

UNITED STATES  
DEPARTMENT OF COMMERCE  
WASHINGTON

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SURVEY OF  
CURRENT BUSINESS

MARCH, 1929

No. 91



**IMPORTANT NOTICE**

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

## INTRODUCTION

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

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

### WEEKLY SUPPLEMENT

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

### RELATIVE AND INDEX NUMBERS

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

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

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

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

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

### RATIO CHARTS

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

### RECORD BOOK

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

### METHODS OF USE

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

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



# SURVEY OF CURRENT BUSINESS

PUBLISHED BY

UNITED STATES DEPARTMENT OF COMMERCE



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

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March, 1929

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## PRELIMINARY SUMMARY FOR FEBRUARY

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

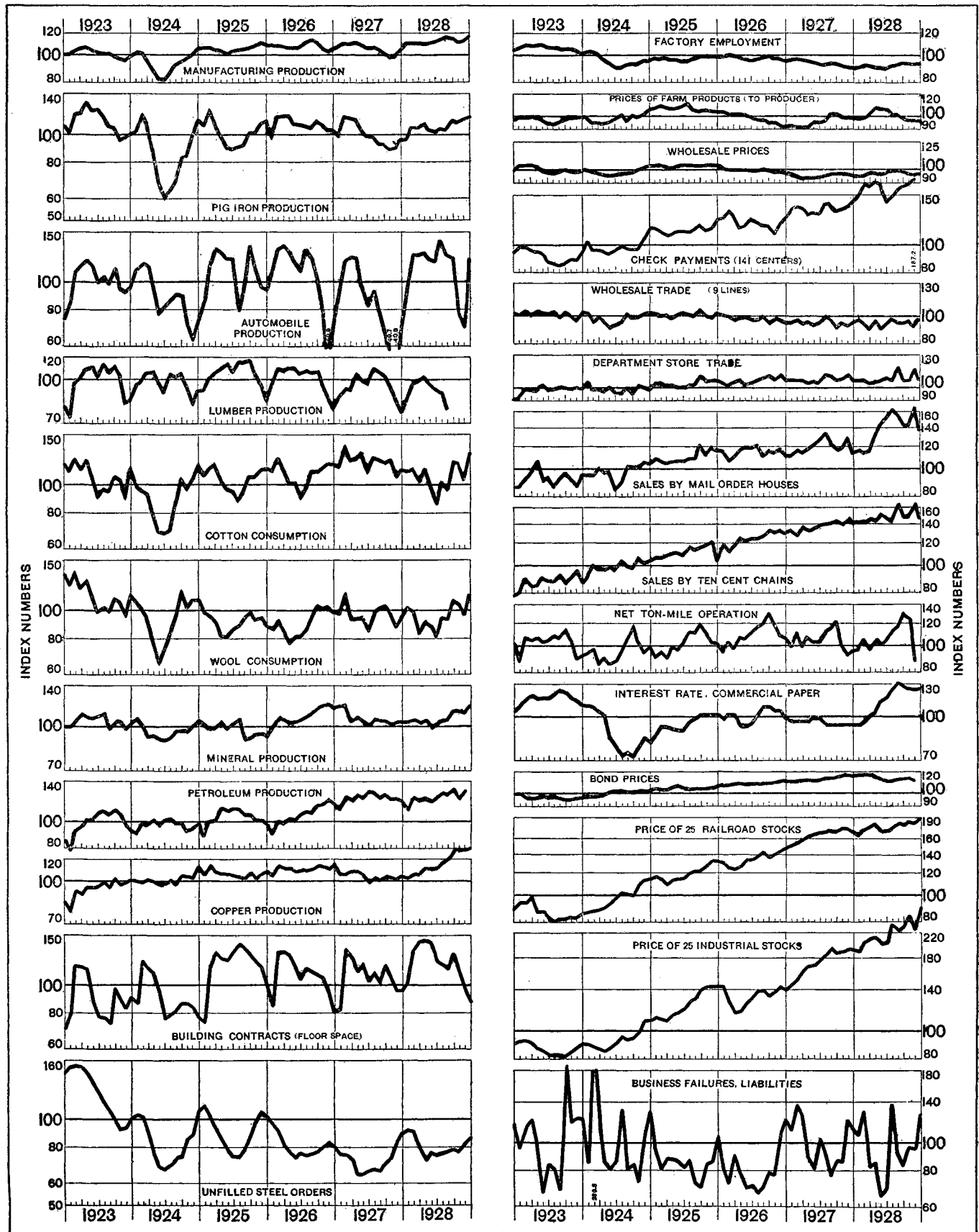
Loans and discounts of Federal reserve member banks at the end of February were somewhat higher than at the end of the preceding month, showing a gain also over a year ago. Interest rates on call money showed practically no change from the previous month, but were higher than a year ago. Time-money rates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

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

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

# MONTHLY BUSINESS INDICATORS, 1923-1928

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



## MONTHLY BUSINESS INDICATORS

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

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

| ITEM                                  | MONTHLY AVERAGE               |       |       |       |       |       | 1927  | 1928  |       |       |       |       |       |       |       |       |       |       |       | 1929  |
|---------------------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                       | 1923                          | 1924  | 1925  | 1926  | 1927  | 1928  | Dec.  | Jan.  | Feb   | Mar   | Apr.  | May   | June  | July  | Aug.  | Sept  | Oct.  | Nov.  | Dec.  | Jan.  |
|                                       | 1923-1925 monthly average=100 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Industrial production:                |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| • Total manufacturing.....            | 101.0                         | 94.0  | 105.0 | 108.0 | 106.0 | 111.0 | 99.0  | 107.0 | 111.0 | 110.0 | 110.0 | 110.0 | 110.0 | 111.0 | 113.0 | 116.0 | 114.0 | 111.0 | 113.0 | 117.0 |
| • Total minerals.....                 | 105.0                         | 96.0  | 99.0  | 107.0 | 107.0 | 106.0 | 103.0 | 103.0 | 103.0 | 105.0 | 103.0 | 105.0 | 99.0  | 101.0 | 105.0 | 108.0 | 114.0 | 113.0 | 112.0 | 118.0 |
| Pig iron.....                         | 111.7                         | 86.7  | 101.5 | 109.0 | 101.0 | 105.5 | 90.2  | 96.1  | 97.1  | 107.1 | 106.6 | 109.9 | 103.1 | 102.8 | 105.0 | 102.5 | 112.9 | 110.5 | 112.8 | 115.2 |
| Steel ingots.....                     | 104.8                         | 88.7  | 106.4 | 113.1 | 104.6 | 120.2 | 91.9  | 115.4 | 117.0 | 130.4 | 124.5 | 121.6 | 108.3 | 110.3 | 120.9 | 120.0 | 134.5 | 123.2 | 116.3 | 129.9 |
| Automobiles.....                      | 101.7                         | 90.8  | 107.5 | 108.4 | 85.7  | 109.8 | 40.4  | 70.1  | 97.9  | 125.0 | 124.0 | 128.8 | 120.0 | 118.6 | 139.5 | 125.6 | 120.1 | 77.7  | 70.7  | 121.6 |
| Cement.....                           | 92.1                          | 99.8  | 108.1 | 110.0 | 115.3 | 118.0 | 96.5  | 78.6  | 70.8  | 82.3  | 108.4 | 139.3 | 140.8 | 140.6 | 150.9 | 143.9 | 141.1 | 124.5 | 98.1  | 78.7  |
| Lumber (5 species).....               | 98.6                          | 96.2  | 105.2 | 101.5 | 94.9  | ..... | 82.9  | 75.8  | 86.7  | 96.3  | 98.4  | 101.2 | 97.4  | 92.7  | 90.4  | 79.1  | ..... | ..... | ..... | ..... |
| Cotton (consumption).....             | 105.9                         | 89.7  | 104.4 | 108.5 | 120.2 | 106.8 | 105.0 | 114.2 | 111.6 | 113.3 | 102.3 | 112.5 | 99.5  | 85.7  | 102.6 | 95.9  | 120.6 | 119.0 | 104.1 | 130.2 |
| Wool (consumption).....               | 112.8                         | 94.6  | 92.6  | 89.7  | 97.0  | 94.7  | 88.0  | 95.2  | 102.0 | 98.7  | 82.0  | 92.7  | 87.1  | 80.4  | 95.2  | 91.8  | 108.6 | 105.7 | 96.8  | 114.0 |
| Raw material output:                  |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Animal products.....                  | 100.0                         | 104.0 | 96.0  | 96.0  | 97.0  | 99.0  | 88.0  | 96.0  | 94.0  | 97.0  | 95.0  | 108.0 | 116.0 | 108.0 | 97.0  | 92.0  | 102.0 | 93.0  | 92.0  | 96.0  |
| Crops.....                            | 92.0                          | 104.0 | 104.0 | 109.0 | 113.0 | 119.0 | 120.0 | 98.0  | 81.0  | 77.0  | 81.0  | 72.0  | 52.0  | 87.0  | 114.0 | 178.0 | 251.0 | 179.0 | 152.0 | 114.0 |
| Forest products.....                  | 99.0                          | 97.0  | 104.0 | 98.0  | 93.0  | 88.2  | 86.0  | 81.0  | 87.0  | 96.0  | 96.0  | 101.0 | 97.0  | 88.0  | 90.0  | 78.0  | 84.0  | 84.0  | 76.0  | 84.0  |
| Crude petroleum.....                  | 99.4                          | 96.9  | 103.7 | 104.6 | 122.3 | 122.2 | 122.1 | 117.8 | 110.9 | 122.2 | 117.5 | 122.5 | 118.1 | 122.9 | 126.8 | 124.5 | 129.5 | 123.8 | 129.4 | 133.5 |
| Bituminous coal.....                  | 108.0                         | 92.5  | 99.5  | 109.7 | 99.0  | 94.3  | 94.4  | 101.5 | 94.9  | 100.9 | 73.9  | 84.1  | 82.6  | 83.3  | 94.8  | 94.8  | 115.6 | 105.7 | 99.6  | 118.1 |
| Copper.....                           | 93.4                          | 100.2 | 106.4 | 110.2 | 104.9 | 114.9 | 101.9 | 103.8 | 102.2 | 106.6 | 105.7 | 111.8 | 111.0 | 111.3 | 116.7 | 118.8 | 131.1 | 129.5 | 129.8 | 131.4 |
| Power and construction:               |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Electric power.....                   | 92.5                          | 98.1  | 109.5 | 122.6 | 133.3 | 146.0 | 143.8 | 144.9 | 137.0 | 144.5 | 136.7 | 142.2 | 139.8 | 142.4 | 149.8 | 145.2 | 158.0 | 154.6 | 157.7 | 163.9 |
| Building contracts (37 States).....   | 89.7                          | 92.7  | 117.6 | 111.0 | 106.8 | 121.4 | 95.2  | 96.0  | 103.7 | 132.7 | 142.4 | 143.5 | 142.2 | 123.7 | 118.8 | 114.2 | 129.1 | 111.1 | 98.2  | 88.6  |
| Unfilled orders:                      |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| General index.....                    | 121.7                         | 87.0  | 91.3  | 84.6  | 74.0  | 76.2  | 71.6  | 81.2  | 81.6  | 81.4  | 76.8  | 73.9  | 75.2  | 77.1  | 74.7  | 74.7  | 71.5  | 72.7  | 71.0  | 79.0  |
| U. S. Steel Corporation.....          | 125.8                         | 83.6  | 90.6  | 82.1  | 71.1  | 80.7  | 83.2  | 89.6  | 92.1  | 90.8  | 81.1  | 71.6  | 76.2  | 74.8  | 75.9  | 77.4  | 78.6  | 76.9  | 83.3  | 86.1  |
| Stocks:                               |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| General index.....                    | 94.5                          | 102.0 | 103.5 | 114.6 | 120.8 | 122.7 | 133.3 | 128.7 | 129.9 | 126.8 | 122.4 | 116.3 | 108.3 | 105.0 | 107.5 | 116.0 | 132.9 | 138.4 | 141.3 | 137.2 |
| Manfd. commodities (28).....          | 93.8                          | 103.2 | 103.0 | 106.3 | 127.0 | 116.7 | 111.6 | 114.7 | 120.0 | 120.2 | 118.5 | 120.2 | 117.3 | 118.3 | 115.4 | 111.3 | 110.5 | 113.7 | 119.7 | 124.0 |
| Cotton.....                           | 102.5                         | 91.4  | 106.2 | 145.5 | 153.1 | 123.8 | 195.9 | 178.6 | 159.1 | 135.8 | 117.7 | 95.0  | 74.7  | 58.6  | 52.4  | 89.5  | 155.1 | 181.4 | 187.7 | 169.8 |
| Copper (refined).....                 | 106.4                         | 113.9 | 73.1  | 64.8  | 85.4  | 58.4  | 84.2  | 85.2  | 76.8  | 77.1  | 64.4  | 58.6  | 52.0  | 48.5  | 48.4  | 45.8  | 40.3  | 46.1  | 57.8  | 55.4  |
| Employment:                           |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Factories.....                        | 106.6                         | 96.3  | 97.2  | 98.0  | 94.3  | 91.9  | 90.7  | 89.8  | 91.2  | 91.8  | 91.4  | 91.2  | 91.3  | 90.3  | 91.7  | 93.1  | 93.9  | 93.5  | 93.6  | 93.4  |
| Prices:                               |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Farm products, to producers.....      | 97.8                          | 97.1  | 106.5 | 98.6  | 94.9  | 100.7 | 99.3  | 99.3  | 97.8  | 99.3  | 101.4 | 107.2 | 105.1 | 105.1 | 100.7 | 102.2 | 99.3  | 97.1  | 97.1  | 96.4  |
| Wholesale, all commodities.....       | 99.9                          | 97.4  | 102.8 | 99.3  | 94.7  | 97.0  | 96.1  | 95.6  | 95.7  | 95.3  | 96.7  | 97.9  | 96.9  | 97.6  | 98.2  | 99.4  | 97.1  | 96.0  | 96.0  | 96.5  |
| Retail food.....                      | 97.6                          | 97.6  | 104.9 | 107.6 | 103.6 | 102.9 | 104.2 | 103.6 | 101.3 | 101.2 | 101.6 | 102.8 | 102.0 | 102.1 | 103.0 | 105.4 | 104.8 | 105.1 | 104.1 | 103.3 |
| Cost of living (including food).....  | 98.1                          | 99.9  | 102.3 | 102.3 | 99.9  | 98.7  | 99.9  | 99.2  | 98.4  | 98.1  | 97.9  | 98.4  | 98.0  | 93.0  | 93.0  | 99.3  | 99.3  | 99.3  | 98.7  | 98.0  |
| Distribution (values):                |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| • Bank debits, 141 cities.....        | 91.2                          | 96.7  | 111.9 | 119.6 | 132.5 | 158.2 | 136.9 | 142.1 | 149.6 | 164.8 | 161.8 | 168.8 | 165.4 | 140.4 | 149.9 | 156.9 | 161.0 | 165.1 | 172.3 | 187.2 |
| • Wholesale trade.....                | 101.0                         | 98.0  | 101.0 | 98.0  | 95.0  | 94.1  | 95.3  | 96.3  | 99.1  | 95.6  | 91.6  | 98.7  | 92.5  | 94.2  | 100.6 | 96.4  | 97.4  | 100.0 | 94.9  | 101.3 |
| • Department stores, sales.....       | 98.0                          | 99.0  | 103.0 | 106.0 | 106.0 | 108.0 | 111.0 | 105.0 | 105.0 | 105.0 | 103.0 | 104.0 | 104.0 | 103.0 | 106.0 | 120.0 | 105.0 | 107.0 | 117.0 | 107.0 |
| • Mail-order houses, sales.....       | 92.0                          | 98.0  | 110.0 | 115.0 | 120.0 | 137.0 | 128.0 | 113.0 | 116.0 | 113.0 | 117.0 | 132.0 | 144.0 | 153.0 | 160.0 | 154.0 | 140.0 | 141.0 | 165.0 | 136.0 |
| • 10-cent chains, sales.....          | 88.0                          | 99.0  | 113.0 | 125.0 | 138.0 | 150.0 | 147.0 | 140.0 | 142.0 | 147.0 | 144.0 | 153.0 | 148.0 | 144.0 | 165.0 | 148.0 | 148.0 | 151.0 | 163.6 | 145.8 |
| Imports.....                          | 97.8                          | 93.1  | 109.0 | 114.3 | 108.0 | 105.5 | 102.5 | 104.6 | 108.7 | 117.8 | 106.9 | 109.6 | 98.2  | 98.4  | 107.3 | 99.0  | 110.0 | 101.1 | 105.0 | 114.1 |
| Exports.....                          | 91.5                          | 100.8 | 107.8 | 105.5 | 106.8 | 112.6 | 107.4 | 108.2 | 97.8  | 110.8 | 95.9  | 111.1 | 102.3 | 99.8  | 100.1 | 111.1 | 145.1 | 143.5 | 125.3 | 129.3 |
| Transportation:                       |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| • Car loadings.....                   | 99.8                          | 97.6  | 102.8 | 106.8 | 105.1 | 104.7 | 96.8  | 98.0  | 101.8 | 129.0 | 83.0  | 106.4 | 127.0 | 82.0  | 102.9 | 132.4 | 85.2  | 105.8 | 102.4 | 101.5 |
| Freight, net ton-miles.....           | 102.2                         | 95.9  | 101.9 | 109.1 | 106.0 | 106.5 | 92.7  | 97.2  | 95.7  | 105.8 | 96.1  | 105.2 | 100.0 | 105.0 | 113.6 | 117.3 | 129.2 | 124.6 | 88.4  | ..... |
| Finances:                             |                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Member bank loans and discounts.....  | 94.1                          | 98.5  | 107.4 | 112.9 | 117.3 | 126.8 | 123.2 | 121.9 | 120.9 | 123.3 | 127.3 | 126.9 | 128.4 | 126.6 | 125.6 | 127.3 | 128.3 | 129.8 | 135.4 | 128.7 |
| Interest rate (commercial paper)..... | 116.2                         | 90.0  | 93.5  | 100.9 | 95.4  | 112.8 | 92.8  | 92.8  | 92.8  | 95.8  | 101.6 | 104.4 | 113.2 | 119.0 | 124.8 | 130.6 | 127.6 | 124.8 | 84.8  | 124.8 |
| Federal reserve ratio.....            | 99.0                          | 104.1 | 96.9  | 96.0  | 99.1  | 89.1  | 86.5  | 95.5  | 96.0  | 95.0  | 90.9  | 89.2  | 84.7  | 88.9  | 90.0  | 86.5  | 87.0  | 84.5  | 80.2  | 89.9  |
| Price, corporation bonds.....         | 96.4                          | 99.9  | 103.6 | 108.0 | 112.5 | 113.0 | 115.6 | 115.9 | 115.8 | 115.7 | 116.0 | 115.0 | 112.3 | 110.9 | 109.8 | 111.0 | 111.3 | 112.0 | 110.7 | ..... |
| Price, railroad stocks.....           | 86.0                          | 96.1  | 117.9 | 133.4 | 162.7 | 174.5 | 171.1 | 169.1 | 164.7 | 170.1 | 176.0 | 178.9 | 169.6 | 170.3 | 173.8 | 176.8 | 176.4 | 186.0 | 180.3 | 189.3 |
| Price, industrial stocks.....         | 88.1                          | 91.9  | 122.0 | 132.4 | 171.4 | 214.8 | 193.7 | 193.5 | 191.2 | 204.8 | 210.4 | 213.6 | 202.1 | 206.1 | 213.4 | 226.9 | 234.5 | 252.6 | 229.0 | 275.0 |
| Failures (liabilities).....           | 106.0                         | 106.8 | 87.2  | 80.4  | 102.2 | 95.6  | 120.3 | 112.3 | 106.3 | 129.3 | 82.5  | 85.2  | 70.3  | 69.8  | 137.3 | 80.1  | 82.6  | 95.8  | 96.2  | 127.1 |

\* Seasonal adjustments.

## BUSINESS CONDITIONS IN JANUARY

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

### COMMODITY STOCKS

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

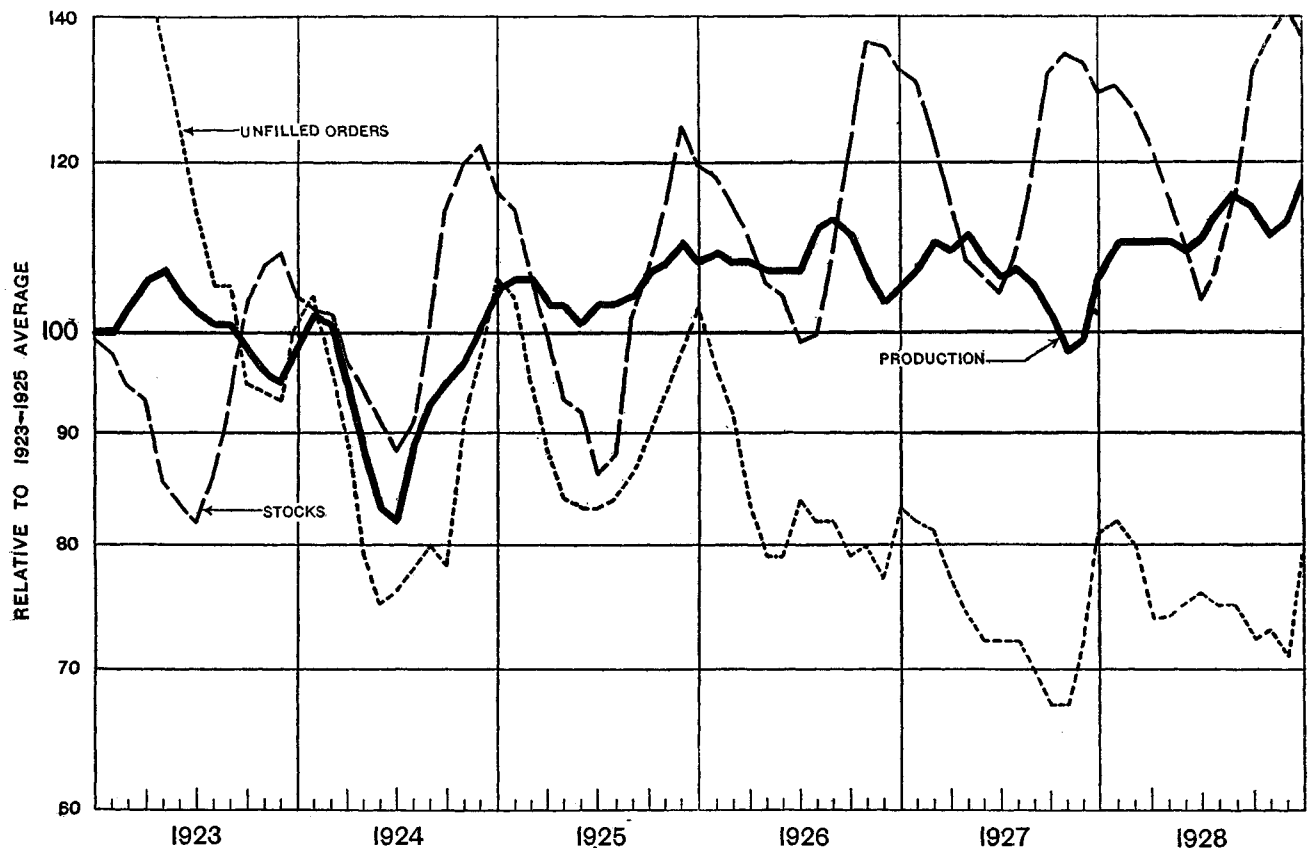
tribution of goods, as indicated by car loadings, was greater than a year ago.

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

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

### PRODUCTION STOCKS AND UNFILLED ORDERS FOR MANUFACTURED COMMODITIES

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



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

### SALES

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

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

## PRICES

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

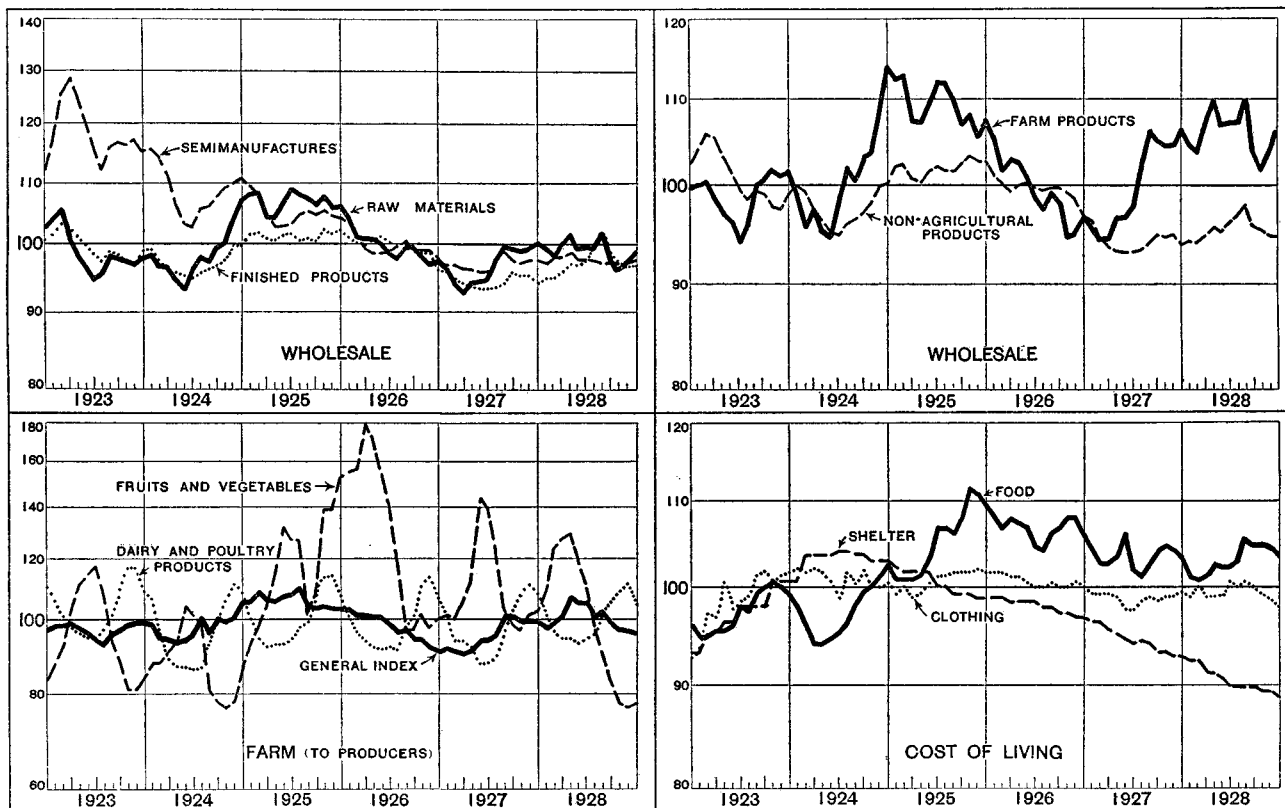
The cost-of-living index showed a decline from both the preceding month and January of last year. As compared with the previous month, all items showed lower prices, except fuel and light, which showed no change. As compared with last year, all items were lower except food and fuel, which showed no change.

## EMPLOYMENT

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

## PRICE COMPARISONS

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



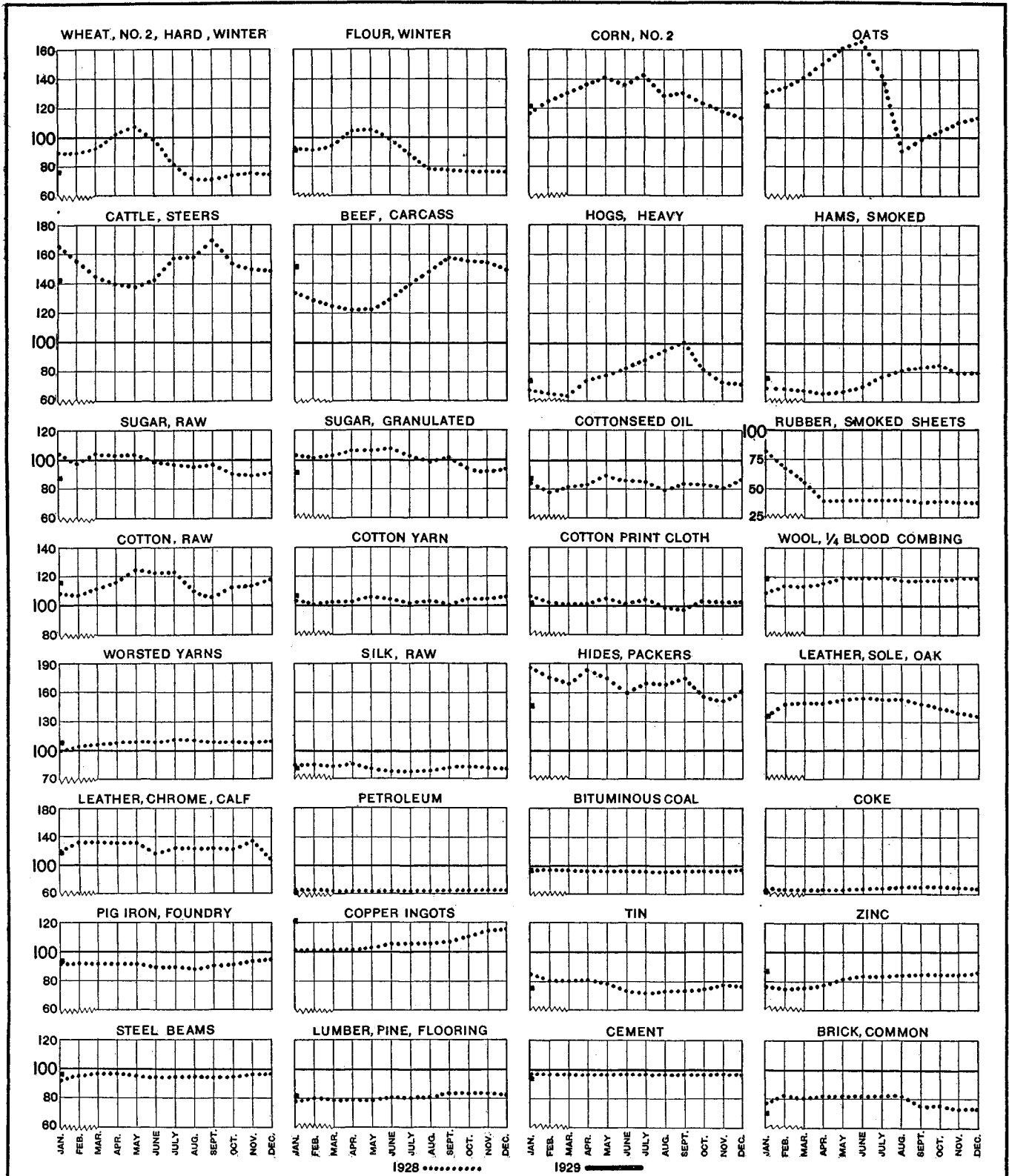
preceding month, while prices for nonagricultural commodities and semimanufactures showed no change. As compared with last year, prices for nonagricultural commodities and finished manufactured products were higher, while raw materials and semimanufactures were lower.

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

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

## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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





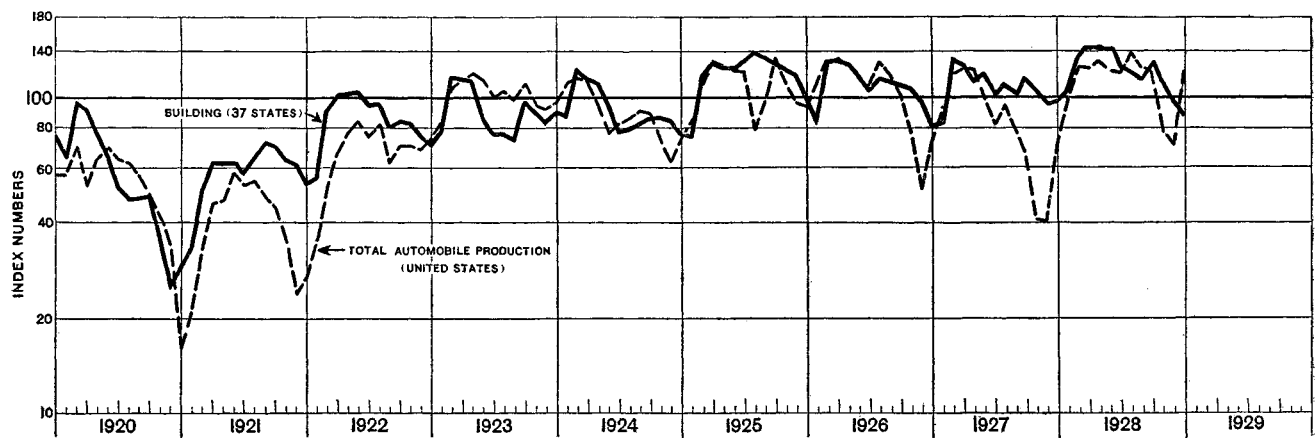
# WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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

| COMMODITIES   | Unit             | ACTUAL PRICE<br>(dollars) |                  |                  | RELATIVE PRICE      |                     |                    |                     |                    |
|---|------------------|---------------------------|------------------|------------------|---------------------|---------------------|--------------------|---------------------|--------------------|
|   |                  | Decem-<br>ber, 1928       | January,<br>1929 | January,<br>1928 | 1926 average=100    |                     |                    |                     |                    |
|   |                  |                           |                  |                  | Novem-<br>ber, 1928 | Decem-<br>ber, 1928 | Janu-<br>ary, 1929 | Decem-<br>ber, 1927 | Janu-<br>ary, 1928 |
| <b>FARM PRODUCTS—AVERAGE PRICE TO PRODUCER</b>                                      |                  |                           |                  |                  |                     |                     |                    |                     |                    |
| Wheat.....  | Bushel.....      | 0.982                     | 0.985            | 1.152            | 72                  | 73                  | 73                 | 84                  | 85                 |
| Corn.....   | Bushel.....      | .761                      | .802             | .752             | 108                 | 109                 | 115                | 107                 | 108                |
| Potatoes.....   | Bushel.....      | .579                      | .589             | .938             | 31                  | 31                  | 32                 | 51                  | 50                 |
| Cotton.....   | Pound.....       | .180                      | .179             | .186             | 118                 | 119                 | 119                | 124                 | 123                |
| Cottonseed.....   | Ton.....         | 37.74                     | 38.05            | 37.40            | 137                 | 139                 | 140                | 137                 | 138                |
| Cattle, beef.....   | Pound.....       | .0894                     | .0897            | .0848            | 143                 | 138                 | 139                | 129                 | 131                |
| Hogs.....   | Pound.....       | .0793                     | .0818            | .0781            | 72                  | 67                  | 69                 | 69                  | 66                 |
| Lambs.....  | Pound.....       | .1141                     | .1223            | .1134            | 99                  | 99                  | 106                | 98                  | 98                 |
| <b>FARM PRODUCTS—MARKET PRICE</b>   |                  |                           |                  |                  |                     |                     |                    |                     |                    |
| Wheat, No. 1, northern spring (Minneapolis).....                                    | Bushel.....      | 1.172                     | 1.217            | 1.293            | 77                  | 76                  | 79                 | 82                  | 84                 |
| Wheat, No. 2, red, winter (Chicago).....  | Bushel.....      | 1.414                     | 1.405            | 1.425            | 87                  | 92                  | 91                 | 90                  | 92                 |
| Corn, contract grade No. 2, cash (Chicago).....                                     | Bushel.....      | .858                      | .915             | .888             | 118                 | 113                 | 121                | 114                 | 117                |
| Oats, contract grades, cash (Chicago).....  | Bushel.....      | .486                      | .523             | .564             | 110                 | 113                 | 122                | 129                 | 131                |
| Barley, feeding (Chicago).....  | Bushel.....      | .574                      | .600             | .932             | 80                  | 83                  | 87                 | 126                 | 134                |
| Rye, No. 2, cash (Chicago).....   | Bushel.....      | 1.059                     | 1.044            | 1.085            | 112                 | 111                 | 109                | 114                 | 114                |
| Tobacco, leaf, average sales, warehouse (Kentucky).....                             | Cwt.....         | 25.691                    | 28.136           | 23.227           | 117                 | 303                 | 332                | 239                 | 274                |
| Cotton, middling upland (New York).....   | Pound.....       | .205                      | .202             | .190             | 114                 | 117                 | 115                | 112                 | 108                |
| Wool, 1/4 blood combing, Ohio and Pennsylvania fleeces (Boston).....                | Pound.....       | .55                       | .55              | .50              | 120                 | 120                 | 120                | 107                 | 106                |
| Cattle, steers, good to choice, corn fed (Chicago).....                             | Cwt.....         | 14.175                    | 13.531           | 15.800           | 150                 | 149                 | 142                | 163                 | 166                |
| Hogs, heavy (Chicago).....  | Cwt.....         | 8.780                     | 9.100            | 8.320            | 73                  | 71                  | 74                 | 70                  | 67                 |
| Sheep, ewes (Chicago).....  | Cwt.....         | 6.275                     | 8.388            | 6.050            | 81                  | 95                  | 127                | 85                  | 92                 |
| Sheep, lambs (Chicago).....   | Cwt.....         | 13.775                    | 15.594           | 12.650           | 93                  | 101                 | 114                | 95                  | 92                 |
| <b>FOOD</b>   |                  |                           |                  |                  |                     |                     |                    |                     |                    |
| Flour, standard patents (Minneapolis).....  | Barrel.....      | 6.131                     | 6.340            | 7.450            | 74                  | 73                  | 75                 | 84                  | 88                 |
| Flour, winter straights (Kansas City).....  | Barrel.....      | 5.500                     | 5.519            | 6.700            | 76                  | 76                  | 78                 | 91                  | 92                 |
| Sugar, 96° centrifugal (New York).....  | Pound.....       | .039                      | .038             | .045             | 89                  | 91                  | 88                 | 106                 | 104                |
| Sugar, granulated, in barrels (New York).....                                       | Pound.....       | .052                      | .050             | .057             | 92                  | 94                  | 92                 | 101                 | 104                |
| Cottonseed oil, prime yellow (New York).....  | Pound.....       | .103                      | .103             | .101             | 81                  | 87                  | 87                 | 84                  | 85                 |
| Beef, fresh, carcass, good native steers (Chicago).....                             | Pound.....       | .245                      | .240             | .220             | 154                 | 149                 | 146                | 136                 | 134                |
| Beef, fresh, carcass, steers (New York).....  | Pound.....       | .245                      | .245             | .230             | 154                 | 144                 | 144                | 139                 | 135                |
| Pork, smoked hams (Chicago).....  | Pound.....       | .244                      | .232             | .212             | 79                  | 79                  | 76                 | 70                  | 69                 |
| Butter, creamery, 92 score (New York).....  | Pound.....       | .51                       | .48              | .49              | 113                 | 113                 | 107                | 116                 | 109                |
| Oleomargarine, standard, uncolored (Chicago).....                                   | Pound.....       | .235                      | .235             | .235             | 103                 | 103                 | 103                | 103                 | 103                |
| <b>TEXTILES</b>   |                  |                           |                  |                  |                     |                     |                    |                     |                    |
| Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston).....          | Pound.....       | .378                      | .382             | .369             | 105                 | 106                 | 107                | 104                 | 103                |
| Cotton-print cloth, 64 x 60-38 1/2"-5.35-yards to pound.....                        | Yard.....        | .078                      | .076             | .080             | 103                 | 103                 | 101                | 105                 | 106                |
| Cotton sheeting, brown 4/4 Trion (New York).....                                    | Yard.....        | .091                      | .090             | .098             | 97                  | 97                  | 97                 | 113                 | 105                |
| Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....               | Pound.....       | 1.575                     | 1.575            | 1.425            | 108                 | 110                 | 110                | 98                  | 99                 |
| Woman's dress goods, French, 39 inches at mills, serge.....                         | Yard.....        | .975                      | .975             | 1.000            | 94                  | 94                  | 94                 | 97                  | 97                 |
| Suitings, unfinished worsted—13-ounce, mill.....                                    | Yard.....        | 2.008                     | 2.008            | 1.935            | 100                 | 100                 | 100                | 96                  | 97                 |
| Suitings, serge, 11-ounce, 56-58 inch.....  | Yard.....        | 1.998                     | 1.998            | 2.093            | 92                  | 92                  | 92                 | 96                  | 97                 |
| Silk, Japan, 18-15.....   | Pound.....       | 4.998                     | 4.998            | 5.145            | 82                  | 81                  | 81                 | 81                  | 83                 |
| Hosiery, women's, pure silk, mill.....  | Dozen pair.....  | 10.290                    | 10.290           | 10.290           | 85                  | 85                  | 85                 | 86                  | 85                 |
| <b>LEATHER</b>  |                  |                           |                  |                  |                     |                     |                    |                     |                    |
| Hides, green salted, packers' heavy native steers (Chicago).....                    | Pound.....       | .226                      | .205             | .261             | 159                 | 161                 | 146                | 178                 | 186                |
| Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....                     | Pound.....       | .250                      | .219             | .300             | 140                 | 144                 | 126                | 144                 | 173                |
| Leather, chrome calf, dull or bright "B" grades (Boston).....                       | Square foot..... | .500                      | .530             | .535             | 108                 | 110                 | 117                | 118                 | 118                |
| Leather, sole, oak, scoured backs, heavy (Boston).....                              | Pound.....       | .590                      | .590             | .590             | 135                 | 135                 | 135                | 135                 | 135                |
| Boots and shoes, men's black calf, blucher (Massachusetts).....                     | Pair.....        | 6.750                     | 6.750            | 6.750            | 106                 | 106                 | 106                | 102                 | 106                |
| Boots and shoes, men's dress welt tan calf oxford (St. Louis).....                  | Pair.....        | 4.85                      | 4.85             | 4.75             |                     |                     | 100                |                     | 98                 |
| <b>FUEL</b>   |                  |                           |                  |                  |                     |                     |                    |                     |                    |
| Coal, bituminous, mine-run (composite price).....                                   | Net ton.....     | 4.006                     | 4.005            | 4.121            | 93                  | 93                  | 93                 | 96                  | 96                 |
| Coal, bituminous, prepared sizes (composite price).....                             | Net ton.....     | 4.547                     | 4.514            | 4.619            | 96                  | 95                  | 94                 | 99                  | 96                 |
| Coal, anthracite, chestnut (composite price).....                                   | Long ton.....    | 13.040                    | 12.987           | 13.130           | 95                  | 95                  | 94                 | 97                  | 95                 |
| Coke, Connellsville (range of prompt and future) furnace—at ovens.....              | Short ton.....   | 2.750                     | 2.750            | 2.780            | 70                  | 67                  | 67                 | 68                  | 68                 |
| Petroleum, crude, Kansas-Oklahoma—at wells.....                                     | Barrel.....      | 1.210                     | 1.185            | 1.220            | 64                  | 64                  | 63                 | 65                  | 65                 |
| <b>METALS</b>   |                  |                           |                  |                  |                     |                     |                    |                     |                    |
| Pig iron, foundry No. 2, northern (Pittsburgh).....                                 | Long ton.....    | 19.510                    | 19.260           | 19.010           | 94                  | 95                  | 93                 | 92                  | 92                 |
| Pig iron, basic, valley furnace.....  | Long ton.....    | 17.500                    | 17.500           | 17.000           | 94                  | 94                  | 94                 | 92                  | 92                 |
| Steel billets, Bessemer (Pittsburgh).....   | Long ton.....    | 33.000                    | 33.000           | 33.000           | 94                  | 94                  | 94                 | 94                  | 94                 |
| Copper ingots, electrolytic, early delivery (New York).....                         | Pound.....       | .1584                     | .1660            | .1385            | 114                 | 115                 | 120                | 100                 | 100                |
| Brass, sheets, mill.....  | Pound.....       | .206                      | .213             | .188             | 108                 | 108                 | 112                | 99                  | 99                 |
| Lead, pig, desilverized, for early delivery (New York).....                         | Pound.....       | .0650                     | .0665            | .0650            | 76                  | 77                  | 79                 | 77                  | 77                 |
| Tin, Straits (New York).....  | Pound.....       | .5021                     | .4916            | .5564            | 78                  | 77                  | 75                 | 90                  | 85                 |
| Zinc, slab, western (St. Louis).....  | Pound.....       | .0635                     | .0635            | .0564            | 85                  | 87                  | 87                 | 78                  | 77                 |
| <b>BUILDING MATERIAL AND MISCELLANEOUS</b>  |                  |                           |                  |                  |                     |                     |                    |                     |                    |
| Lumber, pine, southern, yellow flooring, mill.....                                  | M feet.....      | 37.19                     | 36.55            | 35.26            | 83                  | 82                  | 81                 | 79                  | 78                 |
| Brick, common red, domestic building (New York).....                                | Thousand.....    | 12.00                     | 11.50            | 12.75            | 73                  | 73                  | 70                 | 68                  | 78                 |
| Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district)..... | Barrel.....      | 1.650                     | 1.650            | 1.683            | 97                  | 95                  | 95                 | 97                  | 97                 |
| Steel beams, mill (Pittsburgh).....   | Cwt.....         | 1.900                     | 1.900            | 1.800            | 97                  | 97                  | 97                 | 92                  | 92                 |
| Rubber, smoked sheets (New York).....   | Pound.....       | .179                      | .198             | .402             | 38                  | 37                  | 41                 | 84                  | 83                 |
| Sulphuric acid, 66° (New York).....   | Ton.....         | 15.500                    | 15.500           | 15.500           | 107                 | 107                 | 107                | 107                 | 107                |
| Wood pulp, sulphite, domestic, unbleached, news grade (New York).....               | Cwt.....         | 2.488                     | 2.450            | 2.525            | 88                  | 87                  | 86                 | 88                  | 88                 |
| Newsprint, rolls, contract, mill.....   | Cwt.....         | 3.250                     | 3.250            | 3.250            | 94                  | 94                  | 94                 | 94                  | 94                 |

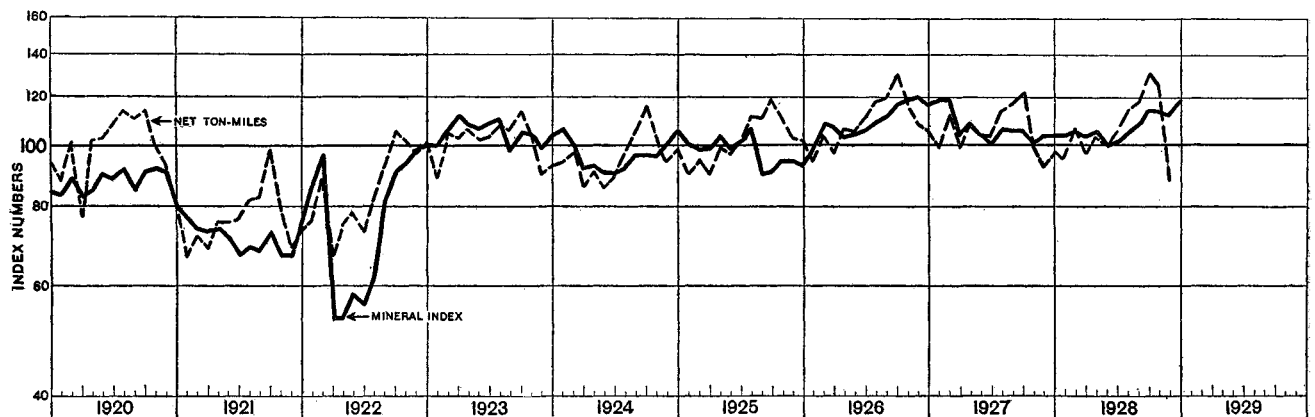
### NEW BUILDING CONTRACTS AND AUTOMOBILE PRODUCTION

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



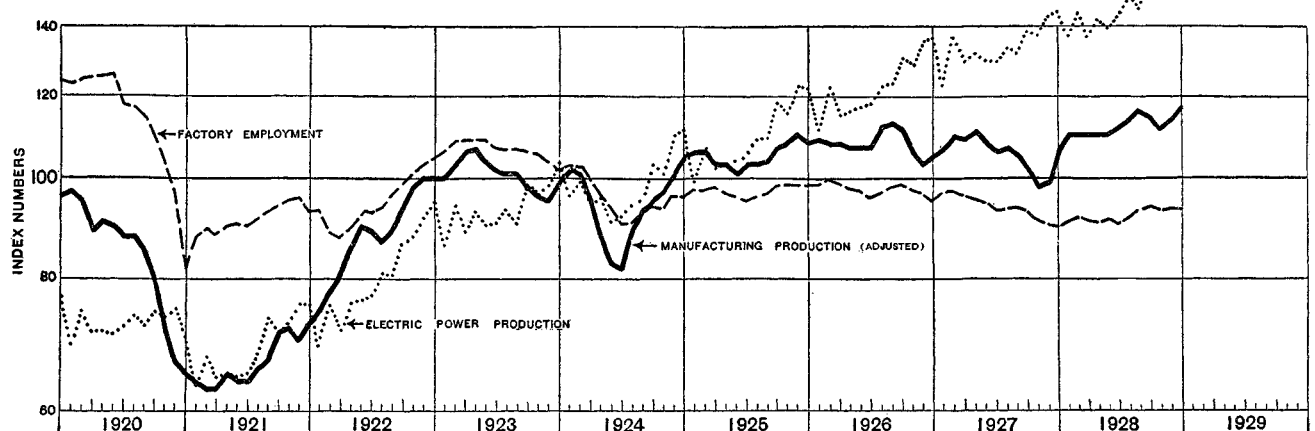
### MINERAL PRODUCTION AND RAILROAD TON-MILEAGE

