than either prior period. Shipments of sheets were less than the preceding month, while new and unfilled orders were greater.

Production of steel castings showed declines from both the month of August and a year ago. For the

preceding month and September, 1929. For the year to date there were produced 843,707 tons. This compares with 1,017,828 tons in 1929 and 769,416 tons in 1928. Structural steel awards declined from the month of August and a year ago. Shipments also were lower than previous periods. New orders for machine tools showed an increase over the preceding month. Unfilled orders were likewise greater, while shipments declined. As compared with a year ago, September shipments and new and unfilled orders were lower. Shipments and new orders of electric overhead cranes registered increases over the month of August. As compared with September, 1929, declines occurred in each case. New orders for foundry equipment were higher than during the preceding month. The number of mechanical stokers sold during September was greater than the previous month but less than a year ago. Shipments of fire-extinguishing apparatus of the hand type were larger than the previous month, but declined from September, 1929.

The production of mine and smelter copper indicated a gain over the output in August. Refined copper output in North and South America fell off slightly when compared with August. As compared with September of last year, all production was lower.

Deliveries of tin during September showed an increase over the previous month, but were lower than in 1929. Zinc production showed declines from both the preceding month and a year ago.

FUELS

The output of bituminous coal in September was seasonably larger than the preceding month, but declined from a year ago. For the first nine months of the year 339,642,000 tons were produced. This compares with 389,255,000 tons for a similar period in 1929 and 358,698,000 in 1928. Anthracite coal output registered declines from both the preceding month of August and a year ago. Coke output showed losses from both prior periods. For the year to date there was more coke produced than in a similar period two years ago.

AUTOMOBILES AND RUBBER

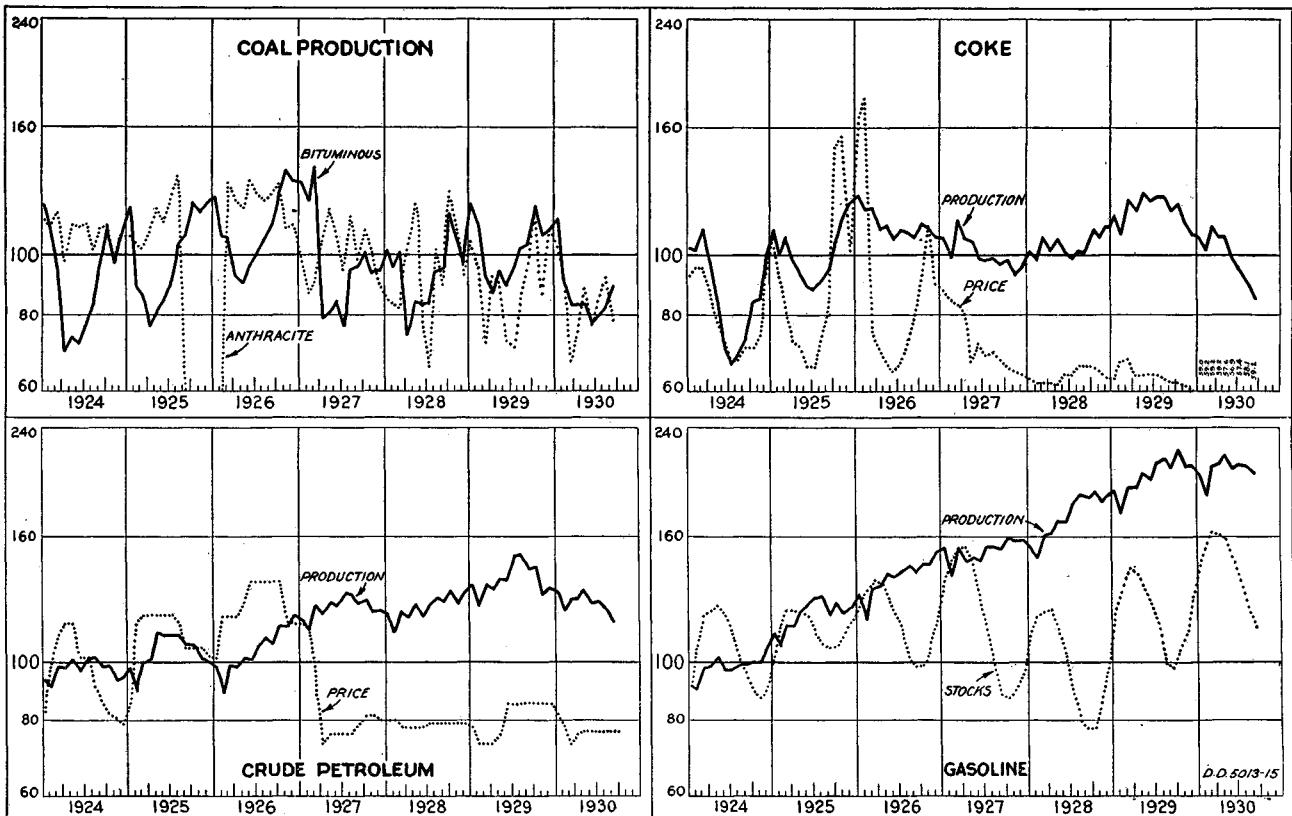
The total production of automobiles, both passenger cars and trucks, was smaller than in August or Septem-

ber, were lower than a year ago. For the first nine months of the year total imports of hides and skins were smaller than during the same period in 1929. More cattle, calves, and sheep were slaughtered under Federal inspection in the United States than during either previous period. Hog slaughterings while greater than in August were smaller than in 1929. Canadian slaughtering of cattle, calves, and sheep showed that more animals were killed than during August.

Exports of sole and belting leather registered increases over both the month of August and a year ago. The production of boots and shoes by 713 establishments during September, 1930, amounted to 23,161,941 pairs; this compares with 23,177,408 pairs of shoes made by the same firms in August of this year.

THE FUEL INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. September, 1930, is latest month plotted where data were available]



ber a year ago. For the first nine months of 1930 there were 2,927,891 passenger cars, 5,422 taxicabs, and 437,420 trucks produced in the United States. Canadian production of automobiles and trucks also showed declines from comparative periods. Exports of automobiles from the United States in September were greater than the preceding month, but were lower than a year ago.

HIDES AND LEATHER

Imports of hides and skins during September, although showing an increase over the month of

PAPER

The imports of newsprint during September, while greater than during the preceding month, showed a decline from September, 1929. Newsprint production in both the United States and Canada was lower than in both prior periods. Consumption by publishers was greater than in either August, 1930, or September, 1929. For the first nine months of this year more paper was used in this country than during the same period in 1929 and 1928. Imports of mechanical wood pulp registered gains over both the month of August and a year ago.

BUILDING

The volume of new building contracts, as to value, was smaller than during August; as measured in square footage, however, an increase over August occurred. As compared with the month of September, 1929, declines occurred in both valuation and square footage of contracts awarded. Although a decline from August was apparent in the grand total of building as measured by value, increases over the previous month occurred in contracts let for industrial, educational, hospital, and institutional buildings and residential buildings. As compared with buildings in September, 1929, contracts let for all types of construction, with the single exception of religious and memorable buildings, was smaller. Fire losses in both the United

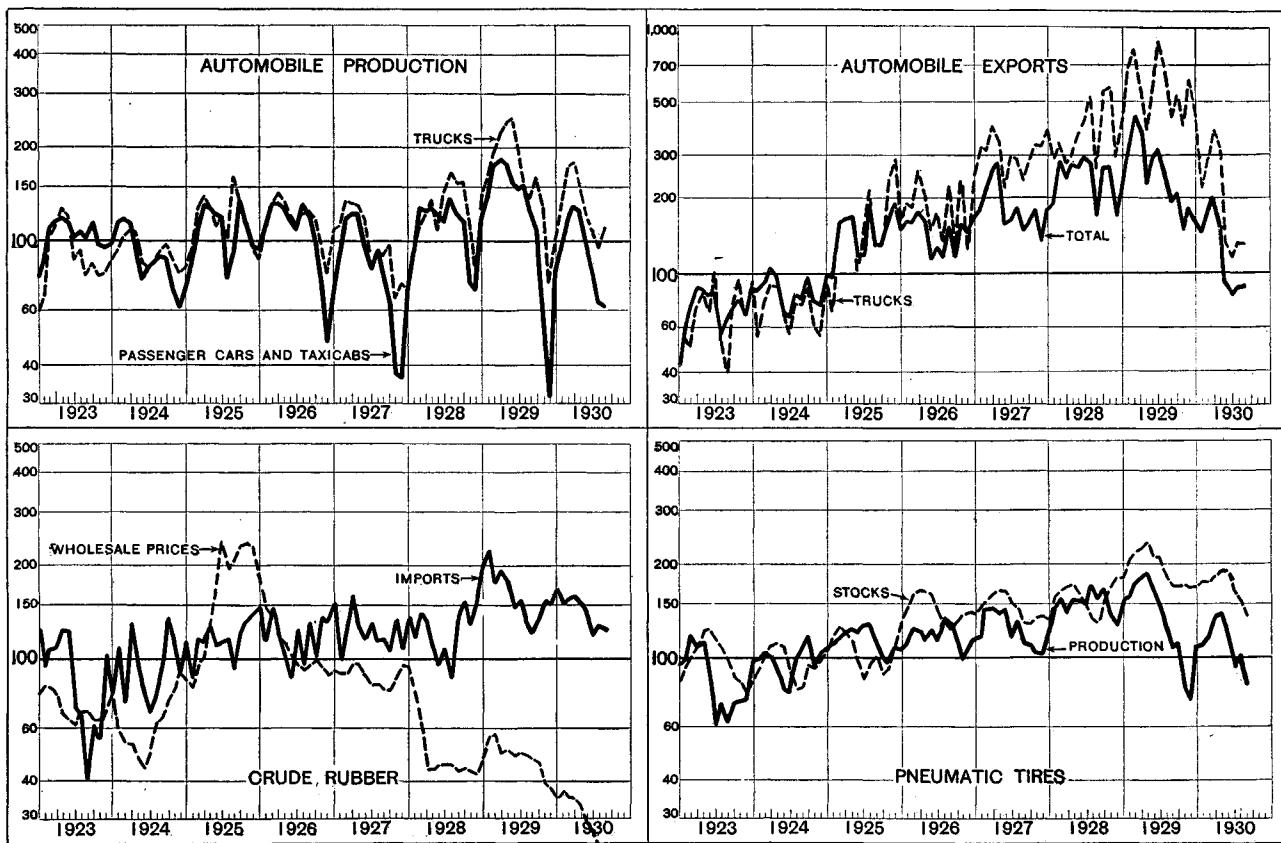
lumber, where declines occurred from the preceding month and a year ago. California redwood, of all the types, indicated a staple condition, where the changes in the output were only fractional as compared with prior periods. In fact, shipments and new orders showed increases over the month of August. As compared with September, 1929, all trends were lower. Production and shipments of maple flooring showed declines from both the preceding month and a year ago.

BUILDING MATERIALS

Portland cement output in the United States during the month of September was lower than in both the preceding month and a year ago. For the year to date the production was 126,919,000 barrels; this compares

THE AUTOMOBILE AND RUBBER INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. Where available, September, 1930, is latest month plotted]



States and Canada were lower in September than in the preceding month. However, fire losses in the United States were greater and losses in Canada less than in September a year ago.

LUMBER

The production of Douglas fir during September indicated declines from both prior periods. Shipments and unfilled orders also were lower, but unfilled orders and exports were higher than the previous month. The downward trend in the output of lumber was also indicated in the smaller cut of northern pine, northern hemlock and hardwoods, and walnut

with 128,199,000 barrels for a similar period in 1929 and 131,178,000 barrels in 1928. Shipments and stocks were also lower than the previous month. Greater stocks of cement were held at the end of September than a year ago. Cement prices although showing no change from the preceding month were higher than in September, 1929. The output of face brick, reflecting the decline in building, showed lower production, shipments, and stocks both from the previous month and September, 1929. Plate-glass manufacture during September was 7,979,000 square feet. This showed an advance over the output for August, but was considerably lower than a year ago.

FOODSTUFFS AND TOBACCO

The visible supply of wheat in the United States and Canada was larger at the end of September than at the end of August or a year ago. Receipts of wheat at principal markets, although smaller than during August, were much larger than in 1929. Exports of the grain, including flour, from the United States were lower than either prior period. Exports from Canada, on the other hand, were larger than in either the preceding month or a year ago. The output of wheat flour by mills showed gains over both prior periods. Receipts and shipments of corn were less than those of either the previous month or in September last year. Barley and rye were exported in greater

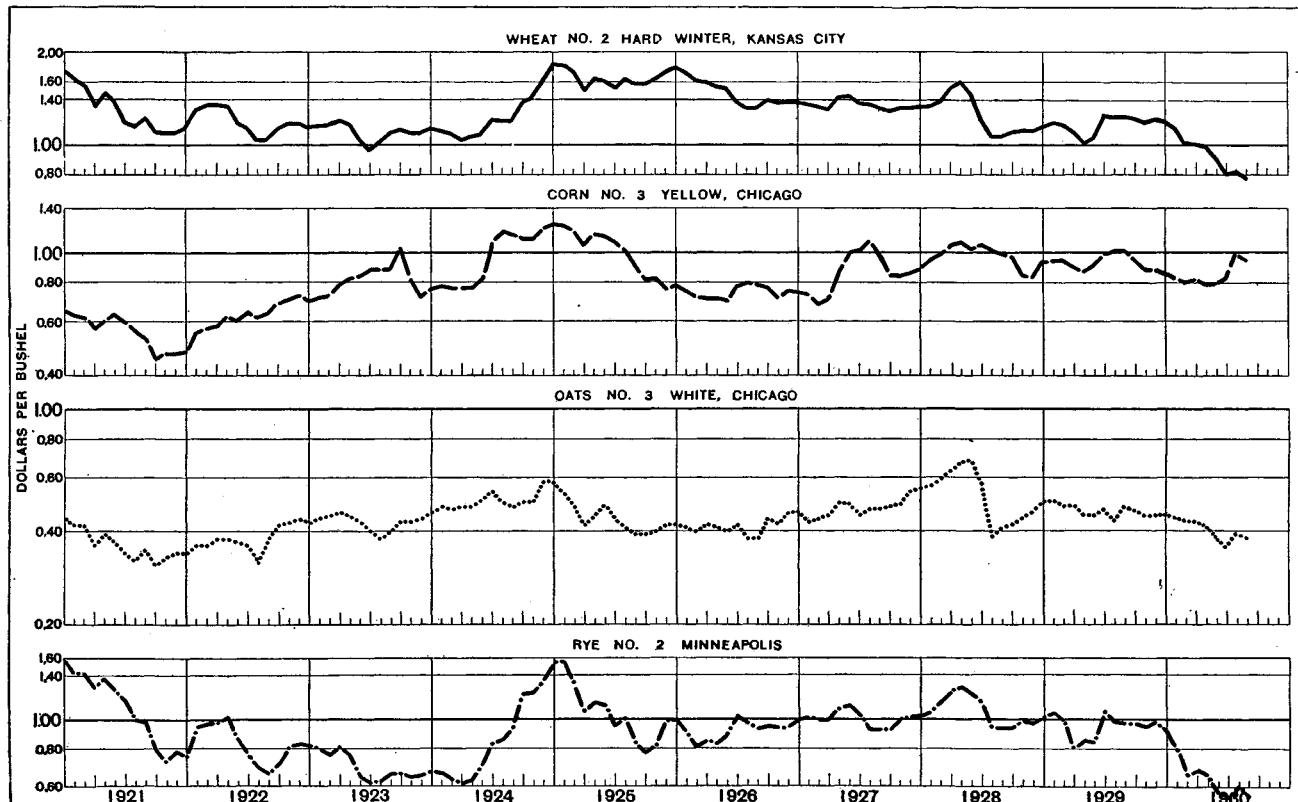
Shipments and local slaughter of hogs were greater than in August but less than in September, 1929. The production of pork and its products was less than in either comparative period. Cold-storage holdings and exports also showed losses from previous periods.

Receipts and shipments of sheep and lambs during September were larger than in the preceding month. Receipts and shipments were also greater than the same month in 1929. The production and consumption of mutton and lamb was more than during either the previous month or a year ago. Prices of ewes and lambs were lower than either prior period.

Poultry receipts at principal markets were greater

MOVEMENT OF GRAIN PRICES

[Weighted price per bushel. September is latest month plotted]



quantities than during the month of August, but were exported in much smaller quantities than during September a year ago. Prices of wheat, wheat flour, and corn were generally lower than during August or September a year ago.

Receipts of cattle and hogs were seasonally larger than during August. As compared with September, 1929, receipts of cattle were larger and hogs smaller. The production of beef and veal under Federal inspection during September was greater than during either prior period. Holdings in cold storage, at the end of September, of these products, also showed gains over both periods.

than during August, but were less when compared with a year ago. Cold-storage holdings of poultry also showed similar comparisons. Receipts of butter and cheese were less than either the month of August or a year ago. Egg receipts at important centers, although greater than during the preceding month, were lower than in September, 1929.

The consumption of large cigars and manufactured tobacco was greater and that of small cigarettes less than the previous month. Exports of unmanufactured tobacco and cigarettes during September exceeded those of the previous month. As compared with a year ago, they were lower in each case.

TRANSPORTATION

September car loadings were smaller than in the preceding month, all classes of commodities except livestock participating in the decline. As compared with a year ago, declines occurred in all classes without exception. There were more locomotives and freight cars in bad order at the end of September than at the end of August, 1930, or September last year. Clearances of vessels in foreign trade in September, while declining from the preceding month, were more numerous than in September, 1929.

BANKING AND FINANCE

Bank debits, outside New York City, registered a substantial gain over the month of August, but were lower than a year ago. Bills discounted by Federal reserve banks showed a decline from the preceding month and were also lower than in 1929. Brokers loans receded from their level of the preceding month and were off considerably from September, 1929. Interest rates on time money showed no change from the rates of August, while call rates showed but a fractional change. Both rates were lower than a year ago. Sales of ordinary life insurance recorded a

decline from September of last year. Prices for stocks in general, averaged higher than the month of August, but were considerably lower than in September, 1929. Bond prices averaged higher than in either prior period. Business failures were slightly more numerous than during August or September a year ago; liabilities, however, showed a decline from the month of August.

GOLD, SILVER, AND FOREIGN EXCHANGE

The receipts of gold at the mint were greater than in either the previous month or September, 1929. Gold imports continued to decline, but exceeded the export movement. The output of silver was smaller than in either prior period. Imports and exports of the metal were lower than in either the preceding month or a year ago.

Exchange rates on the principal countries in September showed but slight change from the preceding month or a year ago. Increases over August were noted in rates with Brazil, while a decline was noted in the rates with Argentina. As compared with a year ago, increases in September occurred in the rates with England, the Netherlands, Belgium, Sweden, Switzerland, Japan, and Canada, while declines took place in the rates with India, Argentina, and Brazil.

