# UNITED STATES DEPARTMENT OF COMMERCE WASHINGTON <br> SURVEY OF CURRENT BUSINESS 

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## 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 wohich are noted in the "Sources of Data" on pages 139-142 of the present issue

## INTRODUCTION

The Survey of Current Busingss is designed to present each month a picture of the business situation by setting forth the principal facts regarding the variqus 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 atill 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 ans soon as they appear (see Tables 1 to 117). In the intervening months the more important comparisons only are given in the table entitled "Trend of busihess 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 Surver, 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 kaind 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 númber. 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 Surver 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 nuuber 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 Boor 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 Recond 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 Surver 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.)

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## PRELIMINARY SUMMARY FOR JANUARY

Business during the early weeks of January, as indicated by the volume of check payments, was greater than in the corresponding period of 1928. Steel plants showed greater productive activity in January than in either the previous month or January of the preceding year. Activity in automobile factories, as reflected by Detroit employment, showed considerable expansion over both the previous month and January, 1928. The volume of new building contracts awarded during the early weeks of the month showed only slight change from the corresponding period of the preceding year.

Loans and discounts of Federal reserve member banks showed substantial recession during the month, but were higher than a year ago. Interest rates on call loans averaged lower than in December, while time money rates showed but little change. Rates on both time and call funds were higher than a year ago. The general index of wholesale prices was

[^0]slightly higher than in December and showed a gain of about 2 per cent over January, 1928. Stock prices averaged higher than in either the preeeding month or January of the preceding year. Prices for bonds, reflecting higher interest rates, were lower than in either period. Brokers' loans reached a new high point during the month. The Federal reserve ratio averaged higher than in the preceding month, but was lower than a year ago. Business failures were more numerous than in December, but showed a decline from January, 1928.
The production of lumber was higher than in December, showing a gain also for the early weeks over the corresponding period of 1928. The output of bituminous coal was running higher than in either prior period. Car loadings of freight showed a gain over the corresponding period of 1928. Petroleum production was running higher than in either the previous month or the corresponding period of the preceding year.

## 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, 10 -cent chains, and department stores have been adjusted for seasonal variations, and manufacturing and mineral production for the varying number of working days in the month as well]


## MONTHLY BUSINESS INDICATORS

The principal businesa indicators are ahown below, all calculated on a comparable basis, the average for the years 1923 to 1025, inclusive. Thus the table gives a bird's-eye view of the business aituation 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, art shown with the average seasonal variations eliminated, as noted below. In this manner a more understanding month-to-month comparison may be made.

| HRM | MONTHET ATERAGE |  |  |  |  |  | 1987 |  | 1208 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1028 | 1984 | 1025 | 1926 | 192\% | 1928 | Nov. | Dee. | Jan. | Feb. | Mar | Apr. | Msy | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|  | 1923-1925 monthiy averagem 100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Industrial production: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Total manufacturing | 101.0 | 94.0 | 105.0 | 108.0 | 108.0 | 111.0 | 98.0 | 99.0 | 107.0 | 111.0 | 110.0 | 110.0 | 110.0 | 110.0 | 111.0 | 113.0 | 116.0 | 114.0 | 111.0 | 112.0 |
| - Total minerals. | 105.0 | 96.0 | 99.0 | 107.0 | 107.0 | 106.0 | 101.0 | 103. 0 | 103.0 | 103.0 | 105. 0 | 103.0 | 105. 0 | 99.0 | 101.0 | 105.0 | 1080 | 114.0 | 113.0 | 112.0 |
| Pig iron. | 111.7 | 86.7 | 101.5 | 109.0 | 101.0 | 105. 5 | 88.6 | 90.2 | 96.1 | 97.1 | 107.1 | 106. 6 | 109.9 | 103.1 | 1028 | 105.0 | 1025 | 112.8 | 110.5 | 112.8 |
| Steel ingots | 104.8 | 88.7 | 100.4 | 113. 1 | 104. 6 | 120.2 | 00. 6 | 91.8 | 115.4 | 117.0 | 130.4 | 124. 5 | 121.6 | 108.3 | 110.3 | 120.9 | 120.0 | 134, 8 | 123.2 | 116.1 |
| Automobiles. | 101. 7 | 00.8 | 107.5 | 108. 4 | 85.7 | 109.8 | 40.6 | 40.4 | 70.1 | 97.9 | 125.0 | 124.0 | 128.8 | 120.0 | 118. ${ }^{\text {b }}$ | 139.5 | 125, 6 | 120.1 | 77.7 | 70.5 |
| Cament. | 02.1 | 09.8 | 108. 1 | 110.0 | 116. 8 | 118.0 | 1163 | 96.5 | 78.6 | 70.8 | 82.3 | 108.4 | 139.3 | 140.8 | 140.6 | 160.9 | 143.9 | 141.1 | 124.5 | 88.1 |
| Lumber (5 species). | 88.6 | 96.2 | 105. 2 | 101.5 | 0. 9 |  | 94. 4 | 82.8 | 75.8 | 86.7 | 96.3 | 98. 4 | 101.2 | 97.4 | 927 | 90.4 | 79.1 |  |  |  |
| Cotton (consumption) | 105.9 | 89, 7 | 104. 4 | 108. 8 | 120.2 | 106.8 | 122.1 | 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 |
| Wool (consumption). | 1128 | 04.6 | 226 | 86.7 | 97.0 | 94.7 | 97.8 | 88.0 | 95.2 | 102.0 | 98.7 | 82.0 | 82.7 | 87.1 | 80.4 | 95.2 | 91.8 | 108.6 | 105. 7 | 96.8 |
| Raw materlal ontput: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anlmal products. | 100.0 | 104.0 | 96.0 | 96.0 | 97.0 | 89.0 | 92.0 | 880 | 96.0 | 94.0 | 97.0 | 95.0 | 108.0 | 116.0 | 108.0 | 97.0 | 92, 0 | 102.0 | 93.0 | 92.0 |
| Crops. | 92.0 | 104.0 | 104.0 | 109.0 | 113.0 | 119.0 | 166.0 | 120.0 | 88.0 | 81.0 | 77.0 | 81.0 | 72.0 | 52.0 | 87.0 | 114.0 | 178.0 | 251.0 | 179.0 | 152.0 |
| Forest products. | 09.0 | 97.0 | 104.0 | 98.0 | 93.0 |  | 93.0 | 86.0 | 81.0 | 87.0 | 98.0 | 96.0 | 101.0 | 97.0 | 88.0 | 90.0 | 78.0 | 84.0 |  |  |
| Crude petroleum. | 09.4 | 96.9 | 103.7 | 104. 6 | 122.3 | 122.2 | 121.3 | 122.1 | 117.8 | 110.9 | 122.2 | 117.8 | 122.5 | 118.1 | 122.9 | 128.8 | 124.5 | 129.5 | 123.8 | 129.4 |
| Bituminous coal. | 108.0 | 92.8 | 90. 5 | 1097 | 09.0 | 94.3 | 92.9 | 94.4 | 101. 5 | 94.9 | 100.9 | 739 | 84.1 | 82.6 | 83.3 | 94.4 | 94. 8 | 115.6 | 105. 7 | 99. 6 |
| Copper | 23.4. | 100.2 | 108. 4 | 110.2 | 104. 0 | 114.9 | 103.2 | 101.9 | 103. 8 | 102.2 | 106.6 | 105. 7 | 111.8 | 111.0 | 111.3 | 116.7 | 118.8 | 131.1 | 129.5 | 129.9 |
| Power and construction: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Electric power...... | 92.5 | 08.1 | 109. 6 | 1226 | 183.3 | 146.0 | 137.1 | 143.8 | 1440 | 137.0 | 144. 5 | 180.7 | 142.2 | 139.8 | 142.4 | 149.8 | 145.2 | 158.0 | 154.5 | 156.9 |
| Building contracts (37 8tates) | 89.7 | 92.7 | 117.6 | 111.0 | 106.8 | 121. 4 | 105. 2 | 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 |
| Unfllied orders: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General inder. | 121.7 | 87.0 | 01.8 | 84.6 | 74.0 | 76.2 | 67.1 | 71.5 | 81.2 | 81.6 | 81.4 | 76.8 | 73.9 | 78.2 | 77.1 | 74.7 | 74.7 | 71.5 | 72.7 | 74.0 |
| U. 8. 8teel Corporation. | 125.8 | 83.6 | 90.6 | 82.1 | 71.1 | 80.7 | 72.4 | 83.2 | 89.5 | 82. 1 | 90.8 | 81.1 | 71.6 | 76.2 | 74.8 | 75.9 | 77.4 | 78.6 | 76.9 | 83.3 |
| 8tocirs: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Index | 94.5 | 102.0 | 103.8 | 114.6 | 120.8 | 122.7 | 134.5 | 133.3 | 128.7 | 129.9 | 126.8 | 122.4 | 116.3 | 108.3 | 105.0 | 107.5 | 118.0 | 132.9 | 138.4 | 140. 2 |
| Manfd. commodities (28) | 93.8 | 103.2 | 103.0 | 106.3 | 127.0 | 127.3 | 152.3 | 149.7 | 139.0 | 137.2 | 131.6 | 125.3 | 113.8 | 101.9 | 95.3 | 108.8 | 119.5 | 149.0 | 156.3 | 156.7 |
| Cotton. | 102.5 | 01.4 | 106.2 | 145. 5 | 153.1 | 123.8 | 200.2 | 195. 9 | 178.8 | 159.1 | 135.8 | 117.7 | 95.5 | 74.7 | 58.6 | 52.4 | 89.5 | 155. 1 | 181.4 | 187.7 |
| Copper (refined) | 108.4 | 113.9 | 73.1 | 64. 8 | 85. 4 | 8.4 | 80.8 | 84.2 | 85. 2 | 76.8 | 77.1 | 64.4 | 58.6 | 520 | 48.5 | 48.4 | 45.8 | 40.3 | 46.1 | 57.8 |
| Imployment: Factories | 108.6 | 0. 3 | 07.2 | 98.0 | 04.3 |  | 01.6 | 7 | 89.8 | 01.2 | 91 | 91. | 01.2 | 91.3 | 90.3 | 91.7 | 93. | 93.9 | 93.5 | 93.6 |
| Prices: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Farm products, to producers. | 97.8 | 07.1 | 100.5 | 08.8 | 04.9 | 100.7 | 09.3 | 99.3 | 92.3 | 07.8 | 99.3 | 101.4 | 107.2 | 105.1 | 105. 1 | 100. 7 | 102.2 | 99. | 97.1 | 97.1 |
| Wholesale, all commodities. | 99.9 | 07.4 | 1028 | 99.3 | 94.7 | 97.0 | 96.0 | 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 |
| Retail food. | 97.6 | 97.6 | 104. 0 | 107.6 | 103.0 | 102. 9 | 104.6 | 104.2 | 103.6 | 101.3 | 101. 2 | 101.6 | 102.8 | 102.0 | 1021 | 103.0 | 105.4 | 104. 8 | 105.1 | 104. 1 |
| Cost of living (including food) | 08.1 | 99.9 | 102.3 | 1023 | 09.8 | 98.7 | 90.8 | 99.9 | 99.2 | 88.4 | 98.1 | 97.9 | 98.4 | 88.0 | 88.0 | 98.0 | 99.3 | 90.3 | 99.3 | 98.7 |
| Distribution (values): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bank debits, 141 cities... | 01.2 | 28.7 | 111.9 | 110.6 | 132.5 | 158.2 | 132.1 | 136.8 | 142.1 | 149.6 | 164.8 | 161.8 | 168.8 | 165.4 | 140.4 | 149.9 | 156.9 | 181.0 | 165.1 | 172.3 |
| - Wholesale trade.... | 101.0 | 28.0 | 101.0 | 28.0 | 95.0 | 94.1 | 05.0 | 83.0 | 95.1 | 07.0 | 92.8 | 80.2 | 96.2 | 89.2 | 93.7 | 98.5 | 94.1 | 94.8 | 96.8 | 91.9 |
| - Department stores, sales | 98.0 | 09.0 | 103. 0 | 108.0 | 1060 | 108.0 | 107.0 | 111.0 | 108. 0 | 105. 0 | 105.0 | 103.0 | 104.0 | 104.0 | 108. 0 | 106.0 | 120.0 | 105.0 | 107.0 | 117.0 |
| - Mail-order housas, sales. | 92.0 | 88.0 | 110.0 | 115.0 | 120.0 | 137.0 | 119.0 | 128.0 | 118.0 | 116.0 | 113.0 | 117.0 | 132.0 | 144.0 | 153.0 | 160.0 | 154.0 | 140. 0 | 141.0 | 165.0 |
| - 10-cent chains, sales. | 88.0 | 09.0 | 113.0 | 125. 0 | 138.0 | 150. 0 | 140.0 | 147.0 | 140.0 | 142.0 | 142.0 | 147.0 | 144.0 | 153.0 | 148.0 | 144.0 | 165.0 | 148.0 | 151.0 | 164.0 |
| Imports | 97.8 | 93.1 | 109.0 | 114.3 | 108.0 | 105. 5 | 108.6 | 1025 | 10.6 | 108.7 | 117.8 | 108.9 | 109.6 | 98.2 | 98.4 | 107.3 | 99.0 | 110.0 | 101.1 | 105.0 |
| Exports | 91.5 | 100.8 | 107.8 | 105. 8 | 100. 8 | 1126 | 121.4 | 107. 4 | 108.2 | 97.8 | 110.8 | 95.9 | 111.1 | 102.3 | 99.8 | 100.1 | 111.1 | 145.1 | 143.5 | 125.1 |
| Transportatiou: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - Car loadings......... | 99.8 | 97.6 | 1028 | 106.8 | 105.1 | 104.7 | 05.2 | 96.8 | 08.0 | 101.8 | 129.0 | 83.0 | 108.4 | 127.0 | 82.0 | 102.9 | 132.4 | 85.2 | 105.8 | 102.4 |
| Freight, net ton-miles. | 102.2 | 95.9 | 101.9 | 109.1 | 101.8 |  | 92. 8 | 92.7 | 07.2 | 95.7 | 105.8 | 96.1 | 105.2 | 100.0 | 106.0 | 118.6 | 117.3 | 129.2 | 124.6 |  |
| Finance: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member bank loans and discounts. | 04. 1 | 88.5 | 107.4 | 112.9 | 117.8 | 126.8 | 121.4 | 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 |
| Interest rate (commerctal paper).- | 116.2 | 90.0 | 93.5 | 100. 9 | 95.4 | 112.8 | 92.8 | 82.8 | 92.8 | 92.8 | 95.8 | 101.6 | 104.4 | 113.2 | 119.0 | 124.8 | 130.6 | 127.6 | 124.8 | 124.6 |
| Federal reserve ratio.. | 00.0 | 104.1 | 96.8 | 90.0 | 00.1 | 89.1 | 92.2 | 86.5 | 95.5 | 96.0 | 95.6 | 90.9 | 89.2 | 84.7 | 88.9 | 90, 0 | 86.5 | 87, 0 | 84.5 | 80.2 |
| Price, corporation bonds. | 96.4 | 90.9 | 103.6 | 108.0 | 1125 | 113.0 | 114.8 | 115.6 | 115.9 | 115.8 | 116.7 | 116.0 | 115.0 | 112.3 | 110.9 | 109.8 | 111.0 | 111.3 | 112.0 | 110.7 |
| Price, railroad stocks... | 88.0 | 96.1 | 117.9 | 133.4 | 162.7 | 174.5 | 171.6 | 171. 11 | 169.1 | 164.7 | 170.1 | 176.0 | 178.9 | 169.6 | 170.3 | 173.8 | 178. 5 | 176.4 | 186.0 | 180.3 |
| Price, industrial stocks.......----.- | 86.1 | 91.9 | 122.0 | 132.4 | 171.4 | 214. 8 | 190.0 | 193. 7 | 183.5 | 191. 2 | 204.8 | 210.4 | 213.6 | 202.1 | 206.1 | 213.4 | 226.9 | 234.5 | 252.6 | 229.0 |
| Failures (liabilities). | 106. 0 | 100.8 | 87.2 | 80.4 | 102.2 | 95.6 | 85.3 | 120.3 | 1123 | 106.3 | 129.3 | 82.5 | 85.2 | 70.3 | 69.8 | 137.3 | 80.1 | 82.5 | 95.8 | 96.2 |

## STATISTICAL SUMMARY OF COMMERCE AND INDUSTRY: 1924-1928

The following table contains a review of production and distribution by principal industries and branches of commerce for the year 1928, with comparisons since 1924. On the following page is given a table of
commodity stocks, as well as of unfilled orders, as of December 31, 1928, with similar data for earlier comparable periods. A text discussion reviewing the year is given on page 6.

VOLUME OF PRODUCTION AND DISTRIBUTION IN 1928


STATISTICAL SUMMARY OF COMMERCE AND INDUSTRY: 1924-1928-Continued STOCKS OF COMMODITIES HELD AT YEAR-END INVENTORY PERIODS

| COMKODITY | Unit | 1925 |  | 1926 |  | 1927 |  | 1928 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nov. 30 | Dec. 31 | Nov. 30 | Dec. 31 | Nov. 30 | Dec. 31 | Nov. 30 | Dec. 31 |
| FOODSTUFFS AND TOBACCO |  |  |  |  |  |  |  |  |  |
| Beef products. | Thous. of lbs. | 73,564 | 84, 996 | 85,977 | 100, 873 | 65, 345 | 76,947 | 79,633 | 98, 853 |
| Pork products | Thous. of libs. | 418,737 | 514, 697 | 434, 972 | 522,749 | 465, 976 | 578, 280 | 516, 634 | 528,505 |
| Lamb and mutton | Thous. of lbs | 1,549 | 1,820 | 3,166 | 4,556 | 3,790 | 4,408 | 5,472 | 5,625 |
| Sugar (raw at refneries) | Long tons | 92, 709 | 120, 146 | 277,687 | 246,391 $\mathbf{1 5 8 , 3 4 8}$ | 215,665 | 205,573 158,834 | $234,429$. 143,080 | 221,196 133,837 |
| Cottonseed oil_.........- | Thous. of libs | -111, 962 | 118,719 259,061 | 176, 1031 | 158,348 $\mathbf{1 6 7 , 4 0 0}$ | 165,070 206,162 | 158,834 190,228 | 143,080 160,899 | 133,837 182 |
| Wheat (visible, United States) | Thous. of bush | 49,774 | 55, 024 | 78,412 | 68, 125 | 96, 468 | 90,506 | 140,775 | 142, 532 |
| Wheat flour | Thous. of bbls | 7,800 | 6,900 | 8,000 | 6,700 | 6,800 | 6, 100 | 7, 500 |  |
| Corn (visible, United States) | Thous. of bush | 3,077 | 19,095 | 32,219 | 36,412 | 20,439 | 28,390 | 7,223 | 17,790 |
| Oats (visible, United States) | Thous, of bush | 68, 584 | 66,762 | 50,083 | 46,341 | 24,429 4 4 | 22,982 | 16, 835 | 17,118 |
| Barley (visible) | Thous. of bush | 6,705 | 7,257 | -4, 902 | $\begin{array}{r}4,492 \\ \hline 1243\end{array}$ | 4, 3128 | 2,707 3 | 9,627 | 9, 250 |
| Rye (visible) | Thous. of bush. | 10,533 33,710 | 11,945 42 478 | 12,751 46,744 | 12,343 49,992 | $\begin{array}{r}\text { 2, } \\ 4612 \\ 464 \\ \hline\end{array}$ | 3, 275 54,855 | 4, 143 67,257 | 84, 557 |
| Butter. | Thous. of lbs | 74,754 | 52,785 | 64,381 | 34, 347 | 83, 224 | 46,289 | 70.985 | 43,786 |
| Cheese, all varietie | Thous. of lbs | 83, 568 | 95, 472 | 81,084 | 72, 055 | 70,735 | 64, 035 | 89,970 | 85, 968 |
| Cheese, American. | Thous. of lbs | ${ }^{66,495}$ | 58,457 | 63,881 | 64, 590 | 53, 447 | 47,765 | 74,325 | ${ }_{58,297}$ |
| Eggs, frozen. | Thous. of lbs- | 39, 336 | 33, 905 | 38,620 | 33, 593 | 54,703 | 47,920 | 64, 201 | 56, 104 |
| Eggs, case | Thous. of cases | 3,786 86,733 | 1,683 111,501 | 3,215 106,854 | 1,096 144,497 | -85,950 |  | 3,547 79,173 | 1, 108,468 |
| Poultry | Thous. of lbs | 86,733 61,849 | 111, 501 | 106, 75,034 | 144,497 69,854 | 85,030 66,790 | 117,490 64,539 | 77,677 | 78,095 |
| Coffee (visible, Uñ | Thous. of bags | 61, 789 | -888 | 7,888 | 69,978 | 686 | ${ }^{768}$ | 752 | 783 |
| Rice (domestic) | Thous. of pockets | 1, 091 | 2,046 | 2, 197 | 2,362 | 2,410 | 2, 291 | 2,887 | 2,792 |
| Tobacco. | Thous. of lbs... | ${ }^{1} 1,754,596$ | 1, 818, 564 | ${ }^{1} 1,768,399$ | 1, 841,645 | ${ }^{1} 1,806,747$ | 1,922,743 | 11,680, 461 | 1,750, 089 |
| CLOTHING MATERIALS |  |  |  |  |  |  |  |  |  |
| Wool, grease equivalent (mills and dealers) | Thous. of lbs. | ${ }^{1} 373,010$ | 346, 678 | 1375,714 |  | ${ }^{1357,107}$ | 303, 668 | 369, 816 |  |
| Cotton (mills and warehouses) | Thous, of bales. | 6,664 | 7,305 | 8,010 | 8,312 | 7, 526 | 7,364 | 6,820 | 7,056 |
| Silk (warehouses) | Bales.-- | 46, 813 | 49, 824 | 47, 130 | 52,478 | 52,069 | 63, 540 | 49, 806 | 48,908 |
| Hosiery | Thous of doz. pairs.. | 5,738 | 5,834 | 6, 856 | 6,710 | 7,568 | 7,640 |  |  |
| Knit underwear | Thous of dozens | 273,686 | 282, 063 | 281, 620 | 205, 932 | 249, 673 | 242, 300 | $\begin{array}{r} 1,164 \\ 259,330 \end{array}$ | 1,210 |
| METALS |  |  |  |  |  |  |  |  |  |
| Iron ore. | Thous. of long tons. | 41,686 | 38, 898 | 42,761 | 38,426 | 41, 472 | 37, 582 | 40,080 | 35, 147 |
| Steel sheets | Short tons. | 143,282 | 165, 481 | 165,14 | 160, 193 | 145, 644 | 150, 104 | 174, 028 | 191, 428 |
| Steel barrels | Barrels_... | 53, 607 | 46, 100 | 54, 377 | 47,790 | 63,017 | 52, 606 | 45, 365 | 48, 464 |
| Zinc | Short tons | 6,922 | 9, 295 | 14,481 | 21,887 | 39,320 | 40,751 | 46, 542 | 45,441 |
| Tin (United States) | Long tons.. | 1,904 | 2,654 | 2, 304 | 1,909 | 2,008 | 1,573 | 3,603 | 2, 428 |
| CONSTRUCTION MATERIALS |  |  |  |  |  |  |  |  |  |
| Yellow pine | M feet b. m. | 1, 152, 748 | 1, 165, 620 | 1,065, 538 | 1, 164, 232 | 1, 194, 404 | 1,207, 534 | 952,395 | 978,964 |
| California white p | M feet b. m.-. | 644,318 | 642, 798 | 674, 249 | 690, 157 | 624, 651 | 667, 618 | 562,528 |  |
| Walnut lumber | M feet b . meet $\mathrm{log}^{\text {meas }}$ | 20,024 4,000 | 19,831 2,569 | 11,591 | 12,202 1,907 | 12,149 3,646 | 13,037 3,615 | 11,688 2,359 | 11,396 1,884 |
| Oak flooring | M feet b. m. | 43,204 | 44,715 | 60, 145 | 77, 279 | 79,899 | 74,773 | 80,331 |  |
| Maple flooring | M feet b. m. | 25, 072 | 28,440 | 26,309 | 27, 721 | 27, 610 | 29,527 | 21,960 | 24,674 |
| Roofing felt | Tons. | 3,488 | 4,234 |  | 3,545 | 3,810 | 3,118 | 4,045 | 4, 000 |
| Cement | Thous. of bbls | 14, 534 | 18,515 | 16,243 | 20,679 | 16, 022 | 21,082 | 17,769 | 22,573 |
| Face brick | Thousands | 1,713 | 1,978 | 2, 104 | 2,241 | 2,777 | 2,832 | 2,553 |  |
| Baths (enamel) | Number | 110, 011 | 123, 000 | 161, 391 | 177, 331 | 151, 673 | 163, 354 | 105, 738 | 175, 104 |
| Lavatories (enamel) | Number | 222, 032 | 228,838 | 225, 645 | 265, 400 | 201, 577 | 212, 004 | 195, 323 | 207, 940 |
| Sinks (enamel) | Number | 228,659 | 260, 981 | 274, 422 | 306, 431 | 230, 148 | 239,022 | 242,837 | 258,428 |
| Turpentine (3 ports) | Barrels | 45, 046 | 51, 247 | 63, 650 | 58, 321 | 77,676 | 81,939 | 83, 477 | 90, 371 |
| Rosin (3 ports) ...........-. | Barrels. | 196, 039 | 220, 479 | 184, 405 | 208, 789 | 247, 954 | 248,758 | 246, 178 | 271, 187 |
| RUBBIER AND PAPER |  |  |  |  |  |  |  |  |  |
| Pneumatic tires. | Thousands.. | 5,229 | 6, 119 | 7,810 | 7,856 | 7,635 | 7,734 | 9,434 |  |
| Solid tires and cushions | Thousands. | 159 | 150 | 158 | 168 | 161 | 161 | 151 |  |
| Newsprint (at mills) | Short tons. | 17,418 | 16,238 | 13,592 | 12,030 | 28, 543 | 20,877 | 34,691 | 34,409 |
| Wood pulp, mechanical | Short tons. | 194,400 | 194, 082 | 200, 932 | 195,980 | 188,717 | 156, 872 | 120,828 | 126,880 |
| Wood pulp, chemical.- | Short tons. | 42, 660 | 41,872 | 43,638 | 42,014 | 41, 652 | 45,198 | 41,980 | 42,084 |

: Quarter ending Sept. 30.
UNFILLED ORDERS FOR SPECLFIED COMMODITIES

| cownority | Unit | JUNE 30- |  |  |  | DECEMBER 81- |  |  |  | Percent-agechangeDec. 31,1928, fomJune 30,1928 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1925 | 1926 | 1927 | 1928 | 1925 | 1926 | 1927 | 1928 |  |
| Hosiery | Thous. of doz. pairs...- | 8,302 | 6,229 | 6,342 | 4,900 | 6,206 | 5,100 | 5,395 |  |  |
| Knit underwear | Thous. of dozens...... | 2,935 | 2,391 | 2,614 | 2,053 | 2,736 | 1,562 | 1,912 | 1, 525 | -25.7 |
| Pyroxylin coated textiles. | Thous. oflinear yds....- | 1, 730 | 2,374 | 2, 571 2, | 3, 4,226 | 1.65 | - ${ }_{2,523}^{5.0}$ | 3.9 2.979 | $\begin{array}{r}5.6 \\ 3,543 \\ \hline\end{array}$ | +55.6 |
| Sheets, blue, black, and galvaniz | Short tons -...........-- | 440,687 | 422,237 | 309,562 | 526,798 | 677, 907 | 529,940 | 745, 393 | 592,094 | +12.4 |
| Steel (U. S. Steel Corporation) | Thous. of long tons...- | 3, 710 | 3,479 | 3,053 | 3,637 | 5,033 | 3,961 | 3, 973 | 3,977 | +9.3 |
| Locomotives. | Number-............. | 411 50,092 | ${ }^{667}$ | 45, 400 | ${ }^{201}$ | 708 | 398. |  | 282 | +40.3 |
| Maple flooring | M feet b. m............. | 9,498 | 41,612 | 45, | 49, <br> 1002 <br> 000 | $\begin{array}{r}\text { 61, } \\ 9 \\ \hline, 076\end{array}$ | 35,985 9,706 | 27, 836 | 7,9888 | $-23.9$ |
| Baths (enamel).- | Number- | 111, 797 | 80, 050 | 45,479 | 121,061 | 83,831 | 49,804 | 33, 160 | 39,182 | $-67.6$ |
| Small ware (enamel) | Number- | 252, 9151 | 172,026 | 115, 375 | 315,920 | 189, 157 | 127, 104 | 104, 774 | 118, 100 | $-62.6$ |
| Face brick--c- | Thousands | 326, 226 | 220, 130 | 254, 1191 |  | 253, 770 | -673 | 22482 |  |  |
| Freight cars.. | Number | 27, 458 | 34,874 | 21, 85 | 12,446 | 20,40, | 318, 481 | 224, 12,431 | 12,671 | 30.0 +1.8 |
| Ships | Thous. of gross tons... | 186 | 199 | 219 | 264 | 232 | ${ }^{1814}$ | 12, 204 | 12, 94 | -64.4 |
| Furniture | No. of days' supply .-- | 56 | ${ }^{60}$ | ${ }^{63}$ | 46 | 56 | 42 | 29 | 39 | -15.2 |
| Hupminating glassware | No. of weeks | ${ }^{82,401}$ | 109,559 $\mathbf{2 . 5}$ | 94,847 1.3 | 77,782 1.3 | 107,756 1.9 | 80, 568 | 74,729 1.0 | 94, 174 | +15. 1 |
|  |  |  |  |  |  |  |  | 1.0 | 1.5 | +15. 4 |

## REVIEW OF COMMERCE AND INDUSTRY IN 1928

The year 1928 on the whole was the year of greatest production and trade in American history in spite of low activity in some branches of industry at its beginning. The year marked a continuance of the longest period of general business stability ever witnessed in the United States.
Though at mid-year such important industries as textiles, in the manufacturing group, and agriculture and coal of the raw-material industries, were lagging somewhat behind the general trend, conditions in these industries at the close of the year indicated a turn for the better.

Practically without interruption, industrial activity, if allowance is made for seasonal changes, showed gains month by month during the year, and this without any abnormal increase in commodity stocks. The quantitative index of manufacturing production, the most complete measure of industrial activity, exceeded the previous high record of 1927. The construction industry, which for the last few years has had such an important part in creating new demands for manufactured products and for labor, showed considerably larger activity than has ever before been recorded. The automobile industry regained its previous stride and for the year registered the largest production on record. Retail trade, as reflected by the volume of business transacted by mail-order houses, 10 -cent chains, and department stores, was also larger than in any previous year. The total volume of money turnover, as indicated by check payments (not counting New York City, where speculative stock transactions greatly affect the total), showed a gain of 9 per cent over 1927, which itself had made the highest record up to that time.

Agriculture for the year as a whole was on a sounder basis. Prices of livestock and animal products reached higher levels and crop yields were large, showing a gain of almost 8 per cent over the average of the last 10 years. Grain prices since August have been relatively low. The cotton situation has been about normal.

The output of electric power continued to increase rapidly. The production of steel for the first time in history practically reached $50,000,000$ tons. Copper production by smelters was larger than in any previous year. New orders for machine tools also reflected the great industrial activity which was witnessed during the year.

These are some of the major results during 1928. Many other less comprehensive indicators point in the same direction. Despite the continued large growth in rayon manufacture, the consumption of silk by textile manufacturers, with a gain of $31 / 2$ per cent over 1927, was about twice as great as in the so-
called "silk-shirt" era of 1919. Shoe production was slightly larger than in 1927. The consumption of tin was greater than in any previous year. Cement output reflected the large demands of the building program. The record-breaking production of automobile tires reflected the high activity in the automobile industry. Business failures during 1928 showed smaller liabilities than in the preceding year, although the number of individual failures was larger.

In the textile industry, consumption of wool and cotton showed curtailment of approximately 3 and 11 per cent, respectively, from the previous year, due to exceptional conditions peculiar to the industry, but here indications are not lacking that conditions have turned for the better. The movement of freight on the railroads, for the year as a whole, was somewhat smaller than in 1927, but during the closing months was heavier than in the corresponding period the year before. The index of factory employment, which does not fully reflect the newer and more active industries, averaged sligh tly lower than in 1927 in keeping with the general tendency to add to output by improved methods and greater use of capital, setting free workers to take part in the growing fields which render services as distinguished from making commodities. The closing months of the year recorded decided increase in employment.

Wholesale prices and the general index of cost of living, although somewhat higher than in 1927, showed declines from 1925 and 1926.

Savings reached a new maximum in 1928, as indicated by gains in savings deposits, building-loan association resources, and new life-insurance business. The year just closed provided investors larger dividends and interest payments than ever before, while Christmas savings reached a new high point. Activity on the stock exchanges during 1928 was unparalled, while prices for stocks reached new high averages.

The foreign trade of the United States showed larger exports during 1928 than in any year since the close of the postwar boom, when price levels were much higher. The gain, as has been usual in recent years, was largely in exports of manufactured goods, which were 8 per cent greater in value than in 1927. Imports were somewhat smaller in value than in the preceding year and considerably smaller than in 1926, but the declines are largely due to lower prices of silk and rubber. If allowance is made for the effect of lower prices, the resultant index would disclose an almost unbroken upward tendency in imports since 1921. In all, American business closed its books at the end of 1928 with greater volume, broader stability, and wider markets than ever before in history.

NEW BUILDING CONTRACTS AND AUTOMOBILE PRODUCTION
[Relative numbers, monthly average, 1023-1925, taken as 100]


MINERAL PRODUCTION AND RAILROAD TON-MILEAGE
[Relative numbers, monthly average, 1023-1025, taken as 100]


FACTORY EMPLOYMENT, MANUFACTURING, AND ELECTRIC POWER PRODUCTION
[Relative numbers, monthly average, 1923-1925, taken as 100]


## WEEKLY BUSINESS INDICATORS ${ }^{1}$

［All data，except Flsher＇s Index $(1926=100)$ ，are relative to the weekly average for 1928－1925 as 100］

| $\begin{aligned} & \text { WEEE } \\ & \text { ENDING } \\ & \text { SAT:2 } \end{aligned}$ | PRODUCTION |  |  |  |  |  | TRADE |  | WHOLESALE PRICES |  |  |  |  | EECEIPTS |  |  |  | BANKING AND FINANCE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \widetilde{\Phi} \\ & \frac{\mathbf{W}}{\omega} \end{aligned}$ |  | $\begin{aligned} & \text { 㮷 } \\ & \text { 首 } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { 要 } \\ & \text { 心 } \\ & \text { 总 } \\ & \text { ém } \end{aligned}$ |  | 荡 | $\begin{aligned} & \text { 菏 } \\ & 0 \end{aligned}$ | $\begin{gathered} 5 \\ \frac{8}{8} \\ \hline 8 \end{gathered}$ | $\square$ | $\begin{aligned} & \text { 녕 } \\ & \text { 苞 } \end{aligned}$ | R | $\begin{aligned} & \text { E1 } \\ & \stackrel{\rightharpoonup}{0} \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { 電 } \\ & 0 \end{aligned}$ | $\begin{aligned} & \text { 胞 } \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 1927 \\ & \text { Nov. } \end{aligned}$ |  | 92.6 | 105． 5 | 38.4 | 117.8 | 86.3 | 130.7 |  |  |  | 77.9 | 85.8 | 94.9 | 176 | 293.8 | 132.6 | 56.2 | 120.3 | 96.0 | 87.9 | 100.0 | 177.9 | 110.2 | 114.0 | 87.7 |
|  | 87. | 97.0 | 105． | 37.1 | 118.5 | 102.8 | 114.4 | 101.7 | 96.4 |  | 74.6 | 85.6 | 95.7 | 128.9 | 263.8 | 127.2 | 74.8 | 120.7 | 4.3 | 84.8 | 194.3 | 177.9 | 110.2 | 105.7 | 87.8 |
|  | 88.0 | 102.8 | 104． 5 | 33.5 | 118.4 | 133.1 | 128.3 | 101.0 | 96. |  | 72.8 | 85.4 | 97.8 | 133.8 | 236.5 | 123．4 | 91.8 | 121.1 | 91.4 | 84. | 97.1 | 184. | 110.7 | 108 | 88.0 |
|  | 91.0 | 90.6 | 96.4 | 35.1 | 119.9 | 120．1 | 125． 1 | 87.7 | 96.7 | 96. | 73.2 | 85.1 | 98.6 | 99.6 | 191． 2 | 99.7 | 71.8 | 121．1 | 92.8 | 84. | 97.1 | 184， 7 | 110.8 | 93．6 | 88.5 |
| Dec． | 87.0 | 92.9 | 102 | 34.3 | 11 | 102 | 156.8 | 95.5 |  |  | 2 | 85.0 | 100.0 | 1120 | 195.8 | 113. | 98.5 | 121.7 | 91.9 | 100.0 | 97.1 | 185.3 | 110.8 | 110.6 | 89.8 |
|  | 80.0 | 99. | 104. | 33.1 | 119.4 | 142.9 | 132.6 | 91.5 | 96.8 |  | 71.3 | 84.8 | 100.8 | 80.6 | 175.4 | 1106. | ${ }^{98.1} 1$ | 122.2 | 91． | 103.0 | 97． 1 | 185.0 | 110.8 | 122.6 | 89．4 |
|  | 83. | 100.4 | 102. | 34.3 | 118.0 | 124.9 | 120.0 | 90．5 | ${ }^{95.6}$ |  | 71.3 | 84.8 | 199．3 | 74.2 | 142.7 | 104． 1 | 109． 2 | 122. | 89． 3 | ${ }^{97.0}$ | 97． 1 | 186.0 | 110 | 123.6 | 81.3 |
|  | 88.0 75.0 | 100.7 81.5 | 88.2 57.3 | 35.5 33.9 | 116.8 | 121.1 | 132.8 | 86.5 70.9 | 96.0 96.0 |  | 72.8 | 84． 8 | 100．0． | 64.3 59.7 | 119．64 | 65.2 51.9 | 80.3 78.9 | 122．5 | 86.7 86.2 | 1133.0 | 97.1 | 186.8 | 110.8 | 122．9 | 84.6 92.6 |
| $\begin{gathered} 1988 \\ \operatorname{Jan} . \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 88 | 10 | 72．7 | 34 | 114 | 109．2 | 15 | 78.6 94.6 |  | 105 | 73.2 | 84． 7 | 100 | 57.4 62.5 | 81．21 | 72.8 | 100 | 125.1 |  | 115.1 | 1 | 187， 2 | 110．6 | 125．1 | 96.8 <br> 97.8 |
| 21 | 97. | 93. | 101.4 | 33.9 | 114． 3 | 104.3 | 130.0 | 92 | 95.7 | 103.9 | 71.0 | 85.3 | 100．0 | 77.8 | 68.1 | 86. | 1325 | 122. | 93. | 97. | 102 | 183. | 110. | 148 | 99.9 |
| 28 | 101.0 | 103．8 | 103.2 | 36.3 | 113.1 | 137.3 | 117.1 | 94.2 | 95.5 | 102.3 | 67.6 | 85.6 | 100． 7 | 74.8 | 66.9 | 80. | 130.4 | 121．6 | 96. | 90.9 | 100.0 | 186．5 | 110.9 | 158. | 101.0 |
| Feb． | 10 | 103 | 10 | 35 | 113 |  | 122． 2 | ${ }^{96.6}$ | 96. | 101.5 | 65.4 |  | 100 | 71.3 | 70.4 | 86.4 | 13 | 122.1 | 95． 1 | 109 | 100. | 184 | 110. | 140.3 | ． 8 |
|  | 111. | 100. | 104.5 | 37.1 | 113.3 | 117.3 | 118.0 | 94.5 | 97.0 | 100.0 | 68.0 | 86.0 | 100．7 | a | 64． 6 | 76 | 124．7 | 121.3 | 95． | 112 | 102. | 183 | 110 | 127 | 103.8 |
|  | 111.0 | 104.2 | 106． 4 | 38.8 | 1113．${ }_{8}^{4}$ | 122． 2 | 110.1 | 92.6 | 96.8 | 103． 1 | ${ }_{69.6}^{67.6}$ | 886.0 | 100.0 100 | 63.2 64.0 | 60.0 50.8 | 73. | 132． 5 | 121.1 | ${ }_{96.5}^{95.5}$ | 109 | 105． 7 | 182 | 111． 7 | 118.8 | 104． 5 |
| Mar． | 111.0 | 104． 4 | 108． 6 | 38.2 | 112.8 113.2 | 122.2 111.0 | 105.3 123.7 | ${ }^{90.7} 100.1$ | 96．6 | 105.4 <br> 104. | 69.9 69.5 | 86. | 100 | 64.0 | 50.8 | 73.7 | 132.5 119.7 | 120.4 | 96．4 | 109.1 | 105． 7 | 181.1 | 110.7 | 118 | 05.4 07.9 |
| Mar． | 109. | 103. |  | 39.6 40.8 | 1113.1 | 111.0 | 123．7 | 100.1 99. 2 | 96.8 | 104.7 | 69.5 | 86.7 | 100 | 84．0 | 46.5 | $68.7$ | 1119.7 | 121． 2 | \％． | 109.1 | 105. | 185. | 110. | 25.3 | 07.9 08.9 |
|  | 109. | 102.0 | 102． 3 | 40.8 | 114.7 | 139.4 | 114.4 | 98.3 | 97.3 | 105.4 | 71. | 86.7 | 100 | 78.3 | 68.1 | 70. | 114.3 | 122.6 | 05 | 109 | 105. | 189. | 110. | 17.0 | 0.0 |
|  | 111. | 101.3 | 106.4 | 40.8 | 114．6 | 145.1 | 134.5 | 99.1 | 98.2 | 109.3 | 72.8 | 86.2 | 100．7 | 65.0 | 67．7 | 71.8 | 103.4 | 122.2 |  | 109. | 105． 7 | 107． | 110.9 | 115.0 | 111.0 |
|  | 112.0 | 95.5 | 107.3 | 41.2 | 115.8 | 140.7 | 118.5 | 99.1 | 88.1 | 109.3 | 72.4 | 86.3 | 100． 7 | 69.0 | 71.5 | 74.7 | 104.6 | 123.3 | 95． 2 | 112.1 | 105． 7 | 197.5 | 110．9 | 134. | 111.3 |
| Apr． $\begin{array}{r}7 \\ 14 \\ 21 \\ 28 \\ 28\end{array}$ | 112. |  | 103 | 37.6 | 11 |  | 145.1 | 5.9 |  | 110.9 | 73.2 | 86.4 | 101.4 |  | 65.0 |  | 81.0 | 126． 3 |  | 121. | 111， | 197. | 10. | 108.8 | 8 |
|  | 111 | 76 | 102. | 37.1 | 114.4 | 155.2 | 120.0 | 95． 2 | 98.9 | 111.6 | 75． 4 | 86.4 | 101.4 | 56.3 | 59．6 | 70. | 67．9 | 126.1 | 92. | 118 | 111．4 | 199. | 10， | 116 | 113． 0 |
|  | 111.0 | 81．2 | 108.6 | 35.5 | 114．9 | 135.2 | 119.9 | 98．5 | 99.4 | 120.9 | 75． 4 | 85.9 | 101.4 | 52.5 | 58.8 | 80. | 75.3 | 126． 1 | 92. | 118. | 1114．3 | 199. | 110. | 116 | 114． 1 |
|  | 111.0 | 84.1 | 104． 5 | 37.6 | 115．4 | 149.4 | 122． 3 | 100.3 | 99.7 | 127.9 | 80. | 85.9 | 10 | 52.0 | 65.0 | 91 | 81.4 | 125 | 92. | 121 | 114.3 | 188. | 110 | 100. | 4.5 |
| May | 112. | 83.9 | 100.5 | 37.6 | 114.4 | 140.3 | 143.3 | 102.2 | 09.8 | 131.0 | 78.7 | 85.9 | 101.4 | 1.2 | 65． 4 |  | 77.0 | 127.6 | 90. | 127.3 | 114.3 | 201.8 | 110.5 | 125.8 | 114.7 |
|  | 112. | 86. | 100 | 35.5 | 113.1 | 148.8 | 132.9 | 104． 5 |  | 127． 1 | 81.3 |  |  |  | ${ }^{66.2}$ | 79. | 79． 7 |  |  |  | 114.3 | 204. | 111.5 | 127.0 | 115.9 |
|  | 111.0 | 84.0 | 93.2 | 32.7 | 112.3 | 154.2 | 140.6 | ${ }^{104 .} 7$ | ${ }_{98,8}^{99}$ | 117.1 | 79.8 | 85．8 | 103.6 | 93.8 60.8 | 50.8 38,5 | 78. | 81.2 94.6 | 127.5 | 89.9 90.3 | 136 | 125.7 | 203． | 110.4 | 108. | 17．1 |
| June |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 104 | 75.7 86.3 | ${ }_{98}^{94.1}$ | 29.8 | ${ }_{113.5}^{113.5}$ | 144.0 | 14 | 103．9 ${ }^{97}$ |  | 120.2 |  | 85.8 | 105. |  | 37 | 73. | ${ }^{92}$ | 127. |  | 145.5 | 128. | 201 | 109. | 84.5 | 117.6 119.0 |
|  | 100. |  |  | 27.8 | 113.2 | 143.3 | 133. | 104． 6 | 97.8 | 115．5 | 77. | 85.7 | 105． 1 | 5． | 34． 2 | 76. | 85．7 | 127． | 87. | 139. | 131. | ， | 108 | 108 | 118.9 |
|  | 96. | 86.1 | 94.1 | 27.3 | 114.1 | 186.2 | 141.2 | 102.9 | 97.9 | 115．5 | 8. | 85．0 | 105． 1 | 36.3 | 23.5 | 72. | 83．0 | 126. | 析 | 148. | 134 | 186. | 108.4 | 109. | 118.8 |
|  | 95. | 86.6 | 100．5 | 28.2 | 4.5 | 175.9 |  |  | 98.4 | 112.4 |  |  |  | 53.5 | 26.5 | 76.6 | 76.7 | 126.0 | 88.6 | 166.7 | 137. | 191．8 | 108.4 | 103. | 118.7 |
| July |  |  |  | 24. | 114.5 | 152.1 | 133. | 88.7 | 98.8 | 105.4 | 84.2 | 84.4 | 105． 1 | 93.2 | 24.6 |  | 67 | 128.7 | 84. | 157. | 137.1 | 195 | 108. | 87.7 | 119.5 |
|  | 93 |  | 97. | 28.6 | 114.8 | 128.8 | 130. | 106．9 | 9.3 | 99． 2 |  | 84． 2 | 105． 1 | 179 | 30．4． | 87.7 | 77. | 126. | 87． 6 | 160.6 |  | 192 | 108． 1 | 114． | 120.0 |
|  | ${ }_{93}^{91}$ | 88.7 82.0 | 100.5 96.4 | 24．1 | 1114.5 | 116.0 | 128.4 | 107．8 | ${ }_{99.0}^{99.9}$ | ${ }^{97.5}$ | 77. | 84.3 84.5 | 105． 1 | 23 | ． 6 | 13.0 | 69. | 126. | 89. | ${ }_{133}^{136}$ | 137 | 191. | 107.4 | 104． | 122.2 |
| Aug． $\begin{array}{r}4 \\ \\ \\ 11 \\ \\ 25\end{array}$ |  |  |  |  |  |  |  |  |  |  | 73.2 | 84.4 | 105． 1 | 313．0 | 5．0 |  |  | 12 | 88.5 | 160 | 137 | 195 | 107. | ， | 125．6 |
|  | 95. | 92.4 | 90. | 24． 1 | 114.7 | 122.2 | 112.7 | 108.9 | 99.4 | 81.4 | 71. | 84.3 | 105． 1 | 254.0 | 16.9 | 81.0 | 58.4 | 126. | 89. | 160 | 142. | 194. | 106. | 5． | 26.6 |
|  |  |  |  | 27 | \％ | 128. | 117.4 | 110.2 | 100.1 | 81 | 70 | 84． 3 | 105.1 | ${ }^{233.6}$ | 20 | 92.4 | 55． | 125． | 89. | 154. | 148.6 | 125 | 106. | 99. | 129.9 |
|  |  | 95． 2 | 90.0 | 27. | 8.9 | 115.5 | 114.2 | 112.7 | 99. | 80.6 |  |  | 105． 1 |  | 42.3 |  | 57.5 |  |  | 168.7 | 148. |  |  |  | 132.6 |
| Sept． |  |  |  |  |  |  | 11. |  |  |  |  | 84 | 10 |  | 7 | 97.2 | 55.5 | 120 |  | 18 |  |  |  | 95.6 | 135.0 |
|  | 101． 0 | 91. | 85. | 29.8 | 119.7 | 96． 7 | 111．0 | 103.4 | 99.7 | 81 | 71. | 84． 8 | 105． 1 | 189.2 | 122.3 | 95．9 | 53.0 | 126． | 8. | 181. | 148 | 209 | 107 | 78. | 135.7 |
|  | 101. | 104. | 90.9 | 29.8 | 120.3 | 123.9 | 125.9 | 118.7 | 100.3 | 81.4 | 65.4 | 84．9 | 106．5 | 222.4 | 137． 3 | 120．3 | 58.7 | 128.5 | 87. | 178. | 160 | 209. | 107． | ${ }^{99} 8$ | 135．9 |
|  | 1105. | 102．8 | 90.9 90.8 | 31.0 32 | 120.5 120.5 | 199.6 162 | 142.8 126.2 | 119．2 2 | 99.8 99.3 | 82.9 85.3 | 68.0 71.0 | 85.1 85.2 | 108.7 | 231.1 249.1 | ${ }_{256 .}^{202 .} 5$ | 140.5 121.8 | 61.3 72.3 | 127.0 126.5 |  | 187. | 165 | 211. | 107. | 107.4 98.3 | 134． 5 |
|  | 112. | 113.4 | 90. | 32 | 12 | 16 | 126. | 124 | 99. | 85. | 71 |  |  | 249 |  |  |  | 120 |  |  |  |  |  | 98.3 | 133.2 |
| Oct． | 115． | 115.7 | 90.8 | 3. | 120． | 130． | 129.1 | 124.1 | 9.4 | 85. | 72.1 | 85． 6 | 108.7 | 231.0 | 23.1 | 112.5 | 68.3 | 127． | 88. | 15． | 125 | 仡 | 107 | 86. | 32． 6 |
|  | 115. | 111．1 | 92.3 | 40.4 | 120. | 134． 1 | 137.6 | 121.2 | 98.9 | 84．5 | 73.9 | 85．9 | 108． 7 | 286.4 | 360.4 | 124.7 | 76.4 | 127. | 86. | 166.7 | 155. | 216. | 107. | 119. |  |
|  | 113． 2 | 115.4 | 92.3 |  | 121.2 | 144.8 | 135.3 | 121.2 | 98.4 | 82.9 | 71. | 86 | 110.1 | 188 | 308 | 127.2 | 86. | 127. | 87 | 160 | 160 | 207 | 107. | 122. | 129.2 |
| Nov． | 114. | 114. | 92.3 | 39.6 | 119.9 | 122.4 | 131.0 | 115.1 | 97.9 | 8 | 71 | 86 | 113.0 | 1 | 295.0 | 108． | 71.6 | 128 | 88.7 | 181. | 160 | 210.7 | 108 | 103. | 127.3 |
|  | 13. | 108． 2 | 90. | 42.9 | 119 | 104．0 | 127.4 | 109.9 | 97.6 | 85． 3 | 71.7 | 86． 5 | 114.5 | 116．8 | 217.3 | 88.6 | 73.8 | 128. | 88. | 154. | 160 | 20 | 108 | 89. | 126． 4 |
|  | 109.2 | 112.1 | 86.8 | 40．4 | 119.6 | 85． 1 | 128.2 | 110.5 | 97.7 | 87.6 | 72.4 | 86． 8 | 114． 5 | 109.0 | 245.4 | 113.6 | 96. | 128. | 87. | 151.5 | 160. | 225. | 108.3 | 108. | 125． 1 |
|  | 106．6 | 112.7 | 90.9 | 38. | 12 | 113.4 | 151. | 107．3 | 97.3 | 88 | 75.4 | 87.4 | 114． 5 | 13 | 26 | 104.7 | 101. | 12. | 88.3 | 157 | 160.0 | 230.7 | 108 | 117.0 | 124.0 |
| Dec． | 109. | 101. | 80.9 | 35.1 | 120.3 | 171.2 | 133.4 | 93． 8 | 97.3 | 88.4 | 76.1 | 87.3 | 114. | 140.9 | 274.6 | 67.7 | 73.8 | 130. | 84. | 181.8 | 160.0 | 233.8 | 108.0 | 102. | 122.9 |
|  | 110. | 115． 0 | 92.3 | 38. | 121.0 | 106．0 | 135．9 | 102.7 | 97.1 | 87.6 | 75.0 | 87.3 | 114.5 | 103.0 | 266.2 | 93.4 | 123.6 | 131. | 83. | 218. | 168 | 225． | 107. | 110. | 121.4 |
|  | 107．9 | 113.2 | ${ }^{90.0}$ | 38.0 | 122.3 | 101． 6 | 1450 | ${ }^{100.6}$ | 96.8 | 86．0 | 75.4 | 87． 5 | 114． 5 | 112.2 | 225． 0 | 94.0 | 117.9 | 130. | 82.8 | 178. | 177. | ${ }^{219} 7$ | 107.3 | 123. | 120.9 |
|  | 105.3 107.9 | 113.4 70.7 | 85． 0 | 35． 9 | 123.5 | 116.7 | 150.6 119.3 | 93.7 | 96.9 | 88.0 | 75.0 | 87.5 | 1114.5 | 98.6 68.6 | 197.7 200.0 | 63.9 40.2 | $\begin{array}{r}118.5 \\ 80.3 \\ \hline\end{array}$ | 130.8 131. | 83.2 | 1781． | 188.6 | ${ }_{231.5}^{222.5}$ | 107.2 |  | 110.5 121.4 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  | 119.6 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 110. | 119.7 | 6． 4 | 43.8 | 124.5 | 93.4 | 154.8 | 95. | 97. | ${ }_{83.7} 7$ | 74.6 | 87.5 | 119.6 | 56.7 | 118.8 | 77.8 | 120.6 | 130. | 85. | 154. | 174.3 | 238 | 107. | 156. | 127.4 |
|  | 109． 2 | 119.9 | 102.3 | 46. | 126.9 | 109.6 | 141.3 | 97.2 | 97.2 | 88.4 | 5. | 87． | 120.3 | 5.9 | 87.7 | 89.2 | 130.7 | 129. | 86. | 169.7 | 177 | 240.0 | 107. | 143. | 129.1 |
| 26 | 110.5 | 120.8 | 99.1 | 44.5 | 127.8 | 110.6 | 137.7 |  | 97.8 | 92.2 | 73.9 | 87.6 | 121.7 | 71.9 | 95．4 | 67.7 | 111.6 | 128．5 | 89.4 | 145.5 | 177.1 | 245.8 | 107.3 | 128. | 130.9 |

[^1]
## AUTOMOBILE PRODUCTION IN THE UNITED STATES ${ }^{1}$

［Number of vehicles］

| MONTH | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1021 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TOTAL PASSENGER CARS AND TRUCKS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 35， 662 | 45， 644 | 31，253 | 107， 402 | 122， 002 | 92， 208 | 93，779 | 187， 937 | 53， 237 | 89，374 | 245， 889 | 318， 589 | 240， 579 | 308，998 | 238， 908 | 231， 728 |
| February | 35， 663 | 48，482 | 49，309 | 124， 546 | 144， 674 | 106， 962 | 114，598 | 188， 030 | 70， 599 | 117， 871 | 278， 091 | 370， 569 | 283， 638 | 363， 652 | 304， 735 | 323， 796 |
| March | 45， 273 | 60， 211 | 94， 311 | 162， 074 | 165， 622 | 132， 142 | 146， 091 | 229， 212 | 112， 453 | 171，487 | 359， 476 | 383， 424 | 374， 406 | 433，467 | 394，513 | 413， 327 |
| April． | 60， 335 | 70，367 | 101， 910 | 152， 529 | 172， 045 | 153， 673 | 165， 229 | 173， 398 | 152， 201 | 219， 394 | 379， 138 | 375， 868 | 433， 792 | 439， 336 | 406，382 | 410， 104 |
| May | 57， 199 | 56， 354 | 88， 390 | 155， 950 | 185， 721 | 143， 003 | 176， 484 | 210， 019 | 156， 805 | 255， 622 | 395， 555 | 315， 177 | 419， 056 | 425， 167 | 405， 648 | 425， 783 |
|  | 53， 581 | 44， 975 | 91， 059 | 139， 794 | 172， 656 | 118， 859 | 166， 575 | 225， 677 | 190， 520 | 278， 876 | 380， 110 | 251， 900 | 308， 524 | 386， 269 | 323， 817 | 396， 796 |
| July． | 34，808 | 30， 987 | 65， 604 | 120， 755 | 164， 764 | 118，060 | 164， 831 | 209， 652 | 176， 870 | 245， 755 | 331， 844 | 269， 812 | 398， 947 | 359， 610 | 269， 396 | 392，076 |
| August | ${ }^{31,416}$ | 48，373 | 82， 082 | 106， 623 | 146， 454 | 89， 542 | 165， 414 | 205， 205 | 181， 270 | 290， 838 | 348， 216 | 284， 693 | 260,236 | 426， 851 | 309； 994 | 461，298 |
| September | 29，860 | 53， 523 | 98， 861 | 140， 281 | 162， 883 | 59，555 | 180，786 | 188， 514 | 158， 760 | 203， 927 | 327， 720 | 296， 382 | 325， 728 | 398， 938 | 260， 310 | 415， 294 |
| October－ | 28，537 | 44， 264 | 89， 127 | 134， 393 | 165， 333 | 50， 311 | 207， 222 | 165， 298 | 148， 009 | 232， 824 | 366， 461 | 294， 553 | 441， 981 | 334， 421 | 219， 682 | 397， 112 |
| Novemb | 32，276 | 32，698 | 84， 769 | 140， 255 | 156， 716 | 43， 244 | 190， 321 | 134， 975 | 116， 644 | 232， 923 | 314， 504 | 234， 611 | 372， 271 | 256， 301 | 134， 370 | 256， 935 |
| December | 40，390 | 33，176 | 93， 255 | 133， 106 | 115， 079 | 63， 127 | 162， 265 | 109， 432 | 79， 455 | 225， 285 | 307， 008 | 207， 062 | 316， 672 | 167， 924 | 133， 571 | 235， 135 |
| Total． Monthly av | 485， 000 | 569， 054 | $\begin{array}{c\|c\|} \hline 969,930 & 1,617,708 \\ 80,828 & 134,809 \end{array}$ |  | $\begin{array}{\|c\|c\|} \hline 1,873,949 & 1,170,686 \\ 156,162 & 97,557 \\ \hline \end{array}$ |  | $\left.\begin{array}{r} 1,933,595 \\ 161,133 \end{array} \right\rvert\,$ | 2，227， 349 | $\begin{array}{\|c\|c\|} \hline 1,596,823 \\ 133,069 \end{array}$ | $\begin{array}{r} 2,544,176 \\ 212,015 \end{array}$ | $\begin{array}{r} 4,034,012 \\ 336,168 \end{array}$ | $\begin{array}{\|c\|} 3,602,540 \\ 300,212 \\ \hline \end{array}$ | $\left.\begin{array}{r} 4,265,830 \\ 355,486 \end{array} \right\rvert\,$ | $\begin{array}{\|c\|c\|} \hline 4,300,934, ~ & 301,326 \\ 358,411 & 283,444 \\ \hline \end{array}$ |  | $\begin{array}{r} 4,357,384 \\ 363,115 \end{array}$ |
|  |  |  |  |  | 185， 612 |  |  |  |  |  |  |  |  |  |
|  | PASSENGER CARS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 34，483 | 44，364 | 28， 304 | 100， 806 |  |  | 116， 815 | 81，611 | 76，422 | 157， 115 | 45，397 | 80， 194 | 224， 549 | 287， 198 | 211， 765 | 278， 995 | 199， 650 |  |
| Februar | 34， 423 | 46，609 | 44， 919 | 117， 460 | 138， 759 | 95， 202 | 97，126 | 158， 921 | 60， 326 | 104， 936 | 254， 808 | 337， 045 | 249， 397 | 326， 472 | 264， 171 | 291， 151 |
| March | 43，887 | 57， 972 | 88， 583 | 153， 175 | 157， 882 | 112， 279 | 124， 559 | 193， 641 | 98， 941 | 152， 311 | 324， 314 | 347， 164 | 329， 115 | 388， 703 | 346， 031 | 371， 821 |
| April | 57， 584 | 67，990 | 95， 537 | 143， 371 | 163， 618 | 130， 361 | 145， 359 | 149， 457 | 137， 640 | 197，903 | 340， 283 | 337， 238 | 385， 058 | 389， 954 | 358， 682 | 364， 877 |
| May． | 54，871 | 53， 521 | 81，054 | 147， 840 | 175， 583 | 118，638 | 154， 792 | 182， 027 | 144， 097 | 232，439 | 350， 279 | 277， 284 | 374， 289 | 378， 826 | 358， 725 | 375， 863 |
| June | 51，512 | 42，991 | 83,813 | 133， 363 | 162，926 | 97， 194 | 144， 805 | 192， 826 | 177， 086 | 252， 704 | 338， 424 | 220， 794 | 359，595 | 343， 388 | 280， 620 | 356， 622 |
| July． | 33， 165 | 29， 236 | 59，111 | 112， 810 | 154， 638 | 93，909 | 142， 135 | 181， 051 | 165， 616 | 223， 823 | 300， 896 | 242， 177 | 356， 688 | 320， 411 | 237， 811 | 338， 792 |
| August | 29， 227 | 46， 793 | 76， 246 | 99， 330 | 132， 234 | 67， 058 | 140， 479 | 176， 234 | 167， 756 | 246， 867 | 317， 141 | 254， 610 | 222， 314 | 383， 227 | 275， 585 | 400， 593 |
| Septembe | 27，035 | 52，095 | 91， 797 | 132， 115 | 148， 572 | 39，591 | 154， 119 | 160，520 | 144， 670 | 184， 485 | 300， 647 | 262， 695 | 266， 506 | 354， 355 | 226， 443 | 358， 872 |
| October | 25， 902 | 41， 588 | 80， 539 | 125，889． | 152， 088 | 30， 119 | 177， 270 | 138， 031 | 134， 774 | 211， 164 | 335， 836 | 260， 244 | 396， 590 | 292， 562 | 183， 042 | 339， 976 |
| November | 30，639 | 30，538 | 78， 193 | 131， 841 | 140， 837 | 29，941 | 161，600 | 118， 944 | 106， 081 | 210， 955 | 286， 006 | 204， 323 | 333， 742 | 222， 419 | 109， 758 | 217， 256 |
| Decemb | 38，781 | 29，982 | 87， 834 | 127， 578 | 101， 840 | 47， 533 | 138， 986 | 96， 793 | 70，727 | 205， 142 | 277， 947 | 179， 233 | 283， 834 | 139， 850 | 106， 083 | 205， 144 |
| Total $\qquad$ Monthly av． | 461，509 | 543， 679 | $\begin{array}{rrrr} 895,930 & 1,525,578 \\ 74,661 & 127,132 & 145,792 \\ \hline \end{array}$ |  |  | $\begin{array}{r} 943,436 \\ 78,620 \end{array}$ | $\begin{array}{lll} 1,657,652 & 1,905,560 \\ 138,138 & 158,797 & \end{array}$ |  | $\left\lvert\, \begin{array}{r} 1,453,111 \\ 121,093 \end{array}\right.$ | $\begin{array}{\|c} 2,302,923 \\ 191,910 \end{array}$ | $3,3531,130 \mid 3$ | $\begin{aligned} & 3,210,005,3,768,993 \\ & 267,500 \\ & 314,083 \end{aligned}$ |  | $\left\|\begin{array}{l} 31819,162 \\ 318 \end{array}\right\|$ | $\begin{array}{\|c} 2,946,601 \\ 245,550 \end{array}$ | $\begin{aligned} & 3,826,613 \\ & 318,884 \end{aligned}$ |
|  | 38， 459 | 45，307 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | TRUCKS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 1，179 | 1，280 | 2,9494,390 | 7，5967,086 | $\begin{aligned} & 5,187 \\ & 5,915 \end{aligned}$ | $10,597$ | $\begin{aligned} & 17,357 \\ & 17,472 \end{aligned}$ | 30,82229,109 | 7,84010273 | $\begin{array}{r} 9,180 \\ 12,935 \end{array}$ | $\begin{gathered} 28,340 \\ 23.283 \end{gathered}$ | 31， 391 | 28， 814 | 30,00337,180 | 38，258 | 26， 082 |
| February | 1，240 | 1，873 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March | 1，386 | 2,239 | 5， 7286,373 | 8,8999,158 | 7,7408,427 | 19,86323,312 | $\begin{gathered} 21,533 \\ 19,870 \end{gathered}$ | 33,57123,941 | $\begin{aligned} & 13,512 \\ & 14,561 \end{aligned}$ | 19， 178 | － 35,162 | 36,26038,630 | 45,291 <br> 48,734 | 44,76449,382 | 48,48247,700 | 41，${ }_{45} \mathbf{2 2 7}$ |
| April． | 2，751 | 2，377 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May | 2，328 | 1， 984 | 7，246 | 6，431 | －9，730 | 21， 26.5 | 21， 770 | 32， 851 | 13， 334 | 26， 172 | 45,27641,886 | 31， 3063 | － 348,929 | 42， 881 | 43， 197 | 49,92040,174 |
| June． | 2,0691,643 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| July． |  | 1，580 | 6，4935,836 | 7， 293 | 14， 220 | 22，484 | 24，935 | 28， 971 | $\begin{aligned} & 11,254 \\ & 13,54 \end{aligned}$ | $\begin{aligned} & 21,932 \\ & 23,971 \end{aligned}$ | $\begin{aligned} & 30,948 \\ & 31,075 \end{aligned}$ | $\begin{aligned} & 27,635 \\ & 30,083 \\ & 00 \end{aligned}$ | $\begin{aligned} & 42,259 \\ & 37,922 \end{aligned}$ | $\begin{aligned} & 39,199 \\ & 43,624 \end{aligned}$ | 34， 409 | 53,28460,705 |
| August | 2， 189 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| September | 2,825$\mathbf{2}, 635$ | 2,6762,160 | 7，064 | 8， 166 |  | $\begin{aligned} & 20,19,102 \\ & 13,303 \end{aligned}$ |  | 27，994 |  |  | 27， 073 |  |  |  | 33， 867 | 56， 422 |
| October |  |  | 8,5886,576 | 8,504 <br> 8,414 <br> 8 | $\begin{aligned} & 13,245 \\ & 15,879 \end{aligned}$ |  | $\begin{aligned} & 20,002 \\ & 29,952 \\ & 28,721 \end{aligned}$ | $\begin{aligned} & 27,276 \\ & 16,031 \end{aligned}$ | $\begin{aligned} & 13,235 \\ & 10,563 \end{aligned}$ | $\begin{aligned} & 10,762 \\ & 21,660 \\ & 21,968 \end{aligned}$ | 30,62528,498 | $\begin{aligned} & 30,080 \\ & 34,309 \\ & 30,288 \end{aligned}$ | 45,391 <br> 38,529 | 41,859 <br> 33,882 | 36,640 <br> 24,612 <br> 27 | 57,13639,67927， 991 |
| November | 1，646 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| December | 1，609 | 3，194 | 5，421 | 5，528 | 13， 239 | 15， 594 | 23， 279 | 12，639 | 8，728 | 20， 143 | 29， 061 | 27，829 | 32， 738 | 28，074 | 27，488 |  |
| Total | $\begin{array}{r} 23,500 \\ 1,958 \end{array}$ | $\begin{array}{r} 25,375 \\ 2,115 \end{array}$ | $\begin{gathered} 74,000 \\ 6,167 \end{gathered}$ | $\begin{array}{r} 92,130 \\ 7,678 \end{array}$ | $\begin{array}{r} 128,157 \\ 10,680 \end{array}$ | $\begin{array}{r} 227,250 \\ 18,938 \end{array}$ | $\begin{array}{r} 275,943 \\ 22,995 \end{array}$ | $\begin{array}{r} 321,789 \\ 26,816 \end{array}$ | $\begin{array}{r} 143,712 \\ 11,976 \end{array}$ | $\begin{array}{r} 241,253 \\ 20,104 \end{array}$ | $\begin{array}{r} 382,882 \\ 31,907 \end{array}$ | $\begin{array}{r} 392,535 \\ 32,711 \end{array}$ | $\begin{gathered} 496,837 \\ 41,403 \end{gathered}$ | $\begin{array}{r} 481,772 \\ 40,148 \end{array}$ | $\begin{array}{r} 454,725 \\ 37,894 \end{array}$ | $\begin{array}{r} 530,771 \\ 44,231 \end{array}$ |
| Monthly av．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Data through June，1921，compiled by the National Automobile Chamber of Commerce from actual monthly reports from the principal producers，covering close to 90 per cent of the industry，from quarterly reports of other member companies，prorated to monthly figures according to the relative output of the larger companies，and from annual figures of small nonmember companies，covering the balance of the industry，prorated to monthly figures according to the relative output of the companies reporting on a monthly or quarterly basis．Beginning with July， 1921 ，figures are actual reports from practically the entire industry compiled by the U．S．Department of Commerce， Bureau of he Census，including data from the Narional Automobile chamber of Commerce．Figures for passenger cars include taxicabs and hose fre apparatus，street sweepers，and busses．All these figures，revising data previously published，represent production or factory sales and cover the United States only．

## LIFE－INSURANCE LAPSES ${ }^{1}$

（Helative to 1925－26 average）

|  | Total |  |  |  |  |  |  |  |  | 莭 | Total |  |  |  |  | 景 |  |  | 焄 | 㫛 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1925 |  |  |  |  |  |  |  |  |  | 1926 |  |  |  |  |  |  |  |  |  |
| First quarter | 96 | 97 | 92 | 101 | 97 | 98 | 93 | 94 | 93 | 91 | 96 | 90 | 96 | 93 | 97 | 90 | 106 | 99 | 101 | 102 |
| Second quarter | 100 | 101 | 103 | 103 | 93 | 98 | 95 | 100 | 92 | 101 | 96 | 86 | 97 | 98 | 92 | 94 | 92 | 95 | 98 | 104 |
| Third quarter | 103 | 116 | 106 | 104 | 106 | 96 | 104 | 100 | 105 | 102 | 106 | 106 | 107 | 105 | 104 | 113 | 108 | 103 | 107 | 101 |
| Fourth quarter | 101 | 106 | 101 | 98 | 100 | 97 | 105 | 111 | 98 | 98 | 102 | 101 | 98 | 97 | 109 | 116 | 96 | 98 | 108 | 101 |
| Yearly average． | 100 | 105 | 101 | 102 | 99 | 97 | 99 | 101 | 97 | 98 | 100 | 96 | 100 | 88 | 101 | 103 | 101 | 99 | 104 | 102 |
|  | 1927 |  |  |  |  |  |  |  |  |  | 1928 |  |  |  |  |  |  |  |  |  |
| First quarter－－ | 96 | 89 | 100 | 92 | 94 | 109 | 103 | 95 | 89 | 90 | 94 | 92 | 96 | 98 | 87 | 97 | 91 | 90 | 89 | 99 |
| Second quarter | 102 | 1103 | 104 | 102 | 97 | 119 | 111 | 94 | 98 | 105 | 94 | 89 | 104 | 98 | 84 | 103 | 93 | 89 | 86 | 90 |
| Third quarter． | 106 | 108 | 110 | 108 | 102 | 107 | 111 | 105 | 105 | 101 | 98 | 103 | 109 | 104 | 89 | 101 | 101. | 86 | 96 | 94 |
| Fourth quarter | 107 | 104 | 112 | 114 | 98 | 108 | 103 | 101 | 115 | 112 | 97 | 101 | 100 | 98 | 94 | 107 | 107 | 91 | 93 | 94 |
| Yearly average． | 103 | 101 | 107 | 104 | 88 | 111 | 105 | 99 | 102 | 102 | 96 | 96 | 102 | 100 | 89 | 102 | 98 | 89 | 91 | 94 |

## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

[Relative numbers, 1926 monthly average taken as 100. December, 1928, is latest month plotted]


## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

Nort.-Prices to producer on larm products and market price of wool are from V. S. Department of Agriculture, Buream of Agricuthurel Economice, nonterrout metals Laber Statiftics. So far as possibio all quotations represent prices to producer or at mill.


## BUSLNESS CONDITIONS IN DECEMBER

## PRODUCTION

Industrial output during December, according to the weighted index of the Federal Reserve Board, showed a gain over both the preceding month and December, 1927, after adjustments for seasonal conditions. The principal gain over December, 1927, occurred in automobiles, iron and steel, nonferrous metals, and tobacco manufactures. Mineral production, after adjustment for seasonal conditions, showed a decline from the previous month, but was almost 10 per cent greater than in December, 1927.

As compared with the previous month, wholesale trade was smaller in all lines except men's clothing and drugs, which advanced. Compared with a year ago, wholesale trade transacted by druggists, meat dealers, and jobbers in men's clothing was greater. Wholesale furniture sales were also greater than in December, 1927. All other lines showed decreases from the preceding year.

Sales by department stores, after adjustments for seasonal conditions, were greater in December than in either the preceding month or December, 1927.

PRODUCTION, STOCKS, AND UNFILLED ORDERS FOR MANUFACTURED COMMODITIES
[1920 monthly average $=100$. Adjustment has been made for the seasonal movement and relative number of working days for production. Unflled orders are principally those of iron, steel, and building materials. December, 1928, is latest month plotted]


## COMMODITY STOCKS

Stocks of commodities held at the end of 1928 were somewhat higher than at the end of the previous year; raw materials and manufactured goods each showed larger inventories than a year previous.

## SALES

The general index of unfilled orders was higher at the end of December than at the end of either the previous month or December, 1927. As compared with November all groups showed higher forward basiness, except lumber, which declined. Contrasted with December, 1927, declines in unfilled orders for iron and steel and transportation equipment were insufficient to offset gains in textiles and lumber.
Wholesale trade in December, after adjustment for Digitized for FRASEseasonal conditions, showed a smaller sales volume nttp://fraser.stlouisfettarif in either the preceding month or December, 1927.
Federal Reserve Bank of St.

Merchandise stocks of department stores, after adjustment for seasonal changes, were smaller at the end of December than at the end of the preceding month, and were somewhat less than a year ago. Sales by mail-order houses were substantially greater than in either the previous month or December of the preceding year. Sales by grocery chains, although showing a decline from the previous month, after allowance for seasonal changes, were considerably larger than in December of the previous year. Sales by 10 -cent chain stores and wearing-apparel chains were larger than in either period. Sales by candy chains, although showing a decline from the previous month, were larger than in December, 1927. Sales by drug, cigar, and shoe chains showed increased volume as compared with both the previous month and the same month of 1927.

## PRICES

The general level of wholesale prices showed no change from November and was fractionally lower than in December, 1927. As compared with the preceding year, prices for all geods were lower except for metals and metal products, building materials and fuel and lighting. Contrasted with the preceding month, prices for farm products, hides and leather products, metals and metal products, building materials, chemicals and drugs, and sundry miscellaneous commodities averaged higher, but the gains were counterbalanced by declines in foods and fuel and lighting. Prices for raw materials and semimanufactures averaged higher than in November while finished products declined; but as compared with December, 1927, prices for finished products alone were higher.
decline from December, 1927, was registered in the price for shelter.

## EMPLOYMENT

Industrial employment, as reflected by the general index of the Department of Labor, showed a gain over both the preceding month and December, 1927. Contrasted with November, larger employment was registered in factories producing foodstuffs, textiles, iron and steel products, chemicals, nonferrous metals, and certain miscellaneous items. Compared with December, 1927, gains were registered in all groups except textiles, lumber, leather, paper and printing, stone, clay, and glass, and tobacco, which declined somewhat.

Factory pay-roll payments in December were likewise greater than in either the preceding month or December of the previous year. As compared with November, pay-roll payments were larger in all groups

FACTORY EMPLOYMENT, BY GROUPS
[1923 monthly average $=100$. December, 1928, is latest month plotted]


The index of prices received by farmers for their produce showed no change from the preceding month and was lower than in December, 1927. Contrasted with the preceding month, declines in the prices for meat animals and fruits and vegetables were sufficient to offset gains in prices for grains, dairy and poultry products, cotton and cottonseed, and certain unclassified products.
The cost-of-living index showed a decline from the preceding month, being lower also than in December, 1927. Compared with the previous month, prices for fogd and clothing were lower, while other items either showed. orlight gains or no change. The principal
except lumber, stone clay and glass, and automobiles, which declined slightly, and chemicals, which showed no change. Contrasted with December, 1927, payroll payments were larger in all groups except textiles, lumber, leather, stone clay and glass, and tobacco manufactures, which declined.

Employment data from several States showed more employees on the pay rolls than in the corresponding month of 1927. Fewer applicants per job were registered at State and municipal agencies in December than in any other month in more than two years. The wages for common labor declined somewhat from November but showed no change from December, 1927.

## REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

## textiles

Imports of wool showed a sizable increase over December, 1927. Wool consumption in December was smaller than in November but greater than in December, 1927. Woolen machinery was generally less active than in November but showed a gain over December, 1927. Cotton consumption was smaller in December than in either the previous month or the same month of 1927 . The consumption of cotton for the year as a whole was 12 per cent smaller than in 1927. Stocks of cotton held at the end of the year were smaller than at the end of the previous year. Rawcotton exports for December were considerably larger
than at the end of the preceding year. Silk deliveries to consuming plants were greater than in December, 1927, while for the year as a whole, indicated consumption of silk was 4 per cent greater than in 1927. Machinery activity in silk mills during December, reduced to a percentage basis, was somewhat lower than in the corresponding month of 1927, except for narrow looms, which showed greater activity. The price index for silk goods showed no change from the preceding month but averaged lower than in December, 1927. Imports of rayon were considerably smaller than in December, 1927, while for the year as a whole, rayon imports showed a decline from

THE TEXTILE INDUSTRIES
[Relative numbers, monthly average, 1923-1925, taken as 100 . Where available, December, 1928, is latest month plotted]

than in the same month of 1927. Cotton prices, both to the producer and at wholesale, averaged higher than in either the previous month or December, 1927.

Spindle activity at cotton mills, reduced to a ratio to capacity, was less than in November but greater than in December of the preceding year. The output of cotton textiles was smaller than in November. Prices of cotton goods were higher than in either period.

Silk imports were larger than in December, 1927, while the increase for the year as a whole, amounted to 2 per cent. Prices for raw silk averaged lower than in November but showed no change from December a year earlier.

1927 amounting to almost 21 per cent. Rayon prices showed no change from those which prevailed in either the preceding month or December, 1927.

Fewer men's and boys' suits were cut in November than in either the previous month or November of the preceding year. Hosiery production in November was smaller than in the same month of the preceding year. The production of knit underwear also showed a slight increase over December, 1927.

Textiles spread with pyroxylin during December showed a substantial gain over the corresponding month of a year earlier, while unfilled orders at the end of the month were also considerably greater than at the same period of 1927.

## METALS

Consumption of iron ore by furnaces was greater in December than in either the previous month or the same month of the preceding year. Pig-iron production, likewise, showed gains over both periods, while the production for the year as a whole showed a gain of more than 4 per cent over 1927. Wholesale prices for pig iron continued to average higher but for the year as a whole showed lower averages than in 1927.

The output of steel ingots was smaller in November than in December but was more than 25 per cent larger than in December, 1927. For the year as a whole, steel-ingot production, totaling almost $50,000,-$ 000 tons, showed the largest production record in history. Unfilled steel orders at the end of the year
siderable gain over the same month of the preceding year. For the year as a whole the production of steel castings showed a substantial increase over 1927. The output of track work in December was greater than in either the previous month or the same month of 1927, but the total for 1928 was considerably smaller than for the preceding year. The output of malleable castings during the last month of 1928 was smaller than in November, but showed a gain over the same month of 1927. New orders for machine tools showed some decline from the high figure of the preceding month, but were considerably in excess of those reported for December, 1927. Shipments of machine tools in December were larger than in either November or December of the preceding year. Unfilled orders for machine tools at the end of the year were larger

THE METAL INDUSTRIES
[Relative numbers, monthly average, 1023-1925, taken as 100. December, 1928, is latest month plotted. Curve covering zinc stocks is plotted from 12 months' moving monthly averages plotted on the end month]

showed gains over both the preceding month and December, 1927. The output of steel sheets by independent manufacturers, although smaller than in November, was greater than in December of the previous year. During the entire year steel-sheet production was considerably greater than at any other time since data first became available in 1919. The output of fabricated structural steel, as indicated by data on shipments, was smaller than in November, but greater than in December, 1927, while for the year as a whole, shipments were substantially larger than in 1927.

The production of steel castings in December was smaller than in the previous month, but showed a con-
than at any other previous period for which data are available.
Shipments of electric overhead cranes were smaller than in either the preceding month or the same month of 1927. Shipments of foundry equipment, although showing a decline from the previous month, were more than twice as heavy as in December, 1927. Shipments of woodworking machinery showed a decline from November, but were greater than in December, 1927. New orders for stokers showed a decline from the previous month when measured in number, but in horsepower were larger than in either the previous month or the same month of 1924.

## FUELS

The production of bituminous coal was smaller than in November and for the year as a whole showed a decline from 1927. Anthracite production in December was also smaller than in the previous month and showed a decline in the total for the year as contrasted with the preceding year. Prices for coal, both bituminous and anthracite, averaged lower in 1928 than in 1927.

## AUTOMOBILES AND RUBBER

The total output of automobiles, both passenger cars and trucks, amounting to more than $4,350,000$ units, during 1928 was the largest production ever recorded. The production of automobiles in Canada was likewise greater in 1928 than in any other previous year.

## HIDES AND LEATHER

Imports of hides and skins in December were larger than in the previous month but smaller than a year ago. For the year as a whole imports were greater than in 1927. Prices for cattle hides averaged higher than in November but were lower than a year ago. The output of sole leather was greater than a year ago. Exports of sole and belting leather were smaller than in December, 1927. Prices for leather averaged higher than a year ago. The output of shoes showed a decline from the preceding month. For the calendar year, shoe production was slightly greater than in 1927. Fewer cattle and calves were slaughtered in December than in either the previous month or in December, 1927. Slaughter of swine, however, was greater than

THE FUEL INDUSTRIES


Exports of automobiles from the United States showed a gain of over 30 per cent over the preceding year. The output of pneumatic tires during November, though showing a decline from October, was substantially greater than in November, 1927. For the first 11 months of the year domestic shipments of pneumatic tires were almost 20 per cent larger than in the same period of 1927. Shipments of inner tubes during the same period showed a gain of 8 per cent over the same period of 1927. Imports of crude rubber in December were considerably greater than in the previous month or December, 1927. Stocks of crude rubber in the United States at the end of the year were considerably smaller than at the end of 1927.
in either the previous month or December of the previous year.

## PAPER

Imports of wood pulp, both chemical and mechanical, showed gains over both the preceding month and December, 1927. For the year as a whole, imports of both types of wood pulp showed gains over 1927. The output of newsprint paper in the United States was larger than in December of last year, but for the year as a whole, the total production was 6 per cent smaller than in 1927. The Canadian output of newsprint in December was also greater than a year ago and the total for 1928 showed a gain of 14 per cent over the production during 1927.

## BUILDING AND CONSTRUCTION

Construction costs on the whole averaged lower in 1928 than in 1927. The value of new building contracts awarded during December showed declines from both the preceding month and December, 1927, but for the year as a whole new construction contracted for showed a gain of more than 5 per cent over 1927. Fire losses in the United States and Canada during 1928 were lower than at any time since 1919.

## LUMBER AND LUMBER PRODUCTS

The output of southern-pine lumber in December showed a decline from both the preceding month and the corresponding month of the previous year. For the year as a whole southern-pine lumber production
shipments, on the other hand, were larger. Face-brick stocks at the end of the year were lower than at the end of 1927. Prices for common brick showed no change from November but averaged higher than in December, 1927.