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



### FACTORY EMPLOYMENT, MANUFACTURING, AND ELECTRIC-POWER PRODUCTION

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



## REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

### TEXTILES

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

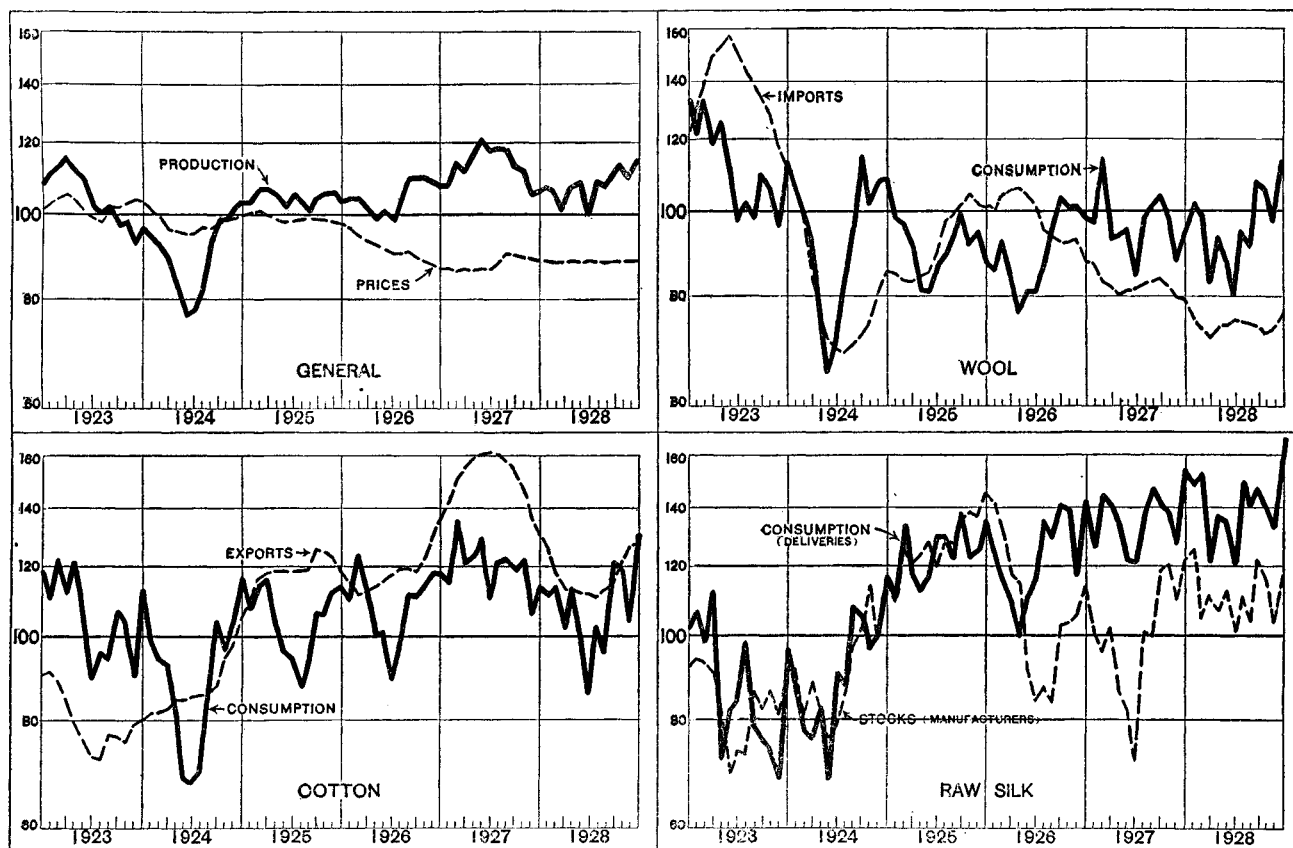
The consumption of cotton was considerably greater than in either prior period. Stocks of cotton held at the end of January, both at mills and in public storage, were lower than a year ago. Raw cotton exports in January showed a gain of 12 per cent over the same month of 1928. Cotton prices paid to producers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

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

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

### THE TEXTILE INDUSTRIES

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



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

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

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

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

### METALS

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

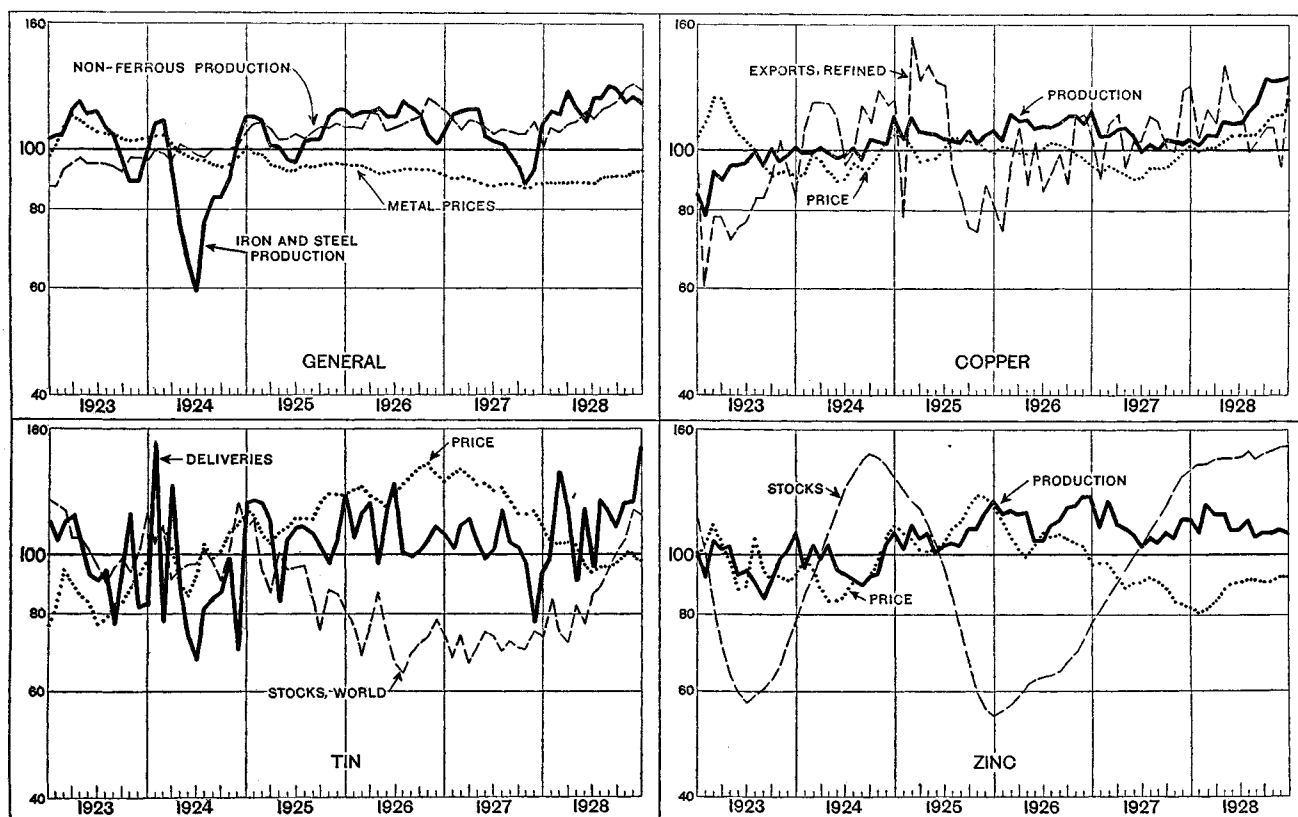
The production of steel ingots was greater than in either the previous month or January of last year. Reduced to a ratio to plant capacity the output of steel ingots showed a gain of almost 9 per cent over January, 1928. Unfilled steel orders at the end of January were greater than at the end of the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

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

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

### THE METAL INDUSTRIES

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



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

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

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

## FUELS

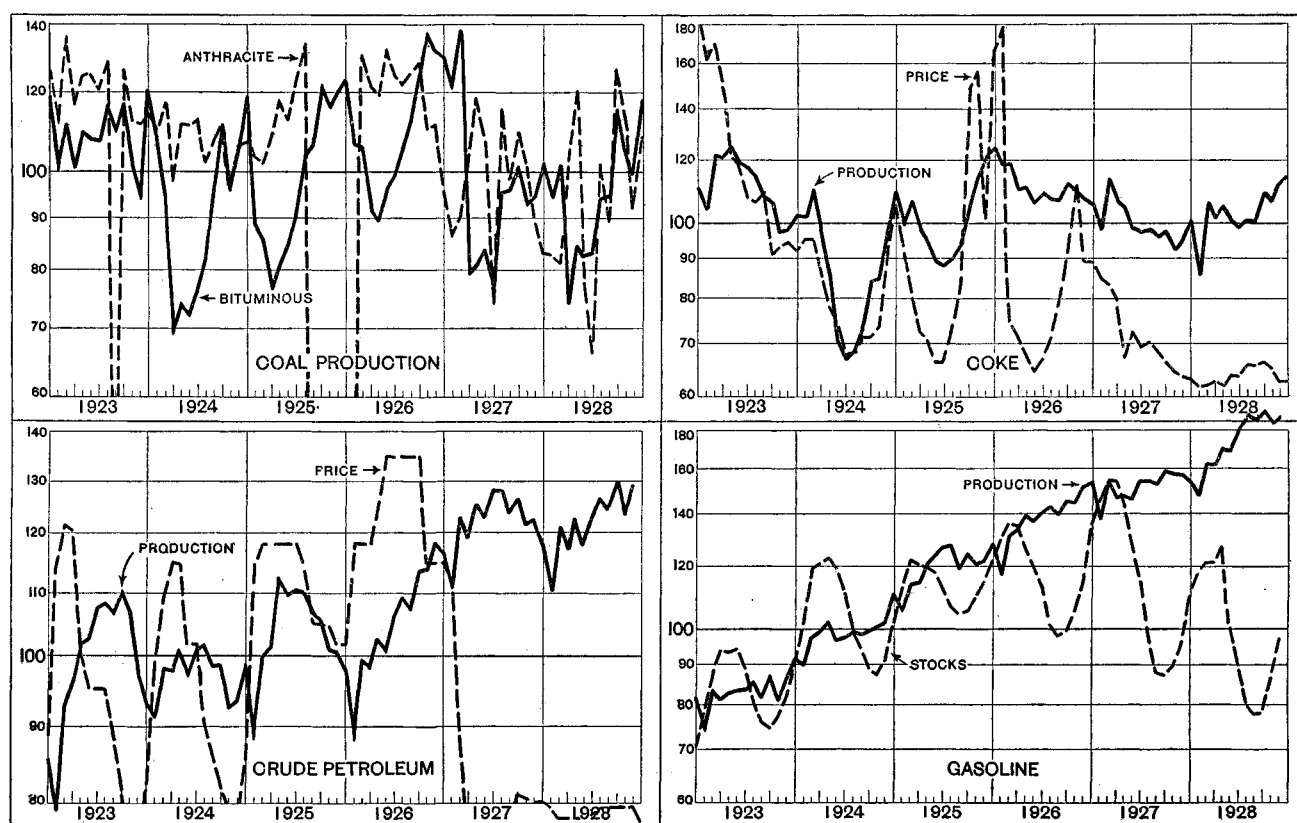
The output of bituminous coal in January showed substantial gains over both the preceding month and January of last year. Anthracite production was likewise greater than in either prior period. Prices for coal, both bituminous and anthracite, averaged lower than in either prior period.

## AUTOMOBILES AND RUBBER

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

## THE FUEL INDUSTRIES

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



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

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

## HIDES AND LEATHER

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

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

## BUILDING AND CONSTRUCTION

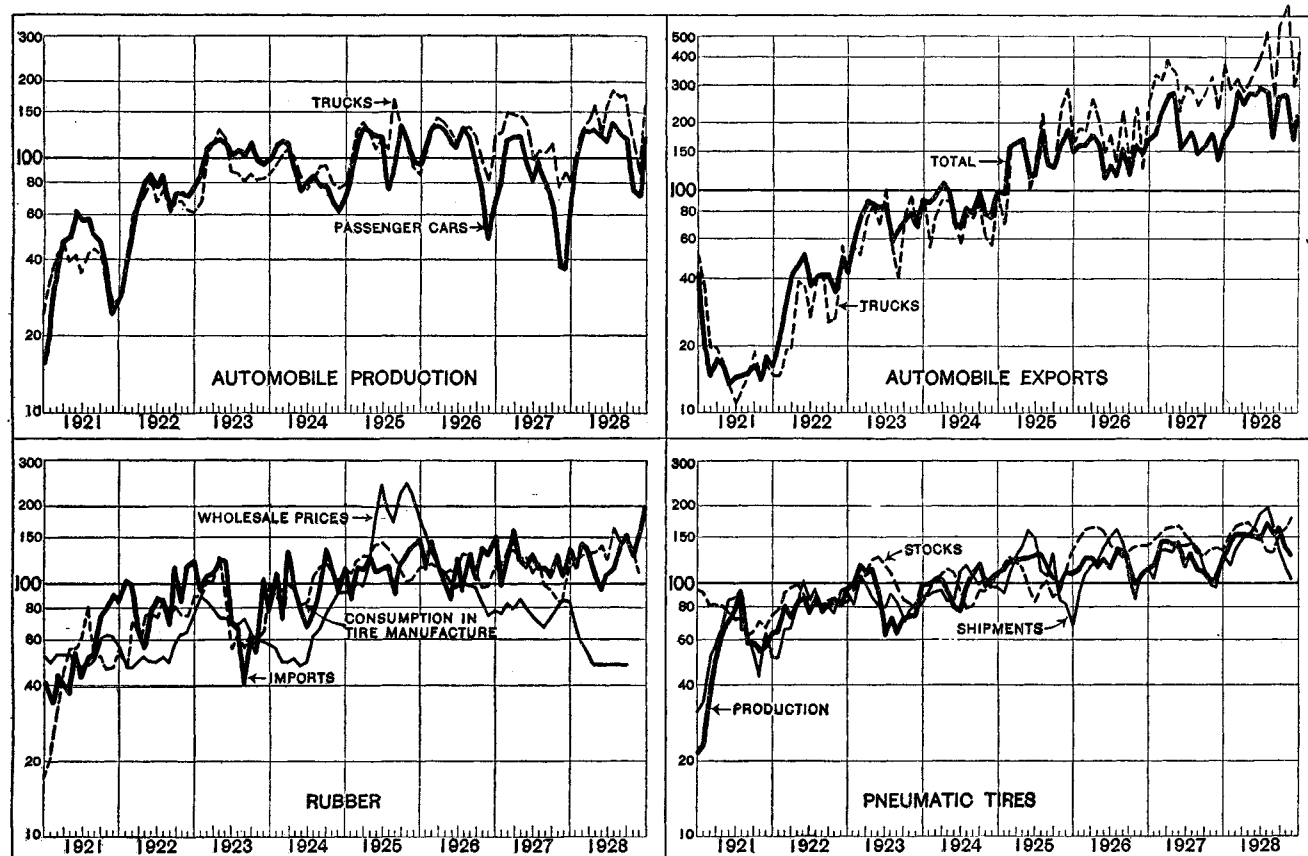
Construction costs on the whole averaged slightly above those for the previous month but showed no uniform tendency as compared with January, 1928. Contracts awarded for new buildings were smaller both in square footage and in value than for either the previous month or for January, 1928, increases in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

## STONE AND CLAY PRODUCTS

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

## THE AUTOMOBILE AND RUBBER INDUSTRIES

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



by declines in contracts for residential and public buildings.

## LUMBER AND LUMBER PRODUCTS

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

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

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

### FOODSTUFFS AND TOBACCO

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

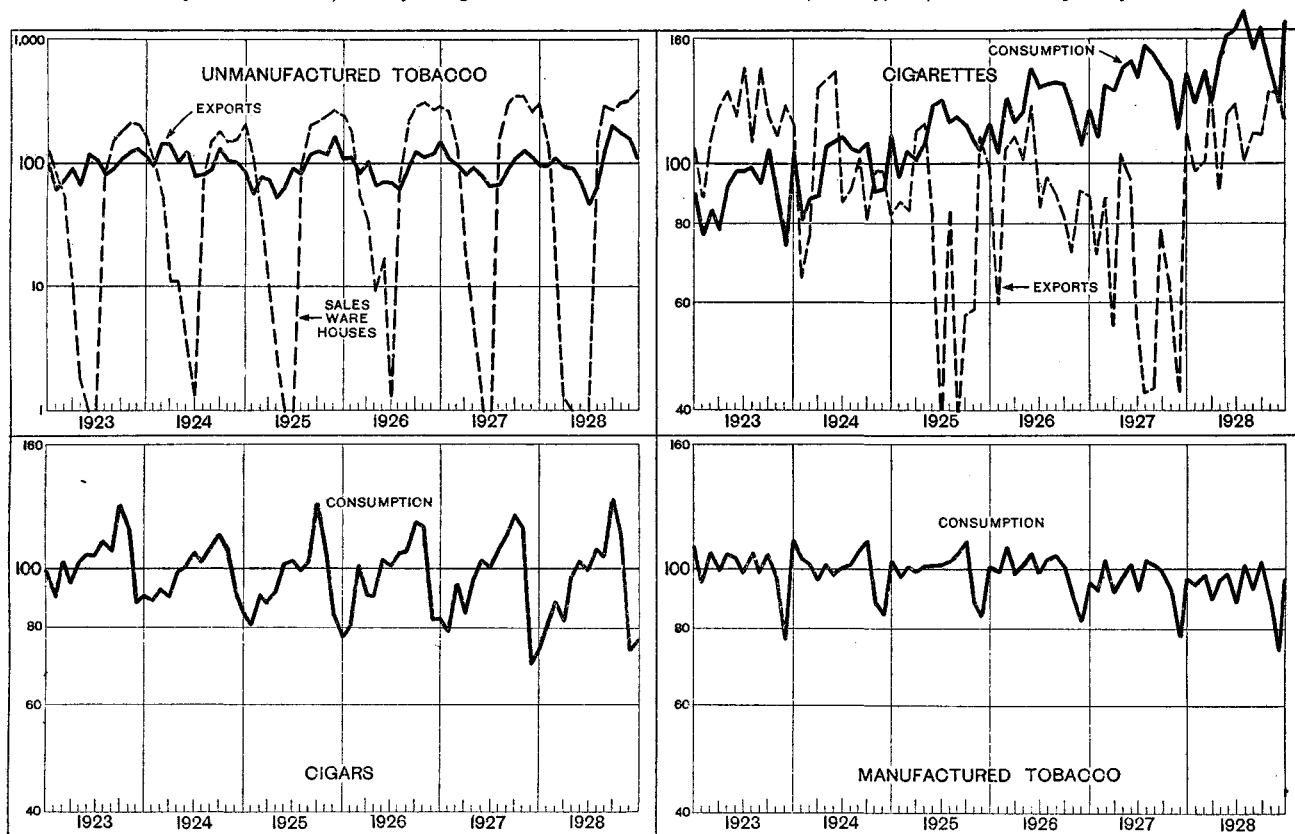
The visible supply of corn at the end of January was 7 per cent smaller than a year ago. Corn exports, including meal, were considerably greater than a year

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

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

### THE TOBACCO INDUSTRIES

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



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

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

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

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

## TRANSPORTATION

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

## BANKING AND FINANCE

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

## DISTRIBUTION MOVEMENT

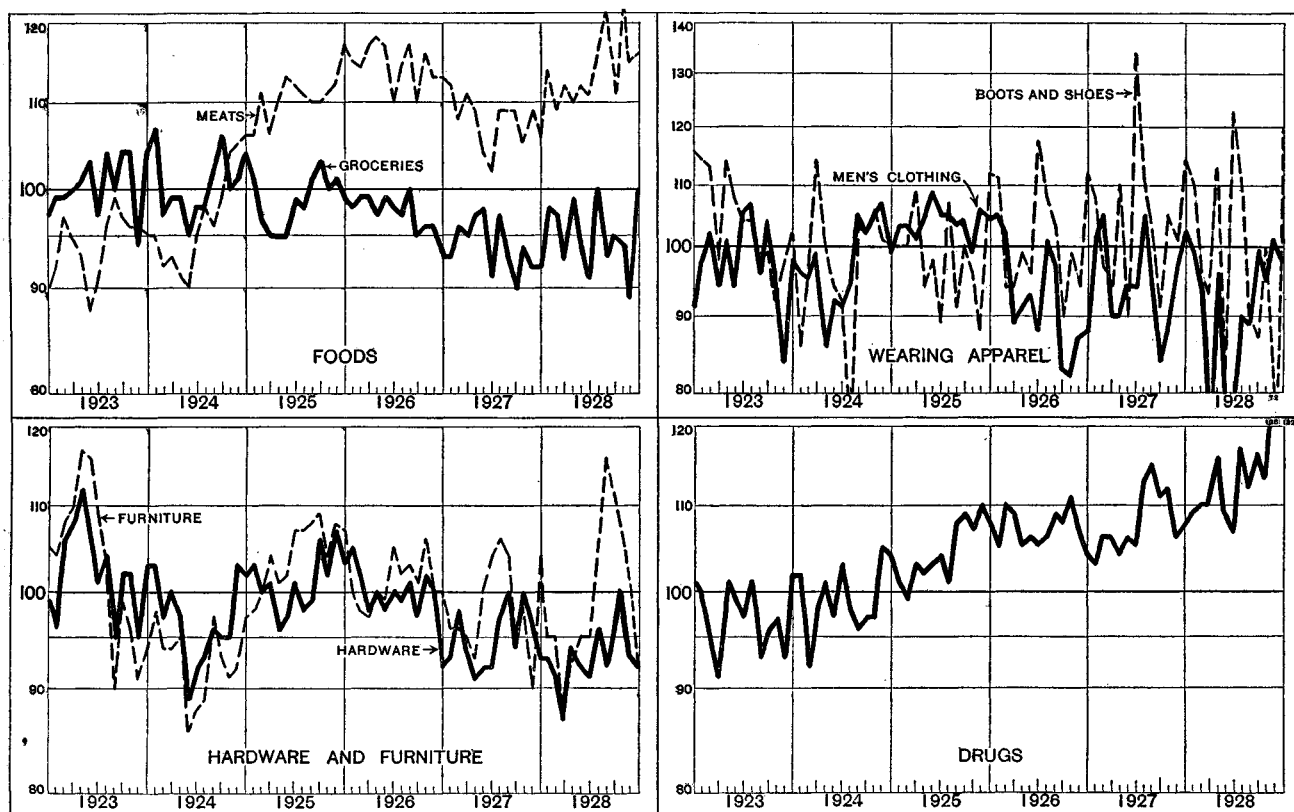
Sales by mail-order houses and chain 10-cent stores showed substantial gains over January, 1928. Magazine advertising also showed a considerable gain. Advertising in newspapers was greater than in January of last year. Postal receipts in 100 representative cities were greater than a year ago. Mail dispatched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

## GOLD, SILVER, AND FOREIGN EXCHANGE

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

## WHOLESALE TRADE

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



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

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

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



## INDEXES OF BUSINESS

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

| Relative to 1923-1925 monthly average as 100  | Maximum since Jan. 1, 1923 | Minimum since Jan. 1, 1923 | 1927     |          | 1928    |          |          | 1929    | PER CENT INCREASE (+)<br>OR DECREASE (-) |                                   |
|---|----------------------------|----------------------------|----------|----------|---------|----------|----------|---------|--|-----------------------------------|
|   |                            |                            | November | December | January | November | December | January | January, 1929, from December, 1928       | January, 1929, from January, 1928 |
| PRODUCTION                                    |                            |                            |          |          |         |          |          |         |  |                                   |
| TOTAL INDUSTRIAL                              |                            |                            |          |          |         |          |          |         |  |                                   |
| Unadjusted, except for working days.....      | 117                        | 81                         | 101      | 95       | 105     | 114      | 109      | 116     | +6.4                                     | +10.5                             |
| Adjusted for seasonal variations.....         | 117                        | 83                         | 99       | 99       | 106     | 112      | 113      | 117     | +3.5                                     | +10.4                             |
| MANUFACTURING                                 |                            |                            |          |          |         |          |          |         |  |                                   |
| Total (adjusted for working days only).....   | 116                        | 79                         | 101      | 95       | 106     | 113      | 109      | 116     | +6.4                                     | +9.4                              |
| Total (adjusted for seasonal variations)..... | 117                        | 82                         | 98       | 99       | 105     | 111      | 113      | 117     | +3.5                                     | +11.4                             |
| Iron and steel.....                           | 127                        | 59                         | 88       | 93       | 108     | 119      | 123      | 117     | -4.9                                     | +8.3                              |
| Textiles.....                                 | 121                        | 77                         | 112      | 105      | 107     | 114      | 111      | 116     | +4.5                                     | +8.4                              |
| Food products.....                            | 106                        | 92                         | 94       | 95       | 103     | 103      | 104      | 103     | -1.0                                     | 0.0                               |
| Paper and printing.....                       | 119                        | 91                         | 110      | 113      | 115     | 117      | 120      | 119     | -0.8                                     | +3.5                              |
| Lumber.....                                   | 110                        | 80                         | 96       | 93       | 92      | 80       | 87       | 92      | +5.7                                     | 0.0                               |
| Automobiles.....                              | 139                        | 47                         | 47       | 53       | 92      | 90       | 98       | 96      | -2.0                                     | +4.3                              |
| Leather and shoes.....                        | 134                        | 86                         | 97       | 96       | 99      | 99       | 92       | 134     | +45.7                                    | +35.4                             |
| Cement, brick, and glass.....                 | 130                        | 92                         | 107      | 105      | 114     | 118      | 130      | 124     | -4.6                                     | +8.8                              |
| Nonferrous metals.....                        | 129                        | 87                         | 106      | 111      | 100     | 126      | 129      |         |  |                                   |
| Petroleum refining.....                       | 162                        | 84                         | 140      | 137      | 135     | 159      | 159      | 159     | 0.0                                      | +17.8                             |
| Rubber tires.....                             | 166                        | 66                         | 117      | 110      | 124     | 150      | 143      | 147     | +2.8                                     | +18.5                             |
| Tobacco manufactures.....                     | 131                        | 93                         | 122      | 113      | 119     | 125      | 127      | 131     | +3.1                                     | +10.1                             |
| MINERALS                                      |                            |                            |          |          |         |          |          |         |  |                                   |
| Total (adjusted for working days only).....   | 124                        | 84                         | 105      | 103      | 99      | 118      | 112      | 113     | +0.9                                     | +14.1                             |
| Total (adjusted for seasonal variations)..... | 120                        | 90                         | 101      | 103      | 103     | 115      | 112      | 117     | +4.5                                     | +3.9                              |
| Bituminous coal.....                          | 125                        | 77                         | 85       | 87       | 92      | 98       | 96       | 103     | +7.3                                     | +12.0                             |
| Anthracite coal.....                          | 133                        | 1                          | 105      | 91       | 89      | 115      | 99       | 110     | +11.1                                    | +23.6                             |
| Crude petroleum.....                          | 138                        | 88                         | 124      | 124      | 121     | 127      | 132      | 138     | +4.5                                     | +14.0                             |
| Iron-ore shipments.....                       | 134                        | 0                          | 49       |          |         | 105      |          |         |  |                                   |
| Copper.....                                   | 129                        | 82                         | 106      | 105      | 102     | 133      | 133      | 129     | -3.0                                     | +26.5                             |
| Zinc.....                                     | 124                        | 93                         | 107      | 109      | 105     | 110      | 106      | 100     | -5.7                                     | -4.8                              |
| Lead.....                                     | 125                        | 75                         | 110      | 109      | 103     | 114      | 113      | 112     | -0.9                                     | +8.7                              |
| Silver.....                                   | 123                        | 85                         | 100      | 95       | 93      | 91       | 103      | 91      | -11.7                                    | -2.2                              |
| ANIMAL PRODUCTS (Marketings)                  |                            |                            |          |          |         |          |          |         |  |                                   |
| Total.....                                    | 124                        | 79                         | 92       | 88       | 96      | 93       | 92       | 96      | +4.3                                     | 0.0                               |
| Wool.....                                     | 421                        | 26                         | 68       | 66       | 61      | 70       | 55       | 35      | -36.4                                    | -42.6                             |
| Livestock.....                                | 131                        | 76                         | 101      | 92       | 107     | 98       | 95       | 102     | +7.4                                     | -4.7                              |
| Poultry and eggs.....                         | 148                        | 68                         | 114      | 126      | 80      | 110      | 126      | 85      | -32.5                                    | +6.3                              |
| Dairy products.....                           | 160                        | 64                         | 71       | 71       | 89      | 77       | 78       | 95      | +21.8                                    | +6.7                              |
| Fish.....                                     | 187                        | 44                         | 119      | 79       | 81      | 131      | 119      | 87      | -26.9                                    | +6.9                              |
| CROPS (Marketings)                            |                            |                            |          |          |         |          |          |         |  |                                   |
| Total.....                                    | 251                        | 45                         | 168      | 121      | 98      | 179      | 152      | 114     | -25.0                                    | +16.3                             |
| Grains *.....                                 | 205                        | 38                         | 109      | 104      | 99      | 122      | 124      | 104     | -16.1                                    | +5.1                              |
| Vegetables *.....                             | 199                        | 60                         | 107      | 74       | 100     | 94       | 69       | 94      | +36.2                                    | -6.0                              |
| Fruits *.....                                 | 266                        | 55                         | 96       | 57       | 45      | 119      | 70       | 72      | +2.9                                     | +60.0                             |
| Cotton products *.....                        | 353                        | 11                         | 231      | 148      | 81      | 258      | 206      | 100     | -51.5                                    | +23.5                             |
| Miscellaneous crops *.....                    | 266                        | 22                         | 237      | 169      | 193     | 205      | 192      | 238     | +24.0                                    | +23.3                             |
| FOREST PRODUCTS                               |                            |                            |          |          |         |          |          |         |  |                                   |
| Total.....                                    | 112                        | 76                         | 93       | 86       | 81      | 84       | 76       | 81      | +6.6                                     | 0.0                               |
| Lumber.....                                   | 112                        | 71                         | 91       | 83       | 80      | 80       | 71       | 78      | +9.9                                     | -2.5                              |
| Pulpwood.....                                 | 151                        | 54                         | 111      | 111      | 99      | 116      | 111      | 111     | 0.0                                      | +12.1                             |
| Gum (rosin and turpentine) *.....             | 161                        | 18                         | 109      | 98       | 38      | 119      | 122      | 41      | -66.4                                    | +7.9                              |
| Distilled wood.....                           | 148                        | 65                         | 100      | 95       | 97      | 104      | 104      | 101     | -2.9                                     | +4.1                              |

## INDEXES OF BUSINESS—Continued

| Relative to 1923-1925 monthly average as 100 | Maximum since Jan. 1, 1923 | Minimum since Jan. 1, 1923 | 1927     |          | 1928    |          |          | 1929    | PER CENT INCREASE (+)<br>OR DECREASE (-) |                                      |
|--|----------------------------|----------------------------|----------|----------|---------|----------|----------|---------|--|--------------------------------------|
|  |                            |                            | November | December | January | November | December | January | January, 1929,<br>from December, 1928    | January, 1929,<br>from January, 1928 |
| PRODUCTION—Continued                         |                            |                            |          |          |         |          |          |         |  |                                      |
| NEW ORDERS                                   |                            |                            |          |          |         |          |          |         |  |                                      |
| Total.....                                   | 138                        | 73                         | 91       | 111      | 100     | 102      | 80       |         |  |                                      |
| Textiles.....                                | 179                        | 70                         | 94       | 179      | 94      | 113      | 88       |         |  |                                      |
| Iron and steel.....                          | 143                        | 71                         | 101      | 133      | 104     | 114      | 111      |         |  |                                      |
| Lumber.....                                  | 141                        | 67                         | 98       | 78       | 112     | 99       | 67       |         |  |                                      |
| Paper and printing.....                      | 118                        | 85                         | 90       | 94       | 103     | 114      | 98       |         |  |                                      |
| Stone and clay products.....                 | 129                        | 75                         | 89       | 75       | 87      | 101      | 82       |         |  |                                      |
| STOCKS                                       |                            |                            |          |          |         |          |          |         |  |                                      |
| Grand total.....                             | 134                        | 82                         | 135      | 133      | 129     | 137      | 141      | 137     | -2.8                                     | +6.2                                 |
| Total manufactured goods.....                | 120                        | 88                         | 111      | 112      | 115     | 114      | 120      | 124     | +3.3                                     | +7.8                                 |
| Food stuffs.....                             | 129                        | 79                         | 81       | 79       | 85      | 87       | 96       | 108     | +12.5                                    | +27.1                                |
| Textiles.....                                | 138                        | 78                         | 113      | 127      | 134     | 118      | 129      | 124     | -3.9                                     | -7.5                                 |
| Iron and steel.....                          | 152                        | 78                         | 123      | 128      | 141     | 143      | 147      | 152     | +3.4                                     | +7.8                                 |
| Nonferrous metals.....                       | 133                        | 74                         | 118      | 119      | 114     | 125      | 125      | 125     | 0.0                                      | +9.6                                 |
| Lumber.....                                  | 125                        | 78                         | 123      | 125      | 119     | 107      | 113      | 112     | -0.9                                     | -5.9                                 |
| Stone, clay, etc.....                        | 178                        | 64                         | 130      | 154      | 169     | 136      | 154      | 173     | +12.3                                    | +2.4                                 |
| Leather.....                                 | 123                        | 66                         | 70       | 69       | 68      | 75       | 77       | 76      | -1.3                                     | +11.8                                |
| Rubber.....                                  | 185                        | 77                         | 132      | 133      | 128     | 156      | 164      | 157     | -4.3                                     | +22.7                                |
| Paper.....                                   | 155                        | 46                         | 109      | 80       | 99      | 133      | 132      | 145     | +9.8                                     | +46.5                                |
| Chemicals and oils.....                      | 125                        | 84                         | 107      | 109      | 115     | 107      | 111      | 114     | +2.7                                     | -0.9                                 |
| Total raw materials.....                     | 157                        | 69                         | 152      | 150      | 139     | 154      | 157      | 147     | -6.4                                     | +5.8                                 |
| Foodstuffs.....                              | 163                        | 68                         | 135      | 136      | 127     | 155      | 163      | 155     | -4.9                                     | +22.0                                |
| Textiles.....                                | 202                        | 43                         | 187      | 183      | 168     | 170      | 174      | 161     | -7.5                                     | -4.2                                 |
| Metals.....                                  | 136                        | 54                         | 113      | 104      | 105     | 126      | 97       | 89      | -8.2                                     | -15.2                                |
| Chemicals and oils.....                      | 153                        | 73                         | 144      | 137      | 128     | 135      | 135      | 124     | -8.1                                     | -3.1                                 |
| UNFILLED ORDERS                              |                            |                            |          |          |         |          |          |         |  |                                      |
| Total.....                                   | 167                        | 67                         | 68       | 72       | 81      | 74       | 71       | 80      | +12.7                                    | -1.2                                 |
| Textiles.....                                | 154                        | 62                         | 76       | 69       | 77      | 72       | 72       | 83      | +15.3                                    | +7.8                                 |
| Iron and steel.....                          | 157                        | 66                         | 71       | 85       | 89      | 76       | 83       | 86      | +3.6                                     | -3.4                                 |
| Transportation equipment.....                | 204                        | 49                         | 51       | 57       | 64      | 49       | 35       | 64      | +82.9                                    | 0.0                                  |
| Lumber.....                                  | 142                        | 56                         | 63       | 52       | 79      | 84       | 62       | 78      | +25.8                                    | -1.3                                 |
| WHOLESALE TRADE                              |                            |                            |          |          |         |          |          |         |  |                                      |
| Grand total, all classes.....                | 124                        | 82                         | 97       | 85       | 88      | 99       | 85       | 93      | +9.4                                     | +5.7                                 |
| Groceries.....                               | 119                        | 86                         | 100      | 90       | 85      | 100      | 88       | 92      | +4.5                                     | +8.2                                 |
| Meats.....                                   | 130                        | 87                         | 101      | 103      | 106     | 117      | 108      | 116     | +7.4                                     | +9.4                                 |
| Dry goods.....                               | 128                        | 71                         | 88       | 70       | 85      | 90       | 69       | 84      | +21.7                                    | -1.2                                 |
| Men's clothing.....                          | 167                        | 43                         | 61       | 48       | 76      | 66       | 52       | 75      | +44.2                                    | -1.3                                 |
| Boots and shoes.....                         | 128                        | 68                         | 110      | 82       | 94      | 105      | 59       | 99      | +67.8                                    | +5.3                                 |
| Hardware.....                                | 118                        | 82                         | 98       | 90       | 82      | 98       | 86       | 82      | -4.7                                     | 0.0                                  |
| Drugs.....                                   | 125                        | 88                         | 113      | 99       | 106     | 114      | 120      | 130     | +8.3                                     | +22.6                                |
| Furniture.....                               | 131                        | 72                         | 105      | 83       | 78      | 110      | 94       | 81      | -13.8                                    | +3.8                                 |
| RETAIL TRADE                                 |                            |                            |          |          |         |          |          |         |  |                                      |
| MAIL-ORDER HOUSES (4 houses).....            | 208                        | 64                         | 149      | 167      | 105     | 176      | 208      | 132     | -36.5                                    | +25.7                                |
| CHAIN STORES:                                |                            |                            |          |          |         |          |          |         |  |                                      |
| Ten-cent.....                                | 305                        | 62                         | 146      | 279      | 104     | 158      | 305      | 112     | -63.3                                    | +7.7                                 |
| Grocery.....                                 | 224                        | 77                         | 188      | 204      | 187     | 218      | 220      | 222     | +0.9                                     | +18.7                                |
| Wearing apparel.....                         | 413                        | 47                         | 250      | 350      | 121     | 289      | 413      | 140     | -66.1                                    | +15.7                                |
| Drug.....                                    | 224                        | 82                         | 144      | 182      | 146     | 169      | 224      | 177     | -21.0                                    | +21.2                                |
| Cigar.....                                   | 160                        | 79                         | 105      | 156      | 90      | 107      | 155      | 91      | -41.3                                    | +1.0                                 |
| Candy.....                                   | 170                        | 70                         | 125      | 164      | 100     | 130      | 170      | 106     | -37.6                                    | +6.0                                 |
| Shoe.....                                    | 184                        | 55                         | 118      | 178      | 87      | 130      | 184      | 102     | -44.6                                    | +17.2                                |
| DEPARTMENT STORES:                           |                            |                            |          |          |         |          |          |         |  |                                      |
| Sales.....                                   | 187                        | 71                         | 122      | 186      | 88      | 122      | 187      | 93      | -50.3                                    | +5.7                                 |
| Stocks.....                                  | 117                        | 83                         | 116      | 96       | 91      | 113      | 92       | 88      | -4.3                                     | -3.3                                 |

## INDEXES OF BUSINESS—Continued

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

## INDEXES OF BUSINESS—Continued

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

FABRICATED STRUCTURAL STEEL <sup>1</sup>

| MONTH                | NEW ORDERS |           |           |           |           |           |           |                      |      |      |      |      |      |      |
|----------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|------|------|------|------|------|------|
|                      | 1922       | 1923      | 1924      | 1925      | 1926      | 1927      | 1928      | 1923                 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|                      | Short tons |           |           |           |           |           |           | Per cent of capacity |      |      |      |      |      |      |
| January.....         |            | 227,760   | 224,940   | 187,380   | 208,800   | 195,000   | 211,750   |                      | 73   | 69   | 54   | 58   | 52   | 55   |
| February.....        |            | 243,360   | 228,200   | 194,320   | 208,800   | 243,750   | 265,650   |                      | 78   | 70   | 56   | 58   | 65   | 69   |
| March.....           |            | 290,160   | 221,680   | 225,550   | 234,000   | 232,500   | 257,950   |                      | 93   | 68   | 65   | 65   | 62   | 67   |
| April.....           | 258,400    | 243,360   | 208,640   | 256,780   | 252,000   | 262,500   | 234,850   | 85                   | 78   | 64   | 74   | 70   | 70   | 61   |
| May.....             | 240,160    | 180,960   | 192,340   | 229,020   | 266,400   | 232,500   | 308,000   | 79                   | 58   | 59   | 66   | 74   | 62   | 80   |
| June.....            | 221,920    | 165,360   | 208,640   | 284,540   | 262,800   | 225,000   | 300,000   | 73                   | 53   | 64   | 82   | 73   | 60   | 78   |
| July.....            | 206,720    | 162,240   | 224,940   | 274,130   | 248,400   | 341,250   | 296,450   | 68                   | 52   | 69   | 79   | 69   | 91   | 77   |
| August.....          | 206,720    | 184,080   | 192,340   | 267,190   | 284,400   | 270,000   | 354,200   | 68                   | 59   | 59   | 77   | 79   | 72   | 92   |
| September.....       | 194,560    | 165,360   | 211,900   | 270,660   | 216,000   | 262,500   | 319,550   | 64                   | 53   | 65   | 78   | 60   | 70   | 83   |
| October.....         | 176,320    | 159,120   | 211,900   | 298,420   | 230,400   | 288,750   | 250,250   | 58                   | 51   | 65   | 86   | 64   | 77   | 65   |
| November.....        | 152,000    | 171,600   | 267,320   | 239,430   | 223,200   | 236,250   | 242,550   | 50                   | 55   | 82   | 69   | 62   | 63   | 63   |
| December.....        | 185,440    | 249,600   | 247,760   | 253,310   | 259,200   | 262,500   | 256,400   | 61                   | 80   | 76   | 73   | 72   | 70   | 64   |
| Total.....           | 1,842,240  | 2,442,960 | 2,640,600 | 2,980,730 | 2,894,400 | 3,052,500 | 3,287,600 |                      |      |      |      |      |      |      |
| Monthly average..... | 204,693    | 203,580   | 220,050   | 248,394   | 241,200   | 254,375   | 273,967   | 67                   | 65   | 68   | 72   | 67   | 68   | 71   |

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

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

<sup>2</sup> Nine months.

STEEL CASTINGS<sup>1</sup>

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

| MONTH          | RAILWAY SPECIALTIES |         |         |         |         |         |         |         |         | MISCELLANEOUS |         |         |         |         |         |         |         |         |
|----------------|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                | 1920                | 1921    | 1922    | 1923    | 1924    | 1925    | 1926    | 1927    | 1928    | 1920          | 1921    | 1922    | 1923    | 1924    | 1925    | 1926    | 1927    | 1928    |
|                | Short tons          |         |         |         |         |         |         |         |         | Short tons    |         |         |         |         |         |         |         |         |
| January.....   | 29,608              | 15,968  | 26,469  | 63,633  | 29,658  | 52,392  | 53,368  | 53,461  | 41,276  | 51,682        | 23,640  | 19,255  | 62,848  | 40,214  | 51,787  | 58,954  | 54,602  | 50,172  |
| February.....  | 30,147              | 17,636  | 24,970  | 52,272  | 44,804  | 38,299  | 46,485  | 41,355  | 41,096  | 55,702        | 19,594  | 23,717  | 60,127  | 46,698  | 43,631  | 55,010  | 53,583  | 49,980  |
| March.....     | 67,272              | 13,446  | 32,112  | 93,690  | 75,929  | 35,012  | 50,229  | 34,680  | 30,992  | 61,091        | 19,263  | 30,342  | 78,411  | 51,057  | 48,800  | 63,541  | 55,673  | 52,763  |
| April.....     | 45,356              | 9,065   | 55,124  | 55,613  | 49,896  | 39,797  | 27,678  | 32,279  | 32,810  | 56,015        | 16,980  | 34,698  | 62,583  | 43,622  | 47,759  | 63,862  | 49,124  | 51,276  |
| May.....       | 44,965              | 8,105   | 52,132  | 55,137  | 42,490  | 34,877  | 33,323  | 28,946  | 34,995  | 55,123        | 16,013  | 41,381  | 62,697  | 37,498  | 43,540  | 51,128  | 44,097  | 51,801  |
| June.....      | 31,974              | 8,775   | 61,149  | 55,903  | 36,985  | 24,277  | 18,180  | 39,455  | 22,597  | 56,278        | 15,208  | 45,026  | 53,853  | 31,034  | 42,160  | 55,605  | 51,744  | 49,510  |
| July.....      | 34,789              | 7,691   | 43,127  | 28,092  | 25,309  | 28,050  | 30,969  | 31,011  | 20,483  | 47,399        | 14,139  | 40,869  | 45,508  | 29,229  | 44,244  | 48,829  | 43,558  | 46,509  |
| August.....    | 37,640              | 10,291  | 33,273  | 34,210  | 21,705  | 27,259  | 24,413  | 21,144  | 25,171  | 43,803        | 15,117  | 49,340  | 24,998  | 28,616  | 43,901  | 46,912  | 42,794  | 56,115  |
| September..... | 41,187              | 13,140  | 68,106  | 37,028  | 36,092  | 21,268  | 22,761  | 18,396  | 35,234  | 41,955        | 16,557  | 48,331  | 34,478  | 39,913  | 40,930  | 46,979  | 34,346  | 47,528  |
| October.....   | 24,793              | 20,961  | 49,223  | 27,532  | 39,405  | 29,734  | 28,980  | 16,625  | 26,736  | 37,264        | 18,886  | 49,096  | 37,145  | 43,816  | 50,776  | 48,856  | 35,535  | 52,124  |
| November.....  | 23,144              | 26,362  | 35,554  | 27,985  | 50,857  | 39,459  | 28,678  | 27,639  | 34,535  | 32,169        | 24,029  | 46,839  | 35,885  | 40,531  | 47,498  | 44,799  | 35,436  | 50,197  |
| December.....  | 18,768              | 21,005  | 40,521  | 27,379  | 63,947  | 53,223  | 39,881  | 39,112  | 43,928  | 29,234        | 20,294  | 49,371  | 33,637  | 51,658  | 52,670  | 50,262  | 38,324  | 52,445  |
| Total.....     | 429,643             | 172,445 | 521,760 | 558,474 | 517,077 | 423,647 | 404,945 | 384,103 | 389,863 | 567,715       | 219,720 | 478,265 | 609,170 | 483,886 | 557,696 | 634,737 | 538,816 | 610,420 |
| Mo. av.....    | 35,804              | 14,370  | 43,480  | 46,540  | 43,090  | 35,304  | 33,745  | 32,009  | 32,489  | 47,310        | 18,310  | 39,855  | 50,764  | 40,324  | 46,475  | 52,895  | 44,901  | 50,868  |

| MONTH          | PRODUCTION |         |           |                     |      |      |               |         |         | YEAR    | CAPACITY                     |                     |               | NEW ORDERS |                     |               | PER CENT OF CAPACITY |                     |               |     |     |    |
|----------------|------------|---------|-----------|---------------------|------|------|---------------|---------|---------|---------|------------------------------|---------------------|---------------|------------|---------------------|---------------|----------------------|---------------------|---------------|-----|-----|----|
|                | Total      |         |           | Railway specialties |      |      | Miscellaneous |         |         |         | Total                        | Railway specialties | Miscellaneous | Total      | Railway specialties | Miscellaneous | Total                | Railway specialties | Miscellaneous |     |     |    |
|                | 1926       | 1927    | 1928      | 1926                | 1927 | 1928 | 1926          | 1927    | 1928    |         | 1926                         | 1927                | 1928          | Total      | Railway specialties | Miscellaneous | Total                | Railway specialties | Miscellaneous |     |     |    |
|                | Short tons |         |           | Per cent capacity   |      |      | Short tons    |         |         |         | Short tons (average monthly) |                     |               |            |                     |               |                      |                     |               |     |     |    |
| January.....   | 96,947     | 87,307  | 74,454    | 69                  | 60   | 51   | 38,935        | 34,037  | 28,714  | 58,009  | 53,333                       | 45,740              | 1913..        | 87,800     | 38,500              | 49,300        | 60,764               | 30,638              | 30,126        | 69  | 80  | 61 |
| February.....  | 95,795     | 89,170  | 87,727    | 69                  | 62   | 60   | 42,944        | 35,322  | 37,719  | 52,851  | 53,848                       | 50,008              | 1914..        | 88,700     | 38,700              | 50,000        | 45,814               | 22,857              | 22,957        | 52  | 59  | 46 |
| March.....     | 115,503    | 103,148 | 93,989    | 83                  | 71   | 64   | 40,995        | 41,232  | 38,448  | 65,608  | 61,916                       | 55,541              | 1915..        | 92,500     | 42,200              | 50,300        | 66,501               | 31,537              | 34,964        | 72  | 75  | 79 |
| April.....     | 113,719    | 95,036  | 86,016    | 81                  | 66   | 58   | 45,718        | 39,189  | 32,619  | 68,001  | 55,847                       | 53,397              | 1916..        | 98,000     | 42,400              | 55,600        | 106,454              | 59,002              | 47,452        | 109 | 139 | 85 |
| May.....       | 103,080    | 87,241  | 93,333    | 74                  | 60   | 63   | 46,063        | 35,236  | 36,599  | 57,017  | 52,005                       | 56,734              | 1917..        | 107,200    | 46,400              | 60,800        | 95,457               | 40,379              | 55,078        | 89  | 87  | 91 |
| June.....      | 99,070     | 88,065  | 91,746    | 71                  | 61   | 62   | 36,564        | 34,596  | 30,742  | 62,506  | 53,469                       | 61,004              | 1918..        | 111,700    | 46,400              | 65,300        | 113,971              | 51,084              | 62,887        | 102 | 110 | 96 |
| July.....      | 90,897     | 80,045  | 78,648    | 65                  | 55   | 53   | 32,677        | 32,576  | 27,501  | 58,220  | 47,469                       | 51,147              | 1919..        | 116,600    | 46,600              | 70,000        | 48,171               | 16,788              | 31,383        | 41  | 36  | 45 |
| August.....    | 85,067     | 87,418  | 87,742    | 61                  | 60   | 60   | 28,163        | 32,397  | 27,157  | 56,904  | 55,021                       | 60,585              | 1920..        | 124,800    | 51,800              | 73,000        | 83,113               | 35,803              | 47,310        | 67  | 69  | 65 |
| September..... | 82,870     | 70,409  | 75,761    | 59                  | 49   | 51   | 24,424        | 25,618  | 25,311  | 58,446  | 44,791                       | 50,450              | 1921..        | 125,400    | 51,800              | 73,600        | 32,680               | 14,370              | 18,310        | 26  | 28  | 25 |
| October.....   | 83,087     | 62,813  | 87,952    | 59                  | 43   | 60   | 26,915        | 21,947  | 29,471  | 56,172  | 40,866                       | 58,481              | 1922..        | 123,300    | 54,300              | 69,000        | 83,335               | 43,480              | 39,856        | 68  | 80  | 58 |
| November.....  | 88,757     | 59,387  | 82,385    | 64                  | 41   | 56   | 25,024        | 19,146  | 30,799  | 63,733  | 40,241                       | 51,586              | 1923..        | 129,100    | 57,300              | 71,800        | 97,303               | 46,539              | 50,764        | 75  | 81  | 71 |
| December.....  | 85,067     | 58,708  | 82,203    | 61                  | 40   | 56   | 29,591        | 19,358  | 26,484  | 55,476  | 39,350                       | 55,719              | 1924..        | 135,700    | 61,500              | 74,200        | 83,413               | 43,090              | 40,323        | 61  | 70  | 54 |
| Total.....     | 1,139,859  | 968,810 | 1,021,956 | 68                  | 56   | 58   | 427,016       | 370,654 | 371,564 | 712,843 | 598,156                      | 650,392             | 1925..        | 137,300    | 61,600              | 75,700        | 81,778               | 35,304              | 46,474        | 60  | 57  | 61 |
| Mo. av.....    | 94,988     | 80,734  | 85,163    | 68                  | 56   | 58   | 35,585        | 30,888  | 30,964  | 59,404  | 49,846                       | 54,199              | 1926..        | 139,800    | 63,500              | 76,300        | 86,640               | 33,745              | 52,895        | 62  | 53  | 69 |
|                |            |         |           |                     |      |      |               |         |         |         |                              |                     | 1927..        | 144,800    | 66,600              | 78,200        | 76,910               | 32,008              | 44,902        | 53  | 48  | 57 |
|                |            |         |           |                     |      |      |               |         |         |         |                              |                     | 1928..        | 147,400    | 67,700              | 79,700        | 83,357               | 32,489              | 50,868        | 57  | 48  | 64 |