INDEXES OF BUSINESS

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

Relative to 1923-1925 monthly average as 100	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			1930				
			July	August	September	July	August	September	July	August	September		
PRODUCTION													
TOTAL INDUSTRIAL													
Unadjusted, except for working days-----	125	81	105	110	116	119	121	123	91	96	92		
Adjusted for seasonal variations-----	127	83	110	112	114	124	123	122	94	91	91		
MANUFACTURING													
Total (adjusted for working days only)-----	127	79	106	110	116	119	121	122	89	88	91		
Total (adjusted for seasonal variations)-----	129	82	111	113	116	126	125	122	93	90	90		
Iron and steel-----	155	59	124	121	128	152	143	140	93	93	86		
Textiles-----	121	77	100	107	107	118	120	116	84	81	88		
Food products-----	110	89	89	90	95	96	100	98	94	91	91		
Paper and printing-----	130	91	118	117	118	125	125	130	111	108	-----		
Lumber-----	110	78	94	87	82	87	88	-----	-----	-----	-----		
Automobiles-----	166	47	116	133	136	142	143	133	75	67	68		
Leather and shoes-----	134	86	112	112	110	114	117	116	100	100	97		
Cement-----	126	99	119	126	130	118	122	118	116	117	111		
Glass, plate-----	174	65	130	138	135	164	168	174	105	65	-----		
Nonferrous metals-----	137	87	113	117	117	127	122	125	95	94	97		
Petroleum refining-----	178	84	155	160	162	171	176	173	166	164	-----		
Rubber tires-----	169	66	149	151	169	141	119	116	93	96	-----		
Tobacco manufactures-----	143	93	125	129	128	131	133	136	137	130	125		
MINERALS													
Total (adjusted for working days only)-----	128	84	103	111	115	118	121	127	100	101	100		
Total (adjusted for seasonal variations)-----	120	90	101	105	107	114	115	118	97	96	94		
Bituminous coal-----	125	77	93	91	94	102	99	103	86	82	85		
Anthracite coal-----	133	1	67	94	93	72	78	102	82	88	80		
Crude petroleum-----	147	88	119	123	123	143	145	140	120	117	114		
Iron-ore shipments-----	143	0	104	104	110	119	121	121	95	96	79		
Copper-----	142	82	113	116	123	122	119	125	83	84	89		
Zinc-----	127	91	117	120	114	124	127	120	92	94	94		
Lead-----	125	75	97	107	115	114	107	119	96	99	-----		
Silver-----	123	68	76	87	79	88	91	89	69	68	-----		
ANIMAL PRODUCTS (Marketing)													
Total-----	124	79	108	97	92	116	100	99	112	91	91		
Wool-----	545	14	387	195	54	404	268	128	545	361	31		
Livestock-----	131	76	78	79	92	83	77	96	77	77	94		
Poultry and eggs-----	148	67	92	80	76	96	89	83	91	72	78		
Dairy products-----	164	64	138	117	95	144	116	94	132	95	86		
Fish-----	283	44	154	170	137	243	247	283	263	202	229		
CROPS (Marketing)													
Total-----	252	45	87	115	178	91	135	177	87	115	166		
Grains *-----	214	38	147	186	165	179	214	117	178	181	139		
Vegetables *-----	199	60	107	83	133	169	88	145	113	82	139		
Fruits *-----	266	43	164	165	206	106	130	173	124	133	164		
Cotton products *-----	373	6	28	45	184	11	72	218	6	78	219		
Miscellaneous crops *-----	344	3	23	119	210	25	155	344	3	25	42		

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

INDEXES OF BUSINESS—Continued

Relative to 1923-1925 monthly average as 100	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			1930				
			July	August	September	July	August	September	July	August	September		
PRODUCTION—Continued													
FOREST PRODUCTS													
Total	112	60	87	89	77	88	92	80	66	66	61		
Lumber	112	58	88	88	77	86	91	79	62	63	58		
Pulpwood	151	54	64	82	68	81	77	74	72	76	75		
Gum (rosin and turpentine)*	204	18	170	161	129	204	189	157	204	171	158		
Distilled wood	148	47	80	78	70	97	100	90	47	49	50		
NEW ORDERS													
Total	138	57	95	98	95	90	92	89	60	57	60		
Textiles	179	56	77	92	99	82	93	103	56	62	75		
Iron and steel	158	71	116	118	125	132	126	106	87	75	71		
Lumber	141	44	100	100	92	83	83	81	53	50	54		
Paper and printing	128	85	101	108	109	112	119	117	105	102	101		
Stone and clay products	129	59	97	97	93	90	85	89	60	59	64		
STOCKS													
Grand total	158	82	106	108	116	122	128	140	125	133	148		
Total manufactured goods	128	88	119	116	112	121	116	114	125	121	118		
Foodstuffs	144	79	126	117	105	144	136	127	120	110			
Textiles	139	78	129	125	118	125	122	115	117	106	97		
Iron and steel	158	78	133	131	130	139	128	135	153	143	139		
Nonferrous metals	221	74	119	121	125	122	127	136	205	209	221		
Lumber	125	78	104	105	104	100	103	104	107	107	108		
Stone, clay, etc.	198	62	148	135	162	140	121	171	160	150			
Leather	123	66	71	72	73	71	70	69	81	79	80		
Rubber	199	77	145	134	130	175	155	144	137	126	116		
Paper	156	46	155	156	137	90	98	101	112	117	118		
Chemicals and oils	141	84	96	96	102	111	107	113	121	117	121		
Total raw materials	186	68	96	102	119	123	136	158	126	141	170		
Foodstuffs	230	68	123	136	145	188	212	222	163	184	197		
Textiles	204	43	67	66	95	64	71	113	104	117	155		
Metals	266	54	87	92	116	96	105	111	119	137	266		
Chemicals and oils	146	72	91	93	108	94	97	115	93	98	120		
UNFILLED ORDERS													
Total	157	67	77	75	75	82	76	77	75	70	67		
Textiles	154	34	68	66	69	70	67	64	36	34	35		
Iron and steel	159	63	75	75	75	84	76	79	78	71	68		
Transportation equipment	204	35	68	60	60	73	79	86	119	118	99		
Lumber	142	52	91	88	84	97	86	84	81	77	79		
RETAIL TRADE													
Mail-order houses (2 houses)	275	68	123	141	155	163	184	193	149	155	166		
CHAIN STORES:													
Ten-cent	308	62	128	136	144	146	161	147	138	146	147		
Restaurant	116	87	93	99	100	105	112	109	98	101	101		
DEPARTMENT STORES:													
Sales	189	71	80	81	113	79	84	117	71	77	103		
Stocks	117	83	93	97	103	92	96	104	87	87	94		
COST OF LIVING													
National Industrial Conference Board Indexes													
(Relative to July, 1914)													
All items weighted	172	152	161	161	163	162	163	163	152	152	153		
Food (Department of Labor)	167	141	153	154	158	159	160	161	144	144	146		
Shelter	186	153	161	161	161	159	159	160	154	153	154		
Clothing	177	152	174	173	174	166	169	168	155	152	154		
Fuel and light (combined)	179	156	158	159	160	157	158	159	156	156	158		
Fuel	208	174	177	178	180	176	177	180	175	176	178		
Light	123	118	121	121	121	120	120	120	119	119	119		
Sundries	176	165	171	171	171	169	169	169	166	165	165		

* 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 monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			1930				
			July	August	September	July	August	September	July	August	September		
EMPLOYMENT													
(Relative to 1923-1925 monthly average as 100)													
Number employed, by industries:													
Total, all classes	106	84	96	98	100	101	102	105	85	85	87		
Iron and steel	108	82	94	96	96	100	101	101	86	84	82		
Machinery	122	88	98	100	101	122	119	120	95	91	90		
Textiles	111	77	88	89	93	92	94	98	77	78	82		
Food products	109	93	98	97	101	100	100	102	95	93	95		
Paper and printing	107	96	101	101	101	104	104	106	101	100	99		
Lumber and products	104	65	88	90	90	91	92	92	68	67	65		
Transportation equipment													
Group	110	70	92	94	95	96	96	95	75	72	70		
Automobiles	131	73	111	118	122	118	115	113	81	76	73		
Leather and products	112	85	94	96	96	95	98	100	87	87	86		
Cement, clay, and glass	107	75	95	97	96	92	94	94	76	75	75		
Nonferrous metals	113	73	95	96	98	101	100	99	78	75	73		
Chemicals													
Group	119	90	100	101	107	109	111	115	101	102	103		
Petroleum refining	125	95	103	104	106	120	122	124	114	112	109		
Rubber products	117	77	110	112	113	114	112	108	83	81	77		
Tobacco products	109	84	88	95	97	91	93	94	88	84	88		
Amount of pay roll, by industries:													
Total, all classes	112	81	98	103	104	105	109	112	82	82	83		
Iron and steel	114	75	94	100	99	104	109	109	79	78	75		
Machinery	132	83	103	105	106	128	128	128	91	86	84		
Textiles	111	69	86	90	95	90	97	103	69	73	81		
Food products	109	94	103	102	104	106	105	108	100	98	101		
Paper and printing	118	92	107	108	100	111	113	116	107	107	106		
Lumber and products	107	62	88	92	93	94	95	97	63	62	65		
Transportation equipment													
Group	117	66	95	100	100	97	107	103	72	66	66		
Automobiles	152	58	115	128	129	110	128	120	72	58	62		
Leather and products	116	76	94	100	100	98	105	104	79	80	76		
Cement, clay, and glass	108	66	91	95	93	86	91	91	66	66	66		
Nonferrous metals	128	71	101	107	109	113	113	112	76	72	71		
Chemicals													
Group	118	90	103	104	106	111	113	116	101	101	101		
Petroleum refining	129	90	107	109	109	123	125	129	118	117	114		
Rubber products	150	72	115	118	124	115	111	105	81	78	72		
Tobacco products	111	76	85	89	93	88	91	93	82	77	80		
WHOLESALE PRICES													
Department of Labor Indexes													
(Relative to 1926 monthly average as 100)													
All commodities	105	84	98	99	100	98	98	98	84	84	84		
Farm products	114	83	107	107	109	108	107	107	83	85	85		
Food, etc.	107	86	102	104	107	103	103	103	86	87	89		
Hides and leather products	127	98	124	121	121	109	110	111	101	99	99		
Textile products	114	76	97	96	96	93	93	93	80	78	76		
Fuel and lighting	112	75	83	85	85	82	81	81	75	75	76		
Metals and metal products	113	92	99	100	101	105	104	104	94	93	92		
Building materials	116	86	94	95	95	97	97	98	89	87	86		
Chemicals	104	87	95	95	95	93	94	94	88	87	87		
House-furnishing goods	111	95	97	97	97	97	97	97	96	96	95		
Miscellaneous	127	70	81	79	80	81	81	82	72	71	70		
Classified by condition of manufacture:													
Semimanufactured articles	128	77	98	97	97	96	96	98	80	78	77		
Finished products	103	86	98	99	101	98	97	97	87	86	87		
Raw materials	109	81	100	99	101	99	99	99	81	82	82		
All commodities except farm and food products	111	83	93	94	94	93	93	93	84	83	83		
Commercial Indexes													
(Relative to 1926 monthly average as 100)													
Dun's	106	85	103	103	103	102	102	102	90	91	89		
Bradstreet's	112	80	102	103	102	98	98	98	81	81	80		

INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			1930				
			July	August	September	June	July	August	July	August	September		
PRICE INDEX NUMBERS													
FARM PRICES													
(Relative to 1909-1914 average as 100)													
All groups-----	152	108	145	139	141	140	143	141	111	108	111		
Grains-----	178	92	142	120	117	122	129	131	92	101	100		
Fruits and vegetables-----	253	108	156	137	127	136	160	160	173	149	148		
Meat animals-----	174	98	157	162	174	167	165	156	127	119	128		
Dairy and poultry-----	166	120	134	136	145	137	141	146	111	115	123		
Cotton and cottonseed-----	252	81	170	153	142	145	146	146	99	94	83		
Unclassified-----	108	67	88	87	85	85	86	85	75	70	67		

SALES OF THE GREAT ATLANTIC & PACIFIC TEA CO.¹

YEAR AND MONTH	SALES (Thousands of dollars)			TONNAGE SALES		YEAR AND MONTH	SALES (Thousands of dollars)			TONNAGE SALES							
	Total	Number of weeks	Weekly average	Total	Weekly average		Total	Number of weeks	Weekly average	Total	Weekly average						
1928																	
September-----	\$69,336	4	\$17,334	309,451	77,363	October-----	\$105,995	5	\$21,199	472,644	94,529						
October-----	93,429	5	18,686	419,079	83,816	November-----	83,714	4	20,928	381,106	95,276						
November-----	73,844	4	18,461	338,704	84,676	December-----	87,260	4	21,815	407,339	101,835						
December-----	74,911	4	18,728	345,595	80,399	1929											
1929																	
January-----	91,983	5	18,397	425,590	85,118	February-----	86,122	4	21,530	400,568	100,146						
February-----	85,846	4	21,462	396,225	99,056	March-----	83,976	4	20,994	395,331	98,834						
March-----	77,712	4	19,428	363,786	90,947	April-----	86,138	4	21,534	404,319	101,080						
April-----	77,324	4	19,331	359,129	89,782	May-----	104,671	5	20,934	503,976	100,795						
May-----	97,319	5	19,464	451,680	90,336	June-----	82,882	4	20,721	407,085	101,771						
June-----	76,653	4	19,163	353,289	88,322	July-----	96,724	5	19,345	488,682	97,736						
July-----	93,671	5	18,734	427,431	85,486	August-----	78,363	4	19,591	389,113	97,278						
August-----	75,191	4	18,798	335,628	83,907	September-----	77,023	4	19,256	378,627	94,657						
September-----	75,246	4	18,811	336,309	84,077												

¹ Compiled by the Atlantic & Pacific Tea Co., and represent the sales of identical stores for the periods shown.

AUTOMOBILE FINANCING¹

YEAR AND MONTH	WHOLE-SALE FINANCING	RETAIL FINANCING												
		TOTAL			NEW CARS			USED CARS			UNCLASSIFIED			
		Volume in dollars	Number of cars	Volume and average		Number of cars	Volume and average		Number of cars	Volume and average		Number of cars	Volume and average	
				Total amount	Per car		Total amount	Per car		Total amount	Per car		Total amount	Per car
1929														
January-----	\$36,899,813	155,475	\$75,018,211	\$483	77,933	\$48,430,114	\$621	68,224	\$22,549,096	\$331	9,318	\$4,039,001	\$433	
February-----	47,962,644	188,672	90,468,079	479	102,918	61,606,570	599	75,979	24,445,129	322	9,775	4,416,380	452	
March-----	61,170,730	302,385	140,973,764	466	165,493	96,357,129	582	120,339	37,576,011	312	16,553	7,040,624	425	
April-----	74,884,909	407,022	170,669,318	419	204,280	115,663,926	566	183,521	46,709,886	255	19,221	8,295,506	432	
May-----	72,291,505	396,922	183,345,725	462	211,601	124,649,301	589	166,396	50,565,278	304	18,925	8,131,146	430	
June-----	62,213,046	382,817	178,896,287	467	203,011	121,444,109	598	162,769	49,873,151	306	17,037	7,379,027	433	
July-----	61,839,467	388,600	180,780,297	465	211,059	124,348,966	589	161,287	49,788,421	309	16,254	6,642,910	409	
August-----	69,959,084	347,565	163,763,129	471	183,591	110,893,680	604	148,439	46,437,285	313	15,535	6,432,164	414	
September-----	(2)	298,541	138,506,676	464	157,634	93,579,040	594	126,749	39,198,001	309	14,158	5,729,635	405	
October-----	(2)	263,139	124,767,425	474	121,651	79,967,218	657	132,184	40,609,905	307	9,304	4,190,302	450	
November-----	(2)	208,735	94,066,750	451	95,417	57,756,181	605	103,300	31,986,597	310	10,018	4,323,972	432	
December-----	(2)	170,330	70,160,837	467	73,865	47,819,401	647	89,133	28,433,535	319	7,332	3,207,901	438	
Total-----		3,510,203	1,620,516,498	462	1,808,453	1,082,515,635	599	1,538,320	468,172,295	304	163,430	69,828,568	427	
1930														
January-----	52,447,062	164,338	71,903,433	438	78,220	44,952,528	575	80,068	24,320,783	304	6,050	2,630,122	435	
February-----	61,244,849	197,924	85,006,756	429	95,093	52,743,378	555	94,762	28,907,025	305	8,069	3,356,353	416	
March-----	77,428,540	312,031	122,792,620	394	138,757	77,000,540	555	165,461	42,083,646	254	7,813	3,708,434	475	
April-----	85,304,532	344,314	145,790,978	423	170,633	93,710,275	549	162,833	48,440,779	297	10,848	3,639,922	336	
May-----	83,612,531	345,979	140,170,993	405	169,400	93,901,411	554	166,726	42,377,514	254	9,853	3,892,068	395	
June-----	53,639,210	337,928	137,204,896	406	159,231	90,894,537	571	168,719	42,472,910	252	9,979	3,837,449	385	
July-----	55,577,837	285,234	118,295,421	415	130,332	73,419,024	563	149,080	42,453,892	265	5,822	2,422,505	416	
August-----	45,348,877	246,539	102,910,682	417	111,299	63,324,551	569	129,155	37,207,831	288	6,085	2,378,300	391	

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census, from reports of 485 automobile-financing organizations. Some of the smaller firms found it impossible to segregate their operations, their totals being shown in the unclassified group. This summary is subject to revision in subsequent issues as reports are received from additional firms.

* Data not available.

22599-30-3

TREND OF BUSINESS MOVEMENTS

The following table contains a summary of the monthly figures, designed to show the trend in important industrial and commercial movements. These data represent continuations of the figures presented in the latest semiannual number (August, 1930), in which monthly figures for 1929 and 1930 may be found, together with explanations as to the sources and exact extent of the figures quoted. The figures given below should always be read in connection with those explanations. Data on stocks, unfilled orders, etc., are given as of the end of the month referred to. For explanations of relative numbers, including base periods, see introduction on inside front cover.

<i>The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"</i>	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	Septem- ber	July	August	Septem- ber	July	August	Septem- ber	1930	1929	1928
TEXTILES												
Wool												
Receipts at Boston:												
Total.....thous. of lbs..	76,915	51,672	7,074	56,981	40,476	19,444	51,907	29,720	10,315	282,118	264,365	265,532
Domestic.....thous. of lbs..	72,313	47,826	4,094	53,652	35,594	16,975	51,316	25,802	7,156	223,540	181,473	189,308
Foreign.....thous. of lbs..	4,602	3,846	2,980	3,329	4,582	2,469	3,561	3,918	3,159	58,578	82,892	76,224
Imports:												
In condition imported.....thous. of lbs..	8,900	10,145	8,917	18,815	17,068	18,158	18,239	14,472	14,510	135,069	221,248	187,988
Grease equivalent.....thous. of lbs..	10,084			21,931	19,015	21,450	18,975	16,025	17,040		247,515	210,141
Consumption by textile mills, grease equivalent.....thous. of lbs..	34,682	33,761	38,083	47,296	52,644	49,755	38,099	45,103	43,492	327,885	441,710	390,910
Machinery activity, hourly:												
Looms—												
Wide.....per ct. of hours active..	48	44	46	62	60	64	53	55	59			
Narrow.....per ct. of hours active..	42	43	41	60	62	63	49	48	53			
Carpet and rug.....per ct. of hours active..	31	34	36	61	66	66	55	63	62			
Sets of cards.....per ct. of hours active..	51	48	53	80	80	83	78	77	85			
Combs.....per ct. of hours active..	71	75	81	86	93	94	59	65	74			
Spinning spindles—												
Woolen.....per ct. of hours active..	52	48	55	78	77	77	75	74	80			
Worsted.....per ct. of hours active..	53	55	60	62	69	70	50	58	62			
Prices:												
Raw, territory, fine, scoured.....dolls. per lb..	.76	.76	.76	.93	.93	.92	1.17	1.14	1.14			
Raw, Ohio and Pa. fleeces, 3/4 blood, combing, grease.....dolls. per lb..	.31	.31	.31	.42	.43	.43	.55	.54	.54			
Worsted, yarn.....dolls. per lb..	1.20	1.20	1.20	1.45	1.45	1.48	1.60	1.60	1.58			
Women's dress goods, French serve, 39-in.....dolls. per yd..	.90	.90	.90	.98	.98	.98	1.03	1.03	.99			
Suiting, 13-oz.....dolls. per yd..	1.696	1.601	1.601	1.996	1.901	2.008	2.008	2.008	2.008			
Cotton												
Production, crop estimate.....thous. of bales..				2 14,486			3 14,825			4 14,478		
Ginnings.....thous. of bales..				8 9,252			8 9,095			8 8,151		
Receipts into sight.....thous. of bales..	64	865	2,410	126	823	2,431	281	527	2,078	6,021	7,000	6,254
Imports, unmanufactured.....bales..	4,161	5,901	3,394	21,369	24,793	23,974	18,473	25,258	18,508	247,128	355,044	236,313
Exports, unmanufactured (excl. Inters.).....bales..	176,435	366,036	902,956	237,507	226,018	725,876	331,452	252,627	609,953	3,797,527	4,207,353	4,818,406
Consumption by textile mills.....bales..	375,835	352,335	394,321	547,165	558,754	6 543,834	439,821	526,340	492,307	4,117,986	5,416,294	4,811,358
Stocks, domestic, end of month:												
Totals, mills and ware- houses.....thous. of bales..	4,061	4,476	6,215	2,037	2,183	6 3,999	2,201	1,970	3,358			
Mills.....thous. of bales..	1,183	1,011	968	1,052	801	6 791	1,011	782	720			
Warehouses.....thous. of bales..	2,878	3,465	5,248	985	1,382	6 3,263	1,190	1,188	2,638			
Stocks, world visible, end of month:												
Total.....thous. of bales..	5,230	5,190	6,707	3,651	3,458	4,381	4,056	3,480	4,114			
American.....thous. of bales..	2,917	3,159	4,892	1,693	1,629	2,652	2,165	1,790	2,563			
Machinery activity of spindles:												
Active spindles.....thousands..	26,464	25,874	26,087	30,397	30,230	6 30,035	28,160	28,217	28,209			
Total activity.....millions of hours..	5,297	5,134	5,663	7,757	8,130	7,881	6,251	7,424	6,963			
Activity per spindle.....hours..	156	151	167	222	234	226	176	209	196			
Ratio to capacity.....per cent..	67.2	65.2	76.4	100.3	97.3	6 103.5	79.7	87.1	90.1			
Prices:												
To producer.....dolls. per lb..	.119	.114	.099	.178	.180	.182	.210	.188	.176			
In New York, mid- dling.....dolls. per lb..	.132	.121	.109	.186	.187	.189	.215	.193	.185			
Cotton Yarn												
Carded sales yarn:												
Production.....thous. of lbs..	11,049	10,031	11,148	13,211	19,639	17,122	12,522	14,046	18,839	114,723	166,856	158,091
Stocks, end of month.....thous. of lbs..	13,742	13,633	12,819	8,901	8,185	7,423	12,350	11,574	10,248			
Unfilled orders, end of monththous. of lbs..	26,469	29,103	33,194	32,472	32,175	35,833	24,619	27,044	34,836			
Prices:												
22/1 cones, Boston.....dolls. per lb..	.262	.252	.242	.348	.349	.357	.384	.369	.358			
40/ls, southern spinningdolls. per lb..	.447	.435	.420	.505	.510	.510	.515	.514	.501			
Cotton Goods												
Cotton textiles:												
Production.....thous. of yds..	165,850	218,815	182,385	234,439	307,538	268,611	221,826	302,470	253,688	2,150,172	2,655,437	2,657,149
New orders.....thous. of yds..	180,147	235,272	291,980	262,889	312,635	371,485	187,439	340,810	387,151	2,073,188	2,672,228	2,587,684
Shipments.....thous. of yds..	176,689	231,348	232,975	252,779	326,398	287,628	217,540	324,073	278,110	2,218,779	2,702,137	2,576,405
Stocks, end of month.....thous. of yds..	455,529	442,996	392,406	382,920	364,060	345,043	463,270	441,667	417,245			
Unfilled orders, end of mo.thous. of yds..	222,498	226,422	285,427	368,858	355,095	438,952	272,227	288,964	398,005			