The production of polished plate glass in December was larger than in the corresponding month of the previous year. For the year as a whole polished plate-glass production was about 10 per cent larger than in 1927. The production of glass containers showed a decline in December from both the preceding month and the same month of 1927, but for the year as a whole the output of glass containers was greater than in the previous year. Stocks of glass containers

THE AUTOMOBILE AND RUBBER INDUSTRIES
[Relative numbers, monthly average 1923-1925 taken as 100. Where available, December, 1928, is latest month plotted]

was lower than at any time since 1921. Stocks of southern pine at the end of the year were considerably lower than at the end of 1927, while prices for southern pine in December averaged substantially higher than in the preceding December. Douglas-fir production during the year 1928 was also smaller than in 1927, while other important types of lumber likewise registered smaller output.
The production of oak flooring in December was larger than in the corresponding month of the preceding year. Maple-flooring production also showed a gain over December, 1927.

## STONE AND CLAY PRODUCTS

 Digitized for $F R$ Rreduction of face brick in December was smaller http://fraser. thetinfìn thee corresponding month of 1927. Face-brickat the end of the year were lower than at the end of 1927.

The output of Portland cement was seasonally smaller than in the previous month, but showed again over December, 1927. Cement production in 1928 was larger than in any other previous year. Cement shipments during the year were likewise greater than in any other preceding year. Stocks of cement at the end of the year were somewhat higher than at the end of 1927 .

New contractslet for concrete pavements in December showed a decline from the preceding month, but were larger than in the same month of 1927 . For the year as a whole concrete-paving contracts were larger than in any other preceding year on record.

## FOODSTUFFS AND TOBACCO

The estimated production of wheat for 1928 was greater than in 1927. The visible supply of wheat at the end of the year both in the United States and in Canada was greater than at the end of the preceding year. Exports of wheat from the United States during the year were lower than in 1927, while Canadian exports were greater. Prices for wheat averaged lower in December than in either the preceding month or December, 1927.

The estimated production of corn was greater than in 1927. The visible supply of corn at the end of the year was considerably smaller than at the end of the preceding year. Exports of corn, including meal, were about twice as large as in 1927.
year. The prices for pork products were generally lower in 1928 than in the previous year.
Receipts of butter at the principal markets were larger in December than in the corresponding month of the preceding year, but for the year as a whole showed a decline from 1927. Storage holdings of creamery butter at the end of the year were smaller than at the end of the previous year. Wholesale prices for butter for the year showed no change from the preceding year. Receipts of cheese at principal markets were smaller in December than in the same month of the previous year, the total for the year 1928 also showing a decline from 1927. Storage holdings of cheese at the end of the year were considerably greater than at the end of the preceding year.

THE TOBACCO INDUSTRIES
[Relative numbers, monthly average 1923-1925 taken as 100. Where available, December, 1928, is latest month plotted]


Receipts and shipments of cattle and calves at primary markets were lower in December than in the corresponding month of 1927, and for the year as a whole these movements likewise showed declines from 1927. Local slaughter of cattle was smaller than in December of the preceding year, showing for the year 1928 as well a decline from the preceding year. Coldstorage holdings of beef products at the end of the year were greater than at the end of 1927.

Receipts and shipments of hogs at principal markets in December were greater than in the same month of 1927. For the year as a whole each of these movements was likewise greater than in 1927. Cold-storage holdDigitized for FRASings of pork products at the end of the year were http://fraser.stlouisfersiderably greater than at the end of the preceding

Imports of raw sugar were smaller in December than in either the preceding month or the same month of 1927. During 1928 raw-sugar imports showed a decline of more than 5 per cent from 1927. Meltings of raw sugar were greater in December than in the corresponding month of the preceding year, but for the year as a whole showed a decline from 1927.

Imports of coffee were smaller in December than in the same month of the previous year, but for the year as a whole showed a gain over 1927. Prices for coffee averaged higher in 1928 than in 1927. Imports of tea were slightly larger in 1928 than in the preceding year, while prices averaged somewhat lower. Cocoa imports were smaller than in 1927, while the price of cocoa also averaged lower.

## TRANSPORTATION

Carloadings in December were greater than in either the previous month or the same month of 1927 , but for the year as a whole were slightly lower than in 1927. At the end of 1928 car surplusages were smaller than at the end of the preceding year. Shipments of railroad locomotives by manufacturers were smaller in 1928 than in any other year since figures became available in 1920. River and canal traffic in 1928 showed generally larger cargoes than in 1927.

## BANKING AND FINANCE

Check payments outside of New York City in December were larger than in either the previous month or the same month of the preceding year. For the year as a whole check payments showed a gain of 9

## DISTRIBUTION MOVEMENT

Sales of mail-order houses, chain stores, and department stores showed larger volume in 1928 than in the preceding year. Postal receipts in 1928 were greater than in 1927 despite declines in postal rates. Magazine advertising in December was larger than in the same month of 1927, but for the year as a whole showed a decline from 1927. Mail dispatched by air showed a tremendous growth during the year.

## GOLD, SILVER, AND FOREIGN EXCHANGE

Receipts of gold at the mint in December were smaller than in the previous month, but larger than in December, 1927. During the entire year gold receipts

## BUSINESS FAILURES


per cent over 1927. Loans and discounts of Federal reserve member banks at the end of the year were larger than at any other time on record. The Federal reserve ratio showed a lower average for 1928 than in any year since 1921. Interest rates on both time and call funds averaged higher in 1928 than in the previous year. New sales of life insurance were greater than in any other year on record. Dividend and interest payments for the calendar year showed a gain of about 5 per cent over 1927. Prices for stocks reached a new high record during the year. Bond prices, though averaging somewhat higher than in 1927, reflected the effect of higher interest rates during the late months of 1928. Brokers' loans reached a new high record during
were greater than in the preceding year. The output of gold at the Rand mines was greater in 1928 than in 1927. Foreign trade in gold showed an excess of exports over imports during the year contrasted with an import excess for the two preceding years. The production of silver in the United States during 1928 was smaller than in the preceding year. Silver stocks at the end of the year, however, were considerably larger than at the end of 1927.

Exchange on the principal currencies was generally lower than in December of the previous year. For the year as a whole, however, exchange on England, Italy, Netherlands, India, Argentina, and Brazil averaged higher than in 1927, other currencies either declining or showing no change.

## PROSPECTIVE CARLOADINGS, FIRST QUARTER OF 1929

Loadings of commodities by railroads in carload lots for the first quarter of 1929 are estimated by the regional advisory boards set up by the American Railway Association at 4.9 per cent above the same period of 1928. These estimates are compiled from detailed reports obtained from shippers, as first described in the August, 1927, issue of the Survey of Current Business, page 20, and are comparable to similar data published quarterly since that time. The various economic districts set up by these boards are shown in the accompanying map.

Estimated loadings of all commodities for the first quarter of 1929 will be greater than a year ago, except for grains, potatoes, other fresh vegetables, canned goods, and hay, straw and alfalfa. The largest numerical increase over a year ago was estimated for coal and coke, while the greatest relative increase was estimated for citrus fruit and automobiles at 33 and 28 per cent, respectively.

In only 3 out of the 13 districts are decreases estimated from the corresponding quarter of 1928-the New England district, 1 per cent; the mid-west district, slightly more than 3 per cent, the central western district, something more than 7 per cent.

The greatest relative increase in loadings over 1928 is estimated for the Allegheny district, 14 per cent.

The next largest increase is for the Ohio Valley district, where a relative gain of almost 12 per cent is anticipated. In both these districts the principal gain over 1928 is due to larger anticipated loadings of coal and coke. Gains of 5 per cent or more are indicated for the Atlantic States, the Allegheny district, the Great Lakes region, the Ohio Valley, the northwest, and the Pacific northwest district.

Regional Advisory Board Districts


PROSPECTIVE CARLOADINGS, FIRST QUARTER OF 1929
COMPARED WITH actual loadings, same quarter of 1928
(As reported by commodity committees, regional shippers' advisory boards, and compiled by American Railway Association)


[^2]PROSPECTIVE CARLOADINGS, FIRST QUARTER OF 1929-Continued
COMPARED WITH ACTUAL LOADINGS, SAME QUARTER OF 1928
(As reported by commodity committees, regional shippers' advisory boards, and compiled by American Railway Association)


[^3]
## Table 1.-INDEX OF INDUSTRIAL PRODUCTION ${ }^{1}$

[Adjusted for seasonal variations, except where otherwise noted]

${ }^{1}$ Compiled by the Federal Reserve Board, Division of Research and Statistics, from 60 individual series of data representing the production of about 35 industries and estimated to represent, directly and indirectly, about 80 per cent of the total industrial production of the United States. The figures are reduced to average daily output to make figures for each month comparable. In addition, the figures are also corrected for seasonal variation, except the unadjusted total, which is prasented to show the to make figures for each month comparable. In addition, the figures are also corrected for seasonal variation, except the unadjusted total, which is presented to show the
actual output on a daily average basis independent of seasonal conditions. Complete description of this index, which is being substituted for the indexes of manufactures
Sandminerals previously published, was presented in the Federal Reserve Bulletin for February, 1927, and March, 1927. Monthly data from 1919 appeared in the July, 1928,

Table 2．－INDEXES OF MARKETINGS OF AGRICULTURAL AND FOREST PRODUCTS ${ }^{1}$

| Year and MONTH | Total， agri－ cul－ tural | ANIMAL PRODUCTS |  |  |  |  |  | CEOPS |  |  |  |  |  | FOREST PRODUCTS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\text { 雷 }}{ }$ | $\begin{aligned} & \text { 응 } \\ & \end{aligned}$ | $\begin{aligned} & \frac{4}{3} \\ & \frac{2}{0} \\ & \frac{0}{2} \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { 寱 } \\ & \text { 安 } \\ & \text { 品 } \\ & \text { 若 } \end{aligned}$ | 量 |  | $\begin{aligned} & \text { 墨 } \\ & \text { 恶 } \end{aligned}$ |  | $\begin{aligned} & \text { 昆 } \\ & \text { 复 } \end{aligned}$ |  |  | $\begin{aligned} & \text { 픙 } \\ & \stackrel{y}{0} \end{aligned}$ | $\begin{aligned} & \text { 炭 } \\ & \text { 亚 } \end{aligned}$ | E <br> 8 <br> 8 <br> B | 最 |  |
|  | Relative to 1923－1925 average |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1920 mo．av＿ | 86 | 71 | 66 | 89 | 75 | 71 | 91 | 86 | 82 | 75 | 78 | 80 | 138 | 82 | 80 | 98 | 79 | 112 |
| 1921 mo．av－ | 98 |  | 90 | 84 | 87 | 82 | 80 | 100 | 110 | 89 | 80 | 90 | 126 | 70 | 70 | 68 | 78 | 49 |
| 1922 mo．av－ | 98 | 93 | 120 | 92 | 94 | 93 | 84 | 99 | 117 | 103 | 88 | 87 | 91 | 90 | 90 | 91 | 88 | 88 |
| 1923 mo．av－ | 93 | 100 | 91 | 103 | 103 | 96 | 92 | 92 | 98 | 97 | 100 | 82 | 96 | 99 | 100 | 93 | 104 | 115 |
| 1924 mo．av－ | 104 | 104 | 126 | 104 | 101 | 103 | 96 | 104 | 114 | 101 | 101 | 99 | 98 | 97 | 96 | 106 | 100 | 88 |
| 1925 mo．av－ | 103 | 90 | 83 | 93 | 96 | 101 | 112 | 104 | 88 | 102 | 99 | 119 | 106 | 104 | 104 | 101 | 96 | 97 |
| $1926 \mathrm{mo.av}$ | 108 | 96 | 106 | 90 | 102 | 101 | 124 | 109 | 89 | 102 | 113 | 125 | 116 | 98 | 98 | 92 | 99 | 101 |
| $1927 \mathrm{mo.av}$－ | 112 | 97 | 138 | 89 | 102 | 103 | 136 | 113 | 103 | 113 | 103 | 118 | 132 | 93 | 93 | 93 | 93 | 102 |
| $1928 \mathrm{mo.av}$－ | 117 | 99 | 132 | 91 | 103 | 102 | 137 | 119 | 120 | 111 | 112 | 117 | 114 |  |  | 97 | 79 | 87 |
| 1926 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February－－ | 75 | 79 | 38 | 79 | 76 | 83 | 83 | 74 | 70 | 68 | 48 | 68 | 134 | 96 | 99 | 90 | 27 | 102 |
| March．．．－－ | 66 | 94 | 88 | 88 | 104 | 97 | 134 | 63 | 60 | 89 | 56 | 62 | 66 | 106 | 109 | 101 | 18 | 111 |
| April．．． | 56 | 89 | 67 | 79 | 114 | 98 | 104 | 53 | 50 | 73 | 53 | 52 | 51 | 103 | 103 | 119 | 44 | 113 |
| May ．．．．．．－ | 56 | 100 | 104 | 83 | 125 | 115 | 129 | 52 | 49 | 94 | 83 | 42 | 33 | 108 | 106 | 121 | 102 | 103 |
| June．．．．．．．． | 61 | 119 | 171 | 85 | 126 | 160 | 157 | 56 | 75 | 137 | 74 | 19 | 41 | 103 | 103 | 92 | 158 | 89 |
| July－．．．．．．－－ | 82 | 111 | 340 | 80 | 92 | 144 | 167 | 79 | 141 | 105 | 168 | 11 | 30 | 96 | 97 | 67 | 161 | 86 |
| August．．．．．－ | 96 | 96 | 178 | 85 | 82 | 107 | 180 | 96 | 141 | 75 | 172 | 48 | 89 | 97 | 100 | 54 | 153 | 94 |
| September． | 154 | 95 | 64 | 99 | 77 | 95 | 138 | 159 | 112 | 142 | 207 | 193 | 159 | 98 | 99 | 75 | 132 | 93 |
| October－－－－ | 219 | 95 | 52 | 109 | 76 | 81 | 134 | 231 | 114 | 184 | 245 | 346 | 220 | 97 | 98 | 82 | 124 | 105 |
| November | 186 | 94 | 64 | 102 | 125 | 72 | 112 | 194 | 91 | 99 | 127 | 320 | 217 | 92 | 91 | 99 | 109 | 105 |
| December－－ | 143 | 92 | 75 | 92 | 142 | 76 | 76 | 148 | 77 | 74 | 67 | 238 | 186 | 85 | 84 | 90 | 124 | 105 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January．．．－ | 114 | 88 | 46 | 96 | 83 | 80 | 102 | 117 | 89 | 88 | 62 | 139 | 194 | 82 | 83 | 72 | 42 | 114 |
| February－－ | 97 | 79 | 48 | 78 | 80 | 81 | 109 | 98 | 76 | 83 | 61 | 108 | 174 | 87 | 88 | 83 | 33 | 98 |
| March ．－．－－ | 89 | 94 | 65 | 88 | 113 | 96 | 161 | 89 | 62 | 112 | 61 | 110 | 105 | $\begin{aligned} & 94 \\ & 93 \end{aligned}$ | 9590 | 100 | 32 | 10899 |
| April．－．－．－． | 65 | 95 | 72 | 79 | 143 | 102 | 116 | 62 | 45 | 114 | 72 | 72 | 36 |  |  | 119 | 74 |  |
| May．．．．．．－ | 67 | 115 | 135 | 93 | 143 | 135 | 142 | 62 | 57 | 115 | 93 | 57 | 29 | 99 | 97 | 117 | 113 | 91 |
| June．．．．．．－－ | 65 | 123 | 348 | 89 | 110 | 160 | 153 | 60 | 76 | 130 | 91 | 31 | 28 | 96 | 96 | 88 | 133 | 92 |
| July．．．．．．．－－ | 69 | 109 | 421 | 76 | 81 | 142 | 154 | 65 | 116 | 99 | 114 | 12 | 25 | 89 | 91 | 64 | $\begin{aligned} & 124 \\ & 119 \end{aligned}$ | 90116 |
| August．．．．．－ | 114 | 105 | 225 | 89 | 77 | 123 | 187 | 115 | 169 | 86 | 124 | 74 | 106 | 99 | 102 | 63 |  |  |
| September ． | 175 | 87 | 89 | 85 | 75 | 89 | 150 | 183 | 178 | 146 | 183 | 186 | 220 | 98 | 99 | 84 | 124 | 113 |
| October－－－－ | 208 | 95 | 68 | 108 | 73 | 81 | 154 | 219 | 160 | 199 | 223 | 260 | 266 | 96 | 94 | 100 | 117 | 104 |
| November－ | 160 | 82 | 68 | 101 | 114 | 71 | 119 | 168 | 109 | 107 | 96 | 227 | 238 | 93 | 91 | 111 | 109 | 100 |
| December－ | 117 | 88 | 66 | 92 | 126 | 71 | 79 | 120 | 104 | 74 | 57 | 145 | 170 | 86 | 83 | 111 | 98 | 95 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January．．．． | 98 | 96 | 61 | 107 | 80 | 89 | 81 | 98 | 99 | 100 | 45 | 81 | 194 | 81 | 80 | 99 | 38 | 97 |
| February－－ | 82 | 94 | 48 | 101 | 89 | 87 | 106 | 81 | 108 | 102 | 43 | 55 | 105 | 87 | 88 | 83 | 26 | 91 |
| March．．．．－ | 79 | 97 | 49 | 83 | 118 | 97 | 160 | 77 | 112 | 106 | 44 | 58 | 40 | 96 | 97 | 102 | 77 | 103 |
| April．－．．．．－－ | 82 | 95 | 61 |  | 130 | 101 | 137 | 81 | 66 | 91 | 47 |  | 25 | 96 | 95 | 111 |  | 91 |
| May ．．．．．－－ | 75 | 108 | 195 | 90 | 139 | 115 | 156 | 72 | 84 | 136 | 94 | 56 | 23 | 101 | 98 | 120 | 140 | 85 |
| June．．．．．．．． | 57 | 116 | 378 | 83 | 106 | 147 | 168 | 52 | 56 | 164 | 75 | 24 | 24 | 94 | 93 | 96 | 172 | 81 |
| July ．－．．．．．．． | 89 | 108 | 387 | 78 | 92 | 138 | 154 | 87 | 147 | 107 | 164 | 28 | 22 | 87 | 88 | 64 | 170 | 73 |
| August．．．－． | 113 | 97 | 195 | 79 | 80 | 117 | 170 | 115 | 186 | 83 | 165 | 45 | 117 | 89 | 88 | 82 | 161 |  |
| September． | 170 | 92 | 54 | 92 | 76 | 95 | 137 | 178 | 165 | 133 | 206 | 184 | 206 | 77 | 77 | 68 | 129 | 64 |
| October－．．－－ | 238 | 102 | 35 | 95 | 86 | 89 | 153 | 251 | 174 | 151 | 268 | 353 | 207 | 87 | 84 | 108 | 128 | 85 |
| November． | 172 | 93 | 70 | 98 | 110 | 77 | 131 | 179 | 122 | 94 | 119 | 258 | 207 | 84 | 80 | 116 | 119 | 97 |
| December－－ | 146 | 92 | 55 | 95 | 126 | 78 | 88 | 152 | 122 | 69 | 70 | 206 | 194 | ． | ．．． | 114 | 122 | 101 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January－．－－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February＿．＿．．．．．．．｜．．．．．．．．｜－．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May－．．．－－－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 3.-INDEXES OF COMMODITY STOCKS AND UNFILLED ORDERS

${ }^{1}$ Compiled by the $U$. S. Department of Commerce, Bureau of the Census, from data on 45 commodities covering stocks in the hands of manufacturers or at other visible points at the end of each month. Details covering construction and weightings are to be found on pp. 20 to 22 of this issue. This index represents a complete revision of the stocksindex formerly published. No adjustment has been made for seasonal variations.
the years 1923 and 1925. In addition to the groups mentioned in this table, data are also included in the total conted acoording to the relative value added in manufacture in the years 1923 and 1925. In addition to the groups mentioned in this table, data are also included in the total covering paper, which, however, is not deemed representa-
tive of the paper group, since only one class of paper is included. Details as to welghtings, sources, etc., are given in the January, 1928 , issue (No. 77).

## Table 4.-INDEXES OF WHOLESALE PRICES

[Base year $\ln$ bold-faced type]

| Year and Monte | DEPARTMENT OF LAROR INDEX: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Farm products | Foods | $\begin{array}{\|c} \text { Hides } \\ \text { and } \\ \text { leather } \\ \text { prod- } \\ \text { ucts } \end{array}$ | $\left\lvert\, \begin{gathered} \text { Textile } \\ \text { prode } \\ \text { uets } \end{gathered}\right.$ | Fuel and light- ing lng | $\begin{gathered} \text { Metals } \\ \text { and } \\ \text { metal } \\ \text { prod- } \\ \text { uets } \\ \hline \end{gathered}$ | $\begin{array}{\|c} \text { Bulld- } \\ \text { ing } \\ \text { mate- } \\ \text { rlals } \end{array}$ |  | House fur-nishIng goods | Mis-cellaneous | $\begin{aligned} & \text { Raw } \\ & \text { mate- } \\ & \text { rialse } \end{aligned}$ | Semi-manu-facarticles | Finished produets | Nonagric. mod. |  |  |
|  | Number of quotations |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Commodities |  |
|  | 550 | 67 | 121 | 40 | 75 | 23 | 73 | 57 | 78 | 37 | 25 | 108 | 62 | 380 | 483 | 300 | 96 |
|  | Relative to 1926 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1913 monthly av.. | 69.8 | 71.5 | 64.2 | 68.1 | 57.3 | 61.3 | 90.8 | 56.7 | 80.2 | 56.3 | 93.1 | 68.8 | 74.9 | 69.4 | 69.0 | 64.3 | 70.9 |
| 1914 montbly av..... | 68.1 | 71.2 | 64.7 | 70.9 | 54.6 | 56.6 | 80.2 | 52.7 | 81.4 | 56.8 | 89.9 | 67.6 | 70.0 | 67.8 | 66.8 | 64.8 | 88.9 |
| 1915 monthly av. | 69.5 | 71.5 | 65.4 | 75.5 | 54.1 | 51.8 | 86.3 | 53.5 | 112.0 | 56.0 | 86.9 | 67.2 | 81.2 | 68.9 | 68, 5 | 67.6 | 77.4 |
| 1916 monthly av..... | 85.5 | 84.4 | 75.7 | 93.4 | 70.4 | 74.3 | 116.5 | 67.6 | 160.7 | 61.4 | 100.6 | 82.6 | 118.3 | 82.3 | 85.3 | 80.3 | 93.3 |
| 1917 monthly av..... | 117.5 | 129.0 | 104.5 | 123.8 | 98.7 | 105.4 | 150.6 | 88.2 | 165.0 | 74.2 | 122.1 | 122.6 | 150.4 | 109.2 | 113.1 | 110.5 | 123.8 |
| 1918 monthly av...-. | 131.3 | 148.0 | 119.1 | 125.7 | 137.2 | 109.2 | 136.5 | 98.6 | 182.3 | 93.3 | 134.4 | 135.8 | 153.8 | 124.7 | 125.1 | 121.9 | 145.2 |
| 1919 monthly av...- | 138.6 | 157.6 | 129.5 | 174.1 | 135.3 | 104.3 | 130.9 | 115.6 | 157.0 | 105.9 | 139.1 | 145.9 | 157.9 | 130.6 | 131.6 | 123.2 | 145.6 |
| 1920 monthly av..... | 154.4 | 150.7 | 137.4 | 171.3 | 164.8 | 163.7 | 149.4 | 150.1 | 164.7 | 141.8 | 167.5 | 151.8 | 198.2 | 149.8 | 154.8 | 129.3 | 140.6 |
| 1921 montbly av.... | 97.6 | 88.4 | 90.6 | 109.2 | 94.5 | 96.8 | 117.5 | 97.4 | 115.0 | 113.0 | 109.2 | 88.3 | 96.1 | 103.3 | 100.1 | 89.1 | 87.2 |
| 1922 monthly av..-- | 98.7 | 93.8 | 87.6 | 104.6 | 100.2 | 107.3 | 102.9 | 97.3 | 100.3 | 103.5 | 92.8 | 90.0 | 98.9 | 98.5 | 97.3 | 92.3 | 95.3 |
| 1923 monthly av ---- | 100.6 | 98.6 | 92.7 | 104.2 | 111.3 | 97.3 | 109.3 | 108.7 | 101.1 | 108.9 | 99.7 | 98.5 | 118.6 | 99.2 | 100.9 | 100.8 | 103.5 |
| 1924 monthly av.... | 98.1 | 100.0 | 91.0 | 101.5 | 106.7 | 92.0 | 106.3 | 102.3 | 98.9 | 104.9 | 93.6 | 97.6 | 108.7 | 96.3 | 97.1 | 100.9 | 100.0 |
| 1925 monthly av...- | 103. 5 | 109.8 | 100.2 | 105.3 | 108.3 | 96.5 | 103.2 | 101.7 | 101.8 | 103.1 | 109.0 | 106.7 | 105.3 | 100.6 | 101.4 | 104.6 | 108.0 |
| 1926 monthly av.... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 180.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 109.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1927 monthly av...- | 95.4 | 99.4 | 96.5 | 107.9 | 95.7 | 86.5 | 98.2 | 93.3 | 96.6 | 98.2 | 89.9 | 96.5 | 96.9 | 94.5 | 94.4 | 99.4 | 99.4 |
| 1928 monthly av.... | 97.7 | 105.9 | 101.0 | 121.7 | 98.3 | 82.8 | 99.8 | 83.7 | 95.5 | 97.4 | 83.0 | 99.1 | 97.4 | 97.0 | 95.5 | 103.1 | 102.4 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May -.----- | 93.7 | 96.3 | 94.4 | 103.7 | 93.9 | 83.9 | 98.6 | 95.1 | 95.4 | 97.8 | 91.3 | 93.9 | 96.0 | 93.6 | 93.2 | 99.3 | 96.295.8 |
| June. | 93.894.1 | 96.5 | 94, 4 | 107.3 | 94.3 | 84.2 | 98.2 | 94.6 | 95.8 | 98.0 | 90.2 | 94.1 | 95. 6 | 93.4 | 83.1 | 98.4 |  |
| July .-... |  | 97.6 | 93.9 | 111.7 | 94.3 | 84.2 | 97.7 | 93.7 | 95.3 | 98.0 | 89.3 | 94.7 | 95.7 | 93.583.4 | 93.293.3 | 98.899.8 | 97.499.8 |
| August. | 95.2 | 102.2 | 94.2 | 111.7 | 96.2 | 84.1 | 98.0 | 92.9 | 95.4 | 98.6 | 89.9 | 97.5 | 97.3 |  |  |  |  |
| September | 96.5 | 105.9 | 96.5 | 112.5 | 88.5 | 84.2 | 97.6 | 92.1 | 96.4 | 98.6 | 89.2 | 99.9 | 98.6 | 94.095.5 | 94.0 | 100.9 | $\begin{aligned} & 102.7 \\ & 103.7 \\ & 104.7 \\ & 105.0 \end{aligned}$ |
| October | 97.0 96.7 96.8 | $\begin{aligned} & 105.0 \\ & 104.3 \\ & 104.4 \end{aligned}$ | $\begin{array}{\|l\|} \hline 100.0 \\ 101.5 \\ 100.7 \end{array}$ | 113.0 <br> 114.3 <br> 116.9 | 98.4 | 83.8 | 97.1 | 91.6 | 97.1 | 98.5 | 88.3 | 99.5 | 97.6 |  | 94.8 | 101.6 |  |
| November |  |  |  |  | 97.5 | 82.9 | 97.0 | 90.2 | 97.4 | 98.9 | 88.3 | 09.0 | 97.0 | 95.3 | 94.6 | 102.5 |  |
| December. |  |  |  |  | 97.2 | 82.5 | 98.4 | 90.4 | 97.2 | 98.8 | 89.0 | 99.2 | 97.7 | 95.3 | 94.8 | 1023 |  |
| 1928 | 96.8 | 104. 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January.-. | $\begin{aligned} & 96.3 \\ & 96.4 \end{aligned}$ | 106. 1 | 98.5 | 121.0 | 96.7 | 80.8 | 98.1 | 90.8 | 96.3 | 98.6 | 89.0 | 100.2 | 97.7 | 93.9 | 93.7 | 101.7 | 104.7 |
| February. |  | 104.5 | 98.7 | 124.1 | 96.6 | 81.2 | 98.3 | 91.0 | 95.8 | 98.4 | 87.3 | 99.1 | 97.1 | 94.8 | 94.2 | 102.7 | 103.2 |
| March. | $\begin{aligned} & 96.0 \\ & 97.4 \end{aligned}$ | 103.5 | 98.0 | 124.0 | 96.5 | 80.8 | 98.4 | 91.0 | 95.6 | 88.3 | 86.8 | 97.9 | 97.8 | 94.8 | 94.0 | 103.6 | 103.8 |
| A pril. |  | 107.6 | 99.5 | 126.7 | 98.5 | 80.8 | 98.4 | 92.5 | 95.8 | 97.9 | 84.9 | 100.1 | 97.9 | 95.9 | 04.7 | 105.6 | 104.0 |
| May | 98.6 | 109.8 | 101.2 | 126.3 | 96.6 | 81.8 | ${ }^{98} 6$ | 93.5 | 95.3 | 97.8 | 85.1 | 101.4 | 98.6 | 97.1 | 95.6 | 103.8 | 102.1 |
| June.. | $\begin{aligned} & 97.6 \\ & 98.3 \end{aligned}$ | $\begin{aligned} & 106.7 \\ & 107.1 \end{aligned}$ | 100.3 | 123.7 | 96.3 | 82.1 | 98.7 | 93.9 | 94.9 | 97.0 | 82.2 | 99.3 | 97.8 | 96.7 | 95.2 | 103.5 | 101.7 |
| July ..... |  |  | 102.3 | 124.2 | 96.8 | 82.8 | 98.6 | 94.4 | 94.5 | 96.9 | 80.8 | 99.5 | 97.8 | 97.8 | 95.9 | 102.9 | 102.1 |
| August. | $98.9$ | $\begin{aligned} & 107.1 \\ & 107.0 \end{aligned}$ | 104.1 | 121.0 | 96.3 | 84.6 | 100.4 | 94.6 | 94.7 | 97.2 | 79.3 | 89.2 | 97.3 | 99.1 | 96.7 | 102.8 | 102.8 |
| September | $\begin{array}{r} 100.1 \\ 97.8 \\ 96.7 \\ 96.7 \end{array}$ | $\begin{aligned} & 108.8 \\ & 103.5 \\ & 101.6 \\ & 103.6 \end{aligned}$ | 108.9 | 120.7 | 95.6 | 85.1 | 100.5 | 94.7 | 95.1 | 97.2 | 79.7 | 100.5 | 96.9 | 100.5 | 97.8 | 103.3 | 101.6 |
| October.. |  |  | 102.3 | 117.5 | 98.1 | 84.9 | 101.0 | 95.0 | 95.6 | 96.5 | 80.3 | 97.4 | 98.9 | 98.5 | 96.4 | 102.3 | 100.7 |
| November |  |  | 100.1 | 115.5 | 06.1 | 84.4 | 101.7 | 96.0 | 96.0 | 96.4 | 80.0 | 96.2 | 96. 9 | 97.2 | 95.4 | 102.6 | 101.8 |
| December. |  |  | 98.0 | 115. 7 | 96.1 | 83.5 | 102.9 | 96.8 | 98.1 | 06.4 | 80.1 | 97.4 | 97. 2 | 96.4 | 94.8 | 1020 | 100.3 |
| 1929 | 96.7 | $\text { 103. } 6$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March.-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April.-. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Compiled by the U. S. Department of Labor, Bureau of Labor Statistics, based on monthly averages of 550 weekly quotations, arranged in 10 groups and also reclassifled by state of manufacture with a grouping of all nonagricultural commodities, consisting of the total index minus the 67 quotations in thefarm-products group. This inder supresedes the index based on 1913 as 100 , which was published in the August, 1927 , issue (No. 72) and previous issues. In computing this new index, the price of
each commodity is weighted by multiplying it by the estimated average quantity marketed in the years 1923 to 1925 , or 1923 and 1925 in the case of most manuartured each commodity is weighted by multiplying it by the estimated average quantity marketed in the years 1923 to 1925 , or 1923 and 1925 in the case of most manupactured
commodities, the census data being used for those years. Monthly data from 1923 appeared in the November, 1927, issue (No. 75 ), p. 24 , except for data for state of mancommodities, the census data being used for those years. Monthly data from 1923 appeared in the November, 1927 , issue (No. 75), p. 24 , except for data for state of man-
ufacture, which appeared in the June, 1928 , issue (No. 82), p. 23 . Full description of the new index, with details on subgroups and on individual commodities, is conufacture, which appeared in the June, 1928 , issue (No. 82)
tained in Bulletin 453 of the Bureau of Labor Statistics.
${ }_{2}$ Data compiled, respectiveiy, by Dun's Review and Bradstreet's and recomputed to a 1926 base for comparison with the Department of Labor index; the data are shown as of the end of the month, insteed of at the first of the month, as formerly. In its original form, Dun's price index is an aggregate of 300 quotations, each weighted by the $\Rightarrow 6$ commodities. Details by commodity groups are shown for each inder in their respective by food products. Bradatreel's inder is the aggregate of prices per pound of 86 commodities. Details by commodity groups are shown for each index in their respective journals.

Table 5.-COST OF LIVING, FARM, AND RETAIL PRICE INDEXES
[Bace year in bold-faced type]


1 Index numbers of the cost of living, compiled by the National Industrial Conference Board, represent, up to March, 1922, retail prices on the first day of the month except food, which is the retail food index of the U. S. Department of Labor, Bureau of Labor Statistics, for the 15 th of the preceding month. Beginning with March, 1822 , all prices shown are as of the 15th of the month indicated. The index is weighted according to the estimated consumption of average wage earners before the war, on the on July quotations: 1018 figures are for 2 months: 1919 for 3 months and thereatter monthly. Owing to different trends, the fuel and the light data have been segregated on July quotations: 1918 figures are for 2 months: 1919 for 3 months and thereafter monthly. Owing to different trends, the fuel and the light data have been segregated available and the fuel and light data previous to 1223 are not quite comparable with the revised figures following, which are 8 points lower than the original figures for those years on fuel and light. The cost-of-17ving indexes of the U. S. Department of $\mathcal{L a b o r}$, now compiled only semiannually, are omitted.
a Compiled by the Department of Agriculture, Bureau of Agricultural Economics, as of the 15 th of the month. These inderes are based upon prices received by farmers the period 1919-23. For the detailed explanation of this inder soe August, 1925, monthly supplement to "Crops and Markets," published annual marketings by farmers for ${ }^{1}{ }^{1}$ The retail food price index compled by the U. S. Department of Labor, Bureau of Labor Statistics, the prices of 22 articles of food being welghted according to their consumption in workingmen's families as reported by retail dealers in 51 of the largest cities as of the 15 th of the month. Monthly data from 1913 appeared in Bulletin 396 of the Bureau of Labor Statistics, p. 12.
'The retail coal price inder compiled by the V. S. Department of Labor, Bureau of Labor Statistics, is based on an anweighted average of quotations on Pennsylvania anthracite, white ash, chestnut, as of the 15th of each month in 51 cities. The annual figures from 1913 through 1926 are based on 2 quotations a year, on Jan. 16 and July 15; thereafter monthly averages are used.

Table 6.-WOOL*

*Monthly data from 1909 through 1926 for items in this table, if available, may be found in the Record Book of Business Statistics, Textiles Section, pp. 10, 11, 12, 14, 16, and 17 .
1 Receipts of wool at Boston by railroads and steamships compiled by the Boston Chamber of Commerce through January, 1925 , and since that date by the Boston Grain
and Flour Exchange. They comprise usually about two-thirds of all wool imported and about half of the domestic wool clip. All classes of wool are combined in these
figures, without reduction to grease equivalent. figures, without reduction to grease equivalent.
${ }^{2}$ Compiled by the $U$. SS. Department of Commerce, Bureau of Foreign and Domestic Commerce. The left-hand column totals wool of all classes in the condition imported, while the right-hand column shows the reduction to grease equivalent. Scoured carpet wool is converted to the grease basis, assuming a shrinkage of 40 per cent; other wool's are converted from scoured to grease on basis of a shrinkage of 45 per cent.
to the U. S. Department of Commerce. Bureau of the Census. These data reported by almost Agoo manufacturenomics, until April, 1922 , when the compilation was transferred to the U. S. Department of Commerce, Bureau of the Census. These data reported by almost 600 manufacturers represent nearly 80 per cent of the industry, the figures from the American woolen Company and irom 10 to 20 other concerns not being included. The figures are reduced to grease equivalent by multiplying scoured wool by 2 and pulled Stocks of wool held by about 600 manulacturers and about 400 dealers from the $U$. $S$. Depar
and thereafter by that bureau jointly with U. S. Department of Commerce, Bureau of the Census. Until the third quarter of 1920 , the stock reports by ict until April, 1822, practically complete, with about 600 firms reporting. Thereafter one large firm and a number of small firms, varying from 10 to 20 , did not report, but estimates were made for them from the third quarter of 1920 through the third quarter of 1921, in order to make the data comparable with previous figures; these figures, however are not comparable with the later data from the reduced number of firms, which represent about 85 per cent of manufacturers' stocks. Stocks in dealers' hands include t. S . Government stocks taken over during the war and finally disposed of shortly after the end of 1921. Stocks include wool, tops, and noils and are reduced to grease equivalent in the saine manner as in the consumption report; further details as to classes of wool, etc., are given in press releases.
Bercentage of active wool machinery compiled by the U. S. Department of Commerce, Bureau of the Census, beginning with June, 1919. From October, 1018 , through
May, 1919 , these data had been collected by the $U$. S. Department of Agriculture, while previous thereto they were compiled by the Jational Assoctation of Wool Manufacturers. The 1913 figure is based on only one month (November flgures as of December 1), while thereafter the averages are of quarterly data until 1917, when monthly figures were started in the middle of the year. The 1917 averages are therefore based on 9 months' fgures. Up to $1921 t h e$ data represent the percentage of active machines to total, and beginning with 1921 the percentage of active hours to total hours of plant operation. Figures on the old basis of active machines are still published in the press releases but are not much different from the more accurate active hour figures. Previous to October, 1822 , these figures were originally given as of the first of activity of over 100 per cent is shown, overtime was reported sufficient to offset all idle hours and leaves an excess. Details as to number of spindles, etc., are given in press releases. These data comprise practically all wool-consuming mills.

Table 7.-CLOTHING *

| Year and Month | MEN'S AND BOYS' GARMENTS CUT 1 |  |  | OFERALLS |  |  | HOSIERY ${ }^{3}$ |  |  |  |  | KNIT UNDERWEAR ${ }^{\text {d }}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Suits | Separate sers | Over- | Cut | $\begin{gathered} \text { Net } \\ \text { ship- } \\ \text { ments } \end{gathered}$ | Un= filled orders, end of mo. | $\begin{gathered} \text { Pro- } \\ \text { duc- } \\ \text { tion } \\ \text { (alasses) } \end{gathered}$ | $\begin{gathered} \text { Net } \\ \text { ship- } \\ \text { ments } \end{gathered}$ | $\begin{gathered} \text { St'ks, } \\ \text { end of } \\ \text { mo. } \end{gathered}$ | New orders | $\begin{array}{\|c\|} \text { Un- } \\ \text { filled } \\ \text { orders, } \\ \text { end of } \\ \text { mo. } \end{array}$ | Pro-duction | $\left\lvert\, \begin{gathered} \text { Net } \\ \text { ship- } \\ \text { ments } \end{gathered}\right.$ | St'ks, end of mo. | $\begin{array}{\|l\|l} \text { New } \\ \text { orders } \end{array}$ | Unflited orders, end of mo. |
|  | Thousands of garments |  |  | Thousands of dozen garments |  |  | Thousands of dozen pairs |  |  |  |  | Thousands of dozen garments |  |  |  |  |
| 1920 monthly average |  |  |  |  |  |  |  |  |  |  |  | 986 | ${ }^{6} 765$ |  | ${ }^{0} 168$ | ${ }^{6} 837$ |
| 1921 monthly average. |  |  |  |  |  |  |  |  |  |  |  | 846 | 770 |  | 994 | 1,840 |
| 1922 monthly average. |  |  |  |  |  |  |  |  |  |  |  | 1,046 | 1, 070 |  | 1,309 | 2,992 |
| 1923 monthly average. |  |  |  |  |  |  | 5 3, 834 |  |  |  |  | 1,170 | 1,230 |  | 1,157 | 3,807 |
| 1924 monthly average. | 2,037 | 2,160 | 522 |  |  |  | 3,352 | 3,331 | 6,259 | 3, 410 | 5,755 | ${ }^{7} 1,108$ | ${ }^{7} 1,038$ |  | ${ }^{2} 1,119$ | 2,456 |
| 1925 monthly average. | 2,280 | 2,295 | 481 |  |  |  | 3,812 | 3,758 | 5,771 | 3,888 | 7,394 | 1,154 | ${ }^{5} 1,156$ | ${ }^{\text {b }} 1,106$ | ${ }^{1} 1,221$ | 3,002 |
| 1926 monthly average.. | 2,205 | 2,260 | 493 |  |  |  | 3, 522 | 3, 620 | 6,703 | 3,839 | 6,077 | 1,029 | 1,020 | 1,243 | 965 | 2,175 |
| 1927 monthly average. | 2, 025 | 2,062 | 465 |  |  |  | 3,749 | 3,780 | 7,781 | 3,909 | 5,960 | 1,062 | 1,104 | 1,331 | 1,124 | 2,364 |
| 1928 monthly average |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| September-..... 19 |  | 2,296 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1,897 |  | 752 |  |  |  | 3, 557 | 4,015 | 6,953 | 3,946 | 5,566 | 1,004 | 1,325 | 1,196 | L, 087 | $\begin{aligned} & 1,659 \\ & 1,417 \end{aligned}$ |
| Oetober | 1,790 | 2,187 | 878 |  |  |  | 3,694 | 3,940 | 6,843 | 4,289 | 5,667 | 1,015 | 1, 166 | 1, 042 | 949 |  |
| November. | 2,081 | $\begin{aligned} & 1,919 \\ & 2,071 \end{aligned}$ | 362308 | - |  |  | 3,7333,487 | 3,888 | 6,856 | 4,012 | 5,783 | 976 | 999 | 1, 011 | L, 117 | 1,460 |
| December. |  |  |  |  |  |  |  | 3,560 | 6,710 | 3,261 | 5,100 | 931 | 787 | 1,063 | 918 | 1,562 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February. | 2,3822,574 | 2,320 | 305 |  |  |  | 3, 640 | 3,412 | 7, 567 | 3, 701 | 5, 668 | 959 | 011 | 1,213 | 1,232 | 2,408 |
| March. |  | 2,284 | 343 |  |  |  | 4,159 | 4, 251 | 7,342 | 4,225 | 5,530 | 1,198 | 1,164 | 1,298 | 1,282 | 2,615 |
| April. | $\begin{aligned} & 2,574 \\ & 1,932 \end{aligned}$ | 2,032 | 255 |  |  |  | 3,709 | 3, 618 | 7,758 | 3,963 | 5,807 | 1,108 | 1, 013 | 1,305 | 949 | 2,566 |
| May.. | $1,775$ | 2,032 | 379 |  |  |  | 3,694 | 3,551 | 7,914 | 4, 058 | 6, 141 | 1,082 | 958 | 1, 527 | 952 | 2,583 |
| June | $\begin{aligned} & 1,970 \\ & 1,902 \end{aligned}$ | 2,064 | 544 |  |  |  | 3,941 | 3,886 | 8, 141 | 4,143 | 6, 342 | 1,127 | 1,049 | 1,623 | 1,115 | 2,614 |
| July |  | 1,950 | 614 |  |  |  | 3,113 | 3,226 | 8,300 | 3, 095 | 6,046 | 880 | 950 | 1, 617 | 803 | 2,458 |
| August. | $\begin{aligned} & 1,902 \\ & 2,151 \end{aligned}$ | 2,199 | 710 |  |  |  | 3,807 | 4,016 | 8,093 | 3,802 | 6, 018 | 1,082 | 1,369 | 1,434 | 1,434 | 2,543 |
| September | 1,839 | 1,963 | 729 |  |  |  | 3,841 | 4,355 | 7,695 | 4,898 | 6,407 | 1,055 | 1,464 | 1,216 | 1,241 | 2,416 |
| October | 1,7151,6922,095 | 1,989 | 704 |  |  |  | 4, 151 | 4, 294 | 7,965 | 4,246 | 6, 481 | 1,181 | 1,359 | 1,322 | 1,147 | 2,185 |
| November. |  | 1,8471,902 | 435 |  |  |  | 3.863 | 3,927 | 7, 568 | 3,838 | 6, 167 | 1,181 | 1,230 | 1, 073 | 1,046 | 1,967 |
| December |  |  | 261 |  |  |  | 3,386 | 3, 646 | 7,640 | 3,183 | 5,395. | 973 | 959 | 1,100 | 924 | 1,925 |
| 1928 | 2,207 | 2,021 | 269 | 354 | 294 | 99 | 3, 578 | 3,033 | 7, 883 | 3, 109 | 5,380 | 1,022 | 017 | 1,202 | 1,309 | 2,313 |
| February | 2,408 | 2,043 | 280 | 377 | 353 | 106 | 3, 603 | 3, 279 | 8,466 | 3, 137 | 5,167 | 1, 132 | 1,042 | 1,209 | 1,025 | 2,275 |
| March... | $\begin{aligned} & 2,265 \\ & 1,584 \end{aligned}$ | 2,329 | 280 | 372 | 254 | 97 | 3,808 | 3,808 | 8,494 | 3,363 | 4,532 | 1,215 | 1,194 | 1,250 | 1,208 | 2,281 |
| April. |  | 1,662 | 199 | 341 | 308 | 125 | 3,304 | 3,217 | 8,618 | 3,418 | 4, 520 | 1,151 | 965 | 1, 520 | 934 | 2,245 |
| May.. | 1. 806 | 1,658 | 330 | 370 | 323 | 183 | 3,462 | 3,312 | .9,030 | 3,682 | 4. 794 | 1, 148 | 1,019 | 1,709 | 1,028 | 2, 164 |
| June. | $\begin{aligned} & 1,902 \\ & 1,911 \end{aligned}$ | 1,818 | 463 | 367 | 322 | 159 | 3, 292 | 3,386 | 9,011 | 3,573 | 4,900 | 1, 113 | 998 | 1,761 | 894 | 2,053 |
| July. |  | 1,638 | 535 | 346 | 330 | 169 | 2, 786 | 2,963 | 8,916 | 2,836 | 4.711 | 881 | 942 | 1,658 | 852 | 1,947 |
| August. | $\begin{aligned} & 1,911 \\ & 2,045 \end{aligned}$ | 1,895 | 666 | 394 | 360 | 159 | 3,469 | 3,731 | 8, 648 | 3,202 | 4, 076 | 1,098 | 1,306 | 1,570 | 1,236 | 1,896 |
| September... | $1,601$ | $\begin{aligned} & 1,852 \\ & 1,884 \\ & 1,643 \end{aligned}$ | 647 | 385 | 358 | 161 | 3.255 | 3,755 | 8,128 | 3,810 | 3,957 | 1,016 | 1,402 | 1,370 | 1,213 | 1,696 |
| October | 1,5621,515 |  | 711 | 404 | 340 | 174 | 3,852 | 4, 166 | 7,849 | 4,342 | 3,888 | 1. 297 | 1,514 | 1,228 | 1,483 | 1,645 |
| November |  |  | 463 | 334 | 294 | 226 |  |  |  |  |  | 1,154 | 1,189 | 1,183 | 1,183 | 1,620. |
| December. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

* Monthly data from 1920 through 1926 for items in this table, if avallable, may be found in the Record Book of Business Statistics, Textiles Section, pp. 37, 38, and 48, except for men's and boys' garments, for which monthly data from 1924 appeared in the May, 1928 , issue (No. 81 ), p. 48
1 Compiled by the U. S. Department of Commerce, Bureau of the Gensus, from reports of 730 identical establishments in 1927 and approximately identical establishments hereafter. Earlier Aigures are from 467 establishments prorated to compare with the 730 establishments on the basis of the relation of the figures in both groups in 1927 . Details by materials are given in press releases.
${ }^{1}$ Compiled from reports to the $U$ U. S. Department of Commerce, Bureau of the Census, from about 290 establishments; further details by kind of overalls are given in press summaries. The data represent overalls, overall jackets, and one-piece overall suits, while additional data on children's play suits, work pants and breeches, blanket-lined and similar coats, sheep-lined coats, leather jackets and hunting, riding, and camp clothing are shown in the press summaries.
${ }^{1}$ Compiled by the U. S. Department of Commerce, Bureau of the Census, as reported by 261 identical establishments, which produced 44 per cent of the total output of hosiery in 1925, according to the census of manufacturers. Further details are given in press releases.
put of tnit underear in 1925 , put of knit underwear in 1925, according to the census of manufacturers, while stocks are from 70 to 83 establishments only. Further details as to classes given in press releases. Data previous to May, 1924, were compiled by the Associated Knit Underwear Manufacturers of America.
${ }^{1} 11$ months' average.
-6 months' average.
' 9 months' average.

Table 8.-TEXTILE WHOLESALE PRICES ${ }^{1}$

| Year and MONTH | COTTON |  | COTTON YARN |  | COTTON GOODS |  |  | WOOL (Boston) ${ }^{2}$ |  | $\begin{aligned} & \text { WOR- } \\ & \text { STED } \\ & \text { YARN } \end{aligned}$ | DRESS GOODS | $\begin{aligned} & \text { SUT } \\ & \text { ING } \end{aligned}$ | $\begin{aligned} & \text { SILK, } \\ & \text { RAW } \end{aligned}$ | $\text { GILK }_{\text {GOODS }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Price to pro= ducer, all grades ${ }^{3}$ | $\begin{aligned} & \text { Mid- } \\ & \text { diling, } \\ & \text { upland, } \\ & \text { New } \\ & \text { York } \end{aligned}$ | Carded, white, north ern, mule spun, 22/1, cones, Boston | Carded, single warp, 40/1s, southern spin. ning | Com= posite index 4 | Print cloth, $64 \times 60$, 381/2in., 5.35 yds. to lb., f. o. b. mill | Sheet- <br> Ing, 4/4 <br> Trion, <br> LL, $3^{\prime \prime}$ ", <br> 4 yds. to lb., New York | Territory, fine, staple, scoured | 1/4 blood combing grease, Ohlo and Pennsylvania fleeces | 2/32's, crossbred stock, Boston | French serge, 39", at mill | Unfinished worsted, 13 oz., at mill | Japanese, 13-15, New York | Com posite index ${ }^{5}$ |
|  | Dollars per pound |  |  |  | $\begin{gathered} \text { Rel. to } \\ \text { 1911-1913 } \end{gathered}$ | Dollars per yard |  | Dollars per pound |  |  | Dollars per yard |  | per pound | Dollars per yard |
| 1913 mo. av . - -- | \$0. 120 | \$0. 128 | \$0. 248 | -------- | ${ }^{8} 100$ | \$0.053 | \$0.062 | \$0.57 | \$0.25 | \$0. 78 |  |  |  |  |
| 1914 mo. av....- | . 104 | ${ }^{7} .119$ | . 218 |  | 97 | . 046 | . 056 | . 61 | . 26 | . 64 |  |  |  |  |
| 1915 mo. av ----- | . 091 | . 102 | . 198 |  | 91 | . 041 | . 052 | . 71 | . 36 | . 79 |  |  |  |  |
| $1916 \mathrm{mo} . \mathrm{av}_{\text {-...- }}$ | . 137 | . 145 | . 297 |  | 122 | . 061 | . 072 | . 87 | . 41 | 1. 05 |  |  |  |  |
| 1917 mo. av_-...- | . 220 | . 235 | . 449 |  | 187 | . 095 | . 119 | 1.59 | . 66 | 1. 56 |  | --------- | \$6. 273 |  |
| 1918 mo. av _...- | . 295 | . 318 | . 662 |  | 292 | . 159 | . 195 | ${ }^{8} 1.84$ | 8.76 | 2.11 |  |  | 6.960 |  |
| 1919 mo. av _---- | . 299 | . 324 | . 596 |  | 272 | . 146 | . 168 | 1.74 | . 64 | ${ }^{7} 1.63$ |  | --------- | 9.639 | \$1. 82 |
| 1920 mo. av - --- | . 310 | . 339 | . 703 |  | 323 | . 182 | . 211 | 1.66 | . 51 | 1. 83 |  | ---.------ | 9.084 | 1. 75 |
| 1921 mo. av----- | . 125 | . 152 | . 331 | \$0. 448 | 162 | . 077 | . 087 | . 85 | . 26 | 1. 18 |  | --------- | 6.574 | 1. 40 |
| 1922 mo. av... | . 193 | . 213 | . 397 | . 571 | 187 | . 086 | . 104 | 1. 25 | . 42 | 1. 41 |  | --- | 7.648 | 1. 44 |
| 1923 mo. av.. | . 270 | . 294 | . 486 | . 648 | 213 | . 103 | . 123 | 1.41 | . 51 | 1. 73 |  | - \$2. 168 | 8. 653 | 1. 57 |
| 1924 mo. av...-- | . 268 | . 287 | . 475 | . 593 | 199 | . 091 | . 113 | 1.42 | . 53 | 1. 69 |  | 2. 195 | 6. 248 | 1.38 |
| 1925 mo. av | . 222 | . 235 | . 418 | . 558 | 188 | . 093 | . 104 | 1.40 | . 55 | 1. 72 |  | 2.348 | 6. 574 | 1.39 |
| 1926 mo. av. | . 151 | . 176 | . 358 | . 508 | 160 | . 076 | . 093 | 1.15 | . 46 | 1. 44 | \$1. 03 | 2.005 | 6. 195 | 1.36 |
| 1927 mo . av . | . 159 | . 176 | . 351 | . 491 | 157 | . 076 | . 093 | 1.10 | . 45 | 1. 37. | . 99 | 1.912 | 5. 443 | 1. 24 |
| 1928 mo. av . | . 186 | . 200 | . 371 | . 499 | 163 | . 077 | . 092 | 1.16 | . 54 | 1.56 | 1.01 | 1.997 | 5.072 | 1.18 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May --.........--- | . 139 | . 163 | . 335 | . 456 | 147 | . 071 | . 082 | 1.08 | . 41 | 1.33 | . 98 | 1. 913 | 5.831 | 1.25 |
| June...--------- | . 148 | . 168 | . 346 | . 470 | 150 | . 073 | . 084 | 1.09 | . 42 | 1.33 | . 98 | 1. 913 | 5. 488 | 1.24 |
| July .-.-.-.------ | . 155 | . 180 | . 354 | . 481 | 152 | . 075 | . 087 | 1.13 | . 44 | 1.35 | . 98 | 1. 913 | 5. 292 | 1.23 |
| August.....------ | . 171 | . 203 | . 387 | . 512 | 162 | . 084 | . 088 | 1. 12 | . 44 | 1.35 | . 98 | 1.913 | 5. 145 | 1.23 |
| September.-.-.-- | . 225 | . 218 | . 406 | . 547 | 177 | . 089 | . 110 | 1. 12 | . 45 | 1. 38 | . 98 | 1.913 | 5. 096 | 1. 20 |
| October ........--- | . 210 | . 211 | . 402 | . 546 | 175 | . 087 | . 111 | 1.12 | . 47 | 1.40 | 1.00 | 1.913 | 5. 145 | 1.20 |
| November.-.--- | . 200 | . 203 | . 383 | . 530 | 172 | . 083 | . 110 | 1.12 | . 48 | 1. 40 | 1.00 | 1.913 | 4.802 | 1.19 |
| December......-- | . 187 | . 196 | . 371 | . 522 | 168 | . 080 | . 105 | 1. 14 | . 49 | 1.40 | 1.00 | 1.917 | 4.998 | 1.19 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | . 186 | . 190 | . 369 | . 523 | 166 | . 080 | . 098 | 1.17 | . 50 | 1. 43 | 1.00 | 1. 935 | 5.145 | 1.19 |
| February | . 170 | . 185 | . 360 | . 494 | 163 | . 077 | . 095 | 1.20 | . 52 | 1. 50 | 1.00 | 1. 953 | 5.292 | 1.20 |
| March.....-...-- | . 178 | . 195 | . 366 | . 483 | 161 | . 076 | . 092 | 1.20 | . 52 | 1. 53 | 1.03 | 2.008 | 5.194 | 1.20 |
| April.----------- | . 187 | . 203 | . 366 | . 480 | 161 | . 076 | . 091 | 1.19 | . 53 | 1. 55 | 1.03 | 2.008 | 5.390 | 1. 20 |
| May | . 201 | . 217 | . 380 | . 480 | 164 | . 079 | . 092 | 1.18 | . 55 | 1.58 | 1.03 | 2. 008 | 4.998 | 1.19 |
| June.-.-.-...----- | . 197 | . 214 | . 374 | . 489 | 162 | . 077 | . 091 | 1.18 | . 55 | 1.58 | 1.03 | 2.008 | 4.851 | 1.18 |
| July --.-.-.------ | . 210 | . 215 | . 384 | . 515 | 165 | . 079 | . 092 | 1.17 | . 55 | 1.60 | 1.03 | 2.008 | 4.851 | 1.17 |
| August..........-- | . 188 | . 193 | . 369 | . 514 | 163 | . 075 | . 091 | 1.14 | - . 54 | 1. 60 | 1.03 | 2.008 | 4.851 | 1.16 |
| September ....-- | . 176 | . 185 | . 358 | . 501 | 160 | . 074 | . 089 | 1.14 | . 54 | 1. 58 | . 99 | 2. 008 | 5.096 | 1.16 |
| October-...----- | . 181 | . 196 | . 372 | . 495 | 163 | . 078 | . 090 | 1.10 | . 54 | 1. 58 | . 98 | 2.008 | 5. 145 | 1.16 |
| November --.--- | . 178 | . 199 | . 375 | . 511 | 164 | . 078 | . 090 | 1.12 | . 55 | 1. 55 | . 98 | 2.008 | 5. 047 | 1. 16 |
| December........- | . 180 | . 205 | . 378 | . 506 | 165 | . 078 | . 091 | 1.14 | . 55 | 1. 58 | . 98 | 2.008 | 4.998 | 1.16 |
| $1929$ <br> January |  |  |  |  |  |  |  |  |  |  |  |  |  | . |
| February ------- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March.......-.--- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April.---.-....-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June. |  |  |  |  |  |  | --- |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Unless otherwise specified, all prices are averages of weelcly quotations as compiled by the $U$. S. Department of Labor, Bureau of Labor Statistics. Monthly data from 1909 through 1926 on items in this table, if available, may be found in the Record Book of Business Statistics, Textiles Section, pp. 13, 14, 15, 28, 35, and 36, except on raw silk, Japan, 13-15, New York, for which monthly data from 1917 were presented in the November, 1927 issue of the Surver (No. 75), p. 27.
${ }_{2}^{2}$ A verages of weekly quotations on representative grades in the Boston market, as compiled by the $U$. S. Department of Agriculture, Bureau of Agricultural Economics. 3 Price of cotton to the producer, given at the end of each month until December, 1923, since which month it is given as of the 15th of the month, is a weighted average of prices received by producers throughout the United States for all grades of cotton as compiled by the U. S. Depart ment of Agriculture, Bureau of Agricultural Economics. The market price in New York, on the other hand, is quoted on a specific grade and includes handing and transportation charges.
${ }_{6}^{4}$ Fairchild cotton-goods index, compiled by the Daily News Record, represents a verage weekly wholesale quotations of 36 standard cloths in the New York market.
${ }^{8}$ Fairchild silk-goods index, compiled by the Daily News Record, represents the arithmetic average price per yard at the end of each month in the New York market of 18 domestic numbers and 5 Japanese numbers, including most of the standard fabrics manufactured both in the United States and in Japan. Monthly data from 1919 are given on $p$. 138 of the present issue.

6 A verage for years 1911 to 1913, inclusive.
7 A verage for 10 months.

- A verage for 9 months.

Table 9.-COTTON ${ }^{1}$


[^4]
## Table 10.-COTTON MANUFACTURING *

| $\underset{\text { Month }}{\text { Mear }}$ | SPINDLE ACTIVITY ${ }^{\text {I }}$ |  |  |  | FINISEED COTTON GOODS |  |  |  |  |  | FINE <br> COTE <br> GONODS <br> (3) <br> Produc- <br> tion <br> (New <br> Bedford) | COTTON <br> CLOTA |  | MILL DIVIDENDS (quarteriy) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Fanl Piver ${ }^{\text {a }}$ | New Bediord ${ }^{\text {c }}$ |  |  |  |  |
|  | Active spin= dles | Total spin= dile hours | $\begin{gathered} \text { Per } \\ \text { sppin- } \\ \text { dle } \\ \text { ln } \\ \text { place } \end{gathered}$ | $\begin{aligned} & \text { Ratio } \\ & \text { to cat } \\ & \text { pacty } \end{aligned}$ |  |  |  |  |  |  | Billings | $\left\|\begin{array}{c} \text { Orders, } \\ \text { gray } \\ \text { yardage } \end{array}\right\|$ | Shlpments | $\begin{aligned} & \text { stocks } \\ & \text { end of } \\ & \text { month } \end{aligned}$ | $\left\|\begin{array}{c} \text { Ac- } \\ \text { tivity } \end{array}\right\|$ | $\begin{aligned} & \text { Un- } \\ & \text { filled } \\ & \text { or- } \\ & \text { ders, } \\ & \text { end } \\ & \text { mo. } \end{aligned}$ | Imports | Exports | Total | $\begin{array}{\|c} \text { Ratio } \\ \text { to cap- } \\ \text { italiza- } \\ \text { tlon } \end{array}$ | Total | $\begin{array}{\|c} \text { Ratio } \\ \text { to cap- } \\ \text { italiza- } \\ \text { tlon } \end{array}$ |
|  | Thous. | Millions of hours | Hours | Per cent | Thousands of yards |  | Cases |  | $\begin{aligned} & \text { Per } \\ & \text { cent } \end{aligned}$ | Days |  | Pieces | Thous. of square yard8 |  | Thous. of dollars | Per ct. per quarte | Thous. of dollars | Per ct. per quarter |
| 1913 mos av. | 30, 559 |  |  |  |  |  |  |  |  |  |  | 3,880 | 38,890 | \$519 | 1.820 | \$547 | 1. 405 |
| 1914 mo.av. | 30,748 |  |  |  |  |  |  |  |  |  |  | 5,189 | 27, 207 | 311 | 1. 084 | 470 | 1. 197 |
| 1915 mo.av. | 31, 136 |  |  |  |  |  |  |  |  |  |  | 3, 563 | 43, 195 | 284 | . 974 | 653 | 1. 645 |
| $1916 \mathrm{mo} . \mathrm{av}^{\text {. }}$ | 32,293 |  |  |  |  |  |  |  |  |  |  | 5,534 | 51,688 | 512 | 1.734 | 746 | 1. 832 |
| 1917 mo.av. | 33, 400 |  |  |  |  |  |  |  |  |  |  | 5,441 | 63,718 | 1, 054 | 3. 338 | 1,471 | 3.001 |
| 1918 mo.av. | 33,525 |  |  |  |  |  |  |  |  |  | ${ }^{7}$ 434, 188 | 2, 737 | 45,348 | 1,512 | 4.594 | 1,603 | 3. 164 |
| 1919 mo.av.. | 33,878 |  |  |  |  |  |  |  |  |  | 383, 523 | 4, 146 | 56, 920 | 1,208 | 3. 651 | 1,681 | 3.324 |
| 1920 mo. av. | 33,807 |  |  |  | ${ }^{8} 52,787$ | ${ }^{8} 30,431$ | ${ }^{8} 25,543$ | ${ }^{8} 39,920$ | ${ }^{8} 38$ | ${ }^{8} 6.7$ | 329, 571 | 11,732 | 68, 229 | 2, 521 | 7.486 | 2, 238 | 4.390 |
| 1921 mo.av. | 33, 052 | ${ }^{-7,532}$ | ${ }^{0} 206$ | - 91.5 | 10 85, 386 | ${ }^{10} 90,054$ | ${ }^{10} 44,935$ | 10 36, 226 | ${ }^{10} 65$ | ${ }^{10} 9.4$ | 354, 274 | 12 7, 148 | 45,959 | 780 | 2.031 | 1,365 | 2. 299 |
| 1922 mo.av.. | 33,026 | 7, 725 | 209 | 03.5 | ${ }^{11} 94,016$ | ${ }^{11} 95,509$ | 1149,102 | 1144,937 | ${ }^{11} 66$ | 119.9 | 385, 770 | 11,872 | 48, 958 | 762 | 1.997 | 1,500 | 2. 429 |
| 1923 mo.av. | 34,681 | 8,292 | 222 | 98.9 | 95, 098 | 91, 504 | 48, 116 | 46, 166 | 68 | 9.5 | 438, 761 | 18, 248 | 38,710 | 882 | 2.061 | 1,258 | 1. 741 |
| 1924 mo.av.. | 31, 136 | 6,689 | 177 | 78.5 | 77,650 | 76, 105 | 41,863 | 43, 139 | 58 | 5.9 | 366, 360 | 14, 782 | 39, 818 | 705 | 1.609 | 942 | 1. 285 |
| 1925 mo.av. | 32, 642 | 7, 883 | 208 | 92.9 | 78, 756 | 76, 558 | 43, 691 | 39,640 | 60 | 5.8 | 421, 059 | 9, 104 | 45, 276 | 419 | . 931 | 981 | 1.325 |
| 1926 mo.av. | 32, 352 | 8, 086 | 215 | 95.4 | 81, 214 | 78, 565 | 47,352 | 39,641 | 64 | 6.1 | 403, 020 | 5, 057 | 42,775 | 305 | . 722 | 703 | 1.024 |
| 1927 mo.av. | 32,547 | 8, 704 | 237 | 104. 7 | 84, 458 | 81, 710 | 49, 428 | 38,243 | 70 | 5.8 | 480, 868 | 5,251 | 45, 987 | 299 | . 730 | 570 | . 788 |
| 1928 mo.av.. | 29,968 | 7, 729 | 216 | 95.5 | 75, 100 | 74,299 | 46, 563 | 37,829 | 62 | 4.8 | 261, 318 | 5,104 | 43,710 | 233 | . 604 |  |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| September.- | 32, 398 | 8,776 | 240 | 106. 6 | 84, 899 | 87,386 | 52,316 | 37, 053 | 72 | 5.8 | 496, 697 | 4,741 | 50,333 | 262 | . 643 | 588 | . 809 |
| October.- | 32,535 | 8,727 | 239 | 105.0 | 85, 490 | 77, 296 | 60, 175 | 39, 094 | 73 | 5.4 | 466, 529 | 4,425 | 42, 836 |  |  |  |  |
| November. | 32, 314 | 8, 690 | 238 | 106.7 | 77, 239 | 69,073 | 44,671 | 41,350 | 61 | 4.4 | 472, 298 | 5,081 | 45,919 |  |  |  |  |
| December.. | 31,722 | 7,859 | 216 | 93.9 | 77,885 | 69,836 | 43,287 | 41,059 | 59 | 3.9 | 468,823 | 5,565 | 41, 117 | 406 | . 997 | 607 | . 826 |
| $\begin{array}{r} 1928 \\ \text { January.... } \end{array}$ | 31,717 | 8,263 | 227 | 101.0 | 68,737 | 75, 665 | 44,673 | 40,751 | 62 | 4.7 | 401, 676 | 6,472 | 34, 963 |  |  |  |  |
| February | 31,726 | 7,970 | 221 | 101.3 | 78,786 | 79, 184 | 49,035 | 38, 698 | 69 | 5.2 | 429, 095 | 5,813 | 33, 380 |  |  |  |  |
| March... | 31, 433 | 8,310 | 231 | 96.8 | 89,740 | 81, 328 | 51, 495 | 39,787 | 69 | 4.8 | 461, 429 | 7,921 | 42, 237 | 247 | . 629 | 597 | . 821 |
| April... | 30,950 | 7,415 | 206 | 94.8 | 75, 378 | 68,316 | 43,378 | 40,876 | 64 | 4.5 | 255, 949 | 6, 418 | 39,831 |  |  |  |  |
| May | 28,948 | 7,966 | 222 | 95.1 | 73, 539 | 72,961 | 47, 555 | 40,449 | 62 | 4.3 | 128, 604 | 5,722 | 43,011 |  |  |  |  |
| June... | 28, 628 | 7, 252 | 203 | 88.4 | 70,029 | 61,347 | 42, 357 | 38,907 | 53 | 3.6 | 134, 158 | 4,615 | 46, 534 | 241 | . 614 | 346 | . 483 |
| July-.. | 28, 160 | 6, 251 | 176 | 79.7 | 58, 685 | 62,310 | 40, 500 | 37,958 | 51 | 3.8 | 80,358 | 3,490 | 44,951 |  |  |  |  |
| August..... | 28,244 | 7,431 | 209 | 87.7 | 70,748 | 71,743 | 46, 283 | 35,819 | 54 | 4.4 | 136, 237 | 3,753 | 43, 928 |  |  |  |  |
| September-- | 28, 277 | 6,961 | 196 | 90.6 | 69, 805 | 74,483 | 45,767 | 33,410 | 61 | 5.0 | 113, 627 | 3,139 | 34, 694 | 217 | . 594 | 238 | . 335 |
| October- | 30,315 | 8, 694 | 246 | 103.9 | 83, 935 | 87, 175 | 50,984 | 32,046 | 66 | 6.0 | 282, 763 | 3, 676 | 56,087 |  |  |  |  |
| November. | 30, 597 | 8,524 | 241 | 108.1 | 82, 700 | 82, 657 | 49, 136 | 36, 566 | 65 | 5.5 | 348, 712 | 4,389 | 54, 248 |  |  |  |  |
| December. | 30,622 | 7,711 | 219 | 99.1 | 79, 112 | 74, 417 | 47, 587 | 38,678 | 62 | 5.6 | 303, 206 | 5,840 | 50,661 | 225 | . 577 |  |  |
| $\begin{gathered} 1929 \\ \text { January } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^5]Table 11. COTTON TEXTILES AND BUTTONS


[^6]Table 12.-SILK, RAYON, OTHER TEXTILES, AND FUR*


* Monthly data from 1909 through 1920 on items in this table, it available, and monthly averages from 1913 through 1918 on all imports and rayon data may be found in the Record Book of Business Statistics, Textiles Section, pp. 41 to 47.

Imports of silk, of unmanufactured fibers, burlaps, and of rayon, as well as stocks of rayon in bonded customs warehouses, from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Silk imports are a total of unmanufactured silk, including raw silk, cocoons, and waste. Unmanufactured fibers include flax, hemp,
stle, jute, kapok, manila, New Zealand flay, sisal, etc. Rayon imports are a total of yarns, threads, and fllaments.
Association of America. A bale of silk averages about in New York City, indicating approximate consumption by but varies considerably, and stocks at these warehouses are from the Silk report. The delivery figures are computed by the association from the data on stocks and trade figur Pacific imports to reach New York.
${ }_{3}$ Computed from data reported by the Silk Association of America, covering from 35 to 60 per cent of the silk manufactures and throwsters, averaging about 45 per cent for most of the year 1924. Owing to the varying number of mills reporting, the original figures have been prorated up to 100 per cent, by dividing the stocks reported by the percentage of the trade which they are estimated to represent. The maximum reporting capacity ( 60 per cent in April and May, 1923 ), coming immediately after a month of minimum reporting capacity ( 35 per cent in March, 1923), indicates, in the close correspondence of these prorated totals, that the prorating shows the situation quite accurately.

- Compiled by the Silk Association of America from manufacturers representing about 50 per cent of the industry. The figures represent the percentage of active hours to the total hours normally worked, and are weighted averages of each section of the silk industry, for which details are given in the associstion's monthly reports, i. e., New Jersey, Pennsylvania, New England, and all other.
Compiled by the Silk Association of America, repres
${ }^{5}$ Compiled by the Silk Association of America, representing average price of bleached rayon, 150 denier, A grade, in the New York market.
6 Compiled by the Webing Manufacturers Exchange from reports of 19 manufacturers.
and shown in thousands of yards in the February, 1928 and proports of 19 manufacturers. From 1920 through August, 1928, data were collected from 8 manufacturers 7 Compiled by the $U$ of yards in the February, 1928 , and previous issues of the SURVEY
Compiled by the . S. Department of Commerce, Bureau of he Census, from reports of from 10 to 16 establishments, the number gradually increasing until 1928, when these 16 establishments had a monthly capacity on a 24 -hour basis of $11,113,074$ yards, based on 26 working days. These data represent products manufactured by spreading ${ }^{8}$ Colose or pyroxylin preparations upon gray goods. Further details as to values, etc., are given in press summaries.
${ }^{8}$ Compiled by the American Fur Merchants' Association, representing sales of fur to garment manufacturers, retailers, etc., principally in New York City, but also in other places in the United States and Canada.
910 months'average, March to December, inclusive, except for pyroxylin unfilled orders, where a different 10 months' average is used, January and October figures not being available.

108 months' average.

$$
28914^{\circ}-29-3
$$

Table 13.-COAL

${ }^{1}$ Production figures, calculated from shipments from the mine and representing complete production except for small quantities used at the mines, compiled by U. S. Department of Commerce, Bureau of Mines. Monthly data from 1911 appeared in November, 1924, issue (No. 39), p. 215.
${ }_{2}$ Compiled by Department of Trade and Commerce, Dominion Burcau of Statistics, including bituminous, subbituminous, and lignite. Previous to 1919 these data comprised sales, colliery consumption, and coal used by operators, and therearter the tonnage representing output of all mines.
${ }^{3}$ Compiled by the $U$. S. Department of Commerce, Bureau of Foreign and Domestic Commerce; bunker coal on vessels engaged in the foreign trade is not included.
1 Coal loaded for consumption by outgoing vessels at principal ports compiled by U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Monthly data covering the period 1913-1923 appeared in October, 1923, issue (No. 26), p. 61
$B$ Compiled by the U. S. Department of the Interior, Geological Survey, representing fuel consumption by all plants producing electric power, mainly central stations. Coal consumption in central stations alone shown in April, 1925, issue ( No .44 ), p. 29, and by street railways, manulacturing plants, and reclamation projects in March, 1925, issue (No. 43), p. 28.
then that about 3 per cent would be added to the figures by such inclusion. About 2 per cent of the coal consumed on railroads in 1923 was anthracite. Monthly data from 1920 appeared in January, 1926 , issue (No. 53), P. 23. product and beehive coke. Monthly data from June, 1921 , were given in March, 1926, issue (No. 55), p. 25
${ }_{8}$ Compiled by the Department of Trade and Commerce, Dominion Bureau of Statistics, presenting complete figures for Canada.
 month, but does not include coal for steamship fuel, on lake docks, in transit, and in householders' bins. The figures for 1918 were taken on three different daters, from actual canvasses, while the later figures are based upon reports from a selected list of 5,000 consumers whose stocks in 1918 bore a known relation to the known total stocks. Data from 1919 were given in the December, 1926 , jssue (No. 64), p. 14.
${ }_{10}$ A verage mine price of spot coal' in 14 representative, bituminous fields weighted by the production in each field, compiled by tbe Coal Age; about 20 per cent of the output of bituminous coal is sold spot, while about 55 per cent is sold on future contracts, and 25 per cent of the output is not sold commercially.
11 Compiled by the U. S. Department of Labor, Bureau of Labor Statistics. Wholesale price of bituminous coal is monthly average based on run of mine as reported by 28 firms, f. o . b city, while the retail price is average consumers price on the 15 th of the month, of lump, egg, nut, and mine run, averaged according to the month's shipments. Anthracite wholesale prices are monthly averages for chestnut coal as reported by 15 frms. f. o. b. city, while retail prices are unweighted quotations on Pennsyl vania anthracite, white ash chestnut, on the 15th of the month. From 1913 through 1919 the retail averages for both bituminous and anthracite are for January $15 t \mathrm{t}$ and July 15 sth only.
${ }^{18}$ Compiled by the $D_{6}, S$. Department of Commerce, Bureau of Mines, from reports of about 500 retail dealers, calculated to show the number of days' supply at the current rate of consumption. Averages cover 2 months in 1919, 3 months in 1920, 4 in 1921, 5 in 1922, 8 in 1923, 2 in 1924, 5 in 1925 , and 8 in 1926.
${ }^{13} 6$ months' average, January, May, June, August, November, and December missing.
${ }^{14} 7$ months' average, June to December, inclusive.
1010 months' average, January and February missing in 1926 and Novembereand December in 1925.