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

STEEL BOILERS, NEW ORDERS <sup>1</sup>

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

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

MALLEABLE CASTINGS <sup>1</sup>

[Short tons]

| MONTH                | 1923                 | 1924    | 1925    | 1926    | 1927    | 1928                         | 1923                 | 1924    | 1925    | 1926    | 1927    | 1928    |
|----------------------|----------------------|---------|---------|---------|---------|------------------------------|----------------------|---------|---------|---------|---------|---------|
|                      | PRODUCTION           |         |         |         |         |                              |                      |         |         |         |         |         |
| Total                |                      |         |         |         |         | Ratio to capacity (per cent) |                      |         |         |         |         |         |
| January.....         | 75,550               | 71,188  | 66,776  | 56,627  | 61,072  | 62.7                         | 62.7                 | 58.9    | 57.4    | 52.0    | 62.7    | 62.7    |
| February.....        | 77,203               | 64,825  | 71,161  | 62,335  | 65,359  | 61.1                         | 61.1                 | 53.9    | 61.1    | 57.8    | 66.8    | 66.8    |
| March.....           | 80,600               | 65,889  | 80,116  | 72,205  | 70,070  | 68.5                         | 68.5                 | 54.8    | 68.9    | 65.7    | 73.0    | 73.0    |
| April.....           | 66,923               | 67,608  | 72,241  | 64,612  | 63,380  | 56.6                         | 56.6                 | 56.4    | 62.7    | 59.1    | 66.0    | 66.0    |
| May.....             | 76,818               | 57,583  | 65,714  | 65,106  | 62,747  | 73.6                         | 48.9                 | 55.2    | 56.9    | 57.2    | 70.7    | 70.7    |
| June.....            | 75,810               | 39,985  | 63,343  | 66,358  | 64,310  | 69.2                         | 34.1                 | 52.7    | 57.3    | 58.5    | 69.9    | 69.9    |
| July.....            | 68,306               | 36,562  | 61,727  | 60,384  | 53,046  | 61.1                         | 31.0                 | 51.3    | 52.9    | 49.3    | 63.1    | 63.1    |
| August.....          | 80,030               | 40,188  | 61,042  | 62,218  | 57,096  | 68.7                         | 33.9                 | 50.6    | 54.6    | 52.4    | 72.1    | 72.1    |
| September.....       | 71,654               | 45,105  | 62,798  | 63,399  | 50,807  | 62.1                         | 38.0                 | 52.2    | 56.4    | 47.6    | 66.3    | 66.3    |
| October.....         | 74,724               | 54,638  | 73,195  | 62,321  | 52,458  | 63.6                         | 45.6                 | 61.8    | 55.5    | 50.0    | 73.4    | 73.4    |
| November.....        | 63,057               | 51,862  | 65,248  | 50,046  | 46,698  | 52.6                         | 43.4                 | 55.8    | 45.9    | 44.4    | 66.8    | 66.8    |
| December.....        | 58,488               | 63,523  | 70,622  | 55,561  | 53,824  | 47.7                         | 52.9                 | 59.9    | 49.4    | 51.2    | 63.4    | 63.4    |
| Total.....           | <sup>2</sup> 568,887 | 689,722 | 793,199 | 76,587  | 696,765 | 779,481                      | <sup>2</sup> 62.3    | 48.4    | 55.3    | 56.6    | 53.8    | 67.9    |
| Monthly average..... | <sup>2</sup> 71,111  | 57,477  | 66,100  | 64,716  | 58,064  | 64,957                       |                      |         |         |         |         |         |
| SHIPMENTS            |                      |         |         |         |         | NEW ORDERS                   |                      |         |         |         |         |         |
| January.....         | 77,261               | 63,980  | 60,817  | 54,747  | 55,432  | 88,232                       | 67,312               | 74,545  | 61,597  | 62,328  |         |         |
| February.....        | 70,257               | 65,135  | 68,628  | 60,775  | 61,011  | 76,221                       | 55,638               | 67,188  | 68,767  | 64,419  |         |         |
| March.....           | 73,916               | 71,199  | 76,151  | 71,609  | 71,224  | 72,319                       | 64,619               | 69,174  | 66,376  | 70,288  |         |         |
| April.....           | 65,361               | 70,829  | 72,322  | 66,811  | 65,001  | 56,645                       | 66,360               | 63,096  | 64,427  | 62,056  |         |         |
| May.....             | 75,214               | 62,263  | 69,721  | 64,379  | 63,385  | 65,232                       | 39,705               | 59,232  | 59,109  | 57,311  | 63,847  |         |
| June.....            | 75,565               | 44,213  | 67,668  | 68,128  | 62,316  | 52,451                       | 30,191               | 55,693  | 55,796  | 54,456  | 61,071  |         |
| July.....            | 70,470               | 42,109  | 62,573  | 60,552  | 54,240  | 51,976                       | 35,941               | 65,220  | 52,455  | 53,484  | 60,964  |         |
| August.....          | 76,522               | 40,601  | 60,242  | 62,420  | 57,193  | 54,731                       | 38,548               | 56,511  | 62,264  | 51,368  | 60,128  |         |
| September.....       | 59,649               | 44,055  | 62,347  | 60,067  | 52,722  | 48,958                       | 53,163               | 58,098  | 57,155  | 46,161  | 61,163  |         |
| October.....         | 71,619               | 49,417  | 69,100  | 58,993  | 48,724  | 63,893                       | 59,946               | 75,039  | 55,085  | 48,062  | 65,780  |         |
| November.....        | 59,498               | 47,934  | 64,043  | 49,618  | 44,983  | 50,438                       | 53,304               | 63,895  | 47,345  | 43,202  | 59,664  |         |
| December.....        | 55,450               | 56,112  | 67,337  | 49,663  | 49,989  | 56,828                       | 62,249               | 63,144  | 49,558  | 57,579  | 61,319  |         |
| Total.....           | <sup>2</sup> 543,987 | 673,499 | 794,174 | 751,738 | 687,494 | 752,727                      | <sup>2</sup> 444,507 | 666,464 | 750,761 | 712,770 | 672,790 | 759,027 |
| Monthly average..... | <sup>2</sup> 67,998  | 56,125  | 66,181  | 62,645  | 57,291  | 62,727                       | <sup>2</sup> 55,563  | 55,539  | 62,563  | 59,398  | 56,066  | 63,252  |

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

AGRICULTURAL MACHINERY <sup>1</sup>

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

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

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

ADDITIONAL PRELIMINARY RETURNS, CENSUS OF MANUFACTURES, 1927 <sup>1</sup>

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

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

## TREND OF BUSINESS MOVEMENTS

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

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey". | 1928    |            |           |           |            | 1929    | 1928       | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Perct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|---|---------|------------|-----------|-----------|------------|---------|------------|---------------------------------------|-----------------------------|--|-----------|---|
|   | August  | September  | October   | November  | December   | January | January    | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928      |   |
|   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| <b>TEXTILES</b>   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| <b>Wool</b>   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Receipts at Boston:   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Total.....thous. of lbs.  | 29,720  | 10,315     | 8,090     | 12,746    | 14,524     | 19,673  | 17,281     | +35.5                                 | +13.8                       | 343,549                                      | 300,892   | -12.4   |
| Domestic.....thous. of lbs.   | 25,802  | 7,156      | 4,598     | 9,322     | 7,293      | 4,532   | 8,044      | -37.9                                 | -43.7                       | 219,189                                      | 210,521   | -4.0  |
| Foreign.....thous. of lbs.  | 3,918   | 3,159      | 3,492     | 3,424     | 7,231      | 15,141  | 9,237      | +109.4                                | +63.9                       | 124,360                                      | 90,371    | -27.3   |
| Imports:  |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| In condition imported.....thous. of lbs.  | 14,472  | 14,510     | 20,730    | 15,587    | 20,293     | 36,523  | 24,759     | +80.0                                 | +47.5                       | 266,659                                      | 244,603   | -8.3  |
| Grease equivalent.....thous. of lbs.  | 16,078  | 17,015     | 24,193    | 18,488    | 24,411     | 38,835  | 28,353     | +59.1                                 | +37.0                       | 304,825                                      | 278,255   | -8.7  |
| Consumption by textile mills, grease equivalent.....thous. of lbs.  | 45,103  | 43,492     | 51,477    | 50,079    | 45,888     | 54,031  | 45,087     | +17.7                                 | +19.8                       | 551,529                                      | 538,354   | -2.4  |
| Stocks, grease equivalent, end of quarter:  |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Total.....thous. of lbs.  |         | \$ 369,816 |           |           | \$ 309,566 |         | \$ 303,668 | -16.3                                 | +1.9                        |  |           |   |
| Held by manufacturers.....thous. of lbs.  |         | \$ 158,346 |           |           | \$ 152,394 |         | \$ 168,458 | -3.8                                  | -9.5                        |  |           |   |
| Held by dealers.....thous. of lbs.  |         | \$ 211,470 |           |           | \$ 157,171 |         | \$ 135,210 | -25.7                                 | +16.2                       |  |           |   |
| Machinery, activity, hourly:  |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Looms:  |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Wide.....per ct. of hours active.....   | 55      | 59         | 67        | 70        | 69         | 69      | 62         | 0.0                                   | +11.3                       |  |           |   |
| Narrow.....per ct. of hours active.....   | 48      | 53         | 66        | 66        | 55         | 63      | 52         | +14.5                                 | +21.2                       |  |           |   |
| Carpet and rug.....per ct. of hours active.....   | 63      | 62         | 67        | 68        | 62         | 65      | 68         | +4.8                                  | -4.4                        |  |           |   |
| Sets of cards.....per ct. of hours active.....  | 77      | 85         | 93        | 89        | 83         | 84      | 78         | +1.2                                  | +7.7                        |  |           |   |
| Combs.....per ct. of hours active.....  | 65      | 74         | 82        | 81        | 74         | 83      | 75         | +12.2                                 | +10.7                       |  |           |   |
| Spinning spindles:  |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Woolen.....per ct. of hours active.....   | 74      | 80         | 88        | 85        | 80         | 82      | 78         | +2.5                                  | +5.1                        |  |           |   |
| Worsted.....per ct. of hours active.....  | 58      | 62         | 68        | 72        | 66         | 69      | 66         | +4.5                                  | +4.5                        |  |           |   |
| Prices:   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Raw, territory, fine, scoured.....dolls. per lb.  | 1.14    | 1.14       | 1.10      | 1.12      | 1.14       | 1.12    | 1.17       | -1.8                                  | -4.3                        |  |           |   |
| Raw, Ohio and Pa. fleeces.....dolls. per lb.  | .54     | .54        | .54       | .55       | .55        | .55     | .50        | 0.0                                   | +10.0                       |  |           |   |
| ¾ blood, combing, grease.....dolls. per lb.   | 1.60    | 1.58       | 1.58      | 1.55      | 1.58       | 1.58    | 1.43       | 0.0                                   | +10.5                       |  |           |   |
| Worsted yarn.....dolls. per lb.   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Women's dress goods, French serge, 39-in.....dolls. per yd.   | 1.03    | .99        | .98       | .98       | .98        | .98     | 1.00       | 0.0                                   | -2.0                        |  |           |   |
| Suiting, 13-oz.....dolls. per yd.   | 2.008   | 2.008      | 2.008     | 2.008     | 2.008      | 2.008   | 1.935      | 0.0                                   | +3.8                        |  |           |   |
| <b>Cotton</b>   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Receipts into sight.....thous. of bales.....  | 509     | 2,027      | 3,927     | 2,902     | 2,343      | 1,112   | 915        | -52.5                                 | +21.5                       | 16,211                                       | 16,069    | -0.9  |
| Imports, unmanufactured.....bales.....  | 25,258  | 18,508     | 27,840    | 39,213    | 39,630     | 54,939  | 41,445     | +38.6                                 | +32.6                       | 411,217                                      | 342,996   | -16.6   |
| Exports, unmanufactured (including linters).....bales.....  | 259,489 | 814,569    | 1,251,966 | 1,451,505 | 1,088,253  | 815,871 | 728,935    | -25.0                                 | +11.9                       | 9,477,744                                    | 8,731,933 | -7.9  |
| Consumption by textile mills.....bales.....   | 526,729 | 492,221    | 618,788   | 610,884   | 534,352    | 668,389 | 586,142    | +25.1                                 | +14.0                       | 7,405,021                                    | 6,575,685 | -11.2   |
| Stocks, domestic, end of month:   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Total, mills and warehouses.....thous. of bales.....  | 1,971   | 3,366      | 5,831     | 6,820     | 7,056      | 6,383   | 6,722      | -9.5                                  | -5.0                        |  |           |   |
| Mills.....thous. of bales.....  | 782     | 720        | 1,195     | 1,567     | 1,741      | 1,768   | 1,709      | +1.6                                  | +3.5                        |  |           |   |
| Warehouses.....thous. of bales.....   | 1,189   | 2,646      | 4,636     | 5,253     | 5,315      | 4,615   | 5,014      | -13.2                                 | -8.0                        |  |           |   |
| Stocks, world visible, end of month:  |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Total.....thous. of bales.....  | 3,480   | 4,114      | 6,198     | 7,130     | 7,766      | 7,607   | 7,163      | -2.0                                  | +6.2                        |  |           |   |
| American.....thous. of bales.....   | 1,790   | 2,563      | 4,645     | 5,438     | 5,900      | 5,510   | 5,470      | -6.6                                  | +0.7                        |  |           |   |
| Prices:   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| To producer.....dolls. per lb.  | .188    | .176       | .181      | .178      | .180       | .179    | .186       | -0.6                                  | -3.8                        |  |           |   |
| In New York, middling.....dolls. per lb.  | .193    | .185       | .196      | .199      | .205       | .202    | .190       | -1.5                                  | +6.3                        |  |           |   |
| <b>Cotton Yarn</b>  |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Machinery activity of spindles:   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Active spindles.....thousands.....  | 28,244  | 28,277     | 30,315    | 30,597    | 30,622     | 30,758  | 31,717     | +0.4                                  | -3.0                        |  |           |   |
| Total activity.....millions of hours.....   | 7,431   | 6,961      | 8,694     | 8,524     | 7,711      | 9,225   | 8,263      | +19.6                                 | +11.6                       |  |           |   |
| Activity per spindle.....hours.....   | 209     | 196        | 246       | 241       | 219        | 261     | 227        | +19.2                                 | +15.0                       |  |           |   |
| Ratio capacity.....per cent.....  | 87.7    | 90.6       | 103.9     | 108.1     | 99.1       | 111.6   | 101.0      | +12.6                                 | +10.5                       |  |           |   |
| Carded sales yarn:  |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Production.....thous. of lbs.....   | 14,046  | 18,839     | 17,621    | 18,675    | 20,157     | 18,311  | 18,934     | -9.2                                  | -3.3                        |  | 214,544   |   |
| Stocks, end of month.....thous. of lbs.....   | 11,574  | 10,248     | 8,476     | 8,568     | 8,204      | 8,836   | 13,444     | +7.7                                  | -34.3                       |  |           |   |
| Unfilled orders, end of mo.....thous. of lbs.....   | 27,044  | 34,836     | 39,041    | 44,752    | 43,618     | 43,246  | 38,287     | -0.9                                  | +13.0                       |  |           |   |
| Prices:   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| 22/1 cones, Boston.....dolls. per lb.   | .369    | .358       | .372      | .375      | .378       | .382    | .369       | +1.1                                  | +3.5                        |  |           |   |
| 40/1s, southern spinning.....dolls. per lb.   | .514    | .501       | .495      | .511      | .506       | .510    | .523       | +0.8                                  | -2.5                        |  |           |   |
| <b>Cotton Goods</b>   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Cotton textiles:  |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Production.....thous. of yds.....   | 302,470 | 253,688    | 284,899   | 341,841   | 279,207    | 342,806 | 297,669    | +22.8                                 | +15.2                       | 3,334,232                                    | 3,563,096 | +6.9  |
| New orders.....thous. of yds.....   | 340,810 | 387,151    | 401,953   | 375,163   | 225,189    | 317,078 | 194,114    | +40.8                                 | +63.3                       | 3,302,466                                    | 3,589,989 | +8.7  |
| Shipments.....thous. of yds.....  | 324,073 | 278,110    | 307,402   | 347,949   | 276,098    | 345,354 | 266,947    | +25.1                                 | +29.4                       | 3,261,613                                    | 3,507,854 | +7.5  |
| Stocks, end of month.....thous. of yds.....   | 441,667 | 417,245    | 394,742   | 388,634   | 391,743    | 389,195 | 367,223    | -0.7                                  | +6.0                        |  |           |   |
| Unfilled orders, end of mo.....thous. of yds.....   | 288,964 | 398,005    | 492,556   | 519,770   | 468,861    | 440,585 | 313,893    | -6.0                                  | +40.4                       |  |           |   |
| Fine cotton goods, production.....pieces.....   | 136,237 | 113,627    | 282,763   | 348,712   | 363,206    | 403,300 | 401,676    | +11.0                                 | +0.4                        | 5,770,419                                    | 3,135,814 | -45.7   |
| Cotton cloth:   |         |            |           |           |            |         |            |                                       |                             |  |           |   |
| Imports.....thous. of sq. yds.....  | 3,753   | 3,139      | 3,676     | 4,389     | 5,840      | 6,069   | 6,472      | +3.9                                  | -6.2                        | 63,016                                       | 61,248    | -2.8  |
| Exports.....thous. of sq. yds.....  | 43,928  | 34,694     | 56,087    | 54,248    | 50,661     | 51,337  | 34,963     | +1.3                                  | +46.8                       | 551,846                                      | 524,525   | -5.0  |

<sup>2</sup> Quarter ending in month indicated.

<sup>3</sup> Quarter ending Dec. 31, 1927.



## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928   |           |         |          |          | 1929    | 1928    | PER CENT INCREASE (+) OR DECREASE (-) | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |       |
|--|--------|-----------|---------|----------|----------|---------|---------|---------------------------------------|--|-----------|--|-------|
|  | August | September | October | November | December | January | January | Jan., 1929 from Dec., 1928            | Jan., 1929 from Jan., 1928                   | 1927      |  | 1928  |
| TEXTILES—Continued   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Cotton Goods—Continued   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Fabric for tire manufacture, consumption.....thous. of lbs..   | 21,854 | 17,797    | 20,295  | 17,038   | 15,373   | 16,040  | 16,040  | +12.1                                 | +21.8  | 177,979   | 222,246  | +24.9 |
| Elastic webbing, shipments.....thous. of dolls..   | 1,399  | 1,478     | 1,624   | 1,462    | 1,260    | 1,412   | 1,159   | -12.1                                 | -21.8  | 16,725    | 16,725   | ----- |
| Prices:  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Print cloth, 64 x 60.....dolls. per yd..   | .075   | .074      | .078    | .078     | .078     | .076    | .080    | -2.6                                  | -5.0   | -----     | -----  | ----- |
| Sheeting, brown.....dolls. per yd..  | .091   | .089      | .090    | .090     | .091     | .090    | .098    | -1.1                                  | -8.2   | -----     | -----  | ----- |
| Cotton goods (Fairchild), rel. to 1911-1913..  | 163    | 160       | 163     | 164      | 165      | 165     | 166     | 0.0                                   | -0.6   | -----     | -----  | ----- |
| Cotton Finishing   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| White, dyed and printed (outside mills):   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Billings, finished goods.....thous. of yds..   | 70,748 | 69,805    | 83,935  | 82,700   | 79,112   | 82,518  | 68,737  | +4.3                                  | +20.0  | 1,013,493 | 901,194  | -11.1 |
| New orders, gray yardage.....thous. of yds..   | 71,743 | 74,483    | 87,175  | 82,657   | 74,417   | 87,082  | 75,665  | +17.0                                 | +15.1  | 980,525   | 891,586  | -9.1  |
| Shipments, finished goods.....cases..  | 46,283 | 45,767    | 50,984  | 49,136   | 47,587   | 54,576  | 44,673  | +14.7                                 | +22.2  | 593,138   | 558,750  | -5.8  |
| Stocks, finished goods, end mo.....cases..   | 35,819 | 33,410    | 32,046  | 36,566   | 38,678   | 36,374  | 40,751  | -6.0                                  | -10.7  | -----     | -----  | ----- |
| Operating activity.....per ct. of capacity..   | 54     | 61        | 66      | 65       | 62       | 65      | 62      | +4.8                                  | +4.8   | -----     | -----  | ----- |
| Unfilled orders, end of month.....days..   | 4.4    | 5.0       | 6.0     | 5.5      | 5.6      | 5.6     | 4.7     | 0.0                                   | +19.1  | -----     | -----  | ----- |
| Printed only (mills and outside):  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Production.....thous. of yds..   | 54,495 | 66,079    | 77,320  | 76,289   | 73,753   | 82,259  | 49,826  | +11.5                                 | +65.1  | 794,192   | 794,192  | ----- |
| Stocks, end of month.....thous. of yds..   | 74,682 | 75,161    | 73,687  | 79,437   | 83,995   | 80,212  | -----   | -4.5                                  | -----  | -----     | -----  | ----- |
| Silk   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Imports, raw.....thous. of lbs..   | 9,320  | 7,202     | 8,272   | 7,441    | 7,631    | 9,105   | 7,405   | +19.3                                 | +23.0  | 86,379    | 88,353   | +2.3  |
| Deliveries (consumption).....bales..   | 50,821 | 47,797    | 49,940  | 47,709   | 45,026   | 57,349  | 52,420  | +27.4                                 | +9.4   | 551,379   | 571,010  | +3.6  |
| Stocks, end of month:  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| At warehouses.....bales..  | 50,975 | 50,464    | 49,381  | 49,806   | 48,908   | 49,943  | 47,528  | +2.1                                  | +5.1   | -----     | -----  | ----- |
| At manufacturing plants.....bales..  | 24,429 | 22,786    | 26,676  | 25,373   | 22,836   | 25,778  | 26,700  | +12.9                                 | -3.5   | -----     | -----  | ----- |
| Silk machinery activity:   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Broad looms.....per cent of normal..   | 89.8   | 92.7      | 102.0   | 94.5     | 92.7     | 94.7    | 94.6    | +2.2                                  | +0.1   | -----     | -----  | ----- |
| Narrow looms.....per cent of normal..  | 54.1   | 54.0      | 50.5    | 51.8     | 52.6     | 48.0    | 50.7    | -8.7                                  | -5.3   | -----     | -----  | ----- |
| Spinning spindles.....per cent of normal..   | 52.1   | 66.9      | 69.3    | 60.3     | 58.5     | 61.0    | 77.3    | +4.3                                  | -21.1  | -----     | -----  | ----- |
| Prices:  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Raw, Japanese, 13-15, N. Y.....dolls. per lb..   | 4.851  | 5.096     | 5.145   | 5.047    | 4.998    | 4.998   | 5.145   | 0.0                                   | -2.9   | -----     | -----  | ----- |
| Silk goods, Fairchild index.....dolls. per yd..  | 1.16   | 1.16      | 1.16    | 1.16     | 1.16     | 1.16    | 1.19    | 0.0                                   | -2.5   | -----     | -----  | ----- |
| Rayon  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Imports.....thous. of lbs..  | 1,248  | 924       | 1,238   | 1,004    | 1,759    | 1,707   | 1,366   | -3.0                                  | +25.0  | 16,210    | 12,880   | -20.5 |
| Stocks, bonded, end of month.....thous. of lbs..   | 2,976  | 2,814     | 2,663   | 2,434    | 2,850    | 2,915   | 2,915   | -----                                 | -----  | -----     | -----  | ----- |
| Price, 150 denier, A grade, N. Y.....dolls. per lb..   | 1.50   | 1.50      | 1.50    | 1.50     | 1.50     | 1.50    | 1.50    | -----                                 | -----  | -----     | -----  | ----- |
| Clothing   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Men's and boys' garments cut:  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Suits.....thous. of garments..   | 2,045  | 1,601     | 1,562   | 1,515    | 1,758    | 2,207   | 2,021   | -----                                 | -----  | 24,291    | 22,564   | -7.1  |
| Separate trousers.....thous. of garments..   | 1,895  | 1,852     | 1,884   | 1,543    | 1,501    | 2,021   | 2,021   | -----                                 | -----  | 24,752    | 21,844   | -11.7 |
| Overcoats.....thous. of garments..   | 666    | 647       | 711     | 463      | 304      | 269     | 269     | -----                                 | -----  | 5,147     | 5,147  | -7.7  |
| Overalls:  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Cut.....thous. of dozen garments..   | 394    | 385       | 404     | 343      | 274      | 354     | 354     | -----                                 | -----  | 4,327     | 4,327  | ----- |
| Net shipments.....thous. of dozen garments..   | 360    | 358       | 340     | 297      | 262      | 294     | 294     | -----                                 | -----  | 3,801     | 3,801  | ----- |
| Unfilled orders end of mo.....thous. of dozen garments..   | 159    | 161       | 174     | 230      | 263      | 99      | 99      | -----                                 | -----  | -----     | -----  | ----- |
| Hosiery  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Production.....thous. of dozen pairs..   | 3,474  | 3,255     | 3,852   | 3,810    | 3,002    | 3,578   | 3,578   | -----                                 | -----  | 44,985    | 41,230   | -8.3  |
| Net shipments.....thous. of dozen pairs..  | 3,735  | 3,755     | 4,166   | 4,144    | 3,360    | 3,038   | 3,038   | -----                                 | -----  | 45,357    | 42,160   | -7.0  |
| Stocks, end of month.....thous. of dozen pairs..   | 8,656  | 8,128     | 7,849   | 7,699    | 7,510    | 7,983   | 7,983   | -----                                 | -----  | 46,908    | 42,616   | -9.1  |
| New orders.....thous. of dozen pairs..   | 3,207  | 3,810     | 4,342   | 4,751    | 3,386    | 3,109   | 3,109   | -----                                 | -----  | -----     | -----  | ----- |
| Unfilled orders, end of mo. thous. of dozen pairs..  | 4,079  | 3,957     | 3,888   | 4,609    | 4,403    | 5,380   | 5,380   | -----                                 | -----  | -----     | -----  | ----- |
| Knit Underwear   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Production.....thous. of dozen garments..  | 1,098  | 1,016     | 1,297   | 1,147    | 951      | 1,041   | 1,022   | +9.5                                  | +1.9   | 12,738    | 13,171   | +3.4  |
| Net shipments.....thous. of dozen garments..   | 1,306  | 1,402     | 1,514   | 1,168    | 873      | 937     | 917     | +7.3                                  | +2.2   | 13,245    | 13,340   | +0.7  |
| Stocks, end of mo.....thous. of dozen garments..   | 1,570  | 1,370     | 1,228   | 1,164    | 1,210    | 1,253   | 1,202   | +3.6                                  | +4.2   | 13,482    | 13,164   | -2.4  |
| New orders.....thous. of dozen garments..  | 1,236  | 1,213     | 1,483   | 1,163    | 819      | 1,428   | 1,309   | +74.4                                 | +9.1   | -----     | -----  | ----- |
| Unfilled orders, end of month.....thous. of dozen garments..   | 1,896  | 1,696     | 1,645   | 1,605    | 1,508    | 1,987   | 2,313   | +31.8                                 | -14.1  | -----     | -----  | ----- |
| Burlaps and Fibers   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Imports:   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Burlaps.....thous. of lbs..  | 47,766 | 43,617    | 30,874  | 31,503   | 51,656   | 57,109  | 48,922  | +10.6                                 | +16.7  | 569,671   | 619,969  | +8.8  |
| Fibers (unmanufactured).....long tons..  | 20,657 | 21,004    | 25,615  | 25,651   | 36,496   | 34,109  | 39,268  | -6.5                                  | -13.1  | 303,598   | 313,715  | +3.3  |
| Pyroxylin Coated Textiles  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Pyroxylin spread.....thous. of lbs..   | 5,596  | 4,844     | 5,712   | 5,366    | 4,763    | 5,389   | 4,093   | +13.1                                 | +31.7  | 42,713    | 61,134   | +43.1 |
| Shipments billed.....thous. of linear yards..  | 4,241  | 3,914     | 4,499   | 4,419    | 3,875    | 4,303   | 3,077   | +11.0                                 | +39.8  | 32,682    | 47,995   | +46.9 |
| Unfilled orders, end mo. thous. of linear yards..  | 3,853  | 4,561     | 3,824   | 3,316    | 3,543    | 4,286   | 3,609   | +21.0                                 | +18.8  | -----     | -----  | ----- |
| Fur  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| sales by dealers.....thous. of dollars..   | 12,110 | 10,244    | 12,576  | 7,960    | 5,553    | 7,081   | 7,081   | -----                                 | -----  | 170,723   | 134,088  | -21.5 |
| Buttons  |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Fresh-water pearl buttons:   |        |           |         |          |          |         |         |                                       |  |           |  |       |
| Production.....ratio to capacity..   | 43.6   | 47.7      | 51.0    | 53.0     | 44.6     | 48.8    | 48.8    | -----                                 | -----  | -----     | -----  | ----- |
| Stocks, end of month.....thous. of gross..   | 10,746 | 10,593    | 10,621  | 10,815   | 10,865   | 10,902  | 10,902  | -----                                 | -----  | -----     | -----  | ----- |
| Revised.   |        |           |         |          |          |         |         |                                       |  |           |  |       |

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 133 of the February, 1929, "Survey" | 1928    |           |         |          |          | 1929    | 1928    | PER CENT INCREASE (+) OR DECREASE (-) |                            | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|---------|-----------|---------|----------|----------|---------|---------|---------------------------------------|----------------------------|--|-----------|--|
|  | August  | September | October | November | December | January | January | Jan., 1929 from Dec., 1928            | Jan., 1929 from Jan., 1928 | 1927   | 1928      |  |
| IRON AND STEEL   |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Iron   |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Manganese ore, imports.....thous. of long tons..   | 26      | 15        | 26      | 16       | 21       | 15      | 9       | -28.6                                 | +66.7                      | 309  | 209       | -32.4  |
| Iron ore:  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Imports.....thous. of long tons..  | 226     | 211       | 170     | 223      | 205      | 180     | 251     | -12.2                                 | -28.3                      | 2,622  | 2,487     | -5.1   |
| Consumption.....thous. of long tons..  | 4,761   | 4,608     | 5,025   | 4,897    | 4,997    | 5,195   | 4,303   | +4.0                                  | +20.7                      | 52,933                                       | 56,823    | +7.3   |
| Stocks, end of month—  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Total.....thous. of long tons..  | 31,754  | 35,808    | 39,555  | 40,080   | 35,147   | 30,189  | 33,350  | -14.1                                 | -9.5                       |  |           |  |
| At furnaces.....thous. of long tons..  | 26,036  | 29,708    | 33,082  | 33,626   | 29,452   | 24,878  | 27,062  | -15.5                                 | -8.1                       |  |           |  |
| On Lake Erie docks.....thous. of long tons..   | 5,718   | 6,100     | 6,473   | 6,454    | 5,695    | 5,311   | 6,288   | -6.7                                  | -15.5                      |  |           |  |
| Pig-iron production:   |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Total, United States.....thous. of long tons..   | 3,137   | 3,062     | 3,374   | 3,302    | 3,370    | 3,442   | 2,870   | +2.1                                  | +19.9                      | 36,232                                       | 37,838    | +4.4   |
| Merchant furnaces.....thous. of long tons..  | 575     | 585       | 644     | 648      | 722      | 791     | 715     | +9.6                                  | +10.6                      | 8,886  | 7,626     | -14.2  |
| Canada.....thous. of long tons..   | 92      | 91        | 93      | 95       | 103      | 88      | 65      | -14.6                                 | +4.8                       | 709  | 1,037     | +46.3  |
| Furnaces in blast, end of month:   |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Furnaces.....number..  | 183     | 197       | 197     | 194      | 201      | 202     | 185     | +0.5                                  | +9.2                       |  |           |  |
| Capacity.....long tons per day..   | 98,730  | 106,755   | 108,800 | 108,575  | 110,675  | 111,985 | 96,640  | +1.2                                  | +15.9                      |  |           |  |
| Per cent of total.....per cent..   | 54.0    | 58.1      | 58.5    | 57.6     | 60.9     | 62.2    | 52.9    | +2.1                                  | +17.6                      |  |           |  |
| Ohio gray-iron foundries:  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Meltings—  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Actual.....long tons..   | 12,932  | 14,586    | 20,112  | 17,249   | 14,284   |         | 13,977  |                                       |                            | 184,766                                      | 194,040   | +5.0   |
| Normal.....long tons..   | 12,497  | 16,155    | 19,349  | 18,849   | 18,182   |         | 16,097  |                                       |                            | 223,441                                      | 197,329   | -11.7  |
| Ratio to normal.....per cent of normal..   | 103.4   | 90.2      | 103.9   | 91.6     | 72.5     |         | 86.8    |                                       |                            |  |           |  |
| Stocks, end of month.....per cent of normal..  | 129     | 131       | 134     | 130      | 124      |         | 129     |                                       |                            |  |           |  |
| Receipts.....per cent of normal..  | 99      | 90        | 103     | 95       | 85       |         | 88      |                                       |                            |  |           |  |
| Malleable castings:  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Production.....short tons..  | 68,606  | 62,665    | 70,054  | 63,560   | 59,432   | 73,169  | 61,072  | +23.1                                 | +19.8                      | 696,765                                      | 779,481   | +11.9  |
| Operating activity.....per ct. of capacity..   | 72.1    | 66.3      | 73.4    | 66.8     | 63.4     | 77.5    | 62.7    | +22.2                                 | +23.6                      |  |           |  |
| Shipments.....short tons..   | 66,962  | 61,736    | 63,510  | 58,346   | 56,861   | 77,188  | 55,432  | +35.7                                 | +39.2                      | 687,494                                      | 752,727   | +9.5   |
| New orders.....short tons..  | 66,128  | 61,163    | 65,780  | 59,664   | 61,319   | 77,091  | 62,328  | +25.7                                 | +23.7                      | 672,790                                      | 759,027   | +12.8  |
| Wholesale prices:  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Foundry, No. 2,  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| northern.....dolls. per long ton..   | 18.26   | 18.64     | 18.86   | 19.39    | 19.51    | 19.26   | 19.01   | -1.3                                  | +1.3                       |  |           |  |
| Basic (valley furnace).....dolls. per long ton..   | 16.00   | 16.19     | 17.10   | 17.50    | 17.50    | 17.50   | 17.00   | 0.0                                   | +2.9                       |  |           |  |
| Composite pig iron.....dolls. per long ton..   | 17.78   | 18.04     | 18.40   | 18.96    | 19.06    | 19.05   | 18.37   | -0.1                                  | +3.7                       |  |           |  |
| Cast-Iron Boilers and Radiators  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Round boilers:   |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Production.....thous. of lbs..   | 12,881  | 13,655    | 17,953  | 16,846   | 9,345    | 11,248  | 9,037   | +20.4                                 | +24.5                      | 245,340                                      | 158,048   | -35.6  |
| Shipments.....thous. of lbs..  | 14,422  | 17,021    | 22,621  | 17,362   | 12,281   | 9,605   | 11,009  | -21.8                                 | -12.8                      | 226,795                                      | 162,562   | -28.3  |
| New orders.....thous. of lbs..   | 12,551  | 14,504    | 19,819  | 13,252   | 12,096   | 8,224   | 11,511  | -32.0                                 | -28.6                      | 226,131                                      | 157,694   | -30.3  |
| Stocks, end of month.....thous. of lbs..   | 86,141  | 82,931    | 78,349  | 77,785   | 74,352   | 77,015  | 79,400  | +3.6                                  | -3.0                       |  |           |  |
| Square boilers:  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Production.....thous. of lbs..   | 38,693  | 26,760    | 30,098  | 26,770   | 12,542   | 32,938  | 24,743  | +162.6                                | +33.1                      | 278,267                                      | 339,781   | +22.1  |
| Shipments.....thous. of lbs..  | 36,212  | 41,989    | 52,505  | 36,328   | 25,368   | 17,888  | 19,292  | -29.5                                 | -7.3                       | 257,461                                      | 335,734   | +30.4  |
| New orders.....thous. of lbs..   | 31,809  | 36,527    | 53,522  | 28,502   | 26,268   | 15,866  | 18,230  | -39.6                                 | -13.0                      | 251,679                                      | 337,876   | +34.2  |
| Stocks, end of month.....thous. of lbs..   | 182,367 | 167,063   | 145,051 | 135,889  | 122,487  | 136,986 | 120,522 | +11.8                                 | +13.7                      |  |           |  |
| Radiators:   |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Production.....thous. sq. ft. heating surface..  | 15,914  | 13,770    | 12,853  | 10,825   | 6,670    | 14,512  | 12,581  | +117.6                                | +15.3                      | 177,430                                      | 160,341   | -9.6   |
| Shipments.....thous. sq. ft. heating surface..   | 16,951  | 18,092    | 23,062  | 19,219   | 13,932   | 9,407   | 10,661  | -32.5                                 | -11.8                      | 162,041                                      | 161,489   | -0.3   |
| New orders.....thous. sq. ft. heating surface..  | 15,753  | 16,533    | 23,394  | 16,931   | 14,798   | 8,998   | 9,990   | -39.2                                 | -9.9                       | 164,608                                      | 168,068   | +2.1   |
| Stocks, end of month.....thous. sq. ft. heating surface..  | 77,267  | 72,902    | 63,082  | 54,776   | 47,572   | 52,599  | 48,714  | +10.6                                 | +8.0                       |  |           |  |
| Gas-fired boilers:   |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Shipments.....dollars..  | 288,954 | 395,265   | 351,367 | 250,315  | 153,744  | 115,100 | 96,589  | -25.1                                 | +19.2                      |  | 2,663,937 |  |
| Shipments.....thous. B. t. u..   | 239,048 | 322,000   | 274,760 | 202,868  | 128,380  | 88,463  | 86,892  | -31.1                                 | +1.8                       |  | 2,153,533 |  |
| Production.....thous. B. t. u..  | 168,547 | 169,376   | 187,196 | 233,073  | 83,300   | 202,075 | 132,733 | +142.6                                | +52.2                      |  | 1,943,973 |  |
| Stocks, end of month.....thous. B. t. u..  | 778,337 | 622,687   | 596,143 | 598,518  | 581,451  | 704,044 | 846,845 | +21.1                                 | -16.9                      |  |           |  |
| Crude Steel  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Steel ingots, production:  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| United States, total.....thous. of long tons..   | 4,178   | 4,148     | 4,648   | 4,259    | 4,019    | 4,489   | 3,991   | +11.7                                 | +12.5                      | 43,398                                       | 49,857    | +14.9  |
| Ratio to capacity.....per cent..   | 82      | 88        | 91      | 87       | 85       | 88      | 81      | +3.5                                  | +8.6                       |  |           |  |
| Canada.....thous. of long tons..   | 89      | 100       | 109     | 108      | 103      | 116     | 84      | -12.6                                 | +38.1                      | 907  | 1,241     | +36.8  |
| U. S. Steel Corporation:   |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Unfilled orders,   |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| end of month.....thous. of long tons..   | 3,624   | 3,698     | 3,751   | 3,673    | 3,977    | 4,109   | 4,276   | +3.3                                  | -3.9                       |  |           |  |
| Earnings.....thous. of dolls..   | 18,597  | 17,418    | 19,399  | 17,365   | 16,423   |         | 11,900  |                                       |                            | 164,297                                      | 193,203   | +17.6  |
| Steel castings:  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Production—  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Total.....short tons..   | 87,742  | 75,761    | 87,952  | 82,385   | 82,203   | 93,410  | 74,454  | +13.6                                 | +25.5                      | 968,810                                      | 1,021,956 | +5.5   |
| Ratio to capacity.....per cent..   | 60      | 51        | 60      | 56       | 56       | 64      | 51      | +14.3                                 | +25.5                      |  |           |  |
| Railroad specialties.....short tons..  | 27,157  | 25,311    | 29,471  | 30,799   | 26,484   | 35,689  | 28,714  | +34.8                                 | +24.3                      | 370,654                                      | 371,564   | +0.2   |
| Miscellaneous.....short tons..   | 60,585  | 50,450    | 58,481  | 51,586   | 55,719   | 57,721  | 45,740  | +3.6                                  | +26.2                      | 598,156                                      | 650,392   | +8.7   |
| New orders—  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Total.....short tons..   | 81,286  | 82,762    | 78,860  | 84,742   | 96,373   | 125,800 | 91,448  | +30.5                                 | +37.6                      | 922,919                                      | 1,000,283 | +8.4   |
| Ratio to capacity.....per cent..   | 55      | 56        | 54      | 58       | 65       | 86      | 62      | +32.3                                 | +38.7                      |  |           |  |
| Railroad specialties.....short tons..  | 25,171  | 35,234    | 26,736  | 34,545   | 43,928   | 66,293  | 41,276  | +50.9                                 | +60.6                      | 384,103                                      | 389,863   | +1.5   |
| Miscellaneous.....short tons..   | 56,115  | 47,528    | 52,124  | 50,197   | 52,445   | 59,507  | 50,172  | +13.5                                 | +18.6                      | 538,816                                      | 610,420   | +13.3  |
| Sheets, black, blue, galvanized, and full finished:  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Production—  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Total.....net tons..   | 329,396 | 318,907   | 309,243 | 358,402  | 302,182  | 391,404 | 316,541 | +29.5                                 | +23.7                      | 3,287,276                                    | 3,947,953 | +20.1  |
| Ratio to capacity.....per cent..   | 92.8    | 101.0     | 103.5   | 104.8    | 95.1     | 109.9   | 89.6    | +15.6                                 | +22.7                      |  |           |  |
| Stocks, end of month—  |         |           |         |          |          |         |         |                                       |                            |  |           |  |
| Total.....net tons..   | 154,461 | 146,832   | 150,600 | 174,028  | 191,429  | 198,874 | 170,453 | +3.9                                  | +16.7                      |  |           |  |
| Unsold.....net tons..  | 51,636  | 44,519    | 49,800  | 63,014   | 66,750   | 63,739  | 59,508  | -4.5                                  | +7.1                       |  |           |  |
| Shipments.....net tons..   | 324,691 | 322,876   | 354,925 | 307,790  | 296,687  | 362,229 | 274,126 | +22.1                                 | +32.1                      | 3,152,173                                    | 3,780,096 | +19.9  |
| New orders.....net tons..  | 254,397 | 370,936   | 344,614 | 346,041  | 323,421  | 438,390 | 302,921 | +35.5                                 | +44.7                      | 3,354,694                                    | 3,794,626 | +13.1  |
| Unfilled orders, end of month.....net tons..   | 498,023 | 539,960   | 525,161 | 565,739  | 592,094  | 652,602 | 694,197 | +10.2                                 | -6.0                       |  |           |  |

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928      |           |         |          |           | 1929      | 1928      | PER CENT INCREASE (+) OR DECREASE (-) | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per ct. in-crease (+) or de-crease (-) cumulative 1928 from 1927 |       |
|--|-----------|-----------|---------|----------|-----------|-----------|-----------|---------------------------------------|--|-----------|--|-------|
|  | August    | September | October | November | December  | January   | January   | Jan., 1929 from Dec., 1928            | Jan., 1929 from Jan., 1928                   | 1927      |  | 1928  |
|  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| <b>IRON AND STEEL—Continued</b>  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| <b>Crude Steel—Continued</b>   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Steel barrels:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Production.....barrels   | 677,313   | 593,255   | 656,021 | 563,647  | 551,113   | 558,492   | 475,906   | +1.3                                  | +17.4  | 6,630,569 | 7,397,785  | +11.6 |
| Ratio to capacity.....per cent   | 57.8      | 50.2      | 56.4    | 48.0     | 47.1      | 48.4      | 43.7      | +2.8                                  | +10.8  |           |  |       |
| Shipments.....barrels  | 675,600   | 595,640   | 661,009 | 568,353  | 549,913   | 548,581   | 474,159   | -0.2                                  | +15.7  | 6,624,753 | 7,403,726  | +11.8 |
| Stocks, end of month.....barrels   | 57,544    | 55,059    | 50,071  | 45,365   | 46,465    | 56,376    | 54,353    | +21.3                                 | +3.7   |           |  |       |
| Unfilled orders, end of month.....barrels  | 1,064,358 | 996,820   | 823,872 | 957,117  | 1,357,443 | 1,661,710 | 1,351,797 | +22.4                                 | +22.9  |           |  |       |
| Track work, production.....short tons  | 11,040    | 10,767    | 9,493   | 8,379    | 11,061    | 9,996     | 9,332     | -9.6                                  | +7.1   | 160,631   | 139,645  | -13.1 |
| Iron, steel, and heavy hardware sales.....rel. to Jan., 1921   | 215       | 207       | 236     | 210      | 221       | 290       | 157       | +31.2                                 | +32.4  |           |  |       |
| Lock washers, shipments.....thous. of dolls.   | 282       | 257       | 269     | 255      | 221       | 219       | 219       |                                       |  |           |  |       |
| Wholesale prices:  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Steel billets, Bessemer.....dolls. per long ton  | 32.00     | 32.00     | 32.80   | 33.00    | 33.00     | 33.00     | 33.00     | 0.0                                   | 0.0  |           |  |       |
| Iron and steel, comp.....dolls. per long ton   | 34.93     | 35.17     | 35.48   | 35.92    | 36.20     | 36.24     | 35.27     | +0.1                                  | +2.8   |           |  |       |
| Structural steel beams.....dolls. per 100 lbs.   | 1.85      | 1.85      | 1.85    | 1.90     | 1.90      | 1.90      | 1.80      | 0.0                                   | +5.6   |           |  |       |
| Composite finished steel.....dolls. per 100 lbs.   | 2.48      | 2.50      | 2.52    | 2.52     | 2.53      | 2.55      | 2.47      | +0.8                                  | +3.2   |           |  |       |
| <b>Fabricated Steel Products</b>   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Structural steel, fabricated:  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| New orders (prorated).....short tons   | 350,350   | 319,550   | 250,250 | 242,550  | 246,400   | 265,650   | 211,750   | +7.8                                  | +25.5  | 3,052,500 | 3,284,050  | +7.6  |
| Ratio to capacity.....per cent   | 91        | 83        | 65      | 63       | 64        | 69        | 55        | +7.8                                  | +25.5  |           |  |       |
| Shipments (prorated).....short tons  | 288,750   | 273,350   | 319,550 | 281,050  | 273,350   | 273,350   | 204,050   | 0.0                                   | +34.0  | 2,853,750 | 3,068,450  | +7.5  |
| Ratio to capacity.....per cent   | 75        | 71        | 83      | 73       | 71        | 71        | 53        | 0.0                                   | +34.0  |           |  |       |
| Steel plate, fabricated, new orders:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Total.....short tons   | 47,245    | 40,281    | 53,983  | 54,418   | 40,441    | 32,724    | 35,787    | -19.1                                 | -8.6   | 497,707   | 532,810  | +7.1  |
| Ratio to capacity.....per cent   | 60        | 50        | 68      | 68       | 51        | 41        | 45        | -19.6                                 | -8.9   |           |  |       |
| Oil-storage tanks.....short tons   | 24,807    | 18,572    | 23,960  | 32,381   | 15,152    | 11,055    | 11,101    | -27.0                                 | -0.4   | 210,974   | 242,763  | +15.1 |
| Steel bars, cold finished, shipments.....short tons  | 42,993    | 43,893    | 50,867  | 46,902   | 40,045    | 50,276    | 45,010    | +25.5                                 | +11.7  | 408,369   | 504,908  | +23.6 |
| Steel boilers, new orders:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Quantity.....number  | 2,018     | 1,749     | 1,803   | 1,660    | 1,343     | 1,075     | 1,244     | -20.0                                 | -13.6  | 19,108    | 19,672   | +3.0  |
| Area.....thous. of sq. ft.   | 1,691     | 1,453     | 1,500   | 1,460    | 1,308     | 1,243     | 993       | -5.0                                  | +25.2  | 17,796    | 17,685   | -0.6  |
| Steel furniture:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Business group—  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Shipments.....thous. of dolls.   | 2,565     | 2,754     | 3,159   | 2,854    | 3,117     | 3,626     | 2,713     | +16.3                                 | +33.7  | 31,106    | 35,043   | +12.7 |
| New orders.....thous. of dolls.  | 2,619     | 2,689     | 3,193   | 2,676    | 3,611     | 3,906     | 3,248     | +8.2                                  | +20.3  | 30,760    | 35,974   | +17.0 |
| Unfilled orders, end mo. thous. of dolls.  | 2,118     | 2,062     | 2,095   | 1,917    | 2,410     | 2,579     | 2,000     | +7.0                                  | +29.0  |           |  |       |
| Shelving—  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Shipments.....thous. of dolls.   | 836       | 678       | 954     | 916      | 791       | 971       | 680       | +22.8                                 | +42.8  | 7,264     | 9,297  | +28.0 |
| New orders.....thous. of dolls.  | 863       | 800       | 959     | 875      | 829       | 1,099     | 769       | +32.6                                 | +42.9  | 7,351     | 9,601  | +30.6 |
| Unfilled orders, end mo. thous. of dolls.  | 734       | 754       | 760     | 721      | 757       | 819       | 680       | +8.2                                  | +20.4  |           |  |       |
| Iron and steel:  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Exports.....long tons  | 287,297   | 228,056   | 256,870 | 256,886  | 221,810   | 274,296   | 205,766   | +23.7                                 | +33.3  | 2,180,970 | 2,862,997  | +31.3 |
| Imports.....long tons  | 54,062    | 47,685    | 50,176  | 50,038   | 41,628    | 45,573    | 49,903    | +9.5                                  | -8.7   | 552,907   | 589,716  | +6.7  |
| <b>Enameled Ware</b>   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Baths:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Shipments.....pieces   | 103,878   | 86,342    | 939,174 | 68,783   | 58,425    | 69,415    | 71,519    | +18.8                                 | -2.9   | 1,131,207 | 1,116,352  | -1.3  |
| Stocks, end of month.....pieces  | 122,167   | 134,749   | 147,656 | 165,738  | 175,104   | 188,738   | 155,418   | +7.8                                  | +21.4  |           |  |       |
| New orders.....pieces  | 96,876    | 76,074    | 90,665  | 72,677   | 63,756    | 66,991    | 78,190    | +5.1                                  | -14.3  | 1,146,867 | 1,220,800  | +6.4  |
| Unfilled orders, end of month.....pieces   | 68,263    | 53,303    | 44,842  | 45,561   | 39,182    | 35,073    | 36,473    | -10.5                                 | -3.8   |           |  |       |
| Lavatories:  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Shipments.....pieces   | 114,070   | 94,383    | 99,250  | 79,218   | 71,607    | 93,321    | 86,529    | +14.1                                 | -5.6   | 1,251,657 | 1,265,220  | +1.1  |
| Stocks, end of month.....pieces  | 161,276   | 168,211   | 180,651 | 195,323  | 207,940   | 230,527   | 202,755   | +10.9                                 | +13.7  |           |  |       |
| New orders.....pieces  | 102,140   | 89,126    | 91,575  | 81,693   | 68,293    | 80,614    | 93,951    | +18.0                                 | -14.2  | 1,272,225 | 1,369,278  | +7.6  |
| Sinks:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Shipments.....pieces   | 116,497   | 101,777   | 111,740 | 89,309   | 73,623    | 93,321    | 93,158    | +26.8                                 | +0.2   | 1,313,952 | 1,317,163  | +0.2  |
| Stocks, end of month.....pieces  | 216,338   | 216,255   | 230,725 | 242,837  | 258,426   | 276,037   | 234,675   | +6.8                                  | +17.6  |           |  |       |
| New orders.....pieces  | 96,830    | 99,749    | 110,396 | 92,490   | 74,700    | 86,866    | 96,509    | +16.3                                 | -10.0  | 1,335,008 | 1,426,336  | +6.8  |
| Miscellaneous sanitary ware:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Shipments.....pieces   | 54,003    | 44,910    | 46,129  | 44,159   | 34,971    | 41,197    | 39,744    | +17.8                                 | +3.7   | 563,731   | 558,671  | -0.9  |
| Stocks, end of month.....pieces  | 95,958    | 103,509   | 116,110 | 125,108  | 128,259   | 137,588   | 131,427   | +7.3                                  | +4.7   |           |  |       |
| New orders.....pieces  | 41,692    | 44,707    | 43,899  | 37,852   | 28,838    | 42,036    | 39,798    | +45.8                                 | +5.6   | 558,381   | 562,623  | +0.8  |
| Small ware (all except baths):   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Unfilled orders, end of month.....pieces   | 174,072   | 155,483   | 129,154 | 130,873  | 118,100   | 111,258   | 100,160   | -5.8                                  | +11.1  |           |  |       |
| Enameled sheet-metal ware:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Shipments.....dozen pieces   | 358,811   | 352,484   | 417,387 | 328,875  | 324,445   | 319,871   | 319,871   |                                       |  | 3,916,930 | 4,193,867  | +7.1  |
| Porcelain flat ware:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| New orders—  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Total.....thous. of sq. ft.  | 6,233     | 6,551     | 7,428   | 6,839    | 5,101     | 5,421     | 5,421     |                                       |  | 73,108    | 70,967   | -2.9  |
| Ratio to capacity.....per cent   | 55        | 58        | 66      | 61       | 45        | 45        | 45        |                                       |  |           |  |       |
| Shipments—   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Total.....thous. of sq. ft.  | 5,495     | 6,108     | 7,700   | 6,602    | 5,153     | 5,473     | 5,473     |                                       |  | 76,818    | 72,011   | -6.3  |
| Ratio to capacity.....per cent   | 49        | 54        | 68      | 59       | 46        | 46        | 46        |                                       |  |           |  |       |
| <b>Machinery</b>   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Vacuum cleaners, shipments.....number  | 63,164    | 89,222    | 96,528  | 90,427   | 114,272   | 71,335    | 78,342    | -37.6                                 | -8.9   | 1,038,614 | 1,019,460  | -1.8  |
| Washing machines, shipments:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Total.....number   | 92,955    | 98,065    | 92,971  | 85,798   | 62,533    | 82,976    | 68,840    | +32.7                                 | +20.5  | 944,506   | 1,000,204  | +5.9  |
| Electric.....number  | 74,253    | 80,770    | 76,757  | 75,252   | 53,442    | 67,297    | 56,728    | +25.9                                 | +18.6  | 775,661   | 820,430  | +5.8  |
| Water softeners, shipments.....units   | 1,402     | 1,187     | 1,505   | 1,125    | 928       | 1,080     | 1,268     | +16.4                                 | -14.8  | 18,118    | 16,189   | -10.6 |
| Water systems, shipments.....units   | 11,243    | 10,190    | 11,333  | 9,867    | 8,048     | 7,930     | 7,943     | -1.5                                  | -0.2   | 100,843   | 117,736  | +16.8 |
| Pumps:   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Domestic shipments—  |           |           |         |          |           |           |           |                                       |  |           |  |       |
| Pitcher, hands, etc.....units  | 50,953    | 42,538    | 42,312  | 37,593   | 44,288    | 50,723    | 50,408    | +14.7                                 | +0.6   | 521,653   | 550,386  | +5.5  |
| Power, horizontal type.....units   | 2,531     | 2,017     | 2,732   | 2,093    | 2,124     | 2,265     | 1,591     | +6.6                                  | +42.4  | 13,133    | 25,980   | +97.8 |
| Steam, power, and centrifugal—   |           |           |         |          |           |           |           |                                       |  |           |  |       |
| New orders.....thous. of dolls.  | 1,579     | 1,405     | 1,708   | 2,084    | 1,424     | 1,695     | 1,137     | +19.0                                 | +49.1  | 17,179    | 17,998   | +4.8  |
| Shipments.....thous. of dolls.   | 1,520     | 1,369     | 1,634   | 1,494    | 1,593     | 1,481     | 1,138     | -7.0                                  | +30.1  | 16,799    | 17,364   | +3.4  |
| Unfilled orders, end mo. thous. of dolls.  | 3,023     | 3,056     | 3,128   | 3,714    | 3,538     | 3,800     | 3,112     | +7.4                                  | +22.1  |           |  |       |

\* Revised.