^a As of Oct. 1.^b Final estimate for 1929.^c Final estimate for 1928.^d As of Oct. 18.

TREND OF BUSINESS MOVEMENTS—Continued

<i>The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"</i>	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	Septem- ber	July	August	Septem- ber	July	August	Septem- ber	1930	1929	1928
TEXTILES—Continued												
Cotton Goods—Continued												
Cotton cloth:												
Imports.....thous. of sq. yds..	2,434	1,664	1,920	5,175	3,927	3,972	3,490	3,754	3,139	30,153	45,646	47,389
Exports.....thous. of sq. yds..	35,397	34,285	32,626	50,412	42,359	42,274	46,218	44,913	35,558	320,889	440,421	375,399
Fabric for tire manufacture:												
Consumption.....thous. of lbs..	13,399	13,223	10,917	18,126	15,803	13,469	20,947	21,854	17,797	130,256	176,023	169,540
Elastic webbing, shipments												
.....thous. of dolls..	1,088	1,127	1,200	1,357	1,399	1,419	1,211	1,399	1,478	11,592	13,992	12,379
Prices:												
Print cloth, 64 x 60.....dolls. per yd..	.054	.050	.053	.073	.075	.076	.079	.075	.074			
Sheeting, brown.....dolls. per yd..	.070	.070	.070	.083	.086	.086	.092	.091	.089			
Cotton Finishing												
White, dyed, and printed (outside mills):												
Billings, finished goods												
.....thous. of yds..	41,473	37,907	40,631	75,582	75,845	73,116	58,685	70,748	69,805	489,666	750,510	655,447
New orders, gray yardage												
.....thous. of yds..	37,349	35,576	41,618	69,475	69,168	67,991	62,310	71,743	74,483	449,215	711,427	647,337
Shipments, finished goods.....cases..	28,559	28,843	26,691	44,809	45,238	43,586	40,500	46,283	45,767	308,960	463,283	411,043
Stocks, finished goods, end mo.												
.....cases..	31,901	27,198	22,079	37,299	36,320	35,062	37,958	35,819	33,410			
Operating activity												
.....per ct. of capacity..	34	36	46	57	60	61	51	54	61			
Unfilled orders, end of month....days..	1.9	2.1	2.6	4.9	4.9	4.6	3.8	4.4	5.0			
Printed only (mills and outside):												
Production.....thous. of yds..	38,799	42,185	55,287	60,902	69,315	66,766	49,996	54,495	66,079	508,952	697,430	566,830
Stocks, end of month....thous. of yds..	82,297	70,395	64,788	87,397	87,918	88,864	75,977	74,682	75,161			
Silk												
Imports, raw.....thous. of lbs..	5,712	8,244	7,887	7,858	9,620	8,811	5,832	9,320	7,218	56,227	71,377	64,919
Deliveries (consumption).....bales..	39,948	41,734	55,649	51,624	59,704	53,274	40,931	50,821	47,797	407,532	467,537	428,335
Stocks, end of month:												
At warehouses.....bales..	35,565	44,978	47,621	42,596	48,408	55,104	38,866	50,975	50,464			
At manufacturing plants.....bales..	*18,046	*20,511	21,243	20,985	25,854	29,594	22,188	24,429	22,786			
Silk-machinery activity:												
Broad looms.....per cent of normal..	79.2	73.1	80.0	99.7	101.9	100.7	93.0	89.8	92.7			
Narrow looms.....per cent of normal..	29.7	35.4	42.9	65.1	65.5	63.1	52.1	54.1	54.0			
Spinning spindles												
.....per cent of normal..	52.1	49.1	57.7	63.8	65.2	66.8	62.7	52.1	66.9			
Prices:												
Raw, Japanese, 13-15, N. Y.												
.....dolls. per lb..	2.955	2.955	2.413	4.876	5.073	5.122	4.851	4.851	5.096			
Silk goods, composite....dolls. per yd..	1.08	1.06	1.04	1.18	1.18	1.18	1.17	1.16	1.16			
Rayon												
Imports.....thous. of lbs..	133	171	153	858	990	1,044	651	1,001	924	5,269	12,621	8,742
Price, 150 denier, A grade, N. Y.												
.....dolls. per lb..	.95	.95	.95	1.15	1.15	1.15	1.50	1.50	1.50			
Clothing												
Men's and boys' garments cut:												
Suits.....thous. of garments..	1,811	1,878	1,662	2,645	2,616	2,173				18,199	23,344	
Separate trousers												
.....thous. of garments..	1,926	1,891	2,071	2,647	2,637	2,490				19,164	23,592	
Overcoats.....thous. of garments..	441	437	564	756	901	926				3,184	5,237	
Overalls:												
Cut.....thous. of dozen garments..	244	288	326	335	374	386	295	245	332	2,600	3,153	2,786
Net shipments												
.....thous. of dozen garments..	223	250	289	317	360	352	289	319	313	2,301	2,885	2,674
Unfilled orders, end of mo.												
.....thous. of dozen garments..	60	74	69	185	113	142	161	153	150			
Hosiery:												
Production.....thous of dozen pairs..	2,300	2,408	2,789	3,245	3,562	3,586	2,786	3,474	3,255	25,804	31,987	30,562
Net shipments												
.....thous. of dozen pairs..	2,356	2,766	3,406	3,234	3,673	4,046	2,963	3,735	3,755	25,392	31,742	30,458
Stocks, end of month												
.....thous. of dozen pairs..	9,015	8,647	7,864	8,420	8,356	7,902	8,916	8,656	8,128	25,015	32,283	30,135
New orders.....thous. of dozen pairs..	2,229	2,633	3,292	2,974	3,586	4,038	2,836	3,207	3,810			
Unfilled orders, end of month.....thous. of dozen pairs..	2,322	2,096	1,876	4,480	4,209	4,160	4,711	4,079	3,957			
Knit underwear:												
Production												
.....thous. of dozen garments..	869	* 828	945	1,091	1,152	1,098	881	1,098	1,016	9,267	10,495	9,776
Net shipments												
.....thous. of dozen garments..	902	* 1,024	1,299	1,064	1,382	1,532	942	1,306	1,402	9,070	10,493	9,785
Stocks, end of month												
.....thous. of dozen garments..	1,880	* 1,759	1,599	1,797	1,689	1,416	1,658	1,570	1,370			
New orders												
.....thous. of dozen garments..	781	* 909	1,085	891	1,149	1,459	852	1,236	1,213	8,928	10,948	9,699
Unfilled orders, end of month												
.....thous. of dozen garments..	1,524	* 1,398	1,170	2,103	1,870	1,783	1,947	1,896	1,696			
Burlaps and Fibers												
Imports:												
Burlaps.....thous. of lbs..	57,553	39,038	39,578	41,526	74,698	33,568	58,541	47,766	43,622	478,971	513,838	505,947
Fibers (unmanufactured)												
.....long tons..	16,857	13,941	13,803	20,469	25,048	22,210	18,448	20,657	21,004	198,426	249,886	225,091
Pyroxylin-Coated Textiles												
Pyroxylin spread.....thous. of lbs..	2,840	* 2,705	2,963	4,331	4,294	3,812	5,040	5,506	4,844	29,831	45,942	45,293
Shipments billed.....thous. of linear yards..	2,212	2,109	2,460	3,509	3,540	3,315	3,757	4,241	3,914	24,878	38,300	35,202
Unfilled orders, end of month.....thous. of linear yards..	1,779	1,179	1,508	2,805	2,468	2,599	4,182	3,853	4,561			

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	September	July	August	September	July	August	September	1930	1929	1928
TEXTILES—Continued												
Fur												
Sales by dealers.....thous. of dollars..	4,348	5,425	7,301	8,135	11,335	11,434	12,215	12,110	10,244	57,545	110,539	107,999
Buttons												
Fresh-water pearl buttons:												
Production.....ratio to capacity..	23.1	25.7	36.2	40.9	45.5	46.6	29.7	44.5	47.5			
Stocks, end of month.....thous. of gross..	6,9,857	6,9,258	9,061	11,170	10,051	6,10,926	10,847	10,667	10,593			
Imports:												
Buttons—												
Product of Philippines.....thous. of gross..	63	69	78	50	52	64	58	72	49	618	482	753
All other.....thous. of gross..	12	14	3	16	9	26	15	2	5	340	296	93
Shells—												
Mother-of-pearl.....thous. of pounds..	476	844	802	832	632	1,073	398	392	586	4,974	5,505	4,146
All other.....thous. of pounds..	72	56	164	86	212	116	46	156	59	2,315	1,563	1,943
Tagua nuts.....thous. of pounds..	1,213	708	1,286	1,537	3,053	2,264	1,799	1,356	1,492	10,185	19,938	16,798
IRON AND STEEL												
Iron												
Manganese ore, imports.....thous. of long tons..	16	8	22	48	33	13	21	26	13	223	259	143
Iron ore:												
Imports.....thous. of long tons..	251	178	215	301	298	247	183	226	211	2,337	2,315	1,855
Shipments from mines.....thous. of long tons..	8,587	8,252	6,488	10,671	10,807	9,547	8,980	9,243	8,748	39,064	53,264	41,266
Receipts—												
Lake Erie ports and furnaces.....thous. of long tons..	6,346	5,586	4,721	7,509	7,518	6,619	6,078	6,390	5,827	26,405	36,575	27,342
Other ports.....thous. of long tons..	2,515	2,492	1,891	3,127	3,284	2,710	2,655	2,819	2,710	11,695	14,839	12,320
Consumption.....thous. of long tons..	3,838	3,673	3,282	5,808	5,779	5,362	4,633	4,761	4,608	37,163	49,502	41,904
Stocks, end of month—												
Total.....thous. of long tons..	30,515	34,988	38,366	28,697	33,831	38,125	27,209	31,754	35,808			
At furnaces.....thous. of long tons..	25,493	29,397	32,323	24,245	28,720	32,366	21,824	26,036	29,708			
On Lake Erie docks.....thous. of long tons..	5,022	5,541	6,043	4,452	5,111	5,765	5,385	5,718	6,100			
Pig-iron production:												
Total, United States.....thous. of long tons..	2,640	2,524	2,277	3,785	3,756	3,498	3,072	3,137	3,062	25,702	32,680	27,792
Merchant furnaces.....thous. of long tons..	564	513	407	746	690	635	607	575	585	5,163	6,671	5,612
Canada.....thous. of long tons..	65	57	48	100	113	99	95	92	91	830	746	
Furnaces in blast, end of month:												
Furnaces.....number..	144	139	123	216	210	205	185	183	197			
Capacity.....long tons per day..	83,645	80,620	73,525	121,965	119,130	116,405	98,445	98,730	106,755			
Malleable castings:												
Production.....short tons..	6,30,911	6,25,614	26,510	70,600	69,173	59,087	60,290	68,606	62,665	428,655	666,842	586,435
Operating activity.....per ct. of capacity..	6,30,9	6,26,2	26,2	73,5	70,6	61,2	63,1	72,1	66,3			
Shipments.....short tons..	6,32,656	6,31,845	28,874	69,618	69,824	62,571	60,084	66,962	61,736	436,798	665,241	574,010
New orders.....short tons..	6,30,068	6,25,409	25,753	61,358	62,541	52,647	60,964	66,128	61,163	397,272	641,094	572,264
Wholesale prices:												
Foundry No. 2, northern.....dolls. per long ton..	19.86	19.76	19.56	20.26	20.26	20.26	18.41	18.26	18.64			
Basic (valley furnace).....dolls. per long ton..	18.10	18.00	17.60	18.50	18.50	18.50	16.00	16.00	16.19			
Composite pig iron.....dolls. per long ton..	18.22	17.99	17.79	19.27	19.18	19.00	17.79	17.78	18.04			
Cast-Iron Boilers and Radiators												
Round boilers:												
Production.....thous. of lbs..	4,703	4,603	6,321	8,997	12,189	11,602	10,581	12,881	13,655	71,935	100,746	113,904
Shipments.....thous. of lbs..	7,266	8,736	12,162	13,553	15,092	18,263	12,302	14,422	17,021	64,012	99,853	110,298
New orders.....thous. of lbs..	6,975	7,392	11,894	14,490	13,916	16,936	12,950	12,551	14,504	59,820	92,910	112,527
Stocks, end of month.....thous. of lbs..	76,865	72,967	68,182	84,027	81,162	74,254	87,993	86,141	82,931			
Square boilers:												
Production.....thous. of lbs..	11,376	10,066	15,920	11,598	19,014	20,766	19,541	38,693	26,760	151,806	199,919	270,371
Shipments.....thous. of lbs..	18,269	24,178	31,595	22,927	28,757	34,671	28,247	36,212	41,989	141,989	174,656	221,533
New orders.....thous. of lbs..	17,496	22,271	32,259	26,039	27,242	36,481	32,164	31,809	36,527	142,413	177,654	229,584
Stocks, end of month.....thous. of lbs..	170,941	155,184	140,508	169,044	159,661	145,716	179,539	182,367	167,063			
Radiators:												
Production.....thous. sq. ft. heating surface..	4,997	5,366	4,643	6,756	10,365	9,545	11,388	15,914	13,770	63,409	99,372	129,903
Shipments.....thous. sq. ft. heating surface..	7,447	9,520	10,347	11,729	13,665	14,980	13,285	16,951	18,092	57,166	86,782	105,276
New orders.....thous. sq. ft. heating surface..	7,232	8,933	11,350	13,621	14,267	15,680	14,844	15,753	16,533	60,759	91,962	112,945
Stocks, end of month.....thous. sq. ft. heating surface..	62,662	57,560	51,964	69,277	65,792	59,794	78,279	77,267	72,902			
Gas-fired boilers:												
Shipments.....dollars..	185,484	430,365	396,788	315,696	486,659	549,424	266,627	288,954	395,265	2,239,547	2,575,156	1,908,511
Shipments.....thous. B. t. u..	160,347	364,861	334,266	254,856	365,280	459,124	224,098	239,048	322,000	1,877,375	2,005,352	1,547,525
Production.....thous. B. t. u..	283,750	268,664	286,748	248,993	235,877	306,158	125,000	168,547	169,376	2,213,263	2,277,781	1,440,404
Stocks, end of mo.....thous. B. t. u..	1,031,838	948,557	939,650	1,115,865	951,598	885,625	852,822	778,337	622,687			
Crude Steel												
Steel ingots, production:												
United States, total.....thous. of long tons..	2,933	3,095	2,868	4,851	4,939	4,528	3,806	4,179	4,148	32,699	43,354	36,930
Ratio to capacity.....per cent..	56	59	55	95	93	92	81	82	88			
Canada.....thous. of long tons..	68	58	56	130	99	89	83	89	100	811	1,087	921

Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	September	July	August	September	July	August	September	1930	1929	1928
IRON AND STEEL—Continued												
Machinery—Continued												
Electric overhead cranes:												
Shipments.....thous. of dolls..	1,005	729	942	1,146	1,060	1,048	463	564	464	8,146	8,426	4,996
New orders.....thous. of dolls..	601	522	614	1,157	1,165	701	733	821	713	6,045	11,338	5,539
Unfilled orders, end of mo.....thous. of dolls..	2,706	2,527	2,124	5,118	5,193	4,879	1,800	1,952	2,188	-----	-----	-----
Woodworking machinery:												
New orders.....thous. of dolls..	733	498	648	1,691	1,748	1,297	1,247	1,641	1,639	7,391	15,447	12,721
Cancellations.....thous. of dolls..	27	12	17	18	25	15	32	6	26	230	291	227
Unfilled orders, end of mo.....thous. of dolls..	593	470	588	2,369	2,130	1,829	1,838	2,058	2,265	-----	-----	-----
Shipments.....thous. of dolls..	821	606	516	1,767	1,974	1,555	1,264	1,436	1,413	7,708	15,306	11,695
Shipments.....number of machines..	624	694	488	1,232	1,386	1,129	932	1,170	1,050	5,729	10,636	8,910
Electric industrial trucks and tractors:												
Shipments, domestic—	99	81	75	163	144	151	92	90	113	882	1,491	945
Total.....number of vehicles..	9	11	6	5	10	7	15	6	5	120	92	102
Exports.....number of vehicles..	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Fire-extinguishing equipment,												
Shipments:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Motor vehicles.....number..	118	118	86	131	116	122	105	125	143	875	989	950
Hand types.....number..	43,911	35,926	37,482	62,266	63,806	51,197	48,897	47,490	42,193	419,724	490,601	424,639
Oil burners:												
Shipments:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
total.....number of burners..	7,241	8,088	12,025	6,520	10,663	13,723	-----	-----	-----	52,151	54,716	-----
Stocks,	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
end of mo.....number of burners..	10,171	8,993	7,606	7,739	8,403	7,900	-----	-----	-----	-----	-----	-----
New orders.....number of burners..	6,790	8,062	11,413	6,854	11,081	12,633	-----	-----	-----	52,589	57,874	-----
Unfilled orders, end of mo.....number of burners..	1,995	1,969	1,357	4,681	5,099	4,009	-----	-----	-----	-----	-----	-----
Pulverized fuel equipment:												
New orders, central system—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Water-tube boilers.....no. of pulverizers..	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Furnaces.....no. of pulverizers..	3	1	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
New orders, unit system—	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Water-tube boilers.....no. of pulverizers..	12	4	24	-----	-----	-----	-----	-----	-----	213	-----	-----
Fire-tube boilers.....no. of pulverizers..	3	6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Marine boilers.....no. of pulverizers..	-----	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Furnaces and kilns.....no. of pulverizers..	1	3	3	-----	-----	-----	-----	-----	-----	30	-----	-----
Patents issued:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total, all classes.....number..	3,452	2,423	2,871	4,054	3,533	3,081	3,107	3,390	3,039	35,097	32,706	31,249
Agricultural implements.....number..	51	27	43	53	51	51	44	29	40	473	460	364
Internal-combustion engines.....number..	52	30	35	92	55	44	59	43	42	573	483	456
NONFERROUS METALS												
Copper												
Production:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Mines.....short tons..	54,249	56,136	56,584	79,229	78,885	79,402	73,426	76,952	78,341	532,650	772,922	651,612
Smelter.....short tons..	67,638	66,698	68,487	94,690	91,735	92,538	83,375	88,517	85,795	661,750	897,214	752,851
Refined (N. and S. America).....short tons..	123,179	120,778	116,004	153,513	148,648	134,343	135,092	143,560	137,018	1,122,129	1,375,438	1,175,297
World production, blister.....short tons..	6,143,997	149,843	151,005	174,507	173,430	174,135	156,190	161,838	157,518	1,329,900	1,624,732	1,376,795
Domestic shipments, refined.....short tons..	75,436	56,810	65,160	98,720	96,970	98,043	82,245	83,398	88,707	600,534	886,551	698,378
Exports.....short tons..	32,421	33,141	30,478	33,876	36,811	42,978	47,855	41,186	36,191	265,251	383,472	421,213
Stocks (N. and S. America), end mo.: Refined.....short tons..	322,089	347,688	360,650	97,729	104,372	94,751	54,871	54,793	51,812	-----	-----	-----
Blister.....short tons..	242,212	234,135	237,135	239,470	241,678	253,519	241,131	238,923	238,142	-----	-----	-----
Wholesale price, electrolytic.....dollars per lb..	.1102	.1069	.1031	.1778	.1778	.1778	.1453	.1453	.1472	-----	-----	-----
Tin												
Deliveries (consumption)....long tons..	6,130	5,695	7,250	6,865	7,185	8,120	5,545	7,200	6,885	56,880	70,260	58,090
Stocks, end of month:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
World visible supply....long tons..	41,950	43,805	40,150	23,789	26,400	24,556	18,022	18,456	19,924	-----	-----	-----
United States.....long tons..	6,786	7,533	25,178	3,087	2,858	2,479	2,878	1,718	3,508	-----	-----	-----
Imports.....long tons..	5,259	5,979	5,523	5,521	9,737	7,712	4,772	6,584	8,222	61,720	72,118	58,451
Wholesale price, Straits, N. Y.....dollars per lb..	.2981	.3002	.2964	.4640	.4665	.4538	.4710	.4808	.4807	-----	-----	-----
Zinc												
Retorts in operation, end of month.....number..	46,030	50,404	44,974	69,911	59,408	69,468	62,384	66,428	61,965	-----	-----	-----
Production.....short tons..	40,038	41,029	40,485	54,447	55,708	51,994	50,890	52,157	49,361	398,860	480,601	468,485
Stocks, end of month.....short tons..	117,381	122,635	132,947	45,336	49,064	53,856	42,210	44,416	47,915	-----	-----	-----
Ore, Joplin district: Shipments.....short tons..	24,974	37,994	32,122	48,995	63,127	45,084	43,227	43,466	41,429	341,314	481,938	427,663
Stocks, mines, end of month.....short tons..	28,729	38,565	41,663	39,813	42,876	43,832	31,679	39,303	48,474	-----	-----	-----
Price, slab, prime western.....dollars per lb..	.0435	.0436	.0427	.0677	.0680	.0680	.0620	.0625	.0625	-----	-----	-----
Lead												
Ore shipments:	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Joplin district.....short tons..	2,570	3,673	2,746	5,373	7,808	7,461	6,623	6,125	9,326	35,608	77,527	68,693
Utah.....short tons..	45,194	60,978	52,907	66,083	92,668	75,927	56,395	78,811	65,353	580,749	727,761	622,997
Receipts in U. S. ore.....short tons..	44,433	45,542	48,354	54,865	54,385	54,623	49,305	53,575	51,978	439,251	495,016	473,114
Price, pig desilverized, N. Y.....dollars per lb..	.0525	.0549	.0550	.0680	.0675	.0689	.0622	.0625	.0645	-----	-----	-----

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

<i>The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"</i>	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	Septem- ber	July	August	Septem- ber	July	August	Septem- ber	1930	1929	1928
BUILDING MATERIALS												
Softwood Lumber												
Douglas fir:												
Production (computed) M ft. b. m.	190,250	206,813	199,651	302,162	353,642	315,592	415,417	358,566	296,343	2,291,509	2,981,336	3,988,096
Shipments (computed) M ft. b. m.	231,434	218,452	200,546	319,621	333,498	293,209	484,803	389,454	315,144	2,276,289	3,037,292	4,237,944
New orders (computed) M ft. b. m.	213,080	222,929	217,557	306,639	327,678	293,209	453,467	381,396	322,754	2,264,204	3,088,322	4,377,996
Unfilled orders, end of month	M ft. b. m.	172,344	184,742	176,373	328,574	245,311	299,924	456,601	257,845	293,657	—	—
Exports, lumber	M ft. b. m.	61,813	42,129	48,097	98,179	72,811	64,085	54,181	59,236	64,265	498,583	699,007
Exports, timber	M ft. b. m.	22,369	25,850	16,114	43,932	48,303	38,493	45,471	40,837	44,264	296,197	419,036
Price, No. 1 common	dolls. per M ft. b. m.	14.47	13.44	13.14	18.77	18.57	18.36	16.99	17.75	17.32	—	—
Price, flooring, 1x4, "B" and better	V. G. dolls. per M ft. b. m.	36.57	35.65	34.58	42.73	42.96	42.79	36.13	37.19	38.85	—	—
California redwood:												
Production (computed) M ft. b. m.	28,335	28,835	28,337	28,435	44,923	35,291	30,092	41,137	34,329	298,108	340,036	355,577
Shipments (computed) M ft. b. m.	31,305	25,044	27,505	28,672	48,648	37,363	29,615	43,983	33,107	276,543	345,498	344,870
New orders (computed) M ft. b. m.	30,574	25,293	27,155	35,657	44,930	34,086	31,620	39,855	33,519	277,074	361,610	350,486
Unfilled orders, end of month (computed)	M ft. b. m.	26,254	26,573	26,150	47,235	44,590	41,837	48,910	45,093	47,916	—	—
Northern pine:												
Lumber:												
Production	M ft. b. m.	37,849	27,583	22,925	50,733	49,846	41,882	52,384	57,335	51,618	241,514	359,918
Shipments	M ft. b. m.	22,101	21,516	17,791	44,825	43,764	37,054	48,300	47,755	44,618	218,009	367,052
New orders	M ft. b. m.	19,962	19,503	17,697	40,012	42,485	30,291	41,820	41,435	44,209	195,942	336,280
Lath:												
Production	thousands	5,214	3,968	3,229	8,822	8,442	6,268	13,476	12,318	12,419	26,569	58,689
Shipments	thousands	4,473	4,833	6,047	10,083	9,258	6,509	9,734	11,099	8,897	38,348	73,194
North Carolina pine:												
Production (computed) M ft. b. m.	26,803	27,349	—	47,831	48,993	48,132	44,471	45,437	37,457	297,514	7458,437	7408,865
Shipments (computed) M ft. b. m.	30,730	33,481	—	50,946	48,230	45,605	48,433	48,643	39,900	293,328	7448,105	7420,349
Northern hemlock:												
Production	M ft. b. m.	13,245	8,223	6,876	15,359	14,908	17,079	16,348	20,449	15,315	91,075	137,028
Shipments	M ft. b. m.	8,033	8,007	6,751	18,614	16,020	12,859	18,920	22,661	19,951	70,421	123,316
Hardwood Lumber												
Walnut lumber:												
Production	M ft. b. m.	1,312	1,174	1,121	3,839	4,605	4,649	2,527	2,931	2,749	16,697	34,667
Shipments	M ft. b. m.	1,123	1,511	1,861	3,570	3,607	3,289	2,742	2,863	3,299	15,678	32,513
Stocks, end of month	M ft. b. m.	20,454	20,090	19,334	12,640	14,303	15,347	13,116	13,166	12,625	—	26,429
New orders	M ft. b. m.	1,081	1,698	1,735	3,627	3,266	3,398	2,731	2,990	2,635	14,815	33,187
Unfilled orders, end of month	M ft. b. m.	4,016	4,025	4,085	6,474	6,892	7,000	5,088	5,270	4,741	—	25,996
Walnut logs:												
Purchased	M ft. log measure	598	886	1,171	2,951	3,667	3,367	2,633	2,736	2,274	11,693	26,849
Made into lumber and veneer	M ft. log measure	943	1,029	1,109	3,217	3,358	3,724	2,527	2,579	2,643	13,925	26,547
Stocks, end of month	M ft. log measure	885	745	805	2,773	2,441	2,148	2,985	3,096	2,684	—	22,703
Northern hardwoods:												
Production	M ft. b. m.	14,363	9,225	4,371	24,961	22,459	17,195	23,673	20,073	16,624	167,657	281,754
Shipments	M ft. b. m.	12,649	11,167	11,862	24,413	27,469	24,275	26,194	27,597	25,086	139,108	243,387
Gum:												
Stocks, total, end of month	mill. ft. b. m.	609	610	601	465	469	482	542	543	529	—	—
Stock, unsold, end of month	mill. ft. b. m.	488	497	494	318	325	328	419	410	396	—	—
Unfilled orders, end of month	mill. ft. b. m.	120	113	107	147	144	154	124	132	133	—	—
Oak:												
Stocks, total, end of month	mill. ft. b. m.	1,044	1,036	1,016	955	982	1,004	974	959	954	—	—
Stocks, unsold, end of month	mill. ft. b. m.	929	927	918	785	802	808	809	800	775	—	—
Unfilled orders, end of month	mill. ft. b. m.	115	109	98	169	181	195	165	159	161	—	—
All hardwoods:												
Production	mill. ft. b. m.	172	165	161	311	334	334	244	263	270	1,983	2,836
Shipments	mill. ft. b. m.	150	154	180	278	296	311	263	285	293	1,730	2,746
New orders	mill. ft. b. m.	128	139	176	278	300	323	262	289	293	1,626	2,799
Stocks, total, end of month	mill. ft. b. m.	3,323	3,308	3,261	2,731	2,772	2,848	2,786	2,771	2,731	—	—
Stocks, unsold, end of month	mill. ft. b. m.	2,795	2,808	2,787	2,088	2,122	2,239	2,225	2,211	2,164	—	—
Unfilled orders, end of month	mill. ft. b. m.	526	500	475	643	645	678	547	557	566	—	—
Flooring												
Maple flooring:												
Production	M ft. b. m.	3,755	3,724	3,591	6,456	6,918	7,334	7,784	8,413	7,675	43,991	59,091
Shipments	M ft. b. m.	5,175	4,762	3,700	7,883	8,435	7,239	8,311	9,515	7,929	41,388	61,716
Stocks, end of month	M ft. b. m.	28,786	26,909	26,273	21,913	20,480	20,827	24,667	23,282	22,584	—	72,567
New orders	M ft. b. m.	3,881	3,805	3,256	6,159	6,927	4,750	7,466	8,861	7,110	35,727	57,530
Unfilled orders, end of month	M ft. b. m.	4,388	3,613	3,036	10,431	8,881	7,641	10,076	10,187	10,106	—	70,611
Fabricated Structural Steel												
New orders (prorated)	short tons	6,284,000	264,000	168,000	6,331,100	6,342,650	296,450	298,450	354,200	319,550	2,280,000	2,768,150
Ratio to capacity	per cent	671	66	42	686	689	77	77	92	83	—	—
Shipments (prorated)	short tons	6,292,000	280,000	260,000	6,281,050	6,315,700	292,600	265,650	6,284,900	273,350	2,524,000	2,498,650
Ratio to capacity	per cent	673	70	65	673	682	76	69	74	71	—	2,233,000

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	Septem- ber	July	August	Septem- ber	July	August	Septem- ber	1930	1929	1928
BUILDING EQUIPMENT—Contd.												
Illuminated Glassware												
Production:												
Total number of tunrs..	1,785	2,083	1,961	1,818	2,719	3,225	1,748	2,985	3,190	21,954	28,450	26,657
Ratio to capacity												
per ct. of capacity..	28.8	33.6	31.7	18.7	36.4	45.3	22.3	36.5	43.0			
New orders per ct. of capacity..	26.8	29.9	33.7	40.1	42.9	46.8	40.2	44.5	44.2			
Shipments per ct. of capacity..	28.0	30.4	33.0	35.3	43.8	49.6	26.8	42.5	43.0			
Unfilled orders, end of month number of weeks' supply..	.8	.7	.8	1.5	1.4	1.4	1.6	1.8	1.7			
Stocks, end of month number of weeks' supply..	4.5	4.6	4.6	5.4	4.7	4.6	4.6	4.3	4.3			
Furniture												
Household furniture and case goods:												
Shipments dolls, av. per firm..	45,686	56,456		53,748	70,482	75,319	43,462	65,947	65,010	380,470	7459,605	7389,925
Unfilled orders dolls, av. per firm..	35,903	33,432		64,573	77,568	84,133	59,214	57,288	58,576			
Grand Rapids district:												
Unfilled orders, end of mo No. days' production..	27	24	26	68	64	58	54	53	49			
New orders No. days' production..	18	18	29	36	30	37	31	30	31			
Shipments No. days' production..	13	18	27	24	30	32	22	31	30			
Outstanding accounts, end of month No. days' sales..	37	40	52	46	53	58	48	56	65			
Cancellations per ct. new orders..	7.0	6.0	5.0	5.0	5.0	6.0	5.0	7.0	9.0			
Plant operation per ct. full time..	67.0	79.0	89.0	90.0	97.0	101.0	88.0	92.0	101.0			
Steel furniture:												
Business group—												
Shipments thous. of dolls..	6 1,812	6 1,985	1,879	2,659	2,483	2,314	2,515	2,565	2,754	20,781	25,702	25,913
New orders thous. of dolls..	6 1,841	6 1,788	1,795	2,590	2,418	2,294	2,594	2,619	2,689	20,148	25,710	26,494
Unfilled orders, end mo. thous. of dolls..	6 1,528	1,331	1,248	2,241	2,171	2,054	2,072	2,118	2,062			
Shelving—												
Shipments thous. of dolls..	6 604	6 554	496	867	890	843	723	836	678	6,095	8,627	6,636
New orders thous. of dolls..	6 596	6 524	509	939	931	880	713	863	800	6,173	9,090	6,938
Unfilled orders, end mo. thous. of dolls..	6 736	704	717	999	1,041	1,079	706	734	754			
PLYWOOD AND VENEER												
Rotary-cut veneer:												
Receipts No. of carloads..	118	100	147	272	174	223	181	259	244	1,315	1,823	1,454
Purchases No. of carloads..	116	106	139	260	122	287	249	325	199	1,227	2,141	1,851
Bushel baskets:												
Production dozens..	298,282	203,492	220,986	232,860	264,212	190,939	229,342	243,056	177,982	1,899,533	1,817,606	1,819,706
Shipments dozens..	309,135	227,120	364,993	232,154	360,050	314,904	294,662	262,810	285,813	1,798,920	1,744,713	1,891,623
Stocks, end of month dozens..	637,419	513,488	371,481	674,330	554,410	461,717	565,911	570,726	409,110			
GLASS CONTAINERS												
Actual production:												
Quantity gross..	2,406	2,439	2,202	2,396	2,715	2,246	2,374	2,686	2,322	21,564	22,322	21,942
Relation to capacity per cent..	71.5	72.5	68.1	73.3	77.5	74.5	77.2	80.9	78.7			
New orders gross..	1,980	2,636	2,585	2,224	1,922	2,942	2,008	1,909	2,122	23,820	22,551	21,047
Shipments gross..	2,368	2,459	2,623	2,507	2,656	2,700	2,311	2,654	2,433	21,811	22,849	21,887
Unfilled orders, end of month gross..	10,152	10,024	9,404	8,824	8,079	8,072	9,166	8,467	8,084			
Stock, end of month gross..	6,799	6,768	6,412	6,388	6,447	5,994	6,267	6,297	6,173			
CHEMICALS AND OILS												
Chemicals												
Sulphuric acid:												
Exports pounds..	570,683	176,023	465,766	506,758	641,492	516,264	773,624	291,035	581,760	4,019,364	5,040,588	5,604,363
Price, wholesale dolls. per 100 lbs..	.78	.78	.78	.78	.78	.78	.78	.78	.78			
Nitrate of soda:												
Imports long tons..	28,644	9,083	19,362	40,501	51,684	31,539	28,150	75,318	36,644	469,701	767,021	853,558
Production in Chile metric tons..	199,284	202,466	181,467	272,300	270,300	253,200	264,300	275,000	259,400	1,967,632	2,406,300	2,301,700
Potash salts:												
Imports (commercial) long tons..	50,965	48,183	45,857	37,126	45,505	40,088	38,461	57,327	43,313	321,088	253,938	282,410
Sales in Germany (K ₂ O content) metric tons..	93,850	98,722	127,660	89,190	95,372	123,465	102,608	108,696	140,818	1,149,358	1,138,023	1,155,100
Superphosphate (acid phosphate):												
Production short tons..	308,241	295,790	282,710	296,629	309,749	253,181	294,121	304,857	251,190	2,863,964	2,607,113	2,797,864
Stocks, end of month short tons..	1,309,260	1,526,934	1,468,411	1,171,912	1,362,679	1,283,706	1,237,006	1,380,278	1,347,735			
Shipments short tons..	73,134	64,756	149,899	65,162	88,230	163,242	64,378	87,688	149,002	1,670,020	1,627,966	1,656,322
Fertilizer:												
Exports long tons..	143,620	115,580	118,761	123,515	112,346	155,103	98,803	103,575	99,611	1,244,426	1,149,079	964,380
Consumption, Southern States short tons..	18,468	38,256	128,302	20,047	46,930	174,347	19,101	62,823	131,120	5,213,934	5,148,146	5,201,831
Crude arsenic:												
Production short tons..	1,428	1,217	2,077	1,444	887	1,027	1,385	2,086	1,079	14,596	12,785	12,410
Stocks, end of month short tons..	3,495	3,254	4,026	1,998	1,876	1,777	2,105	2,999	2,978			
Refined arsenic:												
Production short tons..	1,032	1,002	1,101	812	857	868	728	803	799	8,677	7,827	6,627
Stocks, end of month short tons..	1,897	1,525	1,930	3,305	3,414	3,180	1,568	1,618	1,971			
Dyes and dyestuffs, exports:												
Vegetable thous. of lbs..	110	124	204	126	191	422	254	237	157	1,534	1,802	2,381
Coal tar thous. of lbs..	1,153	1,757	866	3,180	13	39	6,384	6,1,351	1,330	19,790	11,636	18,226
Price index numbers:												
Crude drugs rel. to Aug., 1914..	147	143	139	183	179	180	197	193	193			
Essential oils rel. to Aug., 1914..	107	97	91	191	188	168	162	161	158			
Drugs and pharmaceuticals rel. to Aug., 1914..	176	176	176	173	177	177	168	164	164			
Chemicals rel. to 1927..	95	94	100	100	99	99	99	99	99			
Oils and fats rel. to 1927..	88	87	92	96	100	95	94	95	95			