Table 14.-IRON ORE AND PIG IRON *


[^7]Table 15.-CRUDE STEEL AND COKE*

| Yrar and Month | STEEL INGOTS |  |  | U. S. STEEL CORPORATION: |  | STEEL PRICES |  |  |  | COKE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production |  |  | Unfilled orders, end of month | Earnings | $\begin{aligned} & \text { Steel } \\ & \text { billets, } \\ & \text { Besse- } \\ & \text { mer } \\ & \text { (Pitts- } \\ & \text { burgh) } \end{aligned}$ | Structural steel beams (Pittsburgh ) ${ }^{4}$ | Iron and steel 5 |  | Production |  |  | $\underset{\text { ports }}{ }$ | Whole-saleprice |
|  | United States ${ }^{1}$ |  | $\begin{aligned} & \text { Can- } \\ & \text { ada }^{2} \end{aligned}$ |  |  |  |  |  |  | United | States ${ }^{7}$ |  |  |  |
|  | Total | Hatio to capacity |  |  |  |  |  |  |  | Beehive | $\left\|\begin{array}{r} \text { By- } \\ \text { product } \end{array}\right\|$ | $\begin{aligned} & \text { Can- } \\ & \text { ada } \end{aligned}$ |  | Con-nellsville ${ }^{10}$ |
|  | Thous. of long tons | Per cent | Thous. of longtons |  | Thous. of dolls. | Dolls. per long ton | Dolls. per pound | Dolls. per long ton | $\begin{gathered} \text { Dolls. } \\ \text { per } \\ \text { pound } \end{gathered}$ | Thous. of short tons |  |  | Thous. of long tons | $\begin{gathered} \text { Dolls. } \\ \text { pershort } \\ \text { ton } \end{gathered}$ |
| 1909-13 monthly average |  |  |  | 4,795 | \$10, 370 | \$23.93 |  |  | \$0.0171 |  |  |  | 73 | \$2.09 |
| 1913 monthly average..- | 2, 523 |  |  | 5,907 | 11, 432 | 25.79 | \$0.0151 | \$26. 32 | . 0172 | 2,799 | 1,060 |  | 73 | 2.30 |
| 1914 monthly average.-. | 1,902 |  |  | 4,115 | 5,972 | 20.08 | . 0118 | 22.92 | . 0152 | 1,945 | 935 |  | 49 | 1.79 |
| 1915 monthly average --- | 2, 607 |  |  | 5,189 | 10,866 | 22.44 | . 0128 | 24. 76 | . 0163 | 2, 292 | 1,173 |  | 67 | 1.89 |
| 1916 monthly average . .- | 3, 450 |  | 106 | 9, 722 | 27, 798 | 43.95 | . 0253 | 40.50 | . 0880 | 2,905 | 1,589 |  | 87 | 3.61 |
| 1917 monthly average..- | 3, 635 |  | 130 | 10,716 | 24,608 | 70.78 | . 0374 | 70. 10 | . 0446 | 2, 764 | 1,870 |  | 105 | 8.15 |
| 1918 monthly average .- | 3,588 |  | 140 | 8,635 | 16,613 | 47.30 | . 0300 | 56.68 | . 0379 | 2,540 | 2,167 |  | 126 | 6.00 |
| 1919 monthly average..- | 2, 808 |  | 77 | 5,995 | 11,966 | 40.54 | . 0252 | 50.32 | . 0332 | 1,587 | 2,095 |  | 53 | 4.75 |
| 1920 monthly average..- | 3,407 |  | 92 | 10,022 | 14,724 | 56.14 | . 0284 | 65. 59 | . 0363 | 1,709 | 2, 570 |  | 68 | 10. 79 |
| 1921 monthly average..- | 1,602 |  | 56 | 5,331 | 7,727 | 34.46 | . 0204 | 40.74 | . 0269 | 462 | 1,646 |  | 23 | 3.65 |
| 1922 monthly average . . - | 2, 881 |  | 41 | 5,648 | 8, 461 | 33.95 | . 0173 | 37.86 | . 0231 | 714 | 2,379 |  | 38 | 7.45 |
| 1923 monthly average.-- | 3, 624 |  | 74 | 6,009 | 14,971 | 41. 65 | . 0242 | 44. 55 | . 0295 | 1,615 | 3,133 |  | 92 | 5. 52 |
| 1924 monthly average..- | 3, 068 |  | 54 | 3,993 | 12,760 | 37.99 | . 0224 | 40.80 | . 0284 | 857 | 2, 832 |  | 49 | 3.53 |
| 1925 monthly average... | 3, 678 |  | 63 | 4,324 | 13,795 | 35. 45 | . 0200 | 38.83 | . 0268 | 946 | 3,326 | 123 | 71 | 4.09 |
| 1926 monthly average.-- | 3, 911 | 94 | 65 | 3,922 | 16,588 | 35.00 | . 0196 | 38.27 | . 0264 | 1,041 | 3,698 | 159 | 73 | 4.14 |
| 1927 monthly average... | 3,617 | 76 | 76 | 3,397 | 13,691 | 33.27 | . 0186 | 36.41 | . 0253 | 601 | 3,657 | 165 | 60 | 3.21 |
| 1928 monthly average-.-- | 4, 154 | 85 | 103 | 3,852 |  | 32.67 | . 0187 | 35. 49 | . 0250 | 365 | 3,975 | 192 | 86 | 2.79 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| September | 3,269 | 68 | 54 | 3,148 | 13, 276 | 33.00 | . 0183 | 36.22 | . 0251 | 470 | 3, 601 | 150 | 76 | 3.00 |
| October-....... | 3,316 | 69 | 56 | 3, 341 | 11,870 | 33.00 | . 0180 | 35.75 | . 0248 | 431 | 3,717 | 152 | 69 | 2.91 |
| November. | 3,127 | 65 | 81 | 3,455 | 9,625 | 33.00 | . 0175 | 35.39 | . 0247 | 390 | 3,497 | 157 | 75 | 2.83 |
| December.. | 3,176 | 66 | 96 | 3,973 | 9, 753 | 33.00 | . 0180 | 35.10 | . 0246 | 388 | 3,643 | 177 | 63 | 2. 79 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January .-. -... | 3,991 | 81 | 84 | 4,276 | 11,900 | 33.00 | . 0180 | 35. 27 | . 0247 | 376 | 3,897 | 182 | 65 | 2.78 |
| February--....-.-.-.--- | 4, 045 | 86 | 99 | 4,398 | 13, 581 | 33.00 | . 0185 | 35.57 | . 0252 | 390 | 3,233 | 169 | 76 | 2.71 |
| Mareh..-.-.-...-......- | 4, 508 | 89 | 118 | 4,335 | 15,453 | 33.00 | . 0190 | 35.81 | . 0254 | 449 | 4,065 | 182 | 74 | 2.72 |
|  | 4,303 | 91 | 113 | 3,872 | 13, 927 | 33.00 | . 0120 | 35.67 | . 0251 | 377 | 3,925 | 174 | 62 | 2.74 |
| May... | 4,203 | 83 | 118 | 3,417 | 16,647 | 33.00 | . 0188 | 35.55 | . 0249 | 376 | 4, 100 | 193 | 89 | 2.70 |
| Junc. | 3,743 | 76 | 117 | 3,637 | 16,359 | 32.25 | . 0185 | 35.34 | . 0248 | 302 | 3,961 | 195 | 126 | 2.80 |
|  | 3, 812 | 81 | 83 | 3, 571 | 16, 134 | 32.00 | . 0185 | 34.91 | . 0248 | 271 | 3,911 | 200 | 79 | 2.79 |
| August.-...-.-.-.-.-.----- | 4,178 | 82 | 89 | 3, 624 | 18,597 | 32.00 | . 0185 | 34. 93 | . 0248 | 288 | 3,995 | 191 | 70 | 2.88 |
| September -------.------- | 4,148 | 88 | 100 | 3,698 | 17,418 | 32.00 | . 0185 | 35.17 | . 0250 | 312 | 3,959 | 194 | 77 | 2.88 |
| October-....-.-.-.-.-.-.- | 4, 648 | 91 | 109 | 3,751 |  | 32.80 | . 0185 | 35.48 | . 0252 | 421 | 4,219 | 210 | 100 | 2.91 |
| November | 4,259 | 87 | 108 | 3,673 |  | 33.00 | . 0190 | 35.92 | . 0252 | 416 | 4, 122 | 205 | 121 | 2.87 |
| December. | 4,015 | 85 | 103 | 3,977 |  | 33.00 | . 0190 | 36. 20 | . 0253 | 398 | 4,317 | 213 | 98 | 2. 75 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

* Monthly data from 1909 through 1922 for items on steel in this table, if available, may be found in the Record Book of Business Statiptics, Metals and Machinery Section, pp. 21 , 22, 22, and 26 .
${ }_{1}$ Yearly, Agures represent the monthly averages of total production of all companies as compiled annually by the American Iron and Steel Institute. The institute reportod up to 1823 monthly production figures for 30 companies which produced 844.4 per cent of the total output of the country in $1920,87.48$ per cent in 1921, and 84.15 per cent in 1922. In order to make the monthly figures comparable they have been calculated to a 100 per cent production each year on the basis or the above percentages. The flgures since 1922 are calculated on the basis of reports from companies which produced 95.35 per cent ot the total production in 1922, , 44.84 per cent in 1923, , 94.43 per Institute. Data for 1928 are prorated on the 1927 percentage. The capaeity figures used in computing the ratio between actual production and capacity are based upon the
 crucible and electric ingots are excluded, but these items represented only a fraction of 1 per cent of the total.
${ }^{2}$ Production of steel in Canada, representing complete flgures, compiled by Department of Trade and Commerce, Dominion Bureau of Stat stics.
3 Unfilled orders of steel and earnings reported by United States Steel Corporation.
- Average of weekly prices from U. S. Department of Labor, Bureau of Labor Statistics.
- A verage of weekly prices compiled by the Iron Trade Review, on the following 14 products: Pig iron, billets, slabs, sheet bars, wire rods, steel bars, plates, structural shapes, black, galvanized and blue annealed sheets, tin plates, wire nalls, and black pipe. Pig iron average, in turn, is an average of 14 different quotations.
${ }^{6}$ The figures for composite finished steel compiled by the American Metal Market represents the daily average price per pound of steel products weighted as follows: 212 -pound bars, $11 / 2$-pound plates, $11 / 2$-pound shapes, $11 / 2$ pound pipe, $11 / 2$-pound wire nails, 1 -pound galvanized sheets, and $1 / 2$-pound tin plate.
${ }_{7}$ Production figures, representing complete production, compiled by U. S. Department of Commerce, Bureau of Mfines.
${ }^{3}$ Compiled by the Canadian Department of Trade and Commerce, Dominion Bureau of Statistics, presenting complete figures for Canada.
${ }^{8}$ Compiled by the Canadian Department of Trade and Commerce, Dominion Bureau of Statistics,

Table 16.-FABRICATED STEEL PRODUCTS*

| Year and Month | $\begin{aligned} & \text { FABRICATED } \\ & \text { STRUCTURAL STEEL } 1 \end{aligned}$ |  |  |  | FABRICATED STEEL PLATE |  |  | STEEL <br> BOILERS ${ }^{3}$ |  | STEEL FURNITURE 4 |  |  |  |  |  | $\begin{aligned} & \text { IRON AND } \\ & \text { STEEL: } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | New orders |  | Shipments |  | New orders |  |  | New orders |  | Rusiness group |  |  | Shelving |  |  |  |  |  |
|  |  | Ra- |  | Ra- | Total |  | $\begin{aligned} & \text { Stor. } \\ & \text { age } \\ & \text { tanks } \end{aligned}$ |  |  |  |  | Un- |  |  | Uniled |  |  |  |
|  | Computed total | $\left.\begin{gathered} \text { tio to } \\ \text { ca- } \\ \text { pac- } \\ \text { ity } \end{gathered} \right\rvert\,$ | $\begin{aligned} & \text { Com- } \\ & \text { puted } \\ & \text { total } \end{aligned}$ | $\left.\begin{gathered} \text { tio to } \\ \text { ca- } \\ \text { pac- } \\ \text { Ity } \end{gathered} \right\rvert\,$ | Quan- | $\left\lvert\, \begin{gathered} \text { Ra- } \\ \text { tio to } \\ \text { ca- } \\ \text { pac. } \end{gathered}\right.$ |  |  |  | Ship- | New orders | filled orders, end mo. | Ship- | New orders |  | Exports, total | ${ }_{\text {ports, }}^{\text {mim- }}$ total |  |
|  | Short tons | Per cent | Short tons | Per cent | Short tons | Per cent | Short tons | $\underset{\text { ber }}{\text { Num- }}$ | Thous of sq. feet | Thousands of dollars |  |  |  |  |  | Long tons |  | Rel. to Jan. 1921 |
| 1919 mo . av-- | 143, 640 | 54 |  |  |  |  |  |  |  |  | \$1,335 |  |  | \$46 |  | 362, 920 | 26, 854 |  |
| 1920 mo. av.. | 149,040 | 54 |  |  |  |  |  |  |  |  | 1,941 |  |  | 285 |  | 405, 644 | 34, 546 |  |
| 1921 mo. av-. | 99, 050 | 35 |  |  |  |  |  |  |  |  | 1,250 |  |  | 123 |  | 182, 661 | 10,075 |  |
| 1922 mo. av.- | 194, 580 | 64 |  |  |  |  |  |  |  |  | 1, 432 |  |  | 205 |  | 167, 515 | 64, 115 | 122 |
| 1923 mo . av.- | 203, 580 | 65 |  |  | 48,489 | 60 | 25, 285 |  |  |  | 1, 811 |  |  | 364 |  | 167, 565 | 59,961 | 157 |
| 1924 mo. av- | 220, 050 | 68 | 222. 495 | 68 | 29,028 | 36 | 10, 413 |  |  | 7 \$1,936 | 1, 909 | 7 \$1,256 | ${ }^{7}$ \$567 | 466 | 7\$374 | 150,580 | 38,868 | 139 |
| 1925 mo. av... | 248, 394 | 72 | 249, 840 | 72 | 32, 127 | 37 | 8,261 |  |  | 2, 236 | 2, 279 | 1,541 | 557 | 578 | 483 | 146, 881 | 69,836 | 143 |
| 1926 mo. av.. | 241, 200 | 67 | 267,900 | 74 | 42, 826 | 52 | 14,614 |  |  | 2,619 | 2,616 | 1,694 | 611 | 612 | 639 | 180, 587 | 77, 803 | 167 |
| 1927 mo . av | 254, 375 | 68 | 237, 813 | 63 | 41, 476 | 52 | 17,581 | 1,329 | 1,311 | 2, 592 | 2, 563 | 1,586 | 605 | 613 | 671 | 181,748 | 46, 076 | 191 |
| 1928 mo. av- | 273,967 | 71 | 256, 025 | 67 | 44,040 | 56 | 20, 152 |  |  | 2,920 | 2, 998 | 2, 180 | 775 | 800 | 742 | 238,583 | 49,143 |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May | $\begin{aligned} & 232,500 \\ & 225,000 \end{aligned}$ | 62 | 228,750 | 61 | 37, 883 | 47 | 10,855 | 1, 419 | 1,355 | 2, 381 | 1,598 | 2,381 | $\begin{aligned} & 585 \\ & 658 \end{aligned}$ | 686 | 731710 | 20270, | 55, 83649,599 | 198 |
| June..- |  | 60 | 255,000 | 68 | 28,811 | 36 | 7,402 | 1, 542 | 1,366 | 2, 519 | 2, 369 | 1,469 |  |  |  |  |  | 202 |
| July | 225,000 341,250 | 9172 |  | 68 | 35, 434 | 4460 | 17, 199 | 1, 516 | 1,778 | 2,040 | 2, 092 | 1,507 | 565 | 535679 |  | 190, 502 | 39,543 | 183 |
| August. | 270, 000 |  | $\begin{array}{r} 255,000 \\ 281,250 \end{array}$ | 75 | 48,577 |  | 29. 691 | 1,517 | 1,569 | 2, 475 | 2, 382 | 1,412 | 604 | 592 | 669 | 175, 637 | 51, 596 | 200 |
| September.. | 202,500 | 70 | $247,500$ | 71 | 38,662 | 48 | 15,421 | 1,312 | 2, 152 | 2, 219 | 2, 368 | 1,558 | 531 | 608 | 738 | 166, 352 | 46,573 | 203 |
| October.. | 288, 750 | 77 |  | 66 | 47,090 | 58 | 18, 648 | 1,270 | 930 | 2,380 | 2, 411 | 1, 574 | 619 | 551 | 666 | 170, 255 | 39,516 | 216 |
| November | $\begin{aligned} & 236,250 \\ & 262,500 \end{aligned}$ | 63 | $243,750$ | 65 | 27,341 | 34 | 8,920 | 1,235 | 1,125 | 2, 856 | 2, 476 | 1,577 | 591 | 575 | ${ }^{8.51}$ | 177, 928 | 51, 185 | 186 |
| December. |  | 70 | 236, 250 | 63 | 35,658 | 44 | 13,367 | 1,054 | 906 | 2, 741 | 2, 850 | 1,414 | 578 | 619 | 606 | 168,428 | 55, 070 | 166 |
| $\begin{gathered} 1928 \\ \text { January .........- } \end{gathered}$ | $262,500$ | 55 | 204, 050 | 53 | 35,787 | 45 | 11, 101 | 1,042 | 872 | 2,713 | 3, 248 | 2,000 | 680 | 769 | 680 | 205,766 | 49,903 | 157 |
| February | $\begin{array}{r} 265,650 \\ 257,950 \end{array}$ | 69 | 173, 250 | 45 | 49,820 | 62 | 25, 532 | 086 | 1,165 | 2,909 | 3,296 | 2, 389 | 682 | 741 | 743 | 185, 915 | 36,861 | 158 |
| March.. |  | 67 | 227, 150 | 59 | 46,840 | 59 | 25, 226 | 1,247 | 1,337 | 3, 169 | 3,283 | 2,512 | 832 | 841 | 775 | 221,935 | 58,666 | 187 |
| April..-..- | $\begin{aligned} & 257,950 \\ & 234,850 \end{aligned}$ | 61 | 238,700 | 62 | 50,347 | 63 | 22,095 | 1,325 | 1,295 | 3,066 | 2,915 | 2, 360 | 716 | 741 | 794 | 215, 184 | 55,567 | 187 |
| May.-- | 308,000 | 80 | 261, 800 | 68 | 42,487 | 53 | 14, 849 | 1,571 | 1. 456 | 3,213 | 3, 086 | 2, 233 | 769 | 733 | 753 | 267, 890 | 55, 092 | 204 |
| June | $\begin{aligned} & 300,000 \\ & 296,450 \end{aligned}$ | 78 | 261, 800 | 68 | 35, 202 | 44 | 12, 204 | 1, 611 | 1,470 | 3, 009 | 2,764 | 1,993 | 720 | 737 | 729 | 262, 052 | 56,573 | 204 |
| July....- |  | 77 | 265, 650 | 69 | 35,959 | 47 | 16,881 | 1,615 | 1,528 | 2,515 | 2, 594 | 2, 072 | 723 | 713 | 706 | 253, 336 | 33, 465 | 187 |
| August. | 354, 200 | 92 | 288,750 | 75 | 47,245 | 60 | 24,807 | 1,647 | 1,457 | 2,565 | 2, 610 | 2,118 | 836 | 863 | 734 | 287, 297 | 54, 062 | 215 |
| September-..-- | $\begin{aligned} & 319,550 \\ & 250,250 \\ & 242,550 \\ & 246,400 \end{aligned}$ | $\begin{aligned} & 83 \\ & 65 \\ & 63 \\ & 64 \end{aligned}$ | $\begin{aligned} & 273,350 \\ & 319,550 \\ & 281,050 \\ & 277,200 \end{aligned}$ | 71 | 40, 281 | 50 | 18, 572 | 1,425 | 1,257 | 2,754 | 2,689 | 2, 062 | 678 | 800 | 754 | 228, 056 | 47, 685 | 207 |
| October.- |  |  |  | 83 | 53,983 | 68 | 23, 960 | 1,518 | 1,327 | 3, 159 | 3, 193 | 2, 095 | 954 | 959 | 760 | 256,870 | 50, 176 | 236 |
| November.. |  |  |  | 73 | 54, 277 | 68 | 32,381 | 1,416 | 1,284 | 2,854 | 2,676 | 1,917 | 916 | 875 | 721 | 256,886 | 50,038 | 210 |
| December. |  |  |  | 72 | 36, 254 | 47 | 14, 217 |  |  | 3,117 | 3,611 | 2,410 | 791 | 829 | 757 | 221, 810 | 41,628 |  |
| $\begin{gathered} 1929 \\ \text { January } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

* Monthly data from 1909 through 1926 for items in this table, if available, may be found in the Record Book of Business Statistics, Metals and Machinery Section, pp. 27, 28, 32, 33, and 35 .
${ }_{1}$ Fabricated structural steel data compiled by the Bridge Builders and Structural Society up to April, 1922, and since then by U. S. Department of Commerce, Bureau of the Census, including reports from the Central Fabricators' Association. 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 242 firms (and in addition 30 firms now out of basiness) with a total capacity of 245,140 tons in 1922, 253,020 tons in 1923, 266, 155 tons in $1924,286,675$ tons in tons in 1923, 326,000 tons in 1924, 347,000 in 1925, 360,000 tons in 1926, 375,000 tons in 1927, and 385,000 tons in 1928, for comparison with previous figures. Monthly data tons in $1923,326,000$ tons in $1924,34,000$ in $1925,360,000$ tons in $1926,375,000$ tons in 1927, and 385,000 tons in 1928, for comparison with previous figures. Monthly
from 1922 comparable to figures in this table and revising the figures shown in the Record Book of Business Statistics will appear in the March, 1929 , issue (No. 91 ). from 1922 comparable to figures in this table and revising the figures shown in the Record Book of Business Statistics will appear in the March, 1929, issue (No. 91).
2 Compiled by tbe U. S. Department of Commerce, Bureau of the Census, from reports of 36 identical firms, including reports from the American Erectors Association. Reports from most of the larger fabricators are included in the figures. Data for other classifications included in the total, covering refinery, tank cars, gas holders, blast furnaces, and miscellaneous, including stacks and ladles, but not separately shown, are given in press releases.
furnaces, and miscellaneous, includeng stacks and lades, but not separately shown, are given in press releases. ${ }_{3}$ Compiled by U. S. Department of Commerce, Bureau of the Census, from reports of 72 firms, estimated to reprent 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. Details for the first 5 months of 1927 appeared in July, 1927, issue (No. 71), p. 22.
"Compiled by the U. S. Department of Commerce, Bureau of the Census, including reports from the National Association of Steel Furniture Manufacturers, and comprising data from 33 cornpanies in the "business group" and 15 companies manufacturing shelving, comprising the entire industry, with few exceptions. The "business group" includes sections, counters, office and vault verticals, safes and interiors, desks and tables, and small miscellaneous articles, exclusive of lockers.
${ }_{s}$ Iron and steel exports and imports from the U. S. Department of Commerce, Bureau of Foreian and Domestic Commerce. The exports prior to 1922 are based on the group of pig iron and rolled products as used in the Iron Trade Review, comparable each month back to 1913. Beginning with January, 1922, all commodities are given in quantities in the export reports, and thus a grand total can be presented, which is not more than about 5 per cent larger, on the average, than the data for the comparable items. Imports are identical throughout the period, with a few minor exceptions.
${ }^{8}$ Data on the value of sales by jobbers of hardware, compiled by American Steel and Heavy Hardware Association, comprising reports from about 75 firms, estinated to represent about 10 per cent of the entire iron, steel, and heavy hardware jobbing trade, including iron, steel, motor accessories, and other heavy hardware. Moathly data from 1922 appeared in March, 1927, issue (No. 67), p. 26.
${ }^{7} 4$ rionths' average, September to December, inclusive; previous data not available.

Table 17.—STEEL SHEETS, BARS, BARRELS, AND WASHERS *


[^8]Table 18.-IRON AND STEEL CASTINGS*

| Year and Monte | MALLEABLE CASTINGS ${ }^{1}$ |  |  |  | STEEL CASTINGS: |  |  |  |  |  |  |  | TRACK | OHIO FOUNDEY IRON 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production |  | Shipments | $\begin{aligned} & \text { New } \\ & \text { orders } \end{aligned}$ | Production |  |  |  | New orders |  |  |  |  | Meltings |  |  |  |
|  | Total | $\begin{aligned} & \text { Ratio } \\ & \text { to ea- } \\ & \text { pac- } \\ & \text { Ity } \end{aligned}$ |  |  | Total | $\left\lvert\, \begin{gathered} \text { Reatio } \\ \text { toca- } \\ \text { pac- } \\ \text { ity } \end{gathered}\right.$ | $\begin{aligned} & \text { Rall- } \\ & \text { road } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { Miseel- } \\ \text { laneous } \\ \hline \end{array}$ | Total | $\begin{gathered} \text { Ratio } \\ \text { toca- } \\ \text { pac- } \\ \text { Ity } \end{gathered}$ | Rall- road |  | Pro- duetion | Actual | $\begin{aligned} & \text { Ratio } \\ & \text { to } \\ & \text { mal } \\ & \text { mal } \end{aligned}$ |  |  |
|  | Short tons | Per cent | Short tons |  |  | Per cent | Short tons |  |  | Per cent | Short tons |  |  | $\begin{aligned} & \text { Long } \\ & \text { tons } \end{aligned}$ | Per cent of normal meltings |  |  |
| 1921 mo. average.- |  |  |  |  |  |  |  |  | 32,680 | 26 | 14,370 | 18,310 |  | 87,791 | ${ }^{8} 20.7$ |  |  |
| 1922 mo. average... |  |  |  |  |  |  |  |  | 83, 502 | 68 | 43,480 | 39,855 |  | 12, 183 | 51.8 | 93 | 37 |
| 1923 mo. average... | 71, 111 | 62.3 | 67,998 | 55, 563 |  |  |  |  | 97, 304 | 75 | 46, 540 | 50, 764 | 17,639 | 20,502 | 73.8 | 89 | 58 |
| 1924 mo. average... | 57, 477 | 48.4 | 56, 125 | 55,539 |  |  |  |  | 83, 414 | 62 | 43,090 | 40,324 | 12,781 | 19,022 | 67.6 | 85 | 52 |
| 1925 mo. average... | 66, 100 | 55.3 | 66, 181 | 62, 583 |  |  |  |  | 81,779 | 60 | 35,304 | 46, 475 | 14, 283 | 18,632 | 77.8 | 91 | 66 |
| 1926 mo . average.-. | 64, 716 | 56.6 | 62,645 | 58, 398 | 94, 988 | 68 | 35, 585 | 59, 404 | 86,640 | 62 | 33,745 | 52, 895 | 16, 417 | 17,660 | 81.9 | 91 | 71 |
| 1927 mo. average.-- | 58,064 | 53.8 | 57, 291 | 56,066 | 80,734 | 56 | 30,888 | 49,846 | 76,910 | 53 | 32,009 | 44,901 | 13, 386 | 15,397 | 81.9 | 99 | 73 |
| 1928 mo. average... | 64, 957 | 67.8 | 62, 727 | 63, 252 | 85, 163 | 58 | 30,964 | 54, 199 | 83,357 | 57 | 32,489 | 50,868 | 11,637 | 16, 170 | 08.6 | 136 | 101 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January... | 56, 627 | 52.0 | 54, 747 | 61, 597 | 87, 370 | 60 | 34,037 | 53,333 | 108, 063 | 75 | 53,461 | 54, 602 | 12,969 | 13,613 | 71.3 | 91 | 62 |
| February... | 62, 335 | 57.8 | 60,775 | 68,767 | 89, 170 | 62 | 35, 322 | 53,848 | 94,938 | 66 | 41,365 | 53, 583 | 13,678 | 13, 101 | 84.6 | 105 | 74 |
| March | 72, 205 | 65.7 | 71, 609 | 66, 376 | 103, 148 | 71 | 41, 232 | 61,916 | 90, 353 | 62 | 34,680 | 55,673 | 19,216 | 20,389 | 96.6 | 98 | 84 |
| April. | 64, 612 | 59.1 | 66, 811 | 64, 427 | 95,036 | 68 | 39, 189 | 55, 847 | 81, 403 | 56 | 32, 279 | 49, 124 | 17,081 | 19, 189 | 90.6 | 99 | 79 |
| May | 62,747 | 57.2 | 63,385 | 57,311 | 87, 241 | 60 | 35,236 | 52,005 | 73,043 | 50 | 28,946 | 44, 097 | 16,768 | 20, 117 | 86.5 | 111 | 86 |
| June.. | 64,310 | 58.5 | 62, 316 | 54, 456 | 88, 065 | 61 | 34, 596 | 53,469 | 91, 199 | 63 | 39,455 | 51,744 | 14, 557 | 15,891 | 84.1 | 99 | 83 |
| July .. | 53, 046 | 49.3 | 54, 240 | 53,484 | 80, 045 | 55 | 32,576 | 47,469 | 74, 569 | 52 | 31,011 | 43, 558 | 13,217 | 10, 761 | 72.3 | 94 | 64 |
| August | 57,096 | 52.4 | 57, 193 | 51, 368 | 87,418 | 60 | 32,397 | 55, 021 | 63, 938 | 44 | 21, 144 | 42,794 | 13,387 | 17, 559 | 86.8 | 82 | 71 |
| September.-. | 50, 807 | 47.6 | 52, 722 | 46, 161 | 70,409 | 49 | 25,618 | 44,791 | 52, 742 | 36 | 18,396 | 34, 346 | 10,990 | 13, 298 | 81.6 | 117 | 82 |
| October- | 52,458 | 50.0 | 48,724 | 48,062 | 62, 813 | 43 | 21,947 | 40,866 | 52, 180 | 36 | 16, 625 | 35, 535 | 9,914 | 14, 207 | 77.2 | 88 | 60 |
| November.. | 46,698 | 44.4 | 44,983 | 43, 202 | 59,387 | 41 | 19, 146 | 40, 241 | 63, 075 | 44 | 27,639 | 35,436 | ${ }^{9} 9706$ | 15,647 | 80.0 | 104 | 74 |
| December. | 53, 824 | 51.2 | 49, 989 | 57, 579 | 58,708 | 41 | 19,358 | 39, 350 | 77, 346 | 54 | 39, 112 | 38,324 | 9, 139 | 10,994 | 71.6 | 105 | 58 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January .- | 61, 072 | 62.7 | 55, 432 | 62,328 | 74, 454 | 51 | 28,714 | 45, 740 | 91, 448 | 62 | 41,276 | 50, 172 | 9,332 | 13,977 | 86.8 | 129 | 88 |
| February.- | 65, 359 | 66.8 | 61, 011 | 64, 419 | 87,727 | 60 | 37, 719 | 50,008 | 91, 076 | 62 | 41,096 | 49,980 | 11,371 | 15, 270 | 110.0 | 135 | 105 |
| March | 70,070 | 73.0 | 71, 224 | 70,288 | 93, 989 | 64 | 38,448 | 55, 541 | 83,755 | 57 | 30,892 | 52,763 | 15,058 | 13,355 | 100.0 | 149 | 115 |
| April. | 63,380 | 66.0 | 65,001 | 62,056 | 86, 016 | 58 | 32,619 | 53, 397 | 84,086 | 57 | 32,810 | 51, 276 | 13,511 | 19,039 | 108.0 | 143 | 115 |
| May | 67,903 | 70.7 | 65, 823 | 63,847 | 93, 333 | 63 | 36,599 | 59,734 | 86,796 | 59 | 34,995 | 51,801 | 14, 141 | 13,887 | 103.3 | 150 | 106 |
| June | 67,090 | 69.9 | 66, 737 | 61, 071 | 91, 746 | 62 | 30,742 | 61, 004 | 72, 107 | 49 | 22,597 | 49,510 | 13, 716 | 19,382 | 105.0 | 146 | 99 |
| July .. | 60, 290 | 63.1 | 60, 084 | 60,964 | 78, 648 | 53 | 27, 501 | 51, 147 | 66,992 | 45 | 20,483 | 46,509 | 11, 776 | 19,967 | 103.0 | 127 | 107 |
| August | 68, 606 | 72.1 | 66,962 | 66, 128 | 87, 742 | 60 | 27, 157 | 60, 585 | 81, 286 | 55 | 25, 171 | 56,115 | 11,040 | 12, 932 | 103.4 | 129 | 99 |
| September. | 62, 665 | 66.3 | 61, 736 | 61, 163 | 75, 761 | 51 | 25,311 | 50,450 | 82, 762 | 56 | 35, 234 | 47,528 | 10,767 | 14,580 | 90.2 | 131 | 90 |
| October. | 70, 054 | 73.4 | 63, 510 | 65, 780 | 87, 952 | 60 | 29,471 | 58,481 | 78,860 | 54 | 26,736 | 52,124 | 9,493 | 20, 112 | 103.9 | 134 | 103 |
| November | 63, 560 | 66.8 | 58,346 | 59,664 | 82,385 | 56 | 30,799 | 51, 586 | 84, 742 | 58 | 34,545 | 50, 197 | 8,379 | 17, 249 | 91.6 | 130 | 95 |
| December | 59,432 | 63.4 | 56, 801 | 61, 319 | 82, 203 | 56 | 26,484 | 55,719 | 96,373 | 65 | 43,928 | 52,445 | 11,061 | 14,284 | 78.5 | 124 | 85 |
| $\begin{gathered} 1929 \\ \text { January } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May.. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

- Monthly data from 1909 through 1926 for items in this table, if available, may be found in the Record Book of Business Statistics, Metals and Machinery Section, pp. 1 Compiled by the $U_{i} S$. Department of Commerce, Bureau of the Census, representing reports from 130 identical establishments, covering most of the industry. New
orders, however, are furnished by only 122 firms.
2
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 cestings 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 factured for sale and interplant transfer by steel works and rolling mills and represented 93 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 manufactures for 1925 . Railway specialties include such items as bolsters, sidearms, 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. The revisions in detail appeared in the March, 1928 , issue (No. 79), p. 20, including annual averages from 1913 through 1920 .
${ }^{3}$ Compiled by the American Iron and Steel Institute and covers the production of T-rail track of 60 pounds per yard and heavier, including all special or fabricated T-rail track work (switches, switch stands, frogs, crossings, guard rails, and appurtenances) of carbon steel, manganese steel, and other metals for both domestic and export use.
Monthly figures are available only from the beginning of 1925 and are collected only every 3 months, each month, from 17,000 to 32,000 tons, the data on stocks and roceipts have been converted to a percentage basis for better comparison. Details as to class of receipts and stocks are shown in the association's reports.
${ }^{5} 10$ months' average.

Table 19.-CAST-IRON PRODUCTS

| $\begin{aligned} & \text { Year and } \\ & \text { Monti } \end{aligned}$ | CAST-IRON BOILERS AND RADIATORS ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  | GAS-TIRED BOILERS ? |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Round Roilers |  |  |  | Square Roilers |  |  |  | Radiators |  |  |  | Shipments |  | Pro-duction | Stocks, end of mo. |
|  | $\underset{\text { Puction }}{\text { Pro- }}$ | Shipments | New orders | Stocks, end of mo. | $\begin{gathered} \text { Pro- } \\ \text { duction } \end{gathered}$ | Shipments | New orders | Stocks, end of mo. | $\underset{\text { Pro- }}{\text { Puction }}$ | Shipments | New orders | Stocks, end of mo. |  |  |  |  |
|  | Thousands of pounds |  |  |  |  |  |  |  | Thousands of square feet of heating surface |  |  |  | Dollars | Thousands of B. t. u. |  |  |
| 1923 mo. av.- | 16, 848 | 16, 177 |  |  | 17, 652 | 16, 641 |  |  | 12,670 | 11, 839 |  |  |  |  |  |  |
| 1924 mo. av.- | 18, 126 | 17.339 |  |  | 18,753 | 17,354 |  |  | 12,623 | 12,304 |  |  |  |  |  |  |
| 1925 mo . av-- | 19,526 | 18,935 |  |  | 20, 903 | 20,480 |  |  | 13.486 | 13,769 |  |  | \$91, 729 |  |  |  |
| 1926 mo . $\mathrm{av}_{\text {-. }}$ | 18, 444 | 20,412 | 20,917 | 93, 973 | 20, 596 | 21, 561 | 22, 729 | 97,756 | 14, 519 | 14, 349 | 16,325 | 43, 024 | 191, 112 |  |  |  |
| $1927 \mathrm{mo} \text { av.. }$ | 20,445 | 18,900 | 18, 844 | 103, 688 | 23, 189 | 21,455 | 20,973 | 103, 818 | 14.786 | 13, 503 | 13,717 | 52, 775 | 225, 233 |  |  |  |
| 1928 mo. av.. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1926 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January.-.-- | 19,087 | 13,087 | 13,278 | 74, 324 | 20, 802 | 13, 846 | 14,617 | 89,567 | 15,342 | 10,004 | 10,576 | 32, 115 |  |  |  |  |
| February- | 21, 240 | 12,928 | 14, 150 | 85, 332 | 19,471 | 12,736 | 14, 341 | 93, 198 | 15,360 | 9,770 | 12, 202 | 38,053 |  |  |  |  |
| March. | 23, 549 | 14, 288 | 19,987 | 94,657 | 20,274 | 12,266 | 18,033 | 102,007 | 15,740 | 8, 810 | 17,788 | 45, 059 |  |  |  |  |
| April .-.---...- | 24, 380 | 17,340 | 19,974 | 102, 248 | 22,012 | 15, 012 | 18,022 | 108,944 | 16,366 | 10,592 | 14, 210 | 50,897 |  |  |  |  |
| May-- | 20,660 | 18,881 | 20,056 | 104, 917 | 20,933 | 19, 181 | 20,538 | 110,533 | 14, 113 | 14,355 | 16,489 | 50, 853 |  |  |  |  |
| June.- | 20, 982 | 16,883 | 18, 162 | 109, 243 | 20,655 | 16, 502 | 18,214 | 114, 515 | 13,834 | 10, 824 | 13,486 | 53,638 |  |  |  |  |
| July.... | 17, 058 | 20,882 | 23, 157 | 107, 171 | 18,257 | 23,991 | 27,904 | 111.713 | 14,424 | 14, 983 | 16,243 | 52,915 |  |  |  |  |
| August | 18, 174 | 27,393 | 29,858 | 102,913 | 21, 444 | 30,249 | 33,187 | 105,071 | 14,308 | 19,845 | 23,028 | 46,519 |  |  |  |  |
| September--- | 22, 359 | 27, 929 | 30,820 | 101, 047 | 26, 191 | 31, 888 | 37,305 | 90, 982 | 15, 551 | 18,766 | 21, 080 | 44, 534 |  |  |  |  |
| October....- | 17,676 | 30,978 | 24, 830 | 89, 849 | 22,338 | 35,354 | 28, 170 | 87, 437 | 15,000 | 20,173 | 18, 257 | 39,409 |  |  |  |  |
| November.-- | 15, 914 | 26, 175 | 23,966 | 81, 010 | 19, 229 | 27,777 | 28, 255 | 77, 150 | 12, 356 | 19,631 | 20, 236 | 32, 375 |  |  |  |  |
| Deccmber-.. | 12,245 | 18. 177 | 12,768 | 74,967 | 15,543 | 19,932 | 14, 156 | 72,951 | 11, 829 | 14, 435 | 12,316 | 29,915 |  |  |  |  |
| $\begin{array}{r} 1927 \\ \text { January } \end{array}$ | 17, 164 | 12,692 | 10,604 | 82,765 | 20,658 | 13,105 | 10,896 | 81,849 | 14, 226 | 9,534 | 9, 240 | 34, 464 |  |  |  |  |
| February-.. | 20,202 | 16, 130 | 15, 276 | 89, 880 | 21, 331 | 13, 527 | 12,473 | 89,855 | 14, 842 | 9,770 | 7,393 | 40, 452 |  |  |  |  |
| March | 27, 669 | 15, 864 | 19,404 | 101, 393 | 25, 437 | 13, 132 | 16,085 | 101, 042 | 17, 261 | 8,965 | 11,588 | 48, 714 |  |  |  |  |
| April | 23, 719 | 19,352 | 17,627 | 106, 225 | 20,442 | 16, 164 | 15,610 | 105, 300 | 15, 326 | 10,594 | 10,873 | 53, 598 |  |  |  |  |
| May | 23,128 | 20,992 | 23,086 | 108, 721 | 21,367 | 18,538 | 21, 439 | 106, 933 | 14, 797 | 12,965 | 15, 810 | 60, 439 |  |  |  |  |
| June | 25, 078 | 19,064 | 23,568 | 114, 432 | 25, 561 | 18, 509 | 25, 554 | 113, 210 | 16, 242 | 11,756 | 11,946 | 60,313 |  |  |  |  |
| July.. | 19,011 | 18, 911 | 20,442 | 114, 224 | 21, 225 | 22, 581 | 25,999 | 113,905 | 13, 577 | 14,360 | 15,775 | 59, 692 |  |  |  |  |
| August | 22,311 | 22,588 | 20,781 | 113,776 | 26,966 | 29,268 | 26, 518 | 111, 962 | 16, 828 | 17,904 | 18,606 | 58, 610 |  |  |  |  |
| September--- | 22, 733 | 22,311 | 20,340 | 113,561 | 29,682 | 30,687 | 25,112 | 111, 490 | 17, 453 | 17,304 | 15,768 | 58, 887 |  |  |  |  |
| October...- | 19,865 | 25, 734 | 25,917 | 104, 301 | 24, 758 | 31, 156 | 30, 400 | 110,647 | 14, 088 | 18, 156 | 19,683 | 55,030 |  |  |  |  |
| November--- | 14, 437 | 19, 972 | 17.740 | 99, 284 | 22,575 | 29, 156 | 24, 812 | 101, 090 | 11, 251 | 17,540 | 16, 154 | 49, 302 |  |  |  |  |
| December--- | 10,023 | 13, 185 | 11,346 | 95, 453 | 18,265 | 21,637 | 16,781 | 97,619 | 11, 339 | 13, 193 | 11, 772 | 53, 793 |  |  |  |  |
| $\begin{array}{\|c\|} \hline 1928 \\ \hline \text { January }-. . .- \end{array}$ | 9,037 | 11,009 | 11, 511 | 79,400 | 24,743 | 19,292 | 18, 230 | 120, 522 | 12,581 | 10,661 | 9,990 | 48, 714 | 96,589 | 86, 892 | 132, 733 | 846, 845 |
| February...- | 13,341 | 10, 620 | 10, 566 | 81, 804 | 29,068 | 18,099 | 19,466 | 131, 341 | 14, 774 | 9,357 | 12, 139 | 54, 353 | 128, 824 | 103, 250 | 165,901 | 880, 423 |
| March | 15,631 | 10,407 | 11,238 | 87, 666 | 36,544 | 16,474 | 17,006 | 151, 678 | 18,039 | 7,994 | 8,792 | 64, 467 | 177, 859 | 147, 845 | 217, 385 | 923, 617 |
| April......-- | 12, 452 | 9,280 | 9,554 | 90, 529 | 28, 994 | 15,787 | 15, 582 | 164, 514 | 13, 651 | 7,541 | 8,928 | 70,845 | 161, 976 | 119,354 | 161,317 | 983, 786 |
| May---......- | 14,232 | 12, 166 | 14,888 | 91, 098 | 34,790 | 20, 268 | 29.021 | 181, 972 | 16, 513 | 9,730 | 13,572 | 77,926 | 162, 167 | 122,843 | 164, 434 | 993,425 |
| June-.------- | 12,094 | 13,071 | 14, 765 | 89,728 | 31, 238 | 25, 165 | 29,779 | 188, 078 | 13, 363 | 11,665 | 12,394 | 79, 549 | 230, 250 | 182, 195 | 135, 711 | 960, 656 |
| July | 10, 581 | 12, 302 | 12, 950 | 87,993 | 19,541 | 28, 247 | 32, 164 | 179, 539 | 11, 388 | 13, 285 | 14, 844 | 78, 279 | 266, 627 | 224,098 | 125, 000 | 852, 822 |
| August_----- | 12,881 | 14, 422 | 12, 551 | 86, 141 | 38,693 | 36, 212 | 31, 809 | 182, 367 | 15,914 | 16,951 | 15,753 | 77, 267 | 288, 954 | 239, 048 | 168, 547 | 778, 337 |
| September | 13, 655 | 17, 021 | 14, 504 | 82, 931 | 26,760 | 41,989 | 36, 527 | 167, 063 | 13,770 | 18,092 | 16, 533 | 72,902 | 395, 265 | 322, 000 | 169, 376 | 622,687 |
| October-...- | 17,953 | 22,621 | 19, 819 | 78,349 | 30,098 | 52, 505 | 53, 522 | 145, 051 | 12,853 | 23, 062 | 23, 394 | 63, 082 | 351,367 | 274, 760 | 187, 196 | 596, 143 |
| November... | 16,846 | 17,362 | 13, 252 | 77,785 | 26,770 | 36,328 | 28, 502 | 135, 889 | 10,825 | 19, 219 | 16,931 | 54,776 | 250, 315 | 202, 868 | 233, 073 | 598, 518 |
| December-.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1929 <br> January |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February $\qquad$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |

${ }^{1}$ Compiled by the National Boiler and Radiator Manufacturers' Association, from reports of 30 firms, 15 reporting on cast-iron radiators and 25 reporting on cast-iron boilers (both round and square), both estimated to represent over 90 per cent of the industry. The data for 1923 and 1924 are not available by months.
2 Compiled by the Gas Heating Boiler and Furnace Association from reports of 8 manufacturers of industrial gas-fired heating boilers, estimated to represent about 75 per cent of the industry. The annual shipments for 1925,1926 , and 1927 include furnaces as well as boilers, but furnaces form only a small proportion of the total.

Table 20.-HOUSEHOLD AND AGRICULTURAL MACHINERY AND PUMPS*


* Monthly data from 1919 through 1926 for items in this table, if available, and annual averages on patents from 1913 through 1918 may be found in the Record Book of Business Statistics, Metals and Machinery Section, pp. 43 to 46.
1 Compiled by the Vacuum Cleaner Manufacturers' Association from companies representing about 90 per cent of the industry. Annual figures represent quarterly averages.
'Compiled br the American Washing Machine Manufacturers' Association from reports of 48 members representing practically the entire industry in the United States
and Canada. Data for 7 small frms have been estimated to make the compilation complete. The association's monthly reports show electric, gas and power, water-power, and Canada. Data for 7 smadl firms have been estimated to make the compilation complete. The association's monthly reports show electric, gas and power, water-power, and hand machines separately.
given in press releases and appeared in the November, 1927 , issue (No. 75), from reports of 21 manufacturers, covering domestic water softeners. Values of shipments are given in press releases and appeared in the November, 1927, issue (No. 75), p. 27.
${ }^{4}$ Compiled by the $U$. S. Department of Commerce, Bureau of the Census, from reports of 32 manufacturers. Details by classes are given in press releases. - Compiled through 1926 by the Federal Reserve Bank of Chicago, covering 22 firms in 1922 and 1923 and 19 firms thereafter. Beginning with 1927 , these data have been compiled by the U. S. Department of Commerce, Burcau of the Census, from practically the same number of firms. Details by classes, showing units and values as between domestic and foreign shipments, are shown in monthly press releases.

1925. The number of members reporting gradually increased from 14 in 1919 , representing about two compare with reports from 23 identical firms beginning with April, These totals are believed to represent about two-thirds of the industry, and in 1923 these shipments represented abont 23 per cent of the total production of all pumps and pumping machinery according to the census of manufactures. Details are given on the association's reports as to single steam pumps, duplex steam pumps, power pumps, centrifugal pumps, and reciprocating deep-well pumps.
${ }^{3}$ Patents granted compiled from the owficial records on file in the U. S. Department of Commerce, U. S. Patent Office, Division of Publications; inasmuch as patents are granted on Tuesdays only, the number of patents shown for a given month represents the total of either four or five Tuesdays. Monthly data from 1913 appeared in April, 1923, issue (No. 20), p. 48, except for internal-combustion engines, which appeared in June, 1923, issue (No. 22), p. 52. Agricultural implements patents fall within the official classification of "Agricultural implements; planters, harrows and diggers, plows, harvesters, scattering unloaders, and threshing implements."

8 Compiled by the Federal Reserve Bank of Chicago, covering 90 manufacturers, estimated to represent 80 per cent of the industry. The production figures are based on the employment data of 88 firms and the shipment figures on the value of goods shipped by 90 firms ( 60 reporting foreign shipments). Details for each class, segregated as to foreign and donestic shipments, are shown separately in the monthly summaries of the Federal Reserve Bank of Chicago.
v 11 months' average.

Table 21.-INDUSTRIAL MACHINERY *


* Monthly data from 1919 through 1926 on items in this table, if available, may be found in the Record Book of Business Statistics, Metals and Machinery Section, pp. 40 to 42.
pp. 1 Compiled by the Foundry Equipment Manufacturers' Association from reports of from 11 to 20 members, said to represent 65 to 70 per cent of the foundry equipment industry. The principal products are molding machines, sand-cutting machines, sand-blast machines, tumbling barrels, sand-mixing machines, cupolas, ladles, core-making machines, etc. The reports for each month are related to the average shipments of the reporting firms for 1922 to 1924 and are thus comparable, despite the difference in nummachines, etc. The reports for each month are related to the average shipments of the reporting firms for 1922 to 1924 and
ber of reporting frms. Sh Dassociation reports give detailed index numbers by sizes of frms but no numerical data. 1923, from reports to U.S. Department of Commerce, Bureau of the Gensus, from 13 manufacturers, representing practically the entire industry ( 15 prior to August, 1924 , when 4 establishments consolidated into 2). Press releases show segregation as to installation under fire-tube or water-tube boilers.
${ }^{3}$ Compiled by the National Machine Tool Builders' Association, including quantity reports from between 50 and 60 firms, said to represent about one-third of the industry. This index, based on average monthly shipments for the years 1922 to 1924 as 100 , covers gross new orders, shipments, and unfilled orders at the end of the month. The association reports give detailed index numbers by sizes of firms but no numerical data. Detailed shipments data, since discontinued, appeared on p. 55 of the April, 1924, issue (No. 32).
${ }^{4}$ Compiled by the Electric Hoist Manufacturers' Association from the reports of 9 firms.
${ }^{s}$ Compiled by the Electric Overhead Crane Institute, from reports of 11 manufacturers, estimated to cover 98 per cent of the output of electric overhead cranes for factories, etc. Monthly data from January, 1925, appeared in the March, 1927, issue (No. 67), p. 26.
${ }^{6}$ Compiled by the Association of Manufacturers of Wood Working Machinery from reports of its members, averaging about 23 each month and varying from 20 to 27. The total shipments for 1925 represented 48 per cent of the value of woodworking machinery produced that year, according to the census of manufactures. The products comprised in this classification include band and scroll saws, band mills, band rip and resaws, borers, circular cut-off saws, circular resaws, circular rip saws, combination saws, dovetailers, gainers, grinders, hand planers and glue jointers, lathes, molders, mortisers, planers and matchers, sanders, sash and door machines, shapers, surfacers, tenoners, wheel machines, and woodworkers, besides miscellaneous woodworking machinery.

86 months' average

Table 22.-ENAMELED WARE ${ }^{1}$


[^9]Table 23.-COPPER AND WIRE CLOTH*


* Monthly data from 1909 through 1926 on items in this table, if available, may be found in the Record Book of Businass Statistics, Metals and Machinery Section, pp. 48 to 50 .
T Compiled by the American Bureau of Metal Statistics, except mine production prior to January, 1921, and smelter production prior to 1923 , for which the anntual data of the U.S. Department of the Interior, Geological Survey, have been used for monthly averages, and refined production, shipments, and all stocks from 1919 throngh 1923 , compiled by the Copper Export Association. Data on mine production represent practically complete primary production of copper in the United States, the 1924 data representing 99 per cent of the annual total reported by the Geological Survey. World production of blister copper includes the smelter output of the United States Mexico, Canada, Chile, Peru, Japan, Australia, Europe (in part), Belgian Congo, and Rhodesia. These countries produced about 95 per cent of the worid's production in 1922; 96 per cent in 1923; 97 per cent in 1924 and 1925, and 98 per cent in 1926. Smelter production data are based on the production of bisted States from both domestic and imported ores, also from some serap copper. Refined-production data represent the total output of primary refined in the United States from both domestic and imported ores, also from some scrap copper. Refned-production data represent the total output of primary refine copper by refners in North and south America. from 12 ,refneries located in both North and south America, Stocks or blister copper
${ }_{2}$ Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, representing refined copper in pigs, ingots, bars, old and scrap, pipes, tubes, plates, sheets, and wire, except insulated wire and cable.
${ }^{3}$ Price of ingot copper, electrolytic, New York, based on averages of daily transaction compiled by the Engineering and Mining Journal-Preas.
${ }^{\prime}$ Compiled by the Wirecloth Manufacturers' Association, from reports of 8 manufacturers of brass and bronze wire endless belts for paper manufacturers, and estimated to represent from 80 to 90 per cent of the industry. Details by sizes are given in the association's report. Make and hold orders are special goods made up and held until called for by the paper mills; the goods included in this item are not included in any other items in the table except production.
${ }^{6} 9$ months' average.
- 10 months' average.

Table 24.-ELECTRICAL PRODUCTS

${ }_{1}$ Data compiled by the U. S. Department of Commerce, Bureau of the Census, from quarterly reports by 86 manufacturers of electrical goods. The data include nonelectrical items made by electrical manufacturers and represented 60 per cent of the output of the electrical industry in 1925 , according to the census of manufacturers, Quarterly data from 1922 through 1926 may be found in the Record Book of Business Statistics, Metals and Machinery Section, p. 47 .
${ }^{2}$ Compiled by the National Electrical Manufacturers' Association, from reports of 12 frms estimated to produce 50 to 60 per cent of all standard porcelain ( 8 firms) 15 to 20 per cent of special porcelain ( 12 firms), and 10 per cent of high-tension porcelain ( 3 firms), except that beginning with July, 1927 , a much larger proportion of the hightension output is included.
${ }_{3}$ Compiled by the Nutional Electrical Manufacturers' Association. This product is sold mostly in sheets, tubes, and cut panels and includes some material for noiseless automobile gears.
in general purpose the National Electrical Manufacturers' Association, and comprise large power direct current electric motors of from 1 to 200 horsepower, inclusive, built general purpose inotor, frames including control equipment sold with motors. The data are estimated to represent about 85 per cent of the output of these kinds of motors.
${ }^{6}$ Compiled by the National Electrical Manufacturers' Association from reports of 10 firms estimated to represent about 90 per cent of the output of this product.
${ }^{6}$ Compiled by the National Elecrical Manufacturers' ${ }^{\text {Com }}$ 'ssociation from reports of 6 firms estimated to represent 75 per cent of the output of this product. paper, both sheet and tube.
$\underset{8}{\text { pormpiled by the National Electrical Manufacturers' Association from reports of } 5 \text { companies estimated to represent } 85 \text { per cent of the output of the product. De- }}$ tails by kind of reflector and wattage are given in the association's monthly reports. The reflectors shown here are only for industrial use, but most of them can be used either indoors or outdoors.
${ }^{9}$ Compiled by the National Electrical Credit Association from reports to its constituent regional associations by electrical manufacturers and jobbers. Monthly date from 1921 appeared in the May, 1924, issue (No. 33), p. 206.

106 months', average.
115 months', average.
127 months' average.
${ }^{12} 7$ months' average.

Table 25.-ELECTRICAL PRODUCTS ${ }^{1}$


1 Compiled by the National Electrical Manufacturers', Association, except for data on radio equipment. Data on paper-insulated, lead-covered power cables are reported by 9 companies, representing about 90 per cent of the industry, details by voltage being given in the association reports. Data on flexible cords are reported by 16 companies, representing about 75 per cent of the industry; details by package sizes, with price range and averages, are presented in the association's reports. Data on welding sets are furnished by 6 companies, representing about 90 per cent of the industry; no monthly figures are available for 1926 . Details of single-operator variable voltage sets by ampere capacities are presented in the association's reports as well as the total ampere capacity of the multiple operator constant-potential sets. Data on panelboards and cabinets are reported by 9 companies, representing about 80 per cent of the industry. Data on nonmetallic conduits are furnished by 10 companies, representing about 90 per cent of the industry. Electric-furnace data are reported by 9 companies, representing about 90 per cent of the industry; these furnaces are for indus. trial use only, and are shown in number and value, classified, in the association's reports. Data on manufactured mica are reported by 6 companies, representing about 90 per cent of the industry.
from reports of by the $U$. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, in cooperation with the National Electrical Manufacturers' Association, from reports of about 7,500 retail dealers each quarter. Further details and segregation by States are shown in press releases. Similar data covering jobbers' stocks are also given in press releases of the bureau.

86 months' average.
${ }^{3}$ A verage for 2 quarters.
NUMBER OF ELECTRIC FANS SOLD ${ }^{1}$

| Year | Domestic | Export | Year | Domestic | Export |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1916 | 270, 604 | 31,860 | $1923{ }^{2}$ | 657, 570 | 42,699 |
| 1917 | 386, 314 | 44,231 | $1924{ }^{2}$ | 639, 617 | 65,698 |
| 1918 | 576,934 | 43,749 | $1925{ }^{2}$ | 881, 025 | 37,676 |
| 1919 | 583,964 | 48,631 | $1926{ }^{2}$ | 744, 053 | 46,394 |
| 1920 | 704,494 | 103,757 | $1927{ }^{2}-$ | 610, 610 | 52,964 |
| 1921. | 494, 740 | 36,801 | $1928{ }^{2}$ | 596, 787 | 55,313 |
| $1922{ }^{2}$ | 547, 454 | 41,899 |  |  |  |

[^10]Table 26.-TIN, ZINC, AND LEAD *


* Monthly data from 1909 through 1926 for items in this table, if available, may be found in the Record Book of Business Statistics, Metals and Machinery Section, pp. 52 to 59 , except for price of Straits tin, which appeared in the June, 1928, issue (No. 82), p. 23.

1 Deliveries and stocks of tin from New York Metal Exchange. Stocks in the United States are at port warehouses in New York at the end of the month, while deliveries are from these warehouses and indicate approximate consumption. The world visible supply at the end of the month includes stocks in the United States, in Europe, and afloat. Imports of tin in bars, blocks, etc., from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce.
${ }^{2}$ Production and stoeks at refineries at end of month of total primary zinc and retorts in operation at end of month from American Zinc Institute. Ore shipments and stocks at Joplin district mines at end of month from the Joplin Globe. The Joplin or Tri-State district includes parts of Kansas, Missouri, and Oklaboma, and produces about 65 per cent of zinc ore mined in the United States. Shipments are recorded as loaded at mines by buyers for shipment to smelters.
${ }^{3}$ Production of crude lead (amount extracted from Mexican ore deducted), receipts of lead in United States ore, shipments of lead ore from Utah, and total subscribers' stocks in the United States and Mexico of ore, matte, base bullion, and refined lead, including antimoniai, reported by the American Bureau of Metal Statistics. Shipments of lead ore from mines of the Joplin district from the Joplin Globe. Utah shipments are froin the Park City, Bingham, and Tintic districts and represent totals for 4 weeks with a fifth week added in certain months, this accounting for most of the larger fluctuations. Details by districts are given in the bureau's reports.

Table 27.-MISCELLANEOUS METAL PRODUCTS

| Year andMonti | BABBITTT METAL ${ }^{1}$ |  |  | BAND INSTRUMENTS ${ }^{\text {² }}$ |  |  |  | GALVANIZED SHEET METAL WARE ${ }^{3}$ |  |  |  | $\left(\begin{array}{c} \text { ENAM- } \\ \text { SHEEDT } \\ \text { METR } \\ \text { WALE } \end{array}\right.$ | PORCELAIN ENAMELED FLATWARE ${ }^{5}$ |  |  |  | 苞 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Consumption |  |  | Shipments |  |  |  | Palls and tubs |  | Other |  |  | New orders |  | Shipments |  |  |
|  | $\begin{aligned} & \text { Total } \\ & \text { apz } \\ & \text { par- } \\ & \text { ent } \end{aligned}$ | $\begin{gathered} \text { Direct } \\ \text { by } \\ \text { dro- } \\ \text { duc- } \\ \text { ers } \end{gathered}$ | $\begin{gathered} \text { Sale } \\ \text { to } \\ \text { con- } \\ \text { sum- } \\ \text { ers } \end{gathered}$ | Total | $\mid \underset{\text { piece }}{\text { Cup- }}$ | Shaxo- | Wood wind | Protion | Shipments | Protion | $\begin{aligned} & \text { Ship- } \\ & \text { ments } \end{aligned}$ | Shipments | Quan- | $\left\lvert\, \begin{gathered} \text { Ra- } \\ \text { tio } \\ \text { to } \\ \text { ca- } \\ \text { pac- } \\ \text { ity } \end{gathered}\right.$ | Quan- | $\underset{\text { capa }}{\text { Rati }}$ | io to acity |
|  | Thousands of pounds |  |  | Dollars |  |  |  | Dozens of pieces |  |  |  |  | Thous. of sq. feet | $\begin{aligned} & \text { Per } \\ & \text { cent } \end{aligned}$ | $\begin{gathered} \text { Thous. } \\ \text { of sa. } \\ \text { feet } \end{gathered}$ | Per cent |  |
| 1924 monthly average |  |  |  | 7588,513 | 7206,113 | '365,634 | 717, 100 |  |  |  |  |  |  |  |  |  |  |
| 1925 monthly average... | 5,752 | 1,177 | 4,575 | 587, 589 | 219, 151 | 350, 817 | 19, 287 |  |  |  |  |  | 86,789 | 853 | ${ }^{8} 6,257$ | ${ }^{8} 52$ | 81 |
| 1926 monthly average... | 5,495 | 1,282 | 4, 213 | 544, 377 | 201, 623 | 319,358 | 23,396 | 119, 159 | 118, 806 | 44, 675 | 43, 291 |  | 5,884 | 47 | 6,329 | 51 | 79 |
| 1927 monthly average..-- | 5,009 | 1, 092 | 3,917 | 454, 853 | 169,082 | 260, 892 | 24,879 | 139, 060 | 140,680 | 35,423 | 35,097 | 326, 411 | 6,092 | 48 | 6,402 | 50 | 83 |
| 1928 monthly average... | 4,973 | 1, 028 | 3,945 | 401, 834 | 163,659 | 206, 158 | 32,018 |  |  |  |  |  |  |  |  |  |  |
| September | 5,750 | 1,482 | 4, 268 | 514,799 | 238, 822 | 247, 940 | 28,037 | 135, 572 | 140,491 | 42, 219 | 43, 060 |  | 6,236 | 50 | 6,282 | 50 | 80 |
| October.- | 5,471 | 1,339 | 4, 132 | 646,065 | 245, 328 | 367, 628 | 33, 109 | 143, 038 | 140,778 | 38,847 | 41, 295 |  | 7,790 | 61 | 7,015 | 55 | 88 |
| November | 4, 747 | 1,147 | 3, 600 | 634, 999 | 234, 605 | 371, 839 | 28,455 | 114, 844 | 88, 520 | 32,865 | 31, 321 |  | 4,995 | 39 | 6,922 | 54 | 74 |
| December. | 4,508 | 1,096 | 5,413 | 740, 786 | 223,926 | 489, 358 | 27, 504 | 118, 525 | 101, 356 | 31,393 | 22,025 |  | 6,051 | 48 | 6,436 | 51 | 85 |
| $\begin{array}{r} 1927 \\ \text { January } \end{array}$ | 5,440 | 1,220 | 4,220 | 407, 776 | 143, 893 | 240, 763 | 23, 120 | 131, 006 | 141, 817 | 31,019 | 32,082 | 350, 748 | 6,760 | 53 | 5,942 | 47 | 79 |
| February | 5,452 | 1,066 | 4,386 | 474, 302 | 160, 558 | 289, 347 | 24, 397 | 138, 788 | 165,707 | 39,018 | 36, 123 | 372, 452 | 6,136 | 49 | 5,993 | 47 | 80 |
| March. | 5,626 | 1,208 | 4,418 | 526, 181 | 178,680 | 319, 005 | 28, 496 | 202, 393 | 182, 692 | 32,942 | 30, 980 | 440, 689 | 7,571 | 59 | 7,567 | 59 | 78 |
| April | 4, 812 | 950 | 3, 862 | 398, 509 | 148, 240 | 229, 129 | 21, 140 | 183, 812 | 198, 711 | 30,423 | 33, 785 | 337, 181 | 5,586 | 45 | 6,596 | 52 | 79 |
| May. | 4,946 | 971 | 3,975 | 377, 282 | 140, 272 | 213, 695 | 23,315 | 159, 178 | 133,387 | 33, 011 | 29,900 | 318, 071 | 5,285 | 42 | 6,253 | 49 | 80 |
| June. | 4,855 | 830 | 4,025 | 369, 646 | 158, 137 | 192, 042 | 19,467 | 110,909 | 119,724 | 48, 849 | 46,357 | 292, 048 | 5,907 | 47 | 6,749 | 53 | 80 |
| July | 4,605 | 1,442 | 3, 162 | 346, 627 | 130,642 | 196, 490 | 19,495 | 124, 264 | 128, 816 | 30,712 | 31, 832 | 248, 599 | 4,668 | 37 | 6,040 | 48 |  |
| August | 5,497 | 1,008 | 4,489 | 410, 474 | 162,971 | 228,463 | 19,040 | 133,309 | 148, 148 | 44,632 | 48, 291 | 329, 843 | 5,285 | 43 | 5,837 | 47 |  |
| Septomber | 4, 792 | 676 | 4, 117 | 495, 307 | 182, 209 | 287, 667 | 25,431 | 127,608 | 127, 530 | 37,776 | 44,852 | 310,823 | 6,129 | 48 | 6,849 | 53 |  |
| October | 5, 115 | 1,255 | 3,860 | 550, 345 | 216, 526 | 299, 785 | 34,034 | 151, 495 | 141, 101 | 39,006 | 41,368 | 322,081 | 9,578 | 63 | 6,889 | 54 |  |
| November | 4,506 | 1,186 | 3, 320 | 563, 667 | 201, 341 | 327, 470 | 34, 856 | 112, 690 | 110, 275 | 35,602 | 28,578 | 287, 115 | 5,308 | 43 | 6, 394 | 50 |  |
| December- | 4,466 | 1,296 | 3, 170 | 538, 116 | 205, 514 | 306, 847 | 25, 755 | 93,273 | 90, 254 | 22,090 | 17,013 | 307, 280 | 4,895 | 44 | 5,609 | 44 | 786 |
| 1928 |  |  |  |  |  |  |  |  |  | 32,678 | 35,689 |  |  |  |  |  |  |
|  |  |  | 4, 34 | 411,978 |  | 227, 193 |  | 177, 822 | 176, 125 |  | 29,085 | 372,848 |  | 45 | 5,473 | 46 |  |
| February. | 4,470 | 1,027 | 3, 444 | 411, 978 | 156, 153 | 227, 193 | 28,632 | 177, 822 | 176, 125 | 31, 609 | 29, 085 | 372, 848 | 5,378 | 45 | 5,824 | 49 |  |
| March | 4, 928 | 1,025 | 3, 903 | 445, 709 | 164, 609 | 254, 485 | 26,615 | 173, 592 | 175, 472 | 50,904 | 45, 205 | 442, 889 | 7,024 | 59 | 6, 526 | 54 |  |
| April. | 4, 843 | 1,118 | 3,725 | 367, 687 | 143, 424 | 202, 208 | 22, 055 | 208, 544 | 201, 119 | 31,545 | 36,452 | 351, 034 | 5,430 | 45 | 6,219 | 52 | ${ }^{8} 84$ |
| May | 4,607 | 1,028 | 3,578 | 350, 366 | 149, 901 | 174, 561 | 25, 904 | 177, 170 | 155, 561 | 39, 206 | 35, 143 | 348, 661 | 5,628 | 47 | 6,924 | 58 | 84 |
| June. | 4,731 | 1,106 | 3, 625 | 345, 169 | 148, 148 | 168, 420 | 28,601 | 141, 448 | 144, 385 | 48,038 | 44, 833 | 299, 078 | 5,477 | 49 | 5,322 | 47 |  |
| July. | 4, 693 | 900 | 3,793 | 266, 219 | 110, 104 | 134, 350 | 21, 765 | 114, 343 | 121,415 | 61, 688 | 47,856 | 277, 684 | 4, 457 | 40 | 4, 665 | 41 | 78 |
| August | 4,756 | 939 | 3,817 | 325, 688 | 147, 470 | 161,034 | 17, 184 | 127, 797 | 142, 487 | 37,846 | 44,377 | 358, 811 | 6,233 | 55 | 5,495 | 49 | 82 |
| September | 5,308 | 999 | 4, 309 | 448, 155 | 188,711 | 216, 481 | 42,963 | 150, 845 | 139, 183 | 55,850 | 50,606 | 352, 484 | 6, 551 | 58 | 6, 108 | 54 | 88 |
| October | 5,796 | 1,191 | 4, 605 | 579, 715 | 244, 512 | 270, 407 | 64,786 | 153, 813 | 152, 258 | 56, 469 | 54, 596 | 417, 387 | 7,428 | 66 | 7,700 | 68 |  |
| November | 5,630 | 1, 274 | 4, 357 | 469, 884 | 197, 028 | 242, 561 | 30, 295 | 131, 792 | 103, 290 | 33, 553 | 34, 012 | 322, 875 |  |  |  |  |  |
| December | 4,986 | 837 | 4,149 | 528, 391 | 199, 785 | 275, 400 | 53, 206 |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{r} 1929 \\ \text { Januarv } \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Fanuary -....... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March.... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May...June. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Compiled by the $U . S$. Department of Commerce, Bureau of the Census, from reports of 31 firms, comprising a large part of the industry. Consumption is calculated from sales by manufacturers and consumption by those firms (among them several important railroad systems) which consume their own production. These figures include all white-base friction bearing metals.
' Compiled by the Band Instrument Manufacturers' Association, representing 64 per cent of the total output of wind instruments in 1925 , according to the census of
mennactures. manufactures.
${ }^{3}$ Compiled by the U. S. Department of Commerce, Bureau of the Census, from reports of 12 firms, including data from the Sheet Metal Ware Association. The galvan ized ware included here is the product resulting from dipping made-up shapes in molten zinc and not utensils of galvanized sheets. It is classified as follows: (a) Pails and tubs include well buckets, cement pails, sap pails, stock pails, fire pails, water pails, and washtubs, but not pails for shipping food or candy, food-container pails, ete measures, dry measures (including japanned), refrigerator pans, watering pots, oil and gasoline cans, chamber pails, and ash and garbage-can covers. measures, dry measures (including japanned, reirigerator pans, watering pots, oil and gasoline cans, chamber pails, and ash and garbagencan covers. These reports include cooking, household, and hospital utensils having a vitreous coat on a steel sheet or iron base, and exelude equipment such as stoves, heaters, signs, etc. Details by class (white, gray, or colored), giving values, are shown in monthly press releases.
e. ${ }^{5}$ Compiled by the Porcelain Enamel Manufacturers, Association, from reports of 11 manufacturers of porcelain flatware, such as kitchen table tops, tub covers, outdoor advertising signs (of which 3 classes these figures are estimated to represent about 85 per cent of the industry's capacity), refrigerator linings, stove parts, etc. (for which plants). The unit of measurement for these operations is the number of square feet of sheet metal passed through the furnace once
${ }^{\circ}$ Compiled by the Enamelist Publishing Co. from trade reports on the wet-process vitreous enamel industry, covering stoves, kitehen ware, scales, refrigerator linings,
c.; reports are from about 350 furnaces, representing about 90 per cent of the industry.

Table 28.-AUTOMOBILES

| Year and Month | PRODUCTION ${ }^{1}$ |  |  |  |  |  | EXPORTS |  |  |  |  |  |  | GENERALMOTORSCORP. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United States |  |  | Canada |  |  | United States |  |  |  | Canada |  |  |  |  |
|  | Total | $\begin{aligned} & \text { Pas- } \\ & \text { senger } \\ & \text { cars } \end{aligned}$ | Trucks | Total | Pasesengercars cars | Trucks | Complete or chassis |  |  | Acces. sories $\underset{\text { parts }}{\text { and }}$ part | Complete or chassis |  |  | Sales |  |
|  |  |  |  |  |  |  | Total | Pas- senger cars | Trucks |  | Total | Pas- senger cars | Trucks | Tealers | $\underset{\text { users }}{\text { To }}$ |
|  | Number of cars |  |  |  |  |  |  |  |  | Thous. of dols. | Number of cars |  |  |  |  |
| 1913 monthly av. | 40,417 | 38,458 | 1,958 |  | 1,460 |  | 2,241 | 2,157 | 84 | \$523 |  | 500 |  |  |  |
| 1914 monthly av .. | 47, 421 | 45, 307 | 2,115 |  | 1,510 |  | 2, 147 | 1, 861 | 286 | 472 |  | 468 |  |  |  |
| 1915 monthly av. | 80, 828 | 74, 661 | 6,167 |  | 3,245 |  | 5,330 | 3,489 | 1,841 | 1,389 |  | 1, 123 |  |  |  |
| 1916 monthly av . | 134, 809 | 127, 132 | 7,678 |  | 4,638 |  | 6,737 | 5,160 | 1,577 | 2,001 |  | 1, 048 |  |  |  |
| 1917 monthly av. | 156, 162 | 145, 483 | 10,680 |  | 7,885 |  | 6,686 | 5,480 | 1,207 | 2,635 |  | 791 |  |  |  |
| 1918 monthly av. | 97, 557 | 78, 620 | 18,938 |  | 6,257 |  | 3,937 | 3, 078 | 859 | 2,801 |  | 694 | 4 226 |  |  |
| 1919 monthly av. | 161, 133 | 138, 138 | 22,995 |  | 6,661 |  | 6,894 | 5,595 | 1,299 | 3, 547 | 1,912 | 1,633 | 279 |  |  |
| 1920 monthly av. | 185, 612 | 158, 797 | 26,816 |  | 6,970 |  | 14,304 | 11,876 | 2,428 | 7,183 | 1,918 | 1,506 | 412 |  |  |
| 1921 monthly av. | 133, 069 | 121, 093 | 11,976 |  | 5,091 | ${ }^{8} 297$ | 3,203 | 2,579 | 623 | 3,255 | 894 | 775 | 118 |  |  |
| 1922 monthly av | 212, 015 | 191, 910 | 20, 104 | 8,504 | 7,909 | 596 | 6,520 | 5, 566 | 954 | 3,192 | 3, 163 | 2,950 | 214 | 38, 064 | 37, 195 |
| 1923 monthly av. | 336, 168 | 304, 261 | 31,907 | 12,203 | 10,769 | 1,434 | 12, 658 | 10,586 | 2,072 | 4,915 | 5,827 | 4,790 | 1,037 | 66, 546 | 60,940 |
| 1924 monthly av. | 300, 212 | 287, 500 | 32, 711 | 11, 271 | 9, 814 | 1,457 | 14,894 | 12,615 | 2, 279 | 6, 147 | 4,721 | 3, 657 | 1,064 | 48,945 | 54, 797 |
| 1925 monthly av. | 355, 486 | 314, 083 | 41, 403 | 13,498 | 11,298 | 2,200 | 25, 244 | 20,359 | 4,885 | 6,693 | 6,182 | 4, 834 | 1,349 | 69,659 | 68, 921 |
| 1926 monthly av. | 358, 411 | 318, 264 | 40, 148 | 17,061 | 13, 738 | 3,323 | 25, 452 | 19,878 | 5, 573 | 6,991 | 6, 194 | 4, 469 | 1,725 | 102,904 | 101, 319 |
| 1927 monthly av. | 283, 444 | 245, 550 | 37, 894 | 14, 869 | 12, 182 | 2,687 | 32,016 | 23, 229 | 8,787 | 8,642 | 4,785 | 3, 325 | 1,460 | 130, 229 | 129,548 |
| 1928 monthly av . | 363, 115 | 318, 884 | 44, 231 | 20, 199 | 16, 395 | 3,804 | 42,330 | 30,756 | 11, 573 | 11,948 | 6,646 | 4, 664 | 1,981 |  |  |
| $1927$ | 238, 908 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 199, 650 | 39, 258 | 15,376 | 11, 745 | 3,631 | 29,826 | 22, 122 | 7,704 | 7,411 | 7,466 | 5,296 | 2, 170 | 99,367 | $\begin{array}{r} 81,010 \\ 102,025 \end{array}$ |
| February | 304, 735 | 264, 171 | 40,564 | 18,655 | 14,826 | 3,829 | 31,475 | 21, 355 | 10, 120 | 7, 991 | 5,308 | 3, 597 | 1,711 | 124, 426 |  |
| March | $\begin{aligned} & 394,513 \\ & 406,382 \end{aligned}$ | 346, 031 | 48,482 | 22, 623 | 19,089 | 3,534 | 37,700 | 29,986 | 7,714 | 10,438 | 9,072 | 6, 512 | 2,560 | 161,910 | 146, 275 |
| April. |  | 358, 682 | 47,700 | 24, 611 | 20,890 | 3,721 | 46,703 | 34, 840 | 11, 863 | 10,609 | 4,075 | 2, 930 | 1,145 | 169,067 | 180, 106 |
| May. | 405, 648 | 358, 725 | 46, 923 | 25, 708 | 21,991 | 3,717 | 41, 191 | 30,658 | 10, 533 | 9,817 | 5,588 | 3,901 | 1,687 | 173, 182 | 171, 364 |
| June | 323, 817 | 280, 620 | 43, 197 | 19,208 | 16,470 | 2,738 | 27, 634 | 20,820 | 6, 814 | 8, 152 | 4,576 | 3,089 | 1,487 | 155, 525 | 159,701 |
| July .- | $\begin{aligned} & 269,396 \\ & 309,994 \end{aligned}$ | $\begin{array}{r} 237,811 \\ 275,585 \end{array}$ | 31, 585 | 10,987 | 8,719 | 2,268 | 28,604 | 19,398 | 9,206 | 9,973 | 3,247 | 2, 059 | 1, 188 | 136,909 | 134, 749 |
| August. |  |  | 34, 409 | 12,526 | 10, 139 | 2,387 | 32,061 | 23,295 | 8,766 | 9,741 | 4,634 | 3,020 | 1,614 | 155, 604 | 158, 619 |
| September- | $\begin{aligned} & 260,310 \\ & 219,682 \end{aligned}$ | $228,443$ | 33,867 | 11, 262 | 8,681 | 2,581 | 26, 273 | 19,033 | 7, 240 | 7,962 | 3,872 | 2, 856 | 1,016 | 140, 607 | 132, 596 |
| October.. |  | $\begin{aligned} & 184,042 \\ & 109,758 \end{aligned}$ | 36,640 | 7,748 | 6, 225 | 1, 523 | 27,718 | 19,366 | 8,352 | 6,600 | 3, 507 | 2,380 | 1, 127 | 128,459 | 153, 833 |
| November | $\begin{aligned} & 219,682 \\ & 13,370 \\ & 13, ~ 371 \end{aligned}$ |  | 24,612 | 6, 617 | 5,173 | 1,444 | 31,401 | 21, 402 | 9,999 | 7,501 | 3,876 | 2, 403 | 1,473 | 57, 621 | 80, 639 |
| December. |  | 106, 083 | 27,488 | 3,106 | 2,234 | 872 | 23,609 | 16,473 | 7, 136 | 7,505 | 2, 193 | 1,857 | 336 | 60, 071 | 53, 760 |
| 1928 | 133, 571 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January. | 231, 728 | 205,046 | 26,082 | 8,463 | 6,705 | 1,758 | 32,060 | 20,476 | 11, 584 | 7,489 | 2, 502 | 1,838 | 1,664 | 125, 181 | 107, 278 |
| February | $\begin{aligned} & 323,796 \\ & 413,327 \end{aligned}$ | 291, 151 | 32,645 | 12,504 | 10,315 | 2,189 | 33, 952 | 25, 114 | 8,838 | 9, 570 | 4, 111 | 2,628 | 1,483 | 169, 232 | 132, 029 |
| March.. |  | $\begin{aligned} & 371,821 \\ & 364,877 \end{aligned}$ | 41,506 | 17,469 | 15,223 | 2,246 | 49,974 | 40, 181 | 8,793 | 12,157 | 3, 557 | 2,688 | 871 | 197, 821 | 183, 706 |
| April. | $\begin{aligned} & 413,327 \\ & 410,104 \end{aligned}$ |  | 45,227 | 24, 211 | 20,517 | 3,694 | 42, 269 | 33,644 | 8,625 | 12,466 | 3,996 | 2,957 | 1,039 | 197, 597 | 209, 367 |
| May. | $425,783$ | 375, 863 | 49,920 | 33,942 | 29,764 | 4, 178 | 47,912 | 38,851 | 9,061 | 11, 491 | 8, 157 | 4, 511 | 1,646 | 207, 325 | 224, 094 |
| June | 425,783 396,796 392, 076 <br> 461, 298 | $\begin{aligned} & 356,622 \\ & 338,792 \end{aligned}$ | 40, 174 | 28,399 | 25,341 | 3,058 | 47, 171 | 36,038 | 11, 133 | 11,838 | 5,589 | 4,431 | 1,158 | 186, 160 | 206, 259 |
| July |  |  | 53, 284 | 25, 226 | 20, 122 | 5, 104 | 51, 679 | 38, 880 | 12,790 | 12, 571 | 8, 021 | 6,545 | 1,476 | 169,473 | 177, 728 |
| August |  | 400, 593 | 60, 705 | 31, 245 | 24, 274 | 6,971 | 49,007 | 32,815 | 16, 192 | 13,858 | 11,011 | 7,985 | 3,026 | 186, 653 | 187, 463 |
| September | $\begin{aligned} & 415,294 \\ & 397,112 \\ & 256,935 \\ & 233,135 \end{aligned}$ | $\begin{aligned} & 358,872 \\ & 339,976 \\ & 217,256 \\ & 205,144 \end{aligned}$ | 56, 422 | 21, 193 | 18,572 | 4,621 | 30, 559 | 22,494 | 8, 065. | 10,079 | 8,670 | 6,279 | 2,391 | 167,460 | 148, 784 |
| October |  |  | 57, 136 | 18, 536 | 13,016 | 5,520 | 46, 524 | 29,951 | 16, 573 | 17,523 | 9,705 | 6, 696 | 3,009 | 120, 876 | 140, 883 |
| November |  |  | 39,679 | 11, 769 | 8,154 | 3,615 | 46, 893 | 29,684 | 17, 209 | 13, 150 | 8,783 | 4,906 | 3,877 | 47,587 | 91,410 |
| December. |  |  | 27, 991 | 9,425 | 6,734 | 2,691 | 29,954 | 20,945 | 9,009 | 11, 182 | 6,646 | 4, 510 | 2,136 |  |  |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fanuary.-. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May-.---------...---.........- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^11]Table 29.-MOTOR VEHICLES


[^12]

Table 30.-CRUDE PETROLEUM

${ }^{1}$ Production data, compiled by U. S. Department of Commerce, Bureau of Mines, represent output transported from field of production, excluding oil consumed at locality of production or not transported therefrom, which has comprised only 1 or 2 per cent of the total production since 1919. Details by states and fields are given in monthly press releases. Monthly data from 1917 to 1920 given in December, 1922 , issue (No. 16 ), p. 48 , for 1921 and 1922 in August, 1923 , issue (No. 24 ), $p$. 77 .
${ }^{2}$ Compiled by $U$. S. Department of Commerce, Bureau of Mines, consolidating work formerly carried on by the Bureau of Mines and the Geological Survey under the Department of the Interior. Tank-farm stocksinclude total stocks at pipelines and tank tarms, producers' stocksin California and imported oil held outside refineries through December, 1924; since then California stocks are not included. Refinery stocks since January, 1925, represent only the stocks at refineries east of California. Prior to January, 1923 , the figures on tank-farm stocks included topped oil and imported oil at refineries, but the duplication between this item and the total stocks at reflineries was slight. This old method of securing figures showed totals about 2 per cent greater than those secured by the new method used in 1923 . Adjustments have been made in figures of some of the earlier years to represent approximate net stocks for comparison with later figures. Refineries' stocks include both imported and domestic oil. The number of days' supply is calculated from the tank-farm and pipe-line stocks and from current consumption, but because of the incompletoness of stocks' data this item is nol onger computed. Monthly data on stocks from 1917 to 1919 appeared in December, 1922 , issue ( No 0.16 ), p. 48 ; from 1920 to 1922 in July, 1923 , issue (No. 23 ) p. 50; on days' supply from 1921 to Ausust, 1923, issue (No. 24), p. 77.
${ }^{3}$ 'Includes producers' and refineries ${ }^{\prime}$ stocks, light crude having a specific gravity of $20^{\circ}$ and above and heavy crude a specific gravity below $20^{\circ}$; heavy crude data include
a large amount of manufactured fuel oil, for which reason California figures can not be combined with data for the country east of California. a large amount of manufactured fuel oil, for which reason California figures can not be combined with data for the country east of California.
oil has been generally excluded from the imports; on this basis imports for February, 1923, were $5,069,000$ barrels instead of $6,199,000$ barrels oil has been generally excluded from the imports; on this basis imports for February, 1923, were $5,069,000$ barrels instead of $6,199,000$ barrels, as reported, and to which previous month's figures are comparable.

Consumption by refiners, taken as amount of crude oil run to stills at refineries, compiled by the U. S. Department of Commerce, Bureau of Mines.
Wholesale price of Kansas-Oklahoma crude oil at wells is average for the month as compiled by the U. S. Department of Labor, Bureau of Labor Statiztics.
${ }_{8}$ Nomber or oil wells completed compiled by U. S. Department of Commerce, Bureau of Mines, from reports by American Petroleum Institute and Oil and Gas Journal. are from O' Shaughnessy's South American Oil Reports and are used in this table Lantil Povernment Department, and published in the Boletin del Petroleo. Current figures all derivatives therefrom. All data have been converted from cubic meters to the comparable barrel basis.
${ }^{\circ}$ Compiled by the Minister of the Interior of the United States of Venezuela and published annually on a monthly basis in Memoria del Ministerio de Fomento. Current figures are from O'Shaughnessy's South American Oil Reports and are used in this table until revised by government figures. All data have been converted from toneladas to a comparable barrel basis.

Table 31.-GASOLINE AND KEROSENE

${ }^{1}$ Compiled by the $U$. S. Department of Commerce, Bureau of Mines. Data covering production and stocks of natural-gas gasoline represent total production and stocks of this product, both blended and unblended, the amount blended being included with the production, consumption, and stock data covering the refinery product. The figures showing output of natural-gas gasoline include amount run from California fields through pipe lines. Stocks of gasoline at refineries include marketers' stocks beginning with June, 1923, while consumption figures since that time take account of this change in stocks.
the Chilippine Islandis to. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Gasoline exports include gasoline and all other naphtba, less exports to the Philippine Islands to agree with data by the Bureau of Mines.
York City York City.
-Compiled by the Oil and Gas Journal from reports of 50 representat
Monthly data from 1923 appeared in the March, 1928, issue (No. 79), p. 21 .
$s$ Retail distribution of gasoline compiled by the American Petroleum Institute from reports of gasolingex collection by 41 States including District of Columbia, but excluding Connecticut, Illinois, Maryland, Massachusetts, New Jersey, New York, Vermont, and West Virginia. Details for certain States for 1921 through 1923 may be found on pp. 52 and 53 of the June, 1924 , issue of the SURVEY (No. 34), data from 1922 through 1924 in the May, 1925 , issue ( $N$ o. 45 ), p. 28, and data through 1925 in 1925, the earliest date (No. 55), P. 27. These earlier totals are not comparable with those now published owing to the smaller number of States included. Prior to May, portion shown in the period from May, 1925, through December, 1926 . Data for California, Montana, Pennsylvania, and Tennessee are onily available quarterly and have been divided by 3 to secure corresponding monthly figures.

0 Retail distribution of kerosene, collected from the tax statisties of Arkansas, Colorado, Florida. Georgin, Louisiana, Kansas, Michigan, Minnesota, Nebraska, North Dakota, Oklahoma, South Carolina, and South Dakota by the American Petroleum Institute. No fgures are available for Lovisiana in 1922 , but they have been assumed as 3 per cent lower than the corresponding 1923 figures, in order to permit a total for identical States. Details by States for 1922 and 1923 , except Louisiana, with partial reports for 1921, appeared in the June, 1924 , issue of the SURVEY (No. 34), p. 51 , and data for 1924 and 1925 in the May, 1926 , issue (No. 57 ), $p$. 28 . Owing to the addition
of Louisiana figures and the exclusion of estimates for Indiana, the totals presented here do not agree with those previously published.

76 months' average, July-December, inclusive.

