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

## OCTOBER, 1924

No. 38


## COMPILED BY

BUREAU OF THE CENSUS
BUREAU OF FOREIGN AND DOMESTIC COMMERCE BUREAU OF STANDARDS

IMPORTANT NOTICE
In addition to figures given from Government sources, there are also incorporated for completeness of service figures from other sources generally accepted by the trades, the authority and responsibility for which are noted in the "Sources of data" at the end of this number

[^0]
## INTRODUCTION

The Survey of Current Business is designed to present each month a picture of the business situation by setting forth the principal facts regarding the various lines of trade and industry. At quarterly intervals detailed tables are published giving, for each item, monthly figures for the past two years and yearly comparisons, where available, back to 1913. In the intervening months the more important comparisons only are given in the table entitled "Trend of business movements" (p. 33).

In the quarterly numbers (see issue for August, 1924, No. 36) blank lines covering the next three months have been left at the bottom of each detailed table which will enable those who care to do so to enter new figures as soon as they appear.

## ADVANCE SHEETS

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 advance leaflets almost every week, whenever sufficient material is available, to those subscribers who request them. The leaflets are usually mailed on Thursdays, and give such information as has been received during the preceding week. The information contained in these leaflets is also reprinted in "Commerce Reports," issued weekly by the Bureau of Foreign and Domestic Commerce. The complete bulletin is distributed as quickly as it can be completed and printed.

## BASIC DATA

The figures reported in the accompanying tables are very largely those already in existence. The chief function of the department is to bring together these data which, if available at all, are scattered in hundreds of different publications. A portion of these data are collected by Government departments, other figures are compiled by technical journals, and still others are reported by trade associations.

## RELATIVE NUMBERS

To facilitate comparison between differentitems and render the trend of a movement more apparent, relative numbers (of ten called "index numbers," a term referring more particularly to a special kind of number described below) have been calculated. The relative numbers enable the reader to see at a glance the general upward or downward tendency of a movement which can not so easily be grasped from the actual figures.
In computing these relative numbers the last prewar year, 1913, or in some instances a five-year average, 1909-1913, has been used as a base equal to 100 wherever possible. In many instances comparable figures for the prewar years are not available, and in such cases the year 1919 has usually been taken as the base. For some industries 1919 can not be regarded as a proper base, due to extraordinary conditions in the industry, and some more representative
period has been chosen. In a few cases other base periods are used for special reasons. In all cases the base period is clearly indicated.

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.

## INDEX NUMBERS

When two or more series of relative numbers are combined by a system of weightings the resulting series is denominated an index number. The index number, by combining many relative numbers, is designed to show the trend of an entire group of industries or for the country as a whole, instead of for the single commodity or industry which the relative number covers. Comparisons with the base year or with other periods are made in the same manner as in the case of relative numbers.

## BUSINESS INDICATORS

The diagrams on page 2 have been prepared to facilitate comparisons between a fow of the more important business movements. The lines are plotted on what are known as ratio charts (logarithmic scale). 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 form of a chart can be made clear by an example. If a certain item, having a relative number of 400 in one month, increases 10 per cent in the following month, its relative number will be 440, and on an ordinary chart would be plotted 40 equidistant scale points higher than the preceding month. 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 this 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.

This issue presents practically complete data for the month of August and also, on page 26, items covering September received up to October 14. As most data covering a particular month's business are not available until from 15 to 30 days after the close of the month, a complete picture of that month's operations, including relative numbers, cumulative totals, text, and charts, can not be presented in printed form under 45 days after its close, but the advance leafets described above give considerable information as early as 15 days after its close and present almost every week the latest data adailable. Summary for September based upon early items is given on page 1.

| 鰥 | MONTHIY SUPPLEMENT TO COMMERCE REPORTS UNITED STATES DEPARTMENT OF COMMERCE WASHINGTON | 輀 |
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|  | SURVEY OF CURRENT BUSINESS |  |

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## PRELIMINARY SUMMARY FOR SEPTEMBER

Increased industrial activity in September was indicated by reports from the iron and steel, cotton and silk weaving, and the building industries. Production of pig iron increased 9 per cent over the August output, while the mill consumption of cotton, in September, was 25 per cent larger than in the preceding month but more than 10 per cent below a year ago. Unfilled steel orders on the books of the United States Steel Corporation on September 30 called for a tonnage of 184,000 tons greater than that at the end of the previous month, while new orders for freight cars and unfilled orders for railroad locomotives were larger in September than in August.