^a Revised.^b Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS--Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	September	July	August	September	July	August	September	1930	1929	1928
FOODSTUFFS--Continued												
Wheat Flour--Continued												
Exports:												
United States.....thous. of bbls..	945	1,227	1,412	1,085	1,076	1,163	647	932	1,020	9,696	10,090	8,330
Canada.....thous. of bbls..	659	627	734	836	643	492	782	925	890	5,307	5,877	7,484
Grain offal, production.....thous. of lbs..	774,252	851,404	888,535	746,628	882,931	831,523	697,371	819,994	820,934	6,956,493	6,832,945	6,687,588
Capacity operated, flour mills, per cent..	57	62	67	55	62	66	51	58	66			
Consumption (computed)												
.....thous. of bbls..	10,012	9,585		8,365	11,686	10,006	7,762	10,435	9,078	172,942	174,238	172,090
Stocks, all positions, end of month (computed).....thous. of bbls..	8,850	9,600		10,084	8,800	9,500	7,847	7,400	8,500			
Stocks held by mills, end of quarter.....thous. of bbls..			8,340			8,479			8,4180			
Wholesale prices:												
Standard patents,												
Minn.....dolls. per bbl..	5.51	5.34	5.08	7.69	7.31	7.17	7.36	6.62	6.59			
Winter, straight,												
Kansas City.....dolls. per bbl..	4.64	4.56	4.44	6.31	6.24	6.10	6.44	5.66	5.65			
Corn												
Exports, including meal.....thous. of bushels..	395	332	394	850	895	693	891	1,018	668	6,608	32,463	17,618
Visible supply, end of month.....thous. of bushels..												
Receipts, principal markets.....thous. of bushels..	4,012	4,226	4,976	9,493	5,765	4,638	12,479	9,965	7,114			
Shipments, principal markets.....thous. of bushels..	16,660	20,282	16,048	21,205	19,023	19,532	23,742	21,467	19,658	190,737	198,924	248,091
Grindings (starch, glucose).....thous. of bushels..	11,699	12,792	9,829	15,644	13,643	11,082	16,080	15,778	11,949	131,099	136,732	172,989
Production, crop estimate.....thous. of bushels..	6,103	6,565	6,473	6,558	7,672	7,913	5,833	5,193	6,541	58,734	65,390	65,114
Prices:												
No. 3, Yellow, Chicago.....dolls. per bushel..	.82	.99	.94	.99	1.01	1.01	1.06	1.02	1.00			
No. 3, Yellow, Kansas City.....dolls. per bushel..	.80	.92	.89	.93	.99	.99	1.00	.94	.94			
No. 3, White, Chicago.....dolls. per bushel..	.84	.99	.97	1.00	1.01	1.02	1.06	1.02	1.00			
Oats												
Receipts, principal markets.....thous. of bushels..	8,725	25,277	15,381	10,123	36,320	13,833	6,610	27,271	14,375	99,544	116,704	118,379
Visible supply, end of month.....thous. of bushels..												
Exports, including meal.....thous. of bushels..	9,149	25,867	31,979	8,129	25,897	28,809	1,954	15,687	18,004			
Production, crop estimate.....thous. of bushels..	717	292	194	487	1,182	1,640	245	2,571	2,753	2,922	8,105	9,257
Price, No. 3, White, Chicago.....dolls. per bushel..	.35	.39	.38	.47	.43	.48	.56	.38	.41			
Grindings, Canada.....thous. of bushels..	826	817	1,054	854	1,101	975	723	988	1,100	7,070	8,175	8,103
Production, oatmeal and rolled oats, Canada.....thous. of lbs..	10,893	11,032	14,843	12,145	14,228	12,263	9,320	15,968	16,499	89,716	103,510	106,292
Barley												
Receipts, principal markets.....thous. of bushels..	2,568	10,822	12,477	4,849	18,666	7,807	2,217	23,611	21,710	43,040	54,195	71,848
Visible supply, end of month.....thous. of bushels..												
Productions, crop estimate.....thous. of bushels..	3,997	7,429	11,991	5,518	9,805	9,519	685	6,313	8,084			
Exports.....thous. of bushels..			328,020			303,552			435,487			
Price, No. 2, Minneapolis.....dolls. per bushel..	.698	1,281	1,359	4,120	4,624	6,209	2,242	8,658	14,830	8,443	28,596	33,722
Rye												
Receipts, principal markets.....thous. of bushels..	758	5,200	6,562	880	5,766	3,720	571	2,636	6,001	16,889	16,842	17,557
Visible supply, end of month.....thous. of bushels..												
Exports, including flour.....thous. of bushels..	10,969	12,649	14,842	6,447	8,015	8,889	1,146	1,440	1,927			
Price, No. 2, Minneapolis.....dolls. per bushel..	.18	.23	.25	.106	.470	1,220	195	.709	2,471	258	2,911	9,692
Production, crop estimate.....thous. of bushels..	.55	.60	.55	1.07	.98	.97	1.11	.94	.94			
Total Grains			46,655			40,533			43,366			
Total grain exports, incl. flour.....thous. of bushels..	18,015	26,095	21,041	19,138	24,106	28,097	10,637	27,644	43,250	137,556	182,052	164,313
Rice												
Southern paddy, receipts at mills, bbls..	22,216	507,920	1,084,277	125,737	583,944	1,387,795	16,892	338,269	1,197,924	4,117,003	4,602,915	5,254,968
Shipments:												
Total from mills, pockets (100 lbs.)..	267,710	498,911	766,414	515,342	506,895	841,027	285,155	346,076	777,583	6,089,338	6,529,443	6,670,504
New Orleans.....pockets (100 lbs.)..	56,861			113,969	126,470	156,232	35,274	96,643	147,464			
Stocks, end of month, pockets (100 lbs.)..	450,146	487,724	841,705	485,177	506,953	1,099,055	829,608	695,660	1,102,564			
Exports.....pockets (100 lbs.)..	124,181	99,249	94,030	231,401	221,314	131,509	189,456	120,281	150,623	1,630,979	2,869,489	2,608,073
Imports.....pockets (100 lbs.)..	4,951	5,977	5,667	6,556	5,549	6,292	31,688	6,026	15,412	132,675	182,485	280,683
Production, crop estimate.....thous. of lbs..			38,564			40,217			43,240			

* As of Oct. 1. * Final estimate for 1929. * Final estimate for 1928. * Revised. * Cumulative through Aug. 31. * Quarter ending in month indicated.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	September	July	August	September	July	August	September	1930	1929	1928
FOODSTUFFS—Continued												
Sugar—Continued												
Refined:												
Shipments, 2 ports.....long tons..	89,928	49,066	72,208	93,673	89,294	47,447	67,638	82,773	66,428	605,529	659,901	559,008
Stocks, 2 ports.....long tons..	48,600	53,324	53,998	42,889	47,419	49,631	24,930	34,049	26,725	-----	-----	-----
Exports, including maple.....long tons..	4,661	7,246	6,668	11,631	8,579	5,705	10,313	11,329	7,413	49,625	78,408	76,824
Prices:												
Wholesale, 96° centnf., New York.....dolls. per lb..	.033	.032	.031	.038	.038	.040	.042	.041	.042	-----	-----	-----
Wholesale, granulated New York.....dolls. per lb..	.046	.044	.043	.052	.054	.053	.057	.055	.056	-----	-----	-----
Retail, granulated, New York.....dolls. per lb..	.054	.054	.054	.057	.060	.061	.066	.063	.063	-----	-----	-----
Retail average, 51 cities.....relative to 1913..	111	111	107	116	120	122	133	129	127	-----	-----	-----
Cuban movement (raw):												
Receipts at Cuban ports.....long tons..	149,333	160,710	152,166	153,925	211,090	120,530	149,682	182,414	163,638	3,343,313	4,592,954	4,599,087
Exports.....long tons..	326,074	314,239	274,588	428,066	464,310	349,972	299,714	348,808	370,339	2,410,914	4,058,553	3,106,407
Stocks, end of month.....long tons..	1,417,997	1,278,971	1,162,515	978,543	739,068	503,592	1,017,638	829,437	630,548	-----	-----	-----
Candy												
Sales by manufacturers.thous. of dolls..	16,713	19,044	28,027	17,963	26,174	34,779	-----	-----	-----	208,225	236,490	-----
Coffee												
Imports.....thous. of bags..	801	712	991	864	875	925	821	925	1,655	8,893	8,449	9,338
Visible supply:												
World.....thous. of bags..	5,378	5,529	5,498	5,448	5,269	5,227	5,734	5,515	5,378	-----	-----	-----
United States.....thous. of bags..	861	784	934	760	685	850	793	702	1,040	12,066	10,242	10,641
Receipts, total, Brazil.....thous. of bags..	1,391	1,462	1,595	1,056	1,191	1,266	1,168	1,181	-----	-----	-----	-----
Clearances												
Total, Brazil, for world.....thous. of bags..	1,025	1,318	1,469	1,267	1,242	1,234	1,105	1,057	997	10,979	10,235	10,171
Total, Brazil, for United States.....thous. of bags..	539	652	832	634	655	642	598	548	570	5,755	5,296	5,415
Price, Rio No. 7, Brazil grades.....dollars. per lb..	.076	.072	.072	.163	.161	.158	.165	.173	.173	-----	-----	-----
Tea												
Imports.....thous. of lbs..	7,007	8,134	8,717	6,734	7,019	8,737	7,209	8,086	9,754	59,415	61,051	60,790
Price, Formosa fine, New York.....dollars. per lb..	.292	.290	.224	.310	.310	.310	.325	.325	.325	-----	-----	-----
Cocoa												
Shipments from the Gold and Nigerian Coasts, Africa.....long tons..	20,764	13,441	7,554	7,224	5,238	4,459	6,316	4,011	3,724	185,460	192,196	172,575
Imports.....long tons..	20,443	17,863	11,008	18,862	15,922	10,481	12,971	13,461	6,388	139,173	173,357	143,048
Spot price, Accra, New York.....dollars..	.0869	.0775	.0670	.1069	.1081	.1100	.1350	.1213	.1163	-----	-----	-----
TOBACCO												
Consumption (tax-paid withdrawals):												
Large cigars.....thousands..	532,805	517,200	523,973	589,282	598,583	591,738	558,206	601,877	586,267	4,387,509	4,816,171	4,687,910
Small cigarettes.....thousands..	11,858,840	10,577,438	10,190,031	10,724,403	10,930,629	10,350,544	9,723,647	10,627,344	9,126,271	92,051,474	90,534,149	79,942,901
Manufac. tobacco and snuff.....thous. of lbs..	30,964	31,370	32,166	32,694	34,470	32,260	30,155	34,981	31,789	284,059	290,993	293,264
Exports:												
Unmanufactured.....thous. of lbs..	27,620	39,527	53,841	26,266	41,343	55,965	20,252	26,833	57,509	382,335	349,677	348,598
Cigarettes.....thousands..	643,358	295,744	305,676	504,565	659,187	558,249	1,078,362	860,791	961,827	4,017,862	6,767,808	8,525,491
TRANSPORTATION												
River and Canal Cargo Traffic												
Panama Canal:												
Total cargo traffic.....thous. of long tons..	2,402	2,145	2,060	2,598	2,681	2,433	2,292	2,425	2,313	21,021	23,546	21,575
In American vessels.....thous. of long tons..	1,221	1,022	1,040	1,335	1,311	1,194	1,212	1,103	1,140	10,109	11,011	10,109
In British vessels.....thous. of long tons..	578	532	436	583	639	600	535	707	602	5,225	6,192	6,07
New York State canals.....thous. of short tons..	563	457	458	444	380	389	414	517	411	2,608	2,053	2,275
Sault Ste. Marie canals.....thous. of short tons..	12,367	11,267	10,347	14,120	14,085	13,356	13,247	13,680	12,812	58,361	73,973	61,670
Cape Cod Canal.....short tons..	219,574	247,376	244,640	175,179	206,188	199,955	135,702	148,691	130,566	1,818,557	1,535,727	950,577
Suez Canal.....thous. of met. tons..	2,390	2,288	-----	2,745	2,762	2,772	2,758	2,602	2,634	7,19,658	7,23,122	7,21,567
Welland Canal.....short tons..	850,918	985,829	980,532	628,041	612,943	574,241	1,006,713	1,115,601	996,833	4,520,783	3,650,462	5,206,151
St. Lawrence Canal.....short tons..	928,453	1,005,853	914,038	783,484	809,323	775,772	1,225,338	1,359,561	1,150,058	4,675,108	4,422,094	5,974,108
Mississippi River Govt. barges.....short tons..	84,266	70,088	113,700	94,141	85,000	90,947	112,248	113,903	148,377	856,259	978,456	1,031,459
Ohio River, Pittsburgh, Pa., to Wheeling, W. Va.....short tons..	1,106,423	997,548	927,902	1,088,912	1,080,996	1,144,682	947,227	1,034,775	963,766	8,055,070	8,263,071	7,458,861
Allegheny River.....short tons..	367,727	337,260	-----	396,514	330,123	364,309	306,010	346,670	288,629	7,2,038,473	7,1,990,148	7,1,742,918
Monongahela River.....short tons..	2,154,045	2,152,186	-----	2,396,993	2,500,617	2,374,949	2,095,606	2,304,619	2,305,681	7,17,512,979	18,878,701	16,977,530
Ocean Traffic												
Clearances, vessels in foreign trade:												
Total.....thous. of net tons..	8,067	8,480	7,653	8,099	8,428	7,559	7,781	8,377	7,365	62,832	62,413	58,206
American.....thous. of net tons..	3,371	3,359	3,060	3,176	3,219	2,833	3,056	3,173	2,912	24,806	23,806	22,552
Foreign.....thous. of net tons..	4,696	5,121	4,593	4,923	5,208	4,726	4,725	5,204	4,453	38,026	38,606	35,654
Shipbuilding												
Completed during month:												
Total.....gross tons..	45,069	75,030	32,083	21,585	32,298	28,325	25,523	12,537	27,833	306,348	172,131	147,991
Steel seagoing.....gross tons..	15,974	33,302	20,125	15,708	21,497	24,322	21,450	2,245	24,483	164,008	97,824	90,741
Building or under contract, end of month:												
Merchant vessels thous. of gross tons..	465	489	423	160	215	254	256	235	242	3,762	1,838	2,161

* Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30											
	July	August	September	July	August	September	July	August	September	1930	1929	1928									
TRANSPORTATION—Continued																					
Freight Cars																					
Surplus (daily av. last week of month):																					
Total cars.	454,815	431,971	394,032	197,923	158,112	118,523	271,017	201,864	103,906												
Box cars.	232,235	232,896	202,398	96,577	87,985	72,612	137,618	114,355	53,170												
Coal cars.	165,499	141,721	130,116	58,485	31,021	12,117	90,513	47,615	21,809												
Shortage (daily av. last week of month):				3	12	127	82	8	279												
Total cars.						112	32	8	159												
Box cars.																					
Coal cars.																					
Car loadings:																					
Total cars.	3,555,731	4,670,368	3,725,243	4,160,078	5,600,706	4,542,289	3,944,041	5,348,407	4,470,541	35,158,648	39,920,026	38,224,762									
Grain and grain products cars.	233,312	303,994	189,215	246,841	315,111	6 199,464	207,348	288,572	288,470	1,769,796	1,858,600	1,841,716									
Livestock cars.	80,293	105,550	107,777	92,030	121,357	6 123,685	91,007	126,780	136,923	922,723	1,011,345	1,093,330									
Coal and coke cars.	556,605	769,079	637,889	633,584	902,230	6 799,349	606,857	874,369	764,880	6,215,283	7,075,431	6,659,878									
Forest products cars.	159,618	207,372	161,532	245,248	343,804	6 251,851	238,676	332,061	254,527	1,914,711	2,536,610	2,529,162									
Ore cars.	244,998	284,388	195,118	306,437	378,809	6 274,599	250,150	321,700	250,969	1,396,349	1,862,444	1,465,036									
Merchandise and l. c. l. cars.	899,253	1,178,655	943,536	995,783	1,307,838	6 1,048,912	986,282	1,290,844	1,034,957	9,282,936	9,934,753	9,862,727									
Miscellaneous cars.	1,381,652	1,821,330	1,490,176	1,641,155	2,230,557	6 1,844,429	1,563,721	2,114,081	1,780,815	13,656,850	15,640,843	14,772,386									
Railroad Operation																					
Operating revenues:																					
Freight thous. of dolls.	347,293	354,713	363,473	417,063	446,610	6 435,530	382,226	421,771	424,092												
Passenger thous. of dolls.	65,805	67,432	59,092	79,593	84,315	6 75,759	82,822	85,187	80,200												
Total operating thous. of dolls.	457,025	466,370	467,469	558,386	587,322	6 567,365	513,730	558,751	556,916												
Operating expenses thous. of dolls.	331,562	327,204	320,131	389,258	396,205	6 383,859	376,044	384,528	376,241												
Net operating income thous. of dolls.	82,750	95,604	104,078	123,825	6 141,758	6 383,859	95,231	138,728	134,491												
Freight carried mills. ton-miles.	35,580	37,421		42,009	6 44,950	44,219	39,153	42,425	43,791												
Railway Equipment																					
Locomotives (Am. Ry. Assn.):																					
Owned, end of month—																					
Quantity number.	56,342	56,287	56,236	57,635	57,477	57,355	59,975	59,769	59,600												
Tractive power mills. of lbs.	2,537	6 2,540	2,541	2,540	2,540	2,540	2,590	2,585	2,582												
In bad order, end of month—																					
Quantity number.	4,562	4,585	4,676	4,205	4,002	4,075	4,582	4,486	4,327												
Per cent of total in use per cent.	8.2	8.2	8.6	7.3	7.0	7.2	7.7	7.6	7.3												
Installed number.	118	161	147	120	153	127	116	114	93	1,334	1,211	1,088									
Retired number.	156	216	198	369	306	248	235	320	260	1,910	2,554	2,269									
New orders number.	2	34	25	36	31	84	32	70	8	330	672	2,249									
Shipments, manufacturers' (Census)																					
Total number.	56	77	65	69	129	75	46	34	41	617	592	435									
Steam, domestic number.	52	68	62	39	117	60	19	23	28	584	480	285									
Electric, domestic number.	3	5	3	3	6	7	5	4	2	17	32	87									
Unfilled orders (railroads), end of mo.—																					
From manufacturers number.	242	189	143	365	370	329	56	81	98												
In railroad shops number.	54	46	38	45	25	25	17	19	15												
Unfilled orders, manufacturers' (Census)—																					
Total number.	291	234	174	539	436	429	198	204	178												
Steam, domestic number.	243	193	136	490	392	347	98	135	118												
Electric, domestic number.	41	36	34	18	13	55	59	26	27												
Exports, steam number.	4	2	2	32	30	20	32	20	33	44	165	166									
Freight cars (Am. Ry. Assn.):																					
Owned, end of month—																					
Quantity thous. of cars.	2,274	2,274	2,275	2,267	2,268	2,266	2,300	2,299	2,296												
Capacity mills. of lbs.	211,550	6 211,831	211,956	209,095	208,897	209,001	210,437	210,483	210,335												
In bad order, end of month—																					
Quantity cars.	144,987	153,046	157,141	137,495	134,253	132,611	151,867	149,252	148,333												
Per cent of total in use per cent.	6.5	6.8	7.1	6.2	6.0	6.0	6.7	6.6	6.6												
New orders cars.	1,306	823	565	242	2,562	4,257	307	767	1,236	33,137	66,190	24,636									
Shipments—																					
Total cars.	5,348	5,940	4,235	7,109	7,811	7,614	4,963	5,295	3,220	60,300	49,585	33,650									
Domestic cars.	5,348	5,934	4,176	6,963	7,633	7,239	4,908	5,261	3,000	59,034	47,000	32,763									
Unfilled orders (railroads)—																					
Total cars.	17,230	10,802	6,175	36,014	31,671	29,317	13,531	8,177	6,619												
From manufacturers cars.	14,247	7,723	4,127	31,590	27,289	25,554	10,371	5,673	3,878												
In railroad shops cars.	2,983	3,079	2,048	4,424	4,382	3,763	3,160	2,504	2,741												
Passenger cars:																					
New orders cars.	32	13	62	89	149		19	589	2	623	1,077	1,704									
Shipments—																					
Total cars.	41	35	50	64	76	96	123	147	146	575	752	817									
Domestic cars.	41	35	50	53	64	77	123	144	143	535	684	747									
Highways																					
Concrete pavements, new contracts:																					
Total thous. of sq. yds.	17,416	10,657	10,080	18,022	11,969	10,220	13,123	16,889	14,752	120,975	113,692	124,500									
Road thous. of sq. yds.	12,720	7,243	6,360	11,344	7,010	5,945	6,984	8,254	9,630	91,315	75,146	79,297									
Federal-aid highways:																					
Completed—																					
Cost thous. of dolls.	13,844	18,541	18,422	16,445	9,729	22,469	8,828	12,145	26,105	112,225	115,729	119,513									
Distance miles.	483	537	544	693	442	830	483	599	1,169	4,107	4,112	5,109									
Under construction, end of month miles.	8,055	8,339	8,459	8,494	8,724	8,584	9,497	9,547	9,427	68,187	72,947	80,358									
Passenger Travel																					
National parks:																					
Visitors number.	596,699	549,287	183,533	593,324	523,623	220,766	553,394	499,633	222,698	1,983,153	1,939,910	1,910,400									
Automobiles entered number.	143,049	127,153	43,939	131,511	112,574	49,102	111,642	98,523	44,873	483,537	411,055	367,660									
Arrivals from abroad:																					
Immigrants number.	13,323	14,816		20,068	22,778	28,022	20,682	24,620	29,317	7 132,869	7 174,817	7 187,901									
United States citizens number.	38,822	69,957		37,636	70,783	85,946	32,974	63,191	80,233	7 297,611	7 290,036	7 270,426									
Departures abroad:																					
Emigrants number.	4,818	5,245		5,086	5,571	5,150	7,804	6,488	8,093	7 32,077	7 35,183	7 47,214									
United States citizens number.	55,366	88,372		56,339	70,55	49,429	68,463	50,323	42,105	7 341,858	7 315,645	7 327,671									

* Revised.

† Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS—Continued

<i>The cumulates shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"</i>	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	September	July	August	September	July	August	September	1930	1929	1928
TRANSPORTATION—Continued												
Passenger Travel—Continued												
Passports issued.....number..	6 16,084	10,510	8,772	18,115	11,295	9,135	15,776	9,866	8,056	181,332	172,230	163,319
Pullman company operations:												
Revenue.....thous. of dollars..	6,485	7,128		7,230	7,927	7,483	7,279	7,593	7,297	753,019	755,872	754,619
Passengers carried.....thousands..	2,541	2,767		2,939	3,287	3,031	3,073	3,312	3,081	720,354	722,515	722,881
Trend of business in hotels:												
Room occupancy.....per ct. of capacity..	59	60	64	63	65	69	60	63	68			
Average sale per occupied room.....dollars..	3.86	3.96	3.82	3.94	4.13	4.02	3.98	4.09	3.98			
Warehouses												
Public merchandise warehouses, space occupied.....per ct. of total..	6 67.8	68.7		71.2	71.9	74.3	67.1	67.9	66.1			
PUBLIC UTILITIES												
Telephone companies:												
Operating revenues.....thous. of dollars..	76,850	76,279		75,141	75,898	75,606	67,676	68,784	68,432	7623,744	7597,370	7540,570
Operating income.....thous. of dollars..	15,452	16,448		15,905	17,601	18,197	15,019	15,985	16,496	7139,630	7143,193	7132,545
Telegraph companies:												
Commercial tele-graph tolls.....thous. of dollars..	10,131	10,121		11,679	12,067	11,531	10,618	11,530	11,010	784,122	791,632	785,864
Operating revenues.....thous. of dollars..	13,090	12,965		14,843	15,316	14,751	13,376	14,328	13,911	7107,817	7116,069	7107,348
Operating income.....thous. of dollars..	875	1,400		1,528	1,688	1,724	1,428	1,887	1,918	79,214	713,186	713,658
Gas and electric companies:												
Gross earnings.....thous. of dollars..	181,440	183,073		178,000	179,500	185,000	173,646	173,952	179,346	1,556,013	1,512,250	1,469,378
Net earnings.....thous. of dollars..	70,550	81,133		71,000	73,000	80,000	62,260	61,810	68,236	680,183	651,500	554,432
Electric railways (212 companies):												
Passengers carried.....thous. of persons..	655,477	646,750	646,036	722,289	724,812	704,818	728,849	736,223	717,810	6,342,723	6,824,911	6,917,365
ELECTRIC POWER												
Electric power production:												
Total.....mills. of kw. hours..	6 7,867	7,879		8,072	8,356	8,062	7,142	7,510	7,276	763,958	763,827	756,987
By water power.....mills. of kw. hours..	6 2,859	2,493		3,055	2,837	2,473	3,071	3,036	2,787	723,774	724,028	723,487
By fuels.....mills. of kw. hours..	5,008	5,386		5,017	5,518	5,589	4,071	4,474	4,488	740,145	739,799	733,501
In street railways, manuf. plants, etc.....mills. of kw. hours..	541	526		368	390	380	381	382	355	74,054	73,075	73,516
In central stations.....mills. of kw. hours..	6 7,326	7,353		7,704	7,966	6 7,682	6,761	7,128	6,921	759,905	760,752	783,487
Electric power production (Canada):												
Total.....mills. of kw. hours..	1,415	1,403		1,411	1,445	1,477	1,248	1,314	1,280	711,717	711,425	710,309
By water power.....mills. of kw. hours..	1,393	1,382		1,393	1,426	1,455	1,233	1,298	1,262	711,519	711,226	710,174
Exported.....mills. of kw. hours..	132	143		129	133	136	130	146	130	71,015	7956	71,043
Electric power, gross revenue.....thous. of dollars..	6 167,000	168,100		162,300	6 166,200	170,800	146,600	148,600	156,100	7 1,413,800	7 1,367,400	7 1,235,099
Rate of manufacturing operations (based on the consumption of electrical energy for power purposes):												
Activity by geographical divisions—												
United States.....rel. to 1923-25..	105.1	105.3		129.0	128.2	135.8	120.2	120.8	134.5			
New England.....rel. to 1923-25..	87.9	87.1	88.1	113.4	108.7	118.2	102.4	102.2	115.3			
North Central.....rel. to 1923-25..	109.9	112.0	102.6	141.3	135.5	140.6	131.8	132.4	149.7			
Middle Atlantic.....rel. to 1923-25..	102.9	94.3	103.1	120.5	127.9	138.0	110.8	118.3	136.0			
Southern.....rel. to 1923-25..	106.5	110.2	120.1	114.7	132.7	126.3	112.0	112.8	127.5			
Western.....rel. to 1923-25..	129.0	125.0	133.0	129.4	127.0	143.1	116.5	127.5	150.8			
Activity by industries—												
All industries.....rel. to 1923-25..	105.1	105.3		129.0	128.2	135.8	120.2	120.8	134.5			
Chemical and allied products.....rel. to 1923-25..	104.6	135.7	147.1	127.0	125.0	139.9	128.5	119.2	132.0			
Food and kindred products.....rel. to 1923-25..	139.2	141.2	148.6	129.9	132.2	141.2	129.2	128.3	142.0			
Rolling mills and steel plants.....rel. to 1923-25..	100.7	112.0	110.3	144.4	150.9	152.3	121.2	125.4	141.2			
Metal working plants.....rel. to 1923-25..	95.1	95.2	97.4	144.4	134.6	147.4	126.3	125.8	144.2			
Metal groups.....rel. to 1923-24..	100.5	101.4	144.2	140.7	149.2	149.2	124.2	125.5	143.0			
Leather and its products.....rel. to 1923-25..	97.3	87.7	73.5	82.0	102.2	105.4	99.0	94.7	106.9			
Lumber and its products.....rel. to 1923-25..	100.0	81.3	97.7	103.2	102.3	111.4	108.8	111.6	111.3			
Paper and pulp.....rel. to 1923-25..	119.9	115.1	119.3	122.3	123.6	127.0	127.3	129.1	132.0			
Rubber and its products.....rel. to 1923-25..	103.8	110.5	107.2	136.7	120.2	133.7	135.3	138.4	151.2			
Shipbuilding.....rel. to 1923-25..	118.8	122.8	124.1	107.7	96.3	114.9	67.2	67.3	72.3			
Stone, clay, and glass.....rel. to 1923-25..	110.8	118.2	120.5	154.7	157.7	165.7	129.8	135.3	152.0			
Textiles.....rel. to 1923-25..	79.7	72.5	85.1	113.4	110.0	115.5	91.8	97.3	112.5			
Automobiles, including repair parts.....rel. to 1923-25..	75.3	86.6	88.4	139.5	143.0	138.1	143.7	143.2	161.0			
EMPLOYMENT AND WAGES												
Employment in factories:												
New York State.....rel. to 1923-25..	74.6	73.9	75.7	87.3	87.7	89.3	81.5	82.5	84.3			
Maryland.....rel. to 1924-25..	83.3	82.0	83.4	93.0	93.0	94.2	85.6	88.1	89.0			
Iowa.....rel. to 1923-25..	118.1	117.2		129.7	133.2	133.4	123.3	124.0	124.0			
Massachusetts.....rel. to 1925-27..	71.5	72.8	73.3	87.9	88.8	91.1	83.4	84.9	86.5			
Illinois.....rel. to 1925-27..	85.7	84.9		103.4	105.1	105.8	93.9	96.3	97.7			
Ohio.....rel. to 1926-27..	85.5	82.8	81.9	108.8	106.5	105.6	102.4	104.9	106.5			
Cleveland.....rel. to Jan., 1921-22..	99.4	96.1	92.0	124.2	125.0	124.0	111.3	113.8	114.5			
Detroit.....rel. to 1923-25..	48.0	83.0	74.8	131.0	127.0	119.0	123.5	132.7	134.0			
New York State.....number..	412,693	408,895	418,262	483,142	485,330	494,311	451,135	456,303	466,357			
Oklahoma.....number..	34,849	35,139	35,058	34,984	38,978	38,239	29,405	31,137	36,812			

^a Revised.^b Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS—Continued

<i>The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"</i>	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	September	July	August	September	July	August	September	1930	1929	1928
EMPLOYMENT AND WAGES—												
Continued												
Total pay roll:												
New York State (weekly)-----thous. of dolls--	11,717	11,631	12,061	14,398	14,599	15,063	13,149	13,411	13,862			
Oklahoma (weekly)-----thous. of dolls--	971	958	944	965	1,074	1,015	793	877	865			
New York State-----rel. to 1923--	77.7	77.2	80.0	95.5	96.8	99.9	87.2	89.0	92.0			
Illinois-----rel. to 1925-27--	74.5	73.2	71.4	102.7	106.0	105.0	91.4	96.3	97.1			
Employment:												
Canada-----rel. to cal. year 1926--	118.9	118.8	116.6	124.7	127.8	126.8	117.7	119.3	119.1			
Ohio construction-----rel. to 1926--	98.8	95.4	89.6	115.0	120.9	115.0	123.5	138.4	136.3			
Employment, trade-unions:												
United States-----per cent of total--	78.0	78.0	79.0	91.0	91.0	90.0	88.0	91.0	90.0			
Canada-----per cent of total--	90.8	90.7	-----	97.0	96.5	96.3	97.5	97.6	97.8			
Anthracite mines:												
Employment-----rel. to 1923-25--	92.3	80.8	94.5	85.6	93.6	105.5	100.7	110.9	112.7			
Pay roll-----rel. to 1923-25--	71.6	67.2	78.1	56.8	68.9	83.4	82.5	97.2	112.5			
Federal civilian employees, Washington, D. C., end month-----number--	69,666	70,197	70,598	63,372	63,632	63,517	61,650	62,111	62,010			
Average weekly earnings, factories:												
Illinois-----dollars--	26.27	26.45	26.43	28.16	28.57	28.26	27.45	29.13	28.31			
New York State-----dollars--	28.40	28.45	28.34	29.80	30.08	30.47	29.15	29.39	29.72			
Wisconsin-----dollars--	21.47	22.21	22.16	23.96	26.51	25.17	24.45	26.60	26.30			
Oklahoma-----dollars--	27.85	27.27	26.92	27.57	27.55	26.50	26.97	28.15	28.07			
New York-----rel. to 1923--	104.3	104.4	105.9	109.4	110.4	111.9	107.0	107.9	109.1			
Illinois-----rel. to 1925-1927--	92.6	93.2	93.1	99.2	100.7	99.6	96.7	99.9	99.8			
Average weekly earnings (<i>National Industrial Conference Board</i>):												
Grand total (both sexes)-----dollars--	25.72	25.38	25.22	28.09	27.94	28.58	27.09	27.35	27.76			
Total male-----dollars--	27.33	27.15	26.87	31.01	30.69	31.56	29.95	30.30	30.93			
Skilled male-----dollars--	28.55	28.35	28.08	32.52	32.18	33.06	31.35	31.77	32.42			
Unskilled male-----dollars--	22.26	22.30	21.93	25.23	25.09	25.82	24.69	24.78	25.27			
Total women-----dollars--	15.88	15.71	15.27	17.54	17.47	17.81	17.07	17.04	17.33			
Average weekly hours:												
Nominal (both sexes)-----hours--	48.4	49.1	48.3	49.6	49.4	49.6	49.6	49.6	49.8			
Actual (both sexes)-----hours--	43.3	42.6	42.5	48.8	48.4	49.0	47.5	47.9	48.2			
Wages, road labor, by districts:												
New England-----cents per hour--	49	50	50	49	51	51	47	48	48			
Middle Atlantic-----cents per hour--	42	42	42	42	42	43	43	41	42			
South Atlantic-----cents per hour--	25	28	23	30	30	29	27	34	24			
East South Central-----cents per hour--	25	23	24	25	25	25	25	25	25			
West South Central-----cents per hour--	26	26	27	30	30	31	27	29	26			
East North Central-----cents per hour--	38	37	38	40	39	39	38	39	38			
West North Central-----cents per hour--	36	36	37	36	37	37	36	38	39			
Mountain-----cents per hour--	47	46	48	47	48	48	44	50	52			
Pacific-----cents per hour--	53	53	53	52	52	53	53	53	54			
United States, average-----cents per hour--	40	39	40	39	40	41	40	42	43			
Wage rates, U. S. Steel												
Corp-----cents per hour--	50	50	50	50	50	50	50	50	50			
Wages, steel sheet												
Workers-----per cent of base--	127.0	127.0	127.0	127.0	127.0	127.0	125.5	125.5	125.5			
Applicants per 100 jobs, employment agencies:												
United States-----number--	198	177	170	131	124	114	137	129	107			
Eastern States-----number--	231	214	181	139	121	121	151	223	120			
Central States-----number--	221	204	222	141	135	132	150	132	126			
Southern States-----number--	253	252	201	174	178	148	174	121	91			
Western States-----number--	98	79	71	75	67	67	80	69	63			
Illinois-----number--	262	234	230	148	137	136	151	138	130			
Wisconsin-----number--	150	162	188	115	117	117	113	107	104			
Canada-----number--	161	145	-----	134	119	129	122	109	110			
Factory Labor Turnover												
(Percentage of number on pay roll)												
Departures:												
Total-----per cent (annual basis)--	29.3	28.0	30.0	46.5	48.5	50.6	38.0	42.3	50.6			
Voluntary quits-----per cent (annual basis)--	11.8	11.2	13.7	35.7	38.4	38.2	27.2	31.9	40.3			
Lay offs-----per cent (annual basis)--	15.4	15.3	14.3	5.0	4.8	6.3	5.9	5.1	5.0			
Discharges-----per cent (annual basis)--	2.1	1.5	2.0	5.8	5.3	6.1	4.9	5.3	5.3			
Accessions-----per cent (annual basis)--	17.4	14.7	22.2	61.4	54.3	59.7	46.9	55.7	56.9			
Industrial disputes:												
Disputes-----number--	633	32	-----	53	43	49	42	42	34			
Workers involved-----number--	6,511	8,634	-----	15,589	6,714	8,132	132,187	105,760	62,862			
Man-days lost in month-----number--	612,125	173,245	-----	1,062,428	358,148	244,864	3,337,386	3,553,750	2,571,982			
DISTRIBUTION MOVEMENT												
Retail Sales												
Mail-order houses:												
Total sales, 2 houses-----thous. of dolls--	48,790	50,682	54,419	53,309	60,088	63,078	40,253	45,994	50,814	469,705	492,011	379,727
Sears, Roebuck & Co-----thous. of dolls--	30,121	29,715	33,086	33,501	35,133	36,950	26,276	28,986	30,004	278,562	298,312	231,365
Montgomery Ward & Co-----thous. of dolls--	18,669	20,967	21,333	19,808	24,955	26,128	13,977	17,008	20,810	191,153	193,699	148,362
Ten-cent chain stores:												
Total sales (4 chains)-----thous. of dolls--	39,802	41,905	42,377	42,603	46,613	48,180	38,760	41,049	42,906	372,673	383,648	254,510
Total stores operated (4 chains)-----number--	2,967	2,988	3,002	2,767	2,787	2,816	2,526	2,552	2,586			
F. W. Woolworth & Co-----thous. of dolls--	20,737	22,055	22,353	22,521	24,446	22,264	20,587	21,812	22,637	196,450	205,041	190,310
S. S. Kresge Co-----thous. of dolls--	1,871	1,881	1,886	1,789	1,802	1,815	1,658	1,675	1,698			
Stores operated-----number--	10,882	11,410	11,265	11,687	13,001	11,971	10,583	11,272	11,914	101,015	104,304	96,560
McCormy Stores Corp-----thous. of dolls--	3,123	3,406	3,278	3,300	3,853	3,582	2,951	3,115	3,344	29,218	29,761	26,901
Stores operated-----number--	240	240	240	239	240	241	224	224	224			

^a Revised.