Table 32.-OTHER PETROLEUM PRODUCTS


[^13]Table 33.-CRUDE AND SCRAP RUBBER

| $\begin{aligned} & \text { Year and } \\ & \text { Monti } \end{aligned}$ | CRUDE RUBBER |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { RECLAIMED } \\ \text { RUBBER } \\ (\text { quarterly): } \end{gathered}$ |  | $\underset{\substack{\text { SURBAPR } \\(\text { quarterly) }}}{ }$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | World shipments ${ }^{(2)}$ | $\left(\begin{array}{c} \text { Im- } \\ \text { ports } \\ \text { (ln } \\ \text { clud- } \\ \text { ling } \\ \text { latex) } \end{array}\right.$ | $\begin{aligned} & \text { Consump- } \\ & \text { tion } 1 \\ & \text { (quarterly) } \end{aligned}$ |  | Domestic stocks, end of quarter ${ }^{1}$ |  |  |  | World stocks, end of month 4 |  |  |  |  |  | Produc. tion | St'ks, end of ter | Stocks at re-claimers | Con-sump-tionby re-claim-ers |
|  |  |  | Total | For tires | Total |  | Dealers | Afloat | Total | $\left\|\begin{array}{c}\text { Pro- } \\ \text { ducing } \\ \text { coun- } \\ \text { tries }\end{array}\right\|$ |  | United States | $\begin{aligned} & \text { Planta- } \\ & \text { tion, } \\ & \text { afoat } \end{aligned}$ |  |  |  |  |  |
|  | Long tons |  |  |  |  |  |  |  |  |  |  |  |  | $\left\lvert\, \begin{aligned} & \text { Dolls. } \\ & \text { per lb. } \end{aligned}\right.$ | Long tons |  |  |  |
| 1921 mo. av.. | 24,663 | 15,449 | 38, 572 | 31,280 | 83, 994 |  |  | 29, 671 | $\left\|\begin{array}{c}-\ldots \ldots . . \\ \cdots \cdots, \ldots \\ \hline 6131,770 \\ 188,822 \\ 135,983 \\ 184,308 \\ 255,701 \\ \cdots\end{array}\right\|$ |  | 83, 668 <br> 82, 099 <br> 66, 441 <br> 53, 657 <br> 11, 473 <br> 29, 415 <br> 68,371 <br> -------- - |  <br> $\ldots \ldots \ldots$ <br> $\cdots \cdots$ <br> $\cdots, \ldots$ <br> 64,273 <br> 47,902 <br> 61,974 <br> 93,394 <br> 88,127 | 31,038 | \$0.164 | 8,539 |  | -...... 11,509 |  |
| 1922 mo. av-- | 31,800 | 25,090 | 63, 546 | 51,801 | 85, 935 | 65, 982 | 19, 953 | 39, 523 |  |  |  |  | 42, 284 | .174.296 | 13,447 | --------1 |  | 17,211 |
| 1923 mo. av.- | 34, 398 | 25,762 | 68,739 | 55,238 | 85,450 | 66,885 | 18,565 | 33, 589 |  |  |  |  | -49, 654 |  | 17,384 | ------- |  | 22, 002 |
| 1924 mo. av.- | 35, 101 | 27,338 | 75, 445 | 62,916 | 59,458 | 46,829 | 12,629 | 40,026 |  | 21, 238 |  |  |  | . 261 | 19,018 | 8, 217 | 37, 496 | 26, 415 |
| 1925 mo. av.- | 43,006 | 33, 054 | 88, 468 | 74, 247 | 45,980 | 37, 407 | 8,493 | 48, 811 |  | 17, 882 |  |  | 58, 726 | . 719 | 30, 006 | 8, 662 | 61, 963 | 39,77054,074 |
| 1926 mo. av.- | 51, 232 | 34,445 | 82, 436 | 70, 414 | 61,301 | 50, 704 | 10,597 | 43, 565 |  | 22,781 |  |  | 70, 139 | . 485 | 41, 886 | 14,969 | 72, 096 |  |
| 1927 mo. av- | 50, 183 | 35, 521 | 85, 682 | 72,797 | 88,627 | 72, 701 | 15, 926 | 42, 862 |  | 27,236 |  |  | 66,699 | . 376 | 43, 181 | 19, 544 | 59, 675 | $54,074$ $55,547$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1926 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| September.-. | 55, 363 | 37, 112 | 86, 290 | 75, 142 | 58,883 | 45, 121 | 13,762 | 39,815 | 195, 321209,566 | $\begin{aligned} & 27,691 \\ & 28,144 \end{aligned}$ | 38,15245,093 | $\begin{aligned} & 62,078 \\ & 64,989 \end{aligned}$ | 67,400 | $.410$ | 40,020 | 13, 758 | 66, 908 | 52,068 |
| October.. | 58, 401 | 29, 476 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| November.. | 52,325 | 39,155 |  | 64, 891 | 68, 876 |  |  |  | 211, 353 | 27,460 | 47, 152 | 63,641 | 73, 100 | . 380 |  | 18, 160 |  |  |
| December -- | 57,386 | 37, 754 | 76, 555 |  |  | 58,785 | 10,091 | 50, 529 | 230,395 | 28, 113 | 52, 473 | 72, 509 | 77, 300 |  | 44, 989 |  | 65, 069 | 58, 410 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January .-.- | 56, 559 | 43,34028,337 | ------- |  | -....-.- |  | . | ----- | 237, 425248,740 | 27, 224 | 58,32962,443 | 76, 172 | 75,700 | $\begin{array}{r} .391 \\ .383 \end{array}$ | ---------------- |  |  |  |
| February. | 44, 639 |  |  |  | 28,611 |  |  |  |  | 91, 186 |  | 66,500 |  |  |  |  |  |  |
| March | 64,13144,751 | 35, 515 | 91, 279 | 78,577 |  | 82, 233 | 68, 105 | 14,128 | 45,384 | $\begin{array}{r} 256,689 \\ 263,362 \end{array}$ | 29,51526,176 | $\begin{aligned} & 67,044 \\ & 71,229 \end{aligned}$ | $\begin{aligned} & 85,740 \\ & 92,757 \end{aligned}$ | 74,390 <br> 73,200 | $\begin{aligned} & .383 \\ & .410 \end{aligned}$ | 45,547 | 21, 508 | 62, 807 | 58, 303 |
| April..- |  | 46, 202 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May | 48,74848,459 | 36,51833,045 |  |  |  |  |  |  | 258, 300 | 26,475 | 71, 562 | 94, 563 | 65, 700 | . 409 |  |  |  |  |  |
| June |  |  | 94, 983 | 82,648 | 84, 811 | 71,776 | 13,035 | 45, 168 | $\begin{aligned} & 200,300 \\ & 247,555 \\ & 249,995 \end{aligned}$ | 23,730 | 68, 274 | 89,25198,469 | 66, 300 | . 373 | 41, 197 | 19, 287 | 58, 331 | 52,059 |  |
| July | 41, 938 | 37,677 |  |  |  |  |  |  |  | 24, 500 | 68, 226 |  | 58,800 | . 349 |  |  |  |  |  |
| August....--- | 50, 535 | 32,810 |  |  |  | 72,989 | 17, 872 | 36,006 | 255, 684 | 27,427 | 69, 109 | 96, 148 | 63, 000 | . 351 | $39,449$ | 17, 812 | 55,547 | 50,495 |  |
| September-.- | 48, 186 | 33, 301 | $82,073$ | 69,369 | 90,861 |  |  |  | 260,799 | 27,822 | 72, 748 | 97, 829 | 62,400 | . 338 |  |  |  |  |  |
| October. | 50, 370 | 30, 184 |  |  |  |  |  |  | 263, 683 | 27,654 | 73, 876 | 97, 453 | 64, 700 | . 343 |  |  |  |  |  |
| November..- | 48, 565 | 38,592 |  |  |  |  |  |  | 264, 590 | 30,376 | 70, 880 | 101, 034 | 62,300 | . 376 |  |  |  |  |  |
| December-.- | 54, 315 | 30,736 | 74,391 | 60,592 | 96, 601 | 77, 932 | 18, 669 | 44, 890 | 261, 592 | 27, 324 | 66, 737 | 100, 131 | 67, 400 | . 406 | 46, 530 | 19,567 | 62, 016 | 61,331 |  |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January....- | 48, 134 | 39, 108 |  |  |  |  |  |  | 276,670 | 27,453 | 69,594 | 110, 243 | 69,380 | . 400 |  |  |  |  |  |
| February...- | 48,579 | 33, 392 |  |  |  |  |  |  | 269, 572 | 25,649 | 66, 268 | 108, 955 | 68,700 | . 326 |  |  |  |  |  |
| March. | 46, 887 | 40,688 | 95, 273 | 80, 871 | 112, 103 | 91, 700 | 20,403 | 35,572 | 260, 991 | 22,353 | 61, 478 | 114, 060 | 63, 100 | . 266 | 51, 112 | 16,317 | 61. 299 | 64, 069 |  |
| April. | 36, 114 | 37,958 |  |  |  |  |  |  | 245, 185 | 19, 223 | 57, 174 | 113, 083 | 55, 700 | . 188 |  |  |  |  |  |
| May.-.......- | 43, 889 | 31,014 |  |  |  |  |  |  | 227, 536 | 20, 116 | 48, 243 | 105, 357 | 53, 820 | . 188 | 51, 109 | 15,459 | 51, 518 | 65, 387 |  |
| June | 40, 927 | 27,764 | 95, 220 | 81, 323 | 87,771 | 77,132 | 10,639 | 38, 478 | 212, 527 | 20,664 | 42,365 | 90, 198 | 59,300 | . 194 |  |  |  |  |  |
| July.. | 52,831 | 31, 258 |  |  |  |  |  |  | 208, 789 | 21,578 | 39, 269 | 83, 242 | 64,700 | . 192 |  |  |  |  |  |
| August.-.-.-- | 58,345 | 30,874 |  |  |  |  |  |  | 201, 188 | 21, 828 | 35, 865 | 68, 995 | 74, 500 | . 193 |  |  |  |  |  |
| September --- | -45,338 | 39,732 | 108, 167 | 93, 173 | 68,729 | 54,418 | 14,301 | 43, 492 | 198, 448 | 17,687 | 35, 248 | 68, 851 | 76,700 | . 182 | 52,823 | 14,963 | 61,016 | 66,298 |  |
| October....- | 43, 748 | 44, 058 |  |  |  |  |  |  | 178, 887 | 16, 589 | 28, 026 | 66, 421 | 67,900 | . 187 |  |  |  |  |  |
| November.-- | 93, 073 | 36, 624 |  |  |  |  |  |  | 228, 393 | 34, 500 | 22, 536 | 61,957 | 109, 400 | . 182 |  |  |  |  |  |
| December. |  | 43, 519 |  |  |  |  |  |  |  |  |  | 66, 166 |  |  |  |  |  |  |  |
| $\begin{array}{r} 1929 \\ \text { January } \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February.. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April.. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Data compiled by the Rubber Association of America (Inc.) from reports of about 285 members and nonmembers representing the principal manufacturers, importers' and reclaimers in this field. It should be noted that these consumption and production data represent quarterily, not monthly, totals, while stock figures are shown as of the end of the quarterly period indicated, and annual averages in these columns are of quarterly, not monthly, data.
${ }^{2}$ Compiled by the World's Rubber Position, a British publication. Details of shipments by countries are given in the publication, as well as amounts retained by the principal importing countries.
${ }^{3}$ Imports of rubber, including latex, into the United States compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce.
Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, from basic data on producing countries (Para, Singapore, and Penang) - Compiled by the U. S. Department of Commerce, Bureau, of Foreign and Domesicic commerce, rom basic data on producing conatries (Poratic stocks supplied by the and on European countries (London, Liverpool, Amsterdam, and Antwerp) supplied by the Rubber Growers Association (British), on dome
Rubber Association of A merica and prorated from 95 to 100 per cent, and on stocks of plantation rubber afloat from the World's Rubber Position.
Monthly data from 1915 may be found in the Marketing of Crude Rubber by the U. S. Department of Commerce, pp. 14 and 15.
Tonthly data from 1915 may be lound in the

Table 34．－TIRES AND RUBBER－PROOFED FABRICS

| Year and Month | AUTOMOBILE TIRES ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  | RUREER－PROOFED FABRICS ${ }^{3}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pneumatic tires |  |  |  | Inner tubes |  |  |  | Solid tires and cushions |  |  |  | Raw material consumed |  | Production |  |  |  |  |  |
|  | $\begin{aligned} & \text { E } \\ & \text { E } \\ & \text { C } \\ & \text { 曷 } \\ & \text { a } \end{aligned}$ |  | Shipments |  |  |  | Shipments |  |  |  | Ship－ ments |  |  |  |  |  |  | $\begin{aligned} & \text { 券 } \\ & \text { 曾 } \end{aligned}$ |  |  |
|  |  |  | 关 | 兾 |  |  | $\begin{aligned} & \dot{\text { di }} \\ & \text { e } \end{aligned}$ | $\dot{\hat{x}}$ |  |  | 立 | $\dot{\mathbf{\theta}}$ |  |  |  |  |  |  |  |  |
|  | Thousands |  |  |  |  |  |  |  |  |  |  |  | Thousands of pounds |  | Thousands of yards |  |  |  |  | Per cent |
| 1921 monthly av | 1，821 | 4， 321 | 1， 005 | 43 | 2，261 | 4， 832 | 2， 292 | 29 | 36 | 232 | 44 | 2 | 6，690 | 17， 922 | 1，528 | 456 | 756 |  |  |  |
| 1922 monthly av． | 2， 573 | 4，896 | 2，436 | 81 | 3，189 | 6， 081 | 3， 055 | 58 | 66 | 195 | 57 | 4 | 9， 257 | 27，301 | 2，026 | 799 | 696 |  |  |  |
| 1923 monthly av． | 2，843 | 5，666 | 2，697 | 89 | 3，768 | 7， 354 | 3，630 | 71 | 59 | 254 | 57 | 5 | 9，861 | 30，601 | 2，648 | 1，317 | 640 |  |  |  |
| 1924 monthly av．． | 3，234 | 5，426 | 3，048 | 91 | 4，424 | 7，490 | 4， 174 | 84 | 58 | 198 | 52 | 5 | 11， 868 | 37， 821 | 2，085 | 927 | 526 | ${ }^{3} 652$ | ${ }^{4} 888$ | 425． 1 |
| 1925 monthly av． | 3，811 | 5，920 | 3，604 | 116 | 5，171 | 8，318 | 4，964 | 105 | 65 | 170 | 62 | 7 | 14，025 | 46，033 | 1，999 | 657 | 765 | 577 | 770 | 41.7 |
| 1926 monthly av． | 3，848 | 8， 158 | 3，600 | 93 | 4，793 | 13， 110 | 4，411 | 66 | 48 | 188 | 42 | 5 | 13，830 | 43， 170 | 2， 444 | 697 | 1，230 | 517 | 705 | 39.7 |
| 1927 monthly av．． | 4，045 | 8，272 | 3，850 | 168 | 4，391 | 11， 805 | 4，463 | 100 | 48 | 170 | 4 | 5 | 14，832 | 42， 916 | 3， 156 | 780 | 1，833 | 543 | 828 | ${ }^{5} 39.0$ |
| 1928 monthly av．．．．－． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1927 | 3，731 | 7，839 | 3， 534 | 172 | 4， 007 | 11，704 | 4， 428 | 89 | 44 | 166 | 36 | 7 |  |  | $\text { J., } 916$ |  | 784 | 414 | 957 | $\begin{aligned} & 35.7 \\ & 51.0 \end{aligned}$ |
| January． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February | 3，834 | 8,2988,705 | 3，204 | 151 | 3，724 | 12，595 | 3，763 | 80 | 46 | 163 | 40 | 8 | 13，609 | 45， 037 | 2， 084 | 718 | 881 | 485 | 1，005 |  |
| March． | $\begin{aligned} & 4,727 \\ & 4,742 \end{aligned}$ |  | 4，094 | 199 | 5，395 | 12，839 | 4， 534 | 90 | 57 | 159 | 54 | 8 | 16，651 | 50，614 | 2，756 | 978 | 1， 190 | 588 | 851 | 61.3 |
| April．． |  | 9，113 | 4，118 | 171 | 5，536 | 13，371 | 4，669 | 105 | 64 | 162 | 54 | 5 | 17，238 | 51， 333 | 2，800 | 820 | 1，498 | 482 | 805 | 41.4 |
| May | 4，629 | 9，3709,369 | 4，069 | 186 | 5，060 | 13，813 | 4， 501 | 109 | 65 | 178 | 45 | 4 | 16，029 | 47， 270 | 2， 642 | 955 | 1，206 | 481 | 740 | 59.9 |
| June | $\begin{aligned} & 4,678 \\ & 3,835 \\ & 4,334 \end{aligned}$ |  | 4，487 | 222 | 4，742 | 13，419 | 5，024 | 108 | 62 | 186 | 50 | 6 | 17，443 | 48，778 | 2， 776 | 768 | 1，573 | 435 | 654 |  |
| July |  | $\begin{aligned} & 8,522 \\ & 8,070 \end{aligned}$ | 4，316 | 180 | 3，971 | 12，028 | 5，205 | 104 | 48 | 180 | 43 | 5 | 14， 010 | 41， 209 | 3， 330 | 712 | 2，047 | 571 | 832 |  |
| August |  |  | 4，666 | 144 | 4，871 | 11， 023 | 5，898 | 96 | 49 | 183 | 45 | 5 | 16，323 | 45， 706 | 4，077 | 802 | 2， 723 | 552 | 876 | 30.5 |
| September． | $\begin{aligned} & 3,638 \\ & 3,603 \\ & 3,394 \\ & 3,391 \end{aligned}$ | 7，325 | 4，168 | 136 | 4，247 | 10，162 | 4，973 | 103 | 36 | 173 | 42 | 4 | 13，998 | 37，341 | 4， 545 | 756 | 3，123 | 666 | 955 | 28.7 |
| October－． |  | 7,287$\mathbf{7 , 6 3 5}$7,734 | 3，484 | 133 | 3，809 | 10，187 | 3，685 | 93 | 34 | 162 | 40 | 4 | 13，549 | 37，130 | 4，634 | 819 | 3，179 | 636 | 827 | 31.2 |
| November |  |  | 3，100 | 145 | 3，593 | 10，216 | 3，463 | 88 | 32 | 161 | 32 | 3 | 12，822 | 33，845 | 3，791 | 691 | 2，489 | 611 | 720 | 26.3 |
| December |  |  | 2， 959 | 178 | 3，742 | 10，297 | 3，413 | 133 | 33 | 161 | 28 | 4 | 11，949 | 32，654 | 2， 518 | 621 | 1，303 | 594 | 710 | 23.6 |
| $\begin{array}{r} 1928 \\ \text { January } \end{array}$ | 3，391 <br> 4， 026 | 7，491 | 3，924 | 132 | 4，086 | 9，760 | 4，469 | 90 | 37 | 164 | 31 | 3 | 16，040 | 43，709 | 2，177 | 600 | 874 | 703 | 773 | 29.6 |
| February | $\begin{aligned} & 4,026 \\ & 4,784 \\ & 5,128 \\ & 4,645 \end{aligned}$ | 8，826 | 3， 653 | 133 | 5，176 | 11，020 | 3， 997 | 81 | 37 | 159 | 36 | 3 | 16， 924 | 46， 468 | 2，575 | 757 | 1，107 | 711 | 960 | 28.8 |
| March． |  | $\begin{aligned} & 9,318 \\ & 9,561 \end{aligned}$ | 4，137 | 174 | 5,427 | 11，878 | 4，205 | 98 | 44 | 159 | 41 | 5 | 18，854 | 48， 887 | 2，853 | 805 | 1，148 | 900 | 896 | 25.7 |
| April． |  |  | 4，229 | 143 | 4，999 | 12， 500 | 4，196 | 86 | 44 | 157 | 40 | 3 | 18，310 | 43， 701 | 2，416 | 835 | 874 | 707 | 980 | 27.6 |
| May．． | 5， 082 | 9，704 | 4，707 | 146 | 5，382 | 13， 298 | 4，631 | 100 | 47 | 156 | 44 | 4 | 18， 168 | 51，061 | 2，744 | 725 | 1，110 | 909 | 776 | 27.7 |
| June．．． | $\begin{aligned} & 5,030 \\ & 4,881 \end{aligned}$ | $\begin{aligned} & 9,150 \\ & 8,396 \end{aligned}$ | 5， 162 | 184 | 5，222 | 12，892 | 5，254 | 105 | 49 | 156 | 45 | 5 | 19，646 | 53， 159 | 2，953 | 895 | 1，351 | 707 | 884 | 24.5 |
| July．． |  |  | 5，811 | 121 | 5，009 | 11，248 | 6，469 | 83 | 46 | 152 | 45 | 4 | 20，947 | 47， 128 | 3，447 | 763 | 1，951 | 733 | 497 | 25.9 |
| August | 5，607 | 7， 539 | 6， 131 | 179 | 6， 264 | 10，466 | 6，886 | 132 | 52 | 149 | 49 | 5 | 21， 854 | 62， 224 | 4，613 | 764 | ［2， 598 | 1，251 | 688 | 39.1 |
| September | $\begin{aligned} & 5,101 \\ & 5,495 \\ & 4,556 \end{aligned}$ | $\begin{aligned} & 7,324 \\ & 8,640 \\ & 9,434 \end{aligned}$ | 5， 191 | 168 | 5，327 | 10，158 | 5， 245 | 121 | 43 | 151 | 42 | 2 | 17，797 | 55，351 | 4，966 | 780 | 3，179 | 1，007 | 1，085 | 40.0 |
| October． |  |  | 4，096 | 191 | 5，197 | 11，464 | 4， 138 | 108 | 47 | 153 | 43 | 3 | 20，295 | 58， 302 | 5，914 | 609 | 4， 009 | 1，296 | 1，222 | 31.2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May＿－．．．．．．．．．．．．．．．－．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June－－－－－－－－－－－－－．．．．．．．．． |  | －．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^14]Table 35.-OTHER RUBBER PRODUCTS

${ }^{1}$ Compiled by the Rubber Association of America, from reports of from 13 to 16 manufacturers each month, who made 63 per cent of the total output of rubber heels for sale as such, in 1925 , according to the census of manufactures. Only salable heels are included, none so imperfect as to result in their being reclaimed. Details by kinds of soles and heels are presented in the association's reports. Stocks inelude merchandise consitituting domestic stock in factory, and in transit to, or at, warehouses, branches,
or in possession of dealers on consignment basis, and represent all merchandise still owned by manufacturers as domestic stocks. Shipments include only stock forwarded to a purchaser and exclude goods forwarded to a warehouse, branch, or on a consignment basis.
${ }^{2}$ Compiled by the Rubber Association of America from reports, of 11 manufacturess whose shipments in 1925 represented 78 per cent of the total output of rubber belting and 70 per cent of the output of rubber hose, measured in value, according to the census of manufactures. Details by classes are shown in the association's reports.
${ }^{8}$ Includes tubing, packing, mats and matting (except tiling), molded goods, lathe-cut goods, and miscellancous, but excludes jar rings, tapes, and thread.

- Compiled by the Rubber Association of America from reports of 8 manufacturers estimated to represent 80 per cent of the industry. Details by kinds of packages are given in the association's reports.

Compiled by the Rubber Association of America from reports of 10 manufacturers. The data include individually cut tile and other types of rubber flooring whether in sheet form or not, such as Pullman-car tiling, but exclude regular corrugated, knobbed, and perforated mats and matting, automobile mats, etc. Details by widths

Table 36.-HIDES AND SKINS

${ }^{1}$ Data for the United States compiled by the U. S. Department of Agriculture, Bureau of Animal Industry, representing animals slaughtered under Federal inspection, wata in number of animals are given here as indications to hide output. Monthly data from 1909 appeared in the August, 1927, issue (No. 72 ), p. 138. Data for Canada compiled by Dominion Bureau of Statistics, and cover all slaughter under Canadian inspection. Monthly data on Canadian slaughter from 1913 appeared in the February 1927, issue (No. 66), p. 23.
${ }^{2}$ Compiled by the $U . S$. Department of Commerce, Bureau of Foreign and Domestic Commerce.
${ }^{3}$ Compiled by the U. S. Department of Commerce, Bureau of the Census, from returns from packers, tanners, dealers, importers, and manufacturers, and represent practically complete returns from the leather industry. As given in the detailed monthly reports, which can be obtained upon request from the Bureau of the Cen sus, the returns for hides and skins are expressed in numbers of hides and skins. For the above summary these have been reduced to pounds on the basis of the average weights of each class. The detailed reports also show the various kinds of skins held and where located as between tanners, dealers, etc.
${ }_{i}$ Dota from $U$. $S$. Department of Labor, Bureau of Labor Statistics, representing average monthly prices.
${ }^{8} 4$-year monthly average, 1910-1913.
04 months' average, September to December, inclusive.

Table 37.-LEATHER AND LEATHER PRODUCTS

${ }^{1}$ Prior to July, 1922 , these figures were compiled by the Tanners' Council. Since July, 1922, they have been compiled by the U. S. Department of Commerce, Bureau of the Census, representing practically the entire industry. Hence the figures from July, 1922, on are not directly comparable with those for preceding months.
${ }_{2}$ Based on figures compiled by the $\bar{O}$. S. Department of Commerce, Bureau of the Census. The data embrace returns from packers, tanners, dealers, importers, and manufacturers. Data on leather have been converted to pounds or square feet on the basis of the average weights of each class from original detailed reports in skins, sides, backs, butts, pounds, etc., which may be obtained from the Bureau of the Census on request. Stocks in process represent leather in process of tanning, which takes several months to complete, while finished stocks are those completely tanned.
several Compiled by the U.S. Department of Commerce; Bureau of Foreign and Domestic Commerce. The exports under sole and belting cover sole leather only, while under upper leather are included cattle, calf, goat, sheep and lamb, and patent. Exports of shoes include men's and boys', women's and children's boots and shoes but exclude
slippers, athletic shoes, sandals, and other leather footwear.
Compiled by the U.S. Department of Labar, Bureau of Labor Statistics, representing average monthly prices. Monthly data from 1920 on the St. Louis quotations appeared in the September, 1922, issue (No. 13), p. 47.
${ }^{\circ}$ Compiled by the U.S. Department of Commerce, Bureau of the Census, from over 1,000 firms each month, comprising almost the entire industry. Figures for the years 1914,1919 , and 1921 are those reported by the census of manufactures for those years. Monthly data from November, 1921 , appeared in May, 1924, issue (No. 33 ), p. 97. Further details as to classes given in press releases and details by States are given twice a year.
${ }^{6}$ Compiled by the U. S. Department of Commerce, Bureau of the Census, by 206 identical factories (including data in earlier months for 1 factory now out of business), representing 87 per cent of the leather-glove industry, according to the census of manufactures, 1921. Details by classes are given in monthly press releases.

Table 38.-NEWSPRINT PAPER

| Year and Monte | NEWSPRINT PAPER |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production |  |  | $\begin{aligned} & \text { Con- } \\ & \text { sump- } \\ & \text { tion } \\ & \text { by pub- } \\ & \text { lishers } \end{aligned}$ | Shipments |  | Stocks, end of month |  |  |  | $\underset{\text { ports }}{\text { Im- }}$ | Exports | $\left.\begin{array}{\|c} \text { Price } \\ \text { rodl, } \\ \text { f.o.b. } \\ \text { mill i } \end{array} \right\rvert\,$ |
|  | United States ${ }^{2}$ |  | Canada ${ }^{3}$ |  |  |  | At m |  | $\begin{gathered} \text { At } \\ \text { pub- } \\ \text { lishers } \end{gathered}$ |  |  |  |  |
|  | Total | Ratio tocapacity | Total | United States ${ }^{4}$ | United States | Can- | United States | $\begin{aligned} & \text { Can- } \\ & \text { ada }^{3} \end{aligned}$ | United States ${ }^{\text {4 }}$ |  | United States ${ }^{5}$ | $\underset{\text { ada }}{\text { Can- }}$ |  |
|  | Short tons | Per cent | Short tons |  |  |  |  |  |  |  |  |  | Dolls. per cwt |
| 1913 monthly average.... |  |  |  |  |  |  |  |  |  |  | 18,320 | 12,233 | \$2. 25 |
| 1914 monthly average...- |  |  |  |  |  |  |  |  |  |  | 26,200 | 24,382 | 2. 25 |
| 1915 monthly average.... |  |  |  |  |  |  |  |  |  |  | 30,701 | 20,384 | 2.05 |
| 1916 monthly average.... 1917 monthly average.... | 113, 251 | ------ |  |  |  |  | 38, 998 |  |  |  | 39, 019 | 38, 601 | 270 |
|  |  |  |  |  | 113, 858 | --..---......- | 31,71324,035 | ------------ | 124,789154,952 | --...------- | 46, 593 | $\begin{aligned} & 45,026 \\ & 50,425 \end{aligned}$ | $\begin{aligned} & 3.35 \\ & 3.41 \end{aligned}$ |
| 1918 monthly average.... | $\begin{aligned} & 105,024 \\ & 114,543 \end{aligned}$ | --------- | 61, 251 | 110, 248 | 106,049114,880 | 62, 083 |  | 13, 325 |  | 41, 155 | 49,68952,311 |  |  |
| 1919 monthly average...- |  |  | 67, 284 | 142, 091 |  | 67,922 | 24,035 $\mathbf{2 3 , 9 2 9}$ | 12,597 | 154,952 155,185 | 40, 983 |  | 55, 203 | 3.88 |
| 1920 monthly average.... | 125,997 |  | 72, 931 | 148,780 | 125, 215 | 72,563 | 23, 324 | 10,682 | 144, 712 | 52,006 | 60,822 | 59, 469 | 6. 00 |
| 1921 monthly average...- | $120,641$ |  | $\begin{aligned} & 67,339 \\ & 90,028 \end{aligned}$ | 147, 957 | 102,172 | 66,930 | 29,940 | 17,033 | 188,797 | 28, 211 | 66, 042 | 62,969 | $\begin{aligned} & \text { 5. } 00 \\ & \text { 3. } 69 \end{aligned}$ |
| 1922 monthly average.... |  |  |  | 170,738 | 121, 035 | 90,499 | 22,837 | 10,572 | 171, 121 | 36,657 | 85,772 | 79,960 |  |
| 1923 monthly average.- | 123,750 | -------- | 105,519 | 151, 179 | 123,111122,505 | 104, 793112,063 | 22, 207 | 14,745 | $\begin{aligned} & 175,797 \\ & 176,855 \end{aligned}$ | 40,601 | 109, 070 | 94,830 | $\begin{array}{\|l} 3.69 \\ 3.89 \end{array}$ |
| 1924 monthly average... |  | --------- | $\begin{aligned} & 112,750 \\ & 126,851 \end{aligned}$ |  |  |  | $\begin{aligned} & 29,357 \\ & 26,867 \end{aligned}$ | $\begin{aligned} & 19,789 \\ & 22,454 \end{aligned}$ |  | 33, 942 | $\begin{aligned} & 113,103 \\ & 120,702 \end{aligned}$ | $\begin{aligned} & 101,615 \\ & 116,805 \end{aligned}$ | $\begin{aligned} & \text { 3. } 89 \\ & \text { 3. } 83 \end{aligned}$ |
| 1925 monthly average.... | $\begin{aligned} & 122,548 \\ & 127,527 \end{aligned}$ |  |  | $\begin{aligned} & 148,807 \\ & 166,780 \\ & 172,998 \end{aligned}$ | $\begin{array}{r} 127,862 \\ -140,399 \\ \hline \end{array}$ | 127,096 |  |  | $\begin{aligned} & 176,855 \\ & 152,733 \end{aligned}$ | 32, 205 |  |  | 3.88 3.70 |
| 1926 monthly average.... | - 140, 352 | --------- | ${ }^{6} 156,811$ |  |  | $\begin{array}{r} \text { B 156, } 562 \\ 171,896 \\ 199,919 \end{array}$ | $\begin{aligned} & 16,662 \\ & 24,843 \\ & 35,202 \end{aligned}$ | $\begin{aligned} & 13,881 \\ & 30,052 \\ & 40,999 \end{aligned}$ | $\begin{aligned} & 148,043 \\ & 216,726 \end{aligned}$ | 36,19443,820 | $\begin{aligned} & 154,223 \\ & 165,589 \end{aligned}$ | $\begin{aligned} & 144,332 \\ & 156,822 \end{aligned}$ | 3. 30 3. 50 |
| 1927 monthly average... | 123, 717 | 79 | $\begin{aligned} & 173,912 \\ & 198,425 \end{aligned}$ |  | $\begin{aligned} & 122,877 \\ & 116,449 \end{aligned}$ |  |  |  |  |  |  |  | 3. 25 |
| 1928 monthly a verage.. |  |  |  |  |  |  |  |  |  |  | 179, 570 | 185, 382 | 3.25 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 135, 395 |  | 161,724 | 168, 241 | 130, 973 | 158, 866 | 15,968 | 17,255 | 232, 944 | 43, 624 | 166, 102 | 142, 329 | $\text { 3. } 25$ |
| February.. | $119,953$ <br> 133, 207 |  | 151, 986 | 156, 621 | 117,636 | 146, 365 | 18,420 | 22,769 | 224, 572 | 48, 251 | 134, 209 | 141, 199 |  |
| March |  |  | 174,094166,460 | 176, 356 | 128, 927 | 169, 061 | 22,744 | 28, 462 | 227, 049 | 42, 884 | 166, 532 | 184, 502 | $\begin{aligned} & \text { 3. } 25 \\ & \text { 3. } 25 \end{aligned}$ |
| April...- | 129,892 |  |  | 186, 138 | 128,666 | 168, 711 | 24, 105 | 26,389 | 215, 329 | 40,798 | 147, 635 | 123,449 | 3. 25 |
| May | 127, 395 |  | 171,586 | 186, 268 | 126, 984 | 170, 468 | 24, 233 | 27, 520 | 193,005 | 43, 862 | 170,545 | 140, 924 | 3.25 |
| June. | 129, 201 |  | 171, 819 | 169, 536 | 126, 289 | 168, 951 | 26,549 | 28,851 | 196, 860 | 40,784 | 161, 472 | 159,495 | 3. 25 |
| July - . | 118,929 |  | 162, 449 | 157, 325 | 119,686 | 159, 843 | 27, 764 | 32, 282 | 205, 967 | 40,476 | 159,687 | 140, 543 | 3. 25 |
| August. | 127,065 |  | 180, 116 | 154, 167 | 123,926 | 180, 666 | 30, 335 | 31, 743 | 231, 992 | 40, 916 | 167, 475 | 163, 115 | 3.25 |
| Septernber | 114, 659 | 80 | 178, 815 | 169, 286 | 114, 003 | 177, 195 | 30, 751 | 33, 384 | 225, 310 | 45,570 | 168, 630 | 168, 855 | 3.25 |
| October | 113, 126 | 77 | 191, 171 | 184, 805 | 116, 885 | 188, 769 | 27, 839 | 35,774 | 214, 872 | 45,789 | 175, 484 | 159, 284 | 3. 25 |
| November | 117, 166 | 79 | 190, 293 | 185, 202 | 116, 468 | 187, 766 | 28, 543 | 38, 074 | 214, 639 | 46, 178 | 188, 624 | 179, 069 | 3. 25 |
| December | 119, 312 | 81 | 181, 600 | 182, 027 | 123, 883 | 181, 439 | 20, 877 | 38, 117 | 218, 177 | 46,708 | 180, 670 | 169, 202 | 3. 25 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January .-. | 119,525 | 84 | 187, 848 | 172,952 | 114, 211 | 186, 358 | 25.905 | 37,731 | 207, 449 | 46, 522 | 177, 808 | 157,466 | 3.25 |
| February | 112, 302 | 79 | 188, 697 | 162, 573 | 109, 666 | 189, 153 | 28,499 | 39, 145 | 215, 118 | 48, 212 | 172, 635 | 183, 414 | 3. 25 |
| March | 121, 682 | 80 | 196, 761 | 186, 232 | 115. 502 | 190, 305 | 34,648 | 47, 657 | 206, 392 | 41,613 | 172, 896 | 216, 160 | 3. 25 |
| April... | 117, 553 | 84 | 191, 594 | 181, 112 | 118,583 | 193, 860 | 33, 734 | 46, 641 | 188, 384 | 43,363 | 163, 179 | 140,011 | 3.25 |
| May | 128, 065 | 84 | 202, 596 | 186, 641 | 124, 316 | 203, 836 | 37, 207 | 46, 290 | 184,580 | 46,627 | 181,913 | 194, 298 | 3. 25 |
| June. | 119,673 | -83 | 190, 757 | 170, 892 | 116, 901 | 185, 086 | 39,979 | 47,937 | 186, 307 | 42,767 | 163, 807 | 174, 031 | 3. 25 |
| July | 109,861 | -82 | 187, 434 | 152, 763 | 109, 849 | 185,069 | 40,386 | 48, 270 | 199, 214 | 44, 266 | 174, 667 | 167, 456 | 3. 25 |
| August | 116, 120 | 77 | 200,480 | 162, 184 | 114, 768 | 197, 224 | 40,838 | 52, 108 | 203, 044 | 39,744 | 173,872 | 179, 334 | 3. 25 |
| September. | 102, 821 | 74 | 186, 396 | 169,625 | 107, 834 | 197, 532 | 35,687 | 43,800 | 191, 287 | 48,229 | 164, 648 | 170,840 | 3. 25 |
| October.- | 122, 415 | -81 | 217, 290 | 189, 240 | 121, 729 | 222,430 | 36,380 | 37, 018 | 188, 980 | 45,289 | 200, 362 | 214, 228 | 3. 25 |
| November | 123, 646 | - 90 | 223, 645 |  | 122, 761 | 233,924 | 34,691 | 26, 254 |  |  | 201, 416 | 196, 187 | 3. 25 |
| December | 115, 049 |  | 208, 484 |  | 115, 033 | 215, 133 | 34,469 | 19, 139 |  |  | 207, 727 | 213, 162 | 3.25 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January--- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March.. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April.-- |  |  |  |  |  |  |  |  | --- |  |  |  |  |
| May... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June.- |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1 Newsprint prices are averages of wholesale weekly prices of roll newsprint f. o.b. mill from U. S. Department of Labor, Bureau of Labor Statistics.
${ }^{2}$ Data on production, shipments, and mill stocks of newsprint in the United States prior to May, 1923, from the Federal Trade Commission; since then from the Newsprint Service Bureau, covering almost the entire industry.
Production, shipments, and mill stocks of newsprint, comprising practically the total production of Canada, furnished by the Newsprint Service Bureau; exports from Department of Trade and Commerce, Dominion Bureau of Statistics. Monthly data from 1920 appeared in June, 1922, issue (No. 10), p. 49.
${ }^{4}$ Consumption, publishers' stocks, and stocks in transit, compiled by the Federal Trade Commission through May, 1923 , have been compiled since then by the American Newspaper Publishers Association from reports of about 422 publishers who were included in the 600 reporting to the Federal Trade Commission and had on hand on May 31, 1923, a total of 133,312 tons of paper as against 176,347 tons held by those reporting to the Federal Trade Commission on that date. Monthly data on newsprint paper s 1920 appeared in June, 1922, issue (No. 10), pp. 45-47.

Table 39.-BOOK PAPER AND PRINTING


1 Compiled by the A merican Paper and Pulp Association, beginning with June, 1923, figures previous to that date having been compiled by the Federal Trade Commission, representing practically complete production. Owing to variations in the number of reporting firms, beginning with June, 1923 , the data on prode computed by link relatives, based on identical firms from the previous month. Shipments during this period have been computed by applying the computed production figures the ratio of shipments to production of the firms reporting. Data on new orders and unfilled orders are compiled from weekly reports of a smaller number of mills, 28 on coated paper and 10 on uncoated. Unfilled orders show the average number of days which orders on hand will need for completion.
${ }^{2}$ Compiled by the Publishers' Weekly. Imported books are those of foreign manufacture, catalogued and marketed by American publishers. Between 10 and 15 per cent of the books manufactured in America are new editions, the remainder being new books, while about 95 per cent of the books manufactured in this country are by American authors. Annual averages from 1913 through 1916 appeared in the August, 1927, issue (No. 72), p. 58.
${ }^{3}$ Compiled by the Sales Book Manufacturers' Association from reports of 11 manufacturers, estimated to represent 90 per cent of the industry east of the Rocky Moun. tains. The sales books included are those commonly known as duplicate and triplicate books used by retail stores in recording their sales; all sizes and styles are included, but not interchangeable covers and accessories. Monthly data on new orders from 1919 appeared in the July, 1926, issue (No. 59 ), p. 24 .
t Compiled by the United Typothetæ of A merica, representing the activity of job printing plants in 52 cities in 30 States, based on the productive hours of each department, the departments being weighted by their relative importance. Monthly data from 1922 appeared in the November, 1927, issue (No. 75), p. 25.
report shows these classes separately together with values and relation to normal. Monthly data from 1923 appeared in the May 1928 , issue (No 81 ). The association's - Compiled by the continuous -Compiled by the Gontinuous Fold Printers Associatoon, from reports of 7 firms, representing from 80 to 90 per cent of the industry and presenting data on new orders
of continuonsly printed and folded forms, such as invoices, bills of lading, etc, used by railroads, steamshiplines, banks and commercial concerns. The association's reports

Table 40.-PAPER BOARD AND BOXES

${ }^{1}$ Compiled by the Binders Board Mranufacturers' Association, from reports of 6 firms (including in previous years firms since consolidated or out of business), the association's output representing 84 per cent of the total output of the industry in 1925 , according to the census of manufactures.
${ }^{2}$ Compiled by U. S. Department of Commerce, Bureau of the Census, from reports of 89 identical manufacturers each month, including figures from the members of the Paperboard Industries Association, formerly included in the Box Board Association, prorated from weekly reports. These box board data included all paper board of more than 0.009 inch thickness, such as strawboard, chip board, news board, etc., used for making boxes. Similar paper board designed for making specialties, and boards of less than 0.009 inch thickness are not classed as box board. Capacity data are determined by the number of working days in each month, Sundays and holidays excluded. ${ }^{2}$ Data from the Paperboard Industries Association com
iner Clab and the Paperboard Industries Association, comprising the former National Conlainer Association, which in turn had merged the statistical aetivities of the Condata and 11 report solid fiber data. Data for the former individual associations data and 1 report sold fiber data. Data for the tormer individual associations, extending back to 1919 for the Container club, are given in the August, 1923 , issue (No. 24 ) principally for wrapping purposes), which is excluded from the tabulation above. Monthly data for 1921 and 1922 on the present basis, including relative prices of flnished board and raw materials, appeared in the November, 1023, issue (No. 27), p. 89. Tbe production of boxes is ineasured by the area of board passing through the boz machines.

Table 41.-WRAPPING, FINE, AND TOTAL PAPER ${ }^{1}$


1 Data to May, 1923, from the Federal Trade Commission, representing practically complete production; beginning June, 1923 , production compiled from reports of the American Paper and Pulp Association and prorated to represent complete production on the following percentages calculated on the production in the last seven months of 1923, as compared with the total for that period derived from the Federal Trade Commission reports and the census of manufactures: Wrapping paper, 57 per cent; fine paper, 80 per cent; "All other grades," comprising bag, tissue, hanging, felts and building and other paper, 65 per cent. Total paper figures are the aggregate of the three previous production or stock columns plus, up to May, 1923, the figures on newsprint, book paper, and paper board as compiled by the Federal Trade Commission,
and, after May, 1923 , the figures on book paper compiled by the American Paper and Pulp Association, the figures on newsprint as compiled by the Newsprint Seroice and, after May, 1923, the figures on book paper compiled by the American Paper and Pulp Association , the figures on newsprint as compiled by the Newsprint Service
Bureau, and the figures on box board as compiled by the U. S. Department of Commerce, Bureau of the Census, except that from June through october, 1923 , when these latter figures were not compiled, the paper-board figures of the American Paper and Pulp Association have been used, prorated up to complete production by the percentages which they bore to the box-board figures in 1924, or 60 per cent on production and 73 per cent in stocks. Stock, figures represent paper at mills only. Shipment data for wrapping and writing paper beginning June, 1923 , have been compiled by applying to the prorated production figures the relation of shipments to production of reporting mills, the shipments for "all other grades" being prorated at 65 per cent. The capacity ratio for total paper is computed by the American Paper and Pulp Association on firms reporting directly to that association and is therefore based on a somewhat smaller proportion of the industry than the other total figures.

Table 42.--WOOD PULP AND PAPER PRODUCTS

| Year and Month | WOOD PULP |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { ARRASIVE } \\ & \text { PAPERAAND } \\ & \text { CLOTH? } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mechanical |  |  |  | Chemical |  |  |  |  |  |  |  |  |
|  |  | Con- |  |  |  | Con- |  |  | Price, |  | Shipm | ments |  |
|  | Production ${ }^{4}$ | sump- <br> tion and shipments ${ }^{4}$ | Stocks, end of month ${ }^{4}$ | $\lim _{\text {ports }} \text { s }$ | Production 4 | sump= tion and shipments | $\begin{gathered} \text { Stocks, } \\ \text { end of } \\ \text { month } \end{gathered}$ | $\begin{gathered} \text { Im- } \\ \text { ports } \end{gathered}$ |  | New orders | $\underset{\text { mestic }}{\text { Do- }}$ | Forelgn | Shipm'ts |
|  | Short tons |  |  |  |  |  |  |  | $\begin{aligned} & \text { Dolls. } \\ & \text { per } 100 \\ & \text { lbs. } \end{aligned}$ | $\underset{\substack{\text { Per } \\ \text { ceapac of } \\ \text { ity }}}{ }$ | Reams |  | $\begin{array}{\|l} \text { Rel. to } \\ 19717 \\ 19227 \end{array}$ |
| 1909-1913 monthly avera |  |  |  | 16,463 |  |  |  | 25, 521 |  |  |  |  |  |
| 1913 monthly average. |  |  |  | 13, 991 |  |  |  | 31, 130 | \$2. 23 |  |  |  |  |
| 1914 monthly average | 106,824 |  |  | 18, 105 | 129,325 |  |  | 38,092 | 2.16 |  |  |  |  |
| 1915 monthly average |  |  |  | 14,505 |  |  |  | 32, 860 | 2.12 |  |  |  |  |
| 1916 monthly average. | $\begin{aligned} & 125,678 \\ & 120,589 \end{aligned}$ |  | 112, 145 | 21,876 | 160, 572 |  | 25, 855 | 35, 104 | 3.81 |  |  |  |  |
| 1917 monthly average. |  | 117, 804 | 145, 567 | 23, 256 | 159,375 | 157, 797 | 44,789 | 33,231 | 4.81 |  |  |  |  |
| 1918 monthly average. | 108,617 | 109,817 | 131, 170 | 15, 457 | 158,008 | 158,930 | 33, 671 | 32,728 | 3.84 |  |  |  |  |
| 1919 monthly average. | 120, 817 | 120, 660 | 154, 251 | 16, 854 | 161, 247 | 160,375 | 53,725 | 36, 147 | 3.52 |  | 68,150 | 9,171 |  |
| 1920 monthly average. | $\begin{aligned} & 131,525 \\ & 105,668 \end{aligned}$ | 132, 308 | 120, 079 | 19,429 | 185, 780 | 185, 536 | 33, 720 | 56,096 | 6. 58 |  | 78,363 | 11,695 |  |
| 1921 monthly average. |  | 106, 214 | 166, 889 | 15,895 | 127, 786 | 127, 467 | 53,411 | 42, 196 | 3.50 | 44.2 | 47,957 | 4,379 | ${ }^{7} 100$ |
| 1922 monthly average | $\begin{aligned} & 105,668 \\ & 123,495 \end{aligned}$ | 127, 802 | 136, 664 | 17,984 | 165, 198 | 166,438 | 52, 518 | 86,869 | 2. 56 | 82.7 | 72,394 | 8,836 |  |
| 1923 monthly average.. | 131,073 | 131,266 | 95,900 | 25,007 | 185, 253 | 200, 642 | 62,472 | 89,745 | 2.97 | 80.6 | 86,916 | 10,943 |  |
| 1924 monthly average | $\begin{aligned} & 145,727 \\ & 142,464 \\ & 154,083 \\ & 132,473 \end{aligned}$ | 139,796 | 195, 007 | 20,493 | 199, 140 | 200, 793 | 58,492 | 106,400 | 2.58 | 83.7 | 79,002 | 10,165 |  |
| 1925 monthly average |  | 143, 569 | 225, 804 | 27, 591 | 205, 785 | 206, 147 | 41,335 | 111,044 | 2.88 | 86.0 | 86,891 | 12,435 |  |
| 1926 monthly average. |  | 153,495 | 204, 065 | 25,313 | 222, 937 | 223, 597 | 42,089 | 118, 971 | 2.87 | 87.4 | 84, 634 | 13,565 |  |
| 1927 monthly average. 1928 monthly average |  | 137, 560 | 190,693 | 20,467 | 215,666 | 215, 181 | 40,232 | 119,181 | 2. 64 | 81.4 | 81, 665 | 16,050 |  |
|  |  |  |  | 20,907 |  |  |  | 124, 460 | 2.52 |  |  |  |  |
| 1927 | 160, 192 |  |  |  |  |  |  |  |  |  |  |  |  |
| May.......- |  | 137, 997 | 243,762 | 17, 217 | 214, 848 | 214,918 |  | 116,879 |  | 72.0 | 85, 928 | 17,735 |  |
| June. | 130, 158 | 135, 689 | 238, 231 | 20, 275 | 214,816 | 215, 020 | 39,086 | 109,699 | 2.60 | 124.1 | 81,917 | 15,877 |  |
| July... | $\begin{aligned} & 108,322 \\ & 102,995 \end{aligned}$ | 127, 623 | 218,795 | 13,344 | 198, 888 | 198, 068 | 40,278 | 117,734 | 2.60 | 66.1 | 77, 655 | 16,522 |  |
| August |  | 136,569 | 185, 222 | 18,597 | 220, 138 | 220, 162 | 40, 254 | 113,948 | 2.60 | 79.0 | 89,622 | 13,584 |  |
| September-- | $\begin{array}{r} 92,025 \\ 121,051 \\ 137,245 \\ 133,783 \end{array}$ | 120, 326 | 156, 574 | 28, 389 | 209, 776 | 211, 744 | 38,286 | 119,090 | 2. 60 | 77.7 | 85,379 | 14,361 |  |
| October. |  | 130,465 | 147, 160 | 21,190 | 213, 472 | 213, 524 | 38,234 | 133, 170 | 2.53 | 98.2 | 85, 155 | 18,389 |  |
| November. |  | 143, 220 | 158, 717 | 28, 308 | 214, 936 | 213, 772 | 41,552 | 142,736 | 2.53 | 54.4 | 72, 726 | 16,392 |  |
| December - |  | 135, 632 | 156, 872 | 24,976 | 210, 388 | 207, 064 | 45, 198 | 152,763 | 2.53 | 78.1 | 58, 265 | 16,034 |  |
| 1928 | 142,034 |  |  |  |  |  |  |  |  |  |  |  |  |
| January <br> February $\qquad$ $\qquad$ |  | 139,851 | 159,575 | 21,082 | 209, 106 | 210,016 | 44,726 | 156, 164 | 2.53 |  | 80, 505 | 17,112 | 106 |
|  | 132, 743 | 135, 952 | 156, 366 | 21,151 | 209, 820 | 207, 926 | 47,162 | 130,152 | 2.53 |  | 83, 969 | 16,169 | 97 |
| March | $\begin{aligned} & 143,678 \\ & 149,652 \end{aligned}$ | 144,771 | 155, 274 | 21,124 | 228, 692 | 230, 484 | 45, 854 | 83, 352 | 2.53 |  | 96, 871 | 20, 558 | 109 |
|  |  | 133, 702 | 173, 174 | 18, 549 | 210,780 | 211, 400 | 43,872 | 80,592 | 2. 53 |  | 81,782 | 19,634 | 92 |
| May | 156,258$-133,854$112,403114,668 | 143, 015 | 186, 377 | 24,024 | 222,924 | 225, 710 | 42, 120 | 90,736 | 2.53 |  | 94, 309 | 18,944 | 87 |
| June |  | 135, 917 | 184, 314 | 20, 528 | 217, 456 . | 214, 068 | 45,870 | 122, 474 | 2. 53 |  | 88, 569 | 18,829 | 83 |
|  |  | 125, 465 | 171,098 | 14,553 | 200,654 | 204, 512 | 42,580 | 129,910 | 2.53 |  | 81, 689 | 17,657 | 89 |
| August.-----------..........- |  | 138,309 | 147, 611 | 17, 233 | 222, 116 | 221, 008 | 44, 882 | 120, 643 | 2. 53 |  | 99,789 | 17,875 | 111 |
| September... | $\begin{aligned} & 108,186 \\ & 131,558 \\ & 148,089 \end{aligned}$ | 122,771 | 133,006 | 21, 953 | 201, 646 | 204, 378 | 42,510 | 124,048 | 2.53 |  | 95, 131 | 18,281 | 102 |
| October ......- |  | 146, 383 | 118, 182 | 23,884 | 228,434 | 231, 800 | 40,032 | 149, 112 | 2.53 | --...... | 98,576 | 20,085 | 113 |
| November <br> December |  | 145, 443 | 120, 828 | 19,627 | 219,648 | 218, 132 | 41,980 | $126,700$ | 2. 53 |  | 91, 405 | 18,601 | 107 |
|  |  |  |  | 27, 171 |  |  |  | $179,548$ | 2.49 |  |  |  |  |
| $\begin{array}{r} 1929 \\ \text { January } \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | January ....----- |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June-. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^15]$\diamond$ Imports from the $U$. S. Department of Commerce, Bureau of Foreign and Domestic Commerce.

Table 43.-BUILDING COSTS AND HOUSING

${ }^{1}$ Building material price indexes representing the relative cost of building materials entering into the construction of a six-room frame house and a six-room brick house, from the U. S. Department of Commerce, Bureau of Standards, Division of Building and Housing, and Bureau of the Census, are based on prices paid for material by contractors in some 60 cities of the United States. The prices are weighted by the relative importance of each commodity in the construction of a six-room house.
${ }_{2}$ This index number, furnished through the courtesy of the Aherthaw Construction Co., is designed to show the relative changes in the cost of constructing a standard concrete factory building. The company believes that the year 1914 gives a normal base and that July, 1920, with an index number of 265 , represented the peak of costs. Beginning with June, 1923, the Morton C. Tuttle Co. has also prepared an inder on a similar basis, with practically identical resluts. These index numbers are given as of the first day of the month.
${ }^{3}$ The construction cost index, computed by the Engineering News Record, is based upon the costs of steel (structural shapes, Pittsburgh base), cement (f. o. b. Chicago exclusive of bags), lumber (southern pine, New York base), and the rates paid common labor in the steei industry through 1920, after which common labor rates are averages reported from about 20 cities by correspondents of the Engineering News Record. The prices are weighted on the basis of the total production of steel, cement, and lumber, and the total supply of common labor. Monthly data from 1914 appeared in June, 1923, issue (No. 22), p. 52. These inder numbers are given as of the first day of the month.
${ }^{1}$ Compiled by the American Appraisal Company and represent construction costs for each month as based upon material and labor costs prevailing in the United States, weighted in accordance with cost percentages determined from buildings of each type actually constructed. Details by districts and description of method of compilation may be found in the American Appraisal News for January, 1925, p. 9 . Quarterly data, 1920 to 1923 , inclusive, appeared in October, 1925 , issue of the Surver (No. 50 ), $p$. 26 . materials, believed to be the average of all types of construction. The wage figures are those reported for hod carriers and common labor by the National Board of Builders' Exchanges for 12 cities: Atlanta, Baltimore, Boston, Chicago, Cincinnati, Cleveland, Detroit, Los Angeles, New York, Philadelphia, San Francisco, and St. Louis. ers Exchanges for 2 cities: Atlanta, Baltimore, Boston, Chicago, Cincinnati, Cleveland, Detroit, Los Angeles, New York, Philadelphia, San Francisco, and St. Louis. cement, common brick, lumber (all weighted equally), hollow tile (weighted one-half), and structural and reinforcing steel (both together weighted one-half). Monthly figures from 1921 were given in the May, 1927, issue (No. 69), p. 22 .
${ }^{6}$ Compiled by the U. S. Department of Commerce, Bureau of the Census, as an average of reports from 12 manufacturers and dealers of combined net selling prices to retailers, without freight, on the following competitive fixtures: Bathtub, washstand, water-closet, sink, two-part cement laundry tub, and 30-gallon range boiler, the prices of each item being given separately on monthly press releases.
${ }^{7}{ }^{7}$ Compiled by the Federal Reserve Bank of Minneapolis, showing number of advertisements in a Minneapolis newspaper each month of houses and apartments to rent, both furnished and unfurnished. No effort has been made to eliminate duplications of houses advertised from day to day, and thus the total does not represent actual number of dwellings for rent, but it does indicate the trend
figures including an item of 15 per cent to cover small and include losses of $\$ 10,000$ or over in the principal cities of the United States, Canada, and Alaska, each month's 1913 and seasonal index appeared in the December, 1923 , issue (No. 28), p. 53 .
${ }^{9}$ Compiled by the Monetary Times, from weekly reports, representing property losses only, exclusive of losses due to forest fires. Details by Provinces are shown in the periodical since 1924. Monthly data from 1909 appeared in the December, 1927, issue of the SURVEY (No. 76), p. 48.
${ }^{1} 14$ merage of quarterly figures.
${ }^{11} 4$ months' average, September to December, inclusive.

Table 44.-BUILDING CONSTRUCTION

${ }^{1}$ Compiled by the $F$. W. Dodge Corporation from reports covering contracts awarded in small towns and rural districts as well as large cities. The data shown on this page include figures from 36 States, all except W ashington, Idaho, Montana, Oregon, Utah, W yoming, Nevada, California, Arizona, New Mexico, and parts of Kansas and Mississippi, Alabama, Florida, and Georgia were not compiled, and the totals for those years for 27 States have been prorated to the figures shown above by applying to the 1923 totals for 36 States the percentage changes from year to year for the 27 States. The original area figures for the years 1915 to 1918 , inclusive, used in these calculations, were estimates by the F. W. Dodge Corporation. Data giving monthly figures for 27 States (except that prior to May, 1921 , North and South Carolina were not included, which, however, made little change in the total) for 1920 and 1921 appeared in the May, 1922 , issue (No. 9), pp. 71 and 73, and for subsequent months in the August, 1924, issue (No. 36), p. 109. The reports of the F. W. Dodge Corporation show totals by districts and also separate the public and semipublic building group into various classes, shown separately in the August, 1923, issue (No. 24), pp. 94 to 97, and also present military and naval and miscellaneous classifications, which are here included only in the grand total.
${ }_{3}^{2}$ Oanadian building contracts furnished by McLean Buildino Reports (Ltd.); monthly data from 1920 appeared in July, 1922, issue (No. 11), p. 46.
${ }^{3}$ Compiled by the Associated General Contractors of America to show actual installations in construction as contrasted with contracts let. The index is a simple average of structural steel bookings, common-brick bookings, Portland cement shipments, loadings of sand, gravel, and stone, shipments of face brick and shipments of enamelod sanitary ware. To allow for lag between the factory and the job, the index computed from these data for a particular month is shown as the construction installation Digitized for Findex fop the following month. Monthly data since the beginning of 1921 were given in the May, 1927, issue (No. 69), p. 22.

Table 45.-DOUGLAS FIR, HEMLOCK, AND REDWOOD LUMBER

| Year and Month | DOUGLAS FIR : |  |  |  |  |  |  |  | NORTHERN HEMIDCK ${ }^{4}$ |  | CALITORNIA REDWOOD: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\mid}{\text { Produc- }} \mathbf{t l o n}$ | Shipments | New orders | Unfilled orders, end mo. | Exports ${ }^{2}$ |  | Wholesale price ${ }^{3}$ |  | Pro-duction | Shipments | Pro-duction | Shipments | New orders, | Unsilled orders, end of |
|  |  |  |  |  | $\underset{\text { her }}{ }$ | $\begin{aligned} & \text { Tirn- } \\ & \text { ber } \end{aligned}$ | No. 1, com= mon | Plooring |  |  |  |  |  |  |
|  | Thousands of feet, board measure |  |  |  |  |  | Dolls. M ft. b. m. |  | Thousands of feet, board measure |  |  |  |  |  |
| 1913 monthly average. |  |  |  |  | 56, 203 |  | \$9.21 |  |  |  |  |  |  |  |
| 1914 monthly average. |  |  |  |  | 46, 848 | --- | 7.92 |  |  |  |  |  |  |  |
| 1915 monthly average. |  |  |  |  | 23, 298 |  | 7.88 |  |  |  |  |  |  |  |
| 1916 monthly average |  |  |  |  | 23, 240 |  | 10.38 |  |  |  |  |  |  |  |
| 1917 monthly average | 349, 510 | 322, 157 |  |  | 23,647 |  | 15.88 |  | 35,327 | 33, 169 |  |  |  |  |
| 1918 monthly average | 376,882 | 364, 648 |  |  | 22,700 |  | 18.25 |  | 33, 643 | 37,974 | 37, 460 | 28, 547 | 28, 745 |  |
| 1919 monthly average | 373, 263 | 355, 358 |  |  | 25,095 |  | 25.42 |  | 30, 056 | 37, 051 | 36, 404 | 32,759 | 39, 934 |  |
| 1920 monthly average | 380, 351 | 334, 915 |  |  | 37,602 |  | 29.92 |  | 27, 290 | 18, 431 | 44, 243 | 35,337 | 30, 576 |  |
| 1921. monthly average. | 297, 738 | 298, 506 |  |  | 37, 936 |  | 11.83 | \$46.95 | 16,986 | 18,435 | 39,618 | 28,441 | 29,472 |  |
| 1922 monthly average. | 435, 673 | 409, 224 | 416,088 |  | 51, 225 | 14,371 | 15. 25 | 47.24 | 23, 483 | 26, 083 | 49, 035 | 44, 010 | 47, 805 |  |
| 1923 monthly average. | 508,789 | 515, 951 | 510,318 |  | 43,165 | 31,479 | 19.42 | 51.57 | 26, 059 | 25,351 | 53, 240 | 49, 268 | 46, 861 |  |
| 1924 monthly average. | 488, 831 | 497,747 | 509, 871 |  | 51,877 | 40, 427 | 17.25 | 45.33 | 20, 416 | 18,920 | 48, 136 | 37, 583 | 38, 129 | 38,344 |
| 1925 monthly average. | 543, 966 | 558, 067 | 562, 805 |  | 50,659 | 28,897 | 17.25 | 42.18 | 21, 166 | 18,082 | 43, 294 | 38,785 | 38,391 | 39,4588 |
| 1926 monthly average. | 526, 844 | 529,828 | 536, 468 |  | 57,927 | 46,314 | 16.48 | 38.93 | 17,436 | 19,040 | 42,326 | 39, 165 | 42,371 | 85, 030 |
| 1927 monthly average. | 497, 673 | 489, 839 | 494, 763 |  | 57,155 | 43,324 | 16. 29 | 35. 65 | 16, 057 | 19,006 | 40,610 | 42,299 | 42, 993 | 60, 165 |
| 1928 monthly averag |  |  |  |  | 63,979 | 41,378 |  |  |  |  | 38, 265 | 37,045 | 37, 664 | 44,714 |
| 1927 | 532, 253 | 548, 369 | 553,741 | 59,973 |  | 56, 865 | 16. 56 | 35.69 | 16, 931 | 23, 922 | 44,692 | 56, 527 | 55, 619 | 70,293 |
| June.- | 510, 319 | 551, 950 | 502,709 | ---.-...- | 68, 544 | 47,495 | 16.34 | 35.77 | 14,899 | 24,772 | 37, 802 | 41,970 | 51,766 | 70, 132 |
| July. | $\begin{aligned} & 468,240 \\ & 529,120 \end{aligned}$ | 499, 575 | 489, 727 |  | 52, 837 | 58, 441 | 16.51 | 35.88 | 15,395 | 21,324 | 35, 177 | 36, 055 | 35, 147 | 68, 290 |
|  |  | 521,958 | 519, 719 | ........-- | 65, 121 | 48, 86.4 | 16.51 | 35.83 | 21, 369 | 22,093 | 53, 977 | 53, 022 | 42,373 | 56, 495 |
| September | $\begin{aligned} & \mathbf{5 4 2 , 1 0 2} \\ & 538,968 \\ & 497,337 \\ & 437,352 \end{aligned}$ | $\begin{aligned} & 492,860 \\ & 491,070 \\ & 411,389 \\ & 386,788 \end{aligned}$ | $\begin{aligned} & 487,936 \\ & 464,211 \\ & 452,124 \\ & 397,511 \end{aligned}$ |  | 73,717 | 64, 781 | 16. 39 | 35.83 | 14, 277 | 19, 187 | 42,343 | 41,418 | 39, 680 | 53,807 |
| October. |  |  |  |  | 56, 204 | 15, 498 | 15.17 | 35.47 | 9, 188 | 17,914 | 43, 142 | 42,676 | 36, 492 | 45, 430 |
| November. |  |  |  |  | 61, 909 | 47,711 | 15. 48 | 35.08 | 11, 026 | 14, 261 | 52, 925 | 40,578 | 41,376 | 45,962 |
| December |  |  |  |  | 51,072 | 46, 492 | 14. 80 | 34.50 | 13, 849 | 10,014 | 36,029 | 26, 882 | 23,398 | 41,518 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January... | 410,493 | 397, 571 | 444,514 | 357,604 | 85, 299 | 2, 280 | 15. 23 | 34.04 | 11, 425 | 7,485 | 39, 454 | 30, 201 | 38,763 | 50,415 |
| February | $\begin{aligned} & 507,633 \\ & 508,528 \end{aligned}$ | 479, 879 | 541, 206 | 386, 505 | 45,346 | 44, 226 | 15. 99 | 34.04 | 13,260 | 9, 520 | 43, 270 | 38,700 | 37, 290 | 48, 000 |
| March |  | 479, 879 | 521, 062 | 442, 517 | 58,020 | 43,423 | ${ }^{16}$, 03 | 34.13 | 18,089 | 13,255 | 51, 210 | 43,847 | 45,316 | 49,003 |
| April.. | $\begin{aligned} & 508,528 \\ & 520,615 \end{aligned}$ | 549, 264 | 583, 733 | 468, 492 | 58,862 | 43,226 | 15. 99 | 33.97 | 14, 871 | 16, 153 | 38,489 | 38,820 | 36, 741 | 47, 916 |
| May. | $490,175$ | 558, 217 | 620, 888 | 516, 714 | 71, 427 | 60,797 | 16. 70 | 34.47 | 22,004 | 20,410 | 41,400 | 47,772 | 49,351 | 47, 281 |
| June. | 490, 175 480, 326 415, 417 | $\begin{aligned} & 583,733 \\ & 484,803 \end{aligned}$ | 508, 97e | 429,688 | 85. 174 | 43, 142 | 16.68 | 35.15 | 18, 426 | 22,343 | 36, 190 | 38, 825 | 38, 022 | 46,519 |
| July |  |  | 453, 467 | 456, 601 | 54, 181 | 45, 471 | 16.99 | 36.13 | 16,348 | 18,020 | 30, 092 | 29,615 | 31, 620 | 48,910 |
| August | $\begin{aligned} & 415,417 \\ & 358,566 \end{aligned}$ | $\begin{aligned} & 484,803 \\ & 389,454 \end{aligned}$ | 381, 396 | 257, 845 | 59, 236 | 40,837 | 17.75 | 37.19 | 20, 449 | 22, 661 | 41, 137 | 43,68? | 30,855 | 45,093 |
| September | $\begin{aligned} & 296,343 \\ & 337,527 \\ & 310,220 \end{aligned}$ | $\begin{aligned} & 315,144 \\ & 301,267 \\ & 269,484 \end{aligned}$ | 322, 754 | 293,657 | 64, 265 | 44, 264 | 17.32 | 38.85 | 15, 315 | 19,951 | 34, 329 | 33, 107 | 33, 519 | 47,916 |
| October-- |  |  | 302,610 | 297, 686 | 65, 795 | 39,330 | 18.06 | 40.61 | 16,425 | 21, 042 | 27,851 | 32, 744 | 33, 115 | 40,350 |
| November |  |  | 269, 484 | 238, 149 | 60, 947 | 47,598 | 17.92 | 40.88 | 16,359 | 17, 139 | 45, 834 | 38,715 | 38, 848 | 32,783 |
| December. |  |  |  |  | 59,193 | 41,939 |  |  |  |  | 29, 919 | 28,213 | 29,524 | 32, 379 |
| January 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { March_ } \\ & \text { April_-- } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May-.-------.----..........-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1 Compiled by applying the percentage figures of actual production, shipments, and orders to normal production of veporting mills as supplied by the West Coast Lum
bermen's Association to the actual production of 124 mills for May, 1920 . The production in that month was 447 , 67,540 brard feet and has averazed about 75 per cent of tive total production of Douglas fir lumber in the United States. Monthly production data for the period 1917-1921 appeared in the December, 1922, issue (No. 16), p. 49 . ${ }_{2}$ Compiled by the U. S. Department of Commerce, Bureau of Foreion and Domestic Commerce. Monthly data from 1921 for both lumber and timber appeared in the December, 1923, issue (No. 28), p. 56. Lamber exports comprise boards, planks, and scantlings, rough and dressed, while timber exports include treated and untreatec, sawed, excluding logs and round timber.
${ }^{3}$ Compiled by the $U$. S. Department of Labor, Bureau of Labor Statistics, representing averages of weekly prices. No. 1 common is given for the State or Washington, while flooring price is an average for Pacific coast mills, covering 1 by 4, B and better grade, vertical grain. Monthly data on fiooring extending back to 1921 appeared in the November, 1926 issue (No. 63), p. 16.

* Compiled by the Northern He Helock and Hardwood Manufacturerr', Association, representing chieily Wisconsin and upper Michigan mills, from actual reports of from 60 to 75 mills each month. Yearly averages covering the period $1913-1916$ were shown in the August, 1924 , issue (No. 36 ). The 1913 monthly averages on which the relative numbers were based are $37,664,000$ and $36,442,000$ board feet, respectively, for production and shipments.
s Compiled from data furnished by the California Redwood Association covering 7 identical mills for 1918,1919 , and 1920, representing 40 per cent of the capacity of all isted mills; for the first 4 months of 1921 covering 10 mills representing $561 / 2$ per cent of listed capacity; for the remaining months of 1421 covering 11 miils representing 71 percent of the total listed capacity; for 1922 to 1924 from 14 mills representing 73 per cent; for 1925 cnd 1926 from 15 milis sepresenting 79 per cent; and in 1927 from 16 mills representing 83 per cent of the total listed capacity. The actual average monthly production of the 7 reporting mills for 1918 was $14,984,000$ feet. On the basis of 40 per cent capacity, the 1918 average monthly production of all mills is computed as $37,460,000$ feet. Regarding this as normal production, there has been computed the probable production of the total redwood capacity based on the proportion which capacity of the reporting mills bears to the total of all mills, and in 1925 this computed production was about 2 per cent larger than the total reported by the census of manufactures. The other data represent a similar relationship between the actual reported


## Table 46.-Y ELLOW PINE LUMBER

| Year and Monte | SOUTHERN PINE : |  |  |  |  |  |  |  |  | NORTH CAROLINA PINE ${ }^{\text {a }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Prodism tion | $\begin{gathered} \text { Op- } \\ \text { era- } \\ \text { tions } \end{gathered}$ | Shipments | New orders | Stocks, end of month | Unfilled orders, end mo. | Exports ${ }^{3}$ |  | Price, flooring : | Pro-duction | Shipments | New orders | Stocks, end of month |
|  |  |  |  |  |  |  | $\operatorname{Lum}_{\mathrm{b} e \mathrm{r}}$ | $\operatorname{Tim}_{\text {ber }}$ |  |  |  |  |  |
|  | M. ft. b. m. | $\begin{aligned} & \text { P. ct. } \\ & \text { full } \\ & \text { time } \end{aligned}$ | Thousands of feet, board measure |  |  |  |  |  | Dolls. M ft. b. m. | Thousands of feet, board measure |  |  |  |
| 1913 monthly average. |  |  |  |  |  |  | 82, 270 | 34, 627 | \$23.04 |  |  |  |  |
| 1914 monthly average. |  |  |  |  |  |  | 52, 325 | 24, 109 | 21.37 |  |  |  |  |
| 1915 monthly average. |  |  |  |  |  |  | 38,353 | 13, 674 | 20.29 |  |  |  |  |
| 1916 monthly average |  |  |  |  |  |  | 40, 263 | 13, 933 | 22.64 |  |  |  |  |
| 1917 monthly average. | 423, 529 |  | 441, 903 | 446, 405 | 1, 371, 652 |  | 27, 369 | 10,069 | 31.54 |  |  |  |  |
| 1918 monthly average | 368, 307 |  | 399, 160 | 354, 287 | 1, 116, 259 |  | 24,993 | 2,991 | 33.76 |  |  |  |  |
| 1919 monthly average. | 380, 532 |  | 379, 701 | 376, 070 | 937, 748 |  | 36,481 | 12,849 | 55.00 | 34, 230 | 32, 107 |  |  |
| 1920 monthly average | 358, 031 |  | 330, 229 | 306, 559 | 1,187, 587 |  | 53,096 | 11,245 | 74.53 | 33,514 | 29,791 |  |  |
| 1921 monthly average. | 375,438 |  | 394, 812 | 399, 677 | 1, 211, 174 |  | 36,081 | 7,228 | 35.98 | 30, 164 | 29,052 |  |  |
| 1922 monthly average. | 431, 633 |  | 430, 673 | 451, 395 | 1,177, 627 |  | 39,522 | 12, 616 | 45.46 | 52,543 | 52,496 |  |  |
| 1923 monthly average. | 450, 165 |  | 458, 971 | 451, 944 | 1, 086, 042 |  | 54, 368 | 14, 237 | 41.70 | 48, 257 | 48,539 |  |  |
| 1924 monthly average | 453, 376 |  | 459, 483 | 463, 763 | 1, 099, 374 |  | 55,827 | 14, 563 | 41.89 | 49, 144 | 49,337 |  |  |
| 1925 monthly average. | 473, 336 |  | 471, 843 | 474, 291 | 1, 162, 665 |  | 58,420 | 12,866 | 46.49 | 54, 188 | 51, 558 |  |  |
| 1926 monthly average. | 447, 857 |  | 452, 646 | 445, 749 | 1, 106,661 | ${ }^{5} 302,881$ | 48,464 | 10,249 | 45. 11 | 49,474 | 48, 901 | 40,017 | 48,393 |
| 1927 monthly average. | 431,130 |  | 427, 991. | 436, 772 | 1, 217, 034 | 312, 763 | 59, 287 | 15, 177 | 38.48 | 51,154 | 51, 138 | 41, 586 | 67,795 |
| 1928 monthly average. | 416, 171 | 92 | 435, 707, | 434, 292 | 1,075,415 | 341, 339 | 59, 074 | 13, 631 | 36.49 |  |  | 54, 096 |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May | 439, 870 |  | 460, 588 | 463, 831 | 1, 218, 391 | 314, 563 | 63,216 | 19,746 | 39.32 | 50, 204 | 50,918 | 50, 330 | 84, 070 |
| June . | 426, 123 |  | 405, 744 | 407, 970 | 1, 208, 417 | 298, 504 | 73,035 | 13,700 | 38.96 | 47, 649 | 50,001 | 35, 140 | 48,090 |
| July | 413, 634 |  | 390, 064 | 388, 511 | 1, 255, 002 | 283, 243 | 72, 334 | 19,851 | 38.31 | 50, 190 | 48, 727 | 35, 910 | 60, 550 |
| August | 455, 796 |  | 473, 029 | 487, 599 | 1,220,663 | 328, 561 | 66,790 | 8, 254 | 37.68 | 53,781 | 52,934 | 36, 260 | 120, 540 |
| September | 457, 587 |  | 477,046 | 483, 097 | 1, 193, 268 | 320, 096 | 48, 260 | 16,775 | 37. 49 | 52, 129 | 52, 234 | 46,900 | 73,080 |
| October. | 438, 708 |  | 446, 695 | 453, 811 | 1, 190, 112 | 346, 715 | 48, 637 | 17, 542 | 37.98 | 57, 295 | 56, 133 | 42, 560 | 64,050 |
| November | 439, 773 |  | 442, 920 | 436, 385 | 1, 194, 404 | 305, 164 | 43, 550 | 8,925 | 36.42 | 53, 522 | 50,813 | 47, 670 | 81, 060 |
| December | 419, 297 |  | 395, 239 | 398, 192 | 1, 207, 534 | 287, 741 | 52, 930 | 16,660 | 35. 54 | 48, 139 | 47, 845 | 44, 660 | 68, 670 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 418, 717 | 97 | 426, 220 | 473, 900 | 1,200,031 | 352, 826 | - 06,332 | 16,453 | 35. 26 | 40,019 | 37,030 | 38,920 | 62,020 |
| February | 424, 525 | 99 | 417, 652 | 430, 141 | 1, 206, 904 | 365, 315 | 47, 011 | 17, 235 | 36. 12 | 51,317 | 46, 746 | 54,080 | 55,790 |
| March | 460,346 | 100 | 481, 645 | 498, 006 | 1,185, 605 | 381, 676 | 66, 527 | 16, 515 | 35. 69 | 47, 523 | 54, 866 | 49, 140 |  |
| April | 421, 911 | 99 | 447, 083 | 464, 806 | 1, 160, 433 | 399, 489 | 53,952 | 13,771 | 35. 74 | 57, 155 | 62,978 | 64, 610 |  |
| May | 440, 306 | 99 | 489, 100 | 420, 169 | 1, 101, 740 | 349,362 | 75, 054 | 21, 081 | 35. 88 | 60,039 | 62, 125 | 55,790 |  |
| June | 404, 679 | 96 | 416, 006 | 406,470 | 1,090, 126 | 323,985 | 54, 313 | 12,933 | 36. 40 | 57,904 | 59,528 | 59,360 |  |
| July.- | 405, 937 | 88 | 435, 223 | 434,061 | 1,063, 109 | 335, 836 | 62, 094 | 12,302 | 36. 16 | 44, 471 | 48,433 | 43, 190 |  |
| August | 425,493 | 87 | 468,672 | 479, 370 | 1,019,050 | 339, 038 | 43,287 | 7,465 | 36.34 | 45,437 | 48, 643 | 49, 560 |  |
| September | 386, 671 | 88 | 423,218 | 434, 884 | 991,781 | 340, 885 | 40,837 | 14, 897 | 37.73 | 37,457 | 39,900 | 50,890 |  |
| October- | 427,623 | 90 | 464, 558 | 444, 566 | 854, 846 | 320, 883 | 75, 504 | 14, 104 | 37.73 | 48,090 | 51, 590 | 58,870 |  |
| November. | 396, 256 | 86 | 413, 205 | 392, 674 | 952, 395 | 300, 262 | 61,759 | 7,562 | 37.58 | 51, 548 | 49,196 | 58,310 |  |
| December. | 381, 589 | 79 | 345, 816 | 332, 069 | 978, 954 | 286,515 | 62, 213 | 9,249 | 37.19 |  |  | 66, 430 |  |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January-..-----...-- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May <br> June |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ The figures for southern yellow pine, except exports and prices, are computed data furnished by the Southern Pine Association. The method of computing is first to find the percentage relation between the actual production, shipments, and orders of the mills reporting and the normal production of these same mills, or, in the case of figures after December, 1927, the normal equivalent of the 3 -year relative production, on which the association's statistics are now based. This percentage is then applied to the normal production of the 192 mills. The average production in the first four months of $1916,484,065,392$ feet, is taken as normal production. There are no separate normals for new orders and shipments since these items must be governed by production. Assuming that the mills reporting are a good sample of the industry the resulting for stocks except that normal in this case is $1,262,450,326$ feet, the averace stocks during 16 months and hence a fair sample of the industry. The same procedure is followed for stocks except that normai in this case is $1,262,450,326$ feet, the average stocks during 16 months ending April, 1916 and after December, 1927 , they are calculated from the computed dard on production, shipments, and previous stocks. Unfmed orders prior to 1928 are computed on the same basis as new orders and thereafter are calculated Monthly data for 1021 and 1922 appeared on page 59 of the October, 1923 , issue (No. 26). Monthly data 1017 to 1920 appeared in April, 1923 , issue (No. 20), p. 49 . Monthly data on unflled orders from 1926 appeared in the A pril, 1928, issue (No. 80), p. 22.
${ }_{2}$ Data computed from reports furnished by the North Carolina Pine Association, Inc., for mills varying in number from 31 to 56 , by frst determining for a given month the percentage which the actual data bear to the normal production of the identical mills reporting. This percentage is then applied to an arbitrary figure of $70,000,000$ board feet, which represents the approximate monthly average normal production of the mills which reported in 1919. The resulting figures represent computed data as of identical mills for each month. Stock figures are reported by a smaller number of mills, whose figures are first computed to compare with the larger number of mills on the basis of new orders reported by both sets of mills, and then computed in the same manner as the other data.
${ }^{3}$ Exports of southern yellow pine lumber and timber from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Monthly data from 1921 on lumber only are given in the December, 1923, issue (No. 28), p. 56 . Lumber exports comprise boards, planks, and scantlings, rough and dressed, and exclude short-leaf ping and all other not long-leaf or pitch pine. Timber exports include both treated and untreated, sawed, and exclude logs and round timber.
i From U. S. Department of Labor, Bureau of Labor Statistics, and represent average weekly prices for yellow-pine flooring, grading $B$ and better, at Hattiesburg, Miss.
8 5 months' average, August to December, inclusive.

Table 47.-OTHER PINE LUMBER

${ }^{1}$ Compiled by the Western Pine Manufacturers' Association, the actual data being computed to comparative bases through percentages of normal production for the mills reporting in each period. The normal monthly production covers 54 mills with output of $148,000,000$ hoard feet in the earlier years, gradually reduced to 42 mills with normal output of $136,800,000$ feet in 1925, and is estimated to represent 70 per cent of the output of the western pine territory through 1925 and thereafter 74 per cent, owing to the decrease of the total number of mills in business. Beginning with 1928, several mills which withdrew from the association reported directly to the Bureau of the Census, their figures being combined with those of the association to obtain comparable totals. Monthly data covering the period 1917-1921 appeared in the A pril, 1923 , issue (No. 20), p. 49 , while for unfilled orders monthly data from 1920 through 1927 appeared in the April, 1928, issue (No. 80 ), p. 22.
${ }_{9}$ Compiled by the California White and Sugar Pine Association from reports of from 13 to 26 mills prior to 1926; thereafter from 18 identical mills, except for stocks, which are by a varying number of mills.

Compiled by the Northern Pine Manufacturers', Association, and includes reports from both member and nonmember mills located chiefly in Minnesota. The number of mills has gradually declined from about 20 mills in 1920 to about 13 in 1928. Monthly data on production and shipments from 1920 appeared in the September, 1922,

Table 48.-HARDWOODS

${ }^{1}$ Compiled by Hardwood Manufacturers' Institute. Data on production, shipments, and new orders are computed by taking the percentage relation of the actual production, shipments, and new orders of the mills reporting, and the normal production of these same mills and applying this per cent to the normal production of $375,000,000$ eet, which represents the approximate monthly average production of the mills in the Southern and Appaiachian districts. For stock and unfiled orders the average per operating unit for the mills reporting is applied to a fixed number of 700 operating units. The 700 units were arrived at by taking the annual produetion of 1926 , approximately $6,500,000,000$ feet, and dividing by $8,736,000$ feet, the figures used in determining an operating unit for the mills reporting. The resulting figures represent computed data for the entire country. For gum the fixed number of operating units is 400 . Detailed data as to size, species, grades, etc., are given in the regular reports of the a
ata on new orders and unfilled orders since July, 1923 , were , data on new orders and unfiled orders since July, 1923, were given in the A pril, 1927, issued No. 68), p. 25.
${ }^{3} 6$ months' average, July through December.