New contracts awarded for building construction in 27 northeastern States indicated a slight decline from the awards of the previous month in point of aggregate dollar values with a considerable increase over August in new floor space, however. The decline in the value of awards was almost solely due to a $\$ 3,000,000$ drop in residential lettings, all other classes of construction except educational buildings recording larger awards in both value and floor space.

The production of Portland cement declined in September from the output of the preceding month but was well above that of a year ago, while the

September shipments of cement were on about the August level. Cement stocks were reduced by more than the usual seasonal movement, being, however, on September 30 slightly more than 50 per cent larger than the inventories of a year ago.
Sales by mail-order houses increased over the previous month while 10 cent chains recorded smaller business than in August. Both mail-order houses and 10 -cent chains recorded larger sales volume in September than a year ago. Car loadings increased in a seasonal movement over August but were about 1 per cent below those of a year ago. Postal receipts in 50 selected cities increased over both the previous month and a year ago. Wholesale prices declined in September.
Stock prices, both industrial and railroad, averaged lower in September than in August, while interest rates on call money averaged higher and bond prices averaged lower. With bills discounted for member banks continuing their decline, investments of Federal reserve banks again increased over the previous month's holdings. The reserve ratio at the end of September stood at 80.4 against 82.3 at the end of August and 76.4 a year ago. Business failures, both in number and defaulted liabilities, were smaller than in August.

BUSINESS INDICATORS: 1920-1924
(1.13 monthly averages $=100$. See explanation on inside front cover. Except for "net freight ton-miles" latest month plotted is August, 1924)


## COMPARISON OF AUGUST WHOLESALE PRICES WITH PEAK AND PRE-WAR

(Relative prices 1913=100)

WhEAT
CORN POTATOES

COTTON
COTTON SEED
CATTLE, BEEF
HOGS
LAMBS
WHEAT, SPRING WHEAT, WINTER CORN. NO. 2
OATS
barley
RYE NO. 2
TOBACCO. BURLEY
COTTON -
WOOL $1 / 4$ GREASE (BOBTON)
CATTLE STEERS
HOGS. HEAVY
SHEEP. EWES
SHEEP. LAMBS
FLOUR, SPRING
FLOUR. WINTER
sugar. Raw
sUcar, GRANULATEO COTTONSEED OIL BEEF, CARCASS bEEF. STEER ROUNDS' HAMG. SMOKEO (CHICAGO)

COTTON YARN COTTON. PRINT CLOTH COTTON. SHEETING WORSTED YARN WOMEN'S DRESS GOODS suItinas

SILK. RAW HIDES, PACKER'S hides, CALFSKINS LEATHER. CHRQME (BOSTON LEATHER. SOLE OAK BOOTS AND SHOES (BOSTON) BOOTS AND SHOES (ST. LOUIS)

COAL. BITUMINOUS COAL. ANTHRACITE COKE

PETROLEUM
PIG IRON, FOUNDRY pig iron. basic STEEL BILLETS BESSEMER COPPER

LEAD
TIN
ZINC
LUMBER. PINE. SOUTHERN LUMBER. DOUGLAS FIR BRICK. COMMON (NEW YORK) CEMENT STEEL BEAMS RUBBER. CRUDE SUL URIC ACIO


## WHOLESALE PRICE COMPARISONS-MAXIMUM PRICE COMPARED TO PRICE IN RECENT MONTHS

Note.- Prices to producer on farm products and market price of wool are from U. S. Department of Agrictilure, Bureau of Agricultural Ficonomics. All other prlces are from U. S. Department of Labor, Bureau of Labor Statistics. As far as possible all quotations represent prices to producer or at mill. See dingram on jage 4.

Because of their availability at the time of golng to press, October 14, the September price data have here been included, thus bringing thls table up to date. it should be noted that the chart on page 4 shows August prices only.