## TERND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928    |           |         |          |          | 1929    | 1928    | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per cent. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|---------|-----------|---------|----------|----------|---------|---------|---------------------------------------|-----------------------------|--|-----------|--|
|  | August  | September | October | November | December | January | January | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928      |  |
|  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| IRON AND STEEL—Continued   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Machinery—Continued  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Agricultural machinery and equipment:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Shipments—   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Total.....rel. to 1923-25..  | 219.7   | 179.2     | 153.4   | 108.2    | 123.9    | 155.0   | 115.7   | +25.1                                 | +34.0                       |  |           |  |
| Domestic.....rel. to 1923-25..   | 187.5   | 145.7     | 129.1   | 79.6     | 93.8     | 142.3   | 116.8   | +51.7                                 | +21.8                       |  |           |  |
| Foreign.....rel. to 1923-25..  | 387.5   | 354.0     | 280.3   | 257.4    | 280.8    | 229.5   | 109.9   | -18.3                                 | +108.8                      |  |           |  |
| Production.....rel. to 1923-25..   | 146.1   | 145.5     | 148.5   | 154.6    | 168.1    | 171.5   | 130.7   | +2.0                                  | +31.2                       |  |           |  |
| Foundry equipment:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| New orders.....rel. to 1922-24..   | 278.0   | 170.0     | 185.0   | 197.8    | 166.5    | 180.5   | 132.7   | +8.4                                  | +36.0                       |  |           |  |
| Shipments.....rel. to 1922-24..  | 154.1   | 129.7     | 254.3   | 264.0    | 234.6    | 177.3   | 116.4   | -24.4                                 | +52.3                       |  |           |  |
| Unfilled orders, end of mo.....rel. to 1922-24..   | 467.2   | 529.5     | 462.6   | 403.9    | 333.8    | 336.1   | 120.6   | +0.7                                  | +178.7                      |  |           |  |
| Stokers, mechanical, sales:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Quantity.....number..  | 162     | 161       | 100     | 116      | 102      | 97      | 75      | -4.9                                  | +29.3                       | 1,374  | 1,490     | +8.4   |
| Power.....horsepower..   | 51,572  | 65,060    | 27,219  | 30,938   | 49,212   | 42,392  | 26,572  | -13.9                                 | +59.5                       | 483,602                                      | 508,687   | +5.2   |
| Machine tools:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| New orders.....rel. to 1922-24..   | 241     | 265       | 284     | 290      | 274      | 292     | 218     | +6.6                                  | +33.9                       |  |           |  |
| Shipments.....rel. to 1922-24..  | 208     | 205       | 221     | 242      | 245      | 255     | 149     | +4.1                                  | +71.1                       |  |           |  |
| Unfilled orders, end of mo.....rel. to 1922-24..   | 428     | 441       | 504     | 563      | 596      | 676     | 293     | +13.4                                 | +130.7                      |  |           |  |
| Electric hoists:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| New orders—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Quantity.....number..  | 402     | 447       | 405     | 522      | 475      | 533     | 346     | +12.2                                 | +54.0                       | 3,293  | 5,245     | +59.3  |
| Value.....dollars..  | 180,365 | 228,510   | 209,594 | 258,867  | 188,693  | 253,194 | 160,852 | +34.2                                 | +57.4                       | 1,619,782                                    | 2,447,970 | +51.1  |
| Shipments.....dollars..  | 193,248 | 172,986   | 202,829 | 215,863  | 211,815  | 213,663 | 133,842 | +0.9                                  | +59.6                       | 1,540,300                                    | 2,263,935 | +47.0  |
| Electric overhead cranes:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Shipments.....thous. of dolls..  | 564     | 464       | 806     | 701      | 623      | 852     | 432     | +36.8                                 | +97.2                       | 9,308  | 7,126     | -23.4  |
| New order.....thous. of dolls..  | 821     | 713       | 775     | 725      | 559      | 1,383   | 358     | +147.4                                | +286.3                      | 7,976  | 7,598     | -4.7   |
| Unfilled orders, end of mo.....thous. of dolls..   | 1,952   | 2,188     | 2,165   | 2,189    | 2,092    | 2,547   | 1,735   | +21.7                                 | +46.8                       |  |           |  |
| Woodworking machinery:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| New orders.....thous. of dolls..   | 1,641   | 1,639     | 1,585   | 1,295    | 1,360    | 1,949   | 1,145   | +43.3                                 | +70.2                       | 15,037                                       | 16,961    | +12.8  |
| Cancellations.....thous. of dolls..  | 6       | 26        | 140     | 21       | 36       | 50      | 23      | +38.9                                 | +117.4                      | 182  | 325       | +78.6  |
| Unfilled orders, end of mo.....thous. of dolls..   | 2,058   | 2,265     | 2,035   | 1,838    | 1,792    | 2,367   | 1,456   | +32.1                                 | +62.6                       |  |           |  |
| Shipments.....thous. of dolls..  | 1,436   | 1,413     | 1,666   | 1,502    | 1,353    | 1,420   | 1,130   | +5.0                                  | +25.7                       | 15,508                                       | 16,216    | +4.6   |
| Shipments.....number of machines..   | 1,170   | 1,050     | 1,170   | 985      | 957      | 998     | 920     | +4.3                                  | +8.5                        | 12,243                                       | 12,022    | -18.   |
| Electric industrial trucks and tractors:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Shipments, domestic—   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Tractors.....number of vehicles..  | 5       | 11        | 5       | 9        | 10       | 4       | 5       | -60.0                                 | -20.0                       | 135  | 106       | -21.5  |
| All other types.....number of vehicles..   | 85      | 102       | 109     | 117      | 126      | 125     | 98      | -0.8                                  | +27.6                       | 994  | 1,215     | +22.2  |
| Exports.....number of vehicles..   | 6       | 5         | 20      | 6        | 17       | 19      | 9       | +11.8                                 | +111.1                      | 130  | 145       | +11.5  |
| Fire-extinguishing equipment, shipments:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Motor vehicles.....number..  | 125     | 143       | 139     | 126      | 100      | 90      | 73      | -10.0                                 | +23.3                       | 1,434  | 1,315     | -8.3   |
| Hand types.....number..  | 47,490  | 42,193    | 49,128  | 41,954   | 41,596   | 45,067  | 43,175  | +8.3                                  | +4.4                        | 588,583                                      | 557,317   | -5.3   |
| Patents issued:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Total, all classes.....number..  | 3,390   | 3,039     | 4,323   | 3,494    | 3,309    | 3,835   | 3,504   | +15.9                                 | +9.4                        | 41,731                                       | 42,375    | +1.5   |
| Agricultural implements.....number..   | 29      | 40        | 59      | 39       | 34       | 47      | 45      | +38.2                                 | +4.4                        | 616  | 496       | -19.5  |
| Internal-combustion engines.....number..   | 43      | 42        | 67      | 63       | 54       | 51      | 51      | -5.6                                  | 0.0                         | 777  | 640       | -17.6  |
| NONFERROUS METALS  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Copper   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Mines.....short tons..   | 76,952  | 78,341    | 86,480  | 85,382   | 85,577   | 86,681  | 68,469  | +1.3                                  | +26.6                       | 829,978                                      | 909,051   | +9.5   |
| Smelter.....short tons..   | 88,517  | 85,795    | 100,720 | 103,137  | 103,386  | 101,151 | 77,429  | -2.2                                  | +30.6                       | 968,657                                      | 1,060,094 | +9.4   |
| Refined (N. and S. America).....short tons..   | 143,560 | 137,018   | 149,199 | 155,448  | 147,905  | 154,472 | 122,723 | +4.4                                  | +25.9                       | 1,476,506                                    | 1,627,849 | +10.3  |
| World production, blister.....short tons..   | 161,838 | 157,518   | 176,623 | 183,813  | 179,240  | 178,083 | 143,546 | -0.6                                  | +24.1                       | 1,694,346                                    | 1,916,471 | +13.1  |
| Domestic shipments, refined.....short tons..   | 83,398  | 88,707    | 100,371 | 99,822   | 84,889   | 100,135 | 64,824  | +18.0                                 | +54.5                       | 824,844                                      | 983,460   | +19.2  |
| Exports.....short tons..   | 41,186  | 36,190    | 45,168  | 45,171   | 38,635   | 52,523  | 52,095  | +35.9                                 | +0.8                        | 523,572                                      | 550,080   | +5.1   |
| Stocks (North and South America), end of mo:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Refined.....short tons..   | 54,793  | 51,812    | 45,648  | 52,153   | 65,466   | 62,749  | 96,476  | -4.2                                  | -35.0                       |  |           |  |
| Blister.....short tons..   | 238,923 | 239,142   | 241,732 | 244,854  | 249,995  | 250,096 | 223,500 | 0.0                                   | +11.9                       |  |           |  |
| Wholesale price, electrolytic.....dolls. per lb..  | 1.453   | 1.472     | 1.520   | 1.578    | 1.584    | 1.660   | 1.385   | +4.8                                  | +19.9                       |  |           |  |
| Wire Cloth   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production.....thous. of sq. ft..  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Shipments.....thous. of sq. ft..   | 387     | 423       | 442     | 395      | 391      | 412     | 425     | +5.4                                  | -3.1                        | 5,042  | 4,909     | -2.6   |
| Stocks, end of month.....thous. of sq. ft..  | 1,120   | 1,099     | 1,068   | 1,092    | 1,099    | 1,064   | 1,189   | -3.2                                  | -10.5                       |  |           |  |
| New orders.....thous. of sq. ft..  | 408     | 412       | 419     | 422      | 419      | 376     | 414     | -10.3                                 | -9.2                        |  | 4,719     |  |
| Unfilled orders, end of mo.....thous. of sq. ft..  | 285     | 320       | 266     | 301      | 449      | 302     | 315     | -32.7                                 | -4.1                        |  |           |  |
| Make and hold orders, end of month.....thous. of sq. ft..  | 457     | 453       | 459     | 482      | 469      | 486     | 441     | +3.6                                  | +10.2                       |  |           |  |
| Tin  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Deliveries (consumption).....long tons..   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Stocks, end of month:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| World visible supply.....long tons..   | 18,456  | 19,924    | 20,907  | 22,067   | 24,563   | 24,237  | 15,244  | -1.3                                  | +59.0                       |  |           |  |
| United States.....long tons..  | 1,718   | 3,508     | 4,598   | 3,603    | 2,428    | 2,611   | 2,518   | +7.5                                  | +3.7                        |  |           |  |
| Imports.....long tons..  | 6,584   | 8,187     | 8,048   | 6,221    | 5,250    | 9,498   | 5,727   | +80.9                                 | +65.8                       | 71,205                                       | 80,508    | +13.1  |
| Wholesale price, Straits, N. Y.....dolls. per lb..   | 4.808   | 4.807     | 4.901   | 4.5085   | 4.5021   | 4.916   | 4.5564  | -2.1                                  | -11.6                       |  |           |  |
| Zinc   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Reports in operation, end of month.....number..  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Per cent of total.....per cent..   | 57.4    | 53.4      | 51.5    | 53.0     | 53.0     | 54.5    | 57.0    | +2.8                                  | -4.4                        |  |           |  |
| Production.....short tons..  | 52,157  | 49,361    | 50,259  | 50,260   | 50,591   | 49,709  | 52,414  | -1.7                                  | -5.2                        | 613,548                                      | 619,595   | +1.0   |
| Stocks, end of month.....short tons..  | 44,416  | 47,915    | 46,068  | 46,542   | 45,441   | 45,418  | 42,163  | -0.1                                  | +7.7                        |  |           |  |
| Ore, Joplin district:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Shipments.....short tons..   | 43,466  | 41,429    | 41,165  | 49,246   | 79,308   | 48,777  | 37,612  | -38.5                                 | +29.7                       | 689,036                                      | 597,382   | -13.3  |
| Stocks, mines, end of month.....short tons..   | 39,303  | 48,474    | 53,209  | 51,013   | 25,760   | 27,309  | 49,905  | +6.0                                  | -45.3                       |  |           |  |
| Price, slab, prime western.....dolls. per lb..   | .0625   | .0625     | .0625   | .0626    | .0635    | .0635   | .0564   | 0.0                                   | +12.6                       |  |           |  |

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

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

<sup>2</sup> Quarter ending in month indicated.  
<sup>4</sup> Quarter ending Dec. 31, 1927.

<sup>4</sup> Revised.  
<sup>\*</sup> See table on p. 9 of the February, 1929, issue for earlier data.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928    |           |         |          |          | 1929    | 1928    | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|---------|-----------|---------|----------|----------|---------|---------|---------------------------------------|-----------------------------|--|-----------|--|
|  | August  | September | October | November | December | January | January | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928      |  |
|  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| AUTOMOBILES—Continued  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Accessories and parts:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Shipments—   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Original equipment.....rel. to Jan., 1925  | 230     | 218       | 200     | 163      | 164      |         | 163     |                                       |                             |  |           |  |
| Replacement parts.....rel. to Jan., 1925   | 176     | 185       | 184     | 149      | 131      |         | 137     |                                       |                             |  |           |  |
| Accessories.....rel. to Jan., 1925   | 147     | 122       | 91      | 78       | 73       |         | 79      |                                       |                             |  |           |  |
| Service parts.....rel. to Jan., 1925   | 148     | 140       | 141     | 122      | 120      |         | 142     |                                       |                             |  |           |  |
| Exports.....thous. of dolls.   | 13,858  | 10,079    | 17,522  | 13,151   | 11,182   | 20,068  | 7,604   | +79.5                                 | +163.9                      | 106,343                                      | 143,610   | +35.0  |
| Rim production.....thous. of rims  | 2,319   | 2,316     | 2,115   | 1,213    | 1,101    | 1,835   | 1,812   | +66.7                                 | +1.3                        | 20,011                                       | 24,243    | +21.1  |
| New passenger-car registrations:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Total.....number of cars   | 329,827 | 271,782   | 284,656 | 212,065  | 154,603  |         | 135,843 |                                       |                             | 2,623,538                                    | 3,133,196 | +19.4  |
| Highest price group.....number of cars   | 11,482  | 11,600    | 12,264  | 7,950    | 6,914    |         | 6,817   |                                       |                             | 110,125                                      | 128,138   | +16.4  |
| Second highest group.....number of cars  | 76,968  | 60,730    | 56,936  | 35,084   | 27,966   |         | 32,515  |                                       |                             | 640,708                                      | 654,627   | +2.2   |
| Third highest group.....number of cars   | 76,158  | 61,579    | 59,451  | 52,294   | 37,283   |         | 43,330  |                                       |                             | 662,258                                      | 832,974   | +25.8  |
| Lowest price group.....number of cars  | 164,682 | 137,403   | 155,514 | 115,981  | 82,045   |         | 52,630  |                                       |                             | 1,195,806                                    | 1,509,897 | +26.3  |
| Miscellaneous.....number of cars   | 537     | 470       | 491     | 756      | 395      |         | 551     |                                       |                             | 14,641                                       | 7,560     | -48.4  |
| FUELS  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Coal and Coke  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Bituminous:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| United States.....thous. of short tons   | 41,108  | 41,301    | 50,360  | 46,041   | 43,380   | 51,456  | 44,208  | +18.6                                 | +16.4                       | 517,763                                      | 492,755   | -4.8   |
| Canada.....thous. of short tons  | 1,552   | 1,410     | 1,702   | 1,695    | 1,519    |         | 1,698   |                                       |                             | 17,427                                       | 17,487    | +0.3   |
| Exports.....thous. of long tons  | 1,618   | 1,577     | 1,497   | 1,617    | 1,093    | 917     | 850     | -16.1                                 | +7.9                        | 16,095                                       | 14,439    | -10.3  |
| Consumption—   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| By vessels.....thous. of long tons   | 356     | 313       | 333     | 334      | 301      | 284     | 319     | -5.6                                  | -11.0                       | 4,076  | 3,834     | -5.9   |
| By electric-power plants.....thous. of short tons  | 3,441   | 3,421     | 3,828   | 4,374    | 3,838    |         | 3,695   |                                       |                             | 41,888                                       | 41,336    | -1.3   |
| By railroads.....thous. of short tons  | 7,403   | 7,627     | 8,433   | 8,084    |          |         | 8,304   |                                       |                             |  |           |  |
| By coke plants—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| United States.....thous. of short tons   | 6,194   | 6,180     | 6,726   | 6,595    | 6,830    | 7,021   | 6,168   | +2.8                                  | +13.8                       | 74,115                                       | 76,137    | +2.7   |
| Canada.....thous. of short tons  | 269     | 270       | 294     | 284      | 296      | 300     | 257     | +1.4                                  | +16.7                       | 2,884  | 3,213     | +11.4  |
| Stocks held by consumers.....thous. of short tons  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  |         | 41,100    | 42,400  |          | 41,800   |         | 51,500  |                                       |                             |  |           |  |
| Prices—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Mine aver. (spot).....dolls. per short ton   | 1.74    | 1.81      | 1.83    | 1.85     | 1.81     | 1.85    | 1.85    | +2.2                                  | 0.0                         |  |           |  |
| Wholesale, comp.....dolls. per short ton   | 4.009   | 4.019     | 4.020   | 4.008    | 4.006    | 4.005   | 4.093   | 0.0                                   | -2.2                        |  |           |  |
| Retail, composite.....dolls. per short ton   | 8.74    | 8.84      | 8.96    | 9.07     | 9.11     | 9.09    | 9.21    | -0.2                                  | -1.3                        |  |           |  |
| Anthracite:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production.....thous. of short tons  | 6,883   | 6,036     | 8,554   | 7,457    | 6,226    | 7,337   | 5,690   | +17.8                                 | +28.9                       | 80,096                                       | 76,734    | -4.2   |
| Exports.....thous. of long tons  | 278     | 265       | 405     | 306      | 259      | 298     | 233     | +15.1                                 | +27.9                       | 2,982  | 2,983     | 0.0  |
| Stocks, end of mo. in yds. of dealers.....no. of days' supply  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  |         | 57        | 53      |          | 54       |         |         |                                       |                             |  |           |  |
| Prices—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Wholesale, comp.....dolls. per long ton  | 12.853  | 13.040    | 13.040  | 13.040   | 13.040   | 12.987  | 13.130  | -0.4                                  | -1.1                        |  |           |  |
| Retail, composite.....dolls. per short ton   | 14.76   | 14.93     | 14.98   | 15.06    | 15.07    | 15.06   | 15.08   | -0.1                                  | -0.1                        |  |           |  |
| Coke:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production, U. S.—   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Beehive.....thous. of short tons   | 288     | 312       | 421     | 416      | 398      | 479     | 376     | +20.4                                 | +27.4                       | 7,207  | 4,376     | -39.3  |
| By-product.....thous. of short tons  | 3,995   | 3,959     | 4,219   | 4,133    | 4,317    | 4,360   | 3,897   | +1.0                                  | +11.9                       | 43,885                                       | 47,715    | +8.7   |
| Production, Canada.....thous. of short tons  | 191     | 194       | 210     | 205      | 213      | 221     | 182     | +3.8                                  | +21.4                       | 1,981  | 2,308     | +16.5  |
| Exports.....thous. of long tons  | 70      | 77        | 100     | 121      | 98       | 104     | 65      | +6.1                                  | +60.0                       | 719  | 1,037     | +44.2  |
| Price, furnace   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Connellsville.....dolls. per short ton   | 2.88    | 2.88      | 2.91    | 2.87     | 2.75     | 2.75    | 2.78    | 0.0                                   | -1.1                        |  |           |  |
| Crude petroleum:   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production.....thous. of bbls.   | 77,829  | 76,404    | 79,662  | 76,031   | 79,448   | 81,979  | 72,713  | +3.2                                  | +12.7                       | 901,129                                      | 900,364   | -0.1   |
| Stocks at end of month—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Total (comparable).....thous. of bbls.   | 368,816 | 366,750   | 367,907 | 367,619  | 368,431  | 372,913 | 359,260 | +1.2                                  | +3.8                        |  |           |  |
| Tank farms and pipe lines.....thous. of bbls.  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  | 326,399 | 326,153   | 328,101 | 326,852  | 327,902  | 330,395 | 317,680 | +0.8                                  | +4.0                        |  |           |  |
| Refineries.....thous. of bbls.   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  | 42,417  | 40,597    | 39,806  | 40,767   | 40,529   | 42,518  | 41,580  | +4.9                                  | +2.2                        |  |           |  |
| California—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Light.....thous. of bbls.  | 18,310  | 16,870    | 16,670  | 16,524   | 16,995   | 19,196  | 20,493  | +13.0                                 | -6.3                        |  |           |  |
| Heavy.....thous. of bbls.  | 95,057  | 96,563    | 97,097  | 98,529   | 99,738   | 94,327  | 94,327  | -0.2                                  | +5.7                        |  |           |  |
| Imports.....thous. of bbls.  | 6,141   | 7,140     | 6,703   | 6,908    | 6,807    | 8,075   | 6,145   | +18.6                                 | +31.4                       | 58,383                                       | 79,583    | +36.3  |
| Consumption (run to stills).....thous. of bbls.  | 81,582  | 79,894    | 79,607  | 77,149   | 79,520   | 76,830  | 69,067  | -3.4                                  | +11.2                       | 828,835                                      | 912,713   | +10.1  |
| Refinery operation.....per ct. of capacity   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  | 83      | 84        | 82      | 81       | 78       | 76      | 72      | -2.6                                  | +5.6                        |  |           |  |
| Price, Kansas-Oklahoma.....dolls. per bbl.   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  | 1.210   | 1.210     | 1.210   | 1.210    | 1.210    | 1.185   | 1.220   | -2.0                                  | -2.9                        |  |           |  |
| Oil wells completed.....number   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  | 1,247   | 1,192     | 1,224   | 1,195    | 1,059    | 1,205   | 764     | +13.8                                 | +57.7                       | 14,442                                       | 12,540    | -13.2  |
| Mexico—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production.....thous. of bbls.   | 4,047   | 3,716     | 3,904   | 3,724    | 3,748    |         | 4,770   |                                       |                             | 64,121                                       | 50,144    | -21.8  |
| Exports.....thous. of bbls.  | 2,212   | 2,244     | 2,731   | 2,199    | 1,808    |         | 2,955   |                                       |                             | 48,421                                       | 33,622    | -30.6  |
| Venezuela—   |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production.....thous. of bbls.   | 9,031   | 9,478     | 10,520  | 11,291   | 12,270   | 11,521  | 6,994   | -6.1                                  | +64.7                       | 64,437                                       | 108,099   | +67.8  |
| Exports.....thous. of bbls.  | 8,933   | 8,615     | 9,283   | 9,660    | 10,010   | 9,982   | 6,837   | -0.3                                  | +46.0                       | 54,593                                       | 100,617   | +84.3  |
| Gasoline:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Raw (at refineries).....thous. of bbls.  | 34,101  | 33,669    | 34,403  | 33,171   | 33,907   | 34,335  | 27,981  | +1.3                                  | +22.7                       | 330,435                                      | 377,183   | +14.2  |
| Natural gas (at plants).....thous. of bbls.  | 3,445   | 3,488     | 3,731   | 3,769    | 3,929    | 3,983   | 3,405   | +1.4                                  | +17.0                       | 38,557                                       | 42,286    | +9.4   |
| Exports.....thous. of bbls.  | 4,452   | 4,670     | 3,919   | 4,610    | 3,675    | 4,506   | 3,692   | +22.6                                 | +22.0                       | 43,103                                       | 52,422    | +21.6  |
| Consumption.....thous. of bbls.  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  | 33,336  | 29,722    | 30,680  | 26,052   | 26,644   | 22,602  | 20,778  | -15.2                                 | +8.8                        | 297,780                                      | 328,832   | +10.4  |
| Stocks, end of month—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Raw (at refineries).....thous. of bbls.  | 27,075  | 26,378    | 26,640  | 29,185   | 33,066   | 40,648  | 37,368  | +22.9                                 | +8.8                        |  |           |  |
| Natural gas (at plants).....thous. of bbls.  | 414     | 436       | 402     | 404      | 608      | 741     | 740     | +21.9                                 | +0.1                        |  |           |  |
| Prices—  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Wholesale, New York.....dolls. per gal.  | .180    | .180      | .180    | .180     | .180     | .178    | .170    | 1.1                                   | +4.7                        |  |           |  |
| Retail, wagon 50 cities.....dolls. per gal.  | .160    | .163      | .163    | .160     | .160     | .160    | .143    | 0.0                                   | +11.9                       |  |           |  |
| Retail distribution, 41 States.....thous. of gals.   | 988,358 | 915,036   | 896,934 | 807,565  | 777,079  |         | 612,219 |                                       |                             | 8,777,249                                    | 9,724,013 | +10.8  |
| Kerosene:  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
| Production.....thous. of bbls.   | 5,389   | 5,060     | 5,190   | 4,908    | 4,968    | 4,700   | 5,058   | -5.4                                  | -7.1                        | 56,114                                       | 60,156    | +7.2   |
| Exports.....thous. of bbls.  | 1,653   | 2,068     | 1,749   | 2,087    | 1,229    | 1,896   | 2,350   | +54.3                                 | -19.3                       | 19,278                                       | 21,494    | +11.5  |
| Consumption.....thous. of bbls.  | 3,269   | 3,264     | 3,469   | 2,845    | 3,632    | 2,956   | 2,799   | -18.6                                 | +5.6                        | 37,491                                       | 37,008    | -1.3   |
| Stocks at refineries, end mo. thous. of bbls.  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  | 8,887   | 8,593     | 8,614   | 8,886    | 9,001    | 8,865   | 7,670   | -1.5                                  | +15.6                       |  |           |  |
| Price, 150° water white.....dolls. per gal.  |         |           |         |          |          |         |         |                                       |                             |  |           |  |
|  | .072    | .086      | .082    | .080     | .078     | .077    | .070    | -1.3                                  | +10.0                       |  |           |  |

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## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928    |           |         |          |          | 1929    | 1928    | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |         | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|---------|-----------|---------|----------|----------|---------|---------|---------------------------------------|-----------------------------|--|---------|--|
|  | August  | September | October | November | December | January | January | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928    |  |
|  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| FUELS—Continued  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Coal and Coke—Continued  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Gas and fuel oils:   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thous. of bbls..  | 37,390  | 37,004    | 36,941  | 35,771   | 37,293   | 36,838  | 33,013  | -1.2                                  | +11.6                       | 393,066                                      | 425,755 | +8.3   |
| Consumption—   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| By vessels.....thous. of bbls..  | 4,564   | 4,053     | 4,558   | 4,235    | 4,235    | 3,915   | 3,783   | -7.6                                  | +3.5                        | 50,050                                       | 51,126  | +2.1   |
| By electric pow. plants.....thous. of bbls..   | 612     | 612       | 621     | 632      | 844      | 876     | 589     | +3.8                                  | +48.7                       | 6,779  | 7,121   | +5.0   |
| By railroads.....thous. of bbls..  | 4,087   | 4,363     | 4,877   | 4,490    |          |         | 4,047   |                                       |                             | 48,703                                       |         |  |
| Stocks at refineries, end mo.....thous. of bbls..  | 39,236  | 39,900    | 39,599  | 37,878   | 34,926   | 32,522  | 30,665  | -6.9                                  | +6.1                        |  |         |  |
| Price, Okla. 24-26, refineries.....dolls. per bbl..  | .650    | .650      | .650    | .650     | .625     | .625    | .800    | 0.0                                   | -21.9                       |  |         |  |
| Lubricating oil:   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thous. of bbls..  | 2,891   | 2,833     | 2,979   | 2,748    | 2,993    | 2,945   | 2,654   | -1.6                                  | +11.0                       | 31,701                                       | 34,659  | +9.3   |
| Consumption.....thous. of bbls..   | 2,035   | 1,995     | 2,123   | 1,763    | 1,699    | 1,521   | 1,592   | -10.5                                 | -4.5                        | 21,669                                       | 23,136  | +6.8   |
| Stocks at refineries, end mo.....thous. of bbls..  | 7,711   | 7,742     | 7,830   | 7,921    | 8,340    | 8,649   | 7,988   | +3.7                                  | +8.3                        |  |         |  |
| Price, cylinder oil.....dolls. per gal..   | .229    | .236      | .240    | .246     | .271     | .299    | .245    | +10.3                                 | +22.0                       |  |         |  |
| Asphalt:   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thous. of short tons..  | 316     | 306       | 320     | 244      | 170      | 188     | 202     | +10.6                                 | -6.9                        | 3,419  | 3,298   | -3.5   |
| Stocks, end of month.....thous. of short tons..  | 226     | 203       | 213     | 228      | 236      | 229     | 249     | -3.0                                  | -8.0                        |  |         |  |
| Imports.....thous. of short tons..   | 13      | 4         | 11      | 11       | 11       | 12      | 7       | +9.1                                  | +71.4                       | 156  | 102     | -34.6  |
| Coke:  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thous. of short tons..  | 136     | 119       | 125     | 131      | 132      | 138     | 103     | +4.5                                  | +34.0                       | 1,145  | 1,425   | +24.5  |
| Stocks, end of month.....thous. of short tons..  | 402     | 402       | 404     | 419      | 437      | 404     | 331     | -7.6                                  | +22.1                       |  |         |  |
| Wax:   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thous. of lbs..   | 54,429  | 50,428    | 54,546  | 56,665   | 54,685   | 58,885  | 55,378  | +7.7                                  | +6.3                        | 584,347                                      | 630,144 | +7.8   |
| Stocks, end of month.....thous. of lbs..   | 79,622  | 85,417    | 92,814  | 103,949  | 110,344  | 123,521 | 149,725 | +11.9                                 | -17.5                       |  |         |  |
| RUBBER   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Crude Rubber   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| World shipments, plantation.....long tons..  | 58,345  | 45,338    | 43,748  | 91,860   | 90,150   |         | 48,134  |                                       |                             | 602,196                                      | 646,802 | +7.4   |
| Imports (including latex).....long tons..  | 30,874  | 39,732    | 44,058  | 36,624   | 43,519   | 57,586  | 39,108  | +32.3                                 | +47.2                       | 426,257                                      | 435,989 | +2.3   |
| Consumption by tire mfrs.....thous. of lbs..   | 62,224  | 55,351    | 58,302  | 48,819   | 41,604   |         | 43,709  |                                       |                             | 514,995                                      | 600,423 | +16.6  |
| World stocks, end of month:  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| World total.....long tons..  | 201,078 | 198,481   | 178,876 | 228,185  | 230,497  |         | 276,670 |                                       |                             |  |         |  |
| United States.....long tons..  | 68,995  | 68,851    | 66,421  | 61,957   | 66,166   |         | 110,243 |                                       |                             |  |         |  |
| Europe.....long tons..   | 35,755  | 35,243    | 27,966  | 22,328   | 24,161   |         | 69,594  |                                       |                             |  |         |  |
| Producing countries.....long tons..  | 21,828  | 17,687    | 16,589  | 34,500   | 37,870   | 36,540  | 27,453  | -3.5                                  | +33.1                       |  |         |  |
| Afloat.....long tons..   | 74,500  | 76,700    | 67,900  | 109,400  | 102,300  |         | 69,380  |                                       |                             |  |         |  |
| Wholesale price, smoked sheets, New York.....dolls. per pound..  | .193    | .182      | .187    | .182     | .179     |         | .400    |                                       |                             |  |         |  |
| Tires and Tubes  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Pneumatic tires:   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thousands..   | 5,607   | 5,101     | 5,495   | 4,556    | 4,204    |         | 4,026   |                                       |                             | 48,536                                       | 58,539  | +20.6  |
| Stocks, end of month.....thousands..   | 7,539   | 7,324     | 8,640   | 9,434    | 10,218   |         | 7,491   |                                       |                             |  |         |  |
| Shipments—   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Domestic.....thousands..   | 6,131   | 5,191     | 4,096   | 3,539    | 3,201    |         | 3,924   |                                       |                             | 46,199                                       | 53,781  | +16.4  |
| Export.....thousands..   | 179     | 168       | 191     | 209      | 242      |         | 132     |                                       |                             | 2,017  | 2,022   | -0.2   |
| Inner tubes:   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thousands..   | 6,264   | 5,327     | 5,197   | 4,198    | 3,888    |         | 4,086   |                                       |                             | 52,697                                       | 60,175  | +14.2  |
| Stocks, end of month.....thousands..   | 10,466  | 10,158    | 11,464  | 11,820   | 12,087   |         | 9,760   |                                       |                             |  |         |  |
| Shipments—   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Domestic.....thousands..   | 6,886   | 5,245     | 4,138   | 3,618    | 3,466    |         | 4,409   |                                       |                             | 53,556                                       | 56,574  | +5.6   |
| Export.....thousands..   | 132     | 121       | 108     | 133      | 178      |         | 90      |                                       |                             | 1,198  | 1,315   | +9.8   |
| Solid and cushion:   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thousands..   | 52      | 43        | 47      | 36       | 32       |         | 37      |                                       |                             | 570  | 514     | -9.8   |
| Stocks, end of month.....thousands..   | 149     | 151       | 153     | 151      | 152      |         | 164     |                                       |                             |  |         |  |
| Shipments—   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Domestic.....thousands..   | 49      | 42        | 43      | 34       | 28       |         | 31      |                                       |                             | 509  | 478     | -6.1   |
| Exports.....thousands..  | 5       | 2         | 3       | 3        | 3        |         | 3       |                                       |                             | 63   | 43      | -31.7  |
| Other Rubber Products  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Rubber-proofed fabrics:  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production—  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Total.....thous. of yds..  | 4,613   | 4,966     | 5,914   |          |          |         | 2,177   |                                       |                             |  |         |  |
| Auto fabrics.....thous. of yds..   | 764     | 780       | 609     |          |          |         | 600     |                                       |                             |  |         |  |
| Raincoat fabrics.....thous. of yds..   | 3,179   | 3,179     | 4,009   | 2,447    | 984      |         | 874     |                                       |                             | 21,996                                       | 21,632  | -1.7   |
| All other.....thous. of yds..  | 1,251   | 1,007     | 1,296   | 1,025    | 797      |         | 703     |                                       |                             | 6,515  | 10,746  | +64.9  |
| New orders, auto fabrics.....thous. of yds..   | 688     | 1,085     | 1,222   |          |          |         | 773     |                                       |                             |  |         |  |
| Production, relative to capacity.....per cent..  | 39.1    | 40.0      | 31.2    |          |          |         | 29.6    |                                       |                             |  |         |  |
| Rubber heels:  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thous. of pairs..   | 21,289  | 21,451    | 21,932  | 18,686   | 15,811   |         | 17,682  |                                       |                             | 200,308                                      | 235,152 | +17.4  |
| Shipments—   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| To shoe manufacturers.....thous. of pairs..  | 11,642  | 9,207     | 9,813   | 8,602    | 7,321    |         | 10,786  |                                       |                             | 102,165                                      | 117,028 | +14.5  |
| To repair trade.....thous. of pairs..  | 9,244   | 9,199     | 9,580   | 7,921    | 5,586    |         | 6,314   |                                       |                             | 83,493                                       | 94,131  | +12.7  |
| For export.....thous. of pairs..   | 729     | 875       | 1,262   | 1,317    | 1,108    |         | 793     |                                       |                             | 10,944                                       | 11,404  | +4.2   |
| Stocks, end of month.....thous. of pairs..   | 49,511  | 49,751    | 50,111  | 48,691   | 50,903   |         | 43,796  |                                       |                             |  |         |  |
| Rubber soles:  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Production.....thous. of pairs..   | 3,461   | 2,725     | 2,297   | 2,649    | 2,771    |         | 3,431   |                                       |                             | 27,162                                       | 37,645  | +38.6  |
| Shipments—   |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| To shoe manufacturers.....thous. of pairs..  | 2,209   | 1,703     | 1,655   | 1,906    | 1,730    |         | 2,243   |                                       |                             | 18,607                                       | 22,478  | +20.8  |
| To repair trade.....thous. of pairs..  | 917     | 893       | 958     | 885      | 805      |         | 916     |                                       |                             | 7,945  | 10,990  | +38.3  |
| For export.....thous. of pairs..   | 46      | 29        | 328     | 63       | 143      |         | 675     |                                       |                             | 1,014  | 2,452   | +141.8   |
| Stocks, end of month.....thous. of pairs..   | 5,633   | 5,501     | 5,212   | 4,723    | 4,534    |         | 3,148   |                                       |                             |  |         |  |
| Mechanical rubber goods, shipments:  |         |           |         |          |          |         |         |                                       |                             |  |         |  |
| Total.....thous. of dolls..  | 6,306   | 5,393     | 5,837   | 5,201    |          |         | 5,630   |                                       |                             |  |         |  |
| Belting.....thous. of dolls..  | 1,888   | 1,412     | 1,387   | 1,203    |          |         | 1,388   |                                       |                             |  |         |  |
| Hose.....thous. of dolls..   | 2,068   | 1,731     | 2,026   | 1,811    |          |         | 2,257   |                                       |                             |  |         |  |
| All other.....thous. of dolls..  | 2,360   | 2,250     | 2,424   | 2,186    |          |         | 1,984   |                                       |                             |  |         |  |
| Rubber bands, shipments.....thous. of lbs..  | 193     | 186       | 216     | 201      | 188      |         | 218     |                                       |                             |  |         |  |
| Rubber flooring, shipments.....thous. of sq. ft..  | 583     | 754       | 559     | 566      | 623      |         | 433     |                                       |                             |  |         |  |

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## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928    |            |         |           |           | 1929    | 1928    | PER CENT INCREASE (+) OR DECREASE (-) | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Perct. in-crease (+) or de-crease (-) cumu-lative 1928 from 1927 |       |
|--|---------|------------|---------|-----------|-----------|---------|---------|---------------------------------------|--|-----------|--|-------|
|  | August  | Septem-ber | October | Novem-ber | Decem-ber | January | January | Jan. 1929, from Dec., 1928            | Jan. 1929, from Jan., 1928                   | 1927      |  | 1928  |
| HIDES AND LEATHER  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Hides  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Imports:   |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Total hides and skins.....thous. of lbs.   | 47,056  | 34,448     | 35,982  | 34,720    | 30,228    | 38,679  | 36,409  | +28.0                                 | +6.2   | 446,116   | 505,750  | +13.4 |
| Calfskins.....thous. of lbs.   | 4,053   | 2,707      | 4,310   | 1,900     | 3,395     | 2,608   | 3,410   | -23.2                                 | -23.5  | 44,208    | 47,436   | +7.3  |
| Cattle hides.....thous. of lbs.  | 26,540  | 18,504     | 17,883  | 10,103    | 13,118    | 21,456  | 18,856  | +63.6                                 | +13.8  | 236,159   | 275,481  | +16.7 |
| Goatskins.....thous. of lbs.   | 7,951   | 6,728      | 7,993   | 5,773     | 6,537     | 5,911   | 5,448   | -9.6                                  | +8.5   | 81,294    | 90,765   | +11.7 |
| Sheepskins.....thous. of lbs.  | 6,773   | 4,902      | 3,785   | 4,517     | 4,116     | 5,060   | 5,117   | +22.9                                 | -1.1   | 57,307    | 63,265   | +10.4 |
| Stocks, end of month:  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Total hides and skins.....thous. of lbs.   | 243,591 | 249,272    | 253,921 | 259,330   | 267,503   |         | 244,242 |                                       |  |           |  |       |
| Cattle hides.....thous. of lbs.  | 197,086 | 203,227    | 209,902 | 215,668   | 221,679   |         | 204,224 |                                       |  |           |  |       |
| Calf and kip skins.....thous. of lbs.  | 25,758  | 24,059     | 23,118  | 22,946    | 24,733    |         | 23,825  |                                       |  |           |  |       |
| Sheep and lamb skins.....thous. of lbs.  | 20,747  | 21,986     | 20,901  | 20,716    | 21,091    |         | 16,193  |                                       |  |           |  |       |
| Prices:  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Green salted, packers' heavy native steers.....dolls. per lb.  | .236    | .246       | .219    | .203      | .226      | .205    | .261    | -9.3                                  | -21.5  |           |  |       |
| Calfskins, country, No. 1.....dolls. per lb.   | .275    | .275       | .246    | .242      | .250      | .219    | .300    | -12.4                                 | -27.0  |           |  |       |
| Inspected slaughter of livestock:  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| United States—   |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Cattle.....thous. of animals.  | 717     | 764        | 801     | 762       | 667       | 736     | 711     | +10.3                                 | +3.5   | 9,519     | 8,467  | -11.1 |
| Calves.....thous. of animals.  | 369     | 352        | 405     | 378       | 341       | 369     | 383     | +8.2                                  | -3.7   | 4,878     | 4,683  | -4.0  |
| Swine.....thous. of animals.   | 2,545   | 2,508      | 3,713   | 4,455     | 5,782     | 5,738   | 5,479   | -0.8                                  | +4.7   | 43,636    | 49,714   | +13.9 |
| Sheep.....thous. of animals.   | 1,196   | 1,307      | 1,409   | 1,189     | 1,053     | 1,150   | 1,151   | +9.2                                  | -0.1   | 12,883    | 13,487   | +4.7  |
| Canada—  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Cattle and calves.....thous. of animals.   | 105     | 96         | 111     | 106       | 72        | 71      | 66      | -1.4                                  | +7.6   | 1,148     | 1,115  | -2.9  |
| Swine.....thous. of animals.   | 140     | 161        | 200     | 232       | 239       | 249     | 271     | +4.2                                  | -8.1   | 2,540     | 2,547  | +0.3  |
| Sheep.....thous. of animals.   | 62      | 86         | 142     | 135       | 50        | 35      | 26      | -30.0                                 | +34.6  | 618       | 639  | +3.4  |
| Leather  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Sole and belting leather:  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Production—  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Sole only.....thous. of backs, bends, sides  | 1,463   | 1,324      | 1,447   | 1,264     | 1,212     | 1,284   | 1,223   | +5.9                                  | +5.0   | 15,829    | 16,136   | +1.9  |
| Sole and belting.....thous. of lbs.  | 25,701  | 23,510     | 25,711  | 23,184    | 22,277    |         | 23,095  |                                       |  | 296,802   | 292,074  | -1.6  |
| Stocks, end of month—  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| In process of tanning.....thous. of lbs.   | 89,508  | 85,990     | 83,388  | 80,931    | 78,632    |         | 85,396  |                                       |  |           |  |       |
| Finished.....thous. of lbs.  | 72,439  | 72,243     | 75,188  | 77,363    | 80,061    |         | 54,828  |                                       |  |           |  |       |
| Exports.....thous. of lbs.   | 996     | 733        | 825     | 1,063     | 775       | 1,054   | 1,265   | +36.0                                 | -16.7  | 9,833     | 10,176   | +3.5  |
| Price oak, scoured backs.....dolls. per lb.  | .67     | .65        | .63     | .59       | .59       | .59     | .59     | 0.0                                   | 0.0  |           |  |       |
| Upper leather:   |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Production.....thous. of sq. ft.   | 73,150  | 66,380     | 72,092  | 62,619    | 62,804    |         | 71,415  |                                       |  | 809,041   | 810,329  | +0.2  |
| Stocks, end of month—  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| In process of tanning.....thous. of sq. ft.  | 147,602 | 146,010    | 143,265 | 138,803   | 136,922   |         | 149,952 |                                       |  |           |  |       |
| Finished.....thous. of sq. ft.   | 253,854 | 247,386    | 251,350 | 253,470   | 251,406   |         | 245,931 |                                       |  |           |  |       |
| Exports.....thous. of sq. ft.  | 9,000   | 9,093      | 11,174  | 10,268    | 11,030    | 10,998  | 15,532  | -0.3                                  | -29.2  | 148,256   | 135,559  | -8.6  |
| Chrome calf, "B" grades.....dolls. per sq. ft.   | .57     | .57        | .55     | .49       | .50       | .53     | .54     | +6.0                                  | -1.9   |           |  |       |
| Leather Products   |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Shoes:   |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Production.....thous. of pairs.  | 34,974  | 31,000     | 33,393  | 26,443    | 21,909    |         | 26,210  |                                       |  | 343,608   | 344,352  | +0.2  |
| Exports.....thous. of pairs.   | 331     | 275        | 340     | 403       | 355       | 423     | 388     | +19.2                                 | +9.0   | 5,514     | 4,331  | -21.5 |
| Wholesale prices—  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Men's black calf blucher, Mass.....dolls. per pair   | 6.75    | 6.75       | 6.75    | 6.75      | 6.75      | 6.75    | 6.75    | 0.0                                   | 0.0  |           |  |       |
| Men's dress welt, tan calf oxford, St. Louis.....dolls. per pair   | 5.00    | 5.00       | 5.00    | 4.85      | 4.85      | 4.85    | 4.75    | 0.0                                   | +2.1   |           |  |       |
| Women's black kid, dress welt, lace, oxford.....dolls. per pair  | 4.00    | 4.00       | 4.00    | 4.00      | 4.25      | 4.25    | 4.03    | 0.0                                   | +5.5   |           |  |       |
| Gloves, cut.....dozen pairs  | 237,043 | 213,945    | 236,907 | 223,500   | 179,330   |         | 177,884 |                                       |  | 2,614,580 | 2,551,900  | -2.4  |
| PAPER AND PRINTING   |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Wood Pulp  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Mechanical:  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Production.....short tons  | 114,668 | 108,166    | 131,558 | 145,120   | 135,785   | 150,363 | 142,034 | +10.7                                 | +5.9   | 1,589,679 | 1,605,919  | +1.0  |
| Consumption and shipments.....short tons   | 138,309 | 122,771    | 146,383 | 141,775   | 129,322   | 144,069 | 139,851 | +11.4                                 | +3.0   | 1,650,716 | 1,637,233  | -0.8  |
| Stocks, end of month.....short tons  | 147,611 | 133,006    | 118,182 | 118,548   | 125,011   | 131,898 | 159,575 | +5.5                                  | -17.3  |           |  |       |
| Imports.....short tons   | 17,233  | 21,953     | 23,884  | 19,627    | 27,171    | 25,832  | 21,082  | -4.9                                  | +22.5  | 245,599   | 250,879  | +2.1  |
| Chemical:  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Production.....short tons  | 222,116 | 201,646    | 228,434 | 222,934   | 208,564   | 234,062 | 209,106 | +12.2                                 | +11.9  | 2,587,992 | 2,583,126  | -0.2  |
| Consumption and shipments.....short tons   | 221,008 | 204,378    | 231,800 | 221,262   | 207,355   | 235,326 | 210,016 | +13.5                                 | +17.1  | 2,581,014 | 2,589,862  | +0.3  |
| Stocks, end of month.....short tons  | 44,682  | 42,510     | 40,032  | 40,242    | 40,684    | 41,364  | 44,726  | +2.8                                  | -7.5   |           |  |       |
| Imports.....short tons   | 120,643 | 124,048    | 149,112 | 126,790   | 179,548   | 115,240 | 156,164 | -35.8                                 | -26.2  | 1,431,169 | 1,493,521  | +4.4  |
| Price, sulphite.....dolls. per 100 lbs.  | 2.53    | 2.53       | 2.53    | 2.53      | 2.49      | 2.45    | 2.53    | -1.6                                  | -3.2   |           |  |       |
| Newsprint Paper  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Production:  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| United States, total.....short tons  | 116,120 | 102,821    | 122,415 | 123,646   | 115,049   | 123,822 | 119,525 | +7.6                                  | +3.6   | 1,485,495 | 1,414,952  | -4.7  |
| Ratio to capacity.....per cent   | 77      | 74         | 81      | 90        | 84        |         | 84      |                                       |  |           |  |       |
| Canada.....short tons  | 200,480 | 186,396    | 217,290 | 223,645   | 208,484   | 212,191 | 187,848 | +1.8                                  | +13.0  | 2,086,949 | 2,381,102  | +14.1 |
| Consumption by publishers.....short tons   | 162,184 | 169,625    | 189,240 | 207,056   | 185,121   |         | 172,952 |                                       |  | 2,075,972 | 2,126,391  | +2.4  |
| Shipments:   |         |            |         |           |           |         |         |                                       |  |           |  |       |
| United States.....short tons   | 114,768 | 107,834    | 120,927 | 122,761   | 115,033   | 120,263 | 114,211 | +4.5                                  | +5.3   | 1,474,521 | 1,397,393  | -5.2  |
| Canada.....short tons  | 197,224 | 197,532    | 222,430 | 233,924   | 215,133   | 209,020 | 186,829 | -2.8                                  | +11.9  | 2,062,749 | 2,399,030  | +16.3 |
| Imports.....short tons   | 173,872 | 164,648    | 200,362 | 201,416   | 207,727   | 196,882 | 177,808 | -5.2                                  | +10.7  | 1,987,065 | 2,153,930  | +8.4  |
| Exports:   |         |            |         |           |           |         |         |                                       |  |           |  |       |
| Canada.....short tons  | 179,334 | 170,840    | 214,228 | 196,187   | 213,162   | 195,047 | 157,466 | -8.5                                  | +23.9  | 1,881,866 | 2,206,587  | +17.3 |
| Stocks, end of month:  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| At mills—  |         |            |         |           |           |         |         |                                       |  |           |  |       |
| United States.....short tons   | 40,838  | 35,687     | 36,380  | 34,691    | 34,469    | 38,003  | 25,905  | +10.3                                 | +46.7  |           |  |       |
| Canada.....short tons  | 52,108  | 43,800     | 37,018  | 26,254    | 19,139    | 21,406  | 37,731  | +11.8                                 | -43.3  |           |  |       |
| At publishers.....short tons   | 209,044 | 191,287    | 188,980 | 187,223   | 195,322   |         | 207,449 |                                       |  |           |  |       |
| In transit to publishers.....short tons  | 39,744  | 48,229     | 45,289  | 53,674    | 52,624    |         | 46,522  |                                       |  |           |  |       |
| Price, roll, f. o. b. mill.....dolls. per cwt.   | 3.25    | 3.25       | 3.25    | 3.25      | 3.25      | 3.25    | 3.25    | 0.0                                   | 0.0  |           |  |       |

\* Revised.



## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928    |           |         |          |          | 1929    | 1928    | PER CENT INCREASE (+) OR DECREASE (-) |                            | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Perct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|---------|-----------|---------|----------|----------|---------|---------|---------------------------------------|----------------------------|--|-----------|---|
|  | August  | September | October | November | December | January | January | Jan. 1929, from Dec., 1928            | Jan. 1929, from Jan., 1928 | 1927   | 1928      |   |
| PAPEE AND PRINTING—Continued   |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Printing   |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Book publication:  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| American manufacture.....no. of titles.....  | 551     | 835       | 933     | 765      | 797      |         | 507     |                                       |                            | 8,799  | 8,491     | -3.5  |
| Imported.....no. of titles.....  | 169     | 261       | 160     | 104      | 264      |         | 118     |                                       |                            | 1,354  | 1,863     | +37.6   |
| Sales books:   |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| New orders.....thous. of books.....  | 12,538  | 11,837    | 13,958  | 12,730   | 11,123   | 12,866  | 12,329  | +15.7                                 | +4.4                       | 145,599                                      | 148,804   | +2.2  |
| Shipments.....thous. of books.....   | 13,738  | 11,976    | 14,605  | 13,080   | 12,462   | 12,167  | 11,897  | -2.4                                  | +2.3                       | 143,172                                      | 147,948   | +3.3  |
| Printing activity.....weighted index number.....   | 97      | 105       | 113     | 112      | 114      |         | 108     |                                       |                            |  |           |   |
| Cash checks, shipments.....thous. of checks.....   | 68,482  | 85,489    | 86,889  | 81,204   | 77,008   | 90,616  | 75,144  | +17.7                                 | +20.6                      | 912,461                                      | 935,919   | +2.6  |
| Blank forms, new orders.....thous. of sets.....  | 58,108  | 50,114    | 67,957  | 59,429   | 63,614   |         | 43,173  |                                       |                            | 414,290                                      | 611,429   | +47.6   |
| Box Board  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Operation.....thous. of inch hours.....  | 9,236   | 8,344     | 9,365   | 8,666    | 7,632    | 8,958   | 7,833   | +17.4                                 | +14.4                      | 96,756                                       | 101,295   | +4.7  |
| Operation.....per ct. of capacity.....   | 81.6    | 83.0      | 82.3    | 82.2     | 72.4     | 78.7    | 75.5    | +8.7                                  | +4.2                       |  |           |   |
| Production.....short tons.....   | 230,950 | 224,971   | 243,794 | 241,924  | 205,046  | 247,962 | 203,882 | +25.9                                 | +21.6                      | 2,477,324                                    | 2,682,845 | +8.3  |
| New orders.....short tons.....   | 236,682 | 234,449   | 240,391 | 248,147  | 197,148  | 237,095 | 204,128 | +20.3                                 | +16.2                      | 2,476,241                                    | 2,695,047 | +8.8  |
| Unfilled orders, end of month.....short tons.....  | 81,816  | 87,097    | 81,022  | 93,203   | 94,174   | 83,661  | 80,417  | -11.2                                 | +4.0                       |  |           |   |
| Consumption of waste paper.....short tons.....   | 213,626 | 217,361   | 240,930 | 222,693  | 196,164  | 230,738 | 189,744 | +17.6                                 | +21.6                      | 2,379,475                                    | 2,512,059 | +5.6  |
| Shipments.....short tons.....  | 233,104 | 228,880   | 245,133 | 235,228  | 197,029  | 247,085 | 196,984 | +25.4                                 | +25.4                      | 2,481,135                                    | 2,667,207 | +7.5  |
| Stocks, end of month.....short tons.....   | 47,709  | 45,271    | 43,627  | 47,693   | 55,624   | 56,999  | 49,032  | +2.5                                  | +16.2                      |  |           |   |
| Stocks of waste paper, end of month:   |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| On hand.....short tons.....  | 117,009 | 116,197   | 127,989 | 136,100  | 148,906  | 135,392 | 153,747 | -9.1                                  | -11.9                      |  |           |   |
| In transit and unshipped purchases.....tons.....   | 48,108  | 53,344    | 73,235  | 49,982   | 43,447   | 49,304  | 62,181  | +13.5                                 | -20.7                      |  |           |   |
| Other Paper  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Binder's board, production.....short tons.....   | 3,092   | 2,431     | 2,644   | 2,196    | 2,718    |         | 2,547   |                                       |                            | 29,686                                       | 35,664    | +20.1   |
| Book paper:  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Production.....short tons.....   | 130,416 | 117,374   | 132,633 | 126,001  | 122,221  | 131,999 | 121,509 | -8.0                                  | +8.6                       | 1,331,551                                    | 1,506,934 | +13.2   |
| Ratio to capacity.....per cent.....  | 89      | 86        | 87      | 90       | 87       | 95      | 90      | +9.2                                  | +5.6                       |  |           |   |
| Shipments.....short tons.....  | 133,024 | 120,895   | 133,429 | 124,615  | 122,221  | 132,791 | 125,033 | +8.6                                  | +6.2                       | 1,324,016                                    | 1,499,184 | +13.2   |
| Stocks, end of month.....short tons.....   | 85,836  | 82,403    | 81,579  | 82,395   | 82,395   | 79,699  | 68,265  | -4.0                                  | +15.9                      |  |           |   |
| New orders—  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Coated.....p. ct. of normal production.....  | 77      | 81        | 83      | 84       | 77       | 81      | 83      | +5.2                                  | -2.4                       |  |           |   |
| Uncoated.....p. ct. of normal production.....  | 79      | 80        | 86      | 80       | 82       | 82      | 87      | 0.0                                   | -5.7                       |  |           |   |
| Unfilled orders, end of month—   |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Coated.....p. ct. of normal production.....  | 8       | 10        | 10      | 10       | 7        | 10      | 11      | +42.9                                 | -9.1                       |  |           |   |
| Uncoated.....p. ct. of normal production.....  | 7       | 7         | 8       | 7        | 6        | 8       | 9       | +33.3                                 | -11.1                      |  |           |   |
| Wrapping paper:  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Production.....short tons.....   | 100,779 | 83,582    | 96,053  | 96,907   | 90,979   | 101,604 | 96,223  | +11.7                                 | +5.6                       | 1,087,155                                    | 1,127,981 | +3.8  |
| Ratio to capacity.....per cent.....  | 89      | 84        | 85      | 87       | 81       | 81      | 91      | 0.0                                   | -11.0                      |  |           |   |
| Shipments.....short tons.....  | 100,174 | 86,173    | 94,900  | 91,286   | 88,159   | 91,240  | 93,144  | +3.5                                  | -2.0                       | 1,057,467                                    | 1,111,259 | +5.1  |
| Stocks, end of month.....short tons.....   | 93,340  | 91,977    | 93,416  | 93,930   | 96,123   | 96,740  | 87,895  | +0.6                                  | +10.1                      |  |           |   |
| Fine paper:  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Production.....short tons.....   | 39,331  | 34,885    | 39,680  | 37,463   | 35,263   | 40,020  | 37,471  | +13.5                                 | +6.8                       | 446,717                                      | 458,763   | +2.4  |
| Ratio to capacity.....per cent.....  | 84      | 80        | 84      | 88       | 80       | 92      | 93      | +15.0                                 | -1.1                       |  |           |   |
| Shipments.....short tons.....  | 38,938  | 34,885    | 39,839  | 36,076   | 33,817   | 34,001  | 35,550  | +0.5                                  | -4.4                       | 447,853                                      | 453,299   | +1.2  |
| Stocks, end of month.....short tons.....   | 53,535  | 53,361    | 53,788  | 54,418   | 55,805   | 52,445  | 52,410  | -6.0                                  | +0.1                       |  |           |   |
| All other grades:  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Production.....short tons.....   | 110,677 | 100,138   | 112,529 | 102,703  | 93,374   | 106,160 | 99,588  | +13.7                                 | +6.6                       | 1,197,896                                    | 1,221,547 | +2.0  |
| Shipments.....short tons.....  | 109,154 | 102,437   | 115,563 | 101,483  | 91,785   | 104,397 | 98,946  | +13.7                                 | +5.5                       | 1,193,456                                    | 1,223,549 | +2.5  |
| Stocks, end of month.....short tons.....   | 72,438  | 70,140    | 61,422  | 61,340   | 62,015   | 62,474  | 60,838  | +0.7                                  | +2.3                       |  |           |   |
| Total paper (inc. newsprint and box board):  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Production.....short tons.....   | 728,073 | 663,771   | 747,104 | 728,644  | 661,932  | 751,565 | 678,198 | +13.5                                 | +10.8                      | 8,022,452                                    | 8,413,777 | +4.9  |
| Ratio to capacity.....per cent.....  | 78      | 84        | 83      | 90       | 79       | 91      | 82      | +15.2                                 | +11.0                      |  |           |   |
| Shipments.....short tons.....  | 729,162 | 681,104   | 749,791 | 712,049  | 648,044  | 729,777 | 663,868 | +12.6                                 | +9.9                       | 8,025,944                                    | 8,344,849 | +4.0  |
| Stocks, end of month.....short tons.....   | 393,696 | 378,839   | 370,212 | 374,467  | 386,431  | 385,755 | 344,345 | -0.2                                  | +12.0                      |  |           |   |
| Paper Board Shipping Boxes   |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Production:  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Total.....thous. of sq. ft.....  | 441,792 | 434,371   | 454,662 | 454,354  | 415,958  | 433,141 | 347,622 | +4.1                                  | +24.6                      | 4,720,249                                    | 5,012,380 | +6.2  |
| Corrugated.....thous. of sq. ft.....   | 364,756 | 359,553   | 374,342 | 370,302  | 348,090  | 354,992 | 227,280 | +2.0                                  | +56.2                      | 3,784,861                                    | 4,047,919 | +7.0  |
| Solid fiber.....thous. of sq. ft.....  | 77,036  | 74,818    | 80,320  | 84,052   | 67,868   | 78,149  | 70,342  | +15.1                                 | +11.1                      | 935,388                                      | 915,802   | -2.1  |
| Operating activity:  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Total.....per cent of normal.....  | 79      | 79        | 88      | 82       | 71       | 78      | 69      | +9.9                                  | +13.0                      |  |           |   |
| Corrugated.....per cent of normal.....   | 77      | 78        | 89      | 82       | 72       | 78      | 67      | +8.3                                  | +16.4                      |  |           |   |
| Solid fiber.....per cent of normal.....  | 84      | 80        | 83      | 79       | 68       | 77      | 75      | +13.2                                 | +2.7                       |  |           |   |
| Other Paper Products   |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Rope paper sacks, shipments.....index number.....  | 111     | 102       | 113     | 107      | 93       |         | 106     |                                       |                            |  |           |   |
| Abrasive paper and cloth:  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Domestic shipments.....reams.....  | 99,789  | 95,131    | 98,576  | 91,405   | 97,708   | 94,916  | 80,505  | -2.9                                  | +17.9                      | 979,981                                      | 1,090,303 | +11.1   |
| Foreign shipments.....reams.....   | 17,875  | 18,281    | 20,085  | 18,601   | 19,214   | 17,184  | 17,112  | -10.6                                 | +0.4                       | 192,596                                      | 222,960   | +15.8   |
| BUILDING CONSTRUCTION AND HOUSING  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Rental advertisements, Minneapolis.....number.....   | 7,712   | 7,930     | 6,454   | 4,886    | 3,328    | 2,672   | 2,473   | -19.7                                 | +8.0                       | 60,243                                       | 58,279    | -3.3  |
| Building Costs   |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Building materials:  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Frame house, 6-room.....rel. to 1913.....  | 177     | 177       | 179     | 177      | 175      | 177     | 178     | +1.1                                  | -0.6                       |  |           |   |
| Brick house, 6-room.....rel. to 1913.....  | 181     | 181       | 184     | 182      | 181      | 183     | 183     | +1.1                                  | 0.0                        |  |           |   |
| Concrete factory costs (Aberthaw).....rel. to 1914.....  | 191     | 191       | 191     | 190      | 190      | 190     | 192     | 0.0                                   | -1.0                       |  |           |   |
| Building costs (Eng. News Record).....rel. to 1913.....  | 207     | 208       | 209     | 210      | 209      | 210     | 205     | +0.5                                  | +2.4                       |  |           |   |
| Building costs (A. G. C.).....rel. to 1913.....  | 200     | 201       | 202     | 202      | 202      | 203     | 199     | +0.5                                  | +2.0                       |  |           |   |
| Plumbing fixtures, 6 pieces.....dollars.....   | 101.21  | 101.13    | 100.67  | 100.79   | 101.23   | 100.30  | 98.59   | -0.9                                  | +10.2                      |  |           |   |
| Construction costs (Am. Appraisal):  |         |           |         |          |          |         |         |                                       |                            |  |           |   |
| Frame.....rel. to 1913.....  | 204     | 204       | 204     | 204      | 204      | 204     | 205     | 0.0                                   | -0.5                       |  |           |   |
| Brick, wood frame.....rel. to 1913.....  | 213     | 213       | 213     | 213      | 212      | 212     | 214     | 0.0                                   | -0.9                       |  |           |   |
| Brick, steel frame.....rel. to 1913.....   | 198     | 198       | 197     | 197      | 197      | 197     | 196     | 0.0                                   | +0.5                       |  |           |   |
| Reinforced concrete.....rel. to 1913.....  | 201     | 201       | 201     | 201      | 201      | 201     | 200     | 0.0                                   | +0.5                       |  |           |   |

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928      |           |         |          |          | 1929      | 1928      | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|-----------|-----------|---------|----------|----------|-----------|-----------|---------------------------------------|-----------------------------|--|-----------|--|
|  | August    | September | October | November | December | January   | January   | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928      |  |
|  |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| <b>BUILDING CONSTRUCTION AND HOUSING—Continued</b>   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| <b>Contracts and Losses</b>  |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Contracts awarded (36 States):   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Commercial buildings.....thous. of sq. ft.   | 11,974    | 11,442    | 13,194  | 13,050   | 10,992   | 15,250    | 10,803    | +38.7                                 | +41.2                       | 141,496                                      | 132,143   | -6.6   |
| Industrial buildings.....thous. of sq. ft.   | 8,548     | 10,348    | 9,705   | 6,518    | 6,092    | 7,085     | 4,412     | +16.3                                 | +60.6                       | 68,095                                       | 91,538    | +34.4  |
| Residential buildings.....thous. of sq. ft.  | 42,859    | 38,744    | 48,298  | 40,532   | 36,191   | 27,898    | 37,516    | -22.9                                 | -25.6                       | 474,277                                      | 548,329   | +15.6  |
| Educational buildings.....thous. of sq. ft.  | 5,418     | 5,651     | 4,876   | 4,290    | 4,136    | 2,631     | 3,380     | -36.4                                 | -22.2                       | 53,063                                       | 60,626    | +14.3  |
| Other public and semi-public buildings.....thous. of sq. ft.   | 6,392     | 6,278     | 6,477   | 5,218    | 4,661    | 2,863     | 3,955     | -38.6                                 | -27.6                       | 74,972                                       | 70,022    | -6.6   |
| Grand total.....thous. of sq. ft.  | 78,638    | 73,146    | 82,906  | 70,599   | 63,094   | 56,331    | 60,271    | -10.8                                 | -6.5                        | 812,393                                      | 930,721   | +14.6  |
| Contracts awarded, value (36 States):  |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Commercial buildings.....thous. of dolls.  | 57,178    | 58,525    | 63,263  | 65,469   | 64,352   | 98,644    | 65,981    | +53.3                                 | +49.5                       | 897,172                                      | 847,556   | -5.5   |
| Industrial buildings.....thous. of dolls.  | 41,318    | 112,925   | 61,170  | 35,434   | 33,647   | 60,439    | 34,833    | +79.6                                 | +73.5                       | 475,614                                      | 602,603   | +26.7  |
| Residential buildings.....thous. of dolls.   | 207,521   | 196,850   | 234,654 | 194,028  | 174,731  | 132,862   | 186,904   | -24.0                                 | -28.9                       | 2,489,588                                    | 2,715,111 | +9.1   |
| Educational buildings.....thous. of dolls.   | 33,559    | 37,088    | 30,746  | 28,719   | 25,033   | 17,171    | 22,854    | -31.4                                 | -24.9                       | 368,794                                      | 386,490   | +4.8   |
| Other public and semi-public buildings.....thous. of dolls.  | 45,470    | 51,317    | 46,820  | 40,079   | 42,842   | 23,142    | 30,287    | -46.0                                 | -23.6                       | 639,519                                      | 564,460   | -11.7  |
| Public works and utilities.....thous. of dolls.  | 114,714   | 115,808   | 146,041 | 88,503   | 75,199   | 61,811    | 69,676    | -17.8                                 | -11.3                       | 1,211,252                                    | 1,288,559 | +6.4   |
| Grand total.....thous. of dolls.   | 499,760   | 572,513   | 582,693 | 452,234  | 415,803  | 394,069   | 410,535   | -5.2                                  | -4.0                        | 6,083,949                                    | 6,404,779 | +5.3   |
| Contracts awarded, Canada.....thous. of dolls.   | 39,449    | 45,439    | 44,585  | 29,038   | 18,905   | 41,963    | 20,480    | +122.0                                | +104.9                      | 418,951                                      | 472,033   | +12.7  |
| Building volume (A. G. C.).....rel. to 1913.   | 239       | 266       | 243     | 222      | 182      | 148       | 125       | -18.7                                 | +18.4                       |  |           |  |
| Fire losses:   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| United States and Canada (Journal of Commerce).....thous. of dolls.  | 17,724    | 17,183    | 22,414  | 22,588   | 31,204   | 36,225    | 43,261    | +16.1                                 | -39.4                       | 320,597                                      | 303,268   | -5.4   |
| Canada (Monetary Times).....thous. of dolls.   | 2,356     | 1,739     | 1,795   | 1,662    | 1,646    | 2,664     | 2,959     | +61.8                                 | -10.0                       | 22,667                                       | 24,279    | +7.1   |
| <b>LUMBER PRODUCTS</b>   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| <b>Softwood Lumber</b>   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Southern pine:   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production (computed).....M ft. b. m.  | 425,493   | 386,671   | 427,623 | 396,256  | 381,589  | 425,009   | 418,717   | +11.4                                 | +1.5                        | 5,173,558                                    | 4,994,053 | -3.5   |
| Operation.....per cent of full time.   | 87        | 88        | 90      | 86       | 79       | 87        | 97        | +10.1                                 | -10.3                       |  |           |  |
| Shipments (computed).....M ft. b. m.   | 468,672   | 423,218   | 464,558 | 413,295  | 345,816  | 398,047   | 426,220   | +15.1                                 | -6.6                        | 5,135,886                                    | 5,228,488 | +1.8   |
| New orders (computed).....M ft. b. m.  | 479,370   | 434,884   | 444,566 | 392,674  | 332,069  | 417,700   | 473,900   | +25.8                                 | -10.9                       | 5,241,265                                    | 5,211,506 | -0.6   |
| Stocks, end of mo. (computed).....M ft. b. m.  | 1,019,050 | 991,781   | 954,846 | 952,395  | 978,954  | 1,005,916 | 1,200,031 | +2.8                                  | -16.2                       |  |           |  |
| Unfilled orders, end mo. (comp.).....M ft. b. m.   | 339,038   | 340,875   | 320,833 | 300,262  | 286,515  | 306,168   | 352,826   | +6.9                                  | -17.8                       |  |           |  |
| Exports, lumber.....M ft. b. m.  | 43,287    | 40,837    | 75,504  | 61,759   | 62,213   | 61,693    | 66,332    | -0.8                                  | -7.0                        | 711,430                                      | 708,883   | -0.4   |
| Exports, timber.....M ft. b. m.  | 7,465     | 14,897    | 14,104  | 7,562    | 9,249    | 11,507    | 16,453    | +24.4                                 | -30.1                       | 182,126                                      | 163,577   | -10.2  |
| Price, flooring.....dolls. per M ft. b. m.   | 36.34     | 37.73     | 37.73   | 37.58    | 37.19    | 36.55     | 35.26     | -1.7                                  | +3.7                        |  |           |  |
| Douglas fir:   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production (computed).....M ft. b. m.  | 358,566   | 296,343   | 337,527 | 310,220  | 299,029  | 316,039   | 410,493   | +5.7                                  | -23.0                       | 5,927,070                                    | 4,934,872 | -16.7  |
| Shipments (computed).....M ft. b. m.   | 389,454   | 315,144   | 301,267 | 269,484  | 272,618  | 296,343   | 397,571   | +8.7                                  | -25.5                       | 5,878,066                                    | 5,081,313 | -13.6  |
| New orders (computed).....M ft. b. m.  | 381,396   | 322,754   | 302,610 | 269,484  | 299,029  | 349,165   | 444,514   | +16.8                                 | -21.5                       | 5,937,153                                    | 5,249,119 | -11.6  |
| Unfilled orders (computed).....M ft. b. m.   | 257,845   | 293,657   | 297,686 | 238,149  | 393,930  | 403,331   | 357,604   | +2.4                                  | +12.8                       |  |           |  |
| Exports, lumber.....M ft. b. m.  | 59,236    | 64,265    | 65,795  | 60,947   | 59,193   | 84,299    | 85,299    | +42.4                                 | -1.2                        | 685,855                                      | 767,745   | +11.9  |
| Exports, timber.....M ft. b. m.  | 40,837    | 44,264    | 39,330  | 47,598   | 41,939   | 59,984    | 2,280     | +43.0                                 |                             | 519,887                                      | 496,533   | -4.5   |
| Price, No. 1 common, dolls. per M ft. b. m.  | 17.75     | 17.32     | 18.06   | 17.92    | 16.38    | 17.70     | 15.23     | +8.0                                  | +16.2                       |  |           |  |
| Price, flooring, 1x4, "B" and better, V. G.....dolls. per M ft. b. m.  | 37.19     | 38.85     | 40.61   | 40.88    | 41.05    | 44.44     | 34.04     | +8.3                                  | +30.6                       |  |           |  |
| California redwood:  |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production (computed).....M ft. b. m.  | 41,137    | 34,329    | 27,851  | 45,834   | 29,919   | 29,560    | 39,454    | -1.2                                  | -25.1                       | 487,314                                      | 459,181   | -5.8   |
| Shipments (computed).....M ft. b. m.   | 43,983    | 33,107    | 32,744  | 38,715   | 28,213   | 30,944    | 30,201    | +9.7                                  | +2.5                        | 507,591                                      | 444,542   | -12.4  |
| New orders (computed).....M ft. b. m.  | 39,855    | 33,519    | 33,115  | 38,848   | 29,524   | 34,801    | 38,763    | +17.9                                 | -10.2                       | 515,918                                      | 451,973   | -12.4  |
| Unfilled orders, end mo. (comp.).....M ft. b. m.   | 45,093    | 47,916    | 40,350  | 32,783   | 32,379   | 35,756    | 50,415    | +10.4                                 | -29.1                       |  |           |  |
| California white pine:   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production.....M ft. b. m.   | 145,491   | 122,708   | 126,086 | 107,501  | 76,164   | 69,930    | 46,736    | -8.2                                  | +49.6                       | 1,091,803                                    | 1,227,464 | +12.4  |
| Shipments.....M ft. b. m.  | 118,310   | 105,246   | 119,074 | 94,587   | 79,072   | 100,633   | 79,796    | +27.3                                 | +26.1                       | 1,107,698                                    | 1,203,379 | +8.6   |
| Stocks, end of month.....M ft. b. m.   | 516,764   | 538,136   | 552,422 | 562,528  | 566,914  | 535,998   | 609,181   | -5.5                                  | -12.0                       |  |           |  |
| New orders.....M ft. b. m.   | 102,805   | 86,716    | 100,760 | 81,755   | 81,452   | 95,905    | 65,307    | +17.7                                 | +46.9                       | 1,012,963                                    | 1,064,312 | +5.1   |
| Unfilled orders, end of month.....M ft. b. m.  | 181,014   | 188,747   | 183,493 | 181,665  | 214,016  | 176,506   | 191,837   | -17.5                                 | -8.0                        |  |           |  |
| North Carolina pine:   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production (computed).....M ft. b. m.  | 45,437    | 37,457    | 48,090  | 51,198   | 46,802   | 45,136    | 40,019    | +15.8                                 | +12.8                       | 613,851                                      | 587,412   | -4.3   |
| Shipments (computed).....M ft. b. m.   | 48,643    | 39,900    | 51,590  | 50,218   | 42,651   | 38,976    | 37,030    | -8.6                                  | +5.3                        | 613,655                                      | 604,708   | -1.5   |
| New orders.....M ft. b. m.   | 49,560    | 50,890    | 58,870  | 58,310   | 66,430   | 48,440    | 38,920    | -27.1                                 | +24.5                       | 499,039                                      | 649,150   | +30.1  |
| Northern pine:   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Lumber—  |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production.....M ft. b. m.   | 57,335    | 51,618    | 55,031  | 26,718   | 19,679   | 23,818    | 33,550    | +21.0                                 | -29.0                       | 486,440                                      | 497,289   | +2.2   |
| Shipments.....M ft. b. m.  | 47,755    | 44,618    | 51,378  | 41,808   | 27,632   | 33,167    | 29,451    | +20.0                                 | +12.6                       | 451,720                                      | 494,809   | +9.5   |
| New orders.....M ft. b. m.   | 41,435    | 44,209    | 41,109  | 30,282   | 25,179   | 35,363    | 32,703    | +40.4                                 | +8.1                        | 411,144                                      | 450,981   | +9.7   |
| Lath—  |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production.....thousands.  | 12,318    | 12,419    | 11,777  | 5,230    | 4,118    | 4,692     | 7,315     | +13.9                                 | -35.9                       | 118,894                                      | 105,379   | -11.4  |
| Shipments.....thousands.   | 11,099    | 8,897     | 8,937   | 6,560    | 5,121    | 6,952     | 5,300     | +35.8                                 | -31.2                       | 119,970                                      | 97,244    | -18.9  |
| Northern hemlock:  |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production.....M ft. b. m.   | 20,449    | 15,315    | 16,425  | 16,359   | 14,172   |           | 11,425    |                                       |                             | 192,678                                      | 197,243   | +2.4   |
| Shipments.....M ft. b. m.  | 22,661    | 19,951    | 21,042  | 17,139   | 11,858   |           | 7,485     |                                       |                             | 228,074                                      | 200,737   | -12.0  |
| <b>Hardwood Lumber</b>   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Walnut lumber:   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production.....M ft. b. m.   | 2,931     | 2,749     | 2,857   | 2,806    | 2,460    | 2,974     | 3,063     | +20.9                                 | -2.9                        | 35,545                                       | 34,517    | -2.9   |
| Shipments.....M ft. b. m.  | 2,863     | 3,299     | 3,419   | 3,478    | 2,734    | 3,163     | 2,687     | +15.7                                 | +17.7                       | 34,768                                       | 36,060    | +3.7   |
| Stocks, end of month.....M ft. b. m.   | 13,166    | 12,625    | 12,249  | 11,668   | 11,396   | 12,305    | 13,264    | +8.0                                  | -7.2                        |  |           |  |
| New orders.....M ft. b. m.   | 2,990     | 2,635     | 4,174   | 3,033    | 3,649    | 3,307     | 2,628     | -9.4                                  | +25.8                       | 34,782                                       | 36,852    | +6.0   |
| Unfilled orders, end of month.....M ft. b. m.  | 5,270     | 4,741     | 5,483   | 5,117    | 6,082    | 5,664     | 5,389     | -6.9                                  | +5.1                        |  |           |  |
| Walnut logs:   |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Purchased.....M ft. log measure.   | 2,736     | 2,274     | 2,702   | 2,504    | 2,014    | 2,285     | 2,255     | +1.3                                  | +1.3                        | 35,262                                       | 29,327    | -16.8  |
| Made into lumber and veneer.....M ft. log measure.   | 2,579     | 2,643     | 2,606   | 2,888    | 2,489    | 2,538     | 2,416     | +2.0                                  | +5.0                        | 31,742                                       | 30,686    | -3.3   |
| Stocks, end of month.....M ft. log measure.  | 3,058     | 2,684     | 2,636   | 2,359    | 1,884    | 1,557     | 3,041     | -17.4                                 | -48.8                       |  |           |  |
| Northern hardwoods:  |           |           |         |          |          |           |           |                                       |                             |  |           |  |
| Production.....M ft. b. m.   | 20,073    | 16,624    | 16,727  | 21,642   | 34,639   |           | 37,543    |                                       |                             | 347,236                                      | 357,356   | +2.9   |
| Shipments.....M ft. b. m.  | 27,597    | 25,086    | 31,473  | 30,646   | 23,562   |           | 24,164    |                                       |                             | 329,100                                      | 330,423   | +0.4   |

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 133 of the February, 1929, "Survey" | 1928      |           |           |           |           | 1929      | 1928      | PER CENT INCREASE (+) OR DECREASE (-) | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |            | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |        |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------------------|--|------------|--|--------|
|  | August    | September | October   | November  | December  | January   | January   | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928                  | 1927       |  | 1928   |
| LUMBER PRODUCTS—Continued  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Hardwood Lumber—Continued  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Lower Michigan hardwoods:  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Production.....M ft. b. m.   | 5,502     | 4,915     | 4,411     | 5,541     | 6,257     | 7,934     | 7,934     |                                       |  | 80,339     | 83,169   | +3.5   |
| Shipments.....M ft. b. m.  | 7,349     | 6,467     | 6,137     | 7,280     | 5,695     | 8,147     | 8,147     |                                       |  | 90,048     | 82,454   | -8.4   |
| Stocks, end of month.....M ft. b. m.   | 23,509    | 20,915    | 19,434    | 23,206    | 23,502    | 30,821    | 30,821    |                                       |  |            |  |        |
| Gum:   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Stocks, total, end of month.....mill. ft. b. m.  | 543       | 529       | 532       | 518       | 517       | 543       | 543       |                                       |  |            |  |        |
| Stocks, unsold, end of month.....mill. ft. b. m.   | 410       | 396       | 398       | 376       | 372       | 400       | 400       |                                       |  |            |  |        |
| Unfilled orders, end of month.....mill. ft. b. m.  | 132       | 133       | 134       | 142       | 145       | 143       | 143       |                                       |  |            |  |        |
| Oak:   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Stocks, total, end of month.....mill. ft. b. m.  | 959       | 954       | 918       | 907       | 938       | 1,051     | 1,051     |                                       |  |            |  |        |
| Stocks, unsold, end of month.....mill. ft. b. m.   | 800       | 775       | 746       | 741       | 768       | 865       | 865       |                                       |  |            |  |        |
| Unfilled orders, end of month.....mill. ft. b. m.  | 159       | 161       | 171       | 166       | 170       | 186       | 186       |                                       |  |            |  |        |
| All hardwoods:   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Production.....mill. ft. b. m.   | 263       | 270       | 285       | 289       | 274       | 315       | 315       |                                       |  | 3,960      | 3,216  | -18.8  |
| Shipments.....mill. ft. b. m.  | 285       | 293       | 315       | 308       | 263       | 296       | 296       |                                       |  | 3,701      | 3,306  | -10.7  |
| New orders.....mill. ft. b. m.   | 289       | 293       | 323       | 323       | 274       | 330       | 330       |                                       |  | 3,795      | 3,415  | -10.0  |
| Stocks, total, end of month.....mill. ft. b. m.  | 2,771     | 2,731     | 2,722     | 2,696     | 2,757     | 2,954     | 2,954     |                                       |  |            |  |        |
| Stocks, unsold, end of month.....mill. ft. b. m.   | 2,211     | 2,164     | 2,132     | 2,107     | 2,142     | 2,331     | 2,331     |                                       |  |            |  |        |
| Unfilled orders, end of month.....mill. ft. b. m.  | 557       | 566       | 589       | 589       | 615       | 624       | 624       |                                       |  |            |  |        |
| Production, 10 species.....M ft. b. m.   | 2,206,862 | 1,927,716 | 2,114,273 | 1,991,913 | 1,785,505 | 2,052,155 | 2,002,727 | +14.9                                 | +2.5   | 27,909,648 | 26,104,320   | -6.5   |
| Exports, planks, joists, etc.....M ft. b. m.   | 162,221   | 170,457   | 204,979   | 184,054   | 208,045   | 240,384   | 239,145   | +15.5                                 | +0.5   | 2,159,316  | 2,323,681  | +7.6   |
| Retail yards, Minneapolis district:  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Sales.....M ft. b. m.  | 17,632    | 17,860    | 18,242    | 13,302    | 17,807    | 5,489     | 14,764    | -29.7                                 | +63.9  | 133,401    | 158,604  | +18.9  |
| Stocks, end of month.....M ft. b. m.   | 86,807    | 84,984    | 81,035    | 75,810    | 72,771    | 79,400    | 84,686    | +9.1                                  | -6.2   |            |  |        |
| Retail yards, Kansas City district:  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Sales.....M ft. b. m.  | 6,140     | 6,497     | 7,008     | 5,494     | 4,035     | 4,333     | 4,763     | +7.4                                  | -9.0   | 69,284     | 67,998   | -1.9   |
| Stocks, end of month.....M ft. b. m.   | 45,326    | 45,529    | 45,361    | 42,505    | 44,458    | 45,364    | 41,842    | +2.0                                  | +8.4   |            |  |        |
| Flooring   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Maple flooring:  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Production.....M ft. b. m.   | 8,413     | 7,675     | 8,204     | 8,721     | 8,866     | 7,771     | 7,346     | -12.4                                 | +5.8   | 114,759    | 94,369   | -17.7  |
| Shipments.....M ft. b. m.  | 9,515     | 7,929     | 8,543     | 6,230     | 5,784     | 5,114     | 7,252     | -11.6                                 | -29.5  | 109,952    | 93,124   | -15.3  |
| Stocks, end of month.....M ft. b. m.   | 23,232    | 22,554    | 21,352    | 21,960    | 24,674    | 24,733    | 28,721    | +0.2                                  | -13.9  |            |  |        |
| New orders.....M ft. b. m.   | 8,851     | 7,110     | 7,230     | 6,537     | 5,382     | 5,999     | 8,161     | +11.5                                 | -26.5  | 104,349    | 89,760   | -14.0  |
| Unfilled orders, end of month.....M ft. b. m.  | 10,187    | 10,106    | 7,940     | 7,157     | 7,988     | 8,019     | 9,154     | +0.4                                  | -12.4  |            |  |        |
| Oak flooring:  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Production.....M ft. b. m.   | 51,529    | 45,926    | 51,225    | 45,794    | 38,747    | 35,947    | 35,947    |                                       |  | 526,000    | 531,420  | +1.0   |
| Shipments.....M ft. b. m.  | 51,860    | 45,020    | 45,652    | 37,232    | 31,665    | 38,080    | 38,080    |                                       |  | 513,074    | 531,008  | +3.5   |
| Stocks, end of month.....M ft. b. m.   | 67,864    | 68,456    | 72,689    | 80,331    | 87,856    | 82,239    | 82,239    |                                       |  |            |  |        |
| New orders.....M ft. b. m.   | 49,427    | 43,141    | 38,132    | 43,753    | 29,033    | 53,888    | 53,888    |                                       |  | 506,436    | 533,563  | +5.4   |
| Unfilled orders, end of month.....M ft. b. m.  | 47,026    | 47,099    | 41,151    | 48,052    | 30,956    | 45,925    | 45,925    |                                       |  |            |  |        |
| Doors at Wholesale   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Fir, manufacturing plants:   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Production.....number  | 314,154   | 273,076   | 372,158   | 244,857   | 203,776   | 253,005   | 253,005   | +24.2                                 |  |            |  |        |
| Shipments.....number   | 344,643   | 305,555   | 362,004   | 254,110   | 166,886   | 268,826   | 268,826   | +61.1                                 |  |            |  |        |
| Stocks, end of month.....number  | 267,118   | 238,399   | 243,946   | 251,837   | 277,431   | 216,207   | 216,207   | -22.1                                 |  |            |  |        |
| New orders.....number  | 227,311   | 237,769   | 285,147   | 253,418   | 247,799   | 311,347   | 311,347   | +25.6                                 |  |            |  |        |
| Unfilled orders, end of month.....number   | 344,094   | 300,106   | 215,872   | 217,608   | 295,919   | 219,981   | 219,981   | -25.7                                 |  |            |  |        |
| Wooden Furniture   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Household furniture and case goods:  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Shipments.....dolls., average per firm   | 65,947    | 65,010    | 70,030    | 59,855    | 41,962    | 41,335    | 41,335    |                                       |  | 655,804    | 626,782  | -4.4   |
| Unfilled orders.....dolls., average per firm   | 57,288    | 58,576    | 50,266    | 51,136    | 45,885    | 51,033    | 51,033    |                                       |  |            |  |        |
| Grand Rapids district:   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Unfilled order, end of month.....No. of days' production   | 53        | 49        | 38        | 50        | 39        | 44        | 44        |                                       |  |            |  |        |
| New orders.....No. of days' production   | 30        | 31        | 31        | 50        | 18        | 40        | 40        |                                       |  |            |  |        |
| Shipments.....No. of days' production  | 31        | 30        | 37        | 35        | 26        | 23        | 23        |                                       |  |            |  |        |
| Outstanding accounts, end of month.....No. of days' sales  | 56        | 65        | 65        | 65        | 59        | 55        | 55        |                                       |  |            |  |        |
| Cancellations.....per cent of new orders   | 7.0       | 9.0       | 10.0      | 6.0       | 17.0      | 7.0       | 7.0       |                                       |  |            |  |        |
| Plant operation.....per cent of full time  | 92.0      | 101.0     | 103.0     | 100.0     | 99.0      | 95.0      | 95.0      |                                       |  |            |  |        |
| Piano benches and stools:  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| New orders (average per firm).....dollars  | 6,396     | 9,508     | 9,929     | 7,812     | 8,044     | 7,043     | 7,043     |                                       |  | 107,819    | 85,000   | -21.1  |
| Unfilled orders, end of month (average per firm).....dollars   | 2,323     | 3,012     | 3,178     | 2,385     | 1,066     | 2,851     | 2,851     |                                       |  |            |  |        |
| Shipments—Value (average per firm).....dollars   | 5,251     | 8,343     | 9,760     | 8,594     | 9,315     | 5,918     | 5,918     |                                       |  | 106,180    | 84,578   | -20.3  |
| Quantity (total).....pieces  | 6,020     | 9,826     | 10,972    | 9,790     | 10,519    | 7,617     | 7,617     |                                       |  | 137,005    | 102,918  | -24.9  |
| Plywood and Veneer   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Douglas fir plywood:   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Production.....thous. of sq. ft. of surface  | 11,094    | 9,426     | 13,079    | 9,291     | 8,426     | 12,743    | 12,743    | +51.2                                 |  |            |  |        |
| Shipments.....thous. of sq. ft. of surface   | 10,988    | 9,257     | 12,003    | 9,135     | 7,921     | 13,530    | 13,530    | +70.8                                 |  |            |  |        |
| New orders (sales).....thous. of sq. ft. of surface  | 11,030    | 10,245    | 12,654    | 8,336     | 9,212     | 16,030    | 16,030    | +74.0                                 |  |            |  |        |
| Unfilled orders, end of month.....thous. of sq. ft. of surface   | 8,024     | 7,715     | 6,628     | 5,307     | 6,863     | 9,001     | 9,001     | +31.2                                 |  |            |  |        |
| Stocks, end of month.....thous. of sq. ft. of surface  | 7,358     | 7,309     | 7,704     | 7,747     | 8,433     | 7,316     | 7,316     | -13.2                                 |  |            |  |        |
| Other plywood:   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| New orders.....thous. of sq. ft. of surface  | 4,239     | 3,381     | 4,411     | 5,773     | 3,749     | 3,426     | 2,469     | -8.6                                  | +38.8  | 34,509     | 41,138   | +19.2  |
| Shipments.....thous. of sq. ft. of surface   | 2,961     | 3,177     | 4,235     | 4,147     | 2,973     | 3,746     | 2,575     | +26.0                                 | +45.5  | 34,956     | 36,583   | +4.7   |
| Unfilled orders, end of month.....thous. of sq. ft. of surface   | 5,131     | 5,469     | 5,817     | 6,778     | 6,811     | 5,971     | 2,863     | -12.3                                 | +108.6                                       |            |  |        |
| Bushel baskets:  |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Production.....dozens  | 243,056   | 177,982   | 156,521   | 114,184   | 81,302    | 135,090   | 95,832    | +66.2                                 | +41.0  | 2,715,339  | 2,171,713  | -20.0  |
| Shipments.....dozens   | 262,810   | 285,813   | 156,407   | 75,337    | 111,244   | 126,602   | 58,896    | +13.8                                 | +115.0                                       | 2,562,068  | 2,234,611  | -12.8  |
| Stocks, end of month.....dozens  | 570,726   | 409,110   | 420,671   | 464,733   | 434,942   | 331,992   | 406,694   | -23.7                                 | -18.4  |            |  |        |
| Rotary-cut veneer:   |           |           |           |           |           |           |           |                                       |  |            |  |        |
| Receipts.....number of carloads  | 259       | 244       | 337       | 222       | 206       | 175       | 80        | -15.0                                 | +118.8                                       | 98         | 185  | +88.8  |
| Purchases.....number of carloads   | 325       | 199       | 255       | 190       | 178       | 241       | 132       | -35.4                                 | +82.6  | 97         | 206  | +112.4 |