Table 49.-TOTAL LUMBER AND FLOORING

| Year and Month | LUMBER-ALL SPECLES |  |  |  |  |  | MAPLE FLOORING ${ }^{1}$ |  |  |  |  | OAK FLOORING ${ }^{2}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production ${ }^{3}$ | Exports ${ }^{4}$ | Retall yards, 9th Fed. Res. Dist. ${ }^{5}$ |  | Composite prices ${ }^{8}$ |  | Pro- | Shipments | Stocks, end of month | New orders | Unflled orders, end of month | $\underset{\text { Pro- }}{\text { Puetion }}$ | Shipments | Stocks, end of month | Neworders | $\begin{aligned} & \text { Unfilled } \\ & \text { orders, } \\ & \text { end of } \\ & \text { month } \end{aligned}$ |
|  |  |  | Sales | Stocks, end mo. | Hardwoods | Goftwoods |  |  |  |  |  |  |  |  |  |  |
|  | Thousands of feet, board measure |  |  |  | Dolls. per M ft., board measure |  | Thousands of feet, board measure |  |  |  |  |  |  |  |  |  |
| 1909-13 m. a- | $\begin{array}{\|c}  \\ -\cdots 197 . . . . . \\ 234 \end{array}$ | 178,398 |  |  |  |  |  |  |  |  |  | $4,572$ | $4,572$ | $12,171$ | $4,719$ | $6,290$ |
| 1913 mo . av. |  |  |  |  |  |  |  |  |  |  |  | 6,675 | 6,009 | 10,544 | 6,104 | 7,285 |
| 1914 mo.av_ | 2,102,537 | 149, 146 |  |  |  |  |  |  |  |  |  | 7,464 | 6,877 | 15,877 | 7,419 | 7, 578 |
| 1915 mo . $\mathrm{av}_{-}$ | $2,086,531$ | 93, 947 |  |  |  |  |  |  |  |  |  | 9, 205 | 8,894 | 17,1.58 | 9,525 | 7,547 |
| 1916 mo. av- | $2,262,175$ | 91, 208 |  |  |  |  |  |  |  |  |  | 11, 563 | 11, 470 | 22,489 | 11,429 | 16, 124 |
| 1917 mo . av- | 2, 141, 144 | 84, 971 |  |  |  |  |  |  |  |  |  | 11, 120 | 10,446 | 25, 652 | 8,956 | 20,074 |
| 1918 mo. av. | 1, 874, 419 | 85, 314 |  |  |  |  |  |  |  |  |  | 4,858 | 5,537 | 25, 680 | 4,781 | 7,270 |
| 1919 mo.av- | 2, 069,522 | 109,208129,280 | $\left\|\begin{array}{r} 7 \\ 30,995 \\ 16,786 \end{array}\right\|$ | $\begin{array}{r} 7215,564 \\ 203,175 \end{array}$ |  | $48.98$ | 10,039 | 11, 848 | 15,448 <br> 15,963 | 14,1635,106 | 38, 289 | 10,10110,745 | 11,070 | 14, 431 | 11,782 | 15,03511,324 |
| 1920 mo. av- | 2,002, 193 |  |  |  |  |  |  | 8,259 |  |  | 26,723 |  | 7,800 | 25, 859 | 6,343 |  |
| $1921 \mathrm{mo} . \mathrm{av}_{-}$ | 1,762, 263 | 100, 401 | 13,838 | 153, 155 |  | 27.42 | 8,378 | 8,121 | 30,749 | 8,991 | 10,176 | 12,411 | 13,595 | 32,875 | 14, 058 | 12,003 |
| 1922 mo. av- | 2, 255, 034 | 127,743 | 15,496 | 126, 744 | 40.33 | 30.79 | 11, 479 | 11, 934 | 28,040 | 12, 194 | 20,311 | 22,877 | 23,945 | 23,006 | 23, 723 | 33,052 |
| 1923 mo . $\mathrm{av}_{\text {- }}$ | 2, 504, 591 | 146, 071 | 14, 651 | 127, 719 | 46.72 | 33.86 | 11,734 | 11,805 | 21, 268 | 11, 085 | 26,804 | 30, 103 | 28, 878 | 33, 609 | 28, 313 | 44, 258 |
| 1924 mo. av- | 2, 418, 867 | 161,500 | 13,403 | 111,606 | 43.11 | 30.95 | 8,603 | 7,865 | 23,880 | 8,085 | 12,347 | 34,843 | 35,306 | 43,773 | 35,900 | 46, 562 |
| 1925 mo . av- | $\begin{aligned} & 2,623,901 \\ & 2,468,403 \end{aligned}$ | 161, 687 | 17, 187 | 111, 258 | 41.80 | 30.71 | 8,828 | 8,428 | 26,979 | 8, 360 | 10, 117 | 45,808 | 45,342 | 47, 104 | 44,785 | 52, 031 |
| $1926 \mathrm{mo} . \mathrm{av}_{-}$ |  | $\begin{aligned} & 179,943 \\ & 193,640 \end{aligned}$ | 13,688 | 95, 002 | 41.56 | 30. 57 | 9,618 | 9,983 | 28,180 | 7,722 | 3,334 | 47,953 | 45,024 | 58,293 | 44,362 | 42, 206 |
| 1927 mo. av- | 2, 325, 804 |  | 11,688 | 89, 604 | 41.13 | 29.86 | $\begin{aligned} & 9,563 \\ & 7,867 \end{aligned}$ | $\begin{aligned} & 9,163 \\ & 7,760 \end{aligned}$ | $\begin{aligned} & 27,833 \\ & 25,535 \end{aligned}$ | 8,6967,480 | 11,9209,529 | 43,833 | 42,756 | 75,227 | 42, 203 | 41,606 |
| 1928 mo.av- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June. | 2, 411, 506 |  |  |  |  |  |  |  |  |  | 16,467 | 49, 231 | 43, 242 | 68, 476 | 55,197 28,856 |  |
| July .-. | 2, 283, 439 | 191, 145 | 15,09216,262 | 88, 980 | 42.5942.40 | 30.57 | 9.30811,110 | 9,34010,718 | 25, 565 | 6,5817,188 | 13,80010,879 | 44,904 | 36, 547 | 75, 702 | 28,389 | 34, 477 |
| August. | 2,577, 136 | 191, 764 |  | 87,698 |  | 29.49 |  |  | 25, 487 |  |  | 46,958 | 45, 309 | 76,639 | 42,423 | 31, 789 |
| September | 2,487,728 | 188, 579 | 14, 122 | 85,970 | $\begin{aligned} & 41.64 \\ & 40.02 \end{aligned}$ | 29.74 | $\stackrel{9,546}{9,546}$ | 9,532 | 25,002 | 7,488 | 9,459 | 46, 105 | 44, 471 | 76,616 | 43,88842,563 | 29,45026,329 |
| October-...- | 2,374, 881 | 171, 074 | 15,96112,990 | 80,080 |  | 31.77 |  | 7,913 | 25, 825 | 7, 130 | 7,997 | 45, 292 | 45, 091 | 77, 438 |  |  |
| November-- | $\begin{aligned} & 2,280,430 \\ & 2,079,342 \end{aligned}$ | $\begin{aligned} & 167,986 \\ & 168,289 \end{aligned}$ |  | 75, 271 | $39.04$ | 28.29 | $\begin{aligned} & 8,073 \\ & 7,820 \end{aligned}$ | $\begin{aligned} & 6,884 \\ & 6,545 \end{aligned}$ | 27, 149 | 5,954 | 7,650 | 40, 195 | 37, 343 | 79,899 | 37,977 | 26,32927,96527,887 |
| December-- |  |  | 4,742 | 80,690 | 39.74 | 26.84 |  |  | 29,115 | 6,654 | 8,508 | 38, 548 | 35, 074 | 74, 773 | 40,496 |  |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February -.-- |  | 158, 909 | 4,535 | 88,976 94,155 | 40. 47 | 27.50 | 7,519 | 6,889 | 29, 118 | 7,712 | 10,034 | 35,347 38,771 | 40,232 | 82, 758 | 536,163 | 45, 42.975 |
| March .-. |  | $\begin{aligned} & 186,541 \\ & 179,352 \end{aligned}$ | 7,106$\mathbf{9 , 4 8 5}$ | 91,428 | 41. 24 | 27.55 | 7, 862 | 8, 184 | 28,086 | 7, 211 | 9,816 | 42,272 | 47,599 | 78,855 | 48,815 | 47,134 |
| April | $\begin{aligned} & 2,446,356 \\ & 2,392,894 \end{aligned}$ |  |  | 93,983 | 39.77 | 28.00 | 7,331 | 7,545 | 28,326 | 7,036 | 9,963 | 42,924 | 46, 105 | 77, 491 | 46,071 | 48, 004 |
| May | 2, 474, 885 | 223, 649 | 14, 364 | 92, 064 | 38.39 | 28.39 | 7,070 | 8,258 | 27,514 | 9, 197 | 11,423 | 47,785 | 50, 256 | 75,948 | 50, 295 | 48,681 |
| June | 2, 331, 672 | 220, 961 | 22, 081 | 88,355 | 38.42 | 28.74 | 7,608 | 8,686 | 26, 271 | 7,867 | 10, 500 | 44, 444 | 49, 475 | 71, 425 | 48,873 | 49,002 |
| July... | 2, 204, 457 | 185, 363 | 15,937 | 87, 345 | 40.06 | 28.81 | 7,784 | 8,311 | 24,667 | 7,466 | 10,076 | 46,065 | 47,832 | 68,851 | 45, 972 | 49,912 |
| August. | 2, 206, 862 | 162, 221 | 17,632 | 86, 807 | 39.98 | 29.00 | 8,413 | 9,515 | 23,232 | 8,851 | 10, 187 | 51, 529 | 51,860 | 67, 864 | 49, 427 | 47, 026 |
| September.- | 1,927,716 | 170, 457 | 17,860 | 84, 984 | 39. 91 | 29.27 | 7,675 | 7,929 | 22, 554 | 7,110 | 10, 106 | 45, 926 | 45, 020 | 68, 456 | 43, 141 | 47, 099 |
| October -- |  | 204, 979 | 18, 242 | 81,035 | 40.05 | 30.36 | 8, 204 | 8,543 | 21, 352 | 7, 230 | 7,940 | 51, 225 | 45,652 | 72, 689 | 38, 132 | 41, 151 |
| November.- |  | 184, 054 | 14,314 | 75,810 | 40.19 | 30.73 | 8,721 | 6, 230 | 21, 960 | 6,537 | 7, 157 | 45, 791 | 37, 232 | 80, 331 | 43,753 | 48, 052 |
| December |  | 208, 045 |  |  |  |  | 8,866 | 5,784 | 24, 674 | 5.382 | 7, 988 |  |  |  |  |  |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January-.-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April..- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Data on maple flooring (including also birch and beech) are compiled by the Maple Flooring Manufacturers'Association, said to represent rabout 70 per cent of the indus try. The data for the period 1919-1922 inciude reports from 20 identical mils, in 1923, 21 mils, in 1924, 18 mills; in 1925, 19 mills; in 1926 and 1927 , from 20 to 22 mills. Monthly data from 1920 appeared in July, 1922, issue (No. 11), p. 43.
${ }^{2}$ Compiled by the Oak Flooring Manufacturers' Association from reports of from 25 to 54 mills, said to represent about 90 per cent of the total oak-flooring industry. The large increase in reporting mills is due to many frms starting to make oak flooring in 1927, Monthly data from 1912 appeared in May, 1924 , issue (No. 33 ), p. 36 .
${ }_{3}$ Figures in this column represent the total cut of 10 species of lumber- Jellow pine, Douglas fir, hemlock, western pine, redwood, maple, birch, beech, white fir, and sugar pine-representing over 70 per cent of the total cut of lumber in the United States. Annual figures for 1913 and 1914 are from actual reports to the $U$. $S$. Department of Agriculture, Forest Service, and from 1915 through 1920 are computed on the basis of actual reports to the Forest Service. Monthly figures for 1920 are obtained by prorating the cut of each species as reported by the associations whose figures are carried on these columns to the Forest Service total. For subsequent months prorating is done on an approximate average for the years 1917 to 1920.
${ }^{3}$ Exports consisting or bata compiled by the Federal Reserve Bank of Minneapolis. Stocks represent the inventories of 19 companies retailing lumber through 588 yards in the ninth Federal 3 Data compiled by the Federal Reserve Bank of Minneapolis. Stocks represent the inventories of 19 companies retailing lumber through 588 yards in the ninth Federal reserve district; sales represent the total retail business reported by 21 companies operating 625 yards. Dats or 1919 were estimated for a ew companies on the basis of the
correlation of reporting companies of 1919 and 1920 . Monthly data from 1920 appeared in October, 1923 , issue (No. 26), p. 59 . Similar data for the tenth district, compiled correlation of reporting companies of 1919 and 1920 . Monthly data rom preseappeare
by the Federal Reserve Bank of Kansas City, are shown on p. 138 of the present issue.
${ }_{8}$ Composite lumber prices compiled from weekly data published in the Lumber Manufacturer and Dealer, representing combined weigbted averages for the respective series of lumber, based on quotations on various grades for each species. The species are weighted according to annual production of the previous year, the weights changseries of lumber, based on quotations on various gracion figures are available. The softwood index is based upon 7 species: Yellow pine, Douglas fir, North Carolina pine, ing about May of each year, when the new production figures are available. The sotwood index is based upon species: Yellow, pine, Douglas ir, North carolina pine, Digitized for FRAS 罗ickory and walnut. Figures formerly published covered only first week of the month.

Table 50.-FURNITURE AND MISCELLANEOUS HARDWOODS

${ }^{1}$ Compiled by the Southern Furniture Manufacturers' Association and represents average shipments and unfilled orders per firm from 42 to 58 firms. The firms reporting are located in the States of Virginia, North Carolina, Tennessee, and Georgia and represent approximately one-third of the production of these States. The reporting firms manufacture large bedroom furniture, dining-room furniture, and chairs
${ }^{2}$ Compiled by the National Association of Piano Bench and Stool Manufacturers from concerns estimated to cover about 80 per cent of this industry. Reports are from 14 firms in July, 1917, gradually decreasing until 1923, since which time only 8 firms have reported. The figures are strictly comparable, however, as the 6 firms which ceased reporting went out of this line of business. It should be noted that the items, new orders, unfilled orders, and shipments (values) are averages per firm, while shipments (quantities) are totals for reporting firms. Monthly data from 1917 to April, 1924 , showing aggregates for all items appeared in the June, 1924 , issue (No. 34 ), p. 57 3 Compiled by Seidman \& Seidman from reports of representative manufacturers of furniture in the Grand Rapids district. Owing to variation in the number of frims
reporting each month, the figures have been shown in number of days' production or sales, based on current ratios, or as percentages. The original data are based on value. reporting each month, the flgures have been shown in number of days' production or sales, based on current ratios, or as percentages. The original data are based on value. Monthly data from June, 1923, appeared in the June, 1926, issue (No. 58), p. 24.
${ }_{4}$ Data from Northern Hemlock and Hardwood Manufacturers' Association, representing chiefly Wisconsin and upper Michigan mills. These figures represent aetual reports from 60 to 75 mille each month. The hardwoods cut are mostly maple, birch, and beech. Annual averages from 1913 through 1918 appeared in the February, 1926 , issue (No. 54), p. 65.
s Compiled by the Lower Michigan Lumber Manufacturers from reports of from 11 to 13 mills operating in lower Michigan, except for November, 1925 , when only 8 mills reported. In many instances, fewer firms report on stocks than on the other items. About half of the hardwoods reported consist of maple.

66 months' average, July to December, inclusive.
「 7 months' average, Jucie to December, inclusive.

Table 51.-LUMBER PRODUCTS


1 Compiled by the Douglas Fir Plywood Institute from reports of 8 members. Data represent the actual movement of plywood in square feet and are combined from weekly reports using 4 or 5 weeks to the month. The members of the institute comprise approximately 70 per cent of the total production of Douglas fir plywood.
${ }^{2}$ Compiled by the Plywood Manufacturers' Association from reports of 18 to 20 members in 1925, 16 to 17 in 1926, and 13 to 16 in 1927 . These data represent the business of building up veneers into plywood of from 3 to 8 chicknesses. Details as to kinds of wood and nature of cores are shown in the association's report.
ry, concerning their purchases and receipts of rotary cut veneer for the manufacture of wire-bound boxes. Details by sizes and sources are piven in the cent of the indus${ }^{4}$ Compiled by the American Veneer Package Association from reports of about 30 firms each month, representing a large proportion of the industry. The association's reports also contain data on other kinds of baskets.

89 months' average, April to December, inclusive.
08 months' average, May to December, inclusive.
76 months' average, July to December, inclusive. $\quad{ }^{8} 7$ months' average, June to December, inclusive.
DOUGLAS FIR DOORS (AT MANUFACTURING PLANTS) ${ }^{1}$
(In number of doors)

| Year and Month | Production | Shipments | Stocks, end of month | New orders | Unfilled orders, end of month |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1928 monthly average | 2 320, 181 | ${ }^{2} 327,857$ | ${ }^{3} 272,752$ | ${ }^{2} 300,934$ | ${ }^{3} 396,227$ |
| 1928 |  |  |  |  |  |
| April |  |  | 262, 431 |  | 476, 630 |
| May | 425, 909 | 371, 220 | 317, 109 | 606, 750 | 709,500 |
| June. | 393, 224 | 386, 636 | 293, 505 | 221, 896 | 535,697 |
| July | 434, 299 | 431, 800 | 302, 990 | 327, 387 | 470,617 |
| August. | 314, 154 | 344, 643 | 267, 118 | 227,311 | 344,094 |
| September. | 273, 076 | 305, 555 | 238,399 | 237, 769 | 300, 106 |
| October | 372, 158 | 362, 004 | 243, 946 | 285, 147 | 215, 872 |
| November. | 244, 857 | 254, 110 | 251, 837 | 253, 418 | 217,608 |
| December | 203, 776 | 166, 886 | 277, 431 | 247, 799 | 295, 919 |

${ }^{1}$ Compiled by the Western Door Manufacturers' Association from reports of 10 mills representing about 80 to 85 per cent of the capacity of the Douglas fir door industry on the Pacific coast. Data are combined from weekly reports, using 4 or 5 weeks to the month. The association's reports also give data on garage doors.

28 months' average, May to December, inelusive.

Table 52.-BRICK, TILE, AND TERRA COTTA

${ }^{1}$ Data, except prices, compiled by the Common Brick Manufacturers' Association of America from reports of about 100 concerns representing about 30 per cent of the total output of common brick. It should be noticed that the number of plants shut down increases considerably in the winter, owing to seasonal shutdowns in the more northern localities. Details by districts are given in the association's reports. Monthly data from 1921 appeared in May, 1925, issue (No. 45 ), p. 27.
2 Compiled by the U.S. Department of Commerce, Bureaua of the Censurs, from data reported by 39 concerns which produced about 80 per cent of the total production
of floor and wall tile in 1923 , including the entire membership of the Associated Tile Manufacturers. Details by grades and kinds are issued each month in mimeograph form. ${ }_{3}$ Compiled by the U. S. Department of Commerce, Bureau of the Census, from the reports of 27 manufacturers who produced over 95 per cent of the total architecturai terra cotta made in 1922. Values exclude freight, cartage, duty, and setting charges. Monthly data from 1919 are given in the October, 1924, issue (No. 38 ), p. 52 . Details by districts are given in the press releases.
${ }^{4}$ Data compiled by American Face Brick Association, representing averages per plant in order to allow for the variation in number of firms reporting. About 70 firms usually report. Monthly data from 1922 appeared in January, 1926, issue (No. 53), p. 22.
${ }^{5}$ Wholesale prices are monthly averages from U. S. Department of Labor, Bureau of Labor Statistics, yearly price averages from 1913 to 1918 appeared in the November, 1924, issue (No. 39), p. 101.

Table 53.-CHINA AND PORCELAIN PLUMBING FIXTURES AND SAND-LIME BRICK


[^16]Table 54.-CEMENT AND HIGHWAYS

| Year and Month | PORTTLAND CEMENT ${ }^{\text {1 }}$ |  |  |  |  |  | CONCRETE <br> PAVEMENTS |  | FEDERAL-AID <br> HIGHWAYS ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production |  | Chipments | Stocks, end of month | Stocks, clinker, month | Wholesale price, composite | New orders ${ }^{\text {2 }}$ |  | Completed |  | $\begin{aligned} & \text { Under- } \\ & \text { construc- } \\ & \text { tion } \end{aligned}$ |
|  | Total | Ratio to capacty |  |  |  |  | Total | Roads | Cost | Distance |  |
|  | Thousands of barrels | Per cent | Thousands of barrels |  |  | Dolls. per barrel | Thousands of square yards |  | Thous. of dollars | Miles |  |
| 1913 monthly average | 7,675 | -...--- | 7,391 | 11,220 |  |  |  |  |  |  |  |
| 1914 monthly average - | 7,353 |  | 7,203 | 12,773 |  |  |  |  |  |  |  |
| 1915 monthly average.. | 7,146 |  | 7,219 | 11, 312 |  |  |  |  |  |  |  |
| 1916 monthly average.. | 7, 589 |  | 7,852 | 11, 054 |  |  |  |  |  |  |  |
| 1917 monthly average.. | 7,721 |  | 7,542 | 11,080 |  |  |  |  |  |  |  |
| 1918 monthly average.. | 5,891 |  | 5,894 | 9,386 |  |  |  |  |  |  |  |
| 1919 monthly average. | 6,700 |  | 7,167 | 9,809 |  |  | 4, 455 | ${ }^{4} 3,499$ |  |  |  |
| 1920 monthly average.- | 8,306 |  | 7,999 | 7,278 |  |  | 3, 264 | 2,454 |  |  |  |
| 1921 monthly average.. | 8,191 |  | 7,921 | 10, 161 |  |  | 4,686 | 3,662 |  |  |  |
| 1922 monthly average. | 9,489 |  | 9,714 | 9,572 |  |  | 6, 595 | 4,863 | \$15, 472 | 937 | 14,458 |
| 1923 monthly average.. | 11,448 |  | 11,324 | 9,258 | 4, 015 | \$1. 881 | 6. 580 | 4,245 | 10,799 | 607 | 14,529 |
| 1924 monthly average | 12, 405 |  | 12,146 | 13,178 | 6,191 | 1. 843 | 7,679 | 4, 842 | 17,084 | 853 | 14,637 |
| 1925 monthly average | 13, 434 |  | 13,060 | 16,055 | 7, 077 | 1.789 | 8,681 | 5,328 | 18,410 | 862 | 12, 187 |
| 1926 monthly average. | 13, 673 |  | 13,482 | 18,886 | 9,008 | 1. 744 | 8,942 | 5,095 | 17,876 | 787 | 10,890 |
| 1927 monthly average. | 14,326 | 76.1 | 14, 244 | 19,955 | 9,640 | 1. 686 | 10, 481 | 6, 163 | 15,779 | 690 | 9,660 |
| 1928 monthly average. | 14,664 | 75.2 | 14, 621 | 22,685 | 10, 547 | 1,672 | 12,340 | 7,792 | 16,844 | 621 | 8,879 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |
| January | 8,258 | 45.1 | 5,968 | 22,914 | 9,989 | 1.713 | 4,236 | 2,656 | 8,115 | 508 | 9,839 |
| February-. | 7,377 | 44.6 | 6,731 | 23, 563 | 11,943 | 1.683 | 4,391 | 2,336 | 5,385 | 491 | 9, 599 |
| March | 11,450 | 61.9 | 11, 100 | 23,922 | 12, 997 | 1.683 | 9,300 | 5,135 | 10,119 | 435 | 9, 632 |
| April.- | 14,048 | 78.1 | 14,350 | 23,654 | 13,335 | 1.683 | 15,482 | 10,264 | 6, 170 | 265 | 9,821 |
| May | 16,701 | 88.9 | 16,885 | 23, 503 | 12, 514 | 1. 683 | 14, 234 | 8,235 | 9,101 | 414 | 10,000 |
| June. | 17,224 | 93.1 | 19,781 | 20,972 | 10, 926 | 1.683 | 16,075 | 8, 424 | 17,850 | 845 | 10, 104 |
| July.- | 17,408 | 90.4 | 18,984 | 19,397 | 9, 009 | 1. 683 | 12,615 | 7,299 | 17,150 | 637 | 10, 135 |
| August | 18,315 | 94.5 | 21, 411 | 16,292 | 7,887 | 1.683 | 13,528 | 7,445 | 15, 301 | 750 | 10, 005 |
| September | 17,505 | 923 | 19,828 | 13,996 | 6,490 | 1.683 | 11,581 | 6,872 | 23,354 | 927 | 9,921 |
| October. | 17,174 | 87.4 | 18, 105 | 13, 141 | 5,960 | 1. 683 | 9, 800 | 5,527 | 29, 206 | 1, 151 | 9, 466 |
| November | 14,449 | 75.9 | 11, 619 | 10,022 | 6,374 | 1. 683 | 7,984 | 5,102 | 29,712 | 1, 104 | 8,879 |
| December. | 11,999 | 60.7 | 6,200 | 22,082 | 7,660 | 1. 683 | 6,542 | 4,657 | 17,886 | 758 | 8,517 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |
| January ... | 9,768 | 49.4 | 6,541 | 25, 116 | 9,672 | 1. 683 | 5,902 | 4, 103 | 10,728 | 458 | 8,480 |
| February | 8,797 | 47.5 | 6,563 | 27,349 | 12,237 | 1.683 | 7,499 | 5,615 | 8,209 | 340 | 8,267 |
| March. | 10, 223 | 51.7 | 10,135 | 27, 445 | 14, 463 | 1.683 | 12,408 | 8,746 | 11,411 | 395 | 8,332 |
| April.- | 13,468 | 70.0 | 13,307 | 27,627 | 15,002 | 1.683 | 17,788 | 12,722 | 6,579 | 269 | 8,347 |
| May-- | 17,308 | 86.6 | 18,986 | 25, 984 | 14,329 | 1. 883 | 20,695 | 13,246 | 16,706 | 735 | 8,967 |
| June | 17,497 | 90.1 | 18,421 | 25, 029 | 12,944 | 1. 683 | 15,446 | 8,997 | 18,802 | 661 | 9,494 |
| July-.- | 17, 474 | 97.0 | 19,901 | 22,580 | 11,707 | 1.683 | 13, 123 | 6,984 | 8,828 | 483 | 9,497 |
| August. | 18,759 | 93.1 | 21,970 | 19,374 | 9,357 | 1. 683 | 16,889 | 9,254 | 12,145 | 599 | 9,547 |
| September- | 17,884 | 91.7 | 20,460 | 16,799 | 7,566 | 1. 650 | 14,752 | 9,630 | 26, 105 | 1,169 | 9, 427 |
| October. | 17,533 | 87.1 | 19,836 | 14, 579 | 5,944 | 1.650 | 7,068 | 3,856 | 13,413 | 598 | 9,337 |
| November. | 15, 068 | 77.4 | 11, 951 | 17,769 | 5,953 | 1.650 | 8,430 | 5, 213 | 19,025 | 845 | 8,692 |
| December- | 12,189 | 60.4 | 7,384 | 22,573 | 7,385 | 1.650 | 8,080 | 5,168 | 50,174 | 896 | 8,163 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |
| March |  |  |  |  |  |  |  |  |  |  |  |
| April. -.---------- |  |  |  |  |  |  |  |  |  |  |  |
| Мау.- |  |  |  |  |  |  |  |  |  |  |  |
| June...... |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Data on Portland cement, representing complete reports of manufactures, are from the V. S. Department of Commerce, Bureau of Mines, except prices, which are averages of weekly prices reported by the U. S. Department of Labor, Bureau of Labor Statistics. Clinker is unground cement. The cement industry is highly seasonal and its figures should be compared with corresponding months of previous years rather than with other months of the current year. Detailed data by months back to 1915 ,
 data appeared in the March, 1928 , issue (No. 79 , p. 21. Monthly price data from 1913 for quotations now discontinued appeared in the December, 1923 , issue (No. 28 , p. 54 ,
a Concrete pavements contracted for throughout the United States are from the Portand Cement Association, Highway Burenu. The total contracts include streets and alleys bencrides pavem.
leys besides roads.
3
Data on amount of Federal-aid highways completed during each month and under construction at the end of month specified are compiled by the $U$. $S$. Department of Agriculure, Bureau of Public Roads, and include all kinds of improved roads built with Federal aid. Federal-aid roads represented about 45 per cent of the total mileage of roads improved by the States in 1925, while Federal-aid grants amounted to about 20 per cent of the costs of the Federal-aid roads shown above. The data on roads Digitized for completedrepresent all roads reported as such to the Bureau of Public Roads, whether paid for or not. Monthly data from 1922 appeared in the July, 1928 , issue (No. 599, p. 24 , http://fraser. pavementless ghan 6 inches thick not allocated by class of pavement. This has been prorated to roads on the basis of the roads' share of allocated contracts.

Table 55.-GLASS

| Yiar and Month | ILLUMINATING GLASSWARE 1 |  |  |  |  |  | $\begin{gathered} \text { POL- } \\ \text { PGHED } \\ \text { PLATE } \\ \text { GLASS : } \end{gathered}$ | GLASS CONTAINERS ${ }^{3}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production |  | New orders | Shipments | Un- <br> filled orders, end of month | Stocks, end of month | $\begin{aligned} & \text { Produc- } \\ & \text { tion } \end{aligned}$ | Production |  | $\begin{gathered} \text { Net } \\ \text { orders } \end{gathered}$ | Shipments | Unfilled orders, end of month | Stocks, end of month |
|  | Total | Ratio to capacity |  |  |  |  |  | Total | Ratio to capacity |  |  |  |  |
|  | No. of turns | Per cent of capacity |  |  | No. of weeks' supply |  | Thous. sq. ft. | Thous. gross | Per cent | Thousands of gross |  |  |  |
| 1021 monthly average. |  |  |  |  |  |  | 4, 465 |  |  |  |  |  |  |
| 1922 monthly average. |  |  |  |  |  |  | 6, 390 |  |  |  |  |  |  |
| 1923 monthly average. | 4, 021 | 50.1 | 50.7 | 50.5 | 3.2 | 6.7 | 7,422 |  |  |  |  |  |  |
| 1924 monthly average.. | 3,112 | 41.6 | 42.1 | 40.0 | 2.6 | 8.4 | 7,630 |  |  |  |  |  |  |
| 1925 monthly average. | 3, 385 | 44.5 | 44.7 | 44.2 | 2.3 | 7.0 | 9,769 | 42,053 | +76.6 | 42,383 | 4, 1,805 | 17,891 | 4, 911 |
| 1926 monthly average. | 3,147 | 42.3 | 44.3 | 43.0 | 1.4 | 4.8 | 10,738 | 2,046 | 72.6 | 2,145 | 1,987 | 8,751 | 5,607 |
| 1927 monthly average. | 2,910 | 38.5 | 40.0 | 39.4 | 1.2 | 3.7 | 9, 283 | 2,110 | 71.6 | 2,256 | 2,125 | 9, 747 | 6, 256 |
| 1928 monthly average. | 3,254 | 42.0 | 43.2 | 41.4 | 1.4 | 4.2 | 10,302 | 2, 371 | 77.4 | 2,443 | 2,334 | 9,582 | 6,306 |
| 1926 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| September--. | 3, 193 | 43.7 | 47.0 | 46.3 | 1.4 | 3.4 | 11,431 | 2, 009 | 72.2 | 2, 237 | 2,088 | 7,672 | B, 054 |
| October.- | 3,837 | 50.9 | 49.6 | 49.4 | 1.4 | 3.5 | 11, 186 | 2,321 | 79.7 | 2, 421 | 1,980 | 7,958 | 6, 408 |
| November | 3, 956 | 52.6 | 46.9 | 47.7 | 1.2 | 3.6 | 9,705 | 2, 143 | 72.3 | 2, 553 | 1,693 | 8,714 | 6, 822 |
| December | 3,879 | 50.0 | 40.2 | 47.2 | 1.0 | 3.7 | 7, 344 | 2,045 | 69.0 | 2,414 | 1,592 | 9,453 | 6,315 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January......... | 2,948 | 35.6 | 35.5 | 40.5 | 0.6 | 3.7 | 8,484 | 2,032 | 71.3 | 2, 725 | 1,803 | 10, 274 | 6,541 |
| February.- | 2, 620 | 37.2 | 48.2 | 40.7 | 1.1 | 3.6 | 9,790 | 1,942 | 70.8 | 2, 838 | 1, 867 | 11, 219 | 6, 646 |
| March.... | 3, 023 | 39.0 | 39.0 | 41.0 | 1.0 | 3.5 | 11,641 | 2,234 | 72.3 | 2, 390 | 2, 368 | 11, 137 | 6,488 |
| April. | 3,030 | 39.8 | 39.6 | 38.8 | 1.0 | 3.7 | 10, 299 | 2,205 | 74.1 | 2,004 | 2,346 | 10,658 | 6, 341 |
| May. | 2, 797 | 37.0 | 45.0 | 39.3 | 1.2 | 3.6 | 9,618 | 2, 197 | 73.8 | 1,800 | 2,383 | 10, 135 | 6, 149 |
| June.. | 2, 689 | 36.0 | 38.0 | 37.3 | 1.3 | 3.6 | 7,999 | 2,277 | 76.5 | 2, 016 | 2, 350 | 9, 682 | 6,065 |
| July... | 2, 169 | 33.6 | 36. 3 | 35.3 | 1.2 | 4.0 | 8,868 | 2, 050 | 71.7 | 1,743 | 2, 227 | 9, 148 | 6, 216 |
| August. | 2, 410 | 32.0 | 38.3 | 31.4 | 1.3 | 3.5 | 10,616 | 2,142 | 69.3 | 1,850 | 2,120 | 8,765 | 6, 217 |
| September | 3,609 | 40.7 | 43.4 | 45.7 | 1.5 | 3.6 | 9, 353 | 1,999 | 69.6 | 2, 340 | 2, 325 | 8, 608 | 5,925 |
| October. | 3, 814 | 50.6 | 44.0 | 45.2 | 1.4 | 3.8 | 8,703 | 1,969 | 66.3 | 2,314 | 2, 054 | 8,681 | 5,878 |
| November. | 3,454 | 47.8 | 40.2 | 40.7 | 1.3 | 4.1 | 8,573 | 2,045 | 68.5 | 2, 574 | 1,928 | 9,043 | 6,049 |
| December. | 2,353 | 33.2 | 32.9 | 36.7 | 1.0 | 4.0 | 7,446 | 2,224. | 74.6 | 2.474 | 1,724 | 8, 616 | 6,551 |
| 1828 | 2, 685 | 34.8 | 39.7 |  |  |  | 8,205 |  |  |  |  |  |  |
| January ....... |  |  |  | 36.5 | 1.2 | 4.2 |  | 2, 207 | 76.9 | 2,680 | 1,958 | 10,140 | $\begin{aligned} & 6,327 \\ & 6,370 \end{aligned}$ |
| February ... | 2, 936 | 40.6 | 38.1 | 36.9 | 1.4 | 4.3 | 10,093 | 2,085 | 72.7 | 2,577 | 2, 113 | 10,633 |  |
| March. | $\begin{aligned} & 3,137 \\ & 3,243 \end{aligned}$ | 39.4 | 39.6 | 39.5 | 1.3 | 4.2 | 11,297 | 2, 570 | 82.9 | 3,424 | 2,646 | 11, 272 | 6,283 |
|  |  | 41.8 | 42.4 | 40.1 | 1.1 | 3.7 | 9,953 | 2,421 | 84.3 | 1,965 | 2,491 | 10,705 | 6, 239 |
| May.. | 3,368 | 42.1 | 44.5 | 40.0 | 1.1 | 3.7 | 10,224 | 2,688 | 88.7 | 2, 137 | 2,729 | 10,076 | 6, 192 |
| June. | 3,365 | 44.2 | 41.6 | 42.6 | 1.3 | 4.4 | 10,723 | 2,589 | 86.7 | 2, 225 | 2,552 | 9,642 | 6,220 |
| July | 1,7482,885 | 22.3 | 40.2 | 26.8 | 1.6 | 4.6 | 9,346 | 2, 374 | 77.2 | 2,008 | 2,311 | 9,166 | 6, 267 |
|  |  | 36. 5 | 44.5 | 42.5 | 1.8 | 4.3 | 11,474 | 2,686 | 80.9 | 1,909 | 2,654 | 8,467 | 6, 297 |
| September-...-.-.-..............-.--- | $\begin{aligned} & 3,190 \\ & 4,193 \end{aligned}$ | 43.0 | 44.2 | 43.0 | 1.7 | 4.3 | 10, 248 | 2, 322 | 78.7 | 2,122 | 2,433 | 8,084 | 6,173 |
|  |  | 50.5 | 53.2 | 51.9 | 1.7 | 4.1 | 10, 505 | 2,389 | 71.6 | 2,721 | 2,261 | 8,415 | 6,302 |
|  | $\begin{aligned} & 4,245 \\ & 3,949 \end{aligned}$ | 54.2 | 51.1 | 51.9 | 1.6 | 4.2 | 10,978 | 2, 146 | 66.8 | 2,950 | 1,990 | 8, 872 | 6,455 |
| December $\qquad$$1929$ |  | 54.6 | 39.0 | 45.0 | 1.5 | 4.7 | 10,579 | 1,970 | 63.8 | 2,599 | 1,874 | 9,510 | 6,542 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | January |  |  |  |  |  |  |  |  |  |  |  |  |
| February.... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April.-. | ------------- |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Data from biweekly reports of from 9 to 11 firms to the Illuminating Glassware Guild, estimated to represent from 70 to 75 per cent of the capacity of the industry, with capacity ranging from 4,500 to 7,000 turns per month. A turn is a 4-hour working period for one shop. Production data originally reported by frms with a biweekly capacity of from 2,256 to 3,463 turns, have first been prorated to the equivalent production of a capacity of 3,500 turns per biweekly period; these figures have in turn been reduced to monthly data by combining and prorating the overlapping periods. Data given in percentages of capaoity are averages of either 2 or 3 biweekly periods from the association reports. Stooks and unflled orders have been reported by capacities ranging from 1,891 to 3,098 turns biweekly, but as they are expressed in weeks' supply, they are comparable without prorating. Data from 1923 on actual production, stocks, and unfilled orders appeared in the July, 1926 , issue ( N 0.59 ), p. 25 . The association reports give details by classes of shades, reflectors, bowls, and globes in numbers of turns.
(No; ${ }^{59}$ Compiled by Plate Glass Manufacturers of America, comprising practically the entire industry. Monthly data from 1923 appeared in January, 1926, issue (No. 53 ), p. 23

8 Data from the Glase Container Association, covering 41 manufacturers of glass containers with an annual productive capacity of $\mathbf{3 2 , 0 0 0 , 0 0 0}$ gross, or 8 bout 83 per cent
of the industry. Details by classes ane shown in the association's report. of the industry; Details by classos ane shown in the association's report.

44 months' average, September to December, inclusive.

Table 56.-WOOD DISTILLATION ${ }^{1}$

${ }^{1}$ Except for prices and exports, data are cormpiled by the U. S. Department of Commerce, Bureau of the Census, including through June, 1924, the reports of the National Wood Chemical Association, the total reports from all sources comprising about 95 per cent of the industry during most of this period. Beginning with July, 1924, all data have been collected directly by the Bureau of the Census. Stocks, at crude plants prior to December, 1926, probably include some stocks owned by them but held at refineries, but thereafter only stocks actually at crude plants are reported under that heading. Monthly data on production and on consumption and stocks of wood for 1920 appeared in the September, 1923, issue (No. 25), p. 46, the 1921 data being revised in the December, 1923 , issue (No. 28), p. 51 , and data from 1924 on in the April, 1827 issue (No. 68), p. 26. Press releases of the Bureau of the Census also give Canadian figures, beginning with 1925.

Wholesale prices are monthly sverages compiled by the $U S$ Dial
9 molesale prices are monthly averages compiled by the U. S. Department of Labor, Bureau of Labor Statistice.
19 months' average, April to Decomber, inclusive.

# Table 57.-REFINED METHANOL, ETHYL ALCOHOL, EXPLOSIVES, AND DYES 



[^17]Table 58.-NAVAL STORES

${ }^{1}$ Compiled by the Hercules Powder Company from reports of 8 firms representing almost the entire output of steam naval stores from distillation with steam from the leoresin within or extrected from the wood, generally softwoods
2 Represent the receipts and stocks at Jacksonville, Savannah, and Pensacola, as reported by the Naval Stores Review, earlier data being supplied by the Savannah Pond of Trade, Jacksonville Cismber of Commerce, and Pensacola Chamber of Commerce. Monthly averages for 1914 and 1915 are based on the season beginning Apr. 1 of the year indicated and thereafter on the calendar year. Monthly data from 1929 appeared in June, 1922, issue (No. 10 ), p. 40.
${ }^{8}$ Compiled by the U. S. Department of Labor, Bureau of Labor Statistics, and represent average prices in the New, York market. Quotations for rosin cover B grade unit 280 pounds gross, ex dock, and turpentine quotations cover southern, in barrols, both being at New York. Monthly data from 1913 appeared in November, 1925 , issue

Table 59.-CHEMICAL PRICES, ARSENIC, AND ROOFING
[Base year in bold-faced type]

| Yfar and Monte | WHOLESALE PRICE INDEXES |  |  |  |  | ARSENIC ${ }^{\text {a }}$ |  |  |  | PREPARED R.OOFING ${ }^{4}$ | DEY ROOFING |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Drugs } \\ & \text { and } \\ & \text { phar- } \\ & \text { maceu- } \\ & \text { tidals } . \end{aligned}$ |  |  |  |  |  | ude | Ref | ned |  |  |  |
|  |  | $\begin{aligned} & \text { Eissen- } \\ & \text { tial } \\ & \text { oils }{ }^{1} \end{aligned}$ | Crude drugs ${ }^{1}$ | $\underset{\text { cals? }}{\text { Chemi- }}$ | Oils and fats ${ }^{2}$ | Pro-duction | Stocks, end of month | Pro-duction | Stocks, end of month | Shipments | $\begin{aligned} & \text { Produc- } \\ & \text { tion } \end{aligned}$ | Stocks, end of month |
|  | Relative to August, 1914 |  |  | Relative to 1913-146 |  | Short tons |  |  |  | Thousands of squares ${ }^{7}$ | Short tous |  |
| 1914 monthly average. | 100 | 100 | 100 | 100 | 100 | $\square$ |  |  |  | 2, 079 |  |  |
| 1919 monthly average... | 201 | 213 | 185 |  |  |  |  |  |  |  |  |  |
| 1920 monthly average. | 196 | 265 | 202 |  |  |  |  |  | --- | 2,360 | --- |  |
| 1921 monthly average.- | 129 | 158 | 134 |  |  |  |  |  | --- | 2,182 | 8 9,016 |  |
| 1922 monthly average.. | 120 | 131 | 174 |  |  |  |  |  | -- | 2,541 | ${ }^{\text {B }} 12,055$ |  |
| 1923 monthly average.--- | 142 | 135 | 220 | 125 | 142 |  |  | 1,072 | 742 | 2,542 | 16,078 | 2,427 |
| 1924 monthly average. | 155 | 140 | 208 | 114 | 139 | 1,497 | 2,924 | 1,519 | 3,268 | 2,714 | 17,406 | 2, 296 |
| 1925 monthly average. | 157 | 174 | 198 | 113 | 150 | 697 | 3,575 | 923 | 7,034 | 2,731 | 20,297 | 3,388 |
| 1920 monthly average. | 156 | 170 | 205 | 113 | 150 | 458 | 3, 149 | 520 | 3,982 | 2, 670 | 23, 030 | 4,043 |
| 1927 monthly average. | 158 | 131 | 20. | 113 | 131 | 1,161 | 1,670 | 860 | 1,842 | 2, 833 | 25, 276 | 3,349 |
| 1928 monthly average |  |  |  | 113 | 124 |  |  |  |  |  | 23,452 | 3, 198 |
| 1927 | 155 | 126 | 203 | 114 | 128 | 1,414 | 2,725 | 913 | 1,983 | 1,405 | 19,266 | 3,628 |
| January |  |  |  |  |  |  |  |  |  |  |  |  |
| February | 155 | 125 | 204 | 113 | 137 | 1,147 | 2,387 | 810 | 2,251 | 1,691 | 19,699 | 4,045 |
| March. | 155156 | 126 | 206207 | 113113 | 134 | 1, 380 | 2, 378 | 1,030 | 2,230 | 2,891 | 25,20927,638 | 3,417 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  | 156 |  |  | 121 | 205 | 113 | 130 | 905 | 1,432 | 683 | 1,718 | 3,020 | 27, 019 | 2,806 |
|  | 156 | 122 | 200 | 113 | 130 | 1,003 | 1,155 | 789 | 1,266 | 3,003 | 26,517 3, 181 |  |
| July | 156156 | 122 | 196192 | $\begin{aligned} & 112 \\ & 112 \end{aligned}$ | 126 | 1,163 | $\begin{aligned} & 1,363 \\ & 1,009 \end{aligned}$ | 765986 | 789 | $2,637$ | 23,605 | 3,272 |
| August. |  |  |  |  | 127 |  |  |  | 1,346 | $2,992$ | 27, 441 | 3, 166 |
|  | 156 | 203 | 202 | 113 | 134 | 1,472 | 1,422 | 873 | 1,787 | 3,287 | 27, 902 | 2,007 |
| October | 160 | 123 | 207 | 112 | 134 | 1,004 | 1,260 | 937 | 2,321 | 3,218 | 27, 512 | 3,748 |
| November | 169169 | $\begin{aligned} & 126 \\ & 128 \end{aligned}$ | $\begin{aligned} & 206 \\ & 201 \end{aligned}$ | $112$ | $\begin{aligned} & 133 \\ & 128 \end{aligned}$ | 1,2691,125 | $1,326$ | $822$ | 2,255 | 3,280 | 25, 680 | 3,810 |
| December. |  |  |  |  |  |  | $\begin{aligned} & 1,020 \\ & 1,375 \end{aligned}$ | $782$ | 2,101 | 3,386 | 25, 853 | 3,118 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |
| January. | 169 | 130 | 208 | 112 | 130 | 1, 158 | 1,407 | 827 | 2,496 | 1,587 | 21,743 | 3,088 |
| February | 169 | 131 | 209 | 112 | 122 | 1,600 | 2,005 | 668 | 2,403 | 1,320 | 19,098 3,558 |  |
| March. | 169 | 132 | 212210 | $113$ | 122 |  | 1, 834 | 688 | 2,479 | 3,248 | 25, 492 | 2, 775 |
| April. |  | 139 |  | $113$ |  | $1,098$ | 1,863 | 669 | 2, 760 | 3,016 | 27, 534 | 2, 844 |
|  | 169 | 159 | 208 | 113 | 128 | 1,225 | 1,876 | 713 | 2,370 | 3,008 | 27, 521 | 2,366 |
| June. | 169 | 166 | 198 | 113 | 123 | 1,703 | 2, 099 | 732 | 1,916 | 3,236 | 28, 476 | 2,153 |
| July. | 168 | 162 | 197 | 113 | 123 | 1. 385 | 2,105 | 728 | 1,568 | 2,398 | 25, 810 | 2, 798 |
| August. | 164 | 161 | 193 | 113 | 121 | 2,086 | 2,999 | 803 | 1,618 | 2,447 | 25, 574 | 3,356 |
| September. | 164 | 159 | 192 | 113 | 121 | 1,079 | 2,978 | 789 | 1,971 | 3,774 | 24, 343 | 3,427 |
| October- |  |  |  | 113 | 124 | 1,238 | 3, 024 | 835 | 2, 344 |  | 23, 930 | 3, 367 |
| November. |  |  |  | 113 | 124 | 1,622 | 3,419 | 802 | 2,766 |  | 17, 424 | 4,045 |
| December. |  |  |  | 113 | 124 |  |  |  |  |  | 14,475 | 4,600 |
| 1929 |  |  |  |  |  |  | - |  |  |  |  |  |
| January-----. |  |  |  |  |  |  |  |  |  |  |  |  |
| February .- |  |  |  |  |  |  |  |  |  |  |  |  |
| March |  |  |  |  |  |  |  |  |  |  |  |  |
| April.. |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |
| June -------.... |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

1 Compiled by the Oil, Paint, and Drug Reporter from weekly wholesale quotations of 40 crude botanical drugs, 20 essential oils, and 35 drugs and pharmaceutical chemicals, respectively. ${ }_{2}$ The chemical price indexes from Chemical and Metallurgical Engineering include quotations on 25 chemicals and 15 oils and fats selected on the basis of their importance as representing both qualitatively and quantitatively the principal branches of the chemical industry. These prices are weighted on the basis of total production plus total imports in the year 1923. The figures are averages of weekly prices. A similar index, including 25 of the principal chemicals, oils, and fats used in the new indexes, with yearly data from 1917 to 1923 and monthly data for 1923 and 1924, may be found in the November, 1924, issue (No. 39), p. 105.
3 Compiled by the American Bureau of Metal Statistics. Figures on crude arsenic cover this element in its primary state, while those on refined arsenic cover this commodity as derived from the crude. Stocks are those in producers' hands at the end of the month. Monthly data on refined arsenic from 1823 appeared in the August, 1925 , issue (No. 48), p. 48.
${ }^{4}$ Compiled by the Prepared Roofing Manufacturers' Association until 1926 and prorated to 100 per cent of the industry from reports received from co to 90 per cent of the total machine activity, comprising all types of asphalt-saturated roll roofing whether surfaced or not and all types of asphalt shingles. Monthly data back to 1919 appeared in the September, 1923, issue (No. 25), p. 55. Beginning with 1926 the name of the association was changed to the Asphalt Shingle and Roofing Association, and data are prorated to 100 per cent of the industry.
ine 16 identical mills, until 1925, when 17 firms reported. The felt is made from waste rags and the data are said to represent about 50 per cent of the industry. Data as to receipts of rags and paper and stocks of all kinds appeared in the November, 1924, issue (No. 39) p. 104. A verage prices are also included in the reports of the association.

7 A roof square is equivalent to 100 square feet of covering as measured on the roof.
86 months' average, July to December, inclusive.

Table 60.-CHEMICALS


[^18]Table 61.-COTTONSEED PRODUCTS

| Year and Month | COTRONSEED : |  |  | COTTONSEED OLL |  |  |  |  |  |  | COTTONSEED CAKEAND MEAL |  |  | $\begin{gathered} \text { OLEO- } \\ \text { MARGARINE ? } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Crude ${ }^{1}$ |  | Refined |  |  |  |  |  |  |  |  |  |
|  | Receipts at mills | $\begin{aligned} & \text { Con= } \\ & \text { sump= } \\ & \text { tion } \\ & (\text { crush }) \end{aligned}$ | Stocks at mills. end of month | Produc: tion | Stocks, cnd of month | Pro-duction 1 | Factory consumption |  | Stocks, end of month : |  | Pro-duetion ${ }^{1}$ | Stocks at mills, end of month ${ }^{1}$ |  | Produc. tion | $\begin{aligned} & \text { Con- } \\ & \text { sump- } \\ & \text { tion } \end{aligned}$ |
|  |  |  |  |  |  |  | $\underset{(\text { atly. })^{\text {Total }}}{ }$ | $\operatorname{In}_{\text {oleo. }}$ |  |  |  |  |  |  |  |
|  | Short tons |  |  | Thousands of pounds |  |  |  |  |  | Dolls. perlb. | Short tons |  |  | Thous. of 1bs. |  |
| 1913 mo. av |  |  |  |  |  |  |  |  |  | \$0.072 |  |  | 41,878 | ${ }^{7} 12,102$ | 11, 861 |
| 1914 mo. a |  |  |  |  |  |  |  |  |  | . 066 |  |  | 42, 062 | ${ }^{7} 12,002$ | 11, 788 |
| 1915 mo. av |  |  |  |  |  |  |  |  |  | . 068 |  |  | 60, 786 | ${ }^{7} 12,151$ | 11, 787 |
| 1916 mo. a | ${ }^{8} 788,756$ | ${ }^{8} 463,114$ |  |  |  | ${ }^{8} 170,890$ |  |  | ${ }^{8} 116,385$ | . 106 | ${ }^{8} 93,175$ | 8 148, 815 | 51,330 | ${ }^{7} 12,709$ | 12, 404 |
| 1917 mo . a | 320, 871 | 357, 084 |  |  |  | 99,087 |  |  | 238,965 | . 155 | 176, 746 | 180,400 | 16,800 | 23,937 | 19, 044 |
| 1918 mo. av | 358, 344 | 354, 433 |  |  |  | 101, 457 |  |  | 231, 106 | . 201 | 175, 239 | 86, 007 | 486 | 29, 217 | 26,877 |
| 1919 mo. av | 351, 443 | 392, 739 | ${ }^{8} 457,924$ |  | 898,545 | 97, 483 | 225, 152 |  | 189, 530 | . 239 | 182, 653 | 109, 522 | 26, 172 | 30,733 | 29, 081 |
| 1920 mo. av | 304, 727 | 308, 006 | 259, 179 | 95, 223 | 104, 564 | 81,645 | 169, 225 |  | 271, 659 | . 153 | 137, 015 | 198, 187 | 14, 168 | 29,957 | 30, 014 |
| 1921 mo . | 359, 686 | 335, 846 | 364, 661 | 106, 442 | 94, 699 | 99,659 | 223, 758 | - 1,456 | 253, 101 | . 079 | 149, 183 | 143, 476 | 24, 399 | 17, 840 | 17, 518 |
| 1922 mo. av | 268, 135 | 253, 578 | 315, 672 | 77,880 | 57, 623 | 68,933 | 183, 517 | 1,239 | 188, 105 | . 102 | 114,794 | 133,357 | 18, 707 | 15,380 | 14, 969 |
| 1923 mo. a | 262,946 | 269, 745 | 327,424 | 81, 146 | 61,544 | 75, 878 | 168, 811 | 1,705 | 156,684 | . 113 | 122,901 | 127, 702 | 14,349 | 18,839 | 18,872 |
| 1924 mo. a | 363, 132 | 321, 649 | 435, 341 | 96, 286 | 72,957 | 88,056 | 194, 965 | 1,693 | 152, 824 | . 110 | 147, 394 | 122, 743 | 25,907 | 19,294 | 19, 156 |
| 1925 mo. av | 439, 520 | 423, 562 | 592, 223 | 125,987 | 72,983 | 112, 122 | 290, 279 | 2,029 | 225, 114 | . 108 | 197, 303 | 139,910 | 33, 290 | 19,568 | 19,359 |
| 1926 mo. a | 486, 842 | 495, 473 | 587, 386 | 147, 024 | 75,791 | 123, 079 | 280, 618 | 1,954 | 209, 153 | . 118 | 226, 619 | 226, 264 | 35,088 | 20, 293 | 20,226 |
| 1927 mo. av | 468, 068 | 491, 853 | 594, 639 | 150, 563 | 108, 154 | 132, 741 | 298, 294 | 2,052 | 388, 089 | . 097 | 220, 671 | 142, 217 | 36, 713 | 23, 042 | $22,881$ |
| 1928 mo. av | 410, 835 | 384,411 | 519, 072 | 121,683 | 93,969 | 110, 705 |  | 2,244 | 397, 636 | . 099 | 173,779 | 102, 404 | 24, 209 | 26,374 | 26,456 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January-.- | 581, 856 | 849, 721 | 1,035, 766 | 250, 386 | 175, 190 | 205,929 |  | 2,013 | 395, 022 | . 085 | 377, 42.5 | 147, 144 | 81,099 | 22,748 | 21, 859 |
| February - | 473, 340 | 686, 786 | 818, 715 | 205, 051 | 155, 430 | 201, 217 |  | 2,006 | 460,491 | . 091 | 310, 075 | 152, 147 | 61,775 | 22,345 | 20,356 |
| March. | 358, 989 | 615, 072 | 561, 686 | 186, 914 | 139,879 | 170,868 | 342, 229 | 2,487 | 505,199 | . 095 | 278, 417 | 178, 737 | 23,860 | 25, 484 | 27, 234 |
| April. | 103, 239 | 352,994 | 311, 931 | 106, 887 | 123, 141 | 111,408 |  | 2,173 | 531, 376 | . 091 | 164, 748 | 180, 741 | 8,636 | 23,569 | 23,267 |
| May | 56,611 | 196, 510 | 171, 852 | 62, 182 | 73,029 | 91, 455 |  | 1,974 | 507,762 | . 091 | 84,889 | 153, 853 | 21, 527 | 20,917 | 20,799 |
| June | 55, 562 | 123,977 | 103, 407 | 36, 106 | 33,985 | 70, 257 | 250, 319 | 1,909 | 460, 163 | . 092 | 57, 238 | 101, 748 | 18, 105 | 20,645 | 21, 171 |
| July ....- | 54, 038 | 67, 661 | 89, 784 | 22, 567 | 16,297 | 31, 789 |  | 1,559 | 378, 613 | . 095 | 39, 022 | 63, 632 | 23, 169 | 17, 214 | 16, 727 |
| August. | 275, 505 | 159,856 | 205, 433 | 46, 157 | 25,736 | 33, 253 |  | 1,745 | 272,955 | . 100 | 72, 264 | 44, 142 | 15, 122 | 20,882 | 19,387 |
| September | 1,031, 414 | 585, 275 | 651, 572 | 178,960 | 87,463 | 90, 806 | 348, 821 | 2,113 | 226, 211 | . 107 | 260, 110 | 108, 572 | 26, 306 | 23,495 | 23, 981 |
| October-- | 1,266, 288 | 863, 455 | 1, 054, 405 | 268, 966 | 143, 789 | 194,676 |  | 2, 228 | 310,567 | . 109 | 384, 603 | 108, 610 | 53, 834 | 26,041 | 26, 823 |
| November | 863, 058 | 799, 298 | 1, 118, 165 | 252, 024 | 165, 070 | 205, 856 |  | 2, 260 | 416, 141 | . 106 | 352, 808 | 206, 162 | 63,790 | 25, 913 | 26, 256 |
| December | 496,915 | 601,627 | 1, 012,953 | 190, 554 | 158, 834 | 176, 374 | 251, 805 | 2,154 | 503, 140 | . 100 | 266, 364 | 190, 228 | 43,327 | 27,461 | 26, 717 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January..- | 318, 741 | 570, 704 | 760, 990 | 182, 334 | 170,499 | 143, 230 | ----- | 2, 162 | 539,445 | . 101 | 258, 150 | 176, 416 | 53, 249 | 26, 205 | 27, 729 |
| Fcbruary | 170, 491 | 448, 324 | 483, 157 | 144, 040 | 161, 127 | 138, 895 |  | 2, 114 | 568,867 | . 093 | 201, 609 | 171, 458 | 27,671 | 27, 624 | 26, 327 |
| March | 95, 722 | 322, 955 | 255, 924 | 107, 322 | 124, 029 | 124, 274 | 303,478 | 2,214 | 543,876 | . 096 | 151, 549 | 110,600 | 12,514 | 27, 288 | 27, 437 |
| April. | 17,017 | 165, 097 | 107, 844 | 57,429 | 84,474 | 84, 027 |  | 2,015 | 516, 031 | . 099 | 81,369 | 84, 515 | 8,230 | 24, 291 | 22, 800 |
| May. | 7,846 | 65, 241 | 50,449 | 24,064 | 49,207 | 62,915 |  | 2, 135 | 481, 749 | . 106 | 30,526 | 59,552 | 4,906 | 23,744 | 23, 381 |
| June. | 18,772 | 38,955 | 30, 266 | 13,500 | 34,559 | 22, 274 | 245, 123 | 2, 106 | 415,047 | . 102 | 19,847 | 45,241 | 143 | 23, 738 | 23, 926 |
| July --..--- | 24,936 | 33, 230 | 21,972 | 11,257 | 20,351 | 25,930 |  | 1,867 | 335, 993 | . 101 | 14,065 | 32, 648 | 71 | 21,444 | 20,490 |
| August.--- | 169,498 | 73, 795 | 117, 484 | 20, 863 | 15,346 | 19,677 |  | 2,062 | 236, 200 | . 094 | 34, 760 | 19,794 | 944 | 23, 610 | 24,965 |
| September. | 869, 738 | 420,883 | 566, 530 | 126, 584 | 67,951 | 61,889 | 308, 776 | 2,437 | 159, 629 | . 099 | 185, 723 | 61,350 | 22,013 | 28,446 | 29,002 |
| October | 1, 519, 076 | 903, 031 | 1,182, 175 | 280, 383 | 123, 167 | 204, 255 |  | 2,678 | 220, 449 | . 099 | 405, 150 | .124, 196 | 60, 015 | 30,631 | 30, 137 |
| November. | 1, 010, 791 | 869, 599 | 1,323, 367 | 272, 893 | 143,080 | 223,886 |  | 2, 621 | 322, 857 | . 096 | 387, 160 | 160, 899 | 40,482 | 30,569 | 32, 755 |
| December. $1929$ <br> January | 707, 392 | 701, 116 | 1,328, 703 | 219, 532 | 133,837 | 217, 211 |  | 2, 522 | 431, 694 | . 103 | 315, 442 | 182, 173 | 60, 272 | 28, 899 | 28, 526 |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May.. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^19]Table 62.-FLAXSEED AND PRODUCTS

${ }^{1}$ Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce.
${ }^{2}$ Compiled by the Northwestern Miller. These figures represent a total movement of domestic and bonded grain at Minneapolis and Duluth-Superior. Receipts and shipments are totals of weekly figures with the first and last weeks of each month prorated, while stocks are taken on the day nearest the end of the month. These data displace any previous table on this subject previously shown in the SURVEY OF CURRENT BUSINESS
${ }_{4}$ Does not include mill receipts at Duluth-Superior.
Compiled by the Northwestern Miller and represents the receipts at mills at Duluth-Superior as distinguished from the receipts at public and bonded warehouses.
${ }^{\delta}$ Compiled by the U.S. Department of Commerce, Bureau of the Census, covering practically the entire production, factory stocks, and factory consumption, of fats and original data in tons. Annual figures are quarterly averages. Data prior to 1919 collected by the U. S. Food Administration, and publisled in detail in the supplement to Bulletin 769 of the U.S. Department of Agriculture.
${ }^{3}$ Compiled by the Argentine Ministry of Agriculture, and converted to bushels from original data in metric tons. Monthly data from 1920 appeared in October, 1923 , issue (No. 26), p. 50.
${ }_{7}$ Compiled by the Oil, Paint, and Drug Reporter, representing stocks on the Saturday nearest to the end of the month
8 Compiled by the Minneapolis Chamber of Cominerce.
${ }^{9}$ Compiled by the U. S. Department of Labor, Bureau of Labor Statistics, representing averages of weekly prices at New York. Previous to October, 1925 , prices were quoted per galion and have been recinced to pounds at $71 / 2$ pounds to the gallon. Monthly data from 1909 appeared in the November, 1926 , issue (No. 63 ), p. 26 .
iv 10 months' average.

Table 63.-TOTAL VEGETABLE OILS AND COPRA

| Year and MONTH | TOTAL VEGETABLE OILS |  |  |  |  |  | COPRA |  |  | COCONUT OR COPRA OIL |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pro-duetion ${ }^{1}$ | $\begin{aligned} & \text { Factory } \\ & \text { con- } \\ & \text { tump- } \\ & \text { crude } \end{aligned}$ | Stocks, end of quarter ${ }^{1}$ |  | $\underset{\text { pro }}{\text { Exts }}$ | $\operatorname{Imm}_{\text {ports }}$ | $\operatorname{Im}_{\text {ports }}$ | Fac-torycon-sumption 1 | Stocks, end of quarter | $\operatorname{lm}_{\text {ports }}{ }^{3}$ | Production ${ }^{1}$ |  | Factory consumption |  |  | Stocks, end of quarter ${ }^{1}$ |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Refin | ined |  |  |
|  |  |  | Crude | Refined |  |  |  |  |  |  | Crude | Re- fined | Crude ${ }^{\text {d }}$ | Total ${ }^{1}$ | $\left.\begin{array}{\|c\|} \text { In } \\ \text { oleo- } \\ \text { marga- } \\ \text { rine } \end{array} \right\rvert\,$ | Crude | $\begin{aligned} & \text { Re- } \\ & \text { fned } \end{aligned}$ |
|  | Thousands of pounds |  |  |  |  |  | Short tons |  |  | Thousands of pounds |  |  |  |  |  |  |  |
| 1913 monthly av. |  |  |  |  | 24, 575 | 21,387 | 1,265 |  |  | 6,016 |  |  |  |  |  |  |  |
| 1914 monthly av. |  |  |  |  | 19,547 | 26,441 | 2, 503 |  |  | 4, 834 |  |  |  |  |  |  |  |
| 1915 monthly av.- |  |  |  |  | 31,641 | 20,636 | 4, 512 |  |  | 5, 264 |  |  |  |  |  |  |  |
| 1916 monthly av_- |  |  |  |  | 16, 977 | 30, 133 | 6, 615 |  |  | 5,362 |  |  |  |  |  |  |  |
| 1917 monthly av-. |  |  |  |  | 11,772 | 36,850 | 15, 279 |  |  | 13, 591 |  |  |  |  |  |  |  |
| 1918 monthly av.- |  |  |  |  | 10,437 | 65, 295 | 17, 944 |  |  | 29,674 |  |  |  |  |  |  |  |
| 1919 monthly $\mathrm{ar}_{\text {- }}$ | 578, 478 | 635, 803 | 506, 533 | 283, 591 | 17, 599 | 67,495 | 10,788 | 42, 153 | 22, 184 | 23, 422 | 53,886 | 69, 273 | 105, 564 | 53, 054 |  | 155, 220 | 34,958 |
| 1920 montbly av-- | 474, 776 | 511, 121 | 378,498 | 352, 768 | 16,863 | 71, 390 | 8,966 | 25, 276 | 10,665 | 18, 027 | 32, 805 | 46, 486 | 73, 525 | 59,025 |  | 93, 277 | 28, 664 |
| 1921 monthly $\mathrm{ar}_{-}$-- | 504, 318 | 504, 034 | 332,003 | 263, 529 | 21, 705 | 28,499 | 7,888 | 21, 525 | 5,869 | 15,810 | 28, 299 | 30,669 | 60, 274 | 36,851 | 5 5, 316 | 73, 550 | 19, 051 |
| 1922 monthly av.. | 434, 658 | 459, 447 | 324, 227 | 223, 992 | 6,978 | 53, 298 | 11,206 | 35, 881 | 10,705 | 18,943 | 46,381 | 33, 811 | 75, 721 | 41,270 | 4,480 | 115,996 | 23, 522 |
| 1923 monthly av.. | 505, 647 | 519, 273 | 308, 159 | 197, 604 | 4, 749 | 52, 295 | 13,874 | 46,245 | 6,615 | 15, 157 | 58,980 | 43, 095 | 90, 377 | 52, 985 | 6,326 | 72, 692 | 25, 527 |
| 1924 montbly av-- | 554, 950 | 576, 568 | 276, 696 | 194, 496 | 4, 117 | 67, 641 | 12, 128 | 37,066 | 8,224 | 18, 730 | 47, 839 | 43, 430 | 99, 943 | 52, 725 | 6,938 | 48, 846 | 14, 895 |
| 1925 monthly av-. | 660, 727 | 681, 077 | 343, 732 | 241, 777 | 5, 729 | 55, 368 | 15, 170 | 40, 177 | 10,923 | 19, 431 | 51, 901 | 49, 280 | 96, 364 | 51, 444 | 7,576 | 51, 322 | 13,616 |
| 1926 monthly av.-- | 726, 115 | 766, 873 | 410, 392 | 395, 392 | 3, 736 | 55, 815 | 19,067 | 50, 430 | 18,482 | 20, 428 | 65, 178 | 57, 809 | 108, 122 | 51, 823 | 8,137 | 69,989 | 12,943 |
| 1927 monthly ar.. | 761, 247 | 797, 553 | 470, 330 | 450, 190 | 5, 893 | 58,697 | 18,793 | 54, 202 | 15, 525 | 24, 531 | 70,414 | 62,800 | 133, 289 | 59,557 | 10, 133 | 97,829 | 14,923 |
| 1928 monthly av. |  |  |  |  | 4, 584 | 63, 564 | 23, 023 |  |  | 24, 220 |  |  |  |  | 13,321 |  |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January-... |  |  |  |  | 6,967 | 51,953 | 19,681 |  |  | 31,588 |  |  |  | .... | 9,837 |  |  |
| February |  |  |  |  | 8,435 | 38, 212 | 12,520 |  |  | 16, 153 |  |  |  |  | 9,680 |  |  |
| March. | 960,357 | 974, 980 | 511, 200 | 528, 426 | 6,950 | 48, 137 | 14,747 | 55,890 | 16,755 | 16, 130 | 72,567 | 57, 188 | 129,479 | 58,542 | 11, 169 | 92,660 | 13,226 |
| April |  |  |  |  | 6, 050 | 72, 305 | 19, 107 |  |  | 35, 149 |  |  |  |  | 10,279 |  |  |
| May .-. |  |  |  |  | 8,519 | 74, 369 | 20,418 |  |  | 26,538 |  |  |  |  | 8,734 |  |  |
| June | 487, 201 | 661, 634 | 396, 479 | 487, 136 | 5, 892 | 62, 498 | 14, 162 | 54, 839 | 11, 153 | 21, 273 | 71,032 | 63,839 | 138, 382 | 55, 275 | 8,144 | 108, 434 | 15,545 |
| July... |  |  |  |  | 3,775 | 66,828 | 15,215 |  |  | 16,997 |  |  |  |  | 7, 248 |  |  |
| August_ |  |  |  |  | 1,767 | 50,092 | 19,311 |  |  | 21, 469 |  |  |  |  | 8,840 |  |  |
| September | 524, 720 | 550,497 | 403,776 | 251, 440 | 2, 086 | 55, 985 | 21,694 | 50,945 | 9,340 | 25, 936 | 65, 607 | 57,003 | 131,384 | 54, 822 | 10,436 | 90,679 | 15, 430 |
| October.- |  |  |  |  | 5,307 | 55,387 | 15,660 |  |  | 22,702 |  |  |  |  | 12, 286 |  |  |
| November. |  |  |  |  | 6,484 | 68, 589 | 23,422 |  |  | 30,095 |  |  |  |  | 12,373 |  |  |
| December | 1,072,711 | 1,003,103 | 569,865 | 533, 756 | 8,481 | 60,010 | 29, 582 | 55, 132 | 24,853 | 29,339 | 72,448 | 73, 169 | 133, 912 | 65,590 | 13,549 | 99, 544 | 15, 491 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January |  |  |  |  | 9, 405 | 59,870 | 26,872 |  |  | 32,751 |  |  |  |  | 13, 191 |  |  |
| February |  |  |  |  | 8,939 | 49, 811 | 5,178 |  |  | 22, 271 |  |  |  |  | 14,009 |  |  |
| March | 788, 184 | 844, 976 | 562, 084 | 572, 359 | 9, 406 | 56, 179 | 15, 200 | 62, 844 | 9,744 | 20,889 | 95, 935 | 74, 535 | 148,819 | 69,005 | 13,381 | 99, 053 | 12,853 |
| April |  |  |  |  | 4,618 | 65, 152 | 11,334 |  |  | 23, 112 |  |  |  |  | 12, 284 |  |  |
| May |  |  |  |  | 1,996 | 57,049 | 21,383 |  |  | 15,076 |  |  |  |  | 11,613 |  |  |
| June.- | 390, 484 | 601, 510 | 401, 168 | 443. 100 | 1,652 | 59,951 | 20,488 | 50,308 | 10,071 | 12,671 | 64, 807 | 62, 572 | 135, 639 | 55,917 | $\text { 11, } 791$ | 69,977 | 11, 930 |
| July .- |  |  |  |  | 1, 145 | 53, 379 | 24, 407 |  |  | 19, 629 |  |  |  |  | 10,642 |  |  |
| August. |  |  |  |  | 1,444 | 56,364 | 19,716 |  |  | 12, 581 |  |  |  |  | 11,910 |  |  |
| September-....--- | 426, 346 | 537, 724 | 360, 943 | 185,966 | 3,222 | 80, 914 | 20,754 | 64, 582 | 14, 413 | 34,008 | 82, 269 | 73,389 | 143, 557 | 66, 834 | 14, 452 | 63, 214 | 12,942 |
| October. |  |  |  |  | 3, 681 | 82, 176 | 22, 897 |  |  | 31, 534 |  |  |  |  | 15,714 |  |  |
| November |  |  |  |  | 5,570 | 71, 918 | 30,955 |  |  | 29,672 |  |  |  |  | 16, 026 |  |  |
| December |  |  |  |  | 3, 028 | 70,010 | 57,087 |  |  | 36, 444 |  |  |  |  | 14, 839 |  |  |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April.-.-.--- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Junc. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^20]
## Table 64.-ANIMAL FATS AND OILS ${ }^{1}$


${ }^{1}$ Compiled by the U. S. Department of Commerce, Bureau of the Census, except for shipments of animal glues, and representing practically complete production, factory comsumption, and factory stocks. Quarterly data from 1920 appeared in the August, 1923 , issue (No. 36), p. 115 , except on animal glues and edible gelatin, for which quarterly figures were not begun until 1924 and 1925, respectively. Further details are given in the quarterly press releases.
${ }^{2}$ Compiled by the National Association of Glue Manufacturers from reports of 15 companies estimated to represent 70 per cent of the output of the industry.
Sales between members are excluded to avoid duplication. Further details are given in the association's reports. Sales between members are excluded to avoid duplication. Further details are given in the association's reports.
${ }^{3}$ Average of last 2 quarters of the year.

- Storks on Dec. 31.


## Table 65.-CROP PRODUCTION ${ }^{1}$

[Base year in bold-faced type]

${ }^{1}$ Yearly figures represent the latest revised estimates of total production for the year as reported by the U. S. Department of Agriculture, Bureau of Agricultural Economics. Monthly figures are estimates of the current year's crop as made during the first week of that month. The preliminary estimates made in December of each year are subject to revision in the final estimate made in December of the following year.
and have little effect on the grand totals.

Table 66.-WHEAT FLOUR

| $\begin{aligned} & \text { Year and } \\ & \text { Month } \end{aligned}$ | GRINDINGS OF |  | PRODUCTION |  |  |  |  | $\begin{aligned} & \text { CON- } \\ & \text { SUMP- } \\ & \text { TMON } \end{aligned}$ | STOCKS (end of month) |  | EXPORTS |  | $\underset{\text { PROLCSAL }}{ }{ }^{\text {WHE }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United States ${ }^{2}$ | Canada ${ }^{3}$ | United States |  | $\begin{aligned} & \text { Can- } \\ & \text { ada }^{3} \end{aligned}$ | Grain oftai ${ }^{2}$ | Ca- | Computed 4 | All po-(computed) | $\begin{aligned} & \text { Held } \\ & \text { by } \\ & \text { mills } \\ & \text { (quty.) } \end{aligned}$ | United States ${ }^{5}$ | Can- | $\begin{gathered} \text { Stand- } \\ \text { ard } \\ \text { pat- } \\ \text { ents } \\ \text { Minne- } \\ \text { apolis } \end{gathered}$ | Winterstraights Kansas City |
|  |  |  | Actual ${ }^{2}$ <br> (Census) | Prorated ${ }^{4}$ (Russell) |  |  |  |  |  |  |  |  |  |  |
|  | Thous. of busheis |  | Thousands of barrels |  |  | Thous. of lbs. | Per cent | Thousands of barrels |  |  |  |  | Dollars per barrel |  |
| 1913 monthly av_ |  |  |  |  |  |  |  |  |  |  | 1,023 | 408 | \$4.58 | \$3.85 |
| 1914 monthly av. - |  |  |  | 9, 702 |  |  |  |  |  |  | 1,064 | 389 | 5.10 | 4.13 |
| 1915 monthly av.- |  |  |  | 9,338 |  |  |  |  |  |  | 1,305 | 464 | 6.66 | 5.61 |
| 1916 monthly av.- |  |  |  | 8, 919 |  |  |  |  |  |  | 1, 198 | 660 | 7.26 | 6.09 |
| 1917 monthly av.- |  |  |  | 9,815 |  |  |  |  |  |  | 1,160 | 731 | 11.39 | 10. 55 |
| 1918 monthly av -- |  |  |  | 9,317 |  |  |  |  |  |  | 1,809 | 839 | ${ }^{(1)}$ | 10.30 |
| 1919 monthly av-- |  |  |  | 11, 091 |  |  |  | 8,156 | 9,433 |  | 2, 204 | 839 | 12.00 | 10.70 |
| 1920 monthly av-- |  |  |  | 9, 146 |  |  |  | 8,237 | 8,943 |  | 1,854 | 394 | 12.68 | 11.68 |
| 1921 monthly av-- |  |  |  | 10,102 |  |  |  | 8,569 | 7, 148 |  | 1,400 | 606 | 8.34 | 7.05 |
| 1922 monthly av-- |  | 6,386 |  | 10,466 | 1,421 |  |  | 9,291 | 7, 228 |  | 1,252 | 790 | 7.30 | 6. 14 |
| 1923 monthly av.- | ${ }^{8} 43,872$ | 6,886 | ${ }^{8} 9288$ | 10,480 | 1,559 | ${ }^{8} 762,163$ | ${ }^{-} 58$ | 9, 223 | 7, 701 |  | 1,359 | 928 | 6.38 | 5.36 |
| 1924 monthly av-- | 41, 277 | 7,418 | 8,943 | 11,047 | 1,661 | 734, 824 | 54 | 9, 719 | 7,344 |  | 1,333 | 956 | 7.18 | 5.98 |
| 1925 monthly av.- | 39,836 | 6,940 | 8, 649 | 10,417 | 1,547 | 702, 318 | 52 | 9,492 | 7,046 | ${ }^{9} 3,965$ | 927 | 860 | 8.83 | 7.67 |
| 1926 monthly av.- | 41, 191 | 7, 110 | 8,956 | 10,603 | 1,580 | 723, 384 | 54 | 9, 626 | 7, 197 | 3,891 | 994 | 871 | 8.44 | 7.24 |
| 1927 monthly av.- | 41,738 | 6,732 | 9, 082 | 10,318 | 1,475 | 722, 100 | 54 | 9, 300 | 6,966 | 4,125 | 1,068 | 772 | 7.43 | 6.69 |
| 1928 monthly $\mathrm{av}^{\text {V }}$ - | 43,132 |  | 9,361 |  |  | 752, 936 |  |  |  |  | 896 | 895 | 7.21 | 6.41 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February ..- | 36, 569 | 5,615 | 8,023 | 8,996 | 1,231 | 624, 025 | 53 | 8,572 | 7,059 |  | 874 | 748 | 7.42 | 6.54 |
| March...---.-.-.- | 40,835 | 6, 643 | 8,936 | 10,396 | 1,455 | 700, 540 | 50 | 10,074 | 6, 500 | 4,127 | 867 | 1,029 | 7.33 | 6.58 |
| April.-. | 38, 028 | 5,281 | 8,300 | 9,667 | 1,154 | 659, 198 | 49 | 8,551 | 6,600 |  | 1,016 | 415 | 7.25 | 6.58 |
| May .-- | 38,924 | 6,658 | 8,497 | 9,532 | 1,455 | 672,824 | 52 | 8,733 | 6, 300 |  | 1,099 | 804 | 7.83 | 6.96 |
| June | 39,085 | 6,000 | 8,528 | 9,261 | 1,314 | 675, 003 | 49 | 8,450 | 6,250 | 3,566 | 863 | 847 | 7.91 | 7.06 |
| July | 38,547 | 4,662 | 8,388 | 9, 256 | 1,019 | 668, 232 | 51 | 7,918 | 6,800 |  | 788 | 449 | 7.81 | 6.92 |
| August | 44, 099 | 5,276 | 9,617 | 10,458 | 1,158 | 761, 468 | 54 | 8,906 | 7,300 |  | 1,052 | 514 | 7.60 | 6.77 |
| September--- | 48, 131 | 6,925 | 10,470 | 11,816 | 1,528 | 833, 108 | 64 | 9,346 | 8,490 | 4,267 | 1,281 | 677 | 7.07 | 6. 64 |
| October... | 49,792 | 9,138 | 10,817 | 12,540 | 2, 005 | 866, 428 | 63 | 11,617 | 7,900 |  | 1,513 | 899 | 7.23 | 6.54 |
| November. | 44,882 | 9,656 | 9,735 | 11,337 | 2,120 | 782, 841 | 59 | 11, 111 | 6,800 |  | 1,326 | 1,149 | 7.15 | 6. 58 |
| December | 42,604 | 8,115 | 9,035 | 10,877 | 1,767 | 745, 242 | 53 | 10,451 | 6,100 | 4,540 | 1,126 | 957 | 7.10 | 6. 56 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January... | 42,303 | 7,246 | 9, 132 | 10,502 | 1,579 | 744, 527 | 55 | 8,207 | 7,150 |  | 1,245 | 766 | 7.45 | 6. 70 |
| February | 41, 140 | 6,737 | 8,872 | 10, 107 | 1,464 | 727, 287 | 56 | 9,340 | 6,970 |  | 947 | 768 | 7.37 | 6. 66 |
| March | 44,748 | 7,481 | 9,659 | 10,738 | 1,617 | 790,088 | 54 | 10,499 | 6, 200 | 4, 189 | 1,011 | 1,142 | 7.54 | 6.88 |
| April------------ | 38,986 | 6,058 | 8,400 | 9,661 | 1,314 | 688, 720 | 51 | 8,064 | 6,700 | 1,097 |  | 609 | 8.11 | 7.56 |
| May ............... | 39,910 | 7,138 | 8,604 | 9,960 | 1,541 | 705,781 | 50 | 9, 515 | 6,300 |  | 845 | 886 | 8.49 | 7.63 |
| June...- | 35, 833 | 6,304 | 7, 665 | 8,854 | 1,359 | 636,308 | 44 | 8,269 | 6,200 | 3, 834 | 686 | 716 | 7.95 | 7.18 |
| July ..... | 39,077 | 6,769 | 8,416 | 9,400 | 1,458 | 688,711 | 51 | 7,782 | 7,847 |  | 647 | 782 | 7.36 | 6.44 |
| August | 47, 528 | 7,330 | 10,341 | 11,563 | 1,500 | 817, 831 | 58 | 10,431 | 7,400 |  | 932 | 925 | 6. 62 | 5. 66 |
| September-......- | 47.975 | 8,554 | 10,504 | 11, 197 | 1, 892 | 820, 229 | 66 | 9,077 | 8,500 | 4, 180 | 1,020 | 890 | 6. 59 | 5.65 |
| October--........ | 52,853 | 9,473 | 11,579 | 13,316 | 2, 130 | 910, 238 | 66 | 12,536 | 7,900 |  | 1, 381 | 1,171 | 6.41 | 5. 59 |
| November.- | $\begin{aligned} & 45,247 \\ & 42,181 \end{aligned}$ | 9,690 | 9,901 | 11,200 2,175 <br> .--  |  | $\begin{aligned} & 779,409 \\ & 726,103 \end{aligned}$ | 61 | 10, 401 | 7,500 |  | 1,199 | 1,159 | 6.23 | 5. 53 |
| December. |  | --........ | 9, 255 |  |  | .......-- | -..---.... |  |  | 939 | 923 | 6.13 | 5. 50 |  |
| $\begin{array}{r} 1929 \\ \text { January } \ldots . . \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May..- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June--------------- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Wholesale prices from U. S. Department of Labor, Bureau of Labor Statistics, represent averages of weekly quotations. Monthly figures from 1920 appeared in May,
1922, issue (No. 9), p. 91. factured in 1923, and over 91 per cent in 1925, according to the census of manufactures. This increase has been due partly to the addition from time to time of other firms factured in 1923, and over 91 per cent in 1925, according to the census of manufactures. This increase h
${ }^{3}$ Compiled by the Dominion Bureau of Statistics, Internal Trade Branch, covering merchant mills having a capacity of about 120,000 barrels per month, and also custom mills. The detailed reports of Canadian milling statistics also contain data on other grains as well as a division into eastern and western territory. Monthly data through 1922 appeared in May, 1925 , issue (No. 45), p. 27.
${ }^{4}$ Reported by U. S. Grain Corporation prior to July, 1920, covering practically the entire industry; beginning with July, 1920 , from Russell's Commercial News, the production and stock figures being prorated to 100 per cent from representative current data bearing a known relation to the total figures. Stocks represent four in all positions. Consumption is calculated from production, stocks, exports, and imports. Monthly production from January, 1914, given in October, 1922, issue (No. 14), p. 47.
${ }_{8}$ Exports of flour from U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce.
${ }^{0}$ Exports of flour from Canada from Department of Trade and Commerce, Dominion Bureau of Statistics.
${ }^{7}$ No quotations.

## Table 67.-WHEAT AND CORN



1 Compiled by the U. S. Department of Conmerce, Bureau of the Census, from reports of over 1,000 flour mills representing 88 per cent of the industry. Stocks include wheat owned by millers, whether at mills, in elevators, or in transit. Details by class of elevator are given in press releases.
${ }^{2}$ Data from Bradstreet's representing stocks carried on Saturday nearest end of month at terminals, elevators, warebouses, docks, etc.
8 At principal primary markets, as compiled by the Chicago Board of Trade and reported by the Price Current arain Reporter.
${ }^{4}$ Data from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Monthly figures from 1920 appeared in May, 1922, issue (No. 9), p. 88. Wheat flour has been converted to wheat equivalent at 41/2 bushels to the barrel, while corn meal has been converted at 4 bushels to the barrel.
${ }_{5}$ Exports from Canada from Canadian Department of Trade and Commerce, Dominion Bureau of Statistics.
${ }^{\circ}$ Compiled by the [T. S. Department of Agriculture, Bureau of Agricultural Economics, and represents average prices per bushel for reported cash sales, weighted by the number of cars sold. Monthly data from 1900 appeared in the January, 1929 , issue (No. 89 ) p. 18 .
mprising practically the comprising practically the entire industry. Monthly data from 1920 appeared in June, 1922, issue (No. 10), p. 43.

Table 68.-OTHER GRAINS


1 Receipts of oats compiled by Chicago Board of Trade and reported by Price Current Grain Reporter, while receipts of barley and rye are compiled by the Federal Reserve Board from receipts at 17 interior centers. Monthly data from 1920 appeared in June, 1922, issue (No. 10 ), p. 43.
${ }^{3}$ Data from Rradstreet's, representing stocks carried on Saturday nearest end of month at terminals, elevators, warehouses, docks, etc. Monthly data from 1913 appeared in November, 1925, issue of the SURVEY (No. 51), p. 22.
${ }^{8}$ Data from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Monthly data from 1920 appeared in May, 1922, issue (No. 9), p. 88. Malt is converted at nine-tenths of a bushel to a bushel of barley. Barley flour converted at 5.5 bushels to the barrel, oatmeal at 5.21 bushels to 100 pounds, and rye flour at 6 bushels 0 the barrel. Barley four is included in exports of barley only in 1918 through 1920.
${ }^{4}$ From U. S. Department of Labor, Bureau of Labor Statistics, averages of weekly quotations. Monthly data from 1920 appeared in May, 1922, issue (No. 9), p. 91. Compiled by the Dominion Bureau of Statistics, Internal Trade Branch, covering merchant mills having a capacity of about 120,000 barrels per month, and also custom mills. The detailed reports of Canadian milling statistics also contain data on other grains as well as a division into eastern and western territory. Monthly data from 1922 separating oatmeal and rolled oats appeared in May, 1923 , issue ( No . 45 ), , p .27 .
Monthly data from 1919 appeared in the May, 1926, issue of the SURyEY (No. 57), p. 29.