| COMMODITIES | Date and mum relati | ani- | May, 1921 $\qquad$ <br> (191 | Junm, | July, $1924$ | $\underset{\text { Agzt }}{\text { August, }}$ | Beptem2924 | Per cent Itrcrease (+) or decrease ( - ) In Sppteniber from August |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FARM PRODUCTS-AVERAGE PRICE TO PRODUCERS |  |  |  |  |  |  |  |  |
| Wheat | Junc, 1920 | 326 | 122 | 124 | 134 | 147 | 144 | -20 |
| Corn | July, 1920 | 300 | 127 | 131 | 159 | 174 | 178 | +23 |
| Potatoes | June, 1920 | 706 | 153 | 169 | 183 | 186 | 136 | -20.9 |
| Cotton | July, 1020 | 312 | 234 | 232 | 228 | 232 | 165 | $-20.3$ |
| Cottonseed | May, 1920 | 321 | 160 | 183 | 178 | 170 | 140 | -17.0 |
| Cattle, beef | May, 1910 | 183 | 101 | 95 | 150 | 90 | 94 | -2.1 |
| Hogs... | July, 1919 | 256 | 89 | 87 | 88 | 114 | 113 | -0.8 |
| Lambs | A pr., 1020 | 230 | 157 | 184 | 172 | 100 | 167 | +0.6 |
| FARM PRODUCTS-MARKET PRICE |  |  |  |  |  |  |  |  |
| Wheat, No. 1, northern, spring (Chicago) | May, 1020 | 354 | 129 | 138 | 153 | 149 | 148 | -0.7 |
| Wheat, No. 2, red, winter (Chicago) | May, 1920 | 302 | 109 | 114 | 127 | 133 | 136 | $+23$ |
| Corn, contract grades, No. 2, cash (Chicago) | Sopt. 1917 | 331 | 126 | 134 | 169 | 187 | 186 | -0.5 |
| Oats, contract grades, cash (Chicago) -...... | June, 1920 | ${ }^{296}$ | 130 | 133 | 180 | 140 | 132 | -6. 7 |
| Barley, fair to good, malting (Chicago) | Mar., 1918 | 325 | 122 | 124 | 133 | 130 | 139 | +2.2 |
| Rye, No. 2, cash (Chleago) | Mar., 1918 | 451 | 108 | 115 | 135 | 144 | 100 | +11.1 |
| Tobacco, burley, good leaf, dark red (Louisville) | Mar., 1919 | 352 | 212 | 192 | 186 | 180 | 186 | 0.0 |
| Cotton, middling upland (New York) .-........ | Арг. 1920 | 331 | $\stackrel{247}{106}$ | 235 | 218 178 | 229 | 191 | $-10.6$ |
| Wool, $1 / 4$ blood combing, Ohlo and Pennsylvania fleeces (Boston) ................. | Apr., 1918 | 303 | 196 | 170 | 170 | 182 | 212 | $+10.1$ |
| Cattle, steers, good to choice, corn fed (Chicago) | Mar., 1919 | 218 | 121 | 113 | 112 | 112 | 100 | -5.4 |
| Hogs, heavy (Chicago).....-......................... | July, 1919 | 266 | 89 | ${ }^{87}$ | ${ }^{98}$ | 115 | 118 | $+20$ |
| Sheep, ewes (Chicago). | Apr., 1918 | 319 | ${ }_{181}$ | 103 | 103 | 127 | 115 | -9.1 |
| Sheep, lambs (Chicago)........ | Feb., 1920 | 263 | 182 | 169 | 170 | 170 | 169 | -0.6 |
| FOOD |  |  |  |  |  |  |  |  |
| Flour, standard patents (Minneapolis)-................................................- | May, 1920 | 328 | 145 | 150 145 | 103 152 | 104 | 162 158 188 | -1.2 |
| Flour, winter straights (Kansas City) | May, 1917 | 363 508 | 142 | 145 | 152 145 | 162 164 168 | 188 170 | -28 +104 |
| Sugar, $96^{\circ}$ centrifugal (New York) | May, 1920 | 508 | 161 | 115 | 145 | 154 |  | $+10.4$ |
|  | May, 1020 | 526 | 170 | 152 | 153 | 155 | 167 | +7.7 |
| Cottonseed oll, prime summer yellow (New York) | July, 1919 | 374 | 135 | 144 | 107 | 192 | 130 | -21.0 |
| Beef, fresh carcass good native steers (Chicago).... | Sept. 1920 | 201 | 131 | 129 | 127 | 127 | 127 | 0.0 |
| Beef, fresh steer rounds No. 2 (Chicago) ........ | July, 1920 | 211 | 129 | 134 | 130 | 129 | 122 | $-5.4$ |
| Pork, smoked hams (Chicago) .......-... | July, 1919 | 231 | 117 | 118 | 12 | 134 | 13 | 0.0 |
| CLOTEING |  |  |  |  |  |  |  |  |
| Cotton yarns, carded, white, northern, mule spun, 22-1 cones (Boston)........- | May, 1020 | 348 | 192 | 191 | 190 | 189 | 175 | -7.4 |
| Cotton, print cloth, 27 inches, $64 \times 60-7.60$ yards to pound (Boston).............. | Apr., 1820 | 478 | 192 | 198 | 197 | 202 | 160 | -8.9 |
| Cotton, Sheeting, brown 4/4 Ware Shoals L. L. (New York)........ | May, 1920 | 427 | 177 | 177 | 175 | 150 | 179 | $-5.3$ |
| Worsted yarns, $2 / 32$ 's crossbred stock, white, in skeln (Boston). | Jan., 1920 | 289 | 218 | 206 | 200 | 206 | 212 | $+29$ |