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928                    |           |           |           |           | 1929      | 1928      | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |       |
|--|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------------------|-----------------------------|--|-----------|--|-------|
|  | August                  | September | October   | November  | December  | January   | January   | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928      |  |       |
|  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| STONE, CLAY, AND GLASS PRODUCTS  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Clay Products  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Face brick, averages per plant:  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Production.....  | thousands               | 890       | 900       | 902       | 658       | 735       | 707       | 482                                   | -3.8                        | +46.7  | 8,929     | 8,758  | -1.9  |
| Shipments.....   | thousands               | 841       | 850       | 819       | 840       | 532       | 436       | 402                                   | -18.0                       | +8.5   | 7,959     | 8,801  | +10.6 |
| Stocks, end of month.....  | thousands               | 2,282     | 2,523     | 2,320     | 2,553     | 2,755     | 3,568     | 2,958                                 | +29.5                       | +20.6  |           |  |       |
| Unfilled orders, end of month.....   | thousands               | 989       | 1,101     | 855       | 843       | 892       | 891       | 761                                   | -0.1                        | +17.1  |           |  |       |
| Common brick:  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Stocks, end of month—  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Burned.....  | thousands               | 491,088   | 498,691   | 454,931   | 537,712   | 461,357   |           | 517,897                               |                             |  |           |  |       |
| Unburned.....  | thousands               | 206,938   | 257,692   | 91,226    | 287,162   | 106,440   |           | 68,611                                |                             |  |           |  |       |
| Shipments.....   | thousands               | 218,339   | 167,078   | 122,078   | 180,360   | 136,033   |           | 131,338                               |                             |  | 2,211,243 | 2,230,660  | +0.9  |
| Unfilled orders, end of month.....   | thousands               | 221,625   | 213,274   | 145,427   | 204,189   | 182,791   |           | 219,233                               |                             |  |           |  |       |
| Plants closed down.....  | number                  | 14        | 21        | 49        | 67        | 84        |           | 91                                    |                             |  |           |  |       |
| Price, red, New York.....  | dolls. per thous.       | 13.50     | 12.50     | 12.50     | 12.00     | 12.00     | 11.50     | 12.75                                 | -4.2                        | -9.8   |           |  |       |
| Porcelain plumbing fixtures:   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Net new orders.....  | pieces                  | 12,960    | 9,939     | 22,665    | 11,715    | 12,195    | 13,471    | 18,545                                | +10.5                       | -27.4  |           |  |       |
| Shipments.....   | pieces                  | 22,970    | 16,525    | 17,018    | 14,657    | 9,350     | 11,849    | 13,239                                | +26.7                       | -10.5  |           |  |       |
| Unfilled orders, end of month.....   | pieces                  | 65,029    | 54,583    | 50,558    | 38,268    | 35,545    | 35,497    | 22,639                                | -0.1                        | +56.8  |           |  |       |
| Stocks, end of month.....  | pieces                  | 47,690    | 50,953    | 50,956    | 47,550    | 47,044    | 45,296    | 37,374                                | -3.7                        | +21.2  |           |  |       |
| Vitreous china plumbing fixtures:  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| New orders.....  | pieces                  | 217,305   | 180,758   | 222,190   | 221,575   | 231,771   | 276,144   | 237,727                               | +19.1                       | +16.2  | 2,685,034 | 3,079,675  | +14.7 |
| Shipments.....   | pieces                  | 267,710   | 215,284   | 236,781   | 201,925   | 165,712   | 260,829   | 240,829                               | +57.4                       | +8.3   | 2,933,371 | 3,012,173  | +2.7  |
| Unfilled orders, end of month.....   | pieces                  | 353,034   | 318,508   | 303,917   | 323,567   | 389,626   | 404,941   | 329,482                               | +3.9                        | +22.9  |           |  |       |
| Stocks, end of month.....  | pieces                  | 477,593   | 510,864   | 531,119   | 554,422   | 622,590   | 570,141   | 544,461                               | -8.4                        | +4.7   |           |  |       |
| Terra cotta, new orders:   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Quantity.....  | net tons                | 12,058    | 10,570    | 15,597    | 9,998     | 9,453     | 10,056    | 10,850                                | +6.4                        | -7.3   | 147,135   | 148,755  | +1.1  |
| Value.....   | thous. of dolls.        | 1,123     | 1,005     | 1,460     | 949       | 982       | 1,086     | 949                                   | +10.6                       | +14.4  | 14,479    | 14,171   | -2.1  |
| Portland Cement  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Production.....  | thous. of bbls.         | 18,739    | 17,884    | 17,533    | 15,068    | 12,189    | 9,781     | 9,768                                 | -19.8                       | +0.1   | 171,908   | 175,968  | +2.4  |
| Operation.....   | per ct. of capacity     | 93.1      | 91.7      | 87.1      | 77.4      | 60.4      | 46.5      | 49.4                                  | -23.0                       | -5.9   |           |  |       |
| Shipments.....   | thous. of bbls.         | 21,970    | 20,460    | 19,836    | 11,951    | 7,384     | 5,735     | 6,541                                 | -22.3                       | +12.9  | 170,922   | 175,455  | +2.7  |
| Stocks, end of month.....  | thous. of bbls.         | 19,374    | 16,749    | 14,579    | 17,769    | 22,650    | 26,696    | 25,116                                | +17.9                       | +6.3   |           |  |       |
| Stocks, clinker, end of month.....   | thous. of bbls.         | 9,357     | 7,566     | 5,944     | 5,953     | 7,422     | 9,627     | 9,672                                 | +29.7                       | -0.5   |           |  |       |
| Wholesale prices, composite.....   | dolls. per bbl.         | 1.683     | 1.650     | 1.650     | 1.650     | 1.650     | 1.650     | 1.683                                 | 0.0                         | -2.0   |           |  |       |
| Highways   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Federal-aid highways:  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Completed—   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Cost.....  | thous. of dolls.        | 12,145    | 26,105    | 13,413    | 19,025    | 41,962    | 16,057    | 10,728                                | -61.7                       | +49.7  | 189,349   | 193,913  | +2.4  |
| Distance.....  | miles                   | 599       | 1,169     | 598       | 845       | 1,076     | 557       | 458                                   | -48.2                       | +21.6  | 8,285     | 7,628  | -7.9  |
| Under construction, end of month.....  | miles                   | 9,547     | 9,427     | 9,337     | 8,692     | 8,163     | 7,835     | 8,480                                 | -4.0                        | -7.6   | 115,918   | 106,550  | -8.1  |
| Concrete pavements, new contracts:   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Total.....   | thous. of sq. yds.      | 16,889    | 14,752    | 7,068     | 8,430     | 8,080     | 7,461     | 5,902                                 | -7.7                        | +26.4  | 125,768   | 148,078  | +17.7 |
| Roads.....   | thous. of sq. yds.      | 9,254     | 9,630     | 3,856     | 5,213     | 5,166     | 6,089     | 4,103                                 | +17.9                       | +48.4  | 73,952    | 93,502   | +26.4 |
| Plate Glass  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Production, polished.....  | thous. of sq. ft.       | 12,159    | 10,897    | 11,140    | 11,640    | 10,579    | 11,426    | 8,825                                 | +8.0                        | +29.5  | 111,390   | 130,648  | +17.3 |
| Glass Containers   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Actual production:   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Quantity.....  | gross                   | 2,686     | 2,322     | 2,389     | 2,146     | 1,970     | 2,367     | 2,207                                 | +20.2                       | +7.2   | 25,316    | 28,447   | +12.4 |
| Relation to capacity.....  | per cent.               | 80.9      | 78.7      | 71.6      | 66.8      | 63.8      | 73.6      | 76.9                                  | +15.4                       | -4.3   |           |  |       |
| New orders.....  | gross                   | 1,909     | 2,122     | 2,721     | 2,950     | 2,599     | 3,089     | 2,680                                 | +18.9                       | +15.3  | 27,068    | 29,317   | +8.3  |
| Shipments.....   | gross                   | 2,654     | 2,433     | 2,261     | 1,990     | 1,874     | 2,435     | 1,958                                 | +29.9                       | +24.4  | 25,495    | 28,012   | +9.9  |
| Stocks, end of month.....  | gross                   | 8,467     | 8,084     | 8,415     | 8,872     | 9,510     | 9,306     | 10,140                                | -2.1                        | -8.2   |           |  |       |
| Unfilled orders, end of month.....   | gross                   | 6,297     | 6,173     | 6,302     | 6,455     | 6,542     | 6,460     | 6,327                                 | -1.3                        | +2.1   |           |  |       |
| Illuminating Glassware   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Production:  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Total.....   | number of turns         | 2,985     | 3,190     | 4,193     | 4,245     | 3,949     |           | 2,685                                 |                             |  | 34,916    | 39,044   | +11.8 |
| Ratio to capacity.....   | per ct. of capacity     | 36.5      | 43.0      | 50.5      | 54.2      | 54.6      |           | 34.8                                  |                             |  |           |  |       |
| New orders.....  | per ct. of capacity     | 44.5      | 44.2      | 53.2      | 51.1      | 39.0      |           | 39.7                                  |                             |  |           |  |       |
| Shipments.....   | per ct. of capacity     | 42.5      | 43.0      | 51.9      | 51.9      | 45.0      |           | 36.5                                  |                             |  |           |  |       |
| Unfilled orders, end of month.....   | number of weeks' supply | 1.8       | 1.7       | 1.7       | 1.6       | 1.5       |           | 1.2                                   |                             |  |           |  |       |
| Stocks, end of mo.....   | number of weeks' supply | 4.3       | 4.3       | 4.1       | 4.2       | 4.7       |           | 4.2                                   |                             |  |           |  |       |
| CHEMICALS AND OILS   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Chemicals  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Sulphuric acid:  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Exports.....   | thous. of lbs.          | 291,035   | 581,760   | 441,867   | 632,942   | 322,787   | 429,264   | 559,952                               | +33.0                       | -23.3  | 7,512,347 | 7,001,959  | -6.8  |
| Price, wholesale.....  | dolls. per 100 lbs.     | .78       | .78       | .78       | .78       | .78       | .78       | .78                                   | 0.0                         | 0.0  |           |  |       |
| Nitrate of soda:   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Imports.....   | long tons               | 75,318    | 36,644    | 48,385    | 45,575    | 85,391    | 83,698    | 69,867                                | -2.0                        | +19.8  | 736,025   | 1,032,909  | +40.3 |
| Production in Chile.....   | metric tons             | 275,000   | 259,400   | 282,300   | 285,900   | 293,600   | 274,500   | 242,800                               | -6.5                        | +13.1  | 1,611,342 | 3,163,500  | +96.3 |
| Potash salts:  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Imports (commercial).....  | long tons               | 57,327    | 43,313    | 28,242    | 24,639    | 22,412    | 24,724    | 31,646                                | +10.3                       | -21.9  | 268,997   | 357,703  | +33.0 |
| Production in France.....  | metric tons             | 34,300    | 35,200    | 40,000    | 37,400    | 38,538    |           | 31,290                                |                             |  | 372,040   | 410,316  | +10.3 |
| Sales in Germany.....  | metric tons             | 108,696   | 140,818   | 76,507    | 82,463    | 107,146   |           | 202,010                               |                             |  | 1,239,506 | 1,421,216  | +14.7 |
| Superphosphate (acid phosphate):   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Production.....  | short tons              | 294,381   | 276,811   | 350,958   | 322,452   | 349,685   | 372,817   | 358,008                               | +6.6                        | +4.1   | 3,293,543 | 3,892,320  | +18.2 |
| Stocks, end of month.....  | short tons              | 1,414,615 | 1,424,169 | 1,566,402 | 1,832,363 | 2,058,284 | 2,288,258 | 2,196,736                             | +11.2                       | +4.2   |           |  |       |
| Shipments.....   | short tons              | 82,876    | 154,443   | 91,165    | 75,680    | 107,008   | 123,248   | 101,540                               | +15.2                       | +21.4  | 1,615,084 | 1,911,908  | +18.4 |
| Fertilizer:  |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Exports.....   | long tons               | 103,575   | 99,149    | 86,289    | 94,085    | 66,134    | 99,751    | 87,632                                | +50.8                       | +13.8  | 1,273,176 | 1,210,426  | -4.9  |
| Consumption, Southern States.....  | short tons              | 62,903    | 138,470   | 151,128   | 84,947    | 112,659   | 450,600   | 626,560                               | +300.0                      | -28.1  | 4,579,369 | 5,603,846  | +22.4 |
| Dyes and dyestuffs, exports:   |                         |           |           |           |           |           |           |                                       |                             |  |           |  |       |
| Vegetable.....   | thous. of lbs.          | 237       | 157       | 231       | 400       | 146       | 92        | 239                                   | -37.0                       | -61.5  | 3,771     | 3,158  | -16.3 |
| Coal tar.....  | thous. of lbs.          | 1,335     | 1,330     | 5,194     | 2,436     | 1,926     | 58        | 1,715                                 |                             |  | 26,763    | 32,271   | +20.6 |

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928    |           |         |          |          | 1929    | 1928      | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per ct. in-crease (+) or de-crease (-) cumulative 1928 from 1927 |
|--|---------|-----------|---------|----------|----------|---------|-----------|---------------------------------------|-----------------------------|--|-----------|--|
|  | August  | September | October | November | December | January | January   | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928      |  |
| CHEMICALS AND OILS—Continued   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Arsenic  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Crude:   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production.....short tons..  | 2,086   | 1,079     | 1,238   | 1,622    | 1,215    |         | 1,158     |                                       |                             | 13,929                                       | 16,485    | +18.4  |
| Stocks, end of month.....short tons..  | 2,999   | 2,978     | 3,024   | 3,419    | 3,274    |         | 1,407     |                                       |                             |  |           |  |
| Refined:   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production.....short tons..  | 803     | 799       | 835     | 802      | 1,030    |         | 827       |                                       |                             | 10,315                                       | 9,294     | -9.9   |
| Stocks, end of month.....short tons..  | 1,618   | 1,971     | 2,344   | 2,766    | 3,282    |         | 2,496     |                                       |                             |  |           |  |
| Price index numbers:   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Drugs and pharmaceuticals.....rel. to Aug., 1914..   | 164     | 164       |         |          |          |         |           |                                       |                             |  |           |  |
| Chemicals.....rel. to 1913-14..  | 113     | 113       | 113     | 113      | 113      | 113     | 112       | 0.0                                   | +0.9                        |  |           |  |
| Oils and fats.....rel. to 1913-14..  | 121     | 121       | 124     | 124      | 124      | 125     | 130       | +0.8                                  | -3.8                        |  |           |  |
| Wood Chemicals   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Acetate of lime:   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production—  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....thous. of lbs..  | 4,948   | 4,605     | 4,526   | 4,215    | 4,267    | 11,580  | 12,519    | -5.6                                  | -7.5                        | 156,560                                      | 132,098   | -15.6  |
| Canada.....thous. of lbs..   | None.   | 446       | 999     | 1,242    | 1,283    | 1,263   | 1,109     | -1.6                                  | +13.9                       | 9,700  | 10,133    | +4.5   |
| Shipments—   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....thous. of lbs..  | 12,840  | 13,355    | 10,407  | 13,119   | 12,684   | 11,162  | 11,343    | -12.0                                 | -1.6                        | 156,390                                      | 146,354   | -6.4   |
| Canada.....thous. of lbs..   | 2,098   | 348       | 990     | 1,123    | 1,417    | 1,214   | 831       | -14.3                                 | +46.1                       | 7,899  | 11,891    | +50.5  |
| Stocks, end of month—  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....thous. of lbs..  | 7,950   | 4,314     | 2,863   | 2,078    | 1,095    | 1,498   | 17,596    | +36.8                                 | -91.5                       |  |           |  |
| Canada.....thous. of lbs..   | 140     | 183       | 349     | 283      | 127      | 174     | 2,840     | +37.0                                 | -93.9                       |  |           |  |
| Exports.....thous. of lbs..  | 1,141   | 449       | 36      | 20       | 24       | 42      | 1,630     | +75.0                                 | -97.4                       | 12,134                                       | 11,173    | -7.9   |
| Price, wholesale.....dolls. per cwt..  | 3.88    | 4.00      | 4.00    | 4.50     | 4.50     | 4.50    | 3.50      | 0.0                                   | +28.6                       |  |           |  |
| Methanol, crude:   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production—  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....gallons..  | 535,803 | 495,555   | 641,823 | 745,430  | 682,480  | 624,047 | 699,551   | -8.6                                  | -10.8                       | 8,032,315                                    | 7,490,536 | -6.7   |
| Canada.....gallons..   | None.   | 18,816    | 45,768  | 53,146   | 51,937   | 52,925  | 47,234    | +1.9                                  | +12.0                       | 414,495                                      | 416,836   | +0.6   |
| Stocks at crude plants, end of month—  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....gallons..  | 287,492 | 229,683   | 314,171 | 284,685  | 232,740  | 222,325 | 344,798   | -4.5                                  | -35.5                       |  |           |  |
| Canada.....gallons..   | 37,933  | 13,665    | 34,399  | 19,682   | 42,698   | 28,103  | 39,249    | -34.2                                 | -28.4                       |  |           |  |
| Stocks at refineries and in transit—   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....gallons..  | 160,156 | 164,972   | 161,723 | 167,012  | 219,545  | 145,093 | 1,126,152 | -33.9                                 | -87.1                       |  |           |  |
| Canada.....gallons..   | 64,817  | 67,314    | 57,814  | 53,426   | 47,287   | 48,495  | 56,104    | +2.6                                  | -13.6                       |  |           |  |
| Exports.....gallons..  | 14,000  | 32,540    | 20,408  | 34,583   | 69,407   | 43,915  | 33,384    | -36.7                                 | +31.5                       | 309,060                                      | 567,752   | +83.7  |
| Wood at chemical plants:   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Consumption—   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....cords..  | 55,085  | 49,444    | 65,182  | 73,633   | 73,591   | 71,043  | 68,559    | -3.5                                  | +3.6                        | 859,905                                      | 760,740   | -11.5  |
| Canada.....cords..   | None.   | 2,160     | 5,366   | 6,248    | 6,386    | 6,630   | 5,858     | +3.8                                  | +13.2                       | 49,086                                       | 51,081    | +4.1   |
| Stocks, end of month—  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....cords..  | 509,435 | 514,204   | 550,412 | 532,516  | 622,937  | 494,740 | 560,568   | -20.6                                 | -11.7                       |  |           |  |
| Canada.....cords..   | 73,700  | 73,759    | 73,119  | 72,760   | 72,399   | 72,933  | 74,440    | +0.7                                  | -2.0                        |  |           |  |
| Daily capacity—  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Total.....cords..  | 3,482   | 3,486     | 3,486   | 3,485    | 3,452    | 3,336   | 3,293     | -3.4                                  | +1.3                        |  |           |  |
| Shutdown.....cords..   | 1,053   | 1,083     | 668     | 370      | 388      | 202     | 249       | -47.9                                 | -18.9                       |  |           |  |
| Methanol, refined:   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production—  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....gallons..  | 436,811 | 355,353   | 487,384 | 536,782  | 667,468  | 494,501 | 496,073   | -25.9                                 | -0.3                        | 5,414,154                                    | 5,982,579 | +10.5  |
| Canada.....gallons..   | 14,700  | 38,600    | 56,700  | 39,500   | 57,600   | 59,800  | 38,700    | +3.8                                  | +54.5                       | 300,138                                      | 432,450   | +44.1  |
| Stocks, end of month—  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....gallons..  | 396,730 | 300,478   | 325,914 | 422,640  | 464,063  | 503,054 | 455,316   | +8.4                                  | +10.5                       |  |           |  |
| Canada.....gallons..   | 26,715  | 33,101    | 23,339  | 21,751   | 38,912   | 35,534  | 29,198    | -8.7                                  | +21.7                       |  |           |  |
| Shipments—   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| United States.....gallons..  | 497,971 | 415,340   | 493,712 | 494,047  | 615,515  | 506,624 | 482,666   | -18.7                                 | +5.0                        | 5,723,997                                    | 6,044,639 | +5.6   |
| Canada.....gallons..   | 22,076  | 25,396    | 48,330  | 42,989   | 33,869   | 47,629  | 17,775    | +40.6                                 | +168.0                      | 293,303                                      | 316,444   | +7.9   |
| Price, wholesale, N. Y.....dolls. per gal..  | .48     | .48       | .51     | .58      | .58      | .58     | .48       | 0.0                                   | +20.8                       |  |           |  |
| Ethyl Alcohol  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production.....thous. of gals..  | 18,764  | 18,613    | 20,685  | 19,220   | 19,898   | 15,282  | 13,050    | -23.2                                 | +17.1                       | 173,630                                      | 184,981   | +6.5   |
| Withdrawn for denaturation.....thous. of gals..  | 16,128  | 15,269    | 20,718  | 19,294   | 18,236   | 13,911  | 10,098    | -23.7                                 | +37.8                       | 162,087                                      | 168,555   | +4.0   |
| Warehouse stocks, end of month.....thous. of gals..  | 9,263   | 11,295    | 9,907   | 8,132    | 8,953    | 8,701   | 9,463     | -2.8                                  | -8.1                        |  |           |  |
| Explosives   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| (Black powder, permissible, and other high explosives)   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production.....thous. of lbs..   | 35,092  | 35,310    | 38,636  | 35,524   | 33,642   | 33,596  | 29,607    | -0.1                                  | +13.5                       | 408,888                                      | 397,419   | -2.8   |
| Shipments.....thous. of lbs..  | 23,039  | 37,465    | 38,854  | 34,293   | 31,660   | 35,576  | 31,332    | +12.4                                 | +13.5                       | 406,045                                      | 386,462   | -4.8   |
| New orders.....thous. of lbs..   | 32,268  | 33,611    | 36,347  | 32,723   | 29,068   | 35,733  | 29,878    | +22.9                                 | +19.6                       | 390,540                                      | 374,920   | -4.0   |
| Stocks, end of month.....thous. of lbs..   | 18,554  | 16,274    | 16,011  | 17,147   | 20,148   | 18,071  | 17,973    | -10.3                                 | +0.5                        |  |           |  |
| Naval Stores   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Turpentine (gum):  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Net receipts, southern ports.....barrels..   | 42,724  | 34,312    | 33,924  | 28,160   | 27,360   | 8,175   | 7,764     | -70.1                                 | +5.3                        | 406,514                                      | 339,713   | -16.4  |
| Stocks at port, end of month.....barrels..   | 73,304  | 73,595    | 79,509  | 83,472   | 90,371   | 79,837  | 72,035    | -11.7                                 | +10.8                       |  |           |  |
| Price, southern, New York.....dolls. per gal..   | .52     | .52       | .53     | .59      | .61      | .61     | .60       | 0.0                                   | +1.7                        |  |           |  |
| Rosin (gum):   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Net receipts, southern ports.....barrels..   | 145,357 | 116,029   | 115,235 | 117,168  | 125,706  | 45,203  | 41,160    | -64.0                                 | +9.8                        | 1,406,414                                    | 1,199,261 | -14.7  |
| Stocks at 3 ports, end of month.....barrels..  | 227,517 | 230,672   | 216,917 | 246,178  | 271,187  | 227,409 | 200,262   | -16.1                                 | +13.6                       |  |           |  |
| Price, B. New York.....dolls. per bbl..  | 9.59    | 9.18      | 9.31    | 9.59     | 9.34     | 8.87    | 9.54      | -5.0                                  | -7.0                        |  |           |  |
| Rosin (wood):  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production.....barrels..   | 37,623  | 35,473    | 36,942  | 35,771   | 33,630   | 37,765  | 29,200    | +12.3                                 | +29.3                       | 414,858                                      | 420,516   | +1.4   |
| Stocks, end of month.....barrels..   | 114,074 | 112,964   | 111,728 | 112,680  | 115,216  | 120,956 | 85,413    | +5.0                                  | +41.6                       |  |           |  |
| Turpentine (wood):   |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production.....barrels..   | 6,274   | 6,257     | 6,486   | 6,882    | 6,750    | 7,347   | 5,771     | +8.8                                  | +27.3                       | 79,778                                       | 75,118    | -5.8   |
| Stocks, end of month.....barrels..   | 6,898   | 6,627     | 5,704   | 5,944    | 6,883    | 7,869   | 10,621    | +14.3                                 | -25.9                       |  |           |  |
| Pine oil:  |         |           |         |          |          |         |           |                                       |                             |  |           |  |
| Production.....gallons..   | 225,668 | 211,828   | 219,525 | 211,960  | 209,125  | 238,703 | 198,646   | +14.1                                 | +20.2                       | 2,782,356                                    | 2,693,949 | -3.2   |
| Stocks, end of month.....gallons..   | 822,813 | 845,762   | 845,645 | 827,033  | 898,610  | 938,737 | 605,771   | +4.5                                  | +55.0                       |  |           |  |

Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

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

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928      |           |           |           |           | 1929    | 1928      | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |            | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|-----------|-----------|-----------|-----------|-----------|---------|-----------|---------------------------------------|-----------------------------|--|------------|--|
|  | August    | September | October   | November  | December  | January | January   | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928       |  |
| FOODSTUFFS—Continued   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Wheat Flour—Continued  |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Production, grain offal.....thous. of lbs..  | 4 819,994 | 4 820,934 | 4 910,900 | 4 780,189 | 4 727,305 | 791,828 | 4 745,242 | +8.9                                  | +6.3                        | 8,665,202                                    | 9,105,982  | +5.1   |
| Capacity operated, flour mills.....per cent.   | 58        | 66        | 66        | 61        | 57        | 59      | 55        | +3.5                                  | +7.3                        | 111,596                                      | 113,521    | +1.7   |
| Consumption (computed).....thous. of bbls..  | 10,431    | 9,077     | 12,536    | 10,401    | 9,420     | -----   | 8,207     | -----                                 | -----                       | -----  | -----      | -----  |
| Stocks, all positions, end of month (computed).....thous. of bbls..  | 7,400     | 8,500     | 7,900     | 7,500     | 7,730     | -----   | 7,150     | -----                                 | -----                       | -----  | -----      | -----  |
| Exports:   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| United States.....thous. of bbls..   | 932       | 1,020     | 1,381     | 1,199     | 939       | 1,369   | 1,245     | +45.8                                 | +10.0                       | 12,814                                       | 11,949     | -6.8   |
| Canada.....thous. of bbls..  | 925       | 890       | 1,171     | 1,159     | 4 933     | 933     | 766       | 0.0                                   | +21.8                       | 9,262  | 10,747     | +16.0  |
| Wholesale prices:  |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Standard patents, Minn.....dolls. per bbl..  | 6.62      | 6.59      | 6.41      | 6.23      | 6.13      | 6.34    | 7.45      | +3.4                                  | -14.9                       | -----  | -----      | -----  |
| Winter, straights  |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Kansas City.....dolls. per bbl..   | 5.66      | 5.65      | 5.59      | 5.53      | 5.50      | 5.52    | 6.70      | +0.4                                  | -17.6                       | -----  | -----      | -----  |
| Corn   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Exports, including meal.....thous. of bush..   | 1,018     | 668       | 870       | 2,124     | 6,288     | 12,357  | 1,661     | +96.5                                 | -----                       | 14,976                                       | 26,900     | +79.6  |
| Visible supply, end of month.....thous. of bush..  | 9,985     | 7,114     | 2,271     | 7,223     | 17,790    | 28,012  | 30,078    | +57.5                                 | -6.9                        | -----  | -----      | -----  |
| Receipts, principal markets.....thous. of bush..   | 21,467    | 19,658    | 13,323    | 26,921    | 42,712    | 39,876  | 36,001    | -6.6                                  | +10.8                       | 247,412                                      | 331,047    | +33.8  |
| Shipments, prin. markets.....thous. of bush..  | 15,778    | 11,949    | 9,044     | 11,868    | 18,564    | 19,838  | 19,551    | +6.9                                  | +1.5                        | 137,093                                      | 212,465    | +55.0  |
| Grindings (starch, glucose).....thous. of bush..   | 5,193     | 6,541     | 7,725     | 7,535     | 6,550     | 8,364   | 8,330     | +27.7                                 | +0.4                        | 85,548                                       | 86,922     | +1.6   |
| Price, No. 2, Chicago.....dolls. per bush..  | .97       | .99       | .94       | .90       | .86       | .92     | .89       | +7.0                                  | +3.4                        | -----  | -----      | -----  |
| Oats   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Receipts, principal markets.....thous. of bush..   | 27,271    | 14,375    | 13,872    | 10,834    | 11,196    | 9,919   | 10,495    | -11.4                                 | -5.5                        | 148,787                                      | 154,281    | +3.7   |
| Visible supply, end of month.....thous. of bush..  | 15,687    | 18,004    | 17,882    | 16,935    | 17,118    | 16,212  | 21,519    | -5.3                                  | -24.7                       | -----  | -----      | -----  |
| Exports, including meal.....thous. of bush..   | 2,403     | 2,308     | 1,653     | 822       | 951       | 703     | 623       | -26.1                                 | +12.8                       | 10,179                                       | 10,583     | +4.0   |
| Price, contract grades, Chi.....dolls. per bush..  | .39       | .43       | .45       | .47       | .49       | .52     | .56       | +6.1                                  | -7.1                        | -----  | -----      | -----  |
| Grindings, Canada.....thous. of bush..   | 988       | 1,100     | 1,292     | 1,112     | 896       | 824     | 1,040     | -8.0                                  | -20.8                       | 10,245                                       | 11,403     | +11.3  |
| Production, oatmeal and rolled oats, Canada.....thous. of lbs..  | 15,968    | 16,499    | 17,760    | 13,988    | 11,580    | 9,956   | 12,461    | -14.0                                 | -20.1                       | 121,366                                      | 149,620    | +23.3  |
| Barley   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Receipts, principal markets.....thous. of bush..   | 23,611    | 21,710    | 16,797    | 7,377     | 6,476     | -----   | 6,401     | -----                                 | -----                       | 65,507                                       | 102,498    | +56.5  |
| Visible supply, end of month.....thous. of bush..  | 6,313     | 8,084     | 8,962     | 9,627     | 9,250     | 8,932   | 2,359     | -3.4                                  | +27.6                       | -----  | -----      | -----  |
| Exports.....thous. of bush..   | 8,758     | 14,830    | 11,639    | 5,263     | 6,873     | 2,277   | 1,901     | -66.9                                 | +19.8                       | 40,555                                       | 57,597     | +42.0  |
| Price, fair to good, malting, Chicago.....dolls. per bush..  | .73       | .67       | .62       | .55       | .57       | .60     | .93       | +5.3                                  | -35.5                       | -----  | -----      | -----  |
| Rye  |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Receipts, principal markets.....thous. of bush..   | 2,636     | 6,001     | 6,770     | 1,515     | 2,083     | -----   | 1,477     | -----                                 | -----                       | 41,751                                       | 27,925     | -33.1  |
| Visible supply, end of month.....thous. of bush..  | 1,440     | 1,927     | 4,437     | 4,143     | 5,726     | -----   | 3,656     | -----                                 | -----                       | -----  | -----      | -----  |
| Exports, including flour.....thous. of bush..  | 709       | 2,471     | 3,098     | 1,401     | 499       | 197     | 519       | -60.5                                 | -62.0                       | 36,173                                       | 14,671     | -59.4  |
| Price, No. 2, Chicago.....dolls. per bush..  | .98       | 1.00      | 1.05      | 1.06      | 1.06      | 1.04    | 1.09      | -1.9                                  | -4.6                        | -----  | -----      | -----  |
| Total Grains   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Total grain exports, incl. flour.....thous. of bush..  | 27,476    | 42,805    | 45,533    | 25,564    | 26,477    | 25,093  | 12,264    | -5.2                                  | +104.6                      | 327,898                                      | 255,778    | -22.0  |
| Rice   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Southern paddy, receipts at mills.....bbls..   | 338,269   | 1,197,924 | 2,113,697 | 1,935,761 | 947,584   | -----   | 853,581   | -----                                 | -----                       | 9,208,835                                    | 10,252,010 | +11.3  |
| Shipments:   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Total from mills.....pockets (100 lbs.)..  | 346,076   | 777,583   | 1,245,714 | 1,277,631 | 1,053,585 | -----   | 1,118,120 | -----                                 | -----                       | 9,634,168                                    | 10,247,434 | +6.4   |
| New Orleans.....pockets (100 lbs.)..   | 96,643    | 147,464   | 202,697   | 251,453   | 205,384   | 146,342 | 158,323   | -28.7                                 | -7.6                        | 2,103,510                                    | 2,016,420  | -4.1   |
| Stocks, end of month.....pockets (100 lbs.)..  | 695,660   | 1,108,564 | 2,142,144 | 2,886,600 | 2,792,141 | -----   | 2,106,310 | -----                                 | -----                       | -----  | -----      | -----  |
| Exports.....pockets (100 lbs.)..   | 126,668   | 152,906   | 228,255   | 408,917   | 542,283   | 504,921 | 469,435   | -6.9                                  | +7.6                        | 3,099,943                                    | 3,793,709  | +22.4  |
| Imports.....pockets (100 lbs.)..   | 6,026     | 15,412    | 8,864     | 16,663    | 29,774    | 76,593  | 52,744    | +157.2                                | +45.2                       | 522,071                                      | 335,984    | -35.6  |
| Other Crops  |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Apples:  |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Cold-storage holdings, end of month.....thous. of bbls..   | 84        | 1,631     | 8,733     | 10,392    | 4 9,052   | 6,859   | 5,307     | -24.2                                 | +29.2                       | -----  | -----      | -----  |
| Car-lot shipment.....carloads..  | 4,170     | 18,085    | 44,034    | 19,331    | 8,161     | 7,656   | 5,305     | -6.2                                  | +44.3                       | 98,505                                       | 116,102    | +17.9  |
| Potatoes:  |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Car-lot shipments.....carloads..   | 15,538    | 20,267    | 28,921    | 17,593    | 12,872    | 19,479  | 19,665    | +51.3                                 | -0.9                        | 246,151                                      | 250,626    | +1.8   |
| Onions, car-lot shipments.....carloads..   | 2,561     | 6,009     | 4,115     | 2,158     | 1,611     | 2,436   | 3,114     | +51.2                                 | -21.8                       | 32,368                                       | 33,759     | +4.3   |
| Citrus fruits, car-lot shipments.....carloads..  | 4,254     | 3,636     | 5,868     | 11,671    | 13,314    | 15,226  | 9,057     | +14.4                                 | +68.1                       | 105,993                                      | 94,176     | -11.1  |
| Hay, all tame, receipts.....tons..   | 59,774    | 64,511    | 60,558    | 54,962    | 42,958    | 65,854  | 63,009    | +53.3                                 | +4.5                        | 696,008                                      | 642,987    | -7.6   |
| Cattle and Beef  |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Cattle movements, primary markets:   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Receipts.....thousands..   | 1,829     | 2,191     | 4 2,541   | 4 1,963   | 1,510     | 1,635   | 1,771     | +8.3                                  | -7.7                        | 22,764                                       | 21,477     | -5.7   |
| Shipments, total.....thousands..   | 814       | 1,067     | 1,327     | 4 944     | 598       | 567     | 660       | -5.2                                  | -14.1                       | 9,173  | 9,008      | -1.8   |
| Shipments, stocker and feeder.....thousands..  | 336       | 563       | 799       | 4 497     | 253       | 178     | 234       | -29.6                                 | -23.9                       | 3,612  | 3,966      | +9.8   |
| Local slaughter.....thousands..  | 1,007     | 1,069     | 4 1,195   | 4 1,038   | 910       | 1,051   | 1,080     | +15.5                                 | -2.7                        | 13,459                                       | 12,307     | -8.6   |
| Beef products:   |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Production, inspected.....thous. of lbs..  | 398,056   | 418,882   | 430,688   | 410,226   | 366,012   | 419,676 | 387,750   | +14.5                                 | +8.2                        | 5,277,126                                    | 4,727,008  | -10.4  |
| Apparent consumption.....thous. of lbs..   | 407,512   | 4 433,958 | 4 421,850 | 4 397,635 | 4 355,846 | 431,078 | 397,395   | +21.1                                 | +8.5                        | 5,359,806                                    | 4,813,352  | -10.2  |
| Exports.....thous. of lbs..  | 4 1,419   | 647       | 4 1,276   | 4 934     | 4 867     | 1,119   | 974       | +29.1                                 | +14.9                       | 19,358                                       | 13,314     | -31.2  |
| Cold-storage holdings, end of month.....thous. of lbs..  | 31,065    | 37,223    | 58,036    | 4 79,633  | 4 98,913  | 93,932  | 4 71,651  | -5.0                                  | +31.1                       | -----  | -----      | -----  |
| Prices:  |           |           |           |           |           |         |           |                                       |                             |  |            |  |
| Cattle, corn-fed, Chicago.....dolls. per 100 lbs..   | 15.11     | 16.19     | 14.63     | 14.28     | 14.28     | 13.53   | 15.80     | -5.3                                  | -14.4                       | -----  | -----      | -----  |
| Steer rounds, No. 2.....dolls. per lb..  | .244      | .259      | .255      | .253      | .245      | .240    | .220      | -2.0                                  | +9.1                        | -----  | -----      | -----  |
| Western dressed steers, N. Y.....dolls. per lb..   | .260      | .284      | .282      | .262      | .245      | .245    | .230      | 0.0                                   | +6.5                        | -----  | -----      | -----  |

\* Revised.



## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928      |           |           |           |           | 1929      | 1928      | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |            | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------------------|-----------------------------|--|------------|--|
|  | August    | September | October   | November  | December  | January   | January   | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928       |  |
| FOODSTUFFS—Continued   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Hogs and Pork  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Hog movements, primary markets:  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Receipts.....thousands..   | 2,523     | 2,600     | 3,666     | 4,075     | 4,773     | 5,061     | 5,306     | +6.0                                  | -4.6                        | 41,410                                       | 46,527     | +12.4  |
| Shipments, total.....thousands..   | 1,160     | 1,093     | 1,341     | 1,475     | 1,529     | 1,891     | 1,849     | +23.7                                 | +2.3                        | 15,045                                       | 17,190     | +14.3  |
| Shipments, stocker and feeder.....thousands..  | 43        | 55        | 65        | 62        | 48        | 47        | 77        | -2.1                                  | -39.0                       | 922  | 735        | -20.3  |
| Local slaughter.....thousands..  | 1,363     | 1,500     | 2,311     | 2,602     | 3,230     | 3,166     | 3,443     | -2.0                                  | -8.0                        | 26,345                                       | 29,284     | +11.2  |
| Pork products, total:  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Production, inspected.....thous. of lbs..  | 466,696   | 424,296   | 623,716   | 741,385   | 969,121   | 974,060   | 935,467   | +0.5                                  | +4.1                        | 7,730,761                                    | 8,579,288  | +11.0  |
| Apparent consumption.....thous. of lbs..   | 550,185   | 588,472   | 675,222   | 641,378   | 633,827   | 627,668   | 676,377   | -1.0                                  | -7.2                        | 6,705,555                                    | 7,330,460  | +9.3   |
| Exports.....thous. of lbs..  | 81,924    | 65,617    | 75,384    | 85,592    | 109,671   | 122,577   | 98,794    | +11.8                                 | +24.1                       | 984,349                                      | 1,084,785  | +10.2  |
| Cold-storage holdings, end of month:   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Total.....thous. of lbs..  | 859,903   | 641,977   | 516,634   | 529,019   | 755,256   | 979,643   | 739,645   | +29.7                                 | +32.4                       |  |            |  |
| Fresh and cured.....thous. of lbs..  | 682,015   | 515,087   | 433,160   | 461,762   | 670,039   | 838,072   | 655,638   | +25.1                                 | +27.8                       |  |            |  |
| Lard (included in pork products):  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Production.....thous. of lbs..   | 92,401    | 80,135    | 113,968   | 141,720   | 196,500   |           | 190,557   |                                       |                             | 1,556,747                                    | 1,749,749  | +12.4  |
| Exports.....thous. of lbs..  | 50,658    | 46,158    | 59,865    | 67,716    | 86,358    | 89,932    | 70,660    | +4.1                                  | +27.3                       | 681,303                                      | 759,686    | +11.5  |
| Cold-storage holdings, end of month.....thous. of lbs..  | 177,888   | 126,890   | 33,474    | 61,257    | 85,217    | 141,571   | 84,007    | +66.1                                 | +68.5                       |  |            |  |
| Prices:  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Hogs, heavy, Chicago.....dolls. per 100 lbs..  | 11.71     | 12.43     | 10.00     | 9.02      | 8.78      | 9.10      | 8.32      | +3.6                                  | +9.4                        |  |            |  |
| Hams, smoked, Chicago.....dolls. per lb..  | .249      | .254      | .260      | .243      | .244      | .232      | .212      | -4.9                                  | +9.4                        |  |            |  |
| Lard, prime contract, N. Y.....dolls. per lb..   | .128      | .132      | .124      | .121      | .117      | .121      | .124      | +3.4                                  | -2.4                        |  |            |  |
| Sheep and Lambs  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Sheep movement, primary market:  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Receipts.....thousands..   | 2,362     | 3,386     | 3,938     | 2,053     | 1,610     | 1,876     | 1,705     | +16.5                                 | +10.0                       | 23,939                                       | 25,597     | +6.9   |
| Shipments, total.....thousands..   | 1,250     | 2,161     | 2,485     | 1,091     | 693       | 837       | 705       | +20.8                                 | +18.7                       | 12,482                                       | 13,323     | +6.7   |
| Shipments, stocker and feeder.....thousands..  | 564       | 1,080     | 1,466     | 544       | 193       | 188       | 116       | -2.6                                  | +62.1                       | 4,901  | 5,009      | +2.2   |
| Local slaughter.....thousands..  | 1,097     | 1,213     | 1,403     | 1,016     | 917       | 1,040     | 994       | +13.4                                 | +4.6                        | 11,459                                       | 12,252     | +6.9   |
| Lamb and mutton:   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Production, inspected.....thous. of lbs..  | 44,525    | 49,237    | 54,107    | 45,546    | 41,079    | 45,485    | 47,081    | +10.7                                 | -3.4                        | 501,746                                      | 522,549    | +4.1   |
| Apparent consumption.....thous. of lbs..   | 44,443    | 49,042    | 52,077    | 44,756    | 41,051    | 47,140    | 47,055    | +14.8                                 | +0.2                        | 503,569                                      | 523,560    | +4.0   |
| Cold-storage holdings, end mo. thous. of lbs..   | 1,691     | 2,113     | 4,321     | 5,472     | 5,623     | 4,009     | 4,404     | -28.7                                 | -9.0                        |  |            |  |
| Prices:  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Sheep, ewes, Chicago.....dolls. per 100 lbs..  | 5.72      | 5.50      | 5.35      | 5.31      | 6.28      | 8.39      | 6.05      | +33.6                                 | +38.7                       |  |            |  |
| Sheep, lambs, Chicago.....dolls. per 100 lbs..   | 14.31     | 14.16     | 13.08     | 12.69     | 13.78     | 15.59     | 12.65     | +13.1                                 | +23.2                       |  |            |  |
| Miscellaneous Meats  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Cold-storage holdings, end mo.....thous. of lbs..  | 56,888    | 49,798    | 52,201    | 60,392    | 82,915    | 88,715    | 64,219    | +7.0                                  | +38.1                       |  |            |  |
| Total Meats  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Production, inspected.....thous. of lbs..  | 909,277   | 902,414   | 1,108,511 | 1,197,158 | 1,376,212 | 1,439,221 | 1,370,298 | +4.6                                  | +5.0                        | 13,509,707                                   | 13,827,884 | +2.4   |
| Cold-storage holdings, end mo.....thous. of lbs..  | 949,547   | 731,111   | 631,192   | 674,516   | 942,707   | 1,166,299 | 879,919   | +23.7                                 | +32.5                       |  |            |  |
| Apparent consumption.....thous. of lbs..   | 1,002,140 | 1,074,207 | 1,149,147 | 1,083,627 | 1,030,724 | 1,105,886 | 1,120,118 | +7.3                                  | -1.3                        | 12,568,779                                   | 12,668,257 | +0.8   |
| Poultry  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Receipts at 5 markets.....thous. of lbs..  | 22,361    | 23,859    | 35,613    | 60,812    | 69,965    | 30,969    | 29,347    | -55.7                                 | +5.5                        | 344,209                                      | 355,904    | +3.4   |
| Cold-storage holdings, end mo.....thous. of lbs..  | 40,749    | 43,578    | 58,093    | 79,173    | 109,684   | 102,431   | 118,154   | -6.6                                  | -13.3                       |  |            |  |
| Fish   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Total catch, prin. ports.....thous. of bbls..  | 30,130    | 24,284    | 27,129    | 23,236    |           |           | 14,300    |                                       |                             |  |            |  |
| Cold-storage holdings, 15th of mo. thous. of lbs..   | 66,170    | 71,352    | 73,410    | 77,677    | 78,090    | 62,389    | 53,921    | -20.1                                 | +15.7                       |  |            |  |
| Canned salmon:   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Shipments, United States.....cases..   | 832,632   | 1,113,495 | 810,723   | 504,854   |           |           | 254,394   |                                       |                             |  |            |  |
| Exports, Canada.....cases..  | 121,152   | 168,963   | 253,265   | 145,725   | 170,690   | 205,096   | 168,946   | +20.2                                 | +21.4                       | 1,144,242                                    | 1,340,415  | +17.1  |
| Butter   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Production (factory).....thous. of lbs..   | 142,688   | 119,084   | 104,702   | 87,522    | 92,594    | 102,827   | 106,295   | +11.1                                 | -3.3                        | 1,496,495                                    | 1,456,709  | -2.7   |
| Receipt, 5 markets.....thous. of lbs..   | 55,339    | 44,969    | 41,884    | 36,616    | 36,863    | 44,925    | 42,271    | +21.9                                 | +6.3                        | 582,456                                      | 578,773    | -0.6   |
| Cold-storage holdings, creamery, end of month.....thous. of lbs..  | 136,175   | 128,071   | 105,811   | 70,985    | 43,783    | 24,750    | 28,273    | -43.5                                 | -12.5                       |  |            |  |
| Apparent consumption.....thous. of lbs..   | 186,461   | 168,408   | 148,598   | 158,627   | 166,048   | 1574,57   | 159,687   | -5.2                                  | -1.4                        | 2,088,221                                    | 2,047,769  | -1.9   |
| Wholesale price, New York.....dolls. per lb..  | .47       | .49       | .48       | .51       | .51       | .48       | .49       | -5.9                                  | -2.0                        |  |            |  |
| Cheese   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Total, all varieties:  |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Production (factory).....thous. of lbs..   | 41,578    | 37,431    | 39,003    | 24,351    | 24,690    | 21,510    | 29,238    | -12.9                                 | -26.7                       | 482,095                                      | 468,883    | -2.7   |
| Receipts, 5 markets.....thous. of lbs..  | 18,727    | 18,222    | 18,665    | 14,180    | 11,691    | 13,781    | 14,409    | +17.9                                 | -4.4                        | 218,164                                      | 196,614    | -9.9   |
| Apparent consumption.....thous. of lbs..   | 35,189    | 41,291    | 48,357    | 40,872    | 37,340    | 40,192    | 37,408    | +7.6                                  | +7.4                        | 491,093                                      | 471,966    | -3.9   |
| Cold-storage holdings, end mo.....thous. of lbs..  | 101,498   | 98,339    | 97,421    | 89,970    | 85,730    | 74,095    | 55,862    | -13.6                                 | +32.6                       |  |            |  |
| Imports.....thous. of lbs..  | 5,597     | 6,744     | 9,410     | 9,379     | 8,836     | 7,291     | 5,347     | -17.5                                 | +36.4                       | 79,797                                       | 81,402     | +2.0   |
| Exports, United States.....thous. of lbs..   | 215       | 141       | 204       | 278       | 190       | 244       | 257       | +28.4                                 | -5.1                        | 3,387  | 2,601      | -23.2  |
| Exports, Canada.....thous. of lbs..  | 15,788    | 17,123    | 24,282    | 15,431    | 5,573     | 1,500     | 1,324     | -73.1                                 | +13.3                       | 110,534                                      | 114,152    | +3.3   |
| American whole milk:   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Cold-storage holdings, end of month.....thous. of lbs..  | 83,906    | 81,833    | 82,318    | 74,325    | 68,075    | 57,832    | 41,793    | -15.0                                 | +38.4                       |  |            |  |
| Wholesale price, New York.....dolls. per lb..  | .26       | .27       | .26       | .25       | .26       | .26       | .29       | -3.8                                  | -13.8                       |  |            |  |
| Eggs   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Receipts, 5 markets.....thous. of cases..  | 1,076     | 939       | 794       | 546       | 606       | 918       | 862       | +51.5                                 | +6.5                        | 16,204                                       | 16,138     | -0.4   |
| Cold-storage holdings, end of month:   |           |           |           |           |           |           |           |                                       |                             |  |            |  |
| Case.....thous. of cases..   | 9,944     | 8,542     | 6,247     | 3,542     | 1,415     | 246       | 26        | -82.6                                 |                             |  |            |  |
| Frozen.....thous. of lbs..   | 89,196    | 82,255    | 73,327    | 64,201    | 56,181    | 48,084    | 38,575    | -14.4                                 | +24.7                       |  |            |  |

\* Revised.



## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928       |           |           |           |           | 1929       | 1928      | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |             | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|------------|-----------|-----------|-----------|-----------|------------|-----------|---------------------------------------|-----------------------------|--|-------------|--|
|  | August     | September | October   | November  | December  | January    | January   | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928        |  |
| FOODSTUFFS—Continued   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Milk   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Condensed milk:  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Total stocks, mfrs., end mo.—  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Case goods.....thous. of lbs..   | 30,542     | 27,837    | 23,949    | 18,864    | 14,398    | 10,393     | 20,618    | -27.8                                 | -49.6                       |  |             |  |
| Bulk goods.....thous. of lbs..   | 19,332     | 17,604    | 14,429    | 14,759    | 8,165     | 6,088      | 8,457     | -25.4                                 | -28.0                       |  |             |  |
| Unsold stocks, mfrs., end mo.—   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Case goods.....thous. of lbs..   | 24,159     | 21,821    | 17,818    | 13,588    | 9,428     | 5,339      | 15,151    | -43.4                                 | -64.8                       |  |             |  |
| Bulk goods.....thous. of lbs..   | 8,367      | 6,351     | 4,840     | 3,640     | 3,556     | 2,742      | 5,216     | -22.9                                 | -47.4                       |  |             |  |
| Exports.....thous. of lbs..  | 3,246      | 3,405     | 2,531     | 3,335     | 2,892     | 3,432      | 3,819     | +18.7                                 | -10.1                       | 34,887                                       | 38,624      | +10.7  |
| Wholesale price, New York.....dolls. per case..  | 6.18       | 6.18      | 6.18      | 6.18      | 6.18      | 6.18       | 6.00      | 0.0                                   | +3.0                        |  |             |  |
| Evaporated milk:   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Manufacturers' stocks, end of mo.—   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Total, case goods.....thous. of lbs..  | 161,679    | 165,682   | 164,989   | 158,293   | 153,283   | 137,113    | 118,444   | -10.5                                 | +15.8                       |  |             |  |
| Unsold, case goods.....thous. of lbs..   | 101,819    | 134,259   | 138,808   | 136,271   | 133,835   | 112,430    | 95,120    | -16.0                                 | +18.2                       |  |             |  |
| Exports.....thous. of lbs..  | 6,343      | 5,583     | 5,264     | 6,276     | 4,821     | 6,021      | 7,360     | +24.9                                 | -18.2                       | 68,048                                       | 76,791      | +12.8  |
| Wholesale price, New York.....dolls. per case..  | 4.45       | 4.58      | 4.58      | 4.58      | 4.58      | 4.58       | 4.58      | 0.0                                   | 0.0                         |  |             |  |
| Production, condensed and evaporated milk.....thous. of lbs..  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| 152,451  | 136,170    | 121,287   | 82,285    | 108,290   | 108,812   | 119,410    | +0.5      | -8.9                                  | 1,855,720                   | 1,823,436                                    | -1.7        |  |
| Powdered milk:   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Manufurs.' stocks, end mo.....thous. of lbs..  | 19,941     | 18,857    | 16,864    | 13,824    | 13,366    | 12,355     | 8,334     | -7.6                                  | +48.2                       |  |             |  |
| Exports.....thous. of lbs..  | 526        | 322       | 313       | 502       | 365       | 372        | 236       | +1.9                                  | +57.6                       | 3,326  | 4,018       | +20.8  |
| Net new orders.....thous. of lbs..   | 6,736      | 5,662     | 6,284     | 6,188     | 5,945     | 5,496      | 4,880     | -7.6                                  | +12.6                       | 65,380                                       | 71,558      | +9.4   |
| Fluid milk:  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Receipts—  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Boston (includ. cream).....thous. of qts..   | 19,081     | 17,329    | 18,385    | 16,886    | 17,087    |            | 17,490    |                                       |                             | 213,032                                      | 214,375     | +0.6   |
| Greater New York.....thous. of qts..   | 117,162    | 113,552   | 116,849   | 108,685   |           |            | 109,709   |                                       |                             |  |             |  |
| Production—  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Minneapolis, St. Paul.....thous. of lbs..  | 24,413     | 21,572    | 20,274    | 21,678    |           |            | 26,140    |                                       |                             |  |             |  |
| Consumption in manufacture of oleomargarine.....thous. of lbs..  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| 7,014  | 8,530      | 9,151     | 8,931     | 8,624     | 8,036     | 7,190      | -6.8      | +11.8                                 | 76,233                      | 93,495                                       | +22.6       |  |
| Sugar  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Raw:   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Imports—   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| From Hawaii, Porto Rico.....long tons..  | 107,202    | 89,047    | 104,841   | 57,602    | 16,087    | 68,900     | 45,026    | +328.3                                | +53.0                       | 1,201,213                                    | 1,360,682   | +13.3  |
| From foreign countries.....long tons..   | 274,366    | 315,722   | 257,825   | 229,477   | 194,351   | 255,768    | 219,926   | +31.6                                 | +16.3                       | 3,675,702                                    | 3,443,615   | -6.3   |
| Meltings, 8 ports.....long tons..  | 471,175    | 417,983   | 436,122   | 404,450   | 285,122   | 332,872    | 307,050   | +16.7                                 | +8.4                        | 4,882,351                                    | 4,726,175   | -3.2   |
| Stocks at refineries, end month.....long tons..  | 488,161    | 465,386   | 357,506   | 234,429   | 221,196   | 221,334    | 192,968   | +0.1                                  | +14.7                       |  |             |  |
| Refined:   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Shipments, 2 ports.....long tons..   | 82,773     | 66,428    | 61,799    | 48,231    | 44,824    | 50,026     | 40,958    | +11.6                                 | +22.1                       | 809,800                                      | 713,862     | -11.8  |
| Stocks, 2 ports.....long tons..  | 34,049     | 26,725    | 32,920    | 25,007    | 19,168    | 28,042     | 29,542    | +46.3                                 | -5.1                        |  |             |  |
| Exports, including maple.....long tons..   | 11,329     | 7,413     | 11,971    | 14,887    | 8,213     | 8,243      | 3,184     | +0.4                                  | +158.9                      | 111,764                                      | 111,895     | +0.1   |
| Prices:  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Wholesale, 96° centrif., N. Y.....dolls. per lb..  | .041       | .042      | .039      | .039      | .039      | .038       | .043      | -2.6                                  | -11.6                       |  |             |  |
| Wholesale, granulated, N. Y.....dolls. per lb..  | .055       | .056      | .052      | .051      | .052      | .050       | .057      | -3.8                                  | -12.3                       |  |             |  |
| Retail granulated, N. Y.....dolls. per lb..  | .063       | .063      | .062      | .060      | .060      | .061       | .063      | +1.7                                  | -3.2                        |  |             |  |
| Retail average, 51 cities.....relative to 1913..   | 129        | 127       | 126       | 124       | 122       | 122        | 129       | 0.0                                   | -5.5                        |  |             |  |
| Cuban movement (raw):  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Receipts at Cuban ports.....long tons..  | 182,414    | 168,638   | 154,547   | 123,919   | 92,648    | 638,996    | 238,129   | +589.7                                | +168.3                      | 4,258,418                                    | 3,970,201   | -6.8   |
| Exports.....long tons..  | 348,808    | 370,339   | 323,317   | 287,075   | 259,469   | 237,350    | 212,161   | -8.5                                  | +11.9                       | 4,064,126                                    | 3,976,268   | -2.2   |
| Stocks, end of month.....long tons..   | 829,437    | 630,548   | 446,210   | 288,393   | 125,449   | 457,157    | 177,801   | +264.4                                | +157.1                      |  |             |  |
| Coffee   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Imports.....thous. of bags..   | 925        | 1,655     | 809       | 882       | 993       | 1,033      | 1,148     | +4.0                                  | -10.0                       | 10,859                                       | 12,022      | +10.7  |
| Visible supply:  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| World.....thous. of bags..   | 5,515      | 5,378     | 5,390     | 5,393     | 5,267     | 5,038      | 4,862     | -4.3                                  | +3.6                        |  |             |  |
| United States.....thous. of bags..   | 793        | 702       | 693       | 752       | 783       | 732        | 782       | -6.5                                  | -6.4                        |  |             |  |
| Receipts, total, Brazil.....thous. of bags..   | 1,181      | 1,040     | 1,157     | 1,287     | 1,034     | 1,139      | 1,224     | +10.2                                 | -6.9                        | 15,686                                       | 14,119      | -10.0  |
| Clearances:  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Total, Brazil, for world.....thous. of bags..  | 1,057      | 997       | 1,330     | 993       | 1,166     | 1,176      | 1,248     | +0.9                                  | -5.8                        | 14,934                                       | 13,660      | -8.5   |
| Total, Brazil, for U. S.....thous. of bags..   | 548        | 570       | 667       | 544       | 673       | 678        | 687       | +0.7                                  | -1.3                        | 7,984  | 7,299       | -8.6   |
| Price, Rio No. 7, Brazil grades.....dolls. per lb..  | .173       | .173      | .178      | .181      | .181      | .183       | .148      | +1.1                                  | +23.6                       |  |             |  |
| Tea  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Imports.....thous. of lbs..  | 8,086      | 9,754     | 10,512    | 9,417     | 9,264     | 10,073     | 8,160     | +8.7                                  | +23.4                       | 89,601                                       | 89,983      | -0.4   |
| Stocks, United Kingd., end mo.....thous. of lbs..  | 179,106    | 194,681   | 209,701   | 224,717   | 240,738   | 251,387    | 252,927   | +4.4                                  | -0.6                        |  |             |  |
| Price, Formosa, fine, New York.....dolls. per lb..   | .325       | .325      | .310      | .310      | .310      | .322       | .325      | +3.9                                  | -0.9                        |  |             |  |
| Cocoa  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Shipments from the Gold Coast and  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Nigeria, Africa**.....long tons..  | 4,011      | 3,724     | 15,326    | 33,805    | 48,268    | 59,863     | 47,996    | +24.0                                 | +24.7                       | 244,173                                      | 269,974     | +10.6  |
| Imports.....long tons..  | 13,461     | 6,358     | 5,450     | 6,636     | 14,164    | 15,753     | 16,600    | +11.2                                 | -5.1                        | 189,726                                      | 169,298     | -10.8  |
| Spot price, Accra, New York.....dolls..  | .1213      | .1163     | .1125     | .1055     | .1050     | .1038      | .1363     | -1.1                                  | -23.8                       |  |             |  |
| TOBACCO  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Consumption (tax-paid withdrawals):  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Large cigars.....thousands..   | 601,877    | 586,267   | 723,318   | 630,531   | 411,910   | 427,716    | 413,532   | +3.8                                  | +3.4                        | 6,571,375                                    | 6,453,669   | -1.8   |
| Small cigarettes.....thousands..   | 10,627,344 | 9,126,271 | 9,921,537 | 8,536,426 | 7,515,101 | 10,160,263 | 8,369,087 | +35.2                                 | +21.4                       | 97,176,607                                   | 105,915,965 | +9.0   |
| Manufac. tobacco and snuff.....thous. of lbs..   | 34,981     | 31,789    | 35,333    | 30,146    | 25,369    | 33,160     | 33,002    | +30.7                                 | +0.5                        | 394,075                                      | 384,112     | -2.5   |
| Exports:   |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Unmanufactured.....thous. of lbs..   | 26,833     | 57,509    | 88,509    | 78,170    | 68,566    | 45,804     | 42,958    | -33.2                                 | +6.6                        | 511,788                                      | 583,843     | +14.1  |
| Cigarettes.....thousands..   | 860,791    | 961,827   | 956,846   | 1,114,381 | 1,109,392 | 1,010,368  | 962,574   | -8.9                                  | +5.0                        | 7,093,039                                    | 11,706,110  | +65.0  |
| Sales of loose-leaf, warehouses.....thous. of lbs..  | 70,579     | 133,718   | 122,627   | 142,034   | 142,869   | 174,741    | 135,470   | +22.3                                 | +29.0                       | 964,245                                      | 817,969     | -15.2  |
| Price, leaf, Kentucky.....dolls. per 100 lbs..   | 11.580     | 7.871     | 12.077    | 9.896     | 25.691    |            | 23.227    |                                       |                             |  |             |  |
| Stocks, end of quarter:  |            |           |           |           |           |            |           |                                       |                             |  |             |  |
| Chewing, smoking, snuff, and export.....thous. of lbs..  |            | 1,275,639 |           |           | 1,373,637 |            | 1,519,935 | +7.7                                  | -9.6                        |  |             |  |
| Cigar tobacco.....thous. of lbs..  |            | 1,308,707 |           |           | 1,278,845 |            | 1,300,543 | -9.7                                  | -7.2                        |  |             |  |
| Total, including imported.....thous. of lbs..  |            | 1,680,461 |           |           | 1,750,089 |            | 1,822,743 | +4.1                                  | -9.0                        |  |             |  |

\* Quarter ending in month indicated.