## Table 69.-RICE, FRUITS, VEGETABLES,. AND HAY

| $\begin{aligned} & \text { Year and } \\ & \text { Monti } \end{aligned}$ | RICE : |  |  |  |  |  |  |  |  | APPLES |  | $\begin{gathered} \text { CIT } \\ \text { RUUS } \\ \text { FRUIT } \end{gathered}$ | $\begin{array}{\|l\|} \text { WHETTE } \\ \text { POTA- } \\ \text { TOESS } \end{array}$ | $\begin{aligned} & \text { ON- } \\ & \text { IONS } \end{aligned}$ | HAY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Paddy at California warehouses |  | Southern paddy | Total movement to mills | Shipments |  | Stocks, end of month | Imports | Exports |  |  |  |  |  |  |
|  | Shipments | Stocks end of month | Receipts at mills |  | Total from mills | New Orleans | Domestic at mills and dealers |  |  | $\begin{gathered} \hline \text { Cold- } \\ \text { stor. } \\ \text { hold- } \\ \text { ings } 1 \\ \text { end } \\ \text { mo. } \\ \hline \end{gathered}$ |  | Carwlot sh | ipments |  | Receipts ${ }^{(3)}$ |
|  | Barrels or sacks of 162 pounds |  |  |  | Pockets of 100 pounds |  |  |  |  | Thous. of bbls. | Number of carloads |  |  |  | Tons |
| 11913 mo.av. |  |  |  |  |  | 169, 718 |  | 191,510 | 26,633 |  |  |  |  |  |  |
| 1914 mo.av. |  |  |  |  |  | 203, 340 |  | 193, 597 | 45,687 |  |  |  |  |  |  |
| 1915 mo. av.- |  |  | 468, 036 |  | 479,349 | 196, 238 | 757, 281 | 212, 140 | 57, 431 |  |  |  |  |  |  |
| 1916 mo. av |  |  | 640, 627 |  | 652,912 | 258, 484 | 1, 021, 642 | 179, 760 | 109, 150 | 1,800 | 6,950 |  | 11, 307 | 1,304 |  |
| 1917 mo. av. |  |  | 591, 159 |  | 642, 918 | 275, 513 | 872, 667 | 222, 059 | 172, 990 | 1,752 | 4,754 |  | 12,055 | 1,596 |  |
| 1918 mo. av. |  |  | 633, 910 |  | 699, 754 | 278, 785 | 682, 788 | 446, 741 | 139, 944 | 1,865 | 5,737 | 3, 417 | 14, 105 | 1,835 | 124, 870 |
| $\begin{aligned} & 1919 \text { mo. av. } \\ & 1920 \text { mo. av. } \end{aligned}$ |  |  | 609, 477 |  | 611, 661 | 254, 825 | 811,658 | 136, 090 | 314, 063 | 1,940 | 6,796 | 5,398 | 15, 005 | 1,740 | 120, 675 |
|  |  |  | 639, 610 |  | 554, 723 | 222, 175 | 1,287, 057 | 109, 706 | 327, 177 | 2,383 | 8,580 | 5,975 | 14, 627 | 2,163 | 119, 102 |
| 1921 mo. av. |  |  | 796, 277 |  | 957, 589 | 318, 147 | 1, 291, 023 | 63, 532 | 500, 049 | 2,344 | 8,042 | 7,500 | 18,206 | 1,932 | 69,948 |
| 1922 mo. av.- |  |  | 837,657 |  | 797, 973 | 275, 358 | 1, 253,992 | 52,946 | 342, 952 | 2, 570 | 7,734 | 5,882 | 19,930 | 2, 163 | 76, 873 |
| 1923 mo. av.. | 1 337, 223 | 41, 172, 184 | 659, 645 | ${ }^{3} 994,249$ | 687, 198 | 223, 472 | 1,343,655 | 40, 105 | 290, 699 | 3,391 | 10,268 | 8,261 | 18,956 | 2, 132 | 76, 493 |
| 1924 mo. av..- | 188, 668 | 386, 862 | 707, 425 | 896, 093 | 691, 376 | 156, 446 | 1, 142,799 | 31,728 | 128, 758 | 3,484 | 9,009 | 8, 562 | 20, 178 | 2, 502 | 80, 006 |
| 1925 mo. av.- | 66,022 | 254, 002 | 494, 586 | 560, 607 | 536, 989 | 133, 944 | 896, 837 | 56, 272 | 54, 583 | 3,320 | 9, 202 | 7,299 | 19,585 | 2,453 | 72,343 |
| 1926 mo. av-- | 211, 855 | 579, 429 | 630, 670 | 842, 525 | 635, 703 | 160, 417 | 1,574,641 | 97, 415 | 97, 910 | 3,867 | 10,380 | 8,095 | 18,895 | 2,685 | 66,371 |
| 1927 mo . av.- | 237, 667 | 977, 250 | $\begin{aligned} & 767,403 \\ & 854,334 \end{aligned}$ | 1,005, 070 | 802, 847 | 175, 293 | 1, 746, 110 | 43,506 | 266, 461 | 3. 289 | 8,209 | 8,833 | 20, 513 | 2, 697 | 58, 001 |
| 1928 mo. av.- |  |  |  |  | 853, 953 | 168, 035 | 1,768, 120 | 27,999 | 316, 142 | 3,598 | 9,675 | 7,848 | 20,886 | 2, 813 | 53,582 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January...- | 325,000 | 2, 267,000 | 817,939 | 1,142,939 | 1, 120, 252 | 249, 175 | 2, 095, 911 | 56,818 | 266,945 | 7,335 | 7,827 | 11,725 | 17,408 | 2,7972,0181 | 78,088 |
| February...- | 395,000 | 1, 872,000 | 648, 369 | 1, 043, 3¢9 | 877, 798 | 177, 220 | 1, 957, 608 | 70,562 | 508, 805 | 5,114 | 7, 883 | 10,855 | 17,314 |  | $56,938$ |
| March...... | $\begin{aligned} & 375,000 \\ & 335,000 \end{aligned}$ | $\begin{aligned} & 1,497,000 \\ & 1,162,000 \end{aligned}$ | 621,153371,901 | $\begin{aligned} & 996,153 \\ & 706,901 \end{aligned}$ | 734,405569,194 | 199,258130,146 | $1,867,788$$1,696,891$ | 60,538 | 442,528455,159 | 3, 1411, 598 | 5,276 | 12,946 | 21,005 | 2,018 1,738 | $\text { 63, } 971$ |
| April-.-- |  |  |  |  |  |  |  | 99,637 |  |  | 3,630 | 12,911 | 19,497 | 2,968 | 52, 716 |
| May | 325, 000 | 837,000 | 396,006429,614 | 721,006 | 700, 427 | 119, 681 | 1,400, 980 | 46,034 | 256, 598 | 534 | 2, 465 | 10,643 | 16,407 | 2, 455 | 50,563 |
| June.- | 385,000152,000 | $\underset{(8)}{452,000}$ |  | 814, 614 | 643, 295 | 119,932 | 1,181, 230 | 16,095 | 219, 649 | None. | 1,202 | 7,559 | 21,785 | 830 | 53,435 |
| July |  |  | 429,614 147,176 | 299,176792,345 | 345, 794 | 96, 074 | 987, 310 | 26, 248 | 74, 519 | None. | 1,731 | 5,781 | 20,709 | 1,8642,313 | $\begin{aligned} & 48,005 \\ & 51,652 \end{aligned}$ |
| August | None. | (8) | 792, 345 |  | 423, 559 | 109, 951 | 1,236, 674 | 19,503 | 112, 232 | 33 | 3,352 | 4,492 | 17,418 |  |  |
| September | 75,000 | ( ( <br> (5) | $\begin{aligned} & 1,167,284 \\ & 1,719,740 \end{aligned}$ | 1,242, 281 | 849,908 | 195, 155 | $\begin{array}{\|l\|} \hline 1,581,097 \\ 2,247,038 \end{array}$ | 27, 217 | $\begin{aligned} & 132,903 \\ & 203,350 \end{aligned}$ | 1,038 | 11,039 | 3,853 | 23, 674 | $4,473$ | $64,440$ |
| October.... | 200,000 |  |  | 1,919,740 | 1, 200, 174 | 239, 453 |  | 21, 888 |  | 5,992 | 31, 612 | 5,618 | 37,410 | $\begin{array}{r}\text { 5,754 } \\ \text { 2,924 } \\ \hline\end{array}$ | $\begin{array}{\|l\|l} 69,233 \\ 55,161 \end{array}$ |
| November.- | 125, 000 |  | $\begin{array}{\|r} 1,266,278 \\ 831,033 \end{array}$ | $\begin{array}{r} 1,391,278 \\ 991,033 \end{array}$ | $\begin{aligned} & 1,162,603 \\ & 1,006,759 \end{aligned}$ | $\begin{aligned} & 232,725 \\ & 234,740 \end{aligned}$ | $\begin{aligned} & 2,409,940 \\ & 2,290,857 \end{aligned}$ | $22,808$ | $\begin{array}{r} 159,871 \\ 267,294 \end{array}$ | $7,831$ | 16,607 | 7,487 | 20,318 |  |  |
| December.-- | 150,000 | 3, 640,000 |  |  |  |  |  | $54,723$ |  | $6,845$ | 5,881 | 12, 123 | 13,206 | 2, 234 | 51,806 |
| $\begin{array}{r} 1928 \\ \text { January. } \end{array}$ | 275,000 | 3, 365,000 | 853, 581 | 1, 128,581 | 1, 118, 120 | 158, 323 | 2, 106, 310 | 52,744 | 469,435 | 5,307 | 5,305 | 9, 057 | 19,665 | 3,114 | 63, 009 |
| February. | 325, 000 | 3, 040,000 | 804, 645 | 1, 129, 645 | 961, 109 | 224, 932 | 2, 038, 415 | 58,820 | 322, 071 | 3, 699 | 4,913 | 8,735 | 22, 258 | 2, 470 | 62,673 |
| March. | 475, 000 | 2,565,000 | 942, 266 | 1, 417, 266 | 905, 678 | 170, 442 | 2, 137, 656 | 39,279 | 288, 771 | 2, 454 | 3, 569 | 10,194 | 23, 582 | 1,743 | 57,567 |
| April. | 300,000 | 2, 265, 000 | 620,032 | 920, 032 | 835,992 | 205, 148 | 1,957, 878 | 34,447 | 392,919 | 1,378 | 2,322 | 8,893 | 16,851 | 2,993 | 46, 628 |
| May... | 400, 000 | 1, 865, 000 | 351,607 | 751,607 | 909, 718 | 203, 261 | 1,455, 366 | 27,452 | 380, 725 | 599 | 1, 803 | 8,350 | 22,955 | 4,133 | 42,955 |
| June. | 220,000 | 1,645,000 | 129, 752 | 349, 752 | 531, 073 | 115, 399 | 1,067, 092 | 14,815 | 291, 287 | None. | 1,040 | 5,134 | 29, 152 | 1,200 | 43, 622 |
| July-.- |  |  | 16,892 |  | 285, 155 | 35, 274 | 829, 608 | 31,688 | 189,472 | None. | 3,369 | 5,070 | 20,972 | 1,652 | 43, 770 |
| August. |  |  | 338, 269 |  | 348, 076 | 96,643 | 695, 660 | 6,026 | 126, 668 | 84 | 4,170 | 4,254 | 15, 538 | 2,561 | 59, 774 |
| September |  |  | 1, 197, 924 |  | 777,583 | 147,464 | 1,108, 564 | 15,412 | 152,906 | 1, 831 | 18,085 | 3,636 | 20, 267 | 6,009 | 64, 511 |
| October... |  |  | 2, 113, 697 |  | 1,245,714 | 202, 697 | 2, 142, 144 | 8,864 | 228, 255 | 8,733 | 44,034 | 5,868 | 28, 921 | 4, 115 | 60,558 |
| November. |  |  | 1,935, 761 |  | 1, 277,631 | 251, 453 | 2, 886, 600 | 16,663 | 408, 917 | 10,392 | 19, 331 | 11,671 | 17, 593 | 2,158 | 54,962 |
| December. |  |  | 947, 584 |  | 1, 053, 585 | 205, 384 | 2, 792, 141 | 29,774 | 542, 283 | 8, 004 | 8, 161 | 13, 314 | 12, 872 | 1,611 | 42,958 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1 Southern receipts, shipments, and stocks at mills from Rice Millers' Association, comprising movement of the whole rice crop except California rice. Data on paday at all California warehouses from Rice Growers" Association of California. The column "Total movement to mills" is a total of the shipments from California warehouses and receipts at Southern mills, thus giving a view of the total movement of domestic rice to the mills. Shipments of rice through New Orleans compiled by New Orleans Board of Trade. Imports and exports from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, data for rough rice being reduced to the equivalent of clean rice at 162 pounds of rough to 100 pounds of clean, as barrels or sacks of 162 pounds are equivalent to clean rice pockets at 100 pounds each.
${ }^{2}$ Data on cold-storage holdings of apples and on car-lot shipments of fruits and vegetables compiled by U. S. Department of Agriculture, Bureau of Agricultural Eco-
nomics. Citrus fruit shipments consists of oranges, lemons, and grapefruit.
${ }_{4}^{3}$ Receipts of hay at 11 principal markets, compiled by prorating weekly reports to the Hay Trade Journal.
4 Average for 10 months, March through December.
s Stocks on hand are negligible, as the crop is not warehoused until the month of December.

Table 70.-LIVESTOCK MOVEMENT ${ }^{1}$


Table 71.-PORK PRODUCTS


1 Production of pork products, including lard, from animals slaughtered under Fedexal inspection reported by the U. S. Department of Agriculture, Bureau of Animal Indusiry, given as total dressed weight, excluding meat from condemned animals. Slaughter of hogs under Federal inspection according to 1919 census figures amounted to 68 per cent of total slaughter. Monthly data from 1920, slightly revised since, given in May, 1922, issue (No. 9), p. 95, including data on exports, storage holdings, and apparent consumption also. The figures shown here for lard revise previous figures through calculation of production from yields by the Bureau of Agricultural Economics.
${ }_{2}$ Exports reported by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. The total includes bacon, ham, shoulders, lard, neutral lard, and canned, fresh, and piekled pork. In the division between lard and other products, neutral lard is included with "Other products."

- Cold-storage holdings, reported by the U. S. Department of Agriculture, Bureau of Agricultural Economics, are distinctly seasonal. Economics from the inspected slaughter, less condemned animals, plus net imports less exports and reexports and the change in cold-storage holdings.
conomics from the inspected slaughter, less condemned animals, plus net imports less exports and reexports and the change in cold-storage holaings.
o Wholesale prices are averages of weekly quotations as compiled by the U. S. Department of Labor, Bureau of Labor Statietics. Monthly data on ham prices from 1919 appeared in September, 1923, issue (No. 25), p. 55.


## Table 72.-OTHER MEATS



[^21]Table 73.-CONDENSED AND EVAPORATED MILK

| $\begin{aligned} & \text { Year and } \\ & \text { MONTH } \end{aligned}$ | PRODUCTION ${ }^{1}$ |  |  |  |  | TOTAL STOCKS 1 (end of month) |  |  |  | UNSOLD STOCKS ${ }^{1}$ (end of month) |  |  |  | WHOLE-PAICEPACES |  | EXPORTS ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Condensed |  | Evaporated |  | Total | Condensed |  | $\|$Evap- <br> orated | Total | Condensed |  | Evap= orated <br> Case goods |  |  | Total |  |  |
|  |  | $\begin{aligned} & \text { Case } \\ & \text { goods } \end{aligned}$ | $\begin{aligned} & \text { Buik } \\ & \text { goods } \end{aligned}$ | Case goods | Buik goods |  | Case goods | Bulk goods |  |  | Case goods | $\begin{aligned} & \text { Bulk } \\ & \text { goods } \end{aligned}$ |  | E |  |  |  |  |
|  | Thousands of pounds |  |  |  |  |  |  |  |  |  |  |  |  | Dolls. percase |  | Thous. of pounds |  |  |
| $1820 \mathrm{mo.av}$ | 131, 501 | 29,008 | 8,979 | 82, 117 | 11,398 | 235, 138 | 56,515 | 19,701 | 158,214 | 123,436 | 29,083 | 11,846 | 81,890 | \$9. 50 | \$6.01 | 34, 256 | 23,094 | 11, 162 |
| 1921 mo. av | 122, 014 | 16, 987 | 8, 365 | 85, 798 | 11, 864 | 173, 926 | 31, 375 | 17,999 | 123, 661 | 116, 560 | 23, 346 | 13, 142 | 79, 207 | 7.06 | 5. 10 | 24, 144 | 7, 825 | 16, 319 |
| 1922 mo. av | 119, 279 | 19, 531 | 8, 862 | 79,457 | 11,430 | 137, 226 | 21, 166 | 9, 875 | 105,872 | 87,342 | 14, 833 | 7, 504 | 64, 711 | 5. 25 | 4. 14 | 15, 625 | 4,734 | 10,891 |
| 1923 mo. av | 147, 907 | 16,567 | 12, 258 | 104, 963 | 14, 119 | 166,022 | 20, 181 | 18,505 | 127,089 | 104, 558 | 13, 429 | 11, 142 | 79,751 | 6. 24 | 4.71 | 16, 189 | 4, 781 | 11,407 |
| 1924 mo . av | 141, 712 | 15, 777 | 12, 001 | 100, 109 | 13, 825 | 186, 925 | 19, 236 | 16, 727 | 150, 693 | 132,998 | 14, 119 | 8,870 | 109,751 | 5.99 | 4.15 | 17, 185 | 5,331 | 11, 854 |
| 1925 mo. av | 146, 488 | 15, 828 | 13,246 | 100, 704 | 16,709 | 161,409 | 29,792 | 7,790 | 123,538 | 113, 769 | 21, 259 | 4,092 | 88, 189 | 5.91 | 4.33 | 12,314 | 3, 559 | 8,755 |
| 1926 mo . av | 144,459 | 13, 020 | 16, 934 | 97, 538 | 16, 986 | 165,414 | 27, 065 | 14,904 | 123, 233 | 120, 933 | 21, 438 | 6, 623 | 92, 706 | 5. 86 | 4.42 | 9,640 | 3,226 | 6, 320 |
| 1927 mo.av | 154, 645 | 13, 582 | 15, 283 | 106, 826 | 18,953 | 181,413 | 28,179 | 13,759 | 139, 135 | 132, 773 | 22,911 | 5,445 | 104, 253 | 5.87 | 4. 57 | 8,855 | 2,907 | 5,671 |
| 1928 mo. av |  |  |  |  |  |  |  |  |  |  |  |  |  | 6.01 | 4. 43 | 9,952 | 3,219 | 6,399 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1926 | 207, 243 | 18,282 | 26, 299 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May...... |  |  |  | 139, 251 | 23,411 | 153, 710 | $\begin{aligned} & 26,068 \\ & 36,734 \end{aligned}$ | $\begin{aligned} & 15,701 \\ & 21,392 \end{aligned}$ | $\begin{aligned} & 111,653 \\ & 169.533 \end{aligned}$ | $\begin{aligned} & 107,291 \\ & 167,693 \end{aligned}$ | $\begin{aligned} & 20,439 \\ & 30,943 \end{aligned}$ | $\begin{array}{r} 7,073 \\ 10,083 \end{array}$ | 79,518126.383 | 5. 86 | 4.34 | 9, 776 | 2,813 | 6,963 |
| June. | 233, 143 | 17,618 | 30,040 | 159, 995 | 25, 490 | 228, 156 |  |  |  |  |  |  |  | 5.86 | 4. 33 | 10, 825 | 3,472 | 7, 353 |
| July | 187,556139,361 | 13,002 | 20,309 | 125, 185 | 29,060 | 242, 102 | 37, 285 | 23, 310 | 181, 287 | 179, 708 | 31, 931 | 9, 138 | 138,475 | 5.87 | 4.33 | 9, 160 | 3, 537 | 5,623 |
| August....- |  | 11, 168 | 14, 664 | 90,414 | 23, 115 | 241, 547 | 40, 821 | 23, 136 | 177, 323 | 174, 441 | 32,545 | 9, 148 | 132, 531 | 5. 75 | 4.36 | 7,992 | 2, 139 | 5,657 |
| September |  | 10,655 | 14, 222 | 77, 512 | 16,868 | 207, 422 | 34, 106 | 21,478 | 151,687 | 150, 738 | 26, 711 | 8, 203 | 115, 700 | 5. 76 | 4.45 | 8,481 | 3,001 | 5, 191 |
| October-.-- | $109,476$ |  | 12, 172 | 71, 940 | 14, 493 | 174, 909 | 27,945 | 18,438 | 128, 346 | 135, 412 | 23, 010 | 7, 869 | 104, 385 | 5.85 | 4.41 | 7, 349 | 2, 521 | 4, 657 |
| November | $\begin{aligned} & 89,062 \\ & 98,774 \end{aligned}$ | $10,639$$12,186$ | 8, 220 | 58,827 | 11, 376 | 137, 532 | 23, 935 | 13, 738 | 99,685 | 100, 758 | 18,628 | 5,016 | 76, 965 | 5.85 | 4. 42 | 9, 268 | 2, 939 | 6, 115 |
| December |  |  | 8,798 | 67,639 | 10,151 | 101, 320 | 19,759 | 10, C03 | 71,355 | 63, 896 | 14,399 | 4,072 | 45,235 | 5. 68 | 4.48 | 10,213 | 3,454 | 6,499 |
| 1927 | $\begin{array}{r} 98,774 \\ 117,750 \end{array}$ | 12, 186 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January--- |  | 13,336 | 11,819 | 81, 621 | 10,974 | 80,228 | 16,594 | 8,303 | 54, 888 | 34, 182 | 11,296 | 3,388 | 19,084 | 5. 63 | 4. 50 | 8,516 | 2, 694 | 5,554 |
| February - | $\begin{aligned} & 119,768 \\ & 153,897 \end{aligned}$ | 9,715 | 11,976 | 85, 539 | 12,538 | 70,327 | 12,418 | 7,782 | 49, 940 | 20, 366 | 7,054 | 3,619 | 10,150 | 5,72 | 4. 50 | 7,439 | 2, 853 | 4,331 |
| March ...- |  | $\begin{array}{\|l\|l\|l\|} \hline 11,733 \\ 17,033 \end{array}$ | 14, 653 | 111, 172 | 16, 339 | 66, 610 | 10,935 | 7,812 | 47, 476 | 18,828 | 5,378 | 3,881 | 9,346 | 5.75 | 4. 50 | 9,378 | 2,974 | 6,232 |
| April. | $\begin{aligned} & 153,897 \\ & 183,352 \end{aligned}$ |  | 17, 688 | 128, 504 | 20, 127 | 83,104 | 14,608 | 9,721 | 58,455 | 20,750 | 8,317 | 3, 689 | 8,531 | 5.84 | 4.58 | 10, 150 | 2,761 | 7,054 |
| May | $\begin{aligned} & 241,763 \\ & 258,890 \end{aligned}$ | 20, 031 | 25,569 | 169, 338 | 26,825 | 149, 260 | 26, 709 | 15,392 | 106,636 | 76,063 | 21, 706 | 5,220 | 48,947 | 5. 93 | 4.63 | 11,334 | 3,642 | 7,305 |
| June.....-- |  | $20,038$ | 27, 721 | 181, 079 | 30, 052 | 230, 321 | 41,028 | 20, 223 | 168, 599 | 171,446 | 37, 205 | 7,573 | 126. 534 | 5. 90 | 4. 60 | 12,368 | 3, 190 | 8,926 |
| July - | $\left\|\begin{array}{l} 258,890 \\ 200,076 \\ 162,875 \end{array}\right\|$ | $\begin{aligned} & 14,577 \\ & 12,758 \end{aligned}$ | 16, 974 | 139, 687 | 28,838 | 277, 379 | 44,028 | 19,883 | 213,068 | 222, 774 | 38, 140 | 7,719 | 176, 763 | 5.83 | 4. 58 | 9, 283 | 2, 716 | 6,326 |
| August.. |  |  | 14, 874 | 111, 660 | 23, 583 | 300, 828 | 43, 559 | 20,796 | 236, 173 | 249, 728 | 38, 325 | 7,600 | 203, 643 | 5. 83 | 4. 58 | 8,009 | 3, 532 | 4,240 |
| September | 117, 792 | 9,294 | 11, 867 | 76,206 | 20,427 | 280, 734 | 38,357 | 19,566 | 222, 482 | 237.903 | 33, 004 | 6, 500 | 198, 281 | 6.00 | 4. 58 | 6,434 | 2,439 | 3,756 |
| October--- | $\begin{array}{r} 110,967 \\ 89,150 \end{array}$ | 12,067 | 10,903 | 73, 341 | 14, 656 | 256, 650 | 35, 932 | 14,956 | 205, 587 | 219, 790 | 30,535 | 5,970 | 183, 239 | 6. 00 | 4. 58 | 8,196 | 2,760 | 5,130 |
| November- |  | $\begin{aligned} & 10,763 \\ & 11,633 \end{aligned}$ | 8,677 | 58, 172 | 11, 538 | 207, 892 | 29, 155 | 12,362 | 166, 187 | 179,904 | 24,919 | 5,521 | 149,397 | 6.02 | 4. 59 | 7,941 | 2, 981 | 4,662 |
| December- | 99,440 |  | 10,669 | 65, 596 | 11, 542 | 173, 624 | 24, 820 | 8,310 | 140, 133 | 140, 944 | 19, 048 | 4, 656 | 117, 115 | c. 00 | 4. 57 | 7, 213 | 2,345 | 4,532 |
| $\begin{array}{c\|} 1928 \\ \text { January } . .- \end{array}$ |  | $11,633$ | 13,231 | 81, 599 | 13,015 | 147, 774 | 20,618 | 8, 457 | 118, 444 | 115, 623 | 15, 151 | 5,216 | 95, 120 | 6. 00 | 4.58 | 11,414 | 3,819 | 7, 360 |
| February - | 119,410 <br> 128,694 | 12, 368 | 13, 016 | 89,440 | 13, 872 | 119, 314 | 17,924 | 7,635 | 93,528 | 83,387 | 12,534 | 5,230 | 65, 497 | 5.98 | 4.46 | 10, 504 | 2, 645 | 7, 531 |
| March...- | $\begin{aligned} & 128,694 \\ & 152,238 \\ & \hline \end{aligned}$ | $\begin{aligned} & 14,476 \\ & 13,991 \end{aligned}$ | 16, 760 | 103, 725 | 17, 277 | 100, 299 | 15,845 | 8,299 | 75, 949 | 73, 238 | 10, 868 | 6,034 | 56, 201 | 5. 84 | 4.23 | 13, 715 | 4,707 | 8,742 |
| April_-... | $\begin{aligned} & 178,725 \\ & \\ & 220,328 \\ & 252,493 \end{aligned}$ |  | 17,801 | 128, 688 | 18, 245 | 124, 863 . | 18,496 | 11,757 | 94,338 | 91,928 | 13, 169 | 6,453 | 72, 121 | 5.83 | 4.23 | 9,424 | 2,700 | 6,421 |
| May. |  | 13, 133 <br> 11, 764 | 24,804 | 158, 066 | 24,325 | 158, 648 | 22,396 | 16.716 | 119, 210 | 122,875 | 18, 079 | 8,400 | 95, 386 | 5.83 | 4.28 | 11,357 | 3, 279 | 7,806 |
| June. |  |  | 30, 213 | 183, 728 | 26,788 | 244, 473 | 31, 087 | 25, 255 | 187, 789 | 190, 611 | 25, 081 | 13,368 | 151,769 | 5. 83 | 4. 28 | 8,742 | 3, 054 | 5,464 |
| July | ---..... |  |  |  |  | 232, 131 | 30,397 | 20,794 | 180, 377 | 157, 329 | 23, 594 | 8,611 | 124,738 | 5.97 | 4.34 | 8,550 | 3, 011 | 5,180 |
| August.... | ----...-- | --.-...- |  |  |  | 211, 841 | 30, 542 | 19,332 | 161, 679 | 134, 487 | 24, 159 | 8,367 | 101, 819 | 6. 18 | 4. 45 | 10,114 | 3,246 | 6,343 |
| September |  |  |  |  |  | 211,413 | 27,837 | 17,604 | 165, 682 | 162, 670 | 21,821 | 6, 351 | 134, 259 | 6. 18 | 4. 58 | 9,311 | 3,405 | 5,583 |
| October .-. |  | --------------- |  |  |  | 203, 605 | 23,949 | 14, 429 | 164,989 | 161,584 | 17,818 | 4,840 | 138,808 | 6. 18 | 4.58 | 8,108 | 2, 531 | 5, 264 |
| Novernber- |  |  |  |  |  | 191, 879 | 18, 864 | 14, 634 | 158, 217 | 153, 435 | 13,588 | 3,538 | 136, 228 | 6.18 | 4. 58 | 10, 113 | 3,335 | 6, 276 |
| December- |  | ---------- |  |  |  |  |  |  |  |  |  |  |  | 6.18 | 4.58 | 8,077 | 2,892 | 4,821 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January ... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April_...-. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June.....-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^22]Table 74.-DAIRY PRODUCTS, POULTRY AND EGGS

${ }^{1}$ Receipts of milk, excluding cream, in the metropolitan area around New York City, including many large cities in New Jersey, from the Milk Reporter. Monthly data from 1920 appe (No. 11), p. 46. data from 1920 appeared in the July, 1922, issue (No. 11), p. 46. ${ }^{4}{ }^{4}$ Data from U. S. Treasury Department, Bureau of Internal Revenue, showing consumption of milk in the manufacture of oloomargarine. Monthly data from July,
 Monthly datia from 1920 on production of powdered milk appeared in the October, 1925, issue (No. 50), p. 26.

6 Compiled by the American Dry Milk Institute from 31 identical firms which in 1924 produced 61 per cent of the totals as compiled by ths Department of Agriculture. Montily data from 1924 appeared in the November, 1926, issue (No. 63), p. 19. Data on stocks held by 21 institute members appeared in October, 1925, issue (No. 50 ), 13. 26. The association reports also include production and unit prices of members.
milk as of the end of the month and include both case and bulk goods, the former being comparatively small Monthly data from whole milk, skim milk, and nnskimmed goods, are giveu in the November, 1925, issue (No. 51 ), p. 23.

Compiled by U. S. Department of Commerce, Bureau of Foreign and Domestic Commetce.
9 Receipts at the markets of Boston, New York, Philadelphia, Chicigo, and San Francisco, compiled by the U. S. Department of Agriculture, Bureau of Agricultural Economics, are totals of weekly figures with overlapping weeks prorated. Monthly data from 1920 appeared in June, 1922, issue (No. 10 ), p. 43.

10 Cold-storate holdings at principal warehouses compiled by U. S. Department of Agriculture, Bureau of Agricultural Economics. Poultry holdings are given as of the end of tbe month. Monthly data from 1920 on ponltry appeared in June, 1922, issue (No. 10), p. 43.
in Cold-storage holdings at end of month reported by U.S. Department of Agriculture, Bureau of Agricultural Economics, representing about 98 per cent of stocks held in public and private cold- storage warehouses. Monthly data on storage holdings of frozen eggs since 1916 were given in the May, 1927, issue (No. 69 ), p. 22 .

1 case of eggs equals 30 dozen, or about 45 pounds net.
${ }^{1 s} 6$-month period, July to December, inclusive.

Table 75.-BUTTER AND CHEESE

${ }^{1}$ Data from U.S. Department of Agriculture, Bureau of Agricultural Economics, representing practically complete factory production. Data on American cheese are reported only every 3 months. Total production figures covering cheese, which include cottage, pot, and bakers cheese, are shown monthly from 1920 and American cheese production from 1917 in the July, 1926, issue (No. 59), p. 23.
${ }^{2}$ Compiled by U. S. Department of Agriculture, Bureau of Agricultural Economics, representing the disappearance of butter or cheese into trade. These data are computed from production (comprising actual factory data plus allowance for production on farms), imports, and the difference in cold-storage holdings. Monthly data on butter from 1917 appeared in December, 1925 , issue (No. 52), p. 21, and on cheese from 1920, in the May, 1926, issue (No. 57), p. 29.
a Compiled by U. S. Department of Agriculture, Bureau of Agricultural Economics, covering Boston, New York, Philadelphia, Chicago, and San Francisco, and representing total of weekly figures with first and last weeks of month prorated.
4 Cold-storage holdings at end of month reported by $U$. $S$. Department of Agriculture, Bureau of Agricultural Economics, representing about 98 per cent of stocks held
in public and private cold-storage warehouses. Monthly data on total cheese holdings from 1917 appeared in the July, 1926 , issue (No. 59 ), p. 23 . in public and private cold-storage warehouses. Monthly data on total cheese holdings from 1917 appeared in the July, 1926, issue (No. 59), p. 23 .
${ }^{5}$ A verage of daily wholesale prices of creamery butter, 92 score at New York City, as compiled by U. S. Department of Agriculture, Bureau of Agricultural Economics. Monthly data since January, 1910, were given in the April, 1927 , issue (No. 68), p. 23.
${ }^{6}$ Imports and exports for the United States from the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, representing all classes of cheese. Monthly data from 1909 appeared in the July, 1926, issue (No. 59), p. 23.
(heminion Buteau of Statistics. Yearly figures through 1925 represent monthly averages for the Canadian fiscal year ended March 31 of the year indicated.
${ }^{8}$ American cheese figures are for whole milk cheese only and do not include cheese made from part skim milk, these latter usually totaling from 1 to 2 per cent of the ${ }_{9}$ Average of daily wholesale prices of American cheese, No. 1, fresh, at New York City, as compiled by the U. S. Department of Agriculture, Bureau of Agricultural Economics. Monthly data since January, 1910, were given in the April, 1927, issue (No. 68), p. 23.
${ }^{10}$ Five months' average, August to December, inclusive.

Table 76.-SUGAR

${ }^{1}$ Imports of raw cane sugar and exports of refined from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Imports from foreign countries are mostiy from Cuba and Central America, while sugar from the Philippine Islands is also included in the imports from foreign countries, not in the data from noncontiguous territories, including Hawaii and Porto Rico. The original data in pounds have been converted into long tons for comparison with the other data.
${ }_{2}$ Wholesale price of raw sugar, duty paid, wholesale and retail prices of granulated sugar in New York, and retail priee index for 51 cities from U.S. Department of Labor, Bureau of Labor Statistics, representing averages of weekly prices, except retail prices which are as of the 15 th of the month.
3 Statistics of receipts at Cuban ports, exports from Cuba, and stocks at Cuban ports from Statistical Sugar Trade Journal. Monthly data from 1920 appeared in the
une, 192, issue of the Survey (No. 10), p. 49 . June, 1922, issue of the Survey (No. 10), p. 49.
${ }^{1}$ Meltings of raw sugar by refiners compiled by the Statistical Sugar Trade Journal represent operations at the eight ports of Boston, New York, Philadelphia, Baltimore, Savannah, New Orleans, Galveston, and San Francisco, the Baltimore figures being added in 1921 upon completion of refinery in that city. The figures from the four North Atlantic ports are actual monthly totals, those for San Francisco, Savannah, and Galveston are prorated from weekly totals; while the New Orleans figures are prorated from partly estimated figures. Stocks represent the amount of raw sugar in the hands of refiners and of certain importers (the bulk of stocks being in refiners of the last day of the month. Details of meltings and stocks, by ports, are given in the Statistical Sugar Trade Journal; also classification as between importers' and refiners' of the la
${ }_{6}{ }^{\circ}$ Compiled by the Federal Reserve Banic of Atlanta from reports of refiners at Savannah and New Orleans. Monthly data from 1921 appeared in the February, 1928, issue (No. 78), p. 23.
${ }_{\theta}$ Average for 9 months, April to December, inclusive.

Table 77.-COFFEE, TEA, COCOA, AND FISH

${ }^{1}$ Data on coffee, except imports and prices, from the New York Cofjee and Sugar Exchange, Inc. Brazilian figures cover the ports of Rio, Santos, Bahia, Victoria, Pernambuco, and Paranagua, Victoria being added in 1925 and Pernambuco and Paranagua at the end of 1927, these two ports being of small importance in coffee movement prior to those dates. The world visible supply consists of stocks in Europe, United States, Brazil, and afloat, all of which are shown separately in the Exchange's monthly report. Monthly data from 1913 appeared in the April, 1928, issue (No. 80), p. 23, the addition of Pernambuco figures since publication of that issue making slight revision beginning with July, 1927. inal data in pounds, taking 132 pounds to the bag. to 1918 the priled by the U. S. Department of Labor, Bureau of Labor Statistic 1.18 the prices are av $B$. the last day of the month. Monthly data from 1913 appeared in the November, 1926 , issue (No. 63 ), p. 26.
spot price compiled by George C. Lee the New York Cocoa Exchange. Shipments represent the amount of raw cocoa shipped from the Gold Coast and Nigeria, Africa. ${ }_{0}$ Cold-storage holdings of fish Lee Co., New York, and represents the average monthly spot price of Accra cocoa in New York.
feach month. Monthly datt from principal warehouses, compiled by the U. S. Department of Agriculture, Bureau of Agricultural Economics, and are given as the 15th 7 Fish catch, representing ling 1916 appeared in the July, 1928 , issue (No. 83), p. 19.
Commerce, Bureau of Fisheries. Details by ports are given in monthly statements. representing practically complete pack of United States, including Alaska, reported by pmall rail shipments), San Francisco, and in bond through Prince Rupert, B. C.,
9 Canadian exports of canned salmon from Department of Trade and Commerce, Dominion Burcau of Statistics. Yearly flgures represent monthly averages for the Canadian fiscal year ending Mar. 31 of the year indicated
${ }^{10}$ Excluding Portland and Seattle
117 months' average, January to July, inclusive.
${ }^{12} 6$ months' average, July to December, inclusive. ${ }^{13} 3$ months' average, October to December, inclusize.

Table 78.-TOBACCO


[^23]Table 79.-OCEAN TRANSPORTATION

${ }_{2}^{1}$ Tonnage of vessels cleared in foreign trade from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce.
${ }^{2}$ Vessels lost and abandoned, representing all classes of American vessels, from U. S. Department of Commerce, Bureau of Navigation, given for quarter ending in month stated, yearly figures representing quarterly averages. Scrapped vessels are included under abandoned vessels.
${ }^{3}$ From the U. S. Department of Commerce, Bureau of Navigation. The total completed includes ocean-going, lake, and river vessels built and officially numbered, including vessels of the U. S. Shipping Board and private American owners, but not vessels built for foreign owners. The column on merchant vessels under construction includes all kinds of ships except Government vessels building or under construction at the end of the month. Monthly data from 1915 given in the January, 1924, issue of the SURVEY (No. 29), p. 49.
'Quarterly data on world ship construction compiled by Lloyds', covering all vessels of 100 tons and over; from 1914 to 1921 figures for Germany are not included.

- Compiled by U. S. Department of Labor, Bureau of Immigration. Aliens admitted and departed include legal immigration and emigration but not nonimmigrants.

Compiled by U.S. Department of State, Division of Passport Control and excludes passports issued to Government officials
${ }^{7}$ Compiled by U. S. Department of Commerce, Bureau of Foreign and Domestic commerce, covering six tramp-ship commodities over 12 world-wide trade routes the entire cubical capacity of the vessel, including crew and engine space.

## Table 80.-RIVER AND CANAL CARGO TRAFFIC



[^24]Table 81.--RAILWAY, PULLMAN, AND EXPRESS OPERATIONS

${ }^{1}$ Data from the Interstate Commerce Commizsion, covering Class I railroads, those having annual operating revenues in excess of $\$ 1,000,000$, which comprise 193 railroads
with about 98 per cent of the total operating revenues of all railroads.
a Net railway operating income, from the Interstate Commerce Commision reports on Class I railroads, includes net operating revenue (equal to the differance between total operating rovenue and total operating espenses), from which there have been deducted rallway tax accruals, uncollectible railway revenues, equipment, and joint facility rents.
rannual figures, from Department of Trade and Commerce, cover all railroads in Canada, averaged for the fiscal year ending March 31 of the year indicated; monthly reports cover all railroads with annual operating revenues of 8500,000 or over which includes 98 per cent of the total revenues of all roads. Monthly data from 1920 on net operating revenue and on freight carried appeared in July, 1922, issue (No. 11), p. 45.
' Data on the United States from the Bureau of Railway Economics, excep
mile operations from 1916 appeared in December, 1923 , issue (No. 28), p .52.
${ }_{s}$ operations rrom passenger traftic furnished by The Pullman Company; revenues from its reports to the Interstate Commerce Commission.
0 Visitors to national parks from $U$. $S$. Department of Interior as reported by superintendents of the following 15 parks: Grand Canyon and Casa Grande, Ariz. (the latter a monument rather than a park); Hot Springs, Ark.; General Grant, Sequoia, and Y Osemite, Califi; Rocky Mountain, Colo, Galacier, Mont.; Platt, Ok, Ala.; Crater Laker
 ${ }^{7}$ Reports to the Interstate Commerce Commission of the American Railway Express Co., to which are added reports of the Southeastern Express Co. from the time of its organization in May, 1921, thus presenting practically complete reports of the express business on railroads. Operating income includes net operating revenues (equal to the difference between total operating revenues and operating expenses) from which have been deducted noncollectible revenue from transportation and express tares.

Table 82.-LOCOMOTIVES

${ }^{1}$ Locomotives owned, retired, and building, and in bad order, both passenger and freight, on Class I railroads, from American Railway Association, Car Service Division. Data for 1919 on bad-order locomotives from U. S. Railroad Administration
${ }_{2}$ Data from the Railway Age covering the principal transactions, each month's figures being totals of those given in the weekly issues of the publication appearing during the month, and prorated up to the annual totals made from special inquiries. The percentage used in prorating the 1924 data was 91 per cent.
${ }^{3}$ Reported direct to the U. S. Department of Commerce, Bureau of the Census, by principal locomotive manufacturing companies, exclusive of railroads making locomotives in their own shops. Both steam and electric railroad locomotives are included in these data, the totals including foreign as well as domestic business. Monthly data from 1020 showing both shipments and unfilled orders for domestic and foreign business classifed between steam and clectric, appeared in the May, 1926, issue (No. 67), p. 25.
, Data from the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Monthly data from 1922 appeared in April, 1925, issue (No. 44 ), pp. 27 and 28 and annual averages prior to 1919 in the August, 1927, issue (No. 72), p. 99.
Press Compiled from quarterly reports to the $U$. S. Department of Comnmerce, Bureau of the Census, from nine manufacturers comprising practically the entire industry.
Press releases furnish details as to type, i. e., trolley or storage battery. Data for 1923 not available by quarters, but annual figures are reduced to quarterly averages.
${ }^{6} 10$ months' average, March to December, inclusive.
${ }^{7} 8$ months' average, 'May to December, inclusive.
84 months' average, September to December, inclusive.

- Quarterly average.

Table 83.-FREIGHT-CAR MOVEMENT


[^25] number of freight cars which are idle (surplus) and also the number of requests for cars which can not be filled (shortage). The difference between these two figures represents the net freight-car situation for the country as a whole. The car shortages can not ordinarily be filled from the idle cars because of the uneven geographical distribution of the latter.
${ }^{2}$ From reports of the American Railway Association, Car Service Division. These figures are now put on a monthly basis frorn weekly reports, consisting of exactly four weeks for each month prior to 1923 , except in March, June, September, and December, which cover five weeks each year. From 1923 through 1925 , the five-week months Digized for FRAcredanuary, May, August, and October. Be

## Table 84.-RAILWAY CAR SUPPLY



[^26]
## Table 85.-PUBLIC UTILITIES



1 Telephone earnings are the combined reports of 12 largest telephone companies, reduced by consolidation from 13 companies, and comprising about 83 per cent of the total operating revenues of telephone companies with annual operating revenues over $\$ 250,000$, and telegraph earnings are the combined reports of the Western Union and Postal Telegraph Cos., as reported to the Interstate Commerce Commission.
${ }_{3}$ Compiled by the $U$. S. Department of Commerce, Bureau of the Census, from reports of 95 public-utility companies or systems operating gas, electric light, heat, power, traction, and water services and comprising practically all of the important organizations in the United States, exclusive of telephone and telegraph companies. While the above figures are not complete they are believed to represent typical conditions within the public-utility field. Gross earnings consist, in general, of gross operating do not cover exactly the same subsidiaries, owing to acquisitions, consolidations, etc., but those differences are not believed to be great in the aggregate. Monthly data from 1920 appeared in the December, 1927, issue (No. 76), p. 48
${ }^{3}$ Gross revenue received from the sale of electrical energy as reported by the Electrical World represents the total receipts from the sale of electricity by companies with about 83 per cent of the installed generator rating of the country, computed to 100 per cent of the industry on the basis of the percentage which the reporting companies bear to the installed central-station rating of the country. Companies reporting sales are not identical with those reporting production of power. These figures cover light and power companies only, excluding electric railways which do not sell their current. Monthly data from 1913 appeared in July, 1923, issue of SURVEY (No. 23), p. 45.

Compiled by the V.S. Department of the Interior, Geological Survey. Production in central stations up to March, 192s, was segregated by the U. S. Departmeni of Commerce, Bureau of the Census, from the original records of reporting firms on file with the Geological Survey, from that produced in connection with street railways, manulacturing plants, and reclamation projects. Details, by months, since 1920 for central stations appeared in the June, 1928, issue of the SURVEY (No. 82), P. 22, While for the other items details appeared in the March, 1925, issue (No. 43), p. 28. Beginning with March, 1928, this segregation has been carried on by the Geolofical surtey. Monthly data from 1919 on total production and segregation by water power and fuels appeared in the November, 1927 , issue (No. 75), p. 28.

Compiled by the Department of Trade and Commerce, Dominion Bureau of Statistics, covering all the large central electric stations in Canada. which in 1925 produced 88 per cent of all stations in Canada. These data do not include the output of pulp and paper mills and other plants genersting electricity only for their own use. Monthly data from 1925, including data on electric power generated by fuels, appeared in the April, 1928, issue (No. 80), p. 22.

- Data compiled by the American Electric Raileay Association from reports of 212 companies operating 24,187 miles of revenue single track and 3,090 miles of bus routes and carrying about 68 per cent of the total revenue passengers carried by eloctric railways.

Table 86.-CONSUMPTION OF ELECTRICAL ENERGY ${ }^{1}$


1 Data compiled by the Electrical World and represent the utilization of electrical energy by 3,600 identical concerns depending at all times upon electrical energy for power and do not show the expansion of the market for central power with new customers. All figures are adjusted to the basis of 26 working days to the month.
7 months' average.

Table 87.-EMPLOYMENT-INDUSTRIAL, RAILWAY, MINING, AND FEDERAL
[Base year in bold-faced type]

${ }^{1}$ Compiled by the U. S. Department of Labor, Bureau of Labor Statistics, and represent weighted indexes based upon the number of wage earners in the respective industries in 1919. The original data are teken from the pay roll nearest to the midde of the month as reported by more than 9,000 firms, employing almost $3,000,000$ workers. Details of this table, together with the method of construction, may be found in the April, 1924, Monthly Labor Review, pp. 129-132, while current details are iven roonthly in Employment in Selected Indusiries as issued by the Bureau of Labor stazistics
the officials included in total on pay roll Mondthly data from 1920 given in January, 1923 , issue ( No Commerce Commission. The computation of average wages excludes
 in each month
"Compiled by the U. S. Civil Service Commission, giving number of civilian employees carried on rolls at end of each month. Details by departments, with data on additions and separations, are given in the monthly reports.
© Compiled by the Ohio State University, Bureau of Business Research, based on reports from firms engaged in general contracting throughout Ohio. Employment in the general contracting industry in Ohio follows very closely the trend in the entire construction industry in the State. Wage earners in this report include mechanics, Monthly data from 1923, revising previous flgures, are given on p, 48 of the October 1928 issue (No. 86 ). The bureau also issues an index which eliminates seasonal variations.
${ }^{6}$ Includes stamped and enameled ware and brass, bronze, and copper products.
7 Average for last 7 months of year, earlier data not available.
9 months' average, April to December, inclusive.
${ }_{10}{ }^{9}$ Average of last 6 months of the year.
${ }^{10}$ Data for this group not available in 1922.

# Table 88.-FACTORY EMPLOYMENT, BY STATES AND CITIES 

[Base year in bold-faced type]


1 Compiled from data furnished by the Maryland Commission of Labor and Statistics from about 250 manufacturers each month, link relatives being used for identical concerns from month to month. Monthly reports show details by industries. Monthly figures from 1924 appeared in the July, 1928, issue (No. 83), p. 24.
${ }_{2}$ Compiled by the Massachusetts Department of Labor and Indusiries, Division of Statistics from about 1,000 frms each month. Data are connected by the chain relative method. Monthly data from 1919 appeared in the July, 1928, issue (No. 83), p. 24.
${ }^{3}$ Compiled by the New York Slate Department of Labor from reports of 1,648 firms employing more than one-third of the factory workers of New York State. Monthly data from 1914 appeared in the July, 1928, issue (No. 83), p. 23.

- Compiled by the Federal Reserve Bank of Philadeiphia from reports of about 1,000 plants each month in the States of New Jersey, Pennsylvania, and Delaware. Since August, 1926, figures for New Jersey are from the New Jersey Department of Labor.
${ }_{5}$ Compiled from data furnished by the Illinors Department of Labor from reports by about 1,400 manufacturing establishments, employing about 400,000 people, based on the pay roll nearest the 15 th of the month. Monthly data from 1921 appeared in the July, 1928 , issue (No. 83), p. 23 .
o Compiled by the Industrial Commzssion of Wisconsin, based on link relatives from reports of manufacturing firms. The data have been recomputed to a 1923 base the monthly figures from 1923 appearing in the July, 1928, issue (No. 83), p. 23.

7 Compiled by the Employers' Association of Detroit, covering about two-thirds of the working population of Detroit. Figures for last week of month are given here. ${ }^{8}$ Compiled from data furnished by the lowa Bureau of Labor from reports of about 300 firms, the index being compiled by the link-relative method on reports of identical firms from month to month. Monthly data from 1922 appeared in the July, 1928 , issue (No. 83 ), $p$. 24.

- Compiled by the Cleveland Chamber of Commerce from reports of 100 identical manufacturers, except that in November, 1925, when one plant went out of business, another was substituted. Data are for the end of the month and monthly figures from 1921 appeared in the July, 1928, issue (No. 83), p. 24.
${ }^{10}$ Compiled by the Milwaukee Public Employment Office from rcports of in identical manufacturers, 4 of which are now out of business. Data are for the end of the month and monthly figures from 1921 appeared in the July, 1928 , issue (No. 83), p. 24.
${ }_{13}^{11}$ Compiled by the Oklahoma Department of Labor from reports of 710 establishments. Monthly data from 1924 appeared in the July, 1928 , issue (No. 83 ), p. 24. ${ }^{13}$ Compied by the Ohio State University, Bureau of Business Research, from reports of about 600 manufacturers in Ohio. Details by industries and by cities are given in the burcau's press releases. Monthly data from 1923 are given on p. 48 of the October, 1928 issue (No. 86).

Table 89.-EMPLOYMENT AGENCIES, TRADE-UNIONS, AND INDUSTRIAL DISPUTES

| Yrar and Month | EMPLOYMENT AGENCIES 1 |  |  |  |  |  | TRADE-UNION ${ }^{2}$ EMPLOYMENT |  | $\begin{aligned} & \text { EM- } \\ & \text { PLOF- } \\ & \text { MENT } \\ & \text { CANA- } \\ & \text { DA }^{2} \end{aligned}$ | INDUSTRIAL DISPUTES ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United States average | Eastern States | Central States | South $=$ ern States | West- ern States | Canada | United States | Canada |  | Disputes | Workers Involved | $\begin{aligned} & \text { Man-days } \\ & \text { lost In } \\ & \text { month } \end{aligned}$ |
|  | Number of applicants per 100 jobs |  |  |  |  |  | Per cent of total membership |  | $\begin{gathered} \text { Rel. to } \\ \text { Jan., } 1920 \end{gathered}$ | Number |  |  |
| 1920 monthly average |  |  |  |  |  | 103 | -....-..-- | 95.4 | 4100.0 |  |  |  |
| 1921 monthly average | ${ }^{1} 173$ | ${ }^{8} 131$ | ${ }^{8} 235$ | ${ }^{5} 164$ | B95 | 126 |  | 87.5 | 87.0 |  |  |  |
| 1922 monthly average. | 127 | 106 | 146 | 125 | 70 | 117 |  | 93.0 | 88.6 |  |  |  |
| 1923 monthly average. | 105 | 100 | 131 | 109 | 60 | 109 |  | 95.1 | 94.8 |  |  |  |
| 1924 monthly average. | 143 | 127 | 180 | 130 | 69 | 126 |  | 93.0 | 01.9 |  |  |  |
| 1925 monthly average. | 140 | 122 | 175 | 122 | 64 | 114 |  | 93.0 | 93.0 | -..-- |  |  |
| 1926 monthly average. | 127 | 119 | 160 | 108 | 66 | 119 |  | 94.9 | 98.8 |  |  |  |
| 1927 monthly average.- | 135 | 142 | 159 | 128 | 71 | 122 |  | 95.1 | 103.7 | 63 | 121, 117 | 3,149,950 |
| 1928 monthly average. | 134 | 159 | 151 | 183 | 70 |  | 86.9 |  |  |  |  |  |
| 1926 |  |  |  |  |  |  |  |  |  |  |  |  |
| May-....-.-.----- | 115 | 113 | 138 | 103 | 56 | 117 |  | 95.1 | 101.0 |  |  |  |
| June... | 130 | 123 | 174 | 109 | 54 | 117 |  | 95.9 | 103.7 |  |  |  |
| July .-- | 120 | 128 | 139 | 107 | 78 | 113 |  | 97.7 | 104.2 |  |  |  |
| August.---.-...-....... | 106 | 118 | 128 | 81. | 62 | 101 |  | 97.5 | 104.9 |  |  |  |
| September---- | 100 | 105 | 118 | 85 | 58 | 95 |  | 96.7 | 105. 2 |  |  |  |
| October........ | 104 | 112 | 122 | 72 | 65 | 115 |  | 97.4 | 102.8 |  |  |  |
| November. | 120 | 122 | 139 | 102 | 68 | 145 |  | 95.3 | 101.1 |  |  |  |
| December | 134 | 135 | 157 | 121 | 78 | 138 |  | 94.1 | 94.8 |  |  |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |
| January.............-- | 160 | 156 | 203 | 146 | 78 | 156 |  | 93.6 | 95.4 | 18 | 2, 287 | 58, 125 |
| February..... | 158 | 162 | 191 | 155 | 72 | 147 |  | 93.5 | 96.3 | 45 | 5,717 | 115, 229 |
| March.. | 137 | 146 | 165 | 125 | 67 | 146 |  | 94.3 | 96.2 | 67 | 8, 182 | 214, 283 |
| April.- | 119 | 122 | 140 | 111 | 62 | 124 |  | 94.0 | 100.6 | 88 | 199, 701 | 5, 265, 420 |
| May-.- | 118 | 121 | 137 | 119 | 61 | 124 |  | 94.8 | 105.9 | 116 | 200, 072 | 5, 136, 006 |
| June--- | 137 | 149 | 163 | 125 | 65 | 127 |  | 96.8 | 108.4 | 88 | 196, 323 | 4, 863, 345 |
| July .-......---- | 134 | 145 | 152 | 118 | 87 | 121 |  | 96.7 | 109.2 | 63 | 199, 287 | 5, 308, 123 |
| August. | 129 | 137 | 156 | 122 | 70 | 109 |  | 96.3 | 109.7 | 53 | 198, 444 | 4,999,751 |
| September--. | 121 | 131 | 136 | 114 | 79 | 98 |  | 96.9 | 109.0 | 58 | 196, 829 | 4, 945, 702 |
| October .-- | 120 | 129 | 145 | 122 | 61 | 116 |  | 96.1 | 107.5 | 58 | 82,095 | 2, 724, 117 |
| November- | 137 | 146 | 160 | 132 | 71 | 142 |  | 94.8 | 106.8 | 51 | 82,607 | 2, 040, 140 |
| December....-.- | 145 | 155 | 165 | 145 | 80 | 140 |  | 93.4 | 99.5 | 54 | 81, 229 | 2, 129,153 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |
| January ......- | 170 | 192 | 203 | 188 | 87 | 161 | 82.2 | 93.2 | 100.8 | 62 | 81,676 | 2, 135, 092 |
| February | 175 | 208 | 189 | 222 | 75 | 146 | 81.8 | 93.0 | 101.4 | 61 | 104, 883 | 2, 155, 559 |
| March | 154 | 171 | 166 | 264 | 65 | 137 | 82.0 | 93.5 | 101.1 | 63 | 78,362 | 2, 343,415 |
| April. | 137 | 146 | 147 | 219 | 69 | 120 | 84.0 | 94.8 | 105.5 | 70 | 134, 382 | 4, 884, 430 |
| May .-. | 128 | 138 | 135 | 204 | 66 | 114 | 87.0 | 96.3 | 112.4 | 74 | 136,094 | 2, 526,608 |
| June..- | 121 | 147 | 161 | 221 | 66 | 118 | 89.0 | 96.3 | 116.3 | 64 | 134, 406 | 3, 580, 719 |
| July... | 137 | 151 | 150 | 174 | 80 | 113 | 88.0 | 97.5 | 119.9 | 60 | 134, 102 | 3, 365, 803 |
| August .-.---...- | 129 | 223 | 132 | 121 | 69 | 109 | 91.0 | 97.6 | 119.5 | 59 | 129, 210 | 3, 577, 599 |
| September-.- | 107 | 120 | 126 | 91 | 63 | 98 | 90.0 | 97.8 | 118.9 | 48 | 63,650 | 2, 605, 713 |
| October--.----------- | 117 | 128 | 133 | 142 | 62 | 114 | 91.0 | 96.9 | 119.1 | 51 | 44,064 | 1, 328,474 |
| November....... | 134 | 142 | 125 | 153 | 71 | ......... | 90.0 |  |  | 55 |  | 1, 101, 111 |
| December. | 100 | 146 | 146 | 193 | 69 |  | 87.0 |  |  |  |  |  |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |
| January.------------ |  |  |  |  |  |  |  |  |  |  |  |  |
| February----- |  |  |  |  |  |  |  | .......- | --..--...- |  |  |  |
| March_..-... |  |  |  |  |  |  |  |  |  |  |  |  |
| April..----------...- |  |  |  |  |  | -------- | ------- | --...---.- | --... |  |  | ------ |
| May-.-- |  |  |  |  |  |  |  |  |  |  |  |  |
| June-.--------.---- |  |  |  |  |  |  |  |  |  |  |  |  |

1 Compiled from weekly reports to the U. S. Department of Labor, Employment Service, showing the number of workers and jobs registered at State and municipal employment agencies. Eastern. States included in the report are Connecticut, District of Columbia, Massachusetts, New Jersey, New York, and Rhode Island. (Delaware, Maryland, and Pennsylvania, now reporting, are excluded to show true comparison.) Central States are Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. Southern States include Alabama, Arkansas, Georgia, Kentucky, North Carolina, Oklahoma, Texas, and Virginia. Western States include Arizona, California, Colorado, Idaho, Oregon, and Washington; Montana is included beginning with March, 1922, its figures being so small as not to affect the total. Data for Canada compiled rom weekly reports to the Dominion Department of Labor, Employment Ser
data covering applications and job vacancies from which the Canadian data were compiled were given in the February, 1928, Survey, p. 110.
data covering applications and job vacancies from which the Canadian data were compiled were given in the February, 1928, Survey, p . 110 .
2 Data for the United States complied from reports of trade-union unemployment as published by the American Federation of Labor, the figures above having been inverted to show trade-union employment. Data for Canada from the Dominion Department of Labor, Employment Service of Canada, data covering yearly averages 1915 to 1919, inclusive, were given in the February, 1928, Survey, p. 109; employment index number taken as of the first day of the month foilowing that indicated showing conditions 1919, inclusive, weregiven in the February, 1928 , survey, p. 109 ; employment index number inaker an an average of about 5,800 firms employing about 775,000 workers in 1923 , manufacturing, construction, mining, logging, and services.
${ }^{3}$ Compiled by the U. S. Department of Labor, Bureau of Labor Statistics, through the cooperation of the Conciliction Service and other outside agencies. The data show the number of industrial disputes in effect at the end of the month, disputes involving fewer than six workers and those lasting less than one day being omitted. The number of work-days lost relates only to workers directly affected and is computed by multiplying the number of workers so affected by the length of the dispute measured in working days as normally worked by the industry or trade in question. Figures given include only those disputes which have been verified by the bureau.

## Table 90.-WAGES AND PAY ROLLS, BY STATES



[^27]Table 91.-WEEKLY EARNINGS OF FACTORY LABOR
[Base year in bold-faced type]

${ }^{1}$ Compiled by the National Industrial Conference Board from reports from 1,678 manufacturing plants employing 506,315 people in January, 1921, and representing 23 industries. The nominal hours per week represent the weighted number of hours the plants are supposed normally to operate, while the actual hours represent the average man-hours worked each week. The grand total weekly earnings are compiled by weighting the average earnings in each industry by the number or wage earners employed as reported by the census of manufacturers of 1919, but as it was inpossible to obtain the necessary weighting factors for the classes of labor, the latter averages are unweighted; bence the relative number for the grand total sometimes is lower than the relative number of any class, owing to the different methods of computation.

2 Figures represent reports from 1,648 firms in New York State employing more than'one-third of the factory workers of the State, as reported by tbe New York State Depariment of Labor. The 1914 average upon which the index numbers are calculated is an average of the 7 months, June to December, 1914, inclusive. As originally published by the New York Department of Labor, the index numbers are based on June, 1914, and have been recalculated to the 7 -month average.
${ }^{3}$ Compiled by the Federal Reserve Bank of Philadelphia from reports of about 1,000 plants each month in the States of New Jersey, Pennsylvania, and Delaware. Since August, 1926, figures for New Jersey are from New Jersey State Department of Labor.
(taken from the pay roll nearest the 15 th of the month. Monthly data on earnings since July, ris22, were given in the July, 1928, issue ( No. 8 ,
${ }_{s}$ Compiled by the Industrial Commission of Wisconsin from reports of about 850 manufacturing establishments in Wisconsin. Monthly data on earnings from 1923 were given in the July, 1928, issue (No. 83), p. 23. Relative prior to 1923 are recomputed from old index on 1915 base.
were given in the
Compiled by the Oklahoma Department of Labor from reports of 710 establishments. Monthly data from 1924 appeared in the July, 1928, issue (No. 83 ), p. 24.
7 July, 1914. ${ }_{8}$ A verage of last 7 months of the year. ${ }^{\circ}$ A verage of last 6 months of the year.

Table 92.-PAY ROLL AND HOURS IN FACTORIES
[Inder numbers for base year in bold-faced type]

| Year and Month | PAY-ROLL INDEXES ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { HOURS } \\ \text { OF WORK } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Iro | Lum |  |  |  |  |  |  | Vehi |  |  |  |
|  | $\begin{aligned} & \text { Total, } \\ & \text { 12 } \\ & \text { groups } \end{aligned}$ | and <br> kin= <br> dred <br> prod- <br> uets | tiles <br> and <br> their produets | and <br> steel <br> and <br> their <br> prod. <br> uets | ber and its manu- fac- ture | and <br> Its finished products | $\begin{gathered} \text { Paper } \\ \text { and } \\ \text { print- } \\ \text { ing } \end{gathered}$ | icals and other produets | clay, <br> and <br> glass products | Nonferrous metals ${ }^{3}$ | $\begin{gathered} \text { To- } \\ \text { bace } \\ \text { manu- } \\ \text { fac- } \\ \text { ture } \end{gathered}$ | cles for land trans= portation | Miscel- lane- ous indus- tries | $\underset{\text { nal }}{\text { Nomi- }}$ | Actual |
|  | Relative to 1923 |  |  |  |  |  |  |  |  |  |  |  |  | Hours per week |  |
| 1914, July $\qquad$ <br> 1920 monthly average... | 125.9 | -------------- | ------------- |  |  |  |  |  |  |  |  |  |  | 55.0 | 51.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | ${ }^{4} 50.0$ | + 48.7 |
| 1921 monthly average.-- | 80.0 | ------------- | ---.-.-------- | ---.--------- |  | -------------- |  |  |  |  |  |  |  | $49.7 \quad 45.5$ |  |
| 1922 monthly average..- | 79.9 | ${ }^{6} 84.1$ | 889.3 | ${ }^{5} 75.5$ | ${ }^{58.5}$ | ${ }^{5} 95.2$ | ${ }^{5} 92.3$ | ${ }^{5} 89.6$ | 585.8 | ${ }^{(6)}$ | ${ }^{8} 107.9$ | 878.1 | ${ }^{5} 81.9$ | ${ }^{5} 50.0$ ¢ 49.2 |  |
| 1923 monthly average.-- | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 49.9 49.2 |  |
| 1924 monthly average...- | 90.6 | 97.9 | 86.8 | 86.6 | 97.398.1 | 88.389.4 | 102.2 | 92.795.9 | 101.3103.5 | 91.697.9 | 95.692.7 | 87.593.5 | 90.694.6 | 49.7 46.8 |  |
| 1925 monthly average..- | $\begin{aligned} & 93.6 \\ & 95.8 \end{aligned}$ | 93.7 | 89.5 | $\begin{aligned} & 90.6 \\ & 97.2 \end{aligned}$ |  |  | 105.2 |  |  |  |  |  |  | $49.9 \quad 48.2$ |  |
| 1926 monthly average.-- |  | 93.8 | 85.9 |  | $\begin{aligned} & 98.1 \\ & 97.7 \end{aligned}$ | $\begin{aligned} & 89.4 \\ & 87.8 \end{aligned}$ | 111.5 | 95.9 101.8 | 103.5 106.4 | 97.9 98.5 | 92.7 87.7 | 92.8 | 101.9 | 49.8 | 48.2 |
| 1927 monthly average... | 92.4 | 93.893.6 | 88.582.1 | $\begin{aligned} & 89.3 \\ & 90.2 \end{aligned}$ | 91.086.7 | 85.5 | 112.8113.2 | 100.9 | 1003 | 90.3 | 85.2 | 85.0 | 102.8 | 49.6 | 47.9 |
| 1928 monthly average.-- | 90.6 |  |  |  |  | 78.8 |  | 97.7 | 95.3 | 94.7 | 82.0 | 91.2 | 93.7 |  |  |
| 1926 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May --.----------------- | 95.6 | 91.8 | 83.1 | 98.2 | 98.3 | 79.4 | 111.0 | 100.0 | 110.1 | 90.9 | 83.3 | 96.8 | 100.2 | $49.9 \quad 48.1$ |  |
|  | 95.5 | 93.9 | 81.4 | 98.4 | 100.0 | 82.7 | 110.8 | 100.0 | 112.4 | 97.5 | 88.6 | 94.7 | 100.3 | $50.0 \quad 47.9$ |  |
| July-- | 91.2 | 93.5 | 76.2 | 93.0 | 95.499.6 | 86.893.7 | 108.5109.2 | 96.998.9 | 104.0110.5 | 91.9 | 85.284.4 | 88.394.7 | 97.099.5 | 49.6 47.6 |  |
|  | 94.6 | 93.5 | 80.6 | 94.8 |  |  |  |  |  | 94.0 |  |  |  | 49.6 | 47.5 |
| September | 95.1 | 96.3 | 82.9 | 96.0 | 100.2 | 93.6 | 110.8 | 102.5 | 108.1 | 93.6 | 89.1 | 91.3 | 99.3 | 49.6 48.4 |  |
| October. | $\begin{aligned} & 98.6 \\ & 95.4 \end{aligned}$ | 97.9 | 88.1 | 99.4 | 102.0 | 93.6 | 114.2 | 104.6 | 111.2 | 98.0 | 92.9 | 94.2 | 105.3 | 49.8 | 48.6 |
| November. |  | 95.8 | 84.8 | 96.0 | 100.0 | 87.4 | 115.0 | 103.6 | 108.9 | 95.7 | 91.9 | 87.9 | 102.9 | 49.6 | 47.9 |
| December. | 95.6 | 95.2 | 89.2 | 96.3 | 96.4 | 86.0 | 116.3 | 103.5 | 104.8 | 95.6 | 89.8 | 82.3 | 109.7 | 49.4 | 47.8 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January...--. | 90.9 | 92.7 | 88.8 | 90.9 | 87.1 | 87.3 | 112.7 | 101.9 | 91.8 | 91.9 | 77.6 | 73.6 | 107.2 | 49.5 | 48.2 |
| February...----------- | 96.4 | 92.1 | 94.0 | 96.4 | 89.3 | 92.3 | 113.3 | 106.0 | 98.2 | 95.2 | 80.6 | 88.8 | 109.2 | 49.5 | 48.6 |
| March.-..------------- | 97.7 | 91.0 | 94.0 | 97.8 | 90.6 | 80.0 | 114.2 | 110.0 | 102.8 | 97.9 | 82.1 | 91.3 | 111.4 | 49.6 | 48.5 |
| A pril .-..---------------- | 96.6 | 90.0 | 88.9 | 06.4 | 89.5 | 84.2 | 113.0 | 109.5 | 105.8 | 91.3 | 79.0 | 93.1 | 113.3 | 50.4 | 48.1 |
| May | 95.6 | 92.7 | 87.0 | 93.5 | 92.7 | 81.8 | 112.6 | 100.2 | 107.9 | 95.1 | 84.6 | 94.2 | 109.3 | 49.6 | 48.3 |
| June. | 93.3 | 96.4 | 86.2 | 91.8 | 92.7 | 82.5 | 111.0 | 100.0 | 105.6 | 91.5 | 87.8 | 85.8 | 104.9 | 49.6 | 47.9 |
|  | 89.1 | 95.5 | 83.5 | 84.6 | 89.4 | 86.7 | 109.0 | 95.1 | 96.9 | 86.9 | 86.7 | 81.4 | 99.5 | 49.7 | 47.3 |
| August.-----..----...---- | 91.0 | 93.7 | 86.5 | 87.1 | 92.5 | 93.3 | 110.6 | 96.4 | 100.7 | 88.3 | 80.8 | 85.8 | 96.6 | 49.5 | 47.8 |
| September-........-....- | 90.1 | 95.9 | 88.6 | 84.7 | 93.7 | 91.0 | 111.7 | 98.5 | 99.4 | 86.0 | 91.4 | 81.6 | 93.2 | 49.5 | 47.8 |
| October | 91.2 | 96.3 | 90.2 | 84.4 | 94.5 | 85.4 | 113.7 | 98.3 | 100.6 | 86.7 | 92.3 | 84.2 | 96.5 | 49.5 | 47.4 |
| November. | 87.8 | 94.8 | 86.3 | 81.6 | 92.1 | 75.3 | 114.7 | 96.9 | 98.6 | 85.1 | 91.3 | 79.0 | 92.4 | 49.4 | 47.1 |
| December. | 89.3 | 94.6 | 87.9 | 828 | 88.0 | 76.5 | 117.0 | 98.2 | 94.7 | 87.1 | 87.9 | 80.8 | 99.8 | 49.5 | 47.3 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January...--------.-.-- | 85.8 | 91.9 | 85. 4 | 80.2 | 79.5 | 81.3 | 113.8 | 95.8 | 87.0 | 83.7 | 79.1 | 77.6 | 95.1 | 49.5 | 47.9 |
| February .-.-.---------- | 90.0 | 93.7 | 88.1 | 87.9 | 82.9 | 86.1 | 113.0 | 98.2 | 89.6 | 89.7 | 79.3 | 88.3 | 92.0 | 49.6 | 48.0 |
| March_------------...-- | 91.2 | 92.8 | 86.9 | 89, 9 | 85.6 | 85.0 | 113.1 | 102.5 | 92.7 | 90.7 | 80.2 | 92.0 | 92.1 | 50.0 | 48.2 |
| April.:------------------ | 89.9 | 88.9 | 80.5 | 89.2 | 86.3 | 73.9 | 112.3 | 102.8 | 95.7 | 91.4 | 74.6 | 93.2 | 93.8 | 49.3 | 47.4 |
| May .......--...--.....-- | 90.1 | 91.0 | 78.9 | 91.5 | 87.5 | 71.7 | 112.2 | 94.8 | 98.8 | 93.4 | 78.0 | 94.8 | 91.2 | 49.4 | 47.8 |
| June-.-.----------------- | 90.2 | 93.3 | 78.7 | 90.7 | 88.1 | 74.6 | 112.4 | 93.4 | 98.7 | 92.3 | 83.2 | 92.6 | 93.7 | 49.7 | 47.7 |
| July | 87.4 | 93.7 | 75.1 | 86.6 | 85.4 | 80.1 | 110.4 | 93.2 | 93.4 | 88.9 | 78.7 | 89.1 | 90.9 | 49.6 | 47.5 |
| August .------------------- | 90.2 | 92.2 | 77.6 | 90.2 | 88.0 | 84.7 | 110.7 | 94.5 | 99.7 | 95.2 | 82.3 | 94.5 | 91.1 | 49.6 | 47.9 |
| September--.------..--- | 91.4 | 94.9 | 80.1 | 90.3 | 89.6 | 84.0 | 112.5 | 98.3 | 97.7 | 96.7 | 86.1 | 94.1 | 93.5 | 49.8 | 48.2 |
| October .-. .-....-. ------ | 94.8 | 96.8 | 85.5 | 95.2 | 91.4 | 81.3 | 115.1 | 100.3 | 99.6 | 103.0 | 88.2 | 98.5 | 95.1 |  | 48.0 |
| November------------- | 92.1 | 96.0 | 82.9 | 95.0 | 89.9 | 69.0 | 115.3 | 99.0 | 96.4 | 104.6 | 87.1 | 90.5 | 93.6 |  | 47.8 |
| December...........----- | 93.6 | 97.9 | 85.5 | 95.3 | 86.3 | 73.4 | 117.2 | 99.0 | 94.1 | 106.6 | 87.3 | 89.5 | 102.0 |  |  |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February.. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April..----.------------- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June.-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^28]Includes enameled ware and brass, bronze, and copper products
${ }^{4}$ Average of last 7 months of the year. Average of last 6 months of the year

Table 93.-FACTORY OPERATIONS AND LABOR TURNOVER

${ }^{1}$ Compiled by the U.S. Department of Labor, Bureau of Labor. Statistics, from reports of over 9,000 firms, employing almost $3,000,000$ people showing the percentage of full time worked by the force actually employed. Details for individual industries of each group and percentage of firms operated at full time are given in "Employment Selected in Industries," issued each month by the Bureau of Labor Statistics.
${ }_{2}$ These data, compiled by multiplying the percentage of capacity operat ed, as shown in the following table, by the percentage of time operated, as shown in this table, indicate the approximate actual employment time relative to capacity.
${ }^{3}$ Compiled by the Metropolitan Life Insurance Company covering up to 135 companies employing about 600,000 wage earners for the period 1919-1925. Beginning with 1926, data are from about 300 companies each month. Rates are based on median reports rather than arithmetic mean, to throw out exceptional cases. The annual turnover rates were derived from the monthly rates by multiplying each month rate by 365 ( 366 for leap years) and dividing by the number of calendar days in the month repre${ }_{4}^{4}$ A verage of last 10 months of year.

Table 94.-FACTORY FORCES RELATIVE TO CAPACITY


## Table 95.-ADVERTISING AND MAIL DISTRIBUTION MOVEMENT

| Yrar and Month | MAIL-ORDER HOUSE SALES ${ }^{1}$ |  |  | POSTAL RECEIPTS |  |  | POSTAL MONEY ORDERS |  |  |  |  | $\begin{aligned} & \text { ADVERTIS- } \\ & \text { ING } \end{aligned}$ |  | $\underset{\text { MAIL }}{\text { MAIL }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total, 2 houses | Sears, Roebuck $\& \mathrm{Co}$ | $\begin{gathered} \text { Mont- } \\ \text { gom- } \\ \text { ery } \\ \text { Ward } \\ \& \text { Co. } \end{gathered}$ | Total ${ }^{2}$ |  | $\begin{aligned} & \text { Sec- } \\ & \text { ond } \\ & \text { class } \\ & \text { (quar- } \\ & \text { terly) } \end{aligned}$ | Domestic ${ }^{4}$ (50 p |  |  |  |  | Magazline ${ }^{\text {b }}$ | Newspaper ${ }^{7}$ | $\begin{gathered} \text { Weight } \\ \text { dis- } \\ \text { patched } \end{gathered}$ |
|  |  |  |  | 50 | $50$ |  |  |  |  | Issued |  |  |  |  |
|  |  |  |  | ities | Crial cities |  | $\underset{\text { Ber }}{\text { Num- }}$ | Value | Num- | Val |  |  |  |  |
|  | Thousands of dollars |  |  |  |  |  | Thousands | Thous. of dolls. | Thousands | Thousands of dollars |  | Thousands of agate lines |  | Pounds |
| 1913 monthly average. | \$11,276 | \$7,965 | \$3,311 |  |  | \$2, 525 |  |  |  |  | \$8, 526 | 1,224 |  |  |
| 1914 monthly average. | 11,847 | 8,427 | 3,420 |  |  | 2,598 |  |  |  |  | 6, 781 | 1,137 |  |  |
| 1915 monthly average. | 13,502 | 9,389 | 4,113 |  |  | 2, 684 | 6, 313 | \$34, 812 | 1,315 | \$11, 467 | 4, 464 | 1,144 |  |  |
| 1916 monthly average. | 17,415 | 12, 237 | 5,178 | \$13, 543 |  | 2, 898 | 7,248 | 40, 592 | 1,470 | 12, 702 | 3,667 | 1,373 | 61, 440 |  |
| 1917 monthly average. | 21,448 | 14, 856 | 6,592 | 14, 611 |  | 2, 860 | 7, 149 | 44, 803 | 1,610 | 14, 657 | 3, 230 | 1,490 | 62, 671 |  |
| 1918 monthly average. | 23, 206 | 16,544 | 6,662 | 17,066 |  | 3,367 | 6,784 | 50, 587 | 1,711 | 17,837 | 3,151 | 1,351 | 61,067 |  |
| 1919 monthly average. | 30,332 | 21,494 | 8,838 | 18, 380 |  | 5, 051 | 7,773 | 65, 356 | 1,895 | 21,713 | 3, 030 | 1,913 | 83, 859 |  |
| 1920 monthly a verage. | 30,409 | 21,216 | 9,193 | 20,688 |  | 5,914 | 8,098 | 72, 432 | 2, 059 | 25,017 | 2,390 | 2, 458 | 95, 832 |  |
| 1921 monthly average- | 21, 162 | 14,832 | 6,330 | 20,759 | $\bigcirc$ - \$2, 157 | 4, 898 | 8,211 | 64, 827 | 2, 107 | 23,351 | 1,877 | 1,596 | 86, 661 |  |
| 1922 monthly average- | 22, 887 | 15, 181 | 7,706 | 22,901 | 2, 333 | 6,851 | 9,409 | 68, 462 | 2,340 | 24,544 | 2, 282 | 1,633 | 91, 131 |  |
| 1923 monthly average. | 29, 182 | 17,962 | 11, 220 | 25,085 | 2,593 | 7,233 | 10,391 | 78,913 | 2,684 | 28, 005 | 3,531 | 1,935 | 97, 402 |  |
| 1924 monthly average. | 32,075 | 18,515 | 13,560 | 26,335 | 2, 809 | 7,386 | 10,797 | 84, 515 | 2,981 | 29,831 | 4,306 | 2,004 | 96,469 |  |
| 1925 monthly average. | 36,870 | 21, 529 | 15,341 | 28,831 | 3, 668 | 7,664 | 11,101 | 81, 288 | 3, 105 | 31,094 | 4, 669 | 2, 178 | 101, 916 |  |
| 1926 monthly average | 39,330 | 22, 725 | 16,605 | 30,605 | 3, 274 | 8,202 | 11,008 | 87, 304 | 3,175 | 33, 176 | 5,579 | 2, 443 | 105, 889 | 10 19, 948 |
| 1927 monthly average- | 41, 275 | 24, 408 | 16,867 | 31,337 | 3,359 | 8,141 | 11,120 | 86,490 | 3,292 | 34, 060 | 5,906 | 2,482 | 92, 336 | 88,792 |
| 1928 monthly average_ | 48, 277 | 28,914 | 19,363 | 31,445 | 3,381 |  |  |  |  |  |  | 2,449 | 99, 524 |  |
| $1927$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| October | 40, 5089 | 24,609 29,302 | 16, 21,567 | 32,450 | 3,291 |  | 10,167 11,659 | 84, 78.58 | 2,994 | 31,667 35,147 | 5,925 5,515 | 2, 272 | 100,039 114,109 | 146,486 153,649 |
| November. | 51, 229 | 29,847 | 21, 382 | 32, 799 | 3,331 |  | 11,954 | 97, 863 | 3,381 | 34,860 | 5,745 | 2,912 | 107, 248 | 141, 282 |
| December. | 59,494 | 34,486 | 25,008 | 40,823 | 4,448 | 8,199 | 13, 516 | 102, 259 | 3,759 | 37,452 | 11,524 | 2, 553 | 104,997 | 165, 768 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January.. | 37,465 | 24,240 | 13,225 | 30,579 | 3,438 |  | 10,468 | 78,220 | 3,416 | 34, 117 | 4,895 | 1,811 | 95,545 | 144, 289 |
| February | 38, 392 | 23,842 | 14, 550 | 30,547 | 3,482 |  | 10,645 | 78,887 | 3,340 | 33,077 | 4,574 | 2, 176 | 89,023 | 153, 363 |
| March.-.---........---- | 41,787 | 23,986 | 17, 801 | 34,280 | 3,670 | 8,670 | 12,356 | 92,750 | 3,764 | 26,739 | 6,408 | 2, 517 | 105, 595 | 173, 929 |
| April. | 40, 100 | 24, 159 | 15, 941 | 30,758 | 3,348 |  | 10,941 | 84,068 | 3,417 | 33,967 | 4,555 | 2,926 | 107, 115 | 171, 028 |
| May.-.-.-.-...-------- | 40,074 | 24, 203 | 15, 871 | 31,589 | 3,276 |  | 11,014 | 86, 110 | 3,461 | 35,277 | 5,169 | 2,918 | 105,928 | 199, 409 |
| June | 44, 848 | 25, 669 | 19,179 | 29,990 | 3,094 | 8,198 | 11,145 | 85,280 | 3,382 | 34, 263 | 5,777 | 2,571 | 98, 272 | 210, 957 |
| July-....-........----- | 40,253 | 26, 276 | 13,977 | 26, 508 | 2,956 |  | 9,627 | 76,227 | 3,180 | 32,812 | 5, 246 | 2,140 | 81, 244 | 214, 558 |
| August.-.-.........-.-- | 45,994 | 28,986 | 17,008 | 27, 851 | 3,115 |  | 10,183 | 81,180 | 3,165 | 32,886 | 5,564 | 1,755 | 83,354 | 419,047 |
| September.--.....--- | 50,814 | 30,004 | 20,810 | 29, 261 | 3,074 | 6,301 | 9,748 | 79,877 | 2, 879 | 32,382 | 6,142 | 2, 279 | 99,897 | 423,991 |
| October---...........- | 63, 587 | 37,002 | 26, 585 | 34, 196 | 3, 583 |  | 12,020 | 99,310 | 3,669 | 37, 554 | 5,405 | 2, 871 | 112,783 | 465, 635 |
| November..........-. | 61,628 | 36, 172 | 25,456 | 31,713 | 3,202 |  | 11,583 | 94, 175 | 3,480 | 35,718 |  | 2, 845 | 110,012 | 424, 465 |
| December | 74,386 | 42, 434 | 31,952 | 39,972 | 4,331 |  |  |  |  |  |  | 2,580 | 105, 516 |  |
| 1.929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April .-.-.-----------. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }_{2}^{1}$ Sales of two principal mail-order houses include Sears, Roebuck \& Co., and Montgomery Ward \& Co.
${ }^{2}$ Data from U. S. Post Office Department, comprising receipts for transporting all classes of mail. The 50 selected cities cover the largest cities in the country, the industrial cities comprising the 50 most representative industrial cities in the next largest group. The war revenue act of Oct. 3, 1917 , provided for an increase in the rate for first-class letter mail from 2 cents per ounce or fraction thereof prior to Nov. 1, 1917, to 3 cents per ounce or fraction thereof, from Nov. 1, 1917, to July 1 , 1919, and an increase of the rate on postal and post cards from 1 cent to 2 cents each during the same period. Since July 1, 1919, the old rates on first-class mail have been restored. Under this

${ }_{8}{ }^{\text {Note that these data from U. S. Post Office Department represent quarters ending in the months specified and the annual figures represent quarterly averages for each }}$ year, not monthly averages. Second-class mail comprises regular mailings of periodicals. The war revenue act of Oct. 3, 1917, provided for a series of graduated annual rate increases on second-class mail as follows, compared with a flat rate of 1 cent per pound previous to July 1, 1918. From July 1, i918, to June 30, $1919,11 / 4$ cents, and since July $1,1919,11 / 2$ cents per pound, these changes applying regardless of zone or distance, to portions of publications devoted to reading matter. For the advertised portions the
country was divided into eight zones, each with a graduated rate and its corresponding annual increase, beginning with July 1 , 1918, and reaching the maximum on July 1,1921 , making, for the first time, a differentiation between the rates on reading and advertising matter.
1,4 Total of 50 cities transacting two-thirds of the total money-order business of the country from the $U$. S. Post Office Department. Money orders paid include, in addition to those both issued and payable in the 50 cities, those presented for payment but issued at any of the other offices in the United States and the 22 foreign countries, mostly in North America and West Indies, to which domestic postage rates apply.