| Women's dress goods, storm serge, all-wool, dbl. warp. 50 in . (N. Y.).........-- | Oct., 1918 | 292 | 184 | 184 | 184 | 184 | 184 | 0.0 |
| Suitings, wool, dyed blue, 55-56 inches, 16-ounce Middlesex (New York) ....... | July, 1920 | 291 | 239 | 233 | 233 | 233 | 233 | 0.0 |
| Bilk, raw Japanese, Kansas No. 1 (Now York).................................... | Jan., 1920 | 466 | 132 | 137 | 148 | 167 85 | 149 | -10.8 |
| Hides, green salted, packer's heavy native steers (Chicago).................................. | Aug., 1919 | ${ }_{4}^{253}$ | ${ }_{8}^{65}$ | 68 | 71 05 | 85 103 | 87 105 | +24 +1.9 |
| Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago) ...................................... | Aug., 1919 | 490 | 88 | 91 | 05 | 103 | 105 | +1.9 |
| Leather, chrome call, dull or bright "B" grades (Boston) .-.......................- | Nov., 1919 | 473 | 171 | 160 | 160 | 171 | 171 | 0.0 +10 |
| Leather, sole, oak, scoured backs, heavy (Boston) --.............................................. | Aug., 1919 | 230 | 103 | 95 | 05 201 |  | 69 201 | 1.0 +0.0 |
| Boots and shoes, men's black call, blucher (Massachusetts) ....................... | Mar.; 1920 | 305 | 201 | 201 | 201 | 201 |  | 0.0 |
| Boots and shoes, men's dress welt tan calf (St. Louis)................................. | Aug. 1919 | 292 | 153 | 153 | 153 | 153 | 153 | 0. |
| FUEL |  |  |  |  |  |  |  |  |
| Coal, butuminous, mine run lump, Kanawha (Cincinnati) | Sept., 1022 | 336 | 154 | 154 | 154 | 154 214 | 154 | 0.0 +0.9 |
| Coal, anthracite, chestnut (New York tidewater) --......... | Nov., 1923 | 216 637 | 208 140 | 210 132 | 121 | 1214 | 216 124 | +0.8 +4.1 |
| Coke, Connellsville (range of prompt and future) furnace-at ovens............. | Aug., 1920 | 637 375 | 140 186 | 160 | 160 | 147 | 141 | $\pm 4.1$ |
| Petroleum, crude, Kansas-0klahoma-at walls....-................................... | Mar., 1920 | 375 | 186 | 168 | 100 | 14 | 141 | -4.1 |
| METALS |  |  |  |  |  |  |  |  |
| Pig fron, foundry No. 2, northern (Pittsburgh) ...................................... | July, 1917 | 346 | 141 | 134 | 130 129 | 131 129 | 135 129 | $+3.1$ |
| Pig iron basic, balley furnace .-..-...........- |  | 330 385 | 139 149 | 134 | 129 | 146 | 141 | -3.4 |
| Steel bilets, Bessemer (Pittsburgh) | July, 1917 Mar., 1917 | 385 230 | 149 81 | 148 79 | 79 | 85 | 83 | $-24$ |
| Copper ingots, electrolytic, early delivery (New York) ...---........................ | Mar., 1917 | 20 |  |  |  |  |  |  |
| Lead, pig, delivered, for early delivery (New York) <br> Tin, plg for early delivery (New York) | June, 1917 | 261 | 166 98 | 161 95 | 162 103 107 | 162 115 114 | 184 110 | +1.1 -4.3 |
| Tin, plg, for early delivery (New York) <br> Zinc, slab, western, early delivery (New York) | May, 1918 June, 1915 | $\stackrel{24}{386}$ | 198 106 | 95 106 | 107 | 114 | 112 | -4.3 |
| BUILDLNG MATERIALS AND MISCELLANEOUS |  |  |  |  |  |  |  |  |
| Lumber, pine, southern, yellow flooring, $1 \times 4$, "B" and better (Hattiesburg district) | Feb., 1920 | 455 | 181 | 172 | 167 179 | 172 174 | 173 174 | +0.6 0.0 |
| Lumber, Douglas fr, No. l , common, s is, $1 \times 8 \times 10$ (Washington) | Jan., 1920 | 407 | 190 305 | 179 305 | 179 244 | 174 208 | 174 | 0.0 +3.4 |
| Brick, common red, domestic building (New York)................................... | Feb., 1920 | 381 | 305 | 305 | 24 | 200 | 213 | +3.4 |
| Cement, Portland, net without bags to trade, f. o. b., plant (Chicago dist.) .....- | Sept., 1020 | 195 331 | 173 157 | 173 151 | 173 140 | 173 | 173 136 | 0.0 -4.2 |
| Steel beams, mill (Pittsburgh) | June, 1917 | 331 124 | 157 21 | 151 20 | 140 21 | 142 26 | +138089 | 74.2 +7.7 |
|  | Feb., 1916 | 250 | 70 | 70 | 70 | 70 | 70 | 0.0 |
|  | Feb., 1916 | 20 |  |  |  |  |  |  |