Quarter ending Dec. 1927.

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928      |           |           |           |           | 1929      | 1928      | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |            | Per ct increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------------------|-----------------------------|--|------------|---|
|  | August    | September | October   | November  | December  | January   | January   | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928       |   |
| TRANSPORTATION   |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| River and Canal Cargo Traffic  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Panama Canal:  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Total cargo traffic.....thous. of long tons..  | 2,425     | 2,313     | 2,582     | 2,502     | 2,715     | 2,859     | 2,372     | +5.3                                  | +20.5                       | 29,104                                       | 29,394     | +1.0  |
| In American vessels.....thous. of long tons..  | 1,103     | 1,140     | 1,195     | 1,145     | 1,111     | 1,218     | 1,019     | +9.6                                  | +19.5                       | 15,347                                       | 13,560     | -11.6   |
| In British vessels.....thous. of long tons..   | 707       | 602       | 679       | 691       | 750       | 806       | 698       | +7.5                                  | +15.5                       | 6,982  | 8,195      | +17.4   |
| Sault Ste. Marie canals.....thous. of short tons..   | 13,680    | 12,812    | 13,603    | 10,458    | 1,202     |           |           |                                       |                             | 83,355                                       | 86,993     | +4.4  |
| New York State canals.....thous. of short tons..   | 517       | 411       | 536       | 328       |           |           |           |                                       |                             |  |            |   |
| Cape Cod Canal.....short tons..  | 148,691   | 130,566   | 160,903   | 140,464   | 153,838   | 141,496   | 73,095    | -8.0                                  | +93.6                       | 825,147                                      | 1,373,457  | +66.4   |
| Suez Canal.....thous. of met. tons..   | 2,602     | 2,634     | 2,622     | 2,749     | 3,050     |           | 2,647     |                                       |                             | 29,598                                       | 32,622     | +10.2   |
| Welland Canal.....short tons..   | 1,115,601 | 996,833   | 1,115,190 | 1,008,483 | 109,793   |           | None.     |                                       |                             | 7,447,459                                    | 7,433,617  | -0.1  |
| St. Lawrence Canal.....short tons..  | 1,359,561 | 1,150,038 | 1,270,051 | 1,082,545 | 84,838    |           | None.     |                                       |                             | 7,912,952                                    | 8,411,542  | +6.3  |
| Mississippi River Govt. barges.....short tons..  | 113,903   | 143,377   | 120,444   | 145,218   | 135,439   | 135,000   | 105,521   | -0.3                                  | +27.9                       | 1,147,236                                    | 1,435,560  | +25.1   |
| Ohio River, Pittsburgh, Pa., to Wheeling, W. Va.....short tons..   | 1,034,775 | 963,766   | 1,010,860 | 940,397   | 764,893   | 478,265   | 517,488   | -37.5                                 | -7.6                        | 9,622,134                                    | 10,175,011 | +5.7  |
| Allegheny River.....short tons..   | 346,670   | 288,629   | 377,744   | 302,344   | 161,860   | 88,940    | 81,585    | -45.1                                 | +9.0                        | 2,946,695                                    | 2,873,495  | -2.5  |
| Monongahela River.....short tons..   | 2,304,619 | 2,305,681 | 2,396,557 | 2,302,719 | 2,114,671 | 2,287,541 | 2,327,246 | +8.2                                  | -1.7                        | 24,402,468                                   | 26,097,158 | +6.9  |
| Ohio River tonnage originating, quantity:  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Pittsburgh district.....thous. short tons..  |           | 2,932     |           |           | 2,602     |           | 2,385     | -11.3                                 | +9.1                        | 9,587  | 10,021     | +4.5  |
| Huntington district.....thous. short tons..  |           | 1,423     |           |           | 1,394     |           | 1,281     | -2.0                                  | +8.8                        | 5,286  | 5,255      | -0.6  |
| Cincinnati district.....thous. short tons..  |           | 139       |           |           | 185       |           | 139       | +33.1                                 | +33.1                       | 599  | 547        | -8.7  |
| Louisville district.....thous. short tons..  |           | 1,178     |           |           | 1,090     |           | 1,140     | -7.5                                  | -4.4                        | 4,375  | 4,132      | -5.6  |
| Total.....thous. short tons..  |           | 5,673     |           |           | 5,271     |           | 4,945     | -7.1                                  | +6.6                        | 19,846                                       | 19,956     | +0.6  |
| Ocean Traffic  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Clearances, vessels in foreign trade:  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Total.....thous. of net tons..   | 8,377     | 7,365     | 7,806     | 7,764     | 5,956     | 5,484     | 5,163     | -7.9                                  | +6.2                        | 75,440                                       | 79,732     | +5.7  |
| American.....thous. of net tons..  | 3,173     | 2,912     | 3,252     | 3,612     | 2,388     | 1,950     | 1,865     | -19.3                                 | +4.6                        | 29,694                                       | 31,804     | +7.1  |
| Foreign.....thous. of net tons..   | 5,204     | 4,453     | 4,554     | 4,152     | 3,568     | 3,534     | 3,298     | -1.0                                  | +7.2                        | 45,647                                       | 47,928     | +5.0  |
| Shipbuilding   |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Completed during month:  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Total.....gross tons..   | 12,537    | 27,833    | 7,148     | 4,913     | 3,880     | 7,413     | 9,294     | +91.1                                 | -20.2                       |  |            |   |
| Steel seagoing.....gross tons..  | 2,245     | 24,483    | 4,318     | 1,382     | 1,812     | 3,392     | 2,888     | +87.2                                 | +17.5                       |  |            |   |
| Building or under contract, end of month:  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Merchant vessels.....thous. of gross tons..  | 235       | 242       | 260       | 169       | 94        |           | 214       |                                       |                             |  |            |   |
| Freight Cars   |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Surplus (daily av. last week of month):  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Total.....cars..   | 201,864   | 103,906   | 105,017   | 222,539   | 411,320   | 278,213   | 403,792   | -32.4                                 | -31.1                       |  |            |   |
| Box.....cars..   | 114,355   | 53,170    | 54,263    | 104,272   | 199,443   | 136,959   | 182,001   | -31.3                                 | -24.7                       |  |            |   |
| Coal.....cars..  | 47,615    | 21,809    | 21,128    | 75,799    | 159,147   | 92,243    | 169,463   | -42.0                                 | -45.6                       |  |            |   |
| Shortage (daily av. last week of month):   |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Total.....cars..   | 8         | 279       | 44        | None.     | None.     | 79        | 4         | None.                                 | +97.5                       |  |            |   |
| Box.....cars..   | None.     | None.     | None.     | None.     | None.     | None.     | 3         | None.                                 | None.                       |  |            |   |
| Coal.....cars..  | 8         | 159       | 44        | None.     | None.     | 11        | None.     | None.                                 | None.                       |  |            |   |
| Car loadings:  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Total.....cars..   | 4,230,809 | 5,586,284 | 4,700,796 | 4,245,028 | 4,413,778 | 3,570,978 | 3,448,895 | -19.1                                 | +3.5                        | 51,635,806                                   | 51,577,903 | -0.1  |
| Grain and grain products.....cars..  | 231,181   | 295,779   | 219,298   | 209,556   | 242,080   | 181,968   | 187,679   | -24.8                                 | -3.0                        | 2,378,742                                    | 2,511,537  | +5.6  |
| Livestock.....cars..   | 98,944    | 164,412   | 154,620   | 133,599   | 138,908   | 117,998   | 127,647   | -15.1                                 | -7.6                        | 1,546,967                                    | 1,520,376  | -1.7  |
| Coal and coke.....cars..   | 680,417   | 952,746   | 869,199   | 832,480   | 940,402   | 857,547   | 752,787   | -8.8                                  | +13.9                       | 9,781,664                                    | 9,301,746  | -4.9  |
| Forest products.....cars..   | 266,137   | 322,538   | 265,872   | 260,103   | 275,108   | 218,647   | 233,119   | -20.5                                 | -6.2                        | 3,422,609                                    | 3,334,430  | -2.6  |
| Ore.....cars..   | 253,085   | 319,579   | 240,988   | 151,639   | 52,069    | 35,671    | 32,795    | -31.5                                 | +8.8                        | 1,891,773                                    | 1,908,716  | +0.9  |
| Merchandise and l. c. l.....cars..   | 1,027,132 | 1,297,461 | 1,079,167 | 1,048,664 | 1,167,683 | 915,552   | 927,707   | -21.6                                 | -1.3                        | 13,245,186                                   | 13,155,475 | -0.7  |
| Miscellaneous.....cars..   | 1,667,913 | 2,233,769 | 1,871,652 | 1,008,987 | 1,597,528 | 1,243,595 | 1,187,161 | -22.2                                 | +4.8                        | 19,368,865                                   | 19,845,623 | +2.5  |
| Railroad Operations  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Operating revenue:   |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Freight.....thous. of dolls..  | 421,007   | 423,347   | 492,275   | 415,124   | 367,184   |           | 337,382   |                                       |                             |  |            |   |
| Passenger.....thous. of dolls..  | 85,102    | 80,098    | 69,564    | 65,156    | 70,523    |           | 78,483    |                                       |                             |  |            |   |
| Total operating.....thous. of dolls..  | 557,856   | 556,044   | 617,782   | 531,219   | 495,816   |           | 457,426   |                                       |                             |  |            |   |
| Operating expenses.....thous. of dolls..   | 383,908   | 375,646   | 401,160   | 374,154   | 357,670   |           | 363,384   |                                       |                             |  |            |   |
| Net operating income.....thous. of dolls..   | 128,414   | 134,513   | 168,315   | 113,695   | 94,386    |           | 56,634    |                                       |                             |  |            |   |
| Freight carried.....mills. ton-miles..   | 42,406    | 43,778    | 48,206    | 41,965    | 37,645    |           | 36,271    |                                       |                             |  |            |   |
| Railway Equipment  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Locomotive (Am. Ry. Assn.):  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Owned, end of month—   |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Quantity.....number..  | 59,769    | 59,600    | 59,371    | 59,097    | 58,758    | 58,633    | 60,679    | -0.2                                  | -3.4                        |  |            |   |
| Tractive power.....mills. of lbs..   | 2,585     | 2,582     | 2,578     | 2,571     | 2,562     | 2,560     | 2,597     | -0.1                                  | -1.4                        |  |            |   |
| In bad order, end of month—  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Quantity.....number..  | 7,954     | 7,815     | 8,177     | 4,671     | 7,931     | 8,161     | 8,733     | +2.9                                  | -6.5                        |  |            |   |
| Per cent of total in use.....per cent..  | 13.4      | 13.2      | 13.9      | 15.1      | 13.6      | 14.0      | 14.5      | +2.9                                  | -3.4                        |  |            |   |
| Installed.....number..   | 114       | 93        | 102       | 68        | 132       | 111       | 154       | -15.9                                 | -27.9                       | 1,955  | 1,390      | -28.9   |
| Retired.....number..   | 320       | 260       | 331       | 313       | 420       | 236       | 259       | -43.8                                 | -8.9                        | 3,572  | 3,323      | -6.7  |
| New orders.....number..  | 70        | 8         | 4         | 41        | 59        | 28        | 2         | -52.5                                 | +40.0                       | 656  | 353        | -46.2   |
| Shipments, manufacturers' (Census)—  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Total.....number..   | 34        | 41        | 36        | 35        | 44        | 23        | 47        | -47.7                                 | -51.1                       | 1,074  | 556        | -48.8   |
| Steam, domestic.....number..   | 23        | 28        | 26        | 20        | 36        | 6         | 22        | -83.3                                 | -72.7                       | 726  | 367        | -49.4   |
| Electric, domestic.....number..  | 4         | 2         | None.     | 1         | 4         | 6         | 23        | +50.0                                 | -73.9                       | 148  | 92         | -37.8   |
| Unfilled orders (railroads), end of mo.—   |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| From manufacturers.....number..  | 81        | 98        | 104       | 97        | 112       | 236       | 151       | +110.7                                | +56.3                       |  |            |   |
| In railroad shops.....number..   | 19        | 15        | 17        | 26        | 35        | 42        | 22        | +20.0                                 | +90.9                       |  |            |   |
| Unfilled orders, manufacturers' (Census)—  |           |           |           |           |           |           |           |                                       |                             |  |            |   |
| Total.....number..   | 204       | 178       | 170       | 152       | 282       | 278       | 222       | -1.4                                  | +25.2                       |  |            |   |
| Steam, domestic.....number..   | 135       | 118       | 113       | 104       | 238       | 251       | 161       | +5.5                                  | +55.9                       |  |            |   |
| Electric, domestic.....number..  | 26        | 27        | 29        | 31        | 27        | 21        | 38        | -22.2                                 | -44.7                       |  |            |   |
| Exports, steam.....number..  | 20        | 33        | 8         | 21        | 4         | 18        | 13        | +350.0                                | +38.5                       | 228  | 199        | -12.7   |

² Quarter ending in month indicated.

³ Quarter ending Dec. 31, 1927.

⁴ Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928      |           |           |           |           | 1929      | 1928      | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------------------|-----------------------------|--|-----------|--|
|  | August    | September | October   | November  | December  | January   | January   | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928      |  |
|  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| TRANSPORTATION—Continued   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Railway Equipment—Continued  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Freight cars (Am. Ry. Assn.):  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Owned, end of month—   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Quantity.....cars..  | 2,299,157 | 2,296,273 | 2,292,096 | 2,287,563 | 2,282,133 | 2,276,289 | 2,309,577 | -0.3                                  | -1.4                        |  |           |  |
| Capacity.....mills. of lbs..   | 210,483   | 210,335   | 210,092   | 209,826   | 209,539   | 209,091   | 210,649   | -0.2                                  | -0.7                        |  |           |  |
| In bad order, end of month—  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Quantity.....cars..  | 149,252   | 148,333   | 138,238   | 139,053   | 134,267   | 136,319   | 136,115   | +1.5                                  | +0.1                        |  |           |  |
| Per cent of total in use.....per cent..  | 6.6       | 6.6       | 6.2       | 6.2       | 6.0       | 6.2       | 6.0       | +3.3                                  | +3.3                        |  |           |  |
| New orders.....cars..  | 767       | 1,236     | 1,635     | 6,100     | 4,668     | 12,452    | 2,098     | +166.8                                | +493.5                      | 58,959                                       | 37,039    | -37.2  |
| Shipments—   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Total.....cars..   | 5,295     | 3,220     | 2,507     | 1,640     | 1,639     | 1,814     | 774       | +10.7                                 | +134.4                      | 54,291                                       | 39,436    | -27.4  |
| Domestic.....cars..  | 5,261     | 3,000     | 2,345     | 1,549     | 1,327     | 525       | 576       | -60.4                                 | -8.9                        | 53,524                                       | 37,984    | -29.0  |
| Unfilled orders (railroads)—   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Total.....cars..   | 8,177     | 6,619     | 5,437     | 13,850    | 12,671    | 28,121    | 18,464    | +121.9                                | +52.3                       |  |           |  |
| From manufacturers.....cars..  | 5,673     | 3,878     | 1,880     | 10,271    | 10,109    | 24,109    | 15,459    | +138.5                                | +56.0                       |  |           |  |
| In railroad shops.....cars..   | 2,504     | 2,741     | 3,557     | 3,579     | 2,562     | 4,012     | 3,005     | +56.6                                 | +33.5                       |  |           |  |
| Passenger cars:  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| New orders.....cars..  | 589       | 2         | 56        | 2         | 11        | 228       | 615       | +107.3                                | -62.9                       | 1,195  | 1,773     | +48.4  |
| Shipments—   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Total.....cars..   | 147       | 146       | 68        | 166       | 181       | 111       | 78        | -38.7                                 | +42.3                       | 1,420  | 1,232     | -13.2  |
| Domestic.....cars..  | 144       | 143       | 68        | 166       | 150       | 109       | 68        | -27.3                                 | +60.3                       | 1,378  | 1,131     | -17.9  |
| Owned or leased, end of quarter.....cars..   |           | 52,949    |           |           | 52,812    |           | 53,495    | -0.3                                  | -1.3                        |  |           |  |
| Unfilled orders, end of quarter.....cars..   |           | 1,173     |           |           | 853       |           | 364       | -27.3                                 | +134.3                      |  |           |  |
| Passenger Travel   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| National parks:  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Visitors.....number..  | 499,633   | 222,698   | 68,997    | 39,517    | 40,910    | 46,242    | 50,591    | +13.0                                 | -8.6                        | 1,976,367                                    | 2,059,824 | +4.2   |
| Automobiles entered.....number..   | 98,523    | 44,873    | 10,466    | 4,875     | 5,001     | 7,473     | 6,679     | +49.4                                 | +11.9                       | 373,495                                      | 388,002   | +3.9   |
| Arrivals from abroad:  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Immigrants.....number..  | 24,629    | 29,317    | 29,917    | 24,805    | 18,357    |           | 18,146    |                                       |                             | 323,885                                      | 290,297   | -10.4  |
| United States citizens.....number..  | 63,191    | 80,233    | 49,831    | 23,198    | 18,911    |           | 19,909    |                                       |                             | 412,485                                      | 442,599   | +7.3   |
| Departures abroad:   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Emigrants.....number..   | 6,488     | 8,093     | 7,479     | 6,549     | 8,264     |           | 5,323     |                                       |                             | 70,122                                       | 77,599    | +10.7  |
| United States citizens.....number..  | 50,323    | 42,105    | 34,643    | 22,380    | 25,173    |           | 27,126    |                                       |                             | 405,989                                      | 451,972   | +11.3  |
| Passports issued.....number..  | 9,866     | 8,056     | 8,494     | 9,441     | 8,051     | 9,513     | 8,896     | +18.2                                 | +6.9                        | 182,430                                      | 189,305   | +3.8   |
| Pullman company operations:  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Revenue.....thous. of dolls..  | 7,593     | 7,297     | 6,650     | 5,751     | 6,529     |           | 6,963     |                                       |                             | 80,953                                       | 80,846    | -0.1   |
| Passengers carried.....thousands..   | 3,312     | 3,081     | 2,738     | 2,466     | 2,758     |           | 2,886     |                                       |                             | 35,198                                       | 33,924    | -3.6   |
| Hotel room occupancy.....per ct. of capacity..   | 63        | 68        | 72        | 70        | 67        | 73        | 72        | +9.0                                  | +1.4                        |  |           |  |
| Warehouses   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Public merchandise warehouses, space occupied.....per ct. of total..   | 67.9      | 66.1      | 66.4      | 68.8      | 68.1      |           | 67.6      |                                       |                             |  |           |  |
| PUBLIC UTILITIES   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Telephone companies:   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Operating revenue.....thous. of dolls..  | 68,784    | 68,432    | 72,464    | 71,213    |           |           | 66,026    |                                       |                             |  |           |  |
| Operating income.....thous. of dolls..   | 15,985    | 16,496    | 18,565    | 17,649    |           |           | 16,783    |                                       |                             |  |           |  |
| Telegraph companies:   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Commercial telegraph tolls.....thous. of dolls..   | 11,530    | 11,010    | 11,765    | 10,623    | 11,386    |           | 9,956     |                                       |                             | 127,490                                      | 130,648   | +2.5   |
| Operating revenue.....thous. of dolls..  | 14,328    | 13,911    | 14,928    | 13,661    | 14,514    |           | 12,467    |                                       |                             | 158,288                                      | 164,361   | +3.8   |
| Operating income.....thous. of dolls..   | 1,887     | 1,918     | 2,247     | 1,770     | 1,811     |           | 1,137     |                                       |                             | 21,506                                       | 21,404    | -0.5   |
| Gas and electric companies:  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Gross earnings.....thous. of dolls..   | 173,952   | 178,346   | 186,000   | 193,000   | 198,000   |           | 196,573   |                                       |                             | 2,113,073                                    | 2,214,724 | +4.8   |
| Net earnings.....thous. of dolls..   | 61,810    | 67,967    | 72,000    | 78,000    | 85,000    |           | 79,013    |                                       |                             | 775,177                                      | 857,399   | +10.6  |
| Electric railways (212 companies):   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Passengers carried.....thous. of persons..   | 736,223   | 717,810   | 795,140   | 759,254   | 796,280   | 799,843   | 814,172   | +0.4                                  | -1.8                        | 9,394,314                                    | 9,268,039 | -1.3   |
| Average fare.....cents..   | 8.121     | 8.121     | 8.129     | 8.137     |           |           | 8.025     |                                       |                             |  |           |  |
| Electric power production:   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Total.....mills. of kw. hours..  | 7,510     | 7,282     | 7,922     | 7,750     | 7,870     |           | 7,265     |                                       |                             | 80,205                                       | 87,852    | +9.5   |
| By water power.....mills. of kw. hours..   | 3,045     | 2,792     | 2,873     | 2,786     | 2,755     |           | 2,739     |                                       |                             | 29,873                                       | 34,750    | +16.3  |
| By fuels.....mills. of kw. hours..   | 4,465     | 4,490     | 5,049     | 4,964     | 5,115     |           | 4,526     |                                       |                             | 50,332                                       | 53,103    | +5.5   |
| In street railways, manfg. plants, etc.....mills. of kw. hours..   | 382       | 355       | 374       | 373       | 407       |           | 598       |                                       |                             | 5,451  | 5,025     | -7.8   |
| In central stations.....mills. of kw. hours..  | 7,128     | 6,927     | 7,548     | 7,377     | 7,463     |           | 6,667     |                                       |                             | 74,754                                       | 82,827    | +10.8  |
| Electric power production (Canada):  |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| Total.....mills. of kw. hours..  | 1,308     | 1,278     | 1,457     | 1,438     | 1,438     |           | 1,324     |                                       |                             | 14,218                                       | 15,898    | +11.8  |
| By water power.....mills. of kw. hours..   | 1,292     | 1,260     | 1,436     | 1,413     | 1,411     |           | 1,304     |                                       |                             | 14,017                                       | 15,673    | +11.8  |
| Exported.....mills. of kw. hours..   | 146       | 130       | 155       | 137       | 123       |           | 124       |                                       |                             | 1,633  | 1,588     | -2.8   |
| Electric power, gross revenue.....thous. of dolls..  | 148,200   | 156,100   | 165,200   |           |           |           | 171,700   |                                       |                             |  |           |  |
| Consumption of electrical energy   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| By geographical divisions:   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| United States.....rel. to 1923-25..  | 120.8     | 134.5     | 132.0     | 133.3     | 127.3     | 132.5     | 118.4     | +4.1                                  | +11.9                       |  |           |  |
| New England.....rel. to 1923-25..  | 102.2     | 115.3     | 119.3     | 126.0     | 120.2     | 127.6     | 115.2     | +6.2                                  | +10.8                       |  |           |  |
| North Central.....rel. to 1923-25..  | 132.4     | 149.7     | 143.5     | 145.7     | 133.8     | 138.8     | 117.0     | +3.7                                  | +18.6                       |  |           |  |
| Middle Atlantic.....rel. to 1923-25..  | 118.3     | 136.0     | 133.4     | 138.9     | 126.8     | 126.7     | 116.2     | -0.1                                  | +9.0                        |  |           |  |
| Southern.....rel. to 1923-25..   | 112.8     | 127.5     | 129.7     | 127.6     | 121.2     | 120.5     | 124.8     | -0.6                                  | -3.4                        |  |           |  |
| Western.....rel. to 1923-25..  | 127.5     | 150.8     | 148.7     | 156.7     | 124.0     |           | 115.0     |                                       |                             |  |           |  |
| By industry:   |           |           |           |           |           |           |           |                                       |                             |  |           |  |
| All industry.....rel. to 1923-25..   | 120.8     | 134.5     | 132.0     | 133.3     | 127.3     | 132.5     | 118.4     | +4.1                                  | +11.9                       |  |           |  |
| Chemical and allied products.....rel. to 1923-25..   | 119.2     | 132.0     | 129.4     | 135.7     | 132.8     | 129.2     | 124.2     | -2.7                                  | +4.0                        |  |           |  |
| Food and kindred products.....rel. to 1923-25..  | 128.3     | 142.0     | 138.0     | 130.0     | 113.7     | 128.0     | 102.4     | +12.6                                 | +25.0                       |  |           |  |
| Rolling mills and steel plants.....rel. to 1923-25..   | 125.4     | 141.2     | 144.7     | 148.8     | 142.2     | 153.5     | 131.3     | +7.9                                  | +16.9                       |  |           |  |
| Metal working plants.....rel. to 1923-25..   | 125.8     | 144.2     | 144.5     | 140.5     | 137.5     | 135.8     | 117.4     | -1.2                                  | +15.7                       |  |           |  |
| Metal groups.....rel. to 1923-25..   | 125.5     | 143.0     | 144.6     | 143.5     | 139.2     | 142.6     | 124.4     | +2.4                                  | +14.6                       |  |           |  |

2 Quarter ending in month indicated.

3 Quarter ending Dec. 31, 1927.

4 Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928    |            |         |           |           | 1929    | 1928    | PER CENT INCREASE (+) OR DECREASE (-) |         | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |                             | Per ct. in-crease (+) or de-crease (-) cumu-lative 1928 from 1927 |      |      |
|--|---------|------------|---------|-----------|-----------|---------|---------|---------------------------------------|---------|--|-----------------------------|---|------|------|
|  | August  | Septem-ber | October | Novem-ber | Decem-ber |         |         | January                               | January | Jan., 1929, from Dec., 1928                  | Jan., 1929, from Jan., 1928 |   | 1927 | 1928 |
|  |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| PUBLIC UTILITIES—Continued   |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| Consumption of electrical energy—Con.  |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| By industry—Continued  |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| Leather and its products... rel. to 1923-25...   | 94.7    | 106.9      | 103.8   | 94.0      | 93.7      | 94.3    | 112.2   | +0.6                                  | -16.0   |  |                             |   |      |      |
| Lumber and its products... rel. to 1923-25...  | 111.6   | 111.3      | 109.3   | 111.8     | 107.3     | 107.4   | 107.7   | +0.1                                  | -0.3    |  |                             |   |      |      |
| Paper and pulp... rel. to 1923-25...   | 129.1   | 132.0      | 133.3   | 135.2     | 127.4     | 126.2   | 121.3   | -0.9                                  | +4.0    |  |                             |   |      |      |
| Rubber and its products... rel. to 1923-25...  | 138.4   | 151.2      | 146.4   | 143.8     | 124.8     | 148.2   | 120.4   | +18.8                                 | +23.1   |  |                             |   |      |      |
| Shipbuilding... rel. to 1923-25...   | 67.3    | 72.3       | 73.8    | 102.2     | 91.8      | 108.2   | 94.2    | +17.9                                 | +14.9   |  |                             |   |      |      |
| Stone, clay, and glass... rel. to 1923-25...   | 135.3   | 152.0      | 144.7   | 149.1     | 136.6     | 137.4   | 105.2   | +0.6                                  | +30.6   |  |                             |   |      |      |
| Textiles... rel. to 1923-25...   | 97.3    | 112.5      | 121.0   | 132.5     | 126.3     | 129.4   | 116.7   | +2.5                                  | +10.9   |  |                             |   |      |      |
| Automobiles, including repair parts... rel. to 1923-25...  | 143.2   | 161.0      | 141.2   | 127.1     | 130.0     | 149.4   | 135.2   | +14.9                                 | +10.5   |  |                             |   |      |      |
| EMPLOYMENT AND WAGES   |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| Employment in factories:   |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| Massachusetts... rel. to 1919-23...  | 74.2    | 75.6       | 78.8    | 79.3      | 78.9      | 78.1    | 82.3    | -1.0                                  | -5.1    |  |                             |   |      |      |
| New York State... rel. to 1923...  | 82.5    | 84.3       | 86.0    | 85.8      | 85.3      | 84.8    | 82.6    | -0.6                                  | +2.7    |  |                             |   |      |      |
| New Jersey... rel. to 1923...  | 91      | 94         | 95      | 97        | 98        | 97      | 91      | -1.0                                  | +6.6    |  |                             |   |      |      |
| Pennsylvania... rel. to 1923...  | 81      | 81         | 82      | 82        | 80        | 81      | 80      | +1.3                                  | +1.3    |  |                             |   |      |      |
| Delaware... rel. to 1923...  | 74      | 77         | 74      | 74        | 75        | 75      | 75      | 0.0                                   | 0.0     |  |                             |   |      |      |
| Maryland... rel. to 1924...  | 88.1    | 89.0       | 90.4    | 88.0      | 87.7      | 85.7    | 85.4    | -2.3                                  | +0.4    |  |                             |   |      |      |
| Iowa... rel. to 1923...  | 124.0   | 124.0      | 126.0   | 125.3     | 122.3     |         | 117.9   |                                       |         |  |                             |   |      |      |
| Illinois... rel. to 1923...  | 85.6    | 86.8       | 86.9    | 87.3      | 88.1      | 87.2    | 80.5    | -1.0                                  | +8.3    |  |                             |   |      |      |
| Wisconsin... rel. to 1923...   | 97.9    | 97.1       | 97.0    | 95.7      |           |         | 90.3    |                                       |         |  |                             |   |      |      |
| Detroit... rel. to 1923...   | 134.7   | 135.4      | 131.3   | 126.0     | 123.3     |         | 102.6   |                                       |         |  |                             |   |      |      |
| Detroit... number...   | 293,457 | 294,829    | 285,936 | 274,397   | 268,601   | 289,611 | 223,602 | +7.8                                  | +29.6   |  |                             |   |      |      |
| Milwaukee... number...   | 37,385  | 38,077     | 38,090  | 38,179    | 38,995    | 40,707  | 35,492  | +4.4                                  | +14.7   |  |                             |   |      |      |
| New York State... number...  | 456,303 | 466,357    | 475,753 | 475,043   | 472,054   | 469,125 | 457,275 | -0.6                                  | +2.6    |  |                             |   |      |      |
| Oklahoma... number...  | 31,137  | 30,812     | 31,960  |           |           |         | 25,615  |                                       |         |  |                             |   |      |      |
| Ohio... rel. to 1923...  | 106     | 109        | 110     | 110       | 109       | 108     | 97      | -0.9                                  | +11.3   |  |                             |   |      |      |
| Total pay roll:  |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| New York State (weekly)...thous. of dolls...   | 13,411  | 13,862     | 14,168  | 14,094    | 14,217    | 13,938  | 13,361  | -2.0                                  | +4.3    |  |                             |   |      |      |
| Oklahoma (weekly)...thous. of dolls...   | 877     | 865        | 868     |           |           |         | 685     |                                       |         |  |                             |   |      |      |
| Wisconsin... rel. to 1923...   | 108.7   | 106.5      | 110.2   | 107.3     |           |         | 88.9    |                                       |         |  |                             |   |      |      |
| New York State... rel. to 1923...  | 89.0    | 92.0       | 94.0    | 93.5      | 94.3      | 92.5    | 88.6    | -1.9                                  | +4.4    |  |                             |   |      |      |
| New Jersey... rel. to 1923...  | 99      | 102        | 105     | 107       | 110       | 108     | 98      | -1.8                                  | +10.2   |  |                             |   |      |      |
| Pennsylvania... rel. to 1923...  | 83      | 83         | 87      | 85        | 85        | 82      | 79      | -3.5                                  | +3.8    |  |                             |   |      |      |
| Delaware... rel. to 1923...  | 76      | 77         | 78      | 77        | 82        | 79      | 76      | -3.7                                  | +3.9    |  |                             |   |      |      |
| Employment, Canada... rel. to Jan. 1920...   | 119.5   | 118.9      | 119.1   | 116.7     |           |         | 100.8   |                                       |         |  |                             |   |      |      |
| Ohio construction... rel. to 1923...   | 139.4   | 135.0      | 137.7   | 128.1     | 108.7     | 89.3    | 79.6    | -17.8                                 | +12.2   |  |                             |   |      |      |
| Employment, trade-unions:  |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| United States... per cent of total...  | 91.0    | 90.0       | 91.0    | 90.0      | 87.0      | 85.0    | 82.2    | -2.3                                  | +3.4    |  |                             |   |      |      |
| Canada... per cent of total...   | 97.6    | 97.8       | 96.9    | 95.8      | 93.4      |         | 93.2    |                                       |         |  |                             |   |      |      |
| Anthracite mines:  |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| Employment... rel. to 1923-25...   | 107.9   | 110.8      | 112.8   | 113.4     | 114.6     |         | 120.2   |                                       |         |  |                             |   |      |      |
| Pay roll... rel. to 1923-25...   | 86.7    | 92.5       | 119.8   | 108.8     | 106.8     |         | 98.7    |                                       |         |  |                             |   |      |      |
| Federal civilian employees, Wash- ington, D. C., end of month...   | 62,111  | 62,010     | 62,016  | 62,244    | 62,140    |         | 60,743  |                                       |         |  |                             |   |      |      |
| Average weekly earnings, factories:  |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| Illinois... dolls...   | 29.13   | 28.31      | 28.57   | 28.38     | 29.55     |         | 27.49   |                                       |         |  |                             |   |      |      |
| New York State... dolls...   | 29.39   | 29.72      | 29.78   | 29.67     | 30.12     | 29.71   | 29.22   | -1.4                                  | +1.7    |  |                             |   |      |      |
| Wisconsin... dolls...  | 26.60   | 26.30      | 27.25   | 26.87     | 28.40     |         | 23.60   |                                       |         |  |                             |   |      |      |
| Oklahoma... dolls...   | 28.15   | 28.08      | 27.16   |           |           |         | 26.73   |                                       |         |  |                             |   |      |      |
| Massachusetts... rel. to 1914...   | 234.4   | 230.9      | 230.2   | 225.6     | 229.9     | 225.8   | 232.1   | -1.8                                  | -2.7    |  |                             |   |      |      |
| New York... rel. to 1914...  | 235.5   | 238.1      | 238.6   | 237.7     | 241.3     | 238.1   | 234.1   | -1.3                                  | +1.7    |  |                             |   |      |      |
| New Jersey... rel. to 1923...  | 109     | 110        | 112     | 111       | 113       | 112     | 109     | -0.9                                  | +2.8    |  |                             |   |      |      |
| Pennsylvania... rel. to 1923...  | 102     | 101        | 106     | 104       | 105       | 102     | 98      | -2.9                                  | +4.1    |  |                             |   |      |      |
| Delaware... rel. to 1923...  | 102     | 101        | 104     | 103       | 108       | 104     | 100     | -3.7                                  | +4.0    |  |                             |   |      |      |
| Illinois... rel. to 1923...  | 107.6   | 104.6      | 105.5   | 104.8     | 109.2     |         | 101.6   |                                       |         |  |                             |   |      |      |
| Wisconsin... rel. to 1923...   | 111.0   | 109.7      | 113.7   | 112.1     | 118.5     |         | 98.4    |                                       |         |  |                             |   |      |      |
| Average weekly earnings (National Industrial Conference Board)   |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| Grand total (both sexes)...dollars...  | 27.35   | 27.76      | 27.76   | 27.42     | 27.73     |         | 27.24   |                                       |         |  |                             |   |      |      |
| Total male...dollars...  | 30.30   | 30.93      | 30.70   | 29.75     | 30.06     |         | 29.80   |                                       |         |  |                             |   |      |      |
| Skilled male...dollars...  | 31.77   | 32.42      | 35.26   | 31.21     | 31.47     |         | 31.22   |                                       |         |  |                             |   |      |      |
| Unskilled male...dollars...  | 24.78   | 25.27      | 24.72   | 24.34     | 24.76     |         | 24.66   |                                       |         |  |                             |   |      |      |
| Total women...dollars...   | 17.04   | 17.33      | 17.34   | 17.16     | 17.24     |         | 17.23   |                                       |         |  |                             |   |      |      |
| Average weekly hours:  |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| Nominal (both sexes)...hours...  | 49.6    | 49.8       | 49.6    | 49.6      | 49.6      |         | 49.5    |                                       |         |  |                             |   |      |      |
| Actual (both sexes)...hours...   | 47.9    | 48.2       | 48.0    | 47.8      | 48.5      |         | 47.9    |                                       |         |  |                             |   |      |      |
| Wages, road labor, by districts:   |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| New England...cents per hour...  | 48      | 48         | 51      | 50        | 51        | 52      | 53      | +2.0                                  | -1.9    |  |                             |   |      |      |
| Middle Atlantic...cents per hour...  | 41      | 42         | 41      | 41        | 44        | 45      | 48      | +2.3                                  | -6.2    |  |                             |   |      |      |
| South Atlantic...cents per hour...   | 34      | 24         | 26      | 27        | 28        | 23      | 24      | -17.9                                 | -4.2    |  |                             |   |      |      |
| East South Central...cents per hour...   | 25      | 25         | 26      | 27        | 26        | 26      | 25      | 0.0                                   | +4.0    |  |                             |   |      |      |
| West South Central...cents per hour...   | 29      | 26         | 30      | 31        | 30        | 31      | 26      | +3.3                                  | +19.2   |  |                             |   |      |      |
| East North Central...cents per hour...   | 39      | 38         | 40      | 40        | 41        | 45      | 39      | +9.8                                  | +15.4   |  |                             |   |      |      |
| West North Central...cents per hour...   | 38      | 39         | 39      | 40        | 38        | 38      | 37      | 0.0                                   | +2.7    |  |                             |   |      |      |
| Mountain...cents per hour...   | 50      | 52         | 49      | 42        | 46        | 44      | 41      | -4.3                                  | +7.3    |  |                             |   |      |      |
| Pacific...cents per hour...  | 53      | 54         | 54      | 53        | 53        | 52      | 50      | -1.9                                  | +4.0    |  |                             |   |      |      |
| United States, average...cents per hour...   | 42      | 43         | 42      | 42        | 39        | 36      | 37      | -7.7                                  | -2.7    |  |                             |   |      |      |
| Wage rates, U. S. Steel Corp...cents per hour...   | 50      | 50         | 50      | 50        | 50        | 50      | 50      | 0.0                                   | 0.0     |  |                             |   |      |      |
| Wages, steel sheet workers...per cent of base...   | 125.5   | 125.5      | 125.5   | 125.5     | 125.5     | 125.5   | 125.5   | 0.0                                   | 0.0     |  |                             |   |      |      |
| Applicants per 100 jobs, employment agencies:  |         |            |         |           |           |         |         |                                       |         |  |                             |   |      |      |
| United States...number...  | 129     | 107        | 117     | 134       | 100       | 156     | 170     | +56.0                                 | -8.2    |  |                             |   |      |      |
| Eastern States...number...   | 223     | 120        | 128     | 142       | 146       | 154     | 192     | +5.5                                  | -19.8   |  |                             |   |      |      |
| Central States...number...   | 132     | 126        | 133     | 125       | 146       | 164     | 203     | +12.3                                 | -19.2   |  |                             |   |      |      |
| Southern States...number...  | 121     | 91         | 142     | 153       | 193       | 283     | 188     | +46.6                                 | +50.5   |  |                             |   |      |      |
| Western States...number...   | 69      | 63         | 62      | 71        | 69        | 80      | 87      | +15.9                                 | -8.0    |  |                             |   |      |      |
| Canada...number...   | 109     | 98         | 114     | 143       | 135       |         | 161     |                                       |         |  |                             |   |      |      |