5 Money orders issued to 67 principal foreign countries, representing practically the total international money orders issued by U. S. Post Office Department.
${ }^{\circ}$ Compiled by Printer's Ink and represents magazine advertising lineage of leading magazines of the country. The data for the last four years cover the lineage in dentical magazines. For earlier years the magazines covered are not entirely identical but represent the field with equal thoroughness.
${ }^{7}$ Compiled hy the New York Evening Post from 22sdentical cities: New York, Chicago, Philadelphia, Detroit, Cleveland, St. Louis, Boston, Baltimore, Los Angeles Buffalo, San Francisco, Milwaukee, Washington, Cincinnati, New Orleans, Minneapolis, Indianapolis, Columbus, Louisville, St. Paul, Birnimgham, and Houston. For the years 1916 to 1918 no reports were available for Boston, Louisville, Houston, and columbus. The totals for those years were computed from the actual reports of the 18 other cities, allowing 13.85 per cent of the total to the four missing cities, the average ratio of the $U . S$. Post Office Department, showing total weight of mails dispatched. Monthly figures since the inaurguration of the air mail in February, 1928 , appeared in the June, 1928, issue (No. 82), p. 22. Details for each route showing miles of route and service, frequency of trips and payments to contractors are given in the department's monthly statistical report on air mail.

66 months' average, July to December, inclusive.
1011 months' average, February to December, inclusive.

Table 96.-MALL-ORDER AND CHAIN-STORE SALES ${ }^{1}$


1 Compiled by the Federal Reserve Board, Division of Research and Statistics, from reports of the following stores in 1927 : 34 grocery chains with 29,433 stores and $\$ 1,350$, 371,361 in sales, 14 ten-cent chains with 2,944 stores and $\$ 560,773,589$ in sales, 5 apparel chains with 1,080 stores and $\$ 198,672,838$ in sales, 13 drug chains with 936 stores and $\$ 120,222,701$ in sales, 4 cigar chains with 3,471 stores and $\$ 110,119,595$ in sales, 7 shoe chains with 625 stores and $\$ 43,183,331$ in sales, 4 cand $\mathbf{y}$ chains with 269 stores and $\$ 32,-$ 717,017 in sales, and 4 mail-order houses with $\$ 5 f 2,765,581$ in sales. In the earlier years the number of chains was generally less, and changes are being made in the list as new chains are added, but the data are all related to the sales of the same chains in the base period. The seasonal adjustment allows for number of working-days in the in the date of Easter. Complete description of this index is given in the Federal Reserve Bulletin for April, 1928, pp. 232-242. Monthly data from 1919 appeared in the May in the date of Easter. Complete description (No. 81), p. 20.

Table 97.-TEN-CENT CHAIN STORES ${ }^{1}$

${ }^{1}$ This table is submitted in response to a demand for publication of the figures of sales of the large individual ten-cent chains, as compiled from published reports in financial papers or as reported directly by the companies. Sales data represent the retail sales in dollar values of the ten-cent chains shown, while the annual figures of stores operated represent not an average of stores in operation for the year, but the stores operated at the end of each year. Monthly data on sales from 1920 appeared in May, 1922, issue (No. 9), p. 111. Many of the companies listed above do not limit the sales prices of their individual articles to 10 cents, some selling articles valued as high as
, includes F. W. Woolworth, S. S. Kresge Co., McCrory Stores Corporation, and S. H. Kress Co.

Table 98.-RESTAURANT AND OTHER CHAIN STORES ${ }^{1}$

| $\begin{gathered} \text { Year and } \\ \text { Month } \end{gathered}$ | RESTAURANT CHAINS |  |  |  |  |  | OTHER CHAIN STORES |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total, 3 chains |  |  | $\begin{aligned} & \text { Childs } \\ & \text { Co. } \end{aligned}$ | Waldorf <br> System, Inc. | J. R. Thompson Co. | Isaac Silver \& Bros. |  | $\begin{aligned} & \text { Hartmann } \\ & \text { Corp. } \\ & \text { (furnishings) } \end{aligned}$ |  | $\begin{gathered} \text { J. C. Penney } \\ \text { (clothing) } \end{gathered}$ |  | United Cigar Stores Co. |  | A. Schulte, Inc. (elgars) |  | G. C. Murphy |  |
|  | Sales | per store | Stores | Sales |  |  | Sales | Stores | Sales | Stores | Sales | Stores | Sales | Stores | Sales | Stores | Sales | Stores |
|  | Thous. of dolls. | Dollars | $\begin{gathered} \text { Num- } \\ \text { ber } \end{gathered}$ | Thous. of dollars |  |  | Thous. of dolls. | Number | Thous. of dolls. | $\begin{gathered} \text { Num- } \\ \text { ber } \end{gathered}$ | Thous. of dolls. | $\underset{\text { ber }}{\text { Num- }}$ | Thous. of dolls. | $\underset{\text { ber }}{\text { Num- }}$ | Thous of dolls | Number | Thous. ofdolls. | $\begin{gathered} \text { Num- } \\ \text { ber } \end{gathered}$ |
| 1913 mo. av |  |  |  | $\$ 710$ |  |  |  |  |  |  | \$220 | 45 | \$2,465 |  |  |  |  |  |
| 1914 mo. av. |  |  |  | 718 |  |  |  |  |  |  | 297 | 67 | 2,492 |  |  |  |  |  |
| 1915 mo. av- |  |  |  | $\begin{aligned} & 756 \\ & 898 \end{aligned}$ | $\$ 375$448 |  |  |  |  |  | 402 | 80 | 2,587 |  |  |  |  |  |
| $1916 \mathrm{mo} . \mathrm{av}$. |  |  |  |  | 571 |  |  |  |  |  | 701 | 117 | 2,985 |  |  |  |  |  |
| 1917 mo. av- |  |  |  | 1, 141 |  |  |  |  |  |  | 1,240 | 165 | 3, 578 |  |  |  |  |  |
| $1918 \mathrm{mo} . \mathrm{av}_{-}$ |  |  |  | 1,228 |  |  |  |  |  |  | 1,778 | 192 | 4,336 |  |  |  |  |  |
| 1919 mo . $\mathrm{V}^{\text {- }}$ |  |  |  | 1,3841,828 | -........ | 9371,063 |  |  | \$1,091 | 8 | 2,398 | 197 | 5, 172 |  | \$672 | 224 | \$120 | 45 |
| 1920 mo. av- | \$3, 681 | \$14, 050 | 262 |  | \$790 |  |  |  | 1,294 | 8 | 3, 569 | 312 | 6, 637 |  | 1,084 | 224 | 171 | 53 |
| 1921 mo. av- | 3,954 | 13,972 | 283 | 2,110 | 820 | 1,023 | $2 \$ 170$ | 26 | 965 | 9 | 3,887 | 313 | 6,339 |  | 1,230 | 224 | 186 | 63 |
| 1922 mo. $\mathrm{av}_{-}$ | 4,224 | 13,582 | 311 | 2,127 | 1,127 | 970 | 202 | 8 | 1,173 | 10 | 4,086 | 371 | 6,079 |  | 1,370 | 224 | 225 | 62 |
| 1923 mo. av- | 4,555 | 13,972 | 326 | 2,308 | 1,263 | 984 | 233 | 10 | 1,503 | 16 | 5,183 | 475 | 6,272 | 2, 439 | 1,866 | 250 | 329 | 75 |
| 1924 mo. av- | 4,576 | 13,341 | . 343 | 2, 298 | 1,237 | 1,041 | 266 | 12 | 1,638 | 16 | 6,188 | 569 | 6,232 | 2, 572 | 1,892 | 255 | 419 | 85 |
| 1925 mo. av. | 4,679 | 13,681 | 342 | 2,367 | 1,229 | 1,083 | 329 | 14 | 1,468 | 17 | 7, 539 | 671 | 6,266 | 2,980 | 2,079 | 268 | 540 | 88 |
| 1926 mo. av- | 4,964 | 14,062 | 353 | $\begin{aligned} & \text { 2, } 493 \\ & 2,400 \end{aligned}$ | 1,272 | 1,199 | 397 | 19 | 1,565 | 15 | 9,640 | 747 | 6,687 | 3, 134 | 2, 396 | 292 | 713 | 92 |
| $1927 \mathrm{mo.av}$ - | 4, 843 | 13, 302 | 364 |  | $\begin{aligned} & 1,247 \\ & 1,219 \end{aligned}$ | 1,196 | $\begin{aligned} & 468 \\ & 555 \end{aligned}$ | 19 | 1,472 | 19 | 12, 664 | 891 | 6, 682 | 3,151 | 2,420 | 299 | 853 | 113 |
| 1928 mo. av- |  |  |  | $\begin{aligned} & \text { 2, } 400 \\ & 2,198 \end{aligned}$ |  |  |  | 31 |  |  | 14, 722 | 1,023 | 6,742 | 3,348 | 2,043 | 299 | 1,010 | 133 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January...-- | 5,029 | 13, 931 | 361 | 2, 537 | 1,267 | 1,225 | 281 | 22 | 842 | 16 | 6,331 | 800 | 5,723 | 3, 109 | 2,204 | 294 | 551608 | 92 |
| February - -- | 4, 591 | 12, 717 | 361 | 2,319 | 1,154 | 1,118 | 311 | 22 | 1,152 | 17 | 7,497 | 807 | 5,715 | 3, 096 | 2,362 | 294 |  | 92 |
| March.....- | $\begin{aligned} & 5,049^{\circ} \\ & 5,023 \end{aligned}$ | 13,948 | 362 | 2,522 | 1,284 | 1,243 | 388465 | 22 | 1,1682,427 | 17 | 9,968 | 826 | 6, 500 | 3, 102 | 2, 542 | 294294 | 693881 | 9298 |
| April------- |  | 13,914 | 361 | 2,443 | 1,382 | 1,198 |  | 22 |  | 17 | 13,721 | 832 | 6,652 | 3,112 | 2,592 |  |  |  |
| May.......- | 4,849 | 13, 395 | 362 | 2,402 | 1,225 | 1,222 | 410 | 21 | 1,841 | 17 | 11,632 | 838 | 6, 774 | 3, 105 | 2,493 | 290 | 733 | 98 |
| June-.....-- | 4, 625 | 12,776 | 362 | 2, 281 | 1,171 | 1,173 | 430 | 21 | 1,245 | 17 | 11,617 | 842 | 6,471 | 3, 106 | 2, 471 | 296 | 732 | 100 |
| July.......-- |  | 12,61013,360 | 362 | 2, 256 | 1,154 | 1,155 | 415 | 21 | 1,066 | 17 | 10,442 | 842 | 6,593 | 3,115 | 2,447 | 296 | 735 | 103 |
| August.....- | $\begin{aligned} & 4,565 \\ & 4,862 \end{aligned}$ |  | 364 | 2,462 | 1,217 | 1,183 | 394 | 21 | 1,706 | 17 | 11,000 | 854 | 6,447 | 3,143 | 2,225 | 297 | 736107 |  |
| September-- | $4,844$ | 13,235 | 366 | 2,437 | 1,246 | 1,161 | 430 | 22 | 1,919 | 18 | 13, 727 | 884 | 6,473 | 3,139 | 2,164 | 297 | 771 | 108 |
| October...-- | 4,893 | 13,369 | 366 | 2, 378 | 1,291 | 1,224 | 509 | 22 | 1,478 | 18 | 17, 166 | 889 | 6, 822 | 3, 143 | 2,231 | 297 | 875 | 111 |
| November.- | 4,699 | 12,804 | 367 | 2, 275 | 1,239 | 1,185 | 513 | 19 | 1,312 | 19 | 17,063 | 890 | 6. 534 | 3, 148 | 2,076 | 298 | 865 | 115 |
| December-- | 5,082 | 13,735 | 370 | 2, 490 | 1,330 | 1,262 | 1,065 | 19 | 1,505 | 19 | 21,800 | 891 | 9,475 | 3, 151 | 3,233 | 299 | 2,064 | 113 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January -.-- | 4,808 | 13,019 | 369 | 2, 346 | 1,227 | $\begin{aligned} & \mathbf{1}, 235 \\ & \mathbf{1}, 164 \end{aligned}$ | 312 | 22 | 9071,096 | 19 | 7,722 | 913 | 5,562 | 3, 151 | 1,826 | 300 | 598 | 113 |
| February... | 4,5114,785 | 12, 258 | 368 | 2, 187 | 1,160 |  | 388 |  |  | 19 | 8,906 | 914 | 5, 926 | 3,113 | 1,902 | 298 | 673113 |  |
| March |  | $\begin{aligned} & 13,003 \\ & 12,394 \end{aligned}$ | 368 | $\begin{aligned} & \mathbf{2}, 286 \\ & \mathbf{2}, 171 \end{aligned}$ | 1,2611,183 | 1,245 | $\begin{aligned} & 480 \\ & 512 \end{aligned}$ | 23 23 | 1,234 | 20 | 13, 134 | 930 | 6,578 | 3, 118 | 2,153 | 296 | 788 | 111 |
| April......-- | $\begin{aligned} & 4,785 \\ & 4,561 \end{aligned}$ |  | 368 |  |  | 1,207 |  | 23 | 2, 185 | 20 | 12,993 | 945 | 6,242 | 3, 151 | 1,915 | 298 | 930 | 111 |
| May-.....-- | 4,629 | 12, 613 | 367 | 2, 132 | 1,241 | 1,256 | 469 | 23 | 1,526 | 20 | 14,830 | 953 | 6,959 | 3, 182 | 2, 036 | 291 | 896 | 115 |
| June......... | $\begin{aligned} & 4,429 \\ & 4,280 \end{aligned}$ | $\begin{aligned} & 12,003 \\ & 11,599 \end{aligned}$ | 369 | $\begin{aligned} & 2,040 \\ & 2,012 \end{aligned}$ | 1,1801,1051,170 | $\begin{aligned} & 1,209 \\ & 1,163 \\ & 1,190 \end{aligned}$ | $\begin{aligned} & 516 \\ & 462 \\ & 460 \end{aligned}$ | 25 | 1, 170 | 20 | 14, 129 | 953 | 6,740 | 3, 206 | 2, 075 | 298 | 881 | 116 |
| July ......... |  |  | 369 |  |  |  |  | 26 | 991 | 20 | 11,734 | 953 | 6,334 | 3,226 | 1,846 | 300 | 796 | 116 |
| August...--- | $4,577$ | 12, 404 | 369 | 2, 217 |  |  |  | 26 | 1,416 | 19 | 12,886 | 981 | 6,627 | 3,271 | 1,912 | 300 | 873 | 118 |
| September.- | 4,590 | 12,541 | 366 | 2,190 | 1,215 | 1,185 | 512 | 29 | 2,192 | 19 | 16,477 | 1,006 | 6,622 | 3, 288 | 1,962 | 299 | 1,046 | 119 |
| October-...- | 4, 802 | 13,084 | 367 | 2, 266 | 1,267 | 1,269 | 610 | 30 |  |  | 19,443 | 1,020 | 6, 797 | 3,315 | 1,955 | 298 | 1,056 | 120 |
| Novernber- | 4,617 | 12,512 | 369 | 2,160 | 1,250 | 1,207 | 632 | 31 |  |  | 19,301 | 1,021 | 6,816 | 3,227 | 1,935 | 299 | 1,132 | 130 |
| December.- |  |  |  | 2, 369 | 1.363 |  | 1,305 | 31 |  |  | 25, 104 | 1,023 | 9,700 | 3,348 | 2,995 | 299 | 2,450 | 133 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January-... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February.-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March.....- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April. .-....- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Data compiled from published reports in financial papers or reported directly by the company to the U. S. Department of Commerce, Bureau of the Census. These sales data represent money values. Data for Jones Brothers Tea Co, from 1920 appeared in December, 1923 , issue (No. 28), p. 56 . Monthly data for Childs Co., including the operations of Boos Bros., since January, 1920 (comparable to present series), were given in the July, 1927 , issue (No. 71 ), p. 21 . Data for the Waldorf System include sales of the Ginter Company and its predecessors from the middle of 1922 until its absorption into the Waldorf System in lig27, the 1922 average including undistributed estimate for the Ginter Company for the first five months of that year. Monthly data on this basis appeared in the September, 1927, issue (No. 73), p. 21, while data for 1920 through 1922 for Waldorf System alone appeared in the October, 1923 , issue (No. 26), pp. 58 and 59 . Waldorf data are now reported only every three months. Monthly data for Schulte Cigar Stores irom 1821 appeared in June, 1023, isse ( No .22 , p. 4, , we, for Penney, United cigar and in May,
27 months' average, June to December, inclusive.

Table 99.-DEPARTMENT-STORE SALES

| Year and Month | value of sales, bY federal reserive districts 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | STNEL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | United States |  | Boston | New York | Philadelphia | Clevem land | Richmond | Atlanta | Chicago | st. Louis | Minneapolis | $\underset{\text { City }^{3}}{\text { Kanssas }}$ | Dallas | San Francisco | New England |
|  | $\begin{aligned} & \text { Ad- } \\ & \text { Justed } \end{aligned}$ | Unad- <br> Justed |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Relative to 1923-1925 average |  |  |  |  |  |  |  |  |  |  |  |  |  | Per cent to total |
| 1919 monthly average... |  | 78 | 78 | 76 | 79 | 77 | 84 | 94 |  |  | 93 | --....... | 98 | 68 |  |
| 1920 monthly average.-- |  | 94 | 91 | 91 | 93 | 98 | 93 | 113 |  |  | 105 | -..-- | 117 | 83 |  |
| 1921 monthly average... |  | 87 | 89 | 87 | 89 | 86 | 89 | 96 | 82 | 90 | 97 | -------- | 97 | 79 |  |
| 1922 monthly average.-- |  | 88 | 92 | 89 | 91 | 87 | 86 | 90 | 85 | 89 | 93 |  | 90 | 83 |  |
| 1923 monthly average... |  | 98 | 98 | 96 | 101 | 100 | 97 | 100 | 98 | 99 | 99 |  | 96 | 96 |  |
| 1924 monthly average... |  | 99 | 100 | 99 | 99 | 99 | 99 | 98 | 98 | 98 | 99 | 95 | 100 | 99 |  |
| 1925 monthly average... |  | 103 | 102 | 105 | 100 | 101 | 104 | 102 | 104 | 103 | 102 | 100 | 104 | 105 | 5.2 |
| 1926 monthly average... |  | 108 | 105 | 109 | 102 | 103 | 107 | 106 | 111 | 105 | 99 | 95 | 109 | 110 | 6.2 |
| 1927 monthly average... |  | 106 | 106 | 111 | 98 | 105 | 105 | 107 | 112 | 103 | 97 | 95 | 106 | 113 | 6. 7 |
| 1928 monthly average... |  | 108 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1926 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May .-..... | 107 | 107 | 104 | 106 | 105 | 106 | 108 | 114 | 116 | 105 | 101 | 92 | 112 | 107 | 5.1 |
| June..-- | 102 | 101 | 105 | 104 | 98 | 97 | 102 | 101 | 106 | 96 | 92 | - 90 | 103 | 99 | 3.6 |
| July .-- | 104 | 78 | 77 | 76 | 70 | 78 | 78 | 77 | 84 | 72 | 81 | 72 | 76 | 91 | 5.2 |
| August_-.-.-.-......... | 107 | 83 | 76 | 78 | 71 | 85 | 77 | 80 | 89 | 81 | 84 | 76 | 87 | 107 | 8. 6 |
| September... | 109 | 101 | 97 | 104 | 88 | 97 | 91. | 89 | 118 | 105 | 103 | 98 | 109 | 109 | 5.8 |
| October.... | 110 | 124 | 120 | 134 | 119 | 121 | 127 | 124 | 125 | 126 | 109 | 103 | 127 | 118 | 5.5 |
| November.- | 106 | 121 | 119 | 129 | 124 | 113 | 132 | 123 | 123 | 122 | 101 | 107 | 121 | 116 | 7.8 |
| December........... | 110 | 184 | 182 | 196 | 180 | 177 | 197 | 181 | 183 | 172 | 152 | 164 | 178 | 193 | 3.7 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January ---- | 106 | 89 | 103 | 96 | 80 | 85 | 84 | 85 | 84 | 79 | 81 | 81 | 87 | 96 | 10.5 |
| February | 106 | 83 | 78 | 84 | 78 | 83 | 78 | 88 | 90 | 83 | 76 | 76 | 86 | 85 | 8.0 |
| March.-..- | 105 | 100 | 97 | 99 | 94 | 98 | 89 | 99 | 108 | 98 | 92 | 89 | 97 | 109 | 5.4 |
| April..... | 105 | 111 | 111 | 112 | 103 | 116 | 110 | 109 | 117 | 108 | 104 | 98 | 109 | 115 | 5.1 |
| May | 103 | 102 | 100 | 102 | 94 | 105 | 103 | 108 | 108 | 96 | 91 | 88 | 112 | 107 | 5.2 |
|  | 104 | 101 | 110 | 109 | 97 | 99 | 100 | 98 | 107 | 93 | 91 | 86 | 95 | 95 | 4.3 |
| July .....-........----... | 103 | 75 | 74 | 74 | 65 | 78 | 72 | 76 | 82 | 68 | 75 | 68 | 69 | 89 | 6.0 |
| August ...........-...... | 111 | 89 | 84 | 84 | 73 | 93 | 80 | 86 | 99 | 90 | 92 | 83 | 80 | 114 | 11.2 |
| September.. | 108 | 100 | 99 | 106 | 83 | 95 | 91 | 97 | 114 | 97 | 93 | 96 | 105 | 111 | 7.5 |
| October.-.-............. | 108 | 119 | 115 | 128 | 109 | 113 | 121 | 128 | 119 | 127 | 109 | 106 | 125 | 119 | 7.0 |
| November-.-.-....- | 107 | 122 | 120 | 134 | 120 | 112 | 126 | 119 | 125 | 120 | 100 | 110 | 120 | 121 | 6.7 |
| December.- | 111 | 186 | 182 | 201 | 174 | 176 | 195 | 191 | 189 | 177 | 155 | 165 | 189 | 195 | 3.9 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January .-.-.-...--.-.-- | 105 | 88 | 98 | 94 | 75 | 85 | 81 | 85 | 91 | 82 | 72 | 80 | 89 | 98 | 8.6 |
| February | 105 | 85 | 78 | 89 | 75 | 85 | 82 | 91 | 94 | 85 | 72 | 77 | 88 | 92 | 8.2 |
| March.---- | 105 | 103 | 96 | 102 | 95 | 101 | 105 | 110 | 115 | 105 | 91 | 93 | 109 | 110 | 6.3 |
| April.-.---------.....- | 103 | 102 | 99 | 103 | 90 | 101 | 99 | 102 | 113 | 99 | 82 | 93 | 102 | 114 | 4.8 |
| May... | 104 | 107 | 101 | 109 | 94 | 106 | 108 | 114 | 122 | 104 | 90 | 94 | 116 | 116 | 5.0 |
| June | 105 | 104 | 111 | 112 | 95 | 100 | 102 | 98 | 114 | 94 | 84 | 84 | 98 | 101 | 4.6 |
| July .-.....-.....-......- | 108 | 78 | 76 | 77 | 64 | 78 | 75 | 77 | 91 | 73 | 68 | 71 | 71 | 94 | 5.7 |
| August...-.-.........-- | 108 | 85 | 78 | 78 | 65 | 85 | 78 | 86 | 101 | 83 | 80 | 85 | 80 | 116 | 12.1 |
| September.............. | 120 | 106 | 97 | 111 | 88 | 101 | 96 | 98 | 135 | 107 | 96 | 102 | 112 | 113 | 7.5 |
| October-...-.-.-........ | 105 | 123 | 119 | 135 | 114 | 112 | 125 | 123 | 132 | 119 | 88 | 110 | 125 | 129 |  |
| November-.............. | 107 | 122 | 119 | 134 | 113 | 110 | 127 | 120 | 136 | 119 | 89 | 111 | 126 | 118 |  |
| December......-. | 117 | 187 |  |  |  |  |  | -......-- | -.......- | ---.- | -....... | .-.----- |  |  |  |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January--..---- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March.--- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June...---.-.-.----.--- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Compiled by the Federal Reserve Board, Division of Research and Statistics, from reports of about 560 department stores located in 250 cities, with total annual sales of over $\$ 2,000,000,000$. In all cities covered by the sample census of distribution, except
sales in each case. The index numbers are based upon aggregate values. The index for the United $S$ States as a whole is also shown as adjusted to allow for seasonal varisales in each case. The index numbers are based upon aggregate values. The index for the United States as a whole is also shown as adjusted to allow for seasonal vari-
ations, differences in number of trading days, and variations in sales attributable to the movable Easter. Monthly data from 1919 appeared in the April, 1928 , issue ( No .80 ), pp. 20 and 21 , while a complete description of the methods of compilation may be found in the Federal Reserve Bulletin for February, 1928.
${ }^{2} 1925$ monthly average $=100$.

Table 100.-DEPARTMENT-STORE STOCKS ${ }^{1}$


Table 101.-WHOLESALE DISTRIBUTION ${ }^{1}$

| $\begin{aligned} & \text { Year and } \\ & \text { MONTH } \end{aligned}$ | UNADJUSTED |  |  |  |  |  |  |  |  |  | AdJUSTED FOR SEASONAL VARIATION |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total sales, 保 lines | Gro-cerles | Meats | $\begin{aligned} & \text { Dry } \\ & \text { goods } \end{aligned}$ | Men's clothing | Wom en's cloth ing | Boots and shoes | $\underset{\text { ward }}{\text { Hare }}$ | Drugs | $\begin{gathered} \text { Fur- } \\ \text { nil- } \\ \text { ture } \end{gathered}$ | Total, ones Inner | Gro-cerIes | Meats | $\begin{aligned} & \text { Dry } \\ & \text { goods } \end{aligned}$ | Men's cloth ing | $\begin{aligned} & \text { Wom- } \\ & \text { en's } \\ & \text { cloth- } \\ & \text { ing } \end{aligned}$ | Boots and shoes | Hard- ware | Drugs | $\begin{aligned} & \text { Fur- } \\ & \text { nl- } \\ & \text { ture } \end{aligned}$ |
|  | Index numbers relative to 1923-1925 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1019 mo. av..... | 110 | 118 | 145 | 100 | 78 | 93 | 140 | 96 | 91 |  |  |  |  |  |  |  |  |  |  |  |
| 1920 mo.av... | 114 | 126 | 121 | 107 | 106 | 95 | 125 | 116 | 95 |  |  |  |  |  |  |  |  |  |  |  |
| 1921 mo. av... | 87 | 93 | 80 | 91 | 72 | 84 | 99 | 80 | 86 | 73 | ------ |  |  |  |  |  |  |  |  |  |
| 1922 mo. av... | 89 | 93 | 83 | 89 | 80 | 90 | 97 | 86 | 87 | 85 | -- |  |  |  |  |  |  |  |  |  |
| 1923 mo. av... | 101 | 100 | 94 | 103 | 99 | 109 | 104 | 102 | 97 | 102 |  |  |  |  |  |  |  |  |  |  |
| 1924 mo. av.... | 98 | 101 | 96 | 97 | $98^{\circ}$ | 97 | 98 | 97 | 99 | 93 |  |  |  |  |  |  |  |  |  |  |
| 1925 mo av- | 101 | 99 | 110 | 100 | 103 | 94 | 98 | 101 | 104 | 105 |  |  |  |  |  |  |  |  |  |  |
| 1926 mo. av... | 98 | 98 | 115 | 94 | 95 | 70 | 101 | 100 | 107 | 102 |  |  |  |  |  |  |  |  |  |  |
| 1927 mo av... | 95 | 94 | 108 | 89 | 92 | 68 | 104 | 95 | 108 | 100 |  |  |  |  |  |  |  |  |  |  |
| 1928 mo.av..... | 94 | 95 | 113 | 85 | 91 | 62 | 98 | 93 | 113 | 99 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1926 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May----------- | 91 | 94 | 118 | 85 | 57 | 43 | 100 | 103 | 98 | 96 | 99 | 97 | 118 | 97 | 91 | 78 | 99 | 100 | 105 | 101 |
| June..- | 91 | 102 | 120 | 81 | 47 | 34 | 91 | 102 | 99 | 88 | 99 | 99 | 117 | 91 | 93 | 83 | 96 | 98 | 106 | 100 |
| July--- | 91 | 99 | 112 | 83 | 75 | 28 | 95 | 98 | 100 | 87 | 97 | 98 | 110 | 90 | 88 | 54 | 118 | 100 | 105 | 100 |
| August.........- | 107 | 98 | 116 | 117 | 163 | 62 | 119 | 100 | 103 | 104 | 97 | 97 | 114 | 96 | 101 | 45 | 108 | 99 | 106 | 102 |
| September----- | 117 | 109 | 125 | 122 | 148 | 101 | 126 | 109 | 116 | 117 | 100 | 100 | 117 | 97 | 97 | 70 | 103 | 101 | 109 | 104 |
| October-.--- | 111 | 107 | 123 | 104 | 105 | 111 | 113 | 109 | 125 | 121 | 94 | 95 | 110 | 90 | 83 | 69 | 90 | 97 | 108 | 101 |
| November- | 97 | 102 | 112 | 88 | 61 | 45 | 104 | 100 | 112 | 112 | 98 | 96 | 116 | 99 | 82 | 66 | 99 | 102 | 111 | 107 |
| December.. | 84 | 94 | 106 | 71 | 44 | 42 | 76 | 93 | 100 | 95 | 95 | 96 | 113 | 89 | 87 | 66 | 94 | 100 | 107 | 101 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January .-.----- | 86 | 86 | 113 | 78 | 65 | 71 | 92 | 82 | 102 | 86 | 94 | 93 | 113 | 83 | 84 | 77 | 112 | 92 | 104 | 98 |
| February-----. | 91 | 81 | 107 | 88 | 123 | 95 | 87 | 82 | 95 | 98 | 95 | 93 | 112 | 87 | 97 | 75 | 110 | 93 | 103 | 98 |
| March..--- | 103 | 94 | 104 | 95 | 148 | . 108 | 111 | 102 | 117 | 114 | 96 | 96 | 108 | 90 | 101 | 67 | 97 | 98 | 106 | 101 |
| April.- | 90 | 90 | 104 | 76 | 85 | 64 | 100 | 96 | 108 | 97 | 93 | 95 | 111 | 86 | 87 | 68 | 94 | 94 | 106 | 96 |
| May----..----. | 88 | 95 | 109 | 76 | 52 | 39 | 111 | 93 | 98 | 93 | 95 | 97 | 109 | 87 | 87 | 69 | 110 | 91 | 104 | 98 |
| June-------.--- | 87 | 101 | 106 | 78 | 46 | 28 | 85 | 96 | 99 | 90 | 93 | 98 | 104 | 88 | 90 | 65 | 90 | 92 | 106 | 102 |
| July_...........- | 88 | 92 | 104 | 81 | 78 | 43 | 107 | 90 | 100 | 84 | 95 | 91 | 102 | 88 | 90 | 79 | 134 | 92 | 105 | 102 |
| August | 111 | 97 | 111 | 125 | 165 | 98 | 122 | 98 | 110 | 101 | 100 | 97 | 109 | 102 | 101 | 72 | 111 | 97 | 112 | 109 |
| September----- | 112 | 102 | 117 | 113 | 140 | 95 | 127 | 106 | 122 | 117 | 96 | 94 | 109 | 91 | 92 | 66 | 104 | 99 | 114 | 103 |
| October | 106 | 102 | 122 | 99 | 101 | 87 | 114 | 105 | 128 | 118 | 91 | 90 | 109 | 86 | 81 | 54 | 91 | 94 | 111 | 99 |
| November | 93 | 100 | 101 | 88 | 61 | 45 | 111 | 98 | 113 | 105 | 95 | 94 | 105 | 89 | 88 | 67 | 105 | 100 | 112 | 100 |
| December.-.-.-- | 82 | 90 | 103 | 70 | 48 | 39 | 82 | 90 | 99 | 83 | 93 | 92 | 109 | 87 | 93 | 61 | 101 | 97 | 106 | 89 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January.....-.- | 87 | 85 | 106 | 85 | 76 | 65 | 94 | 82 | 106 | 78 | 94 | 93 | 106 | 89 | 99 | 70 | 115 | 92 | 108 | 89 |
| February | 93 | 85 | 108 | 89 | 128 | 88 | 87 | 82 | 101 | 96 | 97 | 98 | 113 | 88 | 99 | 70 | 110 | 93 | 110 | 96 |
| March. | 99 | 95 | 105 | 87 | 131 | 89 | 111 | 95 | 121 | 107 | 93 | 97 | 109 | 83 | 94 | 55 | 96 | 91 | 110 | 95 |
| April.-. | 86 | 88 | 105 | 70 | 75 | 53 | 99 | 89 | 113 | 88 | 89 | 93 | 112 | 78 | 77 | 57 | 94 | 86 | 111 | 87 |
| May...----.... | 89 | 96 | 109 | 75 | 57 | 35 | 114 | 97 | 110 | 87 | 96 | 99 | 109 | 86 | 96 | 62 | 113 | 94 | 117 | 92 |
| June...-........- | 84 | 97 | 114 | 71 | 39 | 21 | 77 | 96 | 104 | 83 | 89 | 94 | 112 | 79 | 76 | 49 | 82 | 92 | 110 | 94 |
| July | 87 | 92 | 113 | 74 | 68 | 46 | 98 | 90 | 102 | 78 | ${ }^{93}$ | 91 | 111 | 80 | 79 | 83 | 123 | 91 | 107 | 95 |
| August.....---- | 108 | 101 | 118 | 110 | 148 | 93 | 119 | 95 | 115 | 108 | 98 | 100 | 116 | 90 | 90 | 68 | 109 | 94 | 117 | 106 |
| September--.--- | 109 | 100 | 130 | 105 | 137 | 88 | 110 | 100 | 119 | 126 | 94 | 92 | 122 | 84 | 89 | 62 | 90 | 92 | 112 | 112 |
| October-..----- | 111 | 107 | 125 | 99 | 123 | 100 | 108 | 108 | 134 | 131 | 95 | 95 | 111 | 85 | 99 | 62 | 87 | 97 | 116 | 110 |
| November.....- | 95 | 100 | 117 | 90 | 66 | 38 | 105 | 97 | 114 | 110 | 97 | 94 | 122 | 91 | 95 | 55 | 100 | 99 | 113 | 105 |
| December. .-.-- | 81 | 87 | 109 | 69 | 51 | 34 | 59 | 86 | 120 | 92 | 92 | 89 | 115 | 86 | 101 | 54 | 72 | 93 | 128 | 98 |
| 1929 | . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January .......- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February-.-.... | -..---- |  |  |  |  | .... |  | --- |  | --- | -..---- |  |  |  |  |  |  |  |  |  |
| March..--. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April.----- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May .-. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jume...- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Compiled by the Federal Reserve Board, Division of Research and Statistics, from reports of 362 firms on groceries, 61 meat-packing companies on meats, 146 firms on dry goods, 13 firms on men's clothing and 40 firms on women's clothing (both classes for the New York district alone), 89 wholesale dealers and manufacturers, 186 firms on hardware, 92 firms on drugs, and 87 wholesalers and manufacturers on furniture, a total of 1,076 frms. Prior to 1923, fewer frms reported, but these differences are taken care of in the construction of the index as percentages of the sales of identical firms between the given month and the base period (1923 to 1925$)$. The various lines are struction of this index, including seasonal variations, is presented in the Federal Reserve Bulletin for December, 1927, p. 817. Monthly data from 1919 appeared in the January, 1928, issue (No. 77) of the SURvEY, p. 21.

## Table 102.-LIFE INSURANCE-NEW BUSINESS AND PREMIUMS ${ }^{1}$

(Association of Life Insurance Presidents)

| Year and Month | NEW BUSINESS |  |  |  |  |  |  |  |  |  | PREMIUM COLLECTIONS (new and renewal) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ordinary |  | Industrial |  | Group |  |  | Total |  |  | Ordlnary | $\underset{\text { trial }}{\text { Indus- }}$ | Group | Total |
|  | Number of policies | Thousands of dollars | Number policies | Thousands of | $\begin{array}{\|c} \text { Num- } \\ \text { ber of } \\ \text { oon- } \\ \text { tracts } \end{array}$ |  | Thousands of dollars | Number of policies and contracts | Number of policies and certiflcates | Thousands of dollars | Thousands of dollars |  |  |  |
| 1913 monthly average. | 79,514 | \$141, 450 | 379, 819 | \$51, 009 | 5 | 2,500 | \$1,736 | 459,338 | 461,833 | \$195, 095 | \$38, 953 | \$10, 778 | \$36 | \$49, 767 |
| 1914 monthly average | 78, 779 | 138, 225 | 410, 189 | 55, 217 | 6 | 4,090 | 3,790 | 488, 974 | 493, 059 | 197, 231 | 40,506 | 11, 580 | 52 | 52,138 |
| 1915 monthly average. | 83, 909 | 146, 792 | 428, 559 | 58, 128 | 11 | 6,542 | 3,927 | 512,479 | 519, 011 | 208, 847 | 42, 262 | 12,421 | 97 | 54,780 |
| 1916 monthly average | 96,311 | 181, 418 | 414, 605 | 58,645 | 32 | 11, 739 | 6,560 | 510,948 | 522, 655 | 246, 623 | 45, 721 | 13,280 | 143 | 59,144 |
| 1917 monthly average.. | 110,448 | 210, 087 | 414, 443 | 61, 484 | 81 | 25,760 | 14, 861 | 524, 972 | 550, 650 | 286, 433 | 50, 485 | 14, 440 | 308 | 65, 233 |
| 1918 monthly average.. | 111, 640 | 219, 300 | 433, 226 | 66,098 | 70 | 26, 266 | 20, 555 | 544, 936 | 571, 133 | 305, 953 | 54, 579 | 15,807 | 536 | 70,922 |
| 1919 monthly average | 180, 261 | 382, 644 | 465, 248 | 77, 001 | 164 | 39,720 | 35, 465 | 645, 674 | 685, 229 | 496, 010 | 64, 348 | 18,088 | 991 | 83, 427 |
| 1920 monthly average. | 205, 276 | 464, 189 | 499, 938 | 93, 044 | 190 | 38, 491 | 35, 478 | 705, 404 | 743, 705 | 592, 711 | 75, 462 | 20,342 | 1,498 | 97,302 |
| 1921 monthly average | 163, 313 | 381, 688 | 550, 065 | 104, 813 | 58 | 10, 299 | 9,257 | 713,437 | 723, 678 | 495, 758 | 81, 424 | 22,587 | 1,545 | 105, 556 |
| 1922 monthly average. | 166, 781 | 419,585 | 582, 102 | 118, 233 | 96 | 21,345 | 22, 885 | 748, 979 | 770, 229 | 560, 703 | 89, 242 | 25, 751 | 1,621 | 116, 614 |
| 1923 monthly average. | 195, 841 | 502, 495 | 662, 259 | 143, 338 | 158 | 34, 847 | 43, 337 | 858, 257 | 892,946 | 689, 170 | 99,631 | 30,057 | 2, 092 | 131,779 |
| 1924 monthly average. | 196, 841 | 532, 347 | 703, 769 | 163, 630 | 132 | 29, 916 | 49, 814 | 900, 741 | 930,525 | 745, 790 | 110, 287 | 34, 178 | 2, 618 | 147, 083 |
| 1925 monthly average. | 214, 168 | 616, 55] | 804, 380 | 196, 598 | 165 | 45, 533 | 83, 232 | 1,018, 713 | 1,064,080 | 896, 381 | 125, 119 | 39, 119. | 4, 625 | 168,863 |
| 1926 monthly average | 219, 762 | 650, 368 | 782, 247 | 213,838 | 196 | 62, 690 | 87, 550 | 1, 002,205 | 1, 064, 699 | 951, 757 | 130, 882 | 44, 775 | 4, 893 | 180, 549 |
| 1927 monthly average. | 220, 229 | 650, 367 | 823,700 | 222, 278 | 197 | 41,749 | 68,698 | 1,044, 126 | 1.135,678 | 941,343 | 145, 026 | 50, 189 | 5,420 | 200, 635 |
| 1928 monthly average | 248, 640 | 683, 281 | 866, 910 | 224, 377 | 195 | 46,621 | 111, 361 | 1, 115, 745 | 1, 162, 171 | 1,019,019 |  |  |  |  |
| $1926$ | $\begin{aligned} & 184,843 \\ & 219,049 \\ & 221,457 \\ & 273,769 \end{aligned}$ | $\begin{aligned} & 528,186 \\ & 608,599 \end{aligned}$ | $714,041$ | $\begin{array}{r} 197,277 \\ 226,523 \end{array}$ | 157 | 47, 743 | 73,456 | $\begin{array}{r} 899,041 \\ 1,041,691 \end{array}$ | $\begin{array}{r} 946,627 \\ 1,085,721 \end{array}$ | 798, 919 | 118, 023 | 40, 827 | 3,783 | 162,633 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| October |  |  |  |  | 183 | 44, 213 |  |  |  | 897, 475 | 125, 689 | 43, 988 | 4,735 | 174, 412 |
| November- |  | 637, 273 | 870, 324 | 235, 691 | 182 | 70, 363 | 100, 448 | 1,091,963 | 1, 162, 144 | 973,412 | 127, 489 | 45, 281 | 4,327 | 177,097 |
| December |  | 806, 066 | 838, 577 | 228, 008 | 456 | 214, 277 | 262, 452 | 1, 112, 802 | 1, 326, 623 | 1,296,528 | 154, 534 | 73,947 | 7,683 | 236, 164 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 187, 460 | 579, 026 | 679, 290 | 185, 292 | 192 | 51,967 | 94,445 | 866,942 | 918,717 | 858,763 | 135, 395 | 45, 920 | 7,065 | 188, 380 |
| February | 205, 004 | 626, 568 | 767, 121 | 207, 217 | 176 | 32, 452 | 46, 119 | 972,901 | 1, 005, 177 | 879,904 | 135, 969 | 43,286 | 4,803 | 184,058 |
| March. | 245, 374 | 749,543 | 890, 560 | 241, 701 | 178 | 64,803 | 103, 057 | 1, 136, 112 | 1, 200, 737 | 1,094,301 | 159, 168 | 45, 534 | 5,774 | 210, 476 |
| April. | 246, 519 | 738, 141 | 851,905 | 227, 279 | 176 | 30, 991 | 46, 960 | 1,098, 600 | 1,729, 415 | 1, 012,380 | 149, 993 | 45, 650 | 5,427 | 201,070 |
| May | 233,729 | 704, 807 | 902, 343 | 241, 662 | 197 | 30, 805 | 45,683 | 1,136, 269 | 1, 166, 877 | 992, 152 | 145, 256 | 45, 750 | 4,943 | 195,949 |
| June | 236, 429 | 702, 860 | 816,966 | 221, 780 | 189 | 41, 042 | 67, 817 | 1, 053, 584 | 1,094, 437 | 992,457 | 151, 009 | 46, 584 | 5,164 | 202, 757 |
| July. | 216, 956 | 627, 787 | 732, 665 | 200, 835 | 161 | 29, 100 | 54,229 | 949, 782 | 978, 721 | 882, 851 | 140, 517 | 47, 108 | 5,123 | 192, 748 |
| August | 211, 482 | 631, 740 | 781, 361 | 211, 157 | 138 | 30, 488 | 43,977 | 992, 981 | 1,023, 331 | 886, 874 | 137, 510 | 49,220 | 5,327 | 192, 057 |
| September- | 186, 090 | 531, 210 | 745, 664 | 200, 622 | 115 | 13, 496 | 31,475 | 931, 869 | 945, 250 | 763,307 | 131,763 | 45, 741 | 4,317 | 181, 821 |
| October- | 212,924 | 607, 237 | 992, 140 | 265, 974 | 148 | 23,797 | 48, 625 | 1, 205, 212 | 1, 228, 861 | 921, 836 | 140, 041 | 49, 272 | 5,792 | 195, 105 |
| November | 203, 629 | 586, 694 | 940, 847 | 252, 738 | 208 | 27, 928 | 76, 960 | 1, 144, 684 | 1, 172, 404 | 916, 392 | 145, 581 | 48, 273 | 4,862 | 198, 716 |
| December | 256,546 | 718,793 | 783, 539 | 211,076 | 491 | 124, 123 | 165, 025 | 1, 040, 576 | 1, 164, 208 | 1, 094, 894 | 168, 114 | 80, 926 | 6,448 | 264, 488 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 183, 511 | 580,462 | 901, 786 | 236, 303 | 125 | 26, 408 | 46, 841 | 1, 085, 422 | 1, 111, 705 | 863,606 | 148, 947 | 54, 564 | 7,61817,623 | 211, 129 |
| February | 212, 120 | 655, 406 | 846, 745 | 221, 948 | 175 | 53, 800 | 91, 505 | 1, 058, 040 | 1,112,665 | 968, 860 | 154, 292 | 48, 193 |  | 220, 108 |
| March | 264, 939 | $\begin{aligned} & 781,122 \\ & 710,435 \end{aligned}$ | 1, 049,955 | 273,551259,962 | 202159 | $\begin{aligned} & 35,788 \\ & 36,705 \end{aligned}$ | 57, 98662,007 | $1,315,096$$1,209,816$ | $1,350,682$$1,246,362$ | 1,112,659 | 168, 961 | $\begin{aligned} & 51,013 \\ & 50,691 \end{aligned}$ | 17,623 6,465 | 226,439214,455 |
| April. | 228, 861 |  | 980, 796 |  |  |  |  |  |  | 1,032, 404 | 157, 836 |  | 5,928 |  |
| May | 276,180198,845 | $\begin{aligned} & 757,879 \\ & 755,699 \end{aligned}$ | 839,453840,312 | $\begin{aligned} & 216,396 \\ & 214,882 \end{aligned}$ | $\begin{aligned} & 172 \\ & 190 \end{aligned}$ | 48, 839 | $\begin{aligned} & 205,195 \\ & 113,711 \end{aligned}$ | 1, 115, 805 | 1, 164, 472 | $\begin{aligned} & 1,179,470 \\ & 1,084,292 \end{aligned}$ | 165,718154,916 | $\begin{aligned} & \mathbf{5 2 , 1 8 4} \\ & 51,509 \end{aligned}$ | 5,930 | 223, 832 |
| June |  |  |  |  |  | 51,895 |  | 1, 139,347 | 1, 191, 052 |  |  |  |  | 211,909 |
| July-.- | 242, 065 | 660, 062 | $\begin{aligned} & 753,773 \\ & 740,371 \end{aligned}$ | $\begin{aligned} & 194,642 \\ & 193,365 \end{aligned}$ | $\begin{aligned} & 170 \\ & 159 \end{aligned}$ | $\begin{aligned} & 38,905 \\ & 24,605 \end{aligned}$ | 74,19656,926 |  | 1,040, 054 | 928,900 876,885 | 152,862143,386 | 53,07250,228 | 7,2965,705 | $\begin{aligned} & 213,230 \\ & 199,319 \end{aligned}$ |
| August |  | 626, 594 |  |  |  |  |  | $982,595$ | 1,007,041 | 876, 885 |  |  |  |  |
| September | $\begin{aligned} & 219,388 \\ & 263,201 \\ & 257,589 \\ & 289,606 \end{aligned}$ | $\begin{aligned} & 534,112 \\ & 659,844 \\ & 667,633 \\ & 810,127 \end{aligned}$ | 770,416 | $\begin{aligned} & 198,949 \\ & 233,530 \end{aligned}$ | $\begin{aligned} & 120 \\ & 157 \end{aligned}$ | 52,943 | 277,943 | $\begin{array}{r} 989,924 \\ 1,209,642 \end{array}$ | 1,042, 747 | $\begin{array}{r} 1,011,004 \\ 965,493 \end{array}$ | 135,743154,489 | $\begin{aligned} & 49,343 \\ & 55,961 \\ & 49,154 \end{aligned}$ | $\begin{aligned} & 5,738 \\ & 6,447 \\ & 6,577 \end{aligned}$ | $\begin{aligned} & 100,824 \\ & 216,627 \\ & 210,763 \end{aligned}$ |
| October |  |  | 946, 284 |  |  | 18,911 | 72,119 |  | 1, 228, 396 |  |  |  |  |  |
| November |  |  | 782, 026 | 202, 948 | 203 | 42,358 | 53, 569 | 1, 039, 818 | 1, 081, 973 | 924, 150 | 155, 032 |  |  |  |
| December |  |  | 951,002 | 246, 045 | 510 | 128, 290 | 224, 330 | 1, 241, 118 | 1,368, 904 | 1, 280, 502 |  |  |  |  |
| January 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February <br> March |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April_ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MayJune |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Compiled by the Association of Life Insurance Presidents. The data on new business represent only new business that has been paid for, exclusive of revivals, increases, and dividend additions. Premium collections show the amount of money actually invested in life insurance each month, and include total premium collections, new and renewal, and considerations for annuities and for supplementary contracts involving and not involving hife contingencies. The 45 companies whose igures are include given in September, 1924, issue (No. 37), p. 37. Data given in previous issues cover a smaller number of companies.
${ }_{2}$ This column, by adding together the number of policies issued for ordinary and industrial insurance and the number of certificates issued under group insurance contracts, indicates the trend in number of persons covered by new insurance, but does not show the exact number of persons covered, since one person may have several policies of ordinary insurance and in addition hold a certificate under a group contract.

## Table 103.-LIFE INSURANCE-ASSETS AND NEW BUSINESS BY DISTRICTS

| Year and Month | ADMITTED ASSETS : |  |  |  |  |  |  |  |  |  | NEW BUSINESS, ORDINARY INSURANCE ${ }^{2}$ |  |  |  |  |  | $\begin{array}{\|c\|} \hline \text { CANA- } \\ \text { DIAN } \\ \text { SALES, } \\ \text { ORDI- } \\ \text { NARY } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grand total | Mortgage loans |  |  | Bonds and stocks (book values) |  |  |  |  | $\left(\begin{array}{c} \text { Policy } \\ \text { loans } \\ \text { and } \\ \text { pre- } \\ \text { mium } \\ \text { notes } \end{array}\right.$ | United <br> States, total | Eastern facturing | Western manu-facturing | Western agricultural | $\begin{aligned} & \text { South- } \\ & \text { ern } \end{aligned}$ | Far westorn |  |
|  |  | Total | Farm | All | Total | Gov. ernment | Railroad | $\left\|\begin{array}{c}\text { Pub- } \\ \text { ilic } \\ \text { utili- } \\ \text { ties }\end{array}\right\|$ | All |  |  |  |  |  |  |  |  |
|  | Millions of dollars |  |  |  |  |  |  |  |  |  | Thousands of dollars |  |  |  |  |  |  |
| 1921 mo.av.- |  |  |  |  |  |  |  |  |  |  | \$425,092 | \$154, 321 | \$90, 152 | \$81, 074 | \$57, 145 | \$42, 400 | \$30,847 |
| 1922 mo.av.. |  |  |  |  |  |  |  |  |  |  | 459, 292 | 174, 242 | 98,380 | 78,899 | 61,645 | 46, 126 | 28,421 |
| 1923 mo.av_. | \$7,409 | \$2, 694 | \$1, 261 | \$1, 432 | \$3, 327 | \$1, 219 | \$1,750 | \$281 | \$77 | \$828 | 549, 296 | 208, 526 | 121, 194 | 90, 912 | 72,403 | 56, 261 | 30,487 |
| 1924 mo.av_- | 8,091 | 3,138 | 1,405 | 1,734 | 3,428 | 1,119 | 1,849 | 365 | 95 | 995 | 591, 172 | 234,969 | 128, 465 | 93, 252 | 73, 374 | 61, 112 | 32,597 |
| 1925 mo.av.- | 8,944 | 3,607 | 1, 496 | 2, 111 | 3, 653 | 1,053 | 1,975 | 521 | 105 | 1,070 | 672, 286 | 267, 430 | 144, 071 | 107, 277 | 85, 312 | 68, 197 | 35,406 |
| 1926 mo.av.. | 9,935 | 4,211 | 1,564 | 2,647 | 3, 887 | 971 | 2,117 | 686 | 113 | 1,177 | 700, 730 | 279, 875 | 152, 474 | 110, 174 | 88, 133 | 70,075 | 39,304 |
| $1927 \mathrm{mo.av}$ | 11,043 | 4,829 | 1,613 | 3,216 | 4,151 | 922 | 2,230 | 852 | 147 | 1,308 | 710,962 | 286, 505 | 158, 233 | 107, 241 | 87,492 | 71, 491 | 41,870 |
| 1928 mo.av-. |  |  |  |  |  |  |  |  |  |  | 744,722 | 304, 005 | 167, 127 | 112,095 | 87,933 | 73,561 | 48,390 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1926 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| September-- | 10, 141 | 4,335 | 1,579 | 2,756 | 3,924 | 948 | 2,148 | 715 | 113 | 1,202 | 597, 667 | 222, 265 | 132,004 | 104, 268 | 76, 904 | 62, 226 | 34, 878 |
| October-...- | 10, 237 | 4,405 | 1,581 | 2, 824 | 3,941 | 937 | 2, 156 | 729 | 119 | 1,210 | 656, 362 | 262, 334 | 145, 635 | 100, 446 | 81, 621 | 66,326 | 40, 226 |
| November.- | 10,333 | 4,463 | 1, 585 | 2,878 | 3,957 | 936 | 2,161 | 740 | 120 | 1,219 | 691, 520 | 283, 297 | 153, 194 | 102, 804 | 84, 462 | 67, 673 | 44,251 |
| December... | 10, 432 | 4, 532 | 1,588 | 2,944 | 3,975 | 920 | 2,172 | 756 | 127 | 1,229 | 879,049 | 356, 488 | 189, 106 | 133, 132 | 112, 856 | 87, 467 | 47,366 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January ...-- | 10, 529 | 4,587 | 1, 592 | 2,995 | 3,987 | 919 | 2,173 | 764 | 131 | 1,240 | 601,985 | 257, 734 | 133, 912 | 86, 167 | 66, 112 | 58, 060 | 36,986 |
| February--- | 10,606 | 4, 637 | 1,599 | 3, 038 | 4,002 | 918 | 2,173 | 775 | 136 | 1,252 | 673, 855 | 293, 294 | 145, 932 | 95,686 | 77, 258 | 61, 685 | 35,525 |
| March...--- | 10, 713 | 4,686 | 1,604 | 3,082 | 4,033 | 921 | 2,183 | 792 | 137 | 1,268 | 836,995 | 356, 736 | 183, 761 | 121, 369 | 92, 094 | 83, 035 | 42,883 |
| April--.....- | 10,812 | 4,722 | 1,611 | 3,111 | 4,067 | 917 | 2, 204 | 806 | 140 | 1,282 | 778, 451 | 316, 582 | 173,372 | 114, 529 | 93,904 | 80,064 | 41,631 |
| May | 10, 896 | 4, 764 | 1,615 | 3, 149 | 4, 085 | 914 | 2, 210 | 816 | 145 | 1,291 | 752, 267 | 309, 265 | 163, 551 | 110, 340 | 91, 834 | 77, 277 | 44, 553 |
| June... | 10,98211,078 | 4,806 | 1,617 | 3,189 | 4,117 | 915 | 2,225 | 831 | 146 | 1,305 | 763, 495 | 309, 396 | 165, 803 | 115, 180 | 99,022 | 74, 094 | 45, 298 |
| July.-- |  | $\begin{aligned} & 4,847 \\ & 4,898 \end{aligned}$ | 1,620 | 3, 227 | 4, 152 | 920 | 2,234 | 850 | 148 | 1,316 | 680, 076 | 267, 873 | 151, 721 | 105, 250 | 86, 058 | 69, 174 | 39,962 |
| August. | $\begin{aligned} & 11,078 \\ & 11,172 \end{aligned}$ |  | 1, 622 | 3,276 | 4,192 | 923 | 2, 242 | 876 | 151 | 1,327 | 681, 654 | 261, 413 | 154, 708 | 103,638 | 86,549 | 75,346 | 38,360 |
| September.- | $\begin{aligned} & 11,268 \\ & 11,381 \\ & 11,484 \\ & 11,597 \end{aligned}$ | 4,941 | 1,620 | 3,321 | 4,216 | 919 | 2, 259 | 887 | 151 | 1,338 | 606, 760 | 237, 184 | 138,441 | 93, 224 | 76,998 | 60,913 | 35, 302 |
| October....- |  |  | 1, 621 | 3,361 | 4, 262 | 928 | 2, 268 | 911 | 155 | 1,347 | 659, 375 | 257, 543 | 148, 380 | 103, 663 | 82,706 | 67, 083 | 48, 104 |
| November .- |  | $\begin{aligned} & 4,982 \\ & 5,019 \\ & 5,062 \end{aligned}$ | 1, 620 | 3,399 | 4,323 | 940 | 2,287 | 942 | 154 | 1,358 | 662, 688 | 254, 111 | 150, 447 | 106, 310 | 84, 189 | 67,631 | 44,935 |
| $\begin{gathered} \text { December... } \\ 1928 \end{gathered}$ |  |  | 1,618 | 3,444 | 4,374 | 934 | 2,299 | 974 | 167 | 1,369 | 833,944 | 316, 931 | 188, 770 | 131, 530 | 113, 184 | 83, 629 | 48,899 |
|  | $11,597$ | $5,062$ | 1,615 | 3,488 | 4,417 | 938 | 2,311 | 1,004 | 164 | 1,383 | 609, 228 | 261, 898 | 130, 338 | 90,662 | 68,847 | 57, 483 | 47,569 |
| February..- | $\begin{aligned} & 11,704 \\ & 11,796 \end{aligned}$ | 5,129 | 1,613 | 3, 516 | 4, 454 | 939 | 2,329 | 1,017 | 169 | 1,396 | 731, 145 | 318, 664 | 160, 185 | 104, 811 | 81, 213 | 66, 272 | 40,290 |
| March.. | $\begin{aligned} & 11,796 \\ & 11,893 \end{aligned}$ | $\begin{aligned} & 5,153 \\ & 5,199 \end{aligned}$ | 1. 604 | 3, 549 | 4,506 | 939 | 2,345 | 1,050 | 172 | 1,412 | 832, 250 | 343, 463 | 185, 240 | 127, 286 | 96, 766 | 79, 495 | 44, 823 |
| April | 12,001 |  | 1,602 | 3,597 | 4,563 | 943 | 2, 359 | 1,064 | 197 | 1,426 | 769, 263 | 314,944 | 165, 567 | 119, 317 | 94, 128 | 75,307 | 47,156 |
| May | 12, 107 | 5,241 | 1,601 | 3,640 | 4,605 | 928 | 2,372 | 1, 097 | 208 | 1,442 | 834, 557 | 343, 822 | 180, 589 | 128, 946 | 99,513 | 81, 687 | 49,870 |
| June. | $\begin{aligned} & 12,197 \\ & 12,312 \end{aligned}$ | 5,292 | 1,600 | 3, 692 | 4, 621 | 905 | 2,390 | 1,112 | 214 | 1,459 | 805, 695 | 333, 895 | 176, 121 | 121, 089 | ${ }^{96,796}$ | 77,794 | 51,844 |
| July |  | 5,3385,382 | 1,601 | 3,737 | 4,665 | 916 | 2,397 | 1,128 | 224 | 1,472 | 700, 939 | 273, 188 | 163, 694 | 107, 659 | 85,056 | 71,342 | 49,492 |
| August..-..- | $\begin{aligned} & 12,312 \\ & 12,406 \end{aligned}$ |  | 1,602 | 3,780 | 4,704 | 927 | 2,411 | 1,138 | 228 | 1,486 | 702, 275 | 273, 055 | 163, 568 | 104, 287 | 86, 288 | 75, 077 | 43,503 |
| September.- | 12,510 | 5,4295,484 | 1,604 | 3, 825 | 4,718 | 930 | 2,406 | 1,151 | 231 | 1,497 | 578, 193 | 218,788 | 136,379 | 90,916 | 71,371 | 60,739 | 38,872 |
| October-.... | $\begin{aligned} & 12,634 \\ & 12,742 \end{aligned}$ |  | 1,606 | 3,878 | 4,752 | 939 | 2,410 | 1,163 | 240 | 1,510 | 764, 577 | 316, 574 | 176,739 | 112,916 | 85,408 | 72,940 | 55, 743 |
| November.- |  | $\begin{aligned} & 5,484 \\ & 5,517 \end{aligned}$ | 1,603 | 3,914 | 4,816 | 949 | 2,437 | 1,180 | 250 | 1,523 | 722,495 | 296,988 | 167,479 | 104, 294 | 81,768 | 71, 886 | 54, 865 |
| December--- |  |  |  |  |  |  |  |  |  |  | 886,048 | 352, 806 | 199, 625 | 132,957 | 108, 046 | 92, 614 | 56,647 |
| $\begin{gathered} 1929 \\ \text { January } . . .-. \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February ------..... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Compiled by the Association of Life Insurance Presidents from special reports of 41 companies having 82 per cent of the total admitted life insurance assets of United States legal reserve companies; the data are given as of the end of each month and are designed to show the fluctuations in the character of investments of life insurance companies. Admitted assets embrace all assets permitted by statute to be included for testing the solvency of the companies; in addition to the items separately listed, the total also includes real estate, collateral loans, cash, bills receivable, interest due and accrued, deferred and unpaid premiums, etc. of the bonds and stocks, approximately $981 / 2$ per cent are bonds and $11 / 2$ per cent are stocks. A compilation of the mortgages owned by 57 life insurance companies, by States, as of Dec. 31 , 1925 , appeared in the September, 1926, issue (No. 61), p. 26.
${ }_{2}$ Represents data, on ordinary life insurance only (thus excluding industrial and group insurance) compiled by the Life Insurance Sales Research Bureau from 81 insurance companies who held on Jan. 1, 1927,90 per cent of the total ordinary legal life reserve in force in the United States. Monthly data for 1921 were given in the April, 1924, issue (No. 32), p. 56 . The Eastern Manufacturing district includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Penmsylvania; Western Manufacturing district-Ohio, Indiana, Ilinois, Michigan, and Wisconsin; Western Agricultural district-Minnesota, Iowa, Missouri, North Dakota, Texas, South Dakota, Nebraska, Kansas, Arkansas, Louisiana, and Oklahoma. Southern district-Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, and Mississippi; Far Western district-Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, and California. Data on lapses are presented on p. 138 of the present issue.
in Canada. Details by Provinces are given in the bureau's monthly reports, in Canada. Details by Provinces are given in the bureau's monthly reports,

Table 104.-BANKING

${ }^{1}$ Check payments for the United States are represented by debits to individual accounts as collected by the Federal Reserve Board from about 150 of the larger clearinghouse centers. These data represent check transactions more fully than clearings inasmuch as all checks debited to individual accounts are included and not merely those passing through the clearing house. Data on clearings have been discontinued owing to the variation in number of centers reporting, the annual averages back to 1913 being shown in the August, 1927, issue (No. 72), p. 123. The figures given are combined from weekly totals, the first and last weeks of the month being prorated. Data
${ }_{2}$ indivial cities were presented in the October, 1923, issue (No. 26), pp. 51 to 55 , and in the October, 1926 , issue (No. 62), pp. 22 to 24.
${ }_{3}^{2}$ Canadian check payments are represented by bank clearings, showing volume of check transactions passing through 16 clearing houses as compiled by Bradstreet's. Condition reports, showing respectively the combined condition of the 12 Federal reserve banks and the condition of over 800 member banks of the Federal reserve
system, are compiled by the Federal Reserve Board. The condition is given as of the last Wednesday of the month, but prior to $A$ pril, 1921 , figures sys month. The reserve ratio represents the percentage which total reserves (mostly gold) form of the combined deposit and Federal reserve note liabilities. Prior to March, 1921, net deposits were used instead of total deposits in calculating reserve ratios. Monthly data from 1920 on condition of Federal reserve banks may be found in the May, 1922, issue (No. 9), p. 123, except for investments, which are given in the September, 1922, issue (No. 13), p. 47 .
${ }^{4}$ Compiled by the New. York Stock Exchange from reports of all its members as to their net borrowings on collateral outstanding at tbe end of each month from banks or agencies in Now York City. These data include borrowings for out-of-town branch and correspondent offices. These security loans are used to carry securities not only
for customers but also for investment distribution. Details as between banks and other agencies and between demand and time loans are given in the exchange's monthly for customers but also for investment distribution. Details as between banks and other agencies and between. demand and time loans are given in the exchange's monthly
reports. The ratio to market value is based on the market value of all stocks listed on the New York Stock Exchange on the same date computed from actual sales. Monthly data from 1926 are given on p. 138 of the August, 1928 issue (No. 84 ).
${ }^{5}$ Compiled by the Federal Reserve Board from reports, beginning with 1926, of 61 identical reporting member banks in New York City on their collateral loans to brokers and dealers on the last Wednesday in each month (not confned to members of the New York Stock Exchange). Details as to the account for which loans were made (for out-of-town banks, or others), differentiating in each case between call and time money, are given in the board's weekly press releases. Prior to 1926, the figures are based on daily reports of 43 banks, a few of them nonmembers of the Federal reserve system, and did not include for some banks the loans to dealers in securities. However, the figures are fairly comparable. Prior to April, 1921, the data represent the last Friday in each month, instead of the last Wednesday. Complete weekly data in detail from 1917 were published in the November, 1926, issue of the Federal Reserve Bulletin, pp. 779-786.
ing about 150 banks. For the intervening avinths dor which figures of state of New Pork, comprising all savings banks in New York State at semiannual periods, totaling about 150 banks. For the intervening months, for which figures were compiled beginning in 1924, a fow banks, representing about 1 per cent of the total deposits do not report and their deposited balance at the last semiannual period is added to the figures of the reporting banks to secure complete data. Yearly figures from 1914 to Digitized for 1920;, inclusive, and for 1923, are averages of deposits on June 30 and December 31 of each year; 1913 figures are for December 31; 1921 data are averages of four quarterly ttp://fraser stloułsimbiths average October to Duarters are averaged.

Table 105.-GOLD, SILVER, AND MONEY

| Year and Month | GOLD |  |  |  |  | SILVER |  |  |  |  |  |  |  | $\begin{gathered} \text { UNITED } \\ \text { STATES } \\ \text { MONEY } \\ \text { CIRCU- } \\ \text { LATION } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\lim _{\text {ports }}$ ports ${ }^{1}$ | $\underset{\text { ports }{ }^{1}}{\text { Ex- }}$ |  | Domestic recelpts atmint ${ }^{3}$ | Rand output | $\underset{\text { ports }}{\text { Im- }}$ | $\underset{\text { ports }{ }^{\text {Ex }}}{\text { Ex- }}$ | Production ${ }^{\text {s }}$ |  |  | Stocks, end of month s |  | $\begin{aligned} & \text { Price } \\ & \text { in } \\ & \text { Yew } \end{aligned}$ |  |
|  |  |  |  |  |  |  |  | United States | Canada | Mexico | U.S. | $\begin{aligned} & \text { Can- } \\ & \text { adan- } \end{aligned}$ |  |  |
|  | Thousands of dollars |  | Millions of dollars | Fine ounces |  | Thousands of dollars |  | Thousands of fine ounces |  |  |  |  | Dolls. per fine ounce | Millions of dollars |
| 1913 monthly average... | \$5,309 | \$7,650 |  | 148, 050 | 732, 779 | \$2, 989 | \$5, 231 | 5,567 |  |  |  |  | \$0. 598 |  |
| 1914 monthly average..- | 4,782 | 18, 551 |  | 155, 083 | 698, 275 | 2, 163 | 4.300 | 6, 038 |  |  |  |  | . 548 |  |
| 1915 monthly average... | 37, 663 | 2, 619 |  | 157, 830 | 757, 823 | 2, 874 | 1,467 | 6, 247 |  |  |  | .-- | . 497 |  |
| 1916 monthly average..- | 57, 166 | 12,999 |  | 133, 597 | 772, 128 | 2, 689 | 5,883 | 6. 201 |  |  |  |  | . 657 |  |
| 1917 monthly average... | 46, 038 | 30,990 |  | 112, 495 | 951, 855 | 4. 445 | 7,011 | 5,978 |  |  |  |  | . 814 |  |
| 1918 monthly average... | 5, 170 | 3, 422 |  | 86, 472 | 701, 722 | 5,948 | 21, 071 | 5,651 |  |  |  |  | . 964 |  |
| 1919 monthly average...- | 6,378 | 30,682 |  | 71, 093 | 694, 174 | 7.451 | 19.918 | 4, 723 |  |  |  |  | 1.111 |  |
| 1920 monthly average-.- | 35,729 | 26.841 |  | 62,377 | 679, 801 | 7.338 | 9, 468 | 4,714 |  |  |  |  | 1.010 |  |
| 1921 monthly average .-- | 57,604 | 1,991 | --.--- | 80, 183 | 676, 216 | 5,270 | 4. 298 | 4,477 | 1. 084 | 5.372 | 1,091 | 655 | . 621 |  |
| 1922 monthly average... | 22, 931 | 3.073 |  | 86,314 | 585, 009 | 5,901 | 5. 234 | 4. 623 | 1,416 | 6. 756 | 446 | 636 | . 675 |  |
| 1923 monthly a verage-.. | 26, 893 | 2,387 | 4. 060 | 84, 044 | 761, 088 | 6, 204 | 6039 | 5,514 | 1,418 | 7, 568 | 459 | 409 | . 647 | 4, 821 |
| 1924 monthly average..-- | 26,643 | 5,137 | 4,438 | 90, 234 | 799, 803 | 6,162 | 9, 158 | 5,362 | 1,412 | 7,620 | 719 | 544 | . 668 | 4,879 |
| 1925 monthly average..- | 10,690 | 21, 887 | 4,383 | 87, 693 | 799,975 | 5.383 | 8, 261 | 5, 115 | 1,395 | 7, 743 | 453 | 442 | . 691 | 4,870 |
| 1926 monthly average...- | 17,792 | 9,642 | 4,452 | 85, 390 | 830, 238 | 5,800 | 7,688 | 5,077 | 1,771 | 8, 191 | 542 | 839 | . 621 | 4,924 |
| 1927 monthly average.-- | 17.295 | 16,788 | 4. 564 | 81, 077 | 844, 219 | 4, 589 | 6, 302 | 4,951 | 1,730 | 8.715 | 384 | 701 | . 564 | 4, 892 |
| 1928 monthly average...- | 14,075 | 46,730 | 4, 207 | 81,776 | 863, 153 | 5,677 | 7,282 | 4,693 | 1,700 |  | 510 | 741 | . 582 | 4,783 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January-.-- | 59,355 | 14,890 | 4, 527 | 80,777 | 839.782 | 5, 151 | 7,388 | 5,196 | 1,459 | 8, 559 | 700 | 1,300 | . 558 | 4,903 |
| February--......-......- | 22,309 | 2,414 | 4, 576 | 65,999 | 779, 339 | 3, 849 | 6,233 | 4, 979 | 1,733 | 6,930 | 207 | 391 | . 579 | 4, 843 |
| March. | 16.382 | 5,725 | 4, 595 | 73, 822 | 860, 511 | 4,308 | 6, 077 | 5, 104 | 1. 525 | 8,332 | 212 | 1,023 | . 553 | 4,856 |
| April. | 14, 503 | 2,592 | 4,601 | 68,531 | 824, 014 | 3. 815 | 6,824 | 4,712 | 1.716 | 7,737 | 602 | 723 | . 564 | 4,880 |
| May.... | 34.212 | 2, 510 | 4,651 | 66,956 | 859,479 | 5,083 | 6,026 | 4,811 | 1,393 | 7,791 | 231 | 602 | . 563 | 4,860 |
| June. | 14,611 | 1,840 | 4,606 | 66,411 | 855, 154 | 4,790 | 5,444 | 4, 931 | 1. 614 | 9. 244 | 284 | 474 | . 568 | 4, 831 |
| July | 10,738 | 1,803 | 4, 575 | 91, 428 | 851, 861 | 4,288 | 6, 650 | 4, 838 | 1,752 | 9, 197 | 904 | 847 | . 564 | 4,851 |
| August.- | 7,877 | 1,524 | 4,585 | 91, 245 | 863, 345 | 4, 856 | 5,590 | 5,145 | 2,388 | 9,372 | 508 | 624 | . 547 | 4,849 |
| September ......-.-.-.-- | 12,979 | 24, 444 | 4, 584 | 103, 240 | 842. 118 | 4,992 | 6. 627 | 4. 691 | 2,023 | 7,809 | 293 | 761 | . 554 | 4,917 |
| October-.-- | 2,056 | 10,698 | 4, 566 | 97, 103 | 855, 743 | 5,069 | 5,945 | 4, 880 | 1,696 | 8,273 | 178 | 494 | . 560 | 4, 934 |
| November. | 2.082 | 55, 266 | 4, 490 | 91, 840 | 848, 059 | 5, 102 | 5, 634 | 5. 010 | 1,739 | 10,794 | 136 | 567 | . 575 | 4,936 |
| December | 10.431 | 77, 849 | 4,416 | 75,575 | 851, 225 | 3,770 | 7, 186 | 5.015 | 1,723 | 10,437 | 353 | 608 | . 580 | 5, 049 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 38,320 | 52,086 | 4,377 | 73, 624 | 843, 857 | 6. 305 | 6,692 | 4,980 | 1,433 | 7,955 | 574 | 1, 141 | . 571 | 4, 785 |
| February-...............- | 14,686 | 25,806 | 4,373 | 72. 119 | 816, 133 | 4, 658 | 7.479 | 4,490 | 1,272 | 7, 572 | 170 | 547 | . 570 | 4,709 |
| March. | 2.683 | 97, 536 | 4,335 | 67,872 | 877, 380 | 5134 | 7,405 | 5,333 | 1,469 | 10, 861 | 461 | 803 | . 572 | 4.710 |
| April... | 5,319 | 96, 469 | 4, 287 | 65, 166 | 825.907 | 4,888 | 6, 587 | 4, 668 | 1,388 | 8,904 | 128 | 550 | . 574 | 4.730 |
| May........--....-.......- | 1,968 | 83, 688 | 4, 207 | 75,983 | 886, 186 | 4, 247 | 6,712 | 4, 574 | 1,222 | 9,547 | 133 | 456 | . 603 | 4,722 |
| June-...................--- | 20,001 | 99, 932 | 4, 119 | 70, 205 | 862, 363 | 6,221 | 7,456 | 4,945 | 1, 401 | 8,821 | 479 | 707 | . 600 | 4, 736 |
| July -.-.......-...-......-- | 10,331 | 74, 190 | 4, 113 | 72.676 | 867, 211 | 6, 544 | 6, 160 | 3,915 | 2,389 | 8, 299 | 262 | 430 | . 592 | 4,746 |
| August. | 2,445 | 1.698 | 4, 118 | 98, 769 | 891, 863 | 6. 496 | 9,246 | 4,776 | 2, 252 | 8,727 | 263 | 720 | . 589 | 4,743 |
| September................ | 4, 273 | 3,810 | 4,125 | 83,247 | 857, 731 | 5,739 | 6, 229 | 4, 087 | 2, 177 | 9,138 | 872 | 1,457 | . 575 | 4, 804 |
| October-... | 14,331 | 992 | 4, 133 | 121, 539 | 897, 720 | 7,319 | 7,252 | 4,352 | 2, 051 | 8, 514 | 856 | 718 | . 581 | 4,837 |
| November | 29, 591 | 22,916 | 4,151 | 102, 893 | 872, 484 | 5,448 | 7,674 | 4, 756 | 1,459 | 8,643 | 905 | 346 | . 580 | 4,860 |
| December. | 24, 950 | 1,636 | 4,142 | 77,220 | 859,000 | 5,120 | 8,489 | 5,438 | 1,890 |  | 1,011 | 1,011 | . 573 | 5,008 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January...... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May $\qquad$ <br> June. $\qquad$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^29]Table 106.-PUBLIC FINANCE, INTEREST RATES, AND BOND YIELDS

${ }^{1}$ Compiled by the U. S. Treasury Department. Yearly figures under this heading represent averages for the fiscal year ending June 30 of the year indicated, except the debt figures, which represent the condition on June 30 . Debt fgures up to the last two months are on a warrant basis, the current months being on a cash basis, as shown in the preliminary debt statement, where further details may be obtained. Monthly data extending back to 1921 appeared in the March, 1924 , issue of the SUREEY (No.
31), 56 . Receipts and expenditures are shown in detail currently in the daily statement of the $U$. Treasury. The large total receipts every three months are due to 31), p . 56 . Receipts and expenditures are shown in detail currently in the daily statement of the U . S. T
payment of income-tax installments. Expenditures represent those chargeable against ordinary receipts.
( Compiled by the Federal Reserve Board, except time loans prior to 1926 and call loans prior to 1921, which are from Ogle, Dunn \& Co. Time-loan rates are those prevailing for New York Stock Exchange 90 -day time loans, while call-loan rates are average renewal rates for the New York Stock Exchange. Monthly data from 1909 appeared in the June, 1928, issue (No. 82), p. 21.
high and low prices of the month. For the year 1914 , when the exchanges we the yields to maturity on the individual high-grade bonds, calculated from averages of the high and low prices of the month. For the year 1914, when the exchanges were closed for several months, the average for railroad bonds excludes the months of August through October, the averages for industrials and public utilities exclude August through November, and the average for municipals excludes August through December.
${ }^{4}$ Compiled by the Federal Farm Loan Board, representing average interest rates charged by the Federal farm loan banks and intermediate credit banks, respectively. These rates are based on the interest rates on farm-loan bonds issued by the respective banks, being limited by law to a rate not exceeding 1 per cent higher than the rate of the bond issue. The law limits interest rates to a 6 per cent maximum. The rates given here for intermediate credit banks are those for direct loans only. For descriptions oi these banks and the type of their loans, see Table 108 . The rates shown for each month are the averages of the loan rates of the 12 banks in the systerns
of the Federal land and intermediate credit banks. No weight being given to the number of loans closed at the various rates. When a change of rate occurred during a of the Federal land and intermediate credit banks. No weight being given to the number of loans closed at the various rates. When a change of rate
month, the bank's average rate for that month was obtained, each rate during the month being weighted by the number of business days it was in force.
month, the bank's average rate for that month was obtained, each rate during the month being weighted by the number of business days it was in force.
$\delta$ From the Federal Reserve Board. Monthly averages for years prior to 1922 cover only $61-00$ day commercial, agricultural, and livestock paper; since then rates shown are applicable to all classes and maturities of eligible paper.

6 Average of 8 months, May to December, inciusive.
${ }_{7}{ }^{\text {A verage of }}$ Average of 10 months, March to December, inclusive.
${ }_{8}^{7}$ Average of 10 months, March to December, inclusive. Digitized fof(19962 $\mathbf{\text { LoPQ8666). Prior to }} 1927$ the yield is calculated on Liberty bonds only

Table 107.-SECURITY PRICES AND SALES

${ }^{1}$ Average market yield of bonds of 20 large cities at the ond of each month compiled by The Bond Buyer. Averages for 1913 to 1916 , inclusive, taken from Bond Buyer's Index of the Municipal Bond Market, based on period Jan. 1 to Dec. 1 ; subsequent yearly data are averages for the period Jan. 31 to Dec. 31.
${ }^{2}$ Bond sales from Dow, Jones \& Co.; stock sales from the Annalist. These data include only sales on the New York Stock Exchange and not those in the "over-the counter" market or on other exchanges. Monthly data from 1920 are given for most items in this table in the May, 1922 , issue (No. 9 ), pp. 125 and 129.
${ }^{3}$ This index, compiled as of the last day of the month by the New York Trust Co., includes 25 railroad, 10 iron and steel, 5 railroad equipunent, 9 motor (including acces sories), 5 rubber tire, 5 shipping, 5 sugar, 5 leather and shoe, 5 tobacco, 10 copper, 10 oil, and 9 New York bank and trust companies.

4Prices are averages of daily closing prices for these stocks on New York Stock Exchange, taken from the Annalist. Monthly data from 1913 are given in the December, 1922, issue (No. 16), p. 47.
March 1926 issue ( weekly quotations of 25 southern cotton-mill stocks as furnished by R. S. Dickson \& Co. Monthly data from 1923 may be found on p. 24 of the March, 1926, issue (No. 55) each class being capitalized at 4 per cent to give the combined index.
theiris index, compiled as of the last day of the month by the New York Trust Co., includes 6 Liberty and Victory bonds (the 2 issues of Victory bonds being replaced their redemption by the Treasury bonds, thus maki
o 5 substitutions in this series in January, 1922, account for the violent change in the index.

Table 108.-STOCK PRICE INDEXES BY GROUPS AND YIELDS ${ }^{1}$

${ }^{1}$ Compiled by the Standard Statistics Co., Inc., and represent long-term indexes of common-stock market values weighted according to the number of shares of each stock oulstanding, computed as of the close each Friday, and presented in relatives with the 1926 monthly average taken as equal to 100 . Weekly indexes have been averaged to give monthly data. Other groups not published here, but included in the total, comprise agricultural implements, automobile parts and accessories, electrical equipment, miscellaneous. This series and comparable data appearing in the November, 1928, issue (No. 87 ), p. 24 , displace any common-stock price indexes phown in sugar retining, and of the SURVEY OF CURRENT BUSINEss. Industrial stock yields have been computed by dividing the total annual dividend rate each month by the total of previous issues using the average of high and low monthly stock prices. Only such stocks as have paid some dividend every year since 1914 have been included in the common grouping extra cash dividends, on an annual basis, are added to regular dividends and are considered to be part of such regular dividends. while stock dividends are disregarded such adjustments are largely cared for in the market price of the stock. As preferred stocks have various dividend rates, all prices have been adjusted to an equived, a per cent basis and $\$ 100$ par previous to averaging.

Table 109.-NEW SECURITY ISSUES AND AGRICULTURAL FINANCING

${ }^{1}$ Compiled by the Commercial and Financial Chronicle, except for data previous to 1920, which are from the New York Journal of Commerce. The columns "New capital" and "Refunding" include all types of financing to be used for the purpose designated. Distribution of bond issues by classes, from 1920 through Scptember, 1924, appeared in June, 1923, issue (No. 22), p. 42, and in November, 1924, issue (No. 39), p. 187. Further details are given in the Commercial and Financial Chronicle.
${ }^{\text {a }}$ Sales of new securities by States and municipalities compiled by The Bond Buyer. The short-term loans are of a temporary character, usually replaced later by permanent loans.
 and those sold in United States are shown in weekly reports.