TREND OF BUSINESS MOVEMENTS—Continued

<i>The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"</i>	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	Septem- ber	July	August	Septem- ber	July	August	Septem- ber	1930	1929	1928
DISTRIBUTION MOVEMENT—Continued												
Retail Sales—Continued												
Ten-cent chain stores—Continued.												
S. H. Kress & Co., thous. of dolls..	5,061	5,125	5,478	5,095	5,317	5,363	4,639	4,850	5,011	45,980	44,548	41,739
Stores operated.....number..	211	211	211	197	198	200	184	185	190	7,9,742	7,9,738	7,7,173
Metropolitan.....thous. of dolls..	1,258	1,226		1,337	1,612	1,471	908	993	1,109			
Stores operated.....number..	148	148		123	131	134	96	97	100			
W. T. Grant Co., thous. of dolls..	4,818	5,385	5,286	4,524	5,066	4,777	3,731	3,996	4,708	45,499	41,237	33,726
Stores operated.....number..	305	309	318	244	252	258	193	191	199			
F. & W. Grand.....thous. of dolls..	1,669	1,669	1,663	1,635	1,731	1,731	1,205	1,236	1,443	14,871	14,245	10,297
Stores operated.....number..	305	309	318	244	252	258	193	191	199			
Isaac Silver & Bros., thous. of dolls..	598	608	566	649	719	679	462	460	512	5,568	5,214	4,066
Stores operated.....number..	45	45	45	41	43	43	26	26	29			
J. C. Penny Co., thous. of dolls..	13,602	14,397	15,956	14,566	16,493	18,245	11,734	12,877	16,478	130,421	132,390	112,843
Stores operated.....number..	1,438	1,440	1,446	1,217	1,292	1,337	953	982	1,006			
G. C. Murphy Co., thous. of dolls..	1,319	1,362	1,344	1,217	1,273	1,336	796	873	1,046	11,126	10,213	7,481
Stores operated.....number..	163	163	162	145	148	149	116	118	119			
Restaurant chains:												
Total sales (3 chains).....thous. of dolls..	4,501	4,642	4,642	4,821	5,151	6,005	4,280	4,577	4,591	42,915	44,059	41,172
Stores operated.....number..	379	379	380	372	369	367	369	369	366			
Childs Co., sales.....thous. of dolls..	2,050	2,173	2,136	2,259	2,478	6,2,400	2,012	2,217	2,191	19,878	20,602	19,584
Stores operated.....number..	113	113	113	114	113	112	116	116	113			
J. R. Thompson Co.												
sales.....thous. of dolls..	1,199	1,208	1,215	1,302	1,331	1,282	1,163	1,190	1,185	11,224	11,645	10,854
Stores operated.....number..	119	120	120	124	122	121	121	121	121			
Waldorf System												
(Inc.), sales.....thous. of dolls..	1,252	1,261	1,291	1,260	1,342	1,323	1,105	1,170	1,215	11,813	11,812	10,742
Stores operated.....number..	147	146	147	134	134	133	132	132	132			
Installment sales in New England dept. stores, ratio to total sales.....per cent..	6.6			6.7	12.5	7.6	5.7	12.1	8.2			
Advertising												
Magazine advertising.....thous. of lines..	1,986	1,658	2,145	2,338	1,959	6,2,536	2,171	1,770	2,287			
Magazine advertising, total cost.....thous. of dolls..	14,316	12,075	15,214	15,756	12,433	16,548	14,210	11,437	14,349	151,385	180,935	137,812
Newspaper advertising.....thous. of lines..	72,007	70,018	88,648	87,409	84,645	105,702	81,012	83,240	99,839	789,479	896,839	859,234
Radio/broadcast cost facilities.....thous. of dolls..	2,074	1,960	2,123	1,312	1,330	1,599	640	676	814	13,346	12,903	6,623
National advertising in newspapers:												
Total.....thous. of lines..	39,911	31,126	40,579	46,841	42,932	6,52,195	41,339	39,167	43,402	412,899	473,953	371,930
Passenger cars.....thous. of lines..	4,082	2,736	3,154	6,278	6,910	6,7,033	7,193	7,064	6,720	46,077	73,901	61,676
Tires, trucks, and accessories.....thous. of lines..	5,634	5,431	4,063	7,240	6,570	6,5,274	5,536	5,681	4,696	48,255	52,831	38,700
Financial.....thous. of lines..	6,446	3,755	5,112	8,525	6,155	6,3,747	6,648	4,706	5,821	56,255	69,669	55,053
Building materials.....thous. of lines..	117	99	216	274	279	6,757	342	400	811	2,733	5,609	4,997
Electrical appliances, supplies.....thous. of lines..	739	459	685	1,052	851	6,1,550	822	887	895	9,302	10,993	7,621
Foods and beverages.....thous. of lines..	6,428	5,898	6,618	6,421	5,716	6,6,258	6,640	5,802	5,678	65,484	59,624	51,979
Heating and plumbing equipment.....thous. of lines..	401	484	979	291	388	6,737	352	476	979	4,627	4,440	4,185
Medical.....thous. of lines..	1,853	1,760	2,392	2,288	2,136	6,3,007	2,232	2,214	2,920	33,153	39,856	30,748
Radio.....thous. of lines..	927	1,049	3,584	2,413	2,887	6,6,037	634	1,009	3,759	12,725	23,616	10,452
Tobacco.....thous. of lines..	3,742	1,760	5,633	2,416	2,041	6,3,152	2,520	2,709	2,006	36,092	30,854	24,482
Toilet requisites.....thous. of lines..	2,985	2,055	1,841	2,498	2,316	6,2,963	2,250	1,949	2,139	27,000	27,133	20,861
Transportation.....thous. of lines..	3,130	2,323	1,689	3,625	3,041	6,2,271	2,946	2,467	1,734	24,722	27,466	21,308
All other.....thous. of lines..	3,427	3,318	4,623	3,520	3,644	6,5,783	3,224	3,715	5,245	46,478	48,006	39,874
Postal Business												
Postal receipts:												
50 selected cities.....thous. of dolls..	26,761	25,876	28,764	29,069	29,251	30,549	26,508	27,951	29,261	267,502	269,932	271,463
50 industrial cities.....thous. of dolls..	3,157	3,132	3,160	3,189	3,289	3,303	2,956	3,115	3,074	29,966	29,964	29,453
Money orders:												
Domestic issued (50 cities)— Quantity.....thousands..	3,436	3,285	3,415	3,602	3,510	3,407	3,180	3,165	2,879	32,867	32,682	30,004
Value.....thous. of dollars..	34,672	33,363	33,923	37,120	37,027	35,916	32,812	32,886	32,382	327,222	331,946	305,520
Domestic paid (50 cities)— Quantity.....thousands..	10,197	9,681	9,758	10,741	10,862	10,328	9,627	10,183	9,748	96,230	100,640	96,127
Value.....thous. of dollars..	81,800	77,670	79,174	86,573	88,806	86,974	76,227	81,180	79,877	752,404	784,575	742,599
Air mail, weight dispatched.....pounds..	693,627	695,305		645,653	701,538	658,984	214,558	410,047	423,991	7,5,232,899	7,4,482,652	7,1,636,580
BANKING AND FINANCE												
Banking												
Bank debits:												
New York City.....millions. of dolls..	29,600	25,052	27,383	49,215	49,084	50,342	35,685	35,102	38,725	302,368	446,309	356,825
Outside of New York City.....millions. of dolls..	23,171	20,966	21,277	28,444	28,339	27,314	23,897	23,401	24,454	211,095	244,620	222,951
Canada.....millions. of dolls..	1,613	1,464	1,514	2,108	1,937	1,884	1,896	1,813	1,681	14,328	17,505	16,732
Federal reserve banks:												
Bills discounted.....millions. of dolls..	197	231	186	1,076	974	931	1,086	1,039	1,026			
Notes in circulation.....millions. of dolls..	1,335	1,368	1,376	1,779	1,829	1,851	1,613	1,651	1,704			
Total investments.....millions. of dolls..	714	781	801	232	328	484	378	394	545			
Total reserve.....millions. of dolls..	3,178	3,086	3,128	3,109	3,149	3,141	2,756	2,765	2,751			
Total deposits.....millions. of dolls..	2,469	2,454	2,457	2,398	2,348	2,471	2,402	2,325	2,414			
Reserve ratio.....per cent..	83.5	80.5	81.6	74.4	75.4	72.7	68.6	69.5	66.8			
Federal reserve member banks:												
Total loans and discounts.....millions. of dolls..	16,945	16,830	17,013	17,058	16,950	17,428	15,861	15,729	15,952			
Total investments.....millions. of dolls..	6,291	6,338	6,454	5,549	5,456	5,401	6,589	6,405	6,401			
Net demand deposits.....millions. of dolls..	13,798	13,629	13,812	13,395	12,985	13,295	13,186	12,871	13,226			

* Revised.

† Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30											
	July	August	Septem- ber	July	August	Septem- ber	July	August	Septem- ber	1930	1929	1928									
BANKING AND FINANCE—Con.																					
Banking—Continued																					
Brokers' loans, end of month—																					
To N. Y. Stock Ex., members—																					
Total—mills. of dolls.	3,689	3,599	3,481	7,474	7,882	8,549	4,837	5,051	5,513												
Ratio to market value, per cent.	5.49	5.31	5.79	9.16	8.79	9.82	9.00	8.80	9.29												
By New York F. R. member banks—mills. of dolls.	3,228	3,110	3,063	5,960	6,217	6,804	4,259	4,235	4,570												
Deposits, New York State savings banks, end of month—mills. of dolls.	4,572	4,591	4,662	4,434	4,426	4,457	4,283	4,299	4,352												
Interest rates:																					
Time loans, 90 days—per cent.	2.75	2.63	2.63	7.75	8.88	8.88	6.00	6.25	7.00												
Call loans, renewal—per cent.	2.20	2.21	2.19	9.23	8.23	8.50	6.05	6.87	7.26												
Prime com. paper (4-6 mos.)—per cent.	3.25	3.00	3.00	6.00	6.13	6.25	5.13	5.38	5.63												
Prime bankers' acceptances—per cent.	1.88	1.88	1.88	5.13	5.13	5.13	4.25	4.63	4.50												
N. Y. Fed. Res. Bank (redis.)—per cent.	2.50	2.50	2.50	5.00	6.00	6.00	5.00	5.00	5.00												
Federal land banks—per cent.	5.61	5.03	5.63	5.29	5.31	5.44	5.04	5.04	5.04												
Intermediate credit banks—per cent.	4.17	4.13	4.06	5.67	5.67	4.63	4.84	5.12													
Public Finance																					
Government debt, gross, end mo.—mills. of dolls.	16,176	16,188	16,081	16,832	16,805	16,720	17,526	17,648	17,367												
Customs receipts—thous. of dolls.	26,200	32,083	36,655	52,144	56,427	52,612	44,591	52,797	50,410	379,724	461,667	411,520									
Total ordinary receipts, thous. of dolls.	138,741	127,388	602,811	168,473	174,502	670,736	154,859	173,495	557,398	2,969,342	3,180,322	2,938,160									
Expenditure: chargeable to ordinary receipts—thous. of dolls.	284,310	224,117	308,221	349,625	210,725	399,068	278,620	308,594	482,600	2,824,905	2,771,967	2,788,904									
U. S. money in circulation: Daily average—mills. of dolls.	4,483	4,476	4,492	4,764	4,777	4,811	4,746	4,743	4,804												
Gold and Silver																					
Gold:																					
Domestic receipts at mint—fine ounces.	115,119	112,395	125,871	92,256	100,387	77,029	72,676	98,769	83,247	832,338	660,665	679,661									
Rand output—fine ounces.	912,000	921,000	907,880	889,480	889,601	849,553	867,211	891,863	857,731	8,003,058	7,812,649	7,728,631									
Monetary stock of U. S.— daily average—mills. of dolls.	4,532	4,496	4,503	4,335	4,351	4,368	4,113	4,118	4,125												
Imports—thous. of dolls.	21,889	19,714	13,671	35,525	19,271	18,781	10,331	2,445	4,273	287,473	255,084	100,026									
Exports—thous. of dolls.	41,529	39,332	11,135	807	881	1,205	74,190	1,698	3,810	101,659	9,942	535,216									
Silver:																					
Production— United States—thous. of fine oz.	3,551	8,3,835	3,717	4,523	5,006	4,634	3,915	4,776	4,087	38,904	44,663	42,768									
Canada—thous. of fine oz.	2,100	2,085	3,486	1,910	2,744	2,437	2,389	2,252	2,177	17,701	15,388	15,003									
Stocks, end of month— United States—thous. of fine oz.	459	6,677	813	682	1,074	1,112	262	263	872												
Canada—thous. of fine oz.	312	410	341	339	880	914	436	720	1,457												
Imports—thous. of dolls.	3,953	6,3,492	3,461	4,723	7,345	4,111	6,544	6,496	5,662	34,179	48,913	50,232									
Exports—thous. of dolls.	3,708	6,4,544	3,903	6,795	8,522	4,374	6,160	9,246	6,229	42,158	61,046	63,966									
Price at New York—dollars. per fine oz.	.343	.352	.363	.525	.526	.510	.592	.589	.575												
Business Failures																					
Liabilities (United States):																					
Total commercial—thous. of dolls.	39,826	49,181	46,947	32,426	33,746	34,125	29,587	58,202	33,957	473,042	332,427	373,194									
Manufacturers—thous. of dolls.	13,369	22,735	16,448	12,767	13,857	14,914	12,932	16,877	14,727	181,265	127,218	135,759									
Trade establish- ments—thous. of dolls.	21,572	17,829	19,311	14,605	16,602	16,660	12,899	19,096	13,567	201,265	165,596	171,876									
Agents and broker—thous. of dolls.	4,887	8,617	11,188	5,053	3,888	2,551	3,755	22,229	5,662	90,515	19,615	65,558									
Banks (quarterly)—thous. of dolls.	81,712	-----	8,73,877	54,458	-----	8,74,180	28,933	-----	8,26,810	207,268	166,147	86,565									
Liabilities (Canada)—thous. of dolls.	2,907	2,939	2,664	2,592	1,393	6,2,457	1,402	2,584	2,632	33,312	22,333	27,681									
Firms (United States):																					
Total commercial—number.	2,028	1,913	1,963	1,752	1,762	1,588	1,723	1,852	1,635	19,675	17,254	18,038									
Manufacturers—number.	425	566	434	461	482	427	450	493	454	4,794	4,484	4,379									
Trade establishments—number.	1,481	1,234	1,395	1,190	1,163	1,039	1,161	1,241	1,073	13,688	11,696	12,576									
Agents and brokers—number.	122	113	134	101	117	102	112	112	108	1,243	1,074	1,077									
Banks (quarterly)—number.	134	-----	102	148	-----	81	92	-----	855	360	310	256									
Firms (Canada)—number.	183	167	175	180	132	164	123	136	119	1,718	1,472	1,327									
By groups:																					
Manufacturers—																					
Metals—number.	45	33	30	39	35	29	31	36	35	331	317	334									
Textiles—number.	51	55	53	63	48	48	61	59	74	597	514	560									
Lumber—number.	81	98	65	88	102	77	69	60	73	839	747	664									
Chemicals—number.	11	14	9	6	11	8	5	4	8	93	99	66									
Printing and engraving—number.	20	19	18	15	11	10	16	22	6	159	140	134									
Foodstuffs—number.	37	29	35	31	34	38	47	51	24	353	361	374									
Leather, etc.—number.	10	21	14	10	4	11	18	8	15	113	110	117									
Liquors and tobacco—number.	1	11	8	7	6	3	3	6	4	43	59	51									
Stone, clay, and glass—number.	9	7	7	9	6	9	5	10	3	77	74	74									
All other—number.	160	279	197	193	225	194	195	237	212	2,189	1,963	2,005									
Traders—																					
General stores—number.	83	67	93	68	72	60	77	54	60	847	770	751									
Foods and tobacco—number.	403	329	341	406	399	363	387	423	376	3,461	3,724	3,797									
Clothing—number.	268	270	257	201	163	168	202	210	108	2,749	2,020	2,478									
Household furniture—number.	235	204	247	180	179	127	179	171	187	2,481	2,049	2,202									
Chemicals and paints—number.	73	78	98	54	64	55	71	43	779	547	598										
Books and paper—number.	21	11	12	5	15	11	14	11	13	119	111	115									
All other—number.	398	275	347	276	271	256	247	307	226	3,202	2,475	2,632									

* Revised.

* Quarter ending in month indicated.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	September	July	August	September	July	August	September	1930	1929	1928
BANKING AND FINANCE—Con.												
Agricultural Finances												
Loans outstanding, end mo.:												
Federal farm loan banks.....thous. of dolls..	1,191,949	1,191,212	1,190,270	1,204,363	1,203,806	1,202,490	1,185,714	1,187,365	1,189,345			
Joint-stock land banks.....thous. of dolls..	567,010	564,933	562,747	596,403	594,876	593,388	608,314	608,706	608,451			
Federal intermediate credit banks.....thous. of dolls..	111,244	122,697	123,336	68,981	68,882	72,204	67,815	66,978	68,619			
Stocks and Bonds												
Stock prices, average daily closing:												
25 industrials, average.....dolls. per share..	282.64	282.81	282.92	414.04	431.20	448.78	257.98	267.16	283.99			
25 railroads, average.....dolls. per share..	113.69	110.38	110.16	149.27	151.29	152.26	119.18	121.57	124.82			
Southern cotton mills.....dolls. per share..	71.92	68.96	65.70	92.45	90.41	89.37	108.17	104.82	103.31			
103 stocks, average dolls. per share..	56.98	55.92	47.40	86.25	90.35	82.47	73.30	76.59	78.49			
Stock prices, average weekly closing:												
Industrials, rails, and utilities (402).....rel. to 1926..	149.3	147.6	148.8	190.7	207.2	218.1	144.2	148.3	156.6			
All industrials (335).....rel. to 1926..	139.8	138.7	139.3	202.7	210.3	216.1	147.8	152.6	162.2			
All railroads (33).....rel. to 1926..	124.2	121.2	122.6	160.0	165.4	168.1	124.6	126.5	129.6			
All utilities (34).....rel. to 1926..	215.4	212.7	216.4	272.8	304.3	321.0	145.3	147.9	155.8			
Automobiles and trucks (13).....rel. to 1926..	132.2	134.1	132.5	241.0	240.8	240.9	238.4	244.7	270.0			
Automobile tires and rubber goods (7).....rel. to 1926..	76.8	72.0	65.5	184.9	169.5	163.4	113.3	119.3	127.6			
Airplane (10).....rel. to 1926..	405.7	400.9	391.1	1,131.0	1,130.0	994.4	565.2	591.5	693.7			
Agricultural implements (4).....rel. to 1926..	285.5	268.5	265.3	418.0	423.9	444.8	263.9	281.7	301.3			
Chain stores (17).....rel. to 1926..	88.7	90.1	95.6	148.0	148.7	154.6	135.3	142.9	150.5			
Copper and brass (9).....rel. to 1926..	129.1	121.3	114.4	280.8	228.9	294.4	150.0	155.2	172.0			
Food, other than meat (20).....rel. to 1926..	149.4	147.2	149.8	189.1	186.7	191.1	152.1	158.1	167.1			
Machinery and machine equipment (10).....rel. to 1926..	154.5	152.3	154.1	171.8	177.2	191.4	132.7	135.4	139.4			
Oil producing and refining (16).....rel. to 1926..	132.9	129.7	125.4	149.1	157.5	166.7	110.9	112.6	115.7			
Railroad equipment (9).....rel. to 1926..	94.3	93.4	95.6	148.5	157.8	157.6	125.1	123.6	129.5			
Rayon (5).....rel. to 1926..	72.0	65.8	71.4	126.6	126.2	119.8	167.0	165.1	160.7			
Steel and iron (9).....rel. to 1926..	159.1	160.4	161.5	211.5	238.4	243.9	136.6	143.6	155.8			
Textiles (30).....rel. to 1926..	67.1	66.0	67.2	120.3	118.1	114.1	120.3	120.5	125.9			
Theaters, motion pictures, and amusements (7).....rel. to 1926..	111.9	106.1	112.4	139.0	142.5	145.2	111.0	116.6	135.1			
Tobacco and tobacco products (10).....rel. to 1926..	146.6	149.2	152.6	139.1	141.6	141.5	134.3	137.6	142.5			
Traction, motor transportation, etc. (9).....rel. to 1926..	74.1	72.7	74.6	83.0	83.1	84.7	96.0	95.7	99.5			
Stock yields:												
Total common (90).....per cent..	4.44	4.42	4.33	3.16	3.01	2.92	4.14	4.01	3.78			
Industrial (50).....per cent..	4.77	4.69	4.60	3.36	3.26	3.19	4.11	3.96	3.72			
Public utilities (20).....per cent..	3.04	3.12	3.04	1.95	1.78	1.69	3.48	3.39	3.14			
Railroads (20).....per cent..	5.41	5.50	5.45	4.17	4.04	3.96	5.14	5.08	4.98			
Preferred high grade industrial (20).....per cent..	5.56	5.53	5.48	5.52	5.54	5.52	5.40	5.43	5.41			
Stocks sale, N. Y. Stock Exchange.....thous. of shares..	46,753	39,869	53,545	93,379	95,705	100,056	39,001	67,704	90,907	649,293	827,006	613,202
Bond sales:												
Miscellaneous.....thous. of dolls..	183,716	167,584	221,327	295,577	251,287	210,995	183,815	173,561	190,582	2,008,537	2,028,340	2,155,943
Liberty-Treasury.....thous. of dolls..	10,112	4,951	9,631	13,330	8,510	9,267	25,240	9,988	10,467	84,611	95,201	138,850
Total.....thous. of dolls..	193,828	172,535	230,958	308,907	259,797	220,262	209,055	183,549	201,049	2,093,147	2,123,541	2,294,793
Bond prices:												
Highest-grade rails.....p. ct. of par. 4% bond..	92.83	94.25	95.83	86.06	85.93	85.51	90.62	89.66	91.05			
Second-grade rails.....p. ct. of par. 4% bond..	85.09	86.94	88.32	78.55	77.25	77.64	83.09	80.99	82.51			
Public utility.....p. ct. of par. 4% bond..	74.90	76.82	79.49	73.25	73.14	73.13	79.47	79.08	79.51			
Industrial.....p. ct. of par. 4% bond..	75.43	76.33	76.13	75.24	74.54	73.84	77.74	77.97	78.18			
Comb. price index.....p. ct. of par. 4% bond..	81.43	82.93	84.26	77.99	77.43	77.23	82.45	81.68	82.53			
Bond prices, 1st of following month:												
5 Liberty bonds.....p. ct. of par..	105.44	105.23	105.84	100.64	100.61	100.34	103.20	103.88	103.11			
50 domestic bonds.....p. ct. of par..	99.81	100.41	100.98	96.82	96.51	96.34	99.09	99.48	99.57			
40 representative issues.....p. ct. of par..	91.12	90.99	88.25									
Bond yields:												
Total, 60 high grade.....per cent..	4.49	4.43	4.41	4.73	4.74	4.76	4.54	4.59	4.57			
Railroads (15).....per cent..	4.36	4.29	4.25	4.67	4.67	4.71	4.44	4.49	4.43			
Industrials (15).....per cent..	4.92	4.87	4.85	5.09	5.09	5.12	4.95	4.96	4.95			
Utilities (15).....per cent..	4.63	4.59	4.55	4.90	4.89	4.90	4.68	4.73	4.73			
Municipal (15).....per cent..	4.05	3.97	3.97	4.28	4.31	4.32	4.13	4.16	4.17			
Municipal bond yield (20).....per cent..	4.08	4.01	3.97	4.41	4.41	4.49	4.13	4.18	4.16			
U. S. Treasury notes and certificates, 3-6 months.....per cent..	1.83	1.53	1.84	4.55	4.70	4.58	4.12	4.36	4.57			
Liberty and Treasury bonds.....per cent..	3.37	3.38	3.37	3.68	3.72	3.70	3.50	3.56	3.54			
Long-term and real-estate bonds issued:												
Grand total.....thous. of dolls..	16,425	1,938	13,890	36,790	28,403	5,333	48,495	21,947	52,116	124,497	298,680	518,089
Purpose of issue:												
Finance construction.....thous. of dolls..	10,725	300	1,475	24,660	16,108	950	18,581	9,970	4,460	52,821	113,500	194,510
Real-estate mortgage.....thous. of dolls..	2,590	1,388	165	4,556	8,485	188	24,079	5,590	32,955	14,543	77,438	178,329
Acquisitions and improvements.....thous. of dolls..	480	10,500	2,390	105	200	1,510	3,252	530	18,990	52,805	49,758	
Kind of structure:												
Office and commercial.....thous. of dolls..	3,395	250	2,300	24,860	9,875	880	9,786	4,785	2,510	49,763	98,185	162,671
Hotels.....thous. of dolls..	1,400	675	600	1,175	9,995		4,020	2,200	400	4,173	25,230	34,560
Apartments.....thous. of dolls..	10,050	5,99	5,89	1,582	1,588	215	4,600	3,145	270	21,335	15,652	30,279
Interest rates.....per cent..												