business failures by principal classes of establishments
(Data plotted are 12 -month moving monthly averages. August, 1924, latest month)


## BUSINESS SUMMARY

(Index and relative numbers based on the 1919 monthly average as 100 -except unflled orders which are based on the 1920 avernge-cnablo comparisons to bi miade of the relative condition of the several phases of business. The use of index and relative numbers is more fully explained on the thside front cover, nidd detalls of this sum. mary are given in the table entitled "Inderes of Business," beginning on p. 28. While actual data on eloctric power, building construction, factory unjloyment, and the transportation situation may be found in the "Trend of business movements" beginning on p. 33.)

|  | 1023 |  |  | 1921 |  |  |  |  | per centincheask ( + ) or dxcheank (-) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | June | July | August | ^pril | Mas | Junc | July | Ausust | $\begin{aligned} & \text { August from } \\ & \text { July } \end{aligned}$ |  |
| Production: |  |  |  |  |  |  |  |  |  |  |
| Manufacturing (64 commodities) | 126 | 114 | 121 | 118 | 112 | 100 | 100 | 109 | +9.0 | 10. 0 |
| Raw materials, total...-....-.... | 95 | 98 | 121 | 87 | 95 | 80 | 98 | 122 | +24. 1 | +10. 8 |
| Minerals... | 145 | 148 | 155 | 106 | 124 | 122 | 125 | 126 | +1.7 | 18.7 |
| Animal products | 119 | 128 | 110 | 118 | 124 | 317 | 117 | 108 | -7.7 | $-1.8$ |
| Crops.- | 54 | 54 | 113 | 54 | 60 | 56 | 73 | 128 | +76. 7 | +14.2 |
| Forest. | 133 | 124 | 136 | 126 | 130 | 118 | 111 | 124 | +11.7 | -s. 8 |
| Electric power. | 139 | 140 | 144 | 146 | 148 | 141 | 142 | 147 | +3.5 | 92.1 |
| Building construction (awards) | 99 | 90 | 85 | 136 | 124 | 103 | 88 | 90 | +2. | +5. 8 |
| Stocks of commodities ( 45 commodities): Unadjusted index. | 103 | 102 | 104 | 135 | 129 | 120 | 123 | 121 | -1. ${ }^{\text {i }}$ | +16.3 |
| Corrected for seasonal variation ${ }^{\text {a }}$ | 115 | 114 | 125 | 137 | 143 | 133 | 131 | 134 | +2.2 | +7.2 |
| Unfilled orders (relative to 1920) | 77 | 68 | 60 | 54 | 47 | 43 | 44 | 46 | +4. | $-23.3$ |
| Sales (based on value): <br> Mail-order houses (4 houses) | 86 | 74 | 73 | 114 | 90 | 89 | 69 | 74 | +7.2 | +1.4 |
| Ten-cent chains ( 5 chains) - | 154 | 143 | 153 | 178 | 174 | 162 | 163 | 172 | +5.5 | +12.4 |
| Wholesale trade....--.- | 83 | 79 | 88 | 78 | 76 | 75 | 78 | 83 | +6. 1 | $-5.7$ |
| Department stores (359 stores) | 127 | 89 | 100 | 132 | 127 | 119 | 91 | 93 | +2. 2 | $-7.0$ |
| Prices (recomputed to 1919 base): <br> Wholesale, all commodities... | 74 | 73 | 73 | 72 | 71 | 70 | 71 | 73 | +2. 5 |  |
| Retail food.................... | 77 | 79 | 78 | 76 | 76 | 76 | 77 | 77 | 0.0 | $-1.3$ |
| Cost of living (1919 base) | 93 | 94 | 94 | 94 | 94 | 94 | 94 | 95 | $+1.1$ | +1.1 |
| Factory employment (1919 base) | 94 | 93 | 93 | 88 | 84 | 81 | 79 | 79 | 0.0 | $-15.1$ |
| Transportation: |  |  |  |  |  |  |  |  |  |  |
| Net freight ton-mile operation | 115 | 117 | 122 | 97 100 | 103 105 | 97 128 | 97 101 | 100 110 | +3.1 +8.9 | -6.8 |
| Net available car surplus (end of mo.)...- | 143 28 | 173 40 | + 25 | 199 | 205 | 216 | 195 | 117 | -40.0 | $-53.2$ |