- Compiled by the $U$. S. Treasury Department rom actual reports and estimates of the net amount of fully tax-exempt securities outstanding at the end of the month ties, cities, etc., (2) Territories and insular possessions, (3) United States Government, and (4) Federal farm loan system. Monthly figures since January, 1913, are given ties, cities, etc., (2) Territories and insular poss
on p . 23 of the February, 1928 , issue (No. 78 ).
on $p_{8}$ New incorporations represent the value of the authorized capital of new enterprises, exclusive of those under $\$ 100,000$, incorporated in the principal Eastern States as compiled by the New York Journal of Commerce. Monthly averages from 1923 appeared in November, 1924, issue (No. 39), p. 187.
${ }^{\circ}$ These data, from the Federal Farm Loan Board, represent loans made for agricuitural development secured by mortgages on land and buildings, the Federal farm loan banks being established by the Government in 12 districts, while the joint-stock land banks, of which 70 are now in existence, are private organizations. The banks were closed during the greater part of 1920 , pending litigation in the Supreme Court involving the constitutionality of the Federal farm loan act, and in 1921 many loan requests could not be granted because the cessation of bond selling had depleted the resources. Monthly figures on loans closed from 1920 appeared in June, 1923 , issue (No. 22), p. 47.
${ }^{7}$ The Federal intermediate credit banks under the supervision of the Federal Farm Loan Board are located in the same cities as the 12 Federal land banks, as follows: Springfleld, Mass.; Baltimore, Md.; Columbia, S. C.; Louisville, Ky.; Now Orleans, La.; St. Louis, Mo.; St. Paul, Minn.: Omaha, Nebr.; Wichita, Kans.; Houston, Tex.; Berkeley, Calif.; and Spokane, Wash. These banks lend money on staple agriculturai products and make rediscounts for agricultural credit corporations and livestock loan companies.
${ }^{8}$ Data from the War Finance Corporation comprise advances for "agricultural and livestock purposes" under the agricultural credits acts on Aug. 24, 1921, to banks, livestock associations, and cooperative marketing associations. Figures on advancements and repayments from 1922 to September, 1924 , appeared in November, 1924 , issue (No. 39), p. 189; since that date new advances have practically ceased

Commerce, Bureau of Foreign and Domestic Commerce, representing the amount of foreign capital issues, both Government and private, publicly offered in the United States by American underwriters. Details by individual issues, classified by countries, are shown in the bureau's reports. Monthly

Table 110.-NEW SECURITY ISSUES BY CLASSES ${ }^{1}$


1 From the Commercial and Financial Chronicle, showing new financing in the United States. Corporate financing includes both stook and bond finances, and foreign as well as American corporations. The industrial group eomprises the following classifications given in the detailed statements: Iron, steel, coal, copper, etc.; equipment manufacturers; motors and accessories; rubber and miscellaneous industriais. The data on long-term real estate bonds which represents only those put out by inortgage short-term bonds. These latter items, however, were shown in the September, 1925, issue (No. 49) of the Surver, p. 25, together with interest rates on the short-term bhort-term bonds. These later items, however, were shown in the september, ig25, issue (No. 49) of the Surver, p. 25 , together with interest rates on the show here on long-term bonds extending back to January, 1922. In the classifications shown above by purpose of issue and by kind of structure, the
 http://fraser.stloulspen rates/on the long-term real estate bonds issued during the month.

Table 111.-BUSINESS PROFITS AND LOSSES

${ }^{1}$ Compiled by Dun's Review; for annual data in greater detail, see April, 1924, issue of the Survey (No. 32), pp. 57-59. Monthly data on total commercial failures from 1913 appeared in December, 1923, issue (No. 28), p. 53; monthly data on all classes from 1921 appeared in June, 1924, issue (No. 34), p. 55.
${ }^{2}$ Canadian business failures from Bradstreet's. reported. Monthly data for total dividend and interest payments covering the period 1913 to 1921 appeared in the Septernber, 1922 , issue (No. 13 ) of the SURVEY, p. 51 (figure for July, 1917, should be $\$ 333,011$ instead of $\$ 333,011$ ); and for dividends classified, covering the same period, in the October, 1922, issue (No. 14), p. 46.
: Compiled by the Cleveland Trust Co. up to the first quarter of 1927 and thereafter by the Chase Securitips Corporation, representing average dollar dividends paid on the industrial stocks included in the Dow-Jones index of stoek prices, comprising 12 stocks from 1900 through 1914 and 20 stocks from 1915 through 1924 . The figures are unweighted averages of the amount of dividends paid per sharefor these stocks in each quarter reduced to an annual basis. Quarterly figures extending back to 1900 ap-

Table 112.-BUSINESS FAILURES BY GROUPS ${ }^{1}$

${ }^{1}$ Compiled by Dun's Review. These tables give in greater detail the information presented in Table 110, by combining a still more detailed classification as presented in Dun's Review into groups fairly comparable with the classification used for other data. Monthly data from 1913 appeared in the October, 1928 , issue (No. 86), p. 19.

Table 113.-CORPORATION PROFITS AND STOCKHOLDERS (Quarterly)


[^30]Table 114.-FOREIGN EXCHANGE AND CANADIAN TRADE ${ }^{1}$

| Year and Monte | EUROPE |  |  |  |  |  |  | ASIA |  | THE AMERICAS |  |  |  | CANADIAN FOREIGN TRADE ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eng- <br> land | France ${ }^{6}$ | Italy ${ }^{7}$ | $\begin{gathered} \text { Bel- } \\ \text { glum } \end{gathered}$ | Nether- <br> lands | Sweden | Switzerland | Japan | India ${ }^{\text {a }}$ | Canada | Argen- | Brazll ${ }^{8}$ | Chile ${ }^{5}$ | Imports | Exports |
|  | Rate per pound sterling | Rate per franc | $\left\lvert\, \begin{gathered} \text { Rate per } \\ \text { lire } \end{gathered}\right.$ | Rate per belga | Rate per guilder | Rate per krone | Rate per franc | $\begin{gathered} \text { Rate per } \\ \text { yen } \end{gathered}$ | Rate per rupee | Rate per dollar | Rate per gold peso | Rate per milreis | $\begin{gathered} \text { Rate per } \\ \text { paper } \\ \text { peso } \end{gathered}$ | Thousands of dollars |  |
| Par value. | \$4.87 | \$0.039 | \$0.053 | \$0.139 | \$0.402 | \$0.268 | $\begin{array}{r} \$ 0.193 \\ .194 \end{array}$ | \$0.499 | \$0.487 | \$1.000 | \$0.965 | \$0.120 | \$0.122 | \$40, 110 | \$35, 693 |
| 1914 monthly av... | 4.93 | . 199 | . 195 |  |  |  |  | . 491 |  | ------------ |  |  | -.......- |  |  |
| 1915 monthly av... | 4.78 | . 182 | . 169 |  |  |  | . 187 | . 495 | ---.-....-. |  | . 941 | . 234 |  | 37, 568 | 54, 457 |
| 1916 monthly av...- | 4.76 | . 170 | . 155 |  |  |  | . 191 | . 507 | ------...- | -........ | . 964 | . 236 | ---.-.----- | 63, 951 | 92, 704 |
| 1917 monthly av..- | 4.76 | . 174 | . 137 |  |  |  | . 211 | .513.533 | ------------ | -----...-- | .997.999 | .249.253 |  | 83,838 | 132, 791 |
| 1918 monthly av...- | 4.76 | . 178 | . 134 |  |  |  | . 229 |  |  |  |  |  | --..---...-- | 75, 848 | 103, 644 |
| 1919 monthly av...- | 4.43 | . 137 | . 114 | . 640 | . 394 | . 255 | . 190 | . 512 | . 403 | . 956 | . 990 | . 267 | . 226 | 78,418111,410 | 107,903 |
| 1920 monthly av... | 3.66 | . 070 | . 050 | . 370 | . 344 | . 205 | . 169 | . 504 | . 389 | . 893 | . 907 | . 225 | . 185 |  | 108, 567 |
| 1921 monthly av...- | 3.85 | . 075 | . 043 | . 370 | . 336 | . 225 | . 174 | . 482 | . 262 | . 896 | . 730 | . 131 | . 121 | 66,623 | 68,05874,848 |
| 1922 monthly av..- | 4.43 | . 082 | . 048 | . 385 | . 385 | . 262 | . 191 | . 478 | . 287 | . 985 | . 818 | . 129 | . 122 | 63, 534 |  |
| 1923 monthly av..- | 4.57 | . 061 | . 046 | . 260 | . 391 | . 266 | . 181 | . 486 | . 311 | . 980 | . 786 | . 102 | . 122 | 75, 253 | $\begin{aligned} & 85,710 \\ & 89,218 \end{aligned}$ |
| 1924 monthly av..- | 4.42 | . 052 | . 044 | . 230 | . 382 | . 265 | .182.193 | . 412 | . 318 | . 987 | . 781 | . 109 | . 105 | 67,345 |  |
| 1925 monthly av..- | 4.83 | . 048 | . 040 | . 240 | . 402 | . 268 |  | . 410 | . 363 | 1.000 | . 914 | . 122 | .116.121 | $\begin{aligned} & 74,183 \\ & 84,022 \end{aligned}$ | 89,218 106,925 |
| 1926 monthly av... | 4.86 | . 033 | . 039 | . 172 | . 401 | . 268 | . 193 |  | $\begin{aligned} & .363 \\ & .363 \end{aligned}$ | 1.000 | . 921 | . 144 |  |  | 106,925 106,983 |
| 1927 monthly av..- | 4.86 | . 039 | . 052 | . 139 | . 401 | . 268 | . 193 | . 474 |  | 1.000 .963 .118 .121 90,655 103,233 <br> .999 .965 .120 .121 101,850 114,511 |  |  |  |  |  |
| 1928 monthly av-.- | 4.87 | . 039 | . 053 | . 139 | . 402 | . 268 | . 193 | . 464 | . 365 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | \| | - | 1 | 1 | 1 | \| | 1 | \|| |  |  |  |  |  |  |  |  |  |  |  |
| $1926$ <br> September | 4.85 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | . 029 | . 037 | . 135 | . 401 | . 268 | . 193 | . 484 | . 363 | 1. 001 | . 922 | . 152 | . 121 | 85, 563 | $\begin{array}{r} 93,327 \\ \text { 131,489 } \end{array}$ |
| October...- | 4.85 | . 029 | . 041 | . 140 | . 400 | . 267 | . 193 | . 487 | . 362 | 1.001 | . 928 | . 140 | . 121 | 88, 127 |  |
| November--.-.- | 4.85 | $\begin{aligned} & .034 \\ & .040 \end{aligned}$ | . 042 | . 139 | . 400 | . 267 | . 193 | . 491 | . 360 | 1.001 | . 924 | . 130 | . 121 | 87, 657 | $\begin{aligned} & 131,489 \\ & 154,009 \end{aligned}$ |
| December........-- | 4.85 |  | . 044 | . 139 | . 400 | . 267 | . 193 | . 489 | . 361 | . 999 | . 933 | . 119 | . 120 | 81,775 | 139,808 |
| 1927 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January...........- | 4.85 | . 040 | . 043 | . 139 | . 400 | . 267 | . 193 | . 488 | . 364 | . 998 | . 939 | . 117 | . 120 | 78,806 | 85, 266 |
| February-.......-- | 4.85 | . 039 | . 043 | . 139 | . 400 | . 267 | . 192 | . 488 | . 363 | . 998 | . 947 | . 118 | . 120 | 74, 707 | 79,803 |
| March.. | 4.85 | . 039 | . 045 | . 139 | . 400 | . 268 | . 192 | . 491 | . 363 | . 999 | . 960 | . 119 | . 120 | 110,581 | 107, 218 |
| April. | 4.86 | . 039 | . 050 | . 139 | . 400 | . 268 | . 192 | . 484 | . 361 | 1.001 | . 962 | . 118 | . 120 | 74, 298 | 78,404 |
| May ....-...-.....-- | 4.86 | . 039 | . 054 | . 139 | . 400 | . 268 | . 192 | . 471 | . 362 | 1.001 | . 962 | . 118 | . 120 | 94,412 | 111, 298 |
| June.. | 4.86 | . 039 | . 056 | . 139 | . 401 | . 268 | . 192 | . 467 | . 362 | . 999 | . 964 | . 118 | . 120 | 101, 029 | 107, 201 |
| July | 4.86 | . 039 | . 055 | . 139 | . 401 | . 268 | . 193 | . 471 | . 361 | . 999 | . 966 | . 118 | . 120 | 91,369 | 80,787 |
| August.. | 4.86 | . 039 | . 054 | . 139 | . 401 | . 268 | . 193 | . 473 | . 361 | . 999 | . 968 | . 118 | . 120 | 99,348 | 95,955 |
| September. | 4.86 | . 039 | . 054 | . 139 | . 401 | . 269 | . 193 | . 468 | . 363 | 1.001 | . 971 | . 119 | . 121 | 91, 803 | 99,335 |
| October...- | 4.87 | . 039 | . 055 | . 139 | . 402 | . 269 | . 193 | . 466 | . 364 | 1. 001 | . 972 | . 119 | . 122 | 93,936 | 105, 821 |
| November. | 4.87 | . 039 | . 055 | . 140 | . 404 | . 269 | . 193 | . 460 | . 365 | 1. 001 | . 971 | . 119 | . 122 | 94,312 | 155, 521 |
| December | 4.88 | . 039 | . 064 | . 140 | . 404 | . 270 | . 193 | . 462 | . 367 | . 999 | . 972 | . 120 | . 122 | 83, 263 | 132, 189 |
| 1928 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January.- | 4.88 | . 039 | . 053 | . 139 | . 403 | . 269 | . 193 | . 469 | . 367 | . 998 | . 971 | . 120 | . 122 | 79,506 | 84,428 |
| February | 4.87 | . 039 | . 053 | . 139 | . 403 | . 268 | . 192 | . 469 | . 365 | . 998 | . 971 | . 120 | . 122 | 85,932 | 90,387 |
| March. | 4.88 | . 039 | . 053 | . 139 | . 403 | . 268 | . 193 | . 472 | . 365 | 1.000 | . 973 | . 120 | . 122 | 120, 418 | 109, 147 |
| April. | 4.88 | . 039 | . 053 | . 140 | . 403 | . 269 | . 193 | . 477 | . 368 | 1.000 | . 972 | . 120 | . 120 | 78,490 | 60, 455 |
| May. | 4.88 | . 039 | . 053 | . 140 | . 404 | . 268 | . 193 | . 466 | . 366 | . 999 | . 972 | . 120 | . 122 | 113, 582 | 120, 154 |
| June. | 4.88 | . 039 | . 053 | . 140 | . 403 | . 268 | . 193 | . 466 | . 365 | . 998 | . 969 | . 120 | . 122 | 110, 694 | 109, 139 |
| July | 4.86 | . 039 | . 052 | . 139 | . 403 | . 268 | . 193 | . 459 | . 363 | . 998 | . 961 | . 119 | . 121 | 103, 404 | 127, 369 |
| August. | 4.85 | . 039 | . 052 | . 139 | . 401 | . 268 | . 193 | . 451 | . 363 | 1.000 | . 959 | . 119 | . 121 | 114, 175 | 113,904 |
| September. | 4.85 | . 039 | . 052 | . 139 | . 401 | . 268 | . 193 | . 458 | . 363 | 1.000 | . 957 | . 119 | . 121 | 106, 066 | 111, 856 |
| October... | 4.85 | . 039 | . 052 | . 139 | . 401 | . 267 | . 192 | . 462 | . 365 | 1.000 | . 956 | . 120 | . 121 | 112, 341 | 143, 955 |
| November. | 4.85 | . 039 | . 052 | . 139 | . 401 | . 267 | . 193 | . 464 | . 365 | 1.000 | . 958 | . 119 | . 121 | 102,967 | 170, 092 |
| December.. | 4.85 | . 039 | . 052 | . 139 | . 402 | . 268 | . 193 | . 459 | . 365 | . 998 | . 958 | . 119 | . 121 | 94, 621 | 133, 245 |
| 1929 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January--. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| February. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| March. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| April..- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| June.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Daily averages of noon rates for cable transfers reported to the Treasury daily by the New York Federal Reserve Bank. Average figures for the years 1914 to 1918 , inclusive, where given, are weekly averages of commercial quotations from the Annalist. Monthly figures on all items back to 1920 may be found in the May, 1922, issue (No. 9), p. 135.

Foreign trade statistics from Department of Trade and Commerce, Dominion Bureau of Statistics.
a Parity established November, 1926. Prior thereto, the average values of the Belgian franc have been multiplied by 5 to obtain an equivalent quotation for the belga.
On this basis, the present belga was equivalent to 96.5 cents at the old pre-war par of the franc.
${ }^{4}$ Parity established October, 1920. Prior to that, par value of the rupee was 32.44 cents.
${ }_{6}{ }^{5}$ Parity established January, 1926 . The average value of the paper peso in 1913 was 19.5 cents.
' Parity established January, 1926 . The average value of the paper peso in 1913 was 19.
8 Parity established June, 1928. Prior to that the par value of the franc was 19.3 cents.

Table 115.-IMPORTS AND EXPORTS BY CLASSES OF COMMODITIES ${ }^{1}$


1 Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, except agricultural exports. For changes in valuations, see footnote on preceding page.
2Compiled by the $U$. S. Department of Agriculture, Bureau of Agricultural Economics, based on quantities of agricultural products exported in the period July, 1909 , to
June, 1914 . "All commodities" includes 44 selected commodities, comprising usually about 75 per cent of the value of agricultural exports from the United States. The quantities are weighted by the average export price for the base period. Monthly data from 1919 appeared in the March, 1925 , issue (No. 43 ), p. 27 . Details of compilation and group indexes are given in the monthly supplement to Crops and Markets, issued by the Department of Agriculture, for October, 1924, pp. $356-358$.

Table 116.-IMPORTS BY GRAND DIVISIONS ${ }^{1}$

${ }^{1}$ Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, and represent imports of merchandise only. Up to and including May, 1921, import values represented actual market value or wholesale price at the time of exportation to the United States, in the principal markets of the country from whence exported, including the value of all containers and coverings, whether holding liquids or solids, and all other costs, charges, and expenses incident to placing the merchandise, value as defined above, or " the export value, including any export tax imposed by the country of exportation," whichever is higher, (Emergency tariff act of May 27 , 1921 .

Table 117.-EXPORTS BY GRAND DIVISIONS ${ }^{1}$


## SOURCES OF DATA

[Only sources presenting current material are given here: Sources of data used to fill gaps in early figures are noted in their respective detailed tables, thus making this table a complete record of current source material for the SURVEY]

| source | data | current publication 1 | date of publication |
| :---: | :---: | :---: | :---: |

## I.-REPORTS FROM GOVERNMENT DEPARTMENTS, FEDERAL, STATE, AND FOREIGN

Argentine Ministry of agriculture.
British Board of Trade.
Canadian Department of Trade and Commerce.

Federal farm Loan Board Federal Reserve Bank of Atlanta Federal Reserve Bank of Boston Federal Reserve Bank of Chicago Federal Reserve Bank of Kansas City Federal Reserve Bank of Minneapolis.

Federal Reserve Bank of New York...
Federal Reserve Bane of Philadelphla.
Federal Reserve Board
lllinois Department of Labor-
Illinois Department of Labor--.-

Iowa Bureau of Labor
Maryland Com. Labor and Statistics
Massachusetts Dept. Labor aind Industry Massachusetts Dept. Public Utilities-MEXICAN SECRETARY OF INDUSTRy, COMMERCE, AND LABOR.
Milwa ukee Public Employment Office.
New Jersey Department of Labor
New York State Dept. Labor
New York state Dept. Public Works.-.
PKlahoma Department of Labor.
TEXAs State Comptroleer
U.S. CIVIL SERVICE COMMISSION
U. S. Department of Agriculture: Bureau of Animal Industry. Bureau of animal Industry. --......-.

Bureau of Public Roads
U. S. Department of Commerce: bureau of the Census.

Flaxseed exports from Arrentina Tea stocks in United Kingdom Employment in Canadian trade-unions .-....Foreign trade of Canada
Foreign trade of Canada --
Canadian iron, steel, coal, flour production, etc.
 Agricultural lans by land Installment sales, New England dept. stores. Agricultural machinery
Retail sales of lumber by yards
Retail sales of lumber by rural yards
Housing rental advertisements.
Foreign exchange rates
Corporation profits.
Employment in Pennsylvania and Delaware Employment and pay rolls, anthracite mines.
Debits to individual accounts.
Condition of Federal reserve banks.
Condition of roporting member banks.-
Monetary gold stocks and interest rates
Sales of loose-leaf tobacco
Index numbers of production trade.
Employment in Illinois.
Employment in minois.-.-----
Telephone operating revenue and income...................
Telegraph operations and income
Express operations and income.
Fuel consumption by railroads
Railway employment
Factory employment in Iowa
Factory einployment in Massachusetts
Massachusetts employmen
Milk receipts at Boston
Mexican petrcleum production and exports.
Factory employment in Milwaukee
New Jersey factory employment
New York factory employment and earnings
Factory employment in Oklahoma.
Sulphur production
Government employment in Washington, D . C.
Beef, pork, and lamb productionPrices of farm products to producers Wool stocks in dealers' hands and wool prices.
Cold-storage holdings
Movement of cattle, hogs, and shee
Receipts of butter, cheese, eggs, and poultry
Production of dairy products.-
Car-lot shipments of fruits and vegetables.
Consumption of butter, cheese, and meats
Index of agricultural exports...-...............

Cotton ginned
Cotton consumed and on hand
Active textile machinery ........-......................
Leather, hides, shoes, gloves, production, etc..
Leather gloves and mittens
Cottonseed ond cottonseed oil
Hosiery production, stocks, etc
Knit uuderwear production, etc.-.-
Wheat flour production from May, 1023
Wheat flour production from May, 1923
Wheat and wheat flour stock
Stokers, sales from January, 1923
Stocks of tobacco................
Wool consumption and stocks
Steel barrels.
Fabricated steel plate, new orders
Box board
Electrical goods, new orders
Electric locomotives, mining and industrial.
Electric industrial trucks and tractors.
Floor and wall tile
Fire extinguishers...-ral.-.....
Galvanized sheet metal ware
Babbitt metal consumption
Babbitt metal cons
Floor and wall tile
Enameled sanitary ware
Vitreous china plumbing fixtures
Fats and oils, production, consumption, stocks.Glues and gelatin, production and stocks
Fabricated structural steel.-.................
Automobile production from July, 1921
Wood chemical operations, crude and refined
Steel castings, new orders and production.
Steel furniture, shipments --...............................

Estadistica Agro-Pecuaria Board of Trade Bulletin. Labour Gazette (Canadian) Foreign trade of Canada.
Operating Revenues, etc., of Railways
Operating Revenues, etc., of Railways*Press release ${ }^{\text {Press release }}$
Not published currently.
Not published currently.--
Monthly Business Review
Monthly Review.-.
Not published in form used
Business Conditions.
Fed. Res. Bull. and daily statement*
Monthly Review.
Business and Financial Conditions
Business and Financial Conditions
Fed. Res. Bull. and weekly press releases* Fed. Res. Bull. and weekly press releases* Fed. Res. Bull. and weekly press releases* Federal Reserve Bulletin-
Federal Reserve Bulletin.
Federal Reserve Bulletin.
Preliminary statement Class I roads.
Preliminary statement Class I roads.--
Operations of large telephone companies.-
Not published.
Fuel for Road Locomotives.
Not publisned----.....-.
Not published in form used.
Monthly statement*
Not published.
Boletin del Petroleo.

## Press release*

Business and Financial Conditions
Labor Niarket Bulletin and press releases Labor Miarket Bulletin and press releases*
Oklahoma Labor Market
The Panama Canal Record.
Press release*
Not published
Crops and Markets
Crops and Markets
Crops and Markets and press releases*
Crops and Markets..............................................
Crops and Markets.
Crops and Markets.
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Crops and Markets.
Crops and Markets.
Crops and Markets.
Props and Mar

Preliminary report on ginnings*
Preliminary report on cotton consumed Wreol machinery and cotton spindles* Census of hides, skins, and leather* Press release ${ }^{*}$
Press release
Prelim minary report on cottonseed
Press release Press release
Press release
Press release
Press release
Press release ${ }^{*}$
Press release
Press release
Press release

Statement on
Press release**
Press release ${ }^{*}$
Press release*
Press release*
Press release
Press release
Press release**
Press release*
Press release ${ }^{*}$
Press release*
Press release
Statistics of fats and oils*
Press release ${ }^{*}$
Press release*
Press release
Press release*
Press release*

SOURCES OF DATA-Continued

| source | data | current publication | date of publication |
| :---: | :---: | :---: | :---: |
| I.-REPORTS FEOM GOVERNMENT DEPARTMENTS, FEDERAL, STATE, AND FOREIGN-Continued |  |  |  |
| U. S. Department of Commerce-Contd. <br> Bureau of the Census (continued) <br> Bureau of Fisheripa | Locomotive shipments and unfilled orders. | Press release* | 10th of month. |
|  | Earnings of public utilities..- |  | 30th of month. |
|  | Plumbing goods price index- |  | 10th of month. |
|  | Water sorteners, shipments... | Press rolease* | 25th of month. |
|  | Terra cotta, new orders... | Press release** | ${ }^{25}$ th of month. |
|  | Steel boilers, new orders. | Press release* | 20th of month. |
|  | Enameled sheet-metal ware | Press release* | 30th of month. |
|  | Index numbers of production, stocks, and un- | $\stackrel{\text { Prass rese }}{\text { release }}$ - | 10th of month. 30th of month. |
|  | filled orders. |  |  |
|  | Fish catch at principal fishing po | Monthly statement | 20th of month. |
| Bureau of Fisheries. <br> Bureau of Foreign and Domestic Commerce. | All imports and exports .-.....-..---1......--- | Monthly Sum. Foreign Commerce (Pt.1)1- | Last week of month. |
|  | Vessels cleared. | Monthly Sum. Foreign Commerce (Pt.il) | Middle of next month. |
|  | Ship charter rates inde | Commerce Reports. |  |
|  | Foreign loans issued in United States. | Commerce Reports. |  |
|  |  | Press release * | Quarterly. |
| Buread of Mines...-.-.-.......-.......... | Explosives, production, shipments, etc............ | Petroleum statistics* Explosive statistics* | 30th of month. Monthly. |
|  | Coal and coke production. | Weekly report on production of coal | Second or third weekly |
|  | Portland cement, production, etc | Report on Portland cement output* | 20 ish of month. |
|  | Vessel construction and losses | Commerce Reports | First weekly issue of mo. |
| Bureau of Standards | Building material price indexes | Not published |  |
| U. S. Department or tue interior: Geological Survey. | Patents granted. | Not published |  |
|  | Electric power production | Production of electric power* | End of month. |
|  | Consumption of fuel by public utility pl | Production of electric power* | End of month. |
| Division of National Paris <br> U. S. Department of Labor: <br> Employment Service. | Visitors to national par | Not published |  |
|  | Employment agency operatlo | Report of Activities of State and Munici- | Every 4 or 5 weeks. |
| Bureau of Immigration. | Immigration and emigration statistic | pal Employment Agencies. Not published |  |
|  | Wholesale prices and Index | Wholesale Prices of Commodities. | 15th of month. |
|  | Retail price indexes.- | Monthly Labor Review.--..-.- | Monthly. |
|  | Factory employment, pay roll, etc | Employment in Selected Industries | Monthly. |
|  | Industrial disputes | Monthly Labor Review- | Monthly. |
| U. S. Posp Office Department | Postal receipts. | Statement of Postal Receipts* | 7th of mont |
| U. S. Department of State | Money orders--- | Not published |  |
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|  | Domestic receipts of gold at mint-............- | Not published |  |
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|  | Consumption of manufactured tobacco, snuff, | Statement of Tax-paid Products*- | First week of month. |
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| U. S. War Department: Engineer Corps.... |  |  | Monthly during season. |
|  | Ohio, Monongahela, and Allegheny Rivers, | Not published |  |
| Mississippi-Warrior Service <br> Venezuelan Minister of Interior | cargo traffic. <br> Barge traffic on Mississippi River |  |  |
|  | Venezuelan petroleum production and exports.- | Not published cu |  |
| War Finance Corporation- Wisconsin Industrial Commi | Agricultural loans....-........................--- | Not published in form used | 15th of month. |
| Wisconsin Industrial Commi | Wisconsin factory earnings and employment...- | Bulletin on Wisconsin labor |  |

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* Multigraphed or mimeographed sheets.


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## PUBLICATIONS OF THE DEPARTMENT OF COMMERCE

Recent publications of the Department of Commerce having the most direct interest to readers of the Sunver or Cunami Business are listed belowे. A complete list may be obtained by addressing the Division of Publications, Departinent of Commerce, at Washington. Copies of the publications may be purchased from the Superintendent of Documents, Government Printing Office, Wastington, at the prices stated. If no price is mentioned, the publication is distributed free.

## OFILCE OF THE SECRETARY

Radio Service Rulletif, Decenber, 1928. 29 pages. Issued monthly by Radio, Division, of Department of Commerce. Contains list of radio stations and references to ourrent redio literature. Single copiet, 5t, ahanual subscription, 256

Seasoning, Handling and Care of Lumber vi +96 pages, 40 illus: Report of Eabricators' Subcommittee on Seasoning, Handling, trid Care of Lumber of Nationcl Cominittee on Wood Utilization. This is an interesting account of the nethods ased in seasoning lumber and the changes which take place in the wood during the process, A bibliograply is included. Price, 25 .

Stapplement to Directory of Licensed Pilots, Nov., 1928. Supplement 2 to Aeronautics Bulletin NO 20; 15 pages, Iestied Sy the Aeronautics Branch of the Department of Commerce and lists pilots licensed between July 31 and Nov. 1, 1928.

## BUREAU OF THE CENSUS

(Far information coneerning olan of pubication and distrifition of Qensus pubib cathas, address the Direotor of the Censtis)
The Blind Popalation of the United States, 1920.-A statist tical analysis of the data concerning the blind population obtained at the Fourteomth Deceniat Census. Paper, 191 pages. Price 30 F

Census of Religions Bodies, 1926.- Denominational reports showing history doctrike, and organization, with general statistich conearning membership, value and amouint of church property, debt, expenditureer, etc.

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Assyrian Lapobite A postolice Cbarch, Paper, Tpages, grice.E.
Divine SclencolChurch, foper, % pages, price be.
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Disciples of Christ. Paperyp pages, price 5f.
Bisig'is: Paper, 1L pate, pice5e
Mana is, Paper, Le pages, pryce pere, price 100.
Later-Day Saints, paper, q7 pages, price 5e.
Liberal Gathonlo Chtroh, Paper, 10 pages, price 5%.
ApastolicQ Orrooring HolGepurch of God, Papor, p, pqges, pricees,
Church of Godin Ctrist, Qaper, 10pages,pmee S%.
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Finanicial Statistics of State Governments, 1927, - Rreliminary summary sho wing sseessed valuation of property aind tax levies, revenues receifed, government expenses, and indebtedness of the various states for 1927. Paper, 8 pagees.

## BUREAU OF FOREIGN AND DOMESTIC COMMERCE

The pabications of this buread mor also be purchased frope the bureau or its distriet offices)

Foreign Commerce and Navigation of United States for Calendar, Year 192\%, VoL. 1, , xxx +524 pages. Contains statistios tables showing exports and imports by countries and customs districts for 1927 , Price, $\$ 1,50$.

Monthly Summary of Foreign Commerce of United States, Nov., 1928. Parts T and 11, Part I contains statistics of exports of domestic merchandise, and imports by articles for November, 1927 and 1928 and for 11 months ended November, 1927 and 1928 . Part 11 contains summaries of export and import trade; monthly, average import and export prices; statistics of trade with Alaka, Hawai, and Porto Rheo. Single copies, Part I, $10 \phi$, Part II, 54 Annual subscription, $\$ 1.25$

[^33]
## BUREAU OF STANDARDS

Alphabetical Index and Numerical List of United States Government Specifications Promulgated by Federal Specifications Board, Circulat No 371 , $1+20$ pages. Supersedes Circular $319,2 \mathrm{~d}$ ed.

Discussion of National Electrical Safety Code. Hanidbook Series No. 4, vi +334 pages, 30 illus. To accompany the fourth edition of the code Price, $\$ 1$

Bureau of Standards Journal of Research, Jan., 1929, Pages 1-334, illustrations, plates, charts Contains the papers formerly issued as the Teehnologic and Seientific 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 fouraal Siagle copies, 25\%; annual subscration, $\$ 2,75$.

Technical News Bulletin, Dec., 1928. Rages $107-182$. This monthly publication contains a brief account of the laboratory activities of the bureau and gives a list of pamphlets issued and magazine, articles published during the preceding month. Annual subscriptíon, 25t.

## BUREAU OF FISHERIES

Statigtical Rexiew of Alaska Salmon Fisheries. Part I. Bristol Bay and Alaska Peninsula, by Will s 1 . Rich and Edward M. Ball. Document No. 1041. (From Bulletin of the Bureau of Fisheries, vol, xliv, 1928 , pp. $41-95,20$ Litus. , This is a study of the fluctuations in the salmon canning industry of Alaska. It contains a summary of the la ws and regulations affecting the salmon fisheries, and statistics regarding the cateh and appliances used in the fisheries of Bristel Bay and the different districts of the Alaska Peninsula, Price, 20 .

Scallop Industry of North Carolina, by James S, Gutsell. Document No, 1043, (Appendix V to the Report of the U. S. Commissioner of Fisheries for 1928 , pp, 1733197, 11 jllus.) Gives natural history of the scallop and shows growth of the industryin North Garolina. Price, 104.

## BUREAU OF MINES

Coal-Mine Fatalities in United States, 1927,1 y Willam W. Adanes Buletin 293, vi + 120 pages Contains statistics regarding number and causes of accidents in coal nines in United States. Price, 20.

List of Publications, Bureat of Mines, with Index by SubJects and Authors. $1+153$ pages. Includes all the publications, issued by the Buteau of Mines from 1910 to June, 1928.

Mineral Resources of United States, 1926. The reports on mitneral resources are first issued in the form of bulletins, of which the following has been released since the Jankary announcement and may be obtained at the priqe indieated:

Gold, Silerer, Copper Lead, and Zinc in Qolorgdo in, 1926 , ( $\mathrm{Pt}, \mathrm{I}, \mathrm{pp}$

## BUREAU OF NAVIGAIION

Amendments to Navigation Laws of 1927, first Supplement. 22 pages. These changes in the laws relating to navigation and the merchant narine were made by Congress prior to May 29, 1928. Price, 54.

## COAST AND GEODETIC SURVEY

Tide Table, Boston Harbor and Vicinity for Year 1929. SerialNo. 433 , iit 22 pages. Price, $5 \phi$.

Topographical Manual, by C. W, Swainson, Special Pablí cation No. $144 ; 1 v+121$ pages, 29 illues 8 pages of pates. Describes the instruments and methods used in making topographic surveys, Price, 304.

Earthquake History of United States, Exclusive of Pacific Region, by N. H. Heck. Special Publieation No. 149, ilt 61 pages, tmap. This is a discussion of the earthquake conditions in the various States and gives information relative to the date, hour, and intensity of seismic disturbances.

Comparison of Old and New Triangulation in California, by William Bowie, Special Publication No. $151,1 v+50$ pages, 5 ilus, 3 naps. Price, 156 .

## SIEAMBOAT INSPECTION SERVICE

Laws Governing Steamboat Inspection, Service, Edition, June 24, 1926 . Form 800,94 pages. Containe extracts from the Revised Statutes relating to the Steamboat Inspection Service.

# CHIEF FUNCTIONS OF THE DEPARTMENT OF COMMERCE 

WILETAM E. WHITING, Secretary of Commerce

Walten F, Bhown, Assistant Secretary of Commerce. Ephraim F. Morgan, Solicitor

## AERONAUTICS BRANCH

WhbiamP, MoCracken, Jo, Assistant Secretary of Commerce for Aeronautics,
Establishment of civil airways and mantenance of aids to air mavigation, inspection and registration of aireratt and lieensing of pilots, enforcement of air traffic rules; investigation of acei dents, eneouragenent of municipal air ports; fostering of air cominerce, scientific research in aeronautics, and dissemination of information relating to commercial geronautics, (Some of these functions are performed by special divisioms of the Iighthouse Service, the Buteau of Standards, and the cosit and Geodetic Survey)

## BUREAU OF THE CENSUS

Whifiam M, Stevart, Diféctor
Taking censuses of population, inmates of institutions, mines and quariles, forest products, and water trampoortation every 10 yeats, consuses of agriculture and electrical public utilities every 5 years; and a census of manufactidies every 2 yeare.

Compllation of statistics of pealth, public delot and tatetion, ingluding fnancial statistics of local Qevernmeats, every 10 years annual compilation of figincial statisties of state and municipal governments.

Compilation of statistics of riarriage, divorce, births, deaths and peial institutions annually, and of death rates in oities and automobile accidents weekly.

Compilation quatrterly or mopthly of statisties on cotton, wool, tobiaco, leather, and other industries; publication in the Survey of Current Businesio of monthly conmercial and findustrial statistife.

## BUREAU OR FOREIGN AND DOMESIIC COMMERCE

## Junus KLen, Director

The collection of timely information concerning world-market conditions and openings for American productsin foreign countries, through commercial attachés, trade commissioners, and conasular officers, and its distribution through weekly Commerce Reports, bulletine, confidential circulars, the news and trade oress, and distret and oooperative offices if 65 cities.

The maintenance of commodity, terhnical, and regional divisions to afford special service to Angerican exporters and manufacturers.

The compilation and distribution of lists of possible buyers and a'genteffor American produets in all parts of the world and pablication of weelily lists of specific sales opportunities abroad.

The publication of statistics on imports and éports.
The study of the processes of domestie trade and commerce.

## BURRAU OF STANDARDS

## Gronar K.Burgess, Director

Custiody, development, and construction, of standards of mearurement, quality performanee, or practice; comparison. of standards used by scientifio or other institutions; determination of physical constants and properties of materials; researches and teste on materials and processes; and publication of scientific and technical builetins reporting resuits of researchés and fundamental technical data.

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

Collection and dissethination of infornation concerning building codes and the planning and construction of houses.
Establishment of simplified commerial practices through cooperation with business organizations in order to redace the wastes resultiong from excessive variety in commodities.

## BUREAU OF MLNES

Scotr Turnar, Díector
Technical investigations in the mining, preparation and utilization of minetalls, including the study, of mine hazards and safety methods and of improved methods in the production and use of minerals.
Testing of Goverinient fuels and management of the Goverrment Fuel Yard at Washington.
Leearch on helium and Operation of plants producing it.
Studies in the economics and marketing of minerals and collection of statistics on mineral resources and thine accidents.
The disemination of results of teohnicsi and economic tesearches in bulleting, techinical papers, mineral resources seiles, miserd circulars, and miscellanêqus pubilications.

## BUREAU OF IISHERIES

## HRARY OManter, Commissioner

The propagation and distribution of food fish and stellish; in order to prevent the depletion of the fisherie9; in yestigations to promote conseryation of fishery resources, the deyelopment of commercial tisheries and agnicuiture; study of fishery methods, improvements in mierchandising and collection of fiehery statistics; administration of Alaska fisheries and fur sealls, and the protection of spenges off the coast of Florida.

## BUREAU OF LIGHTHOUSES

## Grorde R Purnam, Commissioner

Maintenance of 1 g githouses and other aids to vater navigetion. Estabishment and maintenarice of aids to navigation afong civil airways.

Pubiteatioh of Gight Lats, Byoy Lists, and Notiees to Mariners, giving information regarding these aids to navigation,

## COAST AND GEODEIIC SURVEY

E. Lestran Jonis, Director

Survey of the coasts of the United States and publication of charts for the navigation of the adjacent waters, including Alaska, the Philippine Islands, Hawain, Porto Pico, the Vigin Ilands, and the Canal Zone interior control surveys, mag netic surveys, tife and current observations; and seigmological investigations.

Publication of results threugh charts, coast pilots, tide tables, carrent tables, and special publications.

## BUREAU OF NAVIGATION

ARTHUR S. TYREt, Commissioner.
Superintendence of commercial maine and merchant seamen. Supervision of registering, enroliigg, licensing, numbering etc, of vessels under the United States Hiag, and the annual publication of a list of such vessels.
EAforeement of the navigation and steamboat inspeotion laws, including imposition of fees, finep, tomnage taxen, eto.

## STEAMBOAT INSPECTION SERVICE

## Dickinson N. Hoovar, Supervising Inspector General

The Inspection of merchant vessels, including boilers, hulls, and life-siving equipment, licensing of sficers of yessels, certl fication of able seamen and lifeboat men, and the investigation of violations of steamboat trespection faves,

## UNITED STATES PATENT OFFICE

## Thomas E. Robetrson, Commissioner

The granting of patents and the registration of trade-marks, prihts, and labels after techrical examination and judicial proceediags.

Maintenance of library with public cearch room, containing copies of foreign and United States patents and tiade-marks. Recording bills of sale, assighiments, etc, relatieg to patents and trade-maiks. Furnishing copies of records pertaining to patents.

Publication of the weekly Ofacial Gazette, showing the patentsland trade-marise issued,

## RADIO DIVISION

## W. D, TERRKLU, Chief

Inspection of radio stations onships; Inspection of radio sta tions on shore, including bropdeasting stations, licensing radio operatorss asigning station call Letters, enforcing the terms of the International Radiotelegraphic Convention; and examining and settling international redio áecounts.


[^0]:    $28914^{\circ}-29-1$

[^1]:    ${ }^{1}$ Sources of data are as follows：Bituminous coal and beehive coke production from U．S．Department of Commerce，Bureau of Mines；Lumber production，based on four associations，from the National Lumber Manufacturers Association；Petroleum production（crude）from American Petroleum Institute；Loadings of freight cars from American Railtoay Association；Building contracts from F．W．Dodge Corporation；Receipts of wheat from Bradstreet＇s；Receipts of cattle and hogs from U．S．Department of Agriculture， Bureau of Agricultural Economics；Receipts of ootton from New Orleans Cotton Exchange；Wholesale prices（Fisher＇s index），based on $1923-24$ as 100 ，from Professor Iroing
    Fisher；Price of cotton，middling，from New York Cotton Erchange；Price of iron and steel，composite，from Iron Trade Review；Price of wheat，No． 2 ，hard winter，Kansas Fisher；Price of cotton，middling，from New York Cotton Erchange；Price of iron and steel，composite，from Iron Trade Review；Price of wheat，No．2，hard winter，Kansas
    City，U．S．Department of Agriculture，Bureau of Agricultural Economics；Loans and discounts of member banks and debits to individual accounts from Federal Reserve Board；Call－money and Time－money rates，and Bond prices from Wall Street Journal；Stock prices from Annalist；Business failures from $R$ ．$G$ ．Dun \＆Co．；Detroit employ－ ment＇＇from The Employers＇Association of Detroit．
    ${ }^{2}$ The actual week for all items does not always end on the same day．

[^2]:    ${ }^{1}$ All canned-food products, including catsups, jams, jellies, olives, pickles, preserves, etc.

[^3]:    ${ }^{1}$ All canned-food products, including catsups, jams, jellies, olives, pickles, preserves, etc.

[^4]:    ${ }^{1}$ Receipts into sight compiled by New Orleans Cotton Exchange; imports and exports from U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce; consumption, ginnings, and domestic stocks from U. S. Department of Commerce, Bureau of the Census. Linters are not included in the statistics in this table, except in the exports. Yearly figures represent averages for the calendar year except for ginnings and production, in which case totals for the crop year are shown (not an average). Monthry data from 1909 through 1926 on items in this table, if available, may be found in the Record Book of Business Statistics, Textiles Section, p. 18 to 27.
    ${ }_{2}$ The yearly figures, from U. S. Depart ment of Agriculture, Bureau of Agricultural Economics, represent the latest revised estimates of total production of the cotton crop for the year (not a monthly average). The monthly figures show the current estimate of total production as reported each month.
    ${ }^{3}$ Figures for September are to Sept. 25 only, prior to 1924. December figures cover ginnings through Dec. 13 only. January figures for all years cover ginnings through Jan. 16, and March figures cover all ginnings of the crop. Yearly fgures represent total ginnings for the cotton crop har vested in that year (not a monthly average). Jan. 16, and March figures cover all ginnings of the crop. Chrearly figures represent total gisnings or the cotton crop har vested in that year (not a monthy average). Digitized for FRASWhited states port and interior, Egypt, India, and quantities afoat.

[^5]:    *Monthly data from 1909 through 1926 on items in this table, if available, may be found in the Record Book of Business Statistics, Textiles Section, pp. 29 to 34, 39 , and 40. ${ }_{1}$ Data from $U$. S. Department of Commerce, Bureau of the Census, representing total cotton spindles active in textile mills during the month. The capacity percentage es into account working days, on a single-shift basis, exclusive of holidays. Details by States are given in press releases.
    1 Compiled by the National Association of Finishers of Cotion Fabrics from reports from 31 out of 51 members, covering work done outside of regular textile mills. In the statistics given above, white goods and dyed goods each comprise regularly about 40 per cent of billings and orders, and printed goods about 20 per cent. Prior to November, 1923, an additional firm was included. Details by Federal reserve districts and classes of goods are given in the association's reports. The goods are billed as completed, hence billings approximate production.
    ${ }^{8}$ Data on fine cotton goods, from the Fine Cotton Goods Exchange, are reported by 24 identical mills in the New Bedford district, representing about 50 per cent of the fine cotton goods industry in New England and from 20 to 30 per cent throughout the United States. Data on sales are no longer published, as not strictly comparable with production figures.
    -1 Imports and exports of cotton cloth from the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Exports of cotton cloth include duck and other cloth, bleached, unbleached, and colored. Beginning with January, 1921, the figures are reported in square yards instead of linear yards, as formerly, and are probably slightly smaller than in the corresponding linear-yard measurement. Imports include bleacbed and unbleached, colored, dyed, printed, and woven figured cloths.
    ${ }_{b}$ Dividends paid by cotton mills in Fall River in quarter ending in the month given, comprising about 38 mills, are compiled by $\boldsymbol{G}$. $\boldsymbol{M}$. Haffards \& Co. Yearly figures
    are quarterly averages.
    Yearly figures are quarterly averages.
    79 months', average, April to December, inclusive.
    6 months' average, July to December, inclusive, previous data not available.
    ${ }^{10}$ A 11 verage for 5 months, August to December, inclusive; previous data not available.
    1011 months', average, January to November, inclusive.
    ${ }^{11} 9$ months' average, January to September, inclusive.

[^6]:    1 Compiled by the Cotton Textile Institute from weekly reports, the production figures being combined into the monthly totals on the basis of either 4 or 5 weeks, June and September being 5 -week months, while stocks and unflled orders are for the Saturday nearest the end of the month. The figures for 1927 are not strictly comparable spindles in place, October and most of November from 134 mills with about $1,700,000$ spindles in place, and beginning with the week ended November 26 from 141 mills spindles in place, October and most of November from 134 milis with about $1,700,000$ spindles in place, and beginning with the week ended November 26 from 141 mulls sale to other mills, yarn used by the same mill in further manufacture being excluded.
    ${ }_{2}$ Compiled by the Association of Cotton Textile Merchants of New York from weekly, biweekly, and monthly reports of 46 commission houses and of several additional mills through the Cotton Textile Institute, representing mills manufacturing 23 groups of textile constructions, as follows, new groups added since the beginning of 1926 being marked with the date of inanguration of their statistics: Class A sheetings, Class B sheetings, Class C sheetings, print cloths narrower than 36 inches, print cloth 36 inches and wider, pajama checks, drills 40 inches and narrower, 4-leaf clothing twills, pocketing twills, jeans (gray cloth only), osnaburgs, heavy-warp sateens, drills, twills, sheetings, and sateens wider than 40 inches, denims, chambrays, cheviots and plaids, ginghams, wide brown sheetings (compiled entirely by the Cotton Textíle Institute beginning with July, 1927, with additional mills reporting), print cloth fancies (beginning March, 1926), carded broadcloth (beginning July, i926), canton fannels for the mitten trade (beginning July, 1926), flat ducks (beginning October, 1927), tobacco cloths (beginning October, 1927), and miscellaneous print cloths (beginning October, 1927). The 2 latter groups are compiled by the Cotton Textile Institute, which, beginning with August, 1927, has collected data from additional mills in other groups to add to the reports. Therefore, the data beginning with the latter part of August are not comparable with previous totals on account of the great increase in reporting firms as well as the addition of 3 groups in October representing about 10 per cent of the total. Each group is further subdivided by kinds and sizes in the association's reports. New orders and shipments are computed from the other figures. The mills reporting are believed to represent over 60 per cent of the industry and are located chiefly in the South.
    ${ }_{3}$ Compiled by the Cotton Trextile Institute from reports of from 15 to 18 mills finishing print cloths, both job printers, i. e., those printing cloths not of their own manufacture, and corporation printers, i. e., those both manufacturing and printing. Thesestatistics, therefore, overlap somewhat the data of the National Association of Finishers of Cotton Fabrics, as they include corporation printers, which the association statistics omit, and exclude white and dyed goods, which the association statisties cover in addition to printed goods. The machines included in these reports represent from 68 to 74 per cent of the total printing machines. Cotton and rayon mixtures are included in these data, and the institute's reports present details by kind of cloth and use. Stocks represent printed yardage, both in cases and open stock.
    Compiled by the National Associrtion of Button Manufacturets from reports or 17 frms representing 95.2 per cent of the machine capacity of the association members, except prior comparable. Stocks are as of the last Saturday of the month. Monthly data from 1922 through 1926 may be found in the Record Book of Business Statistics, Teatile Section, page 47 . ompiled by the Ocean Pearl Button Manufacturers' Association from reports of 9 members, estimated to represent about 75 per cent of the industry. Figures represent 4 -week totals, the extra week being omitted in 5 -week months to insure comparability. Details by sizes are given in the association's reports, stock figures being presented also by patterns. Production represents buttons polished.
    ${ }_{8} 7$ months' average. $\quad 75$ months' average
    ${ }^{8} 11$ months' average.
    -9 months' average.

[^7]:    * Monthly data from 1909 through 1926 for items in this table, if available, may be found in the Record Book of Business Statistics, Metals and Machinery Section, pp. 11 to 20 .
    ${ }_{1}$ Data on iron ore from the Lake Superior Iron Ore Association, except imports. Shipments represent movement of ore through the upper lake ports, including not only tonnage passing through the Sault Ste. Marie canals but also that from ports on Lake Michigan, thus representing over 85 per cent of the total iron ore mined. Receipts at ports other than on Lake Erie are mostly at Chicago and vicinity and Detroit, the details by ports being shown in the monthly reports of the association, which also give by districts the consumption data. Furnaces reporting vary in number from 319 to 341 and beginning tith June, 1922, reports from 15 Canadian furnaces are included. Averages are based on the full 12 months of the year.
    Avagempiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Imports of manganese ores exclude ores imported from Cuba since September, 1922, which are shown only in the raw state, but included those ores prior to that date, when they were combined with the manganese content of imported ores.
    ${ }^{3}$ Pig-iron production and blast-furnace data, in the United States, comprising practically the entire output, except that made with charcoal, from the Iron Age. 4Compiled from data reported by the Ifon Age by subtracting the figures on pig iron produced by steel mills from the total pig-iron production figures, thus obtaining
    data on the total output of merchant pig iron.
    ${ }^{5}$ Data on Canadian pig-iron production compiled by Canadian Department of Trade and Commerce, Dominion Eureau of Statistics, comprising complete production.
    Wholesale prices, except composite average, are averages of weekly quotations taken from U. S. Department of Labor, Bureau of Labor Statistics.
    The composite pig-iron price, compiled by the American Metal Market, is the average of daily prices of 10 tons of iron distributed as follows: iton each of Bessemer Valley; No. 2 foundry valley; No. 2 X foundry at Philadelphia and at Buffalo; No. 2 foundry at Cleveland and at Chicago; 2 tons each of basic valley and No. 2 Southern
    89 months' average, April to December, inclusive.

[^8]:    "Monthly data from 1917 through 1926 for items in this table, if available, may be found in the Record Book of Business Statistics, Metals and Machinery Section, pp. 23 ,
    24, and 34, 1 Compiled by the National Association of Flat Rolled Steel Manufacturers, representing almost all the independent sheet manufacturers ranging in capacity from 59 per cent in 1921 to 75 per cent in 1925, the total capacity of the hot mills in the United States being given by the association as 365,000 short tons at the end of 1921 and 464,000 tons in April, 1928 .
    ${ }_{2}$ Compiled by the $U$. S. Department of Commerce, Bureau of the Census, from the reports of 30 identical establishments, operating 35 plants, except for figures on percentage of capacity operated prior to October, 1926, which were compiled by the Steel Barrel Manufacturers' Institute, from 14 to 23 members of the institute, no data being collected from November, 1923, to November, 1924, inclusive.
    ${ }^{3}$ Compiled by the Commercial Lock Washer Statistical Bureau from reports of 7 firms.
    4 Compiled by the Cold Finished Steel Bar Institute, from reports of 8 manufacturers, estimated to represent from 60 to 70 per cent of the industry
    8 Due to change in capacity rating, increasing the rated capacities by about 11 per cent, the percentage ratios beginning with September, 1927 , are not comparable with previous ratios.
    ${ }^{6} 6$ months' averago.

[^9]:    ${ }^{1}$ Compiled by tbe U. S. Department of Commerce, Bureau of the Census, beginning with January, 1922, representing complete production as reported by 22 manufacturers, including the membership of the Enameled Sanitary Ware Manufacturers Association, untilits dissolution in February, 1928 , after which all firms reported direct to the Bureau of the Census. A few small firms were unable to furnish complete reports prior to January, 1924 . Data prior to 1922 are totals of the association reports, estiand Machinery Section, pp. 36 to 39.
    ${ }_{2}$ Small ware includes lavatories, sinks, and miscellaneous.
    ${ }^{2} 9$ months' average, April to December, inclusive; previous data not available.

[^10]:    ${ }^{1}$ Compiled by the National Electrical Manufacturers' Association, Fan Motor Section.

[^11]:    ${ }^{1}$ Monthly domestic automobile production data beginning July, 1921, represent practically complete production or factory sales as compiled by the U. S. Department of Commerce, Bureau of the Census, including total membership of the National Automobile Chamber of Commerce. Foreign assemblies are included in these figures. A nnual figures through 1921 represent production as compiled by the National Automobile Chamber of Commerce from the principal producers, covering close to 90 per cent of the
     issue (No. 70), p. 22, except for Canadian passenger cars, for which data prior to 1922 were compiled by Babson's Statistical Organization from reports of companies estimated to represent 90 per cent of tbe output, and which appeared in the April, 1928, issue (No. 80), p. 18.
    ${ }^{2}$ Automobile exports compiled by the $U$. S. Department of Commerce, Bureau of Foreign and Domestic Commerce.
    ${ }^{3}$ Data supplied by the General Motors Corporation to show the relation between sales by the company to retail dealers and by these dealers to users. These data are based on sales of Chevrolet, Pontiac, Oldsmobile, Oakland, Buick, and Cadillac cars, the Chevrolet commercial cars and trucks, and cars, trucks, and tractors not now manufactured, including through April, 1925, the G. M. C. trucks, which were then transferred to another manufacturing unit. Monthly data from 1922 appeared in the July, 1926, issue (No. 59), p. 25 .

[^12]:    ${ }^{1}$ Compiled by $R . L$. Polk \& Co., showing the number of new cars registered each month. Data for 1925 cover all but 3 States, estimates being made for tbese States, Which in the aggregate have only 2 per cent of the country's automobile population, while in 1926 all States except Mississippi are included (no estimates being made for Mississippi) and beginning with 1927 all States are shown complete. The company's reports show data by makes of car and by States and counties.
    ${ }^{2}$ Compiled by U. S. Department of Commerce, Bureau of the Census, representing shipments of electric industrial trucks and tractors by 9 leading manufacturers, comprising the greater part of the industry.
    ig Compiled by the Tre and Rim Association of America, from reports of 46 firms representing praptically the entire industry. The figures include motor cycle, balloon, high-pressure, truck, and millimeter rims approved and branded by the association after inspection and are given in detail by kinds and sizes in the association reports. Monthly data form January, 1922, appeared in April, 1927, issue (No. 68), p. 23 .
    Sales of automobile accessories and parts shipped to customers by 75 members of the Motor and Accessory Manufacturers' Association, the relative numbers being based on value, with January, 1925, as 100 .

[^13]:    ${ }^{1}$ Compiled by the U. S. Department of Commerce, Bureaus of Mines, representing practically complete data for the reflneries prior to January, 1925 , but since then gas and fuel oil stocks cover only stocks of east California. The consumption data for gas and fuel oils and lubricating oil are caleulated from production, exports and changes in stocks. For lubricating oil stocks, data include marketers' stocks beginning with June, 1923, while consumption since that time takes account of this change in stocks.
    Figures on asphalt, coke and wax relate only to the by-products of petroleum.
    ${ }_{2}$ Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, covering loading of vessels for foreign trade at principal clearing ports.
    Monthly data covering the period 1913-1923 appeared in the October, 1923, issue (No. 26), p. 61.
    ${ }^{3}$ Compiled by the U. S. Department of the Interior, U. S. Geological Survey, representing consumption by all plants producing electric power, but mainly central stations; consumption in central stations alone shown in April, 1925, issue (No. 44), p. 29, and by street railways, manutacturing plants, and reclamation projects in March, 1925, issue (No. 43), p. 28.
    4 Compiled by the Interstate Commerce Commission from reports of 174 steam railroads of Class I, not including switching and terminal companies, and excluding fuel used in switching locomotives. Monthly data from 1921 appeared in January, 1926, issue (No. 53) p. 23.
    o Compiled by the U. S. Department of Labor, Bureau of Labor Statistics, representing average of weekiy prices. Lubricating oil covers quotations of cylinder oil, Pennsylvania, 6000, filtered in tank cars at refinery, and monthy data from 1923 may be found in the November, 1927 , issue (No. 75 ), p . 27.

    - Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, representing'imports of foreign native asphalt. Imports have been reduced from original data in long tons.
    ${ }_{8}^{7} 6$ months' average, July to December. inclusive.

[^14]:    ${ }^{1}$ Compiled by the Rubber Association of America，representing reports from 75 per cent of the industry on pneumatic casings in 1923 and 78 per cent in 1925 ，according to the census of manufactures； 79 per cent and 80 per cent，respectively，on inner tubes and 76 per cent in both years on solid tires．Prior to September， 1921, when an of manufactures and 85 per cent of the output of inner tubes．Crude－rubber consumption in 1925 represented 73 per cent of that reported by the census of manufactures in that year for manufacturers of rubber tires．Export shipments in 1925 represented 85 per cent of the total official exports for both casings and inner tubes and 72 per cent for solid tires．In 1923 the proportions were slightly smaller in each case．The number of reporting firms increased from 36 in November， 1920 ，to a maximum of 66 in 1922 ， while from 1923 to the early part of 1925 the number ranged between 50 and 60 ，in the latter part of 1925 between 45 and 50 ，and in 1926 and 1927 between 40 and 45 ．The decrease in number of firms is stated to be due largely to cessation of business on nominal production．Data comprise all kinds of tires，including millimeter sizes．Stocks represent domestic tires in factory and in transit to or at warehouses，branches，or in possession of dealers on consignment basis，i．e．，all tires still owned by manufacturers as a domestic stock．Shipments include only tires forwarded to purchasers and not those forwarded to warehouses，branches，or on a consignment basis．Solid and cushion tires include plain－tread solid tires，the nonskid－tread type termed＂cushion＂by some manufacturers and also hollow－center or cellular－construction tires of both the pressed－on and demountable types．Details by kind，type，and size are given in the association＇s reports，as well as distribution of domestic shipments between original equipment and other sales，of fabric consumption as between kind of material and of casings and of rubber consumption as between kind of tires．Monthly data from January，1922，appeared in tbe June，1927，issue（No．70），p． 21.
    ${ }^{2}$ Compiled by the Rubber Association of A A erica from reports of from 3 to 8 companies on automobile fabrics each month，representing 48 per cent of the production of automobile fabrics in 1923 and 31 per cent in 1925，according to the Census of Manufactures，and from 10 to 14 manufacturers of other fabrics representing 62 per cent of other fabrics in 1925．Total fabrics reported by these manufacturers represented 62 per cent of all rubberized fabrics in 1923 and 47 per cent in 1925 ．Raincoat fabrics include both single and double texture fabrics，while all other fabrics include hospital and sanitary sheetings，shoe proofings，cretonne and percale apron materials and sundries and New orders for automobile fabrics are those specified for delivery within 90 days．The relation of automobile fabrics also gives detalls by kind and by purposes of shipment． duction）of automobile fabrics to capacity is based on the factor which fixes maximum capacity，based on 24－hour operation，for each plant，whether it is capacity of heaters，
    spreaders，calendars，etc．${ }^{4} 4$ months＇average，September to December，inclusive．

[^15]:    1 Compiled by the Label Manufacturers' National Association, said to include about 75 per cent of the industry. Full capacity is considered as 80 per cent of maximum possibie output in a 48-hour week. Data on production, compiled from January, 1921, through November, 1922, may be found in May, 1923 , issue (No. 21), p. 85.
    ${ }^{2}$ Data compiled by the Abrasive Paper and Cloth Manufacturers' Exchange, estimated to represent 90 per cent of the industry. 'The totals given include the shipments of garnet, emery, flint, and artificial (silicon, carbide, and aluminous oxide) paper, cloth, and combinations. Figures are stated in equivalent reams 9 by 11 inches in size. The data submitted show that in 1919 the total shipments were made up of the following approximate percentages: Garnet 39, emery 8, fint 32, and artificial 20 per cent. Details are given in the association's reports.
    per ${ }_{3}$ Compiled by the Rope Paper Sack Manufacturers'. Association, comprising 15 manufacturers, said to represent approximately 95 per cent of the industry. Rope paper sacks are bags or sacks made principaliy of old rope and used for flour, cement, lime, plaster, etc., but the figures presented here include only flour and meal sacks and are thus on a different basis from those formerly included.

    4 Data on production, consumption, and shipments by mills and stocks from the Federal Trade Commission to May, 1923 , representing practically complete production; thereafter compiled from reports of the American Paper and Pulp Association prorated to represent complete production on the following percentages calculated on the production in the last 7 months of 1923 as compared with the total for that period derived from the Federal Trade Commission reports and the Census of Manufactures: Mechanical pulp, 65 per cent; chemical pulp, 50 per cent.

[^16]:    1 Compiled by the $U$. S. Department of Commerce, Bureau of the Census, from the reports of 10 manufacturers comprising the entire industry. The figures represent regular selection. Details by kind of fixture sre given in press releases, showing also cellis, the clasisications including baths, lavatories, shower receptors, sinks, slope sinks, stalls, trays (single), combination sink and trays, 2 -part trays, intergral drainboard sinks, and miscellaneous. Net new orders comprise total new orders less cancellations, while stocks show amount of finished glost fixtures on hand at the end of the month.
    ${ }^{2}$ Compiled by the $U$. S. Depart ment of Commerce, Burean of the Census, from reporits of 32 manufacturers, covering most of the frrms making vitreous chinaware which in regular practice is connected with a drainage system. The figures represent regular selection (formerly grade A). Details by classes are given in press releases, showing also culls, the classification including siphon jets, washdowns, reverse traps, lowdown tanks, lavatories, and miscellaneous. Net new orders comprise total new orders less cancellations, while stocks show amount of finished glost fixtures on hand at the end of the month.
    ${ }^{3}$ Compiled by Rock Products from reports of 14 firms from May through Ausust, 1926 , and from 17 to 23 firms for the remainder of that year. The 1926 averages are based on total figures for the year by 23 frms, which represented 75 per cent of the output of the industry in 1926, according to the annual census, and whose stocks on Digitized for FRASDeeember 31, 1292, represented 52 per cent of total stocks on that date. Data for 1927 and 1928 were reported by from 23 to 30 plants each month.

[^17]:    ${ }^{1}$ Compiled from individual reports of all methanol-refining plants in the United States and Canada by the $U^{\tau}$. S. Department of Commerce, Bureau of the Census, the following grades of methanol being included: 95 per cent refined, 97 per cent refined, pure, C. P. and denaturing grade methanol; except for prices, which are monthly averages compiled by the U. S. Department of Labor, Bureau of Labor Statistics.
    ${ }^{2}$ Statistics of ethyl alcohol, compiled by the $\mathbb{O}$. S. Treasury Department, Bureau of Internal Revenue, comprise all $160^{\circ}$ proof alcohol produccd in the United States. Withdrawals for denaturing represent approximate production of denatured alcohol. The large increase in the proportion of the total production used for denaturing, beginning with 1922, is stated to be due to the use of denatured alcohol, which pays no tax, for certain medical purposes in place of pure alcohol which was formerly used and is taxable. Data for fiscal years previous to 1920 appeared in the February, 1928, issue (No. 78), p. 79. Beginning with April, 1928, monthly data on production and stocks from 16 members representing about 90 per cent of the industry are also reported by the Industrial Alcohol Institute in terms of wine gallons.
    ${ }^{3}$ Corapiled by the U. S. Department of Commerce, Bureau of Mines, from reports from 24 companies. Data comprise black powder, permissibles, and other high explosives, and do not include reports of manufacturers of ammunition and freworks, nor production of nitroglycerin, except in so far as nitioglycerin is used in the manufacture of other explosives. Detailed data by classes from 1922 appeared in November, 1924 , issue (No. 30) p. 107
    
    50 per cant) and other dye extracts; coal-tar exports comprise coal-tar colors, dyes, and stains.
    t 9 months' average, A pril to December, inclusive.

[^18]:    1 Data compiled by U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce. Potash imports include potash imported as chemicals and also the muriate and sulphate used in fertilizers. "Total fertilizer" exports are made up largely of phosphate rock. Potash data from France and Germany are seeared by the department from Potasses d' Alsace, the French government office having charge of potash mines in France, and the Kali Syndicate, controling the German potash market, respectively. Monthly data on these two items from 1924 appeared in the June, 1928 , issue (No. 82), $p .22$.
    northern and southern sections are obtainable from the association's reports. Detaidators representing about 80 per cent of the industry; figures in greater detail divided into northern and southern sections are obtainable from the association's reports. Details by sections for 1925 appeared in the January, 1926, issue (No. 53 ), p. 16 . Tons are of 16 per cent a vailable phosphoric acid, which is equivalent to 300 pounds per ton.
    month indicated. Similer forures for quarters sing fore quarters ended in onth indicated. Similar figures for quarters since June 30; 1923, were given in the April, 1927, issue (No. 68 ), p. 23.
    ${ }^{5}$ Wholesale average monthly price of $66^{\circ}$ sulphuric acid as New York from U. S. Department of Labor, Bureau of Labor Statistics
    Carolina Georgia Florida Alabama Missiscipi, North Carolina, South
    ${ }^{6}$ Average for last 3 quarters of year.

[^19]:    ${ }^{1}$ Compiled by the U. S. Department of Commerce, Bureau of the Census, covering the entire industry. Receipts of cottonseed at mills include seed later destroyed at mill, but not seed reshipped. Stocks of crude oil include holdings of crude mills and of refiners and oil in transit to refiners and consumers, while stocks of refined oil include holdings of refiners, brokers, agents, and warehousemen, and oil in transit to manufacturers of lard substitutes, oleomargarine, soap, etc. Yearly figures for all these items are now based on the calendar year. Monthly data from 1920 on cottonseed stocks appeared in the August, 1922, issue (No. 12), p. 94, and on crude cottonseed-oil production and stocks in the May, 1922, issue (No. 9), p. 87.
    ${ }_{2}$ Compiled by the U. S. Treasury Department, Bureau of Internal Revenue. Production data represent total output, while consumption figures represent tax-paid withdrawals of both colored and uncolored oleomargarine, consisting of all withdrawals for domestic use except for the Government.
    ${ }^{3}$ Compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce.
    ${ }^{4}$ Compiled by the U. S. Department of Labor, Bureau of Labor Statistics, representing averages of weekly quotations at New York. Monthly data from 1920 appeared in the May, 1922, issue (NO. 9), p. 91.
    ${ }^{5}$ Compiled by the U. S. Department of Commerce, Burcau of the Census, representing practically complete consumption of refined cottonseed oil by factories in further manufacture of such articles as lard substitutes, oleomargarine, soap, etc. Yearly figures are quarterly averages. Quarterly data for 1920 appeared in the August, 1923 , issue (No. 36), p. 119.
    reports. report. Data from July, 1921, together with figures for other ingredients consumed in the manufacture of oleomargarine, are given in the March, 1926, issue (No. 65 ), p. 25.
    ${ }_{8}$ Average for fiscal years beginning July 1 of year stated.
    ${ }^{8} 5$ months' average, Augusi to December, inclusive.
    ${ }^{\circ} 6$ months' average, July to December, inclusive.

[^20]:    ${ }^{1}$ Compiled by the U.S. Department of Commerce, Bureau of the Census, covering practically the entire production, factory stocks and factory consumption of fats and oils and their raw materials. Quarterly data from 1920 appeared in the August, 1923 , issue (No. 30), pp. 115 and 119., Annual agures are quarterly averages. Data prior to 1919 collected by the U. S. Food Administration, and published in detail in the supplement to Bulletin 769 of the U. S. Departmert of Agriculture. Data on production and consumption of total vegetable oils. represent those in the crude state.
    ${ }^{2}$ Compiled by the U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, including cottonseed, corn, and linseed oils.
    ${ }^{3}$ Compiled by the U.S. Department of Commerce; Bureau of Foreign and Domestic Commerce. Imports of total vegetable oils include the following oils: Chinese nut, cocoa butter, coconut, cottonseed, olive (both edible and inedible), palm, palm kernel, peanut, rapeseed, soya bean and linseed. The fgures for Chinese nut, inedible olive, ana rapeseed oils, when reported in gallons, have been converted into pounds, allowing $78 / 4$ pounds per gallon.
    showing total consumption of coconut oil in the manufacture of oleomargarine, as ascertained from tax reports. Monthly data from July, 1921, together with figures for other ingredients consumed in the manufacture of oleomargarine are given in the March,
    ${ }^{5} 6$ months' average, July to December, inclusivo.

[^21]:    ${ }^{1}$ Production from animals slaughtered under Federal inspection reported by the U. S. Department of Agriculture, Bureau of Animal Industry, given as total dressed weight, excluding meat from condemned animals. The slaughter under Federal inspection, according to census figures for 1919, amounted to 82 per cent of the total number of animals slaughtered in the United States in the case of beef and 91 per cent for lamb. Monthly data from 1920, including also exports, storage holdings, apparent consumption, and prices, appeared in May, 1922 , issue (No. 9f, p. 95 . Vealis included in the beef figures and mutton in the lamb fgures.
    ${ }^{2}$ Exports, as reported by the U. S. Department of Commerce, Bureau of Foreign and Domesitc Commerce, include fresh, canned, and pickled and cured beef. on the last day of each month. Beef holdings include frozen, cured, and in process of cure, while lamb holdings embrace frozen lamb and mutton. Total meats include lard, monthly data from 1917 being shown in the July, 1928, issue (No. 83), p. 19.
    Economics, from the inspected slancluding onler, less condeat produced under Federal inspection, has been computed by the U. S. Department of Agriculture, Bureau of Agricultural Economics, from the inspected slaughter, less condemned animals, plus net imports less exports and reexports and the change in cold-storage holdings. Monthly data on total meats from 1916 appeared in the March, 1926, issue (No. 55), p. 23.
    ${ }^{5}$ Wholesale prices are averages for the month from U. S. Depart ment of Labor, Bureau of Labor Statistics.
    ${ }^{6}$ Compiled by U. S. Department of Agriculture and include all stocks of beef, pork, and mutton trimmings and edibles offal that have been frozen, cured, or otherwise prepared for food. Data do not include trimmings that have not been frozen, cured, nor processed, nor sausage or canned-meat products. Data are given for the end of ch month. Monthly data from August, 1917, appeared in the April, 1926, issue (No. 50), p. 20.
    ${ }^{7}$ Average for 5 months, August to December, inclusive.

[^22]:    ${ }^{1}$ Data on production and stocks from $U . S$. Department of Agriculture, Bureau of Agricultural Economics, representing practically the entire industry. Production figures by classes are reported only every three months, while stocks are available currently. Stocks, both total and unsold, are given as of the end oi each month, stocks of evaporated bulk goods being included in each total, but omitted in detail on account of the small quantities usually held. Condensed milk is sweetened by the addition of sugar while evaporated milk is simply milk reduced in volume. The bulk goods are generally destined for bakeries, etc., while case goods are for the retail trade. 48 2-ounce tins, while a case of evaporated milk has 4816 -ounce tins. Monthly data from 1913 appoared in December, 1925 , issue (No. 52 ), p. 22. 48 14-ounce tins, while a case of evaporated milk has 48 16-ounce tins. Monthy data rom 1913 ap
    ${ }^{3}$ Exports are from U. S. Department of Commerce, Bureau of Foreign and Domesic Commerce.

[^23]:    I Estimate of production of the tobacco crop from the $U$. S. Department of Agriculture, Bureau of Agricultural Economics. The annual figures represent the latest revised estimates of the year's total crop, not monthly averages, while the monthly figures represent the current estimate of the total crop for the year made the first week of cach month. Revisions of the December estimate for each year are made in December of the following year.
    ${ }_{2}$ Sqles of tobaceo from loose-leaf warehouses compiled by the Federal Resesve Board, Division of Research and Statistics, from reports of State authorities of Kentucky, North Carolina, South Carolina, and Virginia, which States grow about 75 per cent of the tntal to bacco crop. Sales from Kentucky were not available for the first six months of 1919, so that the year's figure is partly estimated by estimating the Kentucky flgures for the first half year as equal to the sum of the sales in the other reporting States, which is approximately the normal proportion of Kentucky sales to the total.
    ${ }^{3}$ Exports from the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce.
    ${ }^{4}$ Stocks of leaf tobacco held by manufacturers and dealers compiled by the U. S. Department of Commerce, Bureau of the Census. During the years 1913, 1914, 1915 , and 1916 the data were collected semiannually in March and September, the quarterly collection commencing with December, 1916. Therefore the average for the years 1913 through 1915 are semiannual, while for 1916 three quarters are averaged, and thereafter four quarters.
    ${ }_{6}^{5}$ Compiled by the U. S. Department ol Labor, Bureau of Labor Statistics, representing average sales of leaf tobaceo from all Kentucky warehouses.
    ${ }^{6}$ F Figures of consumption of tobacco products from $U$. S. Treasury Department, Bureau ol Internal Revenue, represent withdrawals from bonded warehouses upon paymentigures or consumption of tobacco products rom . S. Treasury Department, Bureau ol Internal Reenenue, represent withdrawals from bonded warehouses upon payDigitized fo meatithose for large cigars, weighing over 3 pounds per thousand, while for cigarettes, small cigarettes are taken, weighing 3 pounds per thousand or less; in both cases the $\mathrm{http}: / /$ fraserseriestaken represent over 90 per cent of the totals for each class.

[^24]:    ${ }_{2}^{1}$ Panama Canal traffic, reported by the Panama Canal, represents cargo carried by commercial vessels. Figures prior to 1922 refer to fiscal years ending June 30 . ${ }^{2}$ Trafic through the Sault Ste. Marie canals, including both the American and Canadian canals, reported by U. $S$. War Department, Engizeer Corps, Monthy averwith current monthly movements. Monthly data by eleasses of commodities, covering the years 1913-1922, appeared in March, 1923 , issue (No. 19 ) pp. 48 and 49 . ${ }^{3}$ Traffc through New York State canals from New York State Superinterdent of Pubbic Works. About two-thirds of this tramp goes through the Erie Canal and one third through the Champlain Canal. Monthly averages for each year are for the seven months daring which the canals are usually open. J. $\dot{s}$. Wompilild by the Boston, Cape Cod \& New York Canal Co. through March, 1928, when the Federal Government took over the canai. Thereafter figures are from the U. S. War Department, Engineer Corps. The average for 1916 is an average of nine months of operation. Monthly data from 1920 on ship tonnage (not comparable with present figures) appeared in the September, 1923, issue (No. 25), pp. 65 and 56
    ${ }^{5}$ Data from the Dominion Bureau of Statisti
    ${ }^{6}$ Data from the Dominion Bureau of Statistics, Canadian Department of Trade and Commerce. Monthly averages for oach year are for seven months during the equivaent of which period the canals are usually open-that is, totals for the years are dividcd by 7 in order to present a figure fairly comparable with current monthly movements. Receipts and shipments of cargo by river at St. Louis, now discontinued, appeared in August, 1925, issue (No. 48), Monthly data from 1920 , including Government bargeline traffic, appeared in July, 922 , issue (No. il), p. 45 .
    We Compiled by the U. S. War Department, Engineer Corps, represent total cargo traffic on the Ohio River between Pittsburgh and Lock and Dam 11, located between Wellsburg and Wheeling, W. Va. The total of $3,585,188$ short tons shown for the months of 1922 , from which the average is computed, does not include the annual total of $1,327,199$ short tons not shown separately by months, the total movement for 1922 being $4,912,387$. Data are available from 1910 to 1914 for trafic between Pittsburgh and Lock No. 6 (near Beaver, Pas.), and from 1915 to 1921 between Pittsburgh and Lock No. 10 (near Steubenville, Ohio). Traffic between Pittsburgh and Lock 10 amounted to 4,733,620 short tons in 1920 and 2,840,978 in 1921 ,
    Compiled by the U.S. War Department, Engineer Corps, representing total cargo traffic on the Monongahela and Allegheny Rivers above Pittsburgh. This traffic ( Monthly data from 1922 appeared in the November, 1926, issue (No. 63), p. 26.
    10 Compiled by the $U$. $S$. War Department, Engineer Corps, representing tonnage of cargo traffic on the Ohio River. Each district includes only the traffic originating in that district either on the Ohio River or on one of its tributaries, so that the total contains no duplications. Figures for 1925 and 1926 are quarterly averages, figures
     http://fraser.stloulsfed.org buarters partly estimated. The annual figures are quarterly averages

[^25]:    1 Data from the American Railway Association. Daily average for the last period ( 7 or 8 days) of the month, exclusive of Canadian roads. The association reports the

[^26]:    ${ }^{1}$ Compiled by the American Railway Association, Car Service Division, covering Class I railroads and some others, including about 99 per cent of total railroad operations. Cars in railroad hands include those owned or leased by railroads but not private-owned cars on their lines. Passenger coaches in railroad hands include coaches, combination, baggage, express, and all other coaches. Monthly averages for bad-order cars for the years 1913-1917; also monthly data for 1920 and 1921, appeared in the
    
    ${ }^{2}$ Data from the Railway Age covering the principal transactions, each month's egures being totals of those given in the weekly issues of the publication appearing during the month, and prorated up to the annual totals made from special inquiries. The percentage used in prorating the 1924 data was 94 per cent. Data for tho years 1913 to 1918 from the Iron Trade Review appeared im May, 1924, issue (No. 33), p. 77; though not comparable month by month on account of different methods of compilation they indicate the trend from year to year comparable to the above figures.
    1924 , issue (Nata on shipments of manufacturers for railway equipment were obtained from the Interstate Commerce Commission. Monthly data from 1919 appeared in July, 924, issue (No. 35), p. 55 .
     ${ }^{5}$ Compiled by the U. S. Department of Commerce, Bureau of the Census, from reports of over 600 public-merchandise warehouses, excluding cold-storage and household goods. Further details are presented by States in monthly press releases.
    A verage of 2 periods, June 30 and Sept, 30 (no report made for Dec. 31 ).

[^27]:    1 Compiled by the U.S. Department of Agriculture, Bureau of Public Roads. The current data beginning January, 1922, are compiled directly from Federal-aid project
    reports. Earlier data included reports on farm labor or other forms of common labor closely correlated, as reported to the Department of Agriculture and the Department of Labor.
    ${ }^{2}$ Average rates in the Pittsburgh district reported by the United States Steel Corporation; rates apply to 10-hour day except for the period Oct. 1,1918 , to July 16,1921, during which period the rates applied to a basic 8-hour day with time and a half for overtime, and beginning Aug. 16, 1923, when they applied to an 8 -hour day, the 10 -hour workers amounting to only 30 per cent of the total.
    ${ }_{3}$ Compiled from data furnshed by the Western. Sheet and Tin Plate Manufacturers' Association and the Amalgamated Association of Iron, Steel, and Tin Workers. The wage scales are based on the price of steel sheets in the previous 2-month period as ascertained by actual prices received by mills. Monthly data from 1917 , together with price of steel sheets for the same period, appeared in the May, 1926, issue (No. 57) of the SURVEY, p. 13.

    A verage rates paid to farm labor as reported by crop reporters to the U. S. Department of Agriculiure, Bureau of Agricultural Economics. Data by sections of the country are shown in the detailed reports published in Crops and Markets.
    $s$ Compiled by the New York State Department of Labor from reports of 1,648 firms employing more than one-third of the factory workers of New York State. Monthly data from 1914 appeared in the July, 1928, issue (No. 83), p. 23. August, 1928, figures for New Jersey are from the New Jersey Department of Labor.

    7 Compiled by the Industrial Commission of Wisconsin from reports of manufacturing plants in Wisconsin.
    8 Compiled by the Oklahoma Department of Labor from reports of 710 establishments.
    ${ }^{9} 6$ months' average.
    ${ }^{9} 7$ months' average.

[^28]:    ${ }^{1}$ Compiled by the U. S. Department of Labor, Bureaid of Labor Statistics, and represent weighted indexes of the amount of the pay roll at the date nearest the middle of each month, for 52 industries combined into 12 groups as above. The groups are weighted in accordance with the aggregate earnings of the respective industries in 1919 . The actual data are obtained from a varying number of reporting firms each month, the months of 1925 covering over 9,000 firms, employing almost $3,000,000$ pecple.
    ${ }^{2}$ Compiled by the National Industrial Conference Board from reports from 1,678 manufacturing plants employing 506,315 people in January, 1921 , and representing 23 industries. The nominal hours per week represent the weighted number of hours the plants are supposed normally to operate, while the actual hours represent the averag man hours wed each week.

[^29]:    ${ }^{1}$ Imports and exports of gold and silver from $U$. S. Department of Commerce, Bureau of Foreign and Domestic Commerce,
    2 Compiled by the Federal Reserve Board consisting of gold held in the Treasury and Federal reserve banks plus the amount in circulation. Gold held abroad by Federal reserve banks is included, but gold in the United States earmarked for foreign account is excluded. The figures are based on the daily monetary gold stock, Complete details are shown in the Federal Reserve Bulletin for December, 1927.
    ${ }^{3}$ Domestic receipts or unrefined gold at U, S. mint from U. S. Treasury Department, Bureau of the Mint.
    ${ }_{4}$ Silver prices, representing daily averages for the month in the New York market, and gold output from the Rand mines from the Engineering and Mining Journal.
    ${ }^{5}$ Production of silver by mines and producers' stocks from American Bureau of Metal Statistics, except annual figures previous to 1921 , which are from $U$. $S$. Department of Interior, Geological Survey. The United States, Canada, and Mexico combined produced about 75 per cent of the world's output of silver in 1923 . Production for both the United States and Canada includes purchases of crude silver by the mints in each country. Canadian production is incomplete, as the silver contained in blister copper, lead bullion, and lead and zinc ores exported is omitted. Mexican production is reported to the bureau by the Mexican Government, and covers refined silver received at the mint tor coinage, refined silver exported, and silver content of base bullion, blister copper, ore concentrates, etc., exported. Detailed data are contained in the bureau's monthly reports. Monthly data from 1921, except on production in the United States, appeared in the February, 1927, issue (No. 66), p. 25.

    6 Compiled by the U. S. Treasury Department and representing all money held outside the Treasury and the Federal reserve system, including gold and silver coin and certificates, minor coin, and notes. Details by classes of money are presented in the monthly circulation statement of the Treasury. These figures are based on the daily Digitized for FRASEelume of money in circulation. A complete description of the revised computation is presented in the Federal Reseroe Bulletin for December, 1927.

[^30]:    1 Compiled by the Federal Reserve Bank of New York from quarterly reports of net profits of 355 companies, consisting of 185 Class I railroads, 71 telephone, 18 motor and accessories, 14 oil, 12 steel, 13 food, 10 metal and mining, 10 machine manufacturing, and 22 miscellaneous companies.

    2 These data showing the growth of stockholders in three prominent companies-a railroad, a public utility, and an industrial-have been furnished direct by the respective companies and represent the number of holders of common stock at the end of each quarter, i. e., December figures are for Dec. 31 or Jan. 1.
    ${ }^{8}$ Dec. 31 figures; other quarters of 1915 not available.

[^31]:    1 Imports and exports of gold and silver in Part II.
    *Multigraphed or mimeographed sheets.

[^32]:    * Multigraphed, mimeographed, or duplicated sheets.

[^33]:    Glossary of Paper Terins and Instractions to Exporters for Guidance in Properly Listing and Classifying Exports or Paper and Paper Prodtacts on Shippers' Export Declarations, vi 122 pages, 1 illus.

    Uniform Through Export Bill of Lading, by A. Lane Cricher. Trade Information Bulletin No. 593 ; $1+62$ pages, Discusses the practicability of the uniform through bill of tading, its use in the United States, and Its acceptability and usage in foreign countries In appendixes are given drafts of international conventions and proposed legislation in the United States relating to these shipping docurnents. Price, 10.

    EConomic, Recovery of Europe and Improved Purchasing Power for Agricultural Products, by H. B, Smith, American trade eonmissioner. Trade Information Bulletin No. 594 ; $1+22$ pages. Shows the changes which have taken place in the economic condition of ELutape since 1923. Price, 104.