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930, "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH SEPTEMBER 30		
	July	August	Septem- ber	July	August	Septem- ber	July	August	Septem- ber	1930	1929	1928
FOREIGN EXCHANGE RATES												
Europe:												
England.....dollars per £ sterling	4.87	4.87	4.86	4.85	4.85	4.85	4.86	4.85	4.85			
France.....dollars per franc	.039	.039	.039	.039	.039	.039	.039	.039	.039			
Italy.....dollars per lira	.052	.052	.052	.052	.052	.052	.052	.052	.052			
Belgium.....dollars per franc	.140	.140	.140	.139	.139	.139	.139	.139	.139			
Netherlands.....dollars per guilder	.402	.403	.403	.401	.401	.401	.403	.401	.401			
Sweden.....dollars per krone	.269	.269	.268	.268	.268	.268	.268	.268	.268			
Switzerland.....dollars per franc	.194	.194	.194	.192	.192	.193	.193	.193	.193			
Asia:												
Japan.....dollars per yen	.494	.494	.494	.456	.467	.473	.459	.451	.458			
India.....dollars per rupee	.361	.360	.360	.360	.360	.363	.363	.363	.363			
America:												
Canada.....dollars per Canadian dollar	1.001	1.001	1.001	.995	.994	.992	.998	1.000	1.000			
Argentina.....dollars per gold peso	.821	.825	.818	.954	.954	.953	.961	.959	.957			
Brazil.....dollars per milreis	.109	.100	.101	.119	.119	.119	.119	.119	.119			
Chile.....dollars per paper peso	.121	.121	.121	.120	.121	.121	.121	.121	.121			
U. S. FOREIGN TRADE												
Imports												
Grand total.....thous. of dollars	220,494	218,359	226,312	352,981	369,358	351,304	317,848	346,715	319,618	2,401,150	3,360,018	3,070,113
By grand divisions:												
Europe:												
Total.....thous. of dollars	62,046	63,495		115,113	109,759	120,056	95,596	107,793	102,315	7 635,954	7 880,320	7 805,114
France.....thous. of dollars	7,857	8,806		14,590	14,028	17,462	11,321	15,075	13,783	7 75,768	7 109,296	7 98,553
Germany.....thous. of dollars	12,724	14,334		22,806	22,731	21,800	20,668	21,023	18,661	7 122,580	7 171,560	7 143,954
Italy.....thous. of dollars	4,518	4,546		8,487	7,660	9,407	6,956	6,876	6,548	7 56,275	7 72,761	7 63,629
United Kingdom.....thous. of dollars	13,901	13,840		27,975	25,920	28,987	28,103	27,535	26,373	7 148,489	7 223,517	7 231,282
North America—												
Total.....thous. of dollars	57,515	55,129		79,393	82,242	76,942	77,533	78,216	76,926	7 530,966	7 683,995	7 644,309
Canada.....thous. of dollars	30,265	29,286		44,092	43,751	42,257	41,798	42,209	42,209	7 278,865	7 335,855	7 317,121
South America—												
Total.....thous. of dollars	30,243	28,280		46,630	51,624	45,387	45,894	51,043	37,560	7 318,045	7 442,692	7 399,063
Argentina.....thous. of dollars	3,931	3,341		7,386	7,818	6,734	8,119	8,975	6,313	7 60,966	7 78,493	7 74,120
Asia and Oceania—												
Total.....thous. of dollars	65,281	68,789		104,987	114,589	102,504	89,788	100,880	97,554	7 635,438	7 921,088	7 834,296
Japan.....thous. of dollars	17,147	25,249		28,885	40,254	39,973	24,888	38,993	33,741	7 178,481	7 270,874	7 250,581
Africa, total.....thous. of dollars	5,354	4,696		6,857	11,144	6,415	7,037	8,782	5,263	7 51,713	7 80,618	7 64,711
By economic classes:												
Crude materials.....thous. of dollars	* 69,585	72,611	75,404	119,038	125,817	122,062	106,065	122,186	110,289	796,350	1,195,010	1,122,851
Foodstuffs, crude and food animals.....thous. of dollars	29,310	26,598	27,582	42,957	39,357	40,700	43,174	45,940	37,207	310,489	409,510	417,960
Manufactured food-stuffs.....thous. of dollars	19,669	17,211	20,588	32,900	35,558	32,327	33,314	30,060	33,771	226,420	335,477	310,544
Semimanufactures.....thous. of dollars	* 44,688	44,141	40,970	71,833	79,725	70,609	60,038	66,337	63,455	486,122	674,842	557,761
Finished manufactures.....thous. of dollars	* 57,242	57,798	61,767	86,163	88,901	85,606	75,258	82,192	74,908	581,768	743,178	661,008
Exports												
Grand total, including reexports.....thous. of dollars	266,619	* 298,118	318,000	402,902	380,758	437,671	378,984	379,006	421,607	2,959,169	3,844,250	3,557,586
By grand divisions:												
Europe:												
Total.....thous. of dollars	113,043	143,262		160,999	160,654	201,300	152,285	149,216	192,840	7 1,208,057	7 1,441,501	7 1,399,779
France.....thous. of dollars	11,986	16,152		15,794	17,095	24,026	15,918	15,167	20,049	7 138,744	7 155,465	7 134,221
Germany.....thous. of dollars	14,151	22,784		24,634	26,367	38,993	22,092	24,579	46,298	7 170,094	7 231,208	7 252,709
Italy.....thous. of dollars	5,522	5,775		8,666	6,620	14,500	11,853	9,956	14,275	7 67,195	7 94,525	7 98,721
United Kingdom.....thous. of dollars	40,628	53,928		56,890	58,333	72,609	52,098	52,827	59,182	7 433,055	7 517,438	7 489,749
North America—												
Total.....thous. of dollars	82,956	82,945		116,405	111,517	117,649	110,919	118,041	115,500	7 737,944	7 952,746	7 857,090
Canada.....thous. of dollars	55,058	53,695		79,569	76,862	80,485	77,940	84,963	87,139	7 480,449	7 659,067	7 591,753
South America—												
Total.....thous. of dollars	27,612	25,744		49,293	39,430	43,550	43,907	43,767	33,805	7 238,462	7 376,723	7 305,236
Argentina.....thous. of dollars	10,816	9,741		20,481	17,352	17,995	16,736	17,348	11,457	7 92,057	7 145,943	7 114,261
Asia and Oceania—												
Total.....thous. of dollars	35,913	38,641		63,183	58,610	66,039	61,866	59,971	71,917	7 389,125	7 544,910	7 500,901
Japan.....thous. of dollars	7,489	8,821		15,006	11,507	19,117	17,987	15,517	27,542	7 113,321	7 153,110	7 156,426
Africa, total.....thous. of dollars	7,095	7,525		13,022	10,546	9,133	10,006	8,011	7,544	7 67,591	7 90,696	7 72,973
By economic classes:												
Total domestic exports only.....thous. of dollars	* 261,968	* 293,914	307,738	393,798	374,723	431,801	371,471	371,312	414,859	2,902,781	3,778,878	3,482,321
Crude materials.....thous. of dollars	36,537	* 53,156	93,749	50,015	50,891	112,260	60,177	52,375	120,188	2,556,097	607,362	770,827
Foodstuffs, crude and food animals.....thous. of dollars	16,656	24,160	18,183	20,259	28,438	29,943	14,217	20,310	42,363	134,439	205,560	183,034
Manufactured food-stuffs.....thous. of dollars	* 24,209	* 28,325	27,823	35,840	37,107	40,963	30,661	34,749	35,761	273,487	351,476	323,122
Semimanufactures.....thous. of dollars	* 39,831	* 40,770	37,192	60,511	57,069	57,601	61,397	55,873	51,077	407,970	558,178	537,329
Finished manufactures.....thous. of dollars	* 144,734	* 147,503	130,791	227,173	201,218	190,944	205,019	199,005	165,469	1,530,788	1,966,305	1,668,008
Agricultural exports (quantities):												
All commodities rel. to 1910-1914—	57	87		70	76	121	64	75	138			
All commodities except cotton.....rel. to 1910-1914—	98	130		117	132	143	84	126	168			
CANADIAN FOREIGN TRADE												
Total trade:												
Imports.....thous. of dollars	84,551	77,906	87,900	114,201	111,631	99,380	103,404	114,175	106,066	793,671	989,581	912,267
Exports.....thous. of dollars	77,906	70,613	82,190	105,636	98,395	89,424	127,369	113,904	111,856	678,428	883,215	917,839

* Revised.

Cumulative through Aug. 31.

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.

Agricultural machinery. Manufacture and Sale of Farm Equipment, 1929. 16 pages. (Bureau of the Census.) Price, 5 cents.

Aviation. Air Commerce Bulletin is issued semimonthly by the Aeronautics Branch of the Department of Commerce and contains short articles on aviation developments and a list of air transport routes.

Bureau of Standards Journal of Research is published monthly and contains the papers formerly issued as Scientific and Technologic Papers series, which 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, 10 cents; annual subscription, \$2.75.

Coal and coke. Simplification of Sizes and Terminology of High Volatile Bituminous Coal (Handled over Docks at American Head of Great Lakes). vi+14 pages, 1 chart. (Bureau of Standards. Miscellaneous Publication No. 113.) This is regional recommendation RR1-29. Price, 5 cents.

Commerce Reports. Index to Commerce Reports, Nos. 14-26, Vol. 2, Thirty-third Year, April-June, 1930. ii+xxv pages. (Bureau of Foreign and Domestic Commerce.) This publication, issued quarterly, indexes all material published in Commerce Reports under the subject, country, and author for the period indicated. Single copies, 5 cents; annual subscription, 20 cents.

Commerce Yearbook, 1930: Vol. I, United States. xxii+678 pages, charts, maps. (Bureau of Foreign and Domestic Commerce.) This volume of the Commerce Yearbook contains detailed information concerning business conditions in the United States and its noncontiguous Territories. Price, \$1.

Commercial laws. Trading Under Laws of Peru, by Roger D. Moore and Joaquin Servera. x+136 pages. (Bureau of Foreign and Domestic Commerce. Trade Promotion Series No. 98.) Discussion of the political and judicial organization of Peru, the codes of civil and commercial laws, bills of exchange, tax laws, regulations governing suspension of payments and bankruptcy, and the law on industrial property. Price, 25 cents.

Commercial standards. American National Special Screw Threads. iv+28 pages, illustrations. (Bureau of Standards. Commercial Standard CS25-30.) Price, 15 cents.

American National Standard Screw Threads (Coarse and Fine Thread Series). vi+22 pages, 1 illustration. (Bureau of Standards. Commercial Standard CS 24-30.) Price, 10 cents.

Fish. Alaska Fishery and Fur-Seal Industries in 1929, by Ward T. Bower. (Bureau of Fisheries. Document No. 1086.) Appendix X to Report of Commissioner of Fisheries for fiscal year 1930, pp. 205-339, 14 illustrations. This bulletin gives the regulations governing the fisheries of Alaska, with a report on operations of the industry during 1929. There is also a report on the fur-seal industry of the Pribilof Islands. Price, 25 cents.

Experiments in Culture of Black Bass and Other Pond-fish, by H. S. Davis and A. H. Wiebe. (Bureau of Fisheries. Document No. 1085.) Appendix IX to Report of Commissioner of Fisheries for fiscal year 1930, pp. 117-203, 5 illustrations, 1 chart. Report on experiments in the propagation of black bass and other fish in ponds. A description of the ponds is given, the fertilization used, and methods of caring for the fish. A bibliography is included. Price, 10 cents.

Review of Fisheries of California, by R. H. Fiedler. (Bureau of Fisheries. Document No. 1087.) Appendix XI to Report of Commissioner of Fisheries for fiscal year 1930, pp. 341-369, 4 illustrations, 4 charts. Deals with the location of fisheries along the California coast, the catch of various kinds of fish, amount and kinds canned, and salmon and cod fishing in Alaska. Price, 10 cents.

Metals and minerals. Accelerated Tests of Asphalts, by O. G. Stricker. (Bureau of Standards. Research Paper No. 197.) Reprint from Bureau of Standards Journal of Research, vol. 5, August, 1930, pp. 247-253, 8 pages of plates. This publication discusses the equipment and methods used for accelerated weathering tests of asphalts and suggests appli-

cations of the method in the solution of problems encountered in asphalt technology. Price, 10 cents.

Silica in 1929. (Bureau of Mines. Mineral Resources of United States, 1929, Pt. II, pp. 35-40.) This publication gives statistics regarding production of silica and regions where found. Price, 5 cents.

Structure of Spectra of Doubly and Trebly Ionized Zinc, by C. C. Kiess and R. J. Land. (Bureau of Standards. Research Paper No. 202.) Reprint from Bureau of Standards Journal of Research, vol. 5, August, 1930, pp. 305-324, 3 illustrations, 1 plate. Price, 10 cents.

Monthly Summary of Foreign Commerce of United States, August, 1930. Parts I and II. (Bureau of Foreign and Domestic Commerce.) Part I contains statistics of exports of domestic merchandise, and imports by articles for August, 1929 and 1930, and for eight months ending August, 1929 and 1930. Part II contains summaries of export and import trade, monthly average import and export prices, and statistics of trade with Alaska, Hawaii, and Porto Rico. Single copies, Part I, 10 cents; Part II, 5 cents. Annual subscription, \$1.25.

Motion Pictures in China. ii+16 pages. (Bureau of Foreign and Domestic Commerce. Trade Information Bulletin No. 722.) Discussion of the increased interest in motion pictures in China, the growing local film industry, the number of films exported from the United States to China, the number of theaters in operation in different towns, and regulations governing film exhibition in each of these places. Price, 10 cents.

Motor vehicles. Automotive Market in Paraguay. ii+13 pages (Bureau of Foreign and Domestic Commerce. Trade Information Bulletin No. 720.) Discussion of highway conditions, the number of motor vehicles in operation, factors influencing the marketing of cars, and the outlook for future sales in Paraguay. Price, 10 cents.

Petroleum. International Trade in Petroleum and Its Products. 1929. vi+175 pages. (Bureau of Foreign and Domestic Commerce. Trade Promotion Series No. 99.) This publication contains tables showing the exports of petroleum products from the United States and the imports of such products into the different countries of the world during 1927 to 1929. There are also tables showing exports of petroleum products from countries where such trade exists. Price, 30 cents.

Petroleum Refineries in Foreign Countries, 1930. ii+43 pages. (Bureau of Foreign and Domestic Commerce. Trade Information Bulletin No. 723.) This bulletin deals with petroleum refinery activities in different countries, showing location of refineries, source of crude product, daily output, and age of equipment used. Price, 10 cents.

Population Statistics. Fifteenth Census of United States, 1930. Rhode Island, Number and Distribution of Inhabitants, 6 pages, 1 illustration. (Bureau of the Census. Population Bulletin, First Series.)

Fifteenth Census of United States, 1930. Virginia, Number and Distribution of Inhabitants, 20 pages, 1 illustration. (Bureau of the Census. Population Bulletin, First Series.)

Fifteenth Census of United States, 1930. West Virginia, Number and Distribution of Inhabitants, 15 pages, 1 illustration. (Bureau of the Census. Population Bulletin, First Series.)

Radio Service Bulletin is issued monthly by the Radio Division of the Department of Commerce and contains list of radio stations. Single copies, 5 cents; annual subscription, 25 cents.

Shipping. American Documented Seagoing Merchant Vessels of 500 Gross Tons and Over. Published monthly by the Bureau of Navigation. Single copies, 10 cents; annual subscription, 75 cents.

Washing, Cleaning, and Polishing Materials. ii+47 pages. (Bureau of Standards. Circular No. 282.) Discussion of the composition of different laundry soaps and alkaline cleaners. There is a brief account of the nature and application of dry-cleaning fluids and soaps, with a discussion of polishes. Price, 10 cents.

CHIEF FUNCTIONS OF THE DEPARTMENT OF COMMERCE

R. P. LAMONT, Secretary of Commerce

JULIUS KLEIN, Assistant Secretary of Commerce.

EPHRAIM F. MORGAN, Solicitor

AERONAUTICS BRANCH

CLARENCE M. YOUNG, Assistant Secretary of Commerce for Aeronautics

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

BUREAU OF THE CENSUS

WILLIAM M. STEUART, Director

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

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

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

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

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

WILLIAM L. COOPER, Director

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

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

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

The publication of statistics on imports and exports.

The study of the processes of domestic trade and commerce.

The Survey of Current Business.

BUREAU OF STANDARDS

GEORGE K. BURGESS, Director

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

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

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

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

BUREAU OF MINES

SCOTT TURNER, Director

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

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

Research on helium and operation of plants producing it.

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

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

BUREAU OF FISHERIES

HENRY O'MALLEY, Commissioner

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

BUREAU OF LIGHTHOUSES

GEORGE R. PUTNAM, Commissioner

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

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

COAST AND GEODETIC SURVEY

RAYMOND S. PATTON, Director

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

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

BUREAU OF NAVIGATION

ARTHUR J. TYREE, Commissioner

Superintendence of commercial marine and merchant seamen.

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

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

STEAMBOAT INSPECTION SERVICE

DICKERSON N. HOOVER, Supervising Inspector General

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

UNITED STATES PATENT OFFICE

THOMAS E. ROBERTSON, Commissioner

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

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

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

RADIO DIVISION

W. D. TEBBELL, Chief

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

U. S. GOVERNMENT PRINTING OFFICE, 1928