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928                         |           |           |           |           | 1929      | 1928    | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |           | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |        |
|--|------------------------------|-----------|-----------|-----------|-----------|-----------|---------|---------------------------------------|-----------------------------|--|-----------|--|--------|
|  | August                       | September | October   | November  | December  | January   | January | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928      |  |        |
| EMPLOYMENT AND WAGES—Contd.  |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Factory Labor Turnover   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| (Percentage of number on pay roll)   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Departures:  |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Total.....   | per cent (annual basis)..... | 42.3      | 50.6      | 41.9      | 35.3      | 29.2      | 34.8    | 27.8                                  | +19.2                       | +25.2  |           |  |        |
| Voluntary quits.....   | per cent (annual basis)..... | 31.9      | 40.3      | 31.9      | 25.6      | 20.1      | 25.1    | 15.9                                  | +24.9                       | +57.9  |           |  |        |
| Lay offs.....  | per cent (annual basis)..... | 5.1       | 5.0       | 4.7       | 4.8       | 4.7       | 4.7     | 8.3                                   | 0.0                         | -43.4  |           |  |        |
| Discharges.....  | per cent (annual basis)..... | 5.3       | 5.3       | 5.3       | 4.9       | 4.4       | 5.0     | 3.6                                   | +13.6                       | +38.9  |           |  |        |
| Accessions.....  | per cent (annual basis)..... | 55.7      | 56.9      | 57.1      | 50.1      | 38.1      | 56.2    | 33.4                                  | +47.5                       | +68.3  |           |  |        |
| Industrial disputes:   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Disputes.....  | number.....                  | 59        | 48        | 43        | 45        | 42        |         | 62                                    |                             |  |           |  |        |
| Workers involved.....  | number.....                  | 129,210   | 63,650    | 41,420    | 39,665    | 39,713    |         | 81,676                                |                             |  |           |  |        |
| Man-days lost in month.....  | number.....                  | 3,577,599 | 2,605,713 | 1,304,647 | 1,304,285 | 1,016,427 |         | 2,135,092                             |                             |  |           |  |        |
| DISTRIBUTION MOVEMENT  |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Retail Sales   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Mail-order houses:   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Total sales, 2 houses.....   | thous. of dolls.....         | 45,944    | 50,814    | 63,587    | 61,628    | 74,386    | 47,400  | 37,465                                | -36.3                       | +26.5  | 495,304   | 579,328  | +17.0  |
| Sears, Roebuck & Co.....   | thous. of dolls.....         | 28,986    | 30,004    | 37,002    | 36,172    | 42,434    | 29,271  | 24,240                                | -31.0                       | +20.8  | 292,901   | 346,973  | +18.5  |
| Montgomery Ward & Co.....  | thous. of dolls.....         | 17,008    | 20,810    | 26,585    | 25,456    | 31,952    | 18,129  | 13,225                                | -43.3                       | +37.1  | 202,403   | 232,355  | +14.8  |
| Ten-cent chain stores:   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Total sales (4 chains).....  | thous. of dolls.....         | 41,050    | 42,906    | 48,992    | 46,799    | 89,445    | 33,512  | 31,895                                | -62.5                       | +5.1   | 503,916   | 539,757  | +7.1   |
| Total stores operated (4 chains).....  | number.....                  | 2,552     | 2,586     | 2,615     | 2,637     | 2,655     | 2,659   | 2,431                                 | +0.2                        | +9.4   |           |  |        |
| F. W. Woolworth & Co.....  | thous. of dolls.....         | 21,812    | 22,637    | 26,895    | 24,660    | 45,439    | 17,658  | 17,108                                | -61.1                       | +3.2   | 272,752   | 287,317  | +5.3   |
| Stores operated.....   | number.....                  | 1,675     | 1,698     | 1,718     | 1,725     | 1,727     | 1,728   | 1,591                                 | +0.1                        | +8.6   |           |  |        |
| S. S. Kresge Co.....   | thous. of dolls.....         | 11,272    | 11,914    | 12,925    | 13,034    | 24,844    | 9,019   | 8,658                                 | -63.7                       | +4.2   | 133,767   | 147,363  | +10.2  |
| Stores operated.....   | number.....                  | 468       | 474       | 481       | 492       | 506       | 509     | 436                                   | +0.6                        | +16.7  |           |  |        |
| McCrorry Stores Corp.....  | thous. of dolls.....         | 3,116     | 3,344     | 3,471     | 3,444     | 7,216     | 2,692   | 2,369                                 | -62.7                       | +13.6  | 39,336    | 41,031   | +4.3   |
| Stores operated.....   | number.....                  | 224       | 224       | 224       | 226       | 228       | 229     | 221                                   | +0.4                        | +3.6   |           |  |        |
| S. H. Kress & Co.....  | thous. of dolls.....         | 4,850     | 5,011     | 5,701     | 5,661     | 11,946    | 4,143   | 3,760                                 | -65.3                       | +10.2  | 58,061    | 65,046   | +12.0  |
| Stores operated.....   | number.....                  | 185       | 190       | 192       | 194       | 194       | 193     | 183                                   | -0.5                        | +5.5   |           |  |        |
| Metropolitan.....  | thous. of dolls.....         | 985       | 1,116     | 1,232     | 1,271     | 2,774     | 798     | 692                                   | -71.2                       | +15.3  | 12,271    | 13,559   | +10.5  |
| Stores operated.....   | number.....                  | 97        | 100       | 104       | 106       | 109       | 109     | 91                                    | 0.0                         | +19.8  |           |  |        |
| F. & W. Grand.....   | thous. of dolls.....         | 1,236     | 1,443     | 1,756     | 1,719     | 3,388     | 1,096   | 800                                   | -67.7                       | +37.0  | 12,882    | 17,160   | +33.2  |
| Stores operated.....   | number.....                  | 74        | 76        | 80        | 81        | 82        | 82      | 62                                    | 0.0                         | +32.3  |           |  |        |
| W. T. Grant Co.....  | thous. of dolls.....         | 3,996     | 4,708     | 5,418     | 5,515     | 10,328    | 3,328   | 2,624                                 | -67.8                       | +26.8  | 43,325    | 54,988   | +26.9  |
| Stores operated.....   | number.....                  | 191       | 199       | 203       | 207       | 213       | 221     | 158                                   | +3.8                        | +39.9  |           |  |        |
| Restaurant chains:   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Total sales (3 chains).....  | thous. of dolls.....         | 4,577     | 4,590     | 4,802     | 4,617     | 4,987     | 4,704   | 4,808                                 | -5.7                        | -2.2   | 58,111    | 55,576   | -4.4   |
| Stores operated.....   | number.....                  | 369       | 366       | 367       | 369       | 371       | 372     | 369                                   | +0.3                        | +0.8   |           |  |        |
| Average per store.....   | dollars.....                 | 12,404    | 12,541    | 13,084    | 12,512    | 13,442    | 12,645  | 13,019                                | -5.9                        | -2.9   |           |  |        |
| Childs Co., sales.....   | thous. of dolls.....         | 2,217     | 2,190     | 2,266     | 2,160     | 2,369     | 2,184   | 2,346                                 | -7.8                        | -6.9   | 28,802    | 26,376   | -8.4   |
| Waldorf System (Inc.), sales.....  | thous. of dolls.....         | 1,170     | 1,215     | 1,267     | 1,250     | 1,363     | 1,296   | 1,227                                 | -4.9                        | +5.6   | 14,960    | 14,622   | -2.3   |
| J. R. Thompson Co. sales.....  | thous. of dolls.....         | 1,190     | 1,185     | 1,269     | 1,207     | 1,255     | 1,224   | 1,235                                 | -2.5                        | -0.9   | 14,349    | 14,585   | +1.6   |
| Other chain stores:  |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Isaac Silver & Bros.....   | thous. of dolls.....         | 460       | 512       | 610       | 632       | 1,305     | 365     | 312                                   | -72.0                       | +17.0  | 5,611     | 6,658  | +18.7  |
| Stores operated.....   | number.....                  | 26        | 29        | 30        | 31        | 31        | 31      | 22                                    | 0.0                         | +40.9  |           |  |        |
| Hartman Corporation.....   | thous. of dolls.....         | 1,416     | 2,192     |           |           |           |         | 907                                   |                             |  |           |  |        |
| Stores operated.....   | number.....                  | 19        | 19        |           |           |           |         | 19                                    |                             |  |           |  |        |
| J. C. Penny Co.....  | thous. of dolls.....         | 12,886    | 16,477    | 19,443    | 19,301    | 25,104    | 8,621   | 7,729                                 | -65.7                       | +11.5  | 151,964   | 176,666  | +16.3  |
| Stores operated.....   | number.....                  | 981       | 1,006     | 1,020     | 1,021     | 1,023     | 1,023   | 914                                   | 0.0                         | +11.9  |           |  |        |
| United Cigar Stores Co.....  | thous. of dolls.....         | 6,627     | 6,622     | 6,797     | 6,816     | 9,700     | 5,736   | 5,562                                 | -40.9                       | +3.1   | 80,179    | 80,903   | +0.9   |
| Stores operated.....   | number.....                  | 3,271     | 3,288     | 3,315     | 3,227     | 3,348     | 3,331   | 3,151                                 | -0.5                        | +5.7   |           |  |        |
| A. Schulte (Inc.).....   | thous. of dolls.....         | 1,912     | 1,962     | 1,955     | 1,935     | 2,995     | 1,665   | 1,826                                 | -44.4                       | -8.8   | 29,040    | 24,512   | -15.6  |
| Stores operated.....   | number.....                  | 300       | 299       | 298       | 299       | 299       | 300     | 300                                   | +0.3                        | 0.0  |           |  |        |
| G. C. Murphy Co.....   | thous. of dolls.....         | 873       | 1,046     | 1,056     | 1,132     | 2,450     | 814     | 598                                   | -66.8                       | +36.1  | 10,224    | 12,119   | +18.5  |
| Stores operated.....   | number.....                  | 118       | 119       | 120       | 130       | 133       | 133     | 113                                   | 0.0                         | +17.7  |           |  |        |
| Installment sales in New England dept. stores; ratio to total sales.....   | per cent.....                | 12.1      | 8.2       | 9.0       | 7.5       | 6.2       |         | 8.6                                   |                             |  |           |  |        |
| Advertising  |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Magazine advertising.....  | thous. of lines.....         | 1,755     | 2,279     | 2,871     | 2,845     | 2,580     | 2,093   | 1,954                                 | -18.9                       | +7.1   | 29,889    | 29,532   | -1.2   |
| Newspaper advertising.....   | thous. of lines.....         | 83,354    | 99,897    | 112,783   | 110,012   | 105,516   | 97,443  | 94,156                                | -7.7                        | +3.5   | 1,115,229 | 1,194,284  | +7.1   |
| Air mail, weight dispatched.....   | pounds.....                  | 419,047   | 423,991   | 465,635   | 424,465   | 541,561   |         | 144,289                               |                             |  | 1,065,498 | 3,542,232  | -232.4 |
| Postal Business  |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Postal receipts:   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| 50 selected cities.....  | thous. of dolls.....         | 27,951    | 29,261    | 34,196    | 31,713    | 39,972    | 31,615  | 30,579                                | -20.9                       | +3.4   | 376,039   | 377,344  | +0.3   |
| 50 industrial cities.....  | thous. of dolls.....         | 3,115     | 3,074     | 3,583     | 3,202     | 4,331     | 3,466   | 3,438                                 | -20.0                       | +0.8   | 40,312    | 40,569   | +0.6   |
| Money orders:  |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Domestic paid (50 cities)—   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Quantity.....  | number.....                  | 10,183    | 9,748     | 12,020    | 11,591    | 12,841    | 10,967  | 10,468                                | -14.6                       | +4.8   | 133,434   | 132,579  | -0.6   |
| Value.....   | thous. of dolls.....         | 81,180    | 79,877    | 99,310    | 94,191    | 100,025   | 83,154  | 78,220                                | -16.9                       | +6.3   | 1,037,893 | 1,036,095  | -0.2   |
| Domestic issued (50 cities)—   |                              |           |           |           |           |           |         |                                       |                             |  |           |  |        |
| Quantity.....  | number.....                  | 3,165     | 2,879     | 3,669     | 3,480     | 3,950     | 3,626   | 3,416                                 | -8.2                        | +6.1   | 39,508    | 41,103   | +4.0   |
| Value.....   | thous. of dolls.....         | 32,886    | 32,382    | 37,554    | 35,711    | 39,046    | 36,025  | 34,117                                | -7.7                        | +5.6   | 408,719   | 417,831  | +2.2   |

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928    |           |         |          |           | 1929      | 1928    | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |            | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|---------|-----------|---------|----------|-----------|-----------|---------|---------------------------------------|-----------------------------|--|------------|--|
|  | August  | September | October | November | December  | January   | January | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928       |  |
|  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| <b>BANKING AND FINANCE</b>   |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| <b>Life Insurance</b>  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| <i>(Association of Life Insurance Presidents)</i>  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Amount of new insurance (45 companies):  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Ordinary.....thous. of dolls.  | 626,594 | 534,112   | 659,844 | 667,633  | 810,127   | 659,843   | 580,462 | -18.6                                 | +13.7                       | 7,804,406                                    | 8,199,375  | +5.1   |
| Industrial.....thous. of dolls.  | 193,365 | 198,949   | 233,530 | 202,948  | 246,045   | 265,998   | 236,303 | +8.1                                  | +12.6                       | 2,667,333                                    | 2,692,522  | +0.9   |
| Group.....thous. of dolls.   | 56,926  | 277,943   | 72,119  | 53,569   | 224,330   | 98,637    | 46,841  | -56.0                                 | +110.6                      | 824,372                                      | 1,366,328  | +65.7  |
| Total insurance.....thous. of dolls.   | 876,885 | 1,011,004 | 965,493 | 924,150  | 1,280,502 | 1,024,478 | 863,606 | -20.0                                 | +18.6                       | 11,296,111                                   | 12,288,225 | +8.8   |
| Premium collections (45 companies):  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Ordinary.....thous. of dolls.  | 143,386 | 135,743   | 154,489 | 155,032  | 181,752   | 160,867   | 148,947 | -11.5                                 | +8.0                        | 1,740,316                                    | 1,873,934  | +7.7   |
| Industrial.....thous. of dolls.  | 50,228  | 49,343    | 55,691  | 49,154   | 96,864    | 53,806    | 54,564  | -44.5                                 | -1.4                        | 602,264                                      | 662,506    | +10.0  |
| Group.....thous. of dolls.   | 5,705   | 5,738     | 6,447   | 6,577    | 7,078     | 8,938     | 7,618   | +26.3                                 | +17.3                       | 65,045                                       | 87,979     | +35.3  |
| Total.....thous. of dolls.   | 199,319 | 190,824   | 216,627 | 210,763  | 285,694   | 223,611   | 211,129 | -21.7                                 | +5.9                        | 2,407,625                                    | 2,624,419  | +9.0   |
| Admitted life insurance assets (41 companies):   |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Grand total.....mills. of dolls.   | 12,406  | 12,510    | 12,634  | 12,742   |           |           | 11,704  |                                       |                             |  |            |  |
| Mortgage loans—  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Total.....mills. of dolls.   | 5,382   | 5,429     | 5,484   | 5,517    |           |           | 5,103   |                                       |                             |  |            |  |
| Farm.....mills. of dolls.  | 1,602   | 1,604     | 1,606   | 1,603    |           |           | 1,615   |                                       |                             |  |            |  |
| All other.....mills. of dolls.   | 3,780   | 3,825     | 3,878   | 3,914    |           |           | 3,488   |                                       |                             |  |            |  |
| Bonds and stocks (book value):   |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Total.....mills. of dolls.   | 4,704   | 4,718     | 4,752   | 4,816    |           |           | 4,417   |                                       |                             |  |            |  |
| Government.....mills. of dolls.  | 927     | 930       | 939     | 949      |           |           | 938     |                                       |                             |  |            |  |
| Railroad.....mills. of dolls.  | 2,411   | 2,406     | 2,410   | 2,437    |           |           | 2,311   |                                       |                             |  |            |  |
| Public utility.....mills. of dolls.  | 1,138   | 1,151     | 1,163   | 1,180    |           |           | 1,004   |                                       |                             |  |            |  |
| All other.....mills. of dolls.   | 228     | 231       | 240     | 250      |           |           | 164     |                                       |                             |  |            |  |
| Policy loans and premium notes.....mills. of dolls.  | 1,486   | 1,497     | 1,510   | 1,523    |           |           | 1,383   |                                       |                             |  |            |  |
| <i>(Life Insurance Sales Research Bureau)</i>  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Sales of ordinary life insurance (81 companies):   |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| United States total.....thous. of dolls.   | 702,275 | 578,193   | 764,577 | 722,495  | 886,048   | 709,452   | 609,228 | -19.9                                 | +16.5                       | 8,531,545                                    | 8,936,665  | +4.7   |
| Eastern manuf. dist.....thous. of dolls.   | 273,055 | 218,788   | 316,574 | 296,968  | 352,506   | 305,721   | 261,898 | -13.3                                 | +16.7                       | 3,438,062                                    | 3,648,065  | +6.1   |
| Western manuf. dist.....thous. of dolls.   | 163,568 | 136,379   | 176,739 | 167,479  | 199,625   | 161,832   | 130,338 | -18.9                                 | +24.2                       | 1,898,798                                    | 2,005,524  | +5.6   |
| Western agric. district.....thous. of dolls.   | 104,287 | 90,916    | 112,916 | 104,294  | 132,957   | 100,769   | 90,662  | -24.2                                 | +11.1                       | 1,286,886                                    | 1,345,140  | +4.5   |
| Southern district.....thous. of dolls.   | 86,288  | 71,371    | 85,408  | 81,768   | 108,046   | 72,892    | 68,847  | -32.5                                 | +5.9                        | 1,049,908                                    | 1,055,200  | +0.5   |
| Far western district.....thous. of dolls.  | 75,077  | 60,739    | 72,940  | 71,986   | 92,614    | 68,238    | 57,483  | -26.3                                 | +18.7                       | 857,891                                      | 882,736    | +2.9   |
| Canada total, 15 companies.....thous. of dolls.  | 43,503  | 38,872    | 55,743  | 54,865   | 56,647    | 50,575    | 47,569  | -10.7                                 | +6.3                        | 502,438                                      | 580,674    | +15.6  |
| <i>(Life Insurance Lapses)</i>   |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Total.....rel. to 1925-26.....   |         | 1.98      |         |          | 1.97      |           | 1.107   | -1.0                                  | -9.3                        |  |            |  |
| New England.....rel. to 1925-26.....   |         | 1.103     |         |          | 1.101     |           | 1.104   | -1.9                                  | -2.9                        |  |            |  |
| Middle Atlantic.....rel. to 1925-26.....   |         | 1.109     |         |          | 1.100     |           | 1.112   | -8.3                                  | -10.7                       |  |            |  |
| East No. Central.....rel. to 1925-26.....  |         | 1.104     |         |          | 1.098     |           | 1.114   | -5.8                                  | -14.0                       |  |            |  |
| West No. Central.....rel. to 1925-26.....  |         | 1.89      |         |          | 1.94      |           | 1.98    | +5.6                                  | -4.1                        |  |            |  |
| South Atlantic.....rel. to 1925-26.....  |         | 1.101     |         |          | 1.107     |           | 1.108   | +5.9                                  | -0.9                        |  |            |  |
| East So. Central.....rel. to 1925-26.....  |         | 1.101     |         |          | 1.107     |           | 1.103   | +5.9                                  | +3.9                        |  |            |  |
| West So. Central.....rel. to 1925-26.....  |         | 1.86      |         |          | 1.91      |           | 1.101   | +5.8                                  | -9.9                        |  |            |  |
| Mountain.....rel. to 1925-26.....  |         | 1.96      |         |          | 1.93      |           | 1.115   | -3.1                                  | -19.1                       |  |            |  |
| Pacific.....rel. to 1925-26.....   |         | 1.94      |         |          | 1.94      |           | 1.112   | 0.0                                   | -16.1                       |  |            |  |
| <b>Banking</b>   |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Check payments:  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| New York City.....mills. of dolls.   | 35,102  | 38,726    | 45,189  | 45,469   | 52,727    | 54,719    | 37,884  | +3.8                                  | +44.4                       | 391,557                                      | 500,211    | +27.7  |
| Outside New York City.....mills. of dolls.   | 23,401  | 24,450    | 27,705  | 25,880   | 29,659    | 28,126    | 25,001  | -5.2                                  | +12.5                       | 281,460                                      | 306,195    | +8.8   |
| Canada.....mills. of dolls.  | 1,813   | 1,681     | 2,395   | 2,376    | 2,121     | 2,124     | 1,871   | +0.1                                  | +13.5                       | 19,704                                       | 23,384     | +18.7  |
| Federal reserve banks:   |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Bills discounted.....mills. of dolls.  | 1,039   | 1,026     | 932     | 900      | 1,151     | 821       | 423     | -28.7                                 | +94.1                       |  |            |  |
| Notes in circulation.....mills. of dolls.  | 1,651   | 1,704     | 1,710   | 1,766    | 1,829     | 1,645     | 1,577   | -10.1                                 | +4.3                        |  |            |  |
| Total investments.....mills. of dolls.   | 394     | 545       | 671     | 716      | 738       | 646       | 812     | -12.5                                 | -20.4                       |  |            |  |
| Total reserve.....mills. of dolls.   | 2,765   | 2,751     | 2,773   | 2,722    | 2,719     | 2,835     | 2,971   | +4.3                                  | -4.6                        |  |            |  |
| Total deposits.....mills. of dolls.  | 2,325   | 2,414     | 2,419   | 2,411    | 2,564     | 2,437     | 2,452   | -5.0                                  | -0.6                        |  |            |  |
| Reserved ratio.....per cent.   | 69.5    | 66.8      | 67.2    | 65.2     | 61.9      | 69.4      | 73.7    | +12.1                                 | -5.8                        |  |            |  |
| Federal reserve member banks:  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Total loans and discounts.....mills. of dolls.   | 15,729  | 15,952    | 16,067  | 16,260   | 16,963    | 16,122    | 15,265  | -5.0                                  | +5.6                        |  |            |  |
| Total investments.....mills. of dolls.   | 6,405   | 6,401     | 6,430   | 6,375    | 6,376     | 6,053     | 6,575   | -5.1                                  | -7.9                        |  |            |  |
| Net demand deposits.....mills. of dolls.   | 12,871  | 13,226    | 13,368  | 13,460   | 14,041    | 13,395    | 13,888  | -4.6                                  | -3.5                        |  |            |  |
| Brokers' loans, end of month:  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| To N. Y. Stock Ex. members—  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Total.....mills. of dolls.   | 5,051   | 5,514     | 5,880   | 6,392    | 6,440     | 6,735     | 4,420   | +4.6                                  | +52.4                       |  |            |  |
| Ratio to market value.....per cent.  | 8.80    | 9.29      | 9.62    | 9.66     | 9.54      | 9.48      | 8.99    | -0.6                                  | +5.5                        |  |            |  |
| By New York F. R. member banks.....mills. of dolls.  | 4,235   | 4,570     | 4,907   | 5,290    | 5,330     | 5,559     | 3,816   | +4.3                                  | +45.7                       |  |            |  |
| Interest rates:  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Time loans, 90 days.....per cent.  | 6.25    | 7.00      | 7.13    | 6.93     | 7.38      | 7.75      | 4.38    | +5.0                                  | +76.9                       |  |            |  |
| Call loans, renewal.....per cent.  | 6.87    | 7.26      | 6.98    | 6.67     | 8.60      | 7.05      | 4.24    | -18.0                                 | +66.3                       |  |            |  |
| Prime com. paper (4-6 mos.).....per cent.  | 5.38    | 5.63      | 5.50    | 5.38     | 5.38      | 5.38      | 4.00    | 0.0                                   | +34.5                       |  |            |  |
| Prime bankers' acceptances.....per cent.   | 4.63    | 4.50      | 4.50    | 4.50     | 4.50      | 4.75      | 3.38    | +5.6                                  | +40.5                       |  |            |  |
| N. Y. Fed. Res. Bank (redisc.).....per cent.   | 5.00    | 5.00      | 5.00    | 5.00     | 5.00      | 5.00      | 3.50    | 0.0                                   | +42.9                       |  |            |  |
| Federal land banks.....per cent.   | 5.04    | 5.04      | 5.04    | 5.04     | 5.04      | 5.04      | 5.06    | 0.0                                   | -0.4                        |  |            |  |
| Intermediate credit banks.....per cent.  | 4.84    | 5.12      | 5.24    | 5.31     | 5.33      | 5.33      | 4.50    | 0.0                                   | +18.4                       |  |            |  |
| Deposits, New York State savings banks, end of month.....mills. of dolls.  | 4,299   | 4,352     | 4,345   | 4,334    | 4,406     | 4,410     | 4,193   | +0.1                                  | +5.1                        |  |            |  |
| <b>Public Finance</b>  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Government debt, gross, end mo. mills. of dolls.   | 17,648  | 17,367    | 17,544  | 17,493   | 17,310    | 17,379    | 18,050  | +0.4                                  | -3.7                        |  |            |  |
| Customs receipts.....thous. of dolls.  | 52,797  | 50,410    | 59,741  | 48,436   | 45,803    | 45,549    | 41,975  | -0.6                                  | +8.5                        | 591,946                                      | 565,500    | -4.5   |
| Total ordinary receipts.....thous. of dolls.   | 173,495 | 557,398   | 187,627 | 145,156  | 649,105   | 163,889   | 168,840 | -74.8                                 | -2.9                        | 4,087,815                                    | 3,920,048  | -4.1   |
| Expenditures chargeable to ordinary receipts.....thous. of dolls.  | 308,594 | 482,600   | 368,653 | 213,629  | 384,019   | 371,595   | 349,142 | -3.2                                  | +6.4                        | 3,604,775                                    | 3,755,205  | +4.2   |
| U. S. money in circulation:  |         |           |         |          |           |           |         |                                       |                             |  |            |  |
| Daily average.....mills. of dolls.   | 4,743   | 4,804     | 4,837   | 4,860    | 5,008     | 4,748     | 4,785   | -5.2                                  | -0.8                        |  |            |  |

\* Quarter ending in month indicated.

\* Quarter ending Dec. 31, 1927.

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928    |           |         |          |          | 1929    | 1928    | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |            | Per. ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|---------|-----------|---------|----------|----------|---------|---------|---------------------------------------|-----------------------------|--|------------|---|
|  | August  | September | October | November | December | January | January | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928       |   |
| BANKING AND FINANCE—Continued.   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Gold and Silver  |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Gold:  |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Domestic receipts at mint..... fine ounces..   | 98,769  | 83,247    | 121,539 | 102,893  | 77,220   | 68,042  | 73,624  | -11.9                                 | -7.6                        | 972,927                                      | 981,313    | +0.9  |
| Rand output..... fine ounces..   | 891,863 | 857,731   | 897,720 | 872,484  | 859,761  | 876,452 | 843,857 | +1.9                                  | +3.9                        | 10,130,630                                   | 10,358,596 | +2.3  |
| Monetary stock of U. S.—   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| daily average..... mills. of dolls..   | 4,118   | 4,125     | 4,133   | 4,151    | 4,142    | 4,115   | 4,377   | -0.7                                  | -6.0                        |  |            |   |
| Imports..... thous. of dolls..   | 2,445   | 4,273     | 14,331  | 29,591   | 24,950   | 48,577  | 38,320  | +94.7                                 | +26.8                       | 195,022                                      | 188,298    | -13.4   |
| Exports..... thous. of dolls..   | 1,698   | 3,810     | 4,992   | 22,916   | 1,636    | 1,378   | 52,086  | -15.8                                 | -97.4                       | 201,455                                      | 560,760    | +178.4  |
| Silver:  |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Production—  |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| United States..... thous. of fine oz..   | 4,776   | 4,087     | 4,352   | 4,756    | 5,273    | 4,909   | 4,980   | -6.9                                  | -1.4                        | 59,412                                       | 56,149     | -5.5  |
| Canada..... thous. of fine oz..  | 2,252   | 2,177     | 2,051   | 1,459    | 1,815    | 1,747   | 1,433   | -3.7                                  | +21.9                       | 20,761                                       | 20,328     | -2.1  |
| Stocks, end of month—  |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| United States..... thous. of fine oz..   | 263     | 872       | 856     | 905      | 1,011    | 594     | 574     | -41.2                                 | +3.5                        |  |            |   |
| Canada..... thous. of fine oz..  | 720     | 1,457     | 718     | 346      | 1,011    | 334     | 1,141   | -67.0                                 | -70.7                       |  |            |   |
| Imports..... thous. of dolls..   | 6,496   | 5,739     | 7,319   | 5,448    | 5,120    | 8,260   | 6,305   | +61.3                                 | +31.0                       | 55,073                                       | 68,119     | +23.7   |
| Exports..... thous. of dolls..   | 9,246   | 6,229     | 7,252   | 7,674    | 8,489    | 8,264   | 6,692   | -2.7                                  | +23.5                       | 75,624                                       | 87,381     | +15.5   |
| Price at New York..... dolls. per fine oz..  | .589    | .575      | .581    | .580     | .573     | .570    | .571    | -0.5                                  | -0.2                        |  |            |   |
| Business Failures  |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Liabilities:   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Total commercial..... thous. of dolls..  | 58,202  | 33,957    | 34,990  | 40,601   | 40,774   | 53,877  | 47,634  | +32.1                                 | +13.1                       | 520,105                                      | 486,559    | -6.4  |
| Manufacturing establishments..... thous. of dolls..  | 16,877  | 14,727    | 13,490  | 15,446   | 17,783   | 16,690  | 14,871  | -6.1                                  | +12.2                       | 211,506                                      | 182,478    | -13.7   |
| Trade establishments..... thous. of dolls..  | 19,096  | 13,567    | 17,268  | 17,224   | 18,933   | 32,024  | 26,446  | +69.1                                 | +21.1                       | 228,194                                      | 225,301    | -1.3  |
| Agents and brokers..... thous. of dolls..  | 22,229  | 5,662     | 4,232   | 7,932    | 4,059    | 5,164   | 6,318   | +27.2                                 | -18.3                       | 80,405                                       | 81,781     | +1.7  |
| Banks (quarterly)..... thous. of dolls..   |         | 20,810    |         |          | 43,085   |         | 30,545  | +107.0                                | +41.1                       | 143,449                                      | 129,650    | -9.6  |
| Liabilities (Canada)..... thous. of dolls..  | 2,589   | 2,572     | 2,504   | 3,287    | 3,065    | 2,241   | 3,249   | -26.9                                 | -31.0                       | 25,287                                       | 36,457     | +44.2   |
| Firms:   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Total commercial..... number..   | 1,852   | 1,635     | 2,023   | 1,838    | 1,943    | 2,535   | 2,643   | +30.5                                 | -4.1                        | 23,146                                       | 23,942     | +3.4  |
| Manufacturing establishments..... number..   | 493     | 454       | 528     | 519      | 498      | 614     | 553     | +23.3                                 | +11.0                       | 5,682  | 5,924      | +4.3  |
| Trade establishments..... number..   | 1,241   | 1,073     | 1,369   | 1,202    | 1,324    | 1,769   | 1,946   | +33.6                                 | -9.1                        | 16,082                                       | 16,471     | +2.4  |
| Agents and brokers..... number..   | 112     | 108       | 126     | 117      | 121      | 152     | 144     | +25.6                                 | +5.6                        | 1,382  | 1,441      | +4.3  |
| Banks (quarterly)..... number..  |         | 255       |         |          | 116      |         | 84      | +110.9                                | +38.1                       | 394  | 372        | -5.6  |
| Firms (Canada)..... number..   | 135     | 120       | 159     | 174      | 214      | 185     | 210     | -13.6                                 | -11.9                       | 2,016  | 1,875      | -7.0  |
| By groups:   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Manufacturers—   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Metals..... number..   | 36      | 35        | 33      | 46       | 30       | 30      | 35      | 0.0                                   | -14.3                       | 374  | 443        | +18.4   |
| Textiles..... number..   | 59      | 74        | 79      | 85       | 69       | 75      | 74      | +8.7                                  | +1.4                        | 703  | 793        | +12.8   |
| Lumber..... number..   | 60      | 73        | 94      | 105      | 107      | 92      | 81      | -14.0                                 | +13.6                       | 850  | 970        | +14.1   |
| Chemicals..... number..  | 4       | 8         | 13      | 6        | 13       | 11      | 3       | -15.4                                 | +266.7                      | 75   | 98         | +30.7   |
| Printing and engraving..... number..   | 22      | 6         | 18      | 9        | 11       | 25      | 21      | +127.3                                | +19.0                       | 264  | 172        | -34.8   |
| Foodstuffs..... number..   | 51      | 24        | 47      | 29       | 46       | 47      | 43      | +2.2                                  | +9.3                        | 461  | 496        | +7.6  |
| Leather, etc..... number..   | 8       | 15        | 14      | 18       | 8        | 24      | 14      | +200.0                                | +71.4                       | 140  | 157        | +12.1   |
| Liquors and tobacco..... number..  | 6       | 4         | 6       | 12       | 6        | 9       | 7       | +50.0                                 | +28.6                       | 104  | 75         | -27.9   |
| Stone, clay, and glass..... number..   | 10      | 3         | 7       | 7        | 6        | 15      | 10      | +150.0                                | +50.0                       | 91   | 94         | +3.3  |
| All other..... number..  | 237     | 212       | 217     | 202      | 202      | 286     | 265     | +41.6                                 | -7.9                        | 2,620  | 2,626      | +0.2  |
| Traders—   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| General stores..... number..   | 54      | 60        | 87      | 100      | 104      | 116     | 100     | +11.5                                 | +16.0                       | 1,214  | 1,042      | -14.2   |
| Foods and tobacco..... number..  | 423     | 376       | 503     | 412      | 441      | 499     | 521     | +13.2                                 | -4.2                        | 4,821  | 5,153      | +6.9  |
| Clothing..... number..   | 210     | 168       | 225     | 200      | 250      | 351     | 446     | +40.4                                 | -21.3                       | 2,978  | 3,153      | +5.9  |
| Household furniture..... number..  | 171     | 187       | 190     | 157      | 219      | 374     | 368     | +70.8                                 | +1.6                        | 2,758  | 2,768      | +0.4  |
| Chemicals and paints..... number..   | 71      | 43        | 78      | 62       | 65       | 66      | 99      | +1.5                                  | -33.3                       | 799  | 803        | +0.5  |
| Books and paper..... number..  | 11      | 13        | 10      | 14       | 5        | 17      | 23      | +240.0                                | -26.1                       | 142  | 144        | +1.4  |
| All other..... number..  | 307     | 226       | 276     | 257      | 240      | 346     | 389     | +44.2                                 | -11.1                       | 3,370  | 3,405      | +1.0  |
| Dividend and Interest Payments   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Grand total..... thous. of dolls..   | 333,400 | 408,600   | 586,750 | 400,560  | 566,500  | 853,575 | 753,200 | +50.7                                 | +13.3                       | 5,580,548                                    | 5,907,911  | +5.9  |
| Interest payments..... thous. of dolls..   | 182,000 | 262,500   | 388,600 | 234,220  | 382,100  | 516,375 | 460,600 | +35.1                                 | +12.1                       | 3,471,398                                    | 3,703,924  | +6.7  |
| Dividend payments:   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Total..... thous. of dolls..   | 151,400 | 146,100   | 198,150 | 166,340  | 184,400  | 337,200 | 292,600 | +82.9                                 | +15.2                       | 2,099,150                                    | 2,223,987  | +5.9  |
| Industrial and misc..... thous. of dolls..   | 109,450 | 118,450   | 156,200 | 118,500  | 141,200  | 215,000 | 182,800 | +52.3                                 | +17.6                       | 1,555,475                                    | 1,630,542  | +4.8  |
| Steam railroads..... thous. of dolls..   | 35,200  | 20,400    | 29,400  | 34,900   | 26,900   | 39,100  | 33,800  | +45.4                                 | +15.7                       | 349,500                                      | 365,455    | +4.6  |
| Street railways..... thous. of dolls..   | 6,750   | 7,250     | 12,550  | 12,900   | 16,300   | 22,200  | 21,000  | +36.2                                 | +5.7                        | 124,675                                      | 130,550    | +4.7  |
| Aver. payments on industrial stocks (quarterly)..... dolls. per share..  |         | 9.10      |         |          | 9.25     |         | 8.57    | +1.6                                  | +7.9                        |  |            |   |
| New Security Issues  |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Foreign loans in the U. S..... thous. of dolls..   |         | 108,949   | 65,121  | 102,527  | 59,298   | 28,000  | 158,575 | -52.8                                 | -82.3                       | 1,592,598                                    | 1,426,490  | -10.4   |
| Foreign governments..... thous. of dolls..   |         | 43,500    | 36,750  | 15,000   | 13,000   | 15,750  | 79,808  | +21.2                                 | -80.3                       | 777,126                                      | 648,120    | -16.6   |
| Total corporation..... thous. of dolls..   | 199,426 | 428,184   | 655,604 | 760,629  | 993,328  | 970,276 | 577,073 | -2.3                                  | +68.1                       | 7,301,417                                    | 7,712,112  | +5.6  |
| Purpose of issue—  |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| New capital..... thous. of dolls..   | 180,716 | 391,158   | 600,473 | 702,055  | 931,673  | 827,729 | 412,045 | -11.2                                 | +100.9                      | 5,373,128                                    | 6,008,312  | +11.8   |
| Refunding..... thous. of dolls..   | 18,710  | 37,026    | 55,131  | 58,574   | 61,655   | 142,547 | 165,028 | +131.2                                | -13.6                       | 1,928,189                                    | 1,705,800  | -11.6   |
| Type of security—  |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Stocks..... thous. of dolls..  | 73,892  | 172,047   | 390,610 | 447,080  | 684,681  | 632,738 | 141,045 | -7.6                                  | +348.6                      | 1,756,258                                    | 3,530,651  | +101.0  |
| Bonds and notes..... thous. of dolls..   | 125,534 | 256,137   | 264,994 | 313,549  | 308,647  | 337,538 | 436,028 | +9.4                                  | -22.6                       | 5,545,160                                    | 4,181,464  | -24.6   |
| Class of industry—   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Railroads..... thous. of dolls..   | 13,726  |           | 45,830  | 57,800   | 79,479   | 61,613  | 78,222  | -22.5                                 | -21.2                       | 962,807                                      | 726,740    | -24.5   |
| Public utilities..... thous. of dolls..  | 97,776  | 202,239   | 214,466 | 151,851  | 199,708  | 202,134 | 210,155 | +1.2                                  | -3.8                        | 2,986,503                                    | 2,625,026  | -12.1   |
| Industrials..... thous. of dolls..   | 32,989  | 98,234    | 114,233 | 154,752  | 228,959  | 234,405 | 118,902 | +2.4                                  | +97.1                       | 1,174,984                                    | 1,551,022  | +32.0   |
| Oil..... thous. of dolls..   |         | 7,000     |         | 99,616   | 54,169   | 134,570 | 2,200   | +148.4                                |                             | 425,338                                      | 263,112    | -38.1   |
| Land and buildings..... thous. of dolls..  | 30,256  | 57,517    | 85,627  | 73,745   | 43,492   | 69,009  | 78,741  | +58.7                                 | -12.4                       | 668,992                                      | 809,365    | +21.0   |
| Shipping and misc..... thous. of dolls..   | 44,678  | 70,194    | 163,749 | 222,866  | 362,028  | 17,900  | 74,331  | -95.1                                 | -75.9                       | 1,009,033                                    | 1,688,926  | +67.4   |
| States and municipalities:   |         |           |         |          |          |         |         |                                       |                             |  |            |   |
| Permanent loans..... thous. of dolls..   | 78,445  | 70,170    | 98,233  | 173,824  | 115,451  | 69,766  | 103,139 | -39.6                                 | -32.4                       | 1,478,569                                    | 1,389,129  | -6.0  |
| Temporary loans..... thous. of dolls..   | 63,543  | 73,419    | 82,552  | 14,496   | 26,183   | 20,325  | 73,320  | -22.4                                 | -72.3                       | 624,873                                      | 716,793    | +14.7   |
| Tax-exempt securities outstanding, end of month..... mills. of dolls..   | 16,911  | 16,932    | 17,007  | 17,072   | 17,109   | 17,126  | 16,270  | +0.1                                  | +5.3                        |  |            |   |

2 Quarter ending in month indicated.

3 Quarter ending Dec. 31, 1927.

4 Revised.



## TREND OF BUSINESS MOVEMENTS—Continued

| The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the February, 1929, "Survey" | 1928        |                       |             |             |                       | 1929        | 1928                  | PER CENT INCREASE (+) OR DECREASE (-) |                             | CUMULATIVE TOTAL FROM JAN. 1 THROUGH DEC. 31 |             | Per ct. increase (+) or decrease (-) cumulative 1928 from 1927 |
|--|-------------|-----------------------|-------------|-------------|-----------------------|-------------|-----------------------|---------------------------------------|-----------------------------|--|-------------|--|
|  | August      | September             | October     | November    | December              | January     | January               | Jan., 1929, from Dec., 1928           | Jan., 1929, from Jan., 1928 | 1927   | 1928        |  |
|  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| BANKING AND FINANCE—Continued  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Agricultural Finances  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Loans outstanding, end mo.:  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Federal farm loan banks.....thous. of dolls..  | 1, 187, 365 | 1, 189, 345           | 1, 190, 278 | 1, 191, 724 | 1, 193, 846           | 1, 195, 089 | 1, 158, 717           | +0.1                                  | +3.1                        |  |             |  |
| Joint-stock land banks.....thous. of dolls..   | 608, 706    | 608, 451              | 607, 632    | 605, 595    | 605, 199              | 604, 375    | 608, 798              | -0.1                                  | -0.7                        |  |             |  |
| Federal intermediate credit banks.....thous. of dolls..  | 66, 978     | 68, 619               | 76, 547     | 78, 685     | 81, 277               | 79, 462     | 74, 888               | -2.2                                  | +6.1                        |  |             |  |
| War finance corporation.....thous. of dolls..  | 747         | 583                   | 558         | 497         | 455                   | 445         | 1, 244                | -2.2                                  | -64.2                       |  |             |  |
| Stocks and Bonds   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Stock prices, average daily closing:   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| 25 industrials, average.....dolls. per share..   | 267.16      | 283.99                | 293.51      | 316.15      | 286.66                | 344.17      | 242.25                | +20.1                                 | +42.1                       |  |             |  |
| 25 railroads, average.....dolls. per share..   | 121.57      | 124.82                | 123.40      | 130.07      | 126.10                | 132.40      | 118.29                | +5.0                                  | +11.9                       |  |             |  |
| 103 stocks, average.....dolls. per share..   | 151.24      | 154.87                | 154.95      | 175.63      | 187.33                | 179.25      | 142.13                | -4.3                                  | +26.1                       |  |             |  |
| Southern cotton mills.....dolls. per share..   | 104.82      | 103.31                | 103.19      | 102.58      | 101.97                | 101.04      | 112.25                | -0.9                                  | -10.0                       |  |             |  |
| Stock sales, N. Y. Stock Exch.....thous. of shares..   | 67, 704     | 90, 907               | 99, 077     | 115, 435    | 92, 837               | 110, 804    | 56, 963               | +19.4                                 | +94.5                       | 584, 491                                     | 920, 551    | +57.5  |
| Bond sales:  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Miscellaneous.....thous. of dolls..  | 173, 561    | 190, 582              | 226, 621    | 210, 897    | 190, 010              | 235, 427    | 269, 374              | +23.9                                 | -12.6                       | 3, 390, 462                                  | 2, 783, 471 | -17.9  |
| Liberty-Treasury.....thous. of dolls..   | 9, 988      | 10, 467               | 11, 949     | 10, 569     | 16, 947               | 13, 772     | 20, 864               | -18.7                                 | -34.0                       | 289, 901                                     | 178, 315    | -38.5  |
| Total.....thous. of dolls..  | 183, 549    | 201, 049              | 238, 570    | 221, 466    | 206, 957              | 249, 199    | 290, 238              | +20.4                                 | -14.1                       | 3, 680, 363                                  | 2, 961, 786 | -19.5  |
| Bond prices:   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Highest-grade rails..p. ct. of par, 4% bond..  | 89.66       | 91.05                 | 90.72       | 91.30       | 89.83                 | 90.09       | 97.04                 | +0.3                                  | -7.2                        |  |             |  |
| Second-grade rails..p. ct. of par, 4% bond..   | 80.99       | 82.51                 | 81.98       | 83.11       | 81.87                 | 81.27       | 88.75                 | -0.7                                  | -8.4                        |  |             |  |
| Public utility.....p. ct. of par, 4% bond..  | 79.08       | 79.51                 | 81.12       | 81.30       | 80.34                 | 80.16       | 79.66                 | -0.2                                  | +0.6                        |  |             |  |
| Industrial.....p. ct. of par, 4% bond..  | 77.97       | 78.18                 | 78.34       | 78.57       | 78.23                 | 78.89       | 81.28                 | +0.8                                  | -2.9                        |  |             |  |
| Comb. price index..p. ct. of par, 4% bond..  | 81.68       | 82.53                 | 82.79       | 83.31       | 82.34                 | 82.39       | 86.15                 | +0.1                                  | -4.4                        |  |             |  |
| Bond prices, 1st of following month:   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| 5 Liberty bonds.....p. ct. of par..  | 103.88      | 103.11                | 103.85      | 103.75      | 103.45                | 102.49      | 105.94                | -0.9                                  | -3.3                        |  |             |  |
| 16 foreign govt. and city.....p. ct. of par..  | 104.77      | 104.55                | 104.59      | 104.20      | 103.77                | 104.52      | 105.90                | +0.7                                  | -1.3                        |  |             |  |
| Comb. price index, 66 bonds..p. ct. of par..   | 100.36      | 100.40                | 100.53      | 100.57      | 100.09                | 100.08      | 102.60                | 0.0                                   | -2.5                        |  |             |  |
| Bond yields:   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Municipal (20).....per cent..  | 4.18        | 4.16                  | 4.16        | 4.14        | 4.17                  | 4.19        | 3.87                  | +0.5                                  | +8.3                        |  |             |  |
| U. S. Treasury notes and certificates, 3-6 months.....per cent..   | 4.36        | 4.57                  | 4.70        | 4.25        | 4.35                  | 4.65        | 3.31                  | +6.9                                  | +40.5                       |  |             |  |
| Liberty and Treasury bonds.....per cent..  | 3.56        | 3.54                  | 3.55        | 3.48        | 3.53                  | 3.59        | 3.35                  | +1.7                                  | +7.2                        |  |             |  |
| Long-term real-estate bonds issued:  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Grand total.....thous. of dolls..  | 21, 947     | 52, 116               | 64, 864     | 61, 360     | 37, 952               | 61, 065     | 61, 167               | +60.9                                 | -0.2                        | 570, 742                                     | 682, 265    | +19.5  |
| Purpose of issue—  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Finance construction.....thous. of dolls..   | 9, 970      | 4, 460                | 33, 290     | 12, 590     | 12, 530               | 13, 610     | 32, 759               | +8.6                                  | -58.5                       | 270, 198                                     | 252, 920    | -6.4   |
| Real-estate mortgage.....thous. of dolls..   | 5, 590      | 32, 955               | 11, 898     | 14, 980     | 7, 622                | 11, 245     | 12, 900               | +47.5                                 | -12.8                       | 137, 215                                     | 212, 829    | +55.1  |
| Acquisitions and improvements.....thous. of dolls..  | 3, 252      | 530                   | 1, 509      | 26, 550     | 11, 750               | 26, 200     | 6, 533                | +123.0                                | +301.0                      | 63, 843                                      | 89, 537     | +40.2  |
| Kind of structure—   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Office and commercial.....thous. of dolls..  | 4, 785      | 2, 510                | 15, 018     | 11, 095     | 11, 325               | 12, 535     | 29, 000               | +10.7                                 | -56.8                       | 186, 503                                     | 200, 109    | +7.3   |
| Hotels.....thous. of dolls..   | 2, 200      | 400                   | 9, 900      | 300         |                       |             | 650                   |                                       |                             | 48, 266                                      | 44, 760     | -7.3   |
| Apartments.....thous. of dolls..   | 3, 145      | 270                   | 8, 423      | 1, 970      | 1, 530                | 2, 905      | 4, 309                | +89.9                                 | -32.6                       | 61, 495                                      | 42, 202     | -31.4  |
| Corporation Stockholders   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| (Quarterly)  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Pennsylvania Railroad Co.:   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Domestic.....number..  |             | <sup>2</sup> 154, 415 |             |             | <sup>2</sup> 154, 008 |             | <sup>3</sup> 142, 622 | -0.3                                  | +8.0                        |  |             |  |
| Foreign.....number..   |             | <sup>2</sup> 3, 032   |             |             | <sup>2</sup> 2, 963   |             | <sup>3</sup> 2, 854   | -2.3                                  | +3.8                        |  |             |  |
| U. S. Steel Corp. common stock:  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Domestic.....number..  |             | <sup>2</sup> 102, 457 |             |             | <sup>2</sup> 99, 174  |             | <sup>3</sup> 94, 756  | -3.2                                  | +4.7                        |  |             |  |
| Foreign.....number..   |             | <sup>2</sup> 1, 748   |             |             | <sup>2</sup> 1, 612   |             | <sup>3</sup> 1, 539   | -7.8                                  | +4.7                        |  |             |  |
| Shares held by brokers.....per ct. of total..  |             | <sup>2</sup> 23.95    |             |             | <sup>2</sup> 24.15    |             | <sup>3</sup> 25.11    | +0.8                                  | -3.8                        |  |             |  |
| American Telephone & Telegraph Co.:  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Domestic.....number..  |             | <sup>2</sup> 451, 603 |             |             | <sup>2</sup> 449, 077 |             | <sup>3</sup> 418, 295 | -0.6                                  | +7.4                        |  |             |  |
| Foreign.....number..   |             | <sup>2</sup> 5, 426   |             |             | <sup>2</sup> 5, 432   |             | <sup>3</sup> 5, 247   | +0.1                                  | +3.5                        |  |             |  |
| FOREIGN EXCHANGE RATES   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Europe:  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| England.....dolls. per £ sterling..  | 4.85        | 4.85                  | 4.85        | 4.85        | 4.85                  | 4.85        | 4.88                  | 0.0                                   | -0.6                        |  |             |  |
| France.....dolls. per franc..  | .039        | .039                  | .039        | .039        | .039                  | .039        | .039                  | 0.0                                   | 0.0                         |  |             |  |
| Italy.....dolls. per lira..  | .052        | .052                  | .052        | .052        | .052                  | .052        | .053                  | 0.0                                   | -1.9                        |  |             |  |
| Belgium.....dolls. per franc..   | .139        | .139                  | .139        | .139        | .139                  | .139        | .139                  | 0.0                                   | 0.0                         |  |             |  |
| Netherlands.....dolls. per guilder..   | .401        | .401                  | .401        | .401        | .402                  | .401        | .403                  | -0.2                                  | -0.5                        |  |             |  |
| Sweden.....dolls. per krone..  | .268        | .268                  | .267        | .267        | .268                  | .267        | .269                  | -0.4                                  | -0.7                        |  |             |  |
| Switzerland.....dolls. per franc..   | .193        | .193                  | .192        | .193        | .193                  | .192        | .193                  | -0.5                                  | -0.5                        |  |             |  |
| Asia:  |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Japan.....dolls. per yen..   | .451        | .458                  | .462        | .464        | 4.59                  | 4.56        | .469                  | -0.7                                  | -2.8                        |  |             |  |
| India.....dolls. per rupee..   | .363        | .363                  | .365        | .365        | .365                  | .365        | .367                  | 0.0                                   | -0.5                        |  |             |  |
| America:   |             |                       |             |             |                       |             |                       |                                       |                             |  |             |  |
| Canada.....dolls. per Canadian doll..  | 1.000       | 1.000                 | 1.000       | 1.000       | .998                  | .998        | .998                  | 0.0                                   | 0.0                         |  |             |  |
| Argentina.....dolls. per gold peso..   | .959        | .957                  | .956        | .958        | .958                  | .958        | .971                  | 0.0                                   | -1.3                        |  |             |  |
| Brazil.....dolls. per milreis..  | .119        | .119                  | .120        | .119        | .119                  | .119        | .120                  | 0.0                                   | -0.8                        |  |             |  |
| Chile.....dolls. per paper peso..  | .121        | .121                  | .121        | .121        | .121                  | .121        | .122                  | 0.0                                   | -0.8                        |  |             |  |

<sup>2</sup> Quarter ending in month indicated.<sup>3</sup> Quarter ending Dec. 31, 1927.



## TREND OF BUSINESS MOVEMENTS—Continued

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



## PUBLICATIONS OF THE DEPARTMENT OF COMMERCE

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

### OFFICE OF THE SECRETARY

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

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

**Radio Service Bulletin, January, 1929.** 28 pages. Issued monthly by the Radio Division of the Department of Commerce. Contains list of radio stations and references to current radio literature. Single copies, 5¢; annual subscription, 25¢.

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

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

### BUREAU OF THE CENSUS

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

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

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

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

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

### BUREAU OF FOREIGN AND DOMESTIC COMMERCE

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

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

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

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

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

### BUREAU OF STANDARDS

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

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

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

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

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

### BUREAU OF FISHERIES

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

### BUREAU OF MINES

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

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

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

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

### BUREAU OF NAVIGATION

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

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

### COAST AND GEODETIC SURVEY

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

### LIGHTHOUSE SERVICE

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

### PATENT OFFICE

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

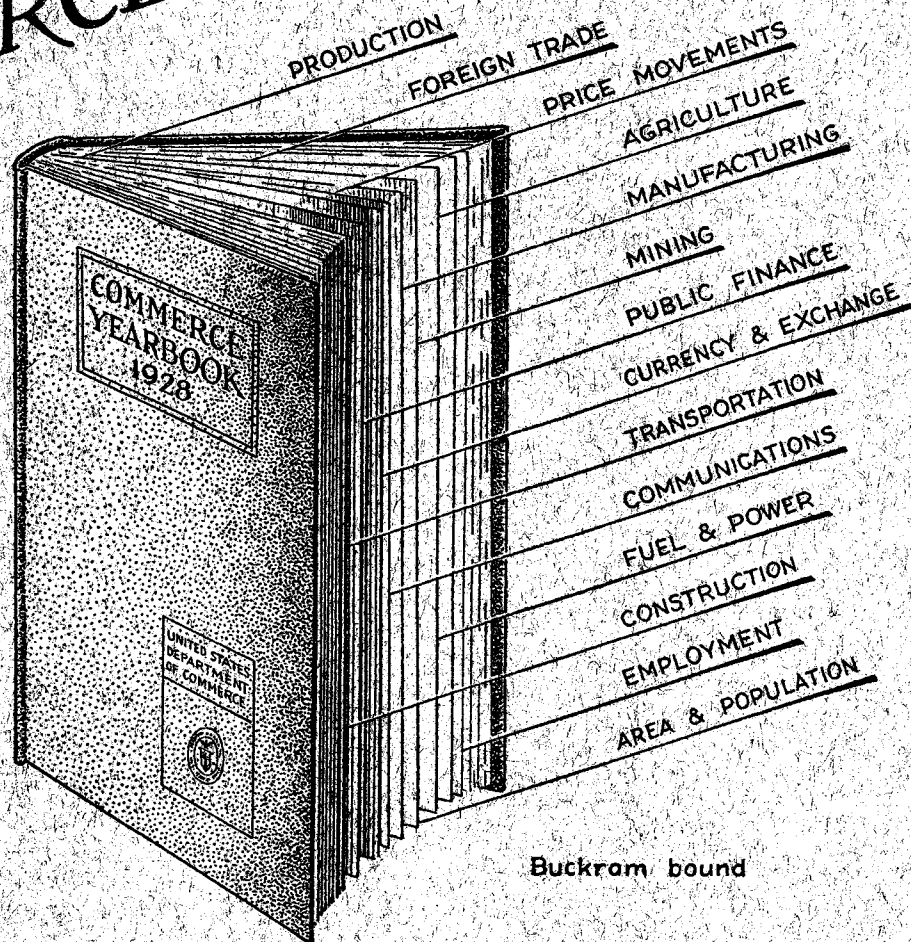
**Index of Trade-Marks Issued from United States Patent Office, 1928.** 648 pages. Contains lists of trade-mark registrants and applicants, labels registrants, and a classified list of trade-marks and prints.

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