${ }^{2}$ Comparable data back to 1919 were published in April, 1924, SURVEY, p. 28. published by new series, including repoits from several thousand firms. See page 180 of the August, 1924, Sunver; also pp. 129-132, April, 1824, Monthiy Labor Ratiere published by the U. S. Department of Labor.

## COURSE OF BUSINESS IN AUGUST

## GENERAL SUMMARY

Manufacturing activity during August was in general on a higher level than in the preceding month. Production increases over the previous month in individual commodities were noted in pig iron, steel ingots, rubber tires, automobiles, petroleum, bituminous coal, copper, lead, gold, silver, lumber, cement, Wheat flour, boots and shoes, sole leather, and in the mill consumption of cotton and wool. Declines from the output of the previous month were registered in anthracite coal, zinc, meats, and locomotives.
New awards for building construction were larger than in either July or a year ago. Sales of mail-order houses and 10 -cent chains in August exceeded those of the previous month and August a year ago. The dollar volume of business as measured by bank debits to individual accounts increased over the preceding
month and a year ago. Interest rates again averaged lower for both call money and commercial paper while the Federal reserve ratio at the end of August was slightly below the July end-of-month condition. Factory employment showed relatively no change from the previous month while retail food prices and the cost of living continued to advance. Defaulted liabilities of failing firms were larger in August than in either the preceding month or a year ago. Car loadings although below a year ago were larger than in July while wholesale prices at 50 per cent above pre-war averaged 2 per cent higher than in July. Imports of merchandise into the United States declined from July and a year ago while exports from the United States were larger than in either of these comparative periods.

RELATIVE PRODUCTION, STOCKS, AND UNFILLED ORDERS IN BASIC INDUSTRIES
(Monthly averages $1920=100$. Unfilled orders are principally those for iron, steel, and building materials.)


SUMMARY OF INDEXES OF BUSINESS

PRODUCTION
Production of manufactures, as measured by the index of 64 commodities based on the 1919 monthly average production as 100 , stood at 108 for August compared with 100 for July and 121 a year ago. All industrial groups registered increased output over the previous month except foodstuffs and tobacco, while the August production of foodstuffs, chemicals, stone, clay, and glass products, and nonferrous metals was larger than the output of these manufacturing groups a year ago.

The weighted index of mineral production at 126 for August compares with 125 for July and 155 a year ago. Declines in the output of minerals from the production of August, 1923, were recorded in petroleum, coal, both anthracite and bituminous, iron ore, zinc, and gold, while the August output of domestic mines registered increases over the previous month in petroleum, bituminous coal, copper, lead, and silver.

The movement of crops to market, as indicated by the weighted index based on 1919 average monthly marketings as 100 , stood at 129 as against 73 for July and 113 a year ago, all groups except cotton and miscellaneous crops coming to market in larger volume in August than a year ago.

The index of animal marketings stood at 108 for August as against 117 for July and 110 a year ago, declines from a year ago being noted in the marketings of all animal products except wool, sheep, poultry, fish and milk.

The production of forest products as indicated by the combined index based on 1919 as 100 stood at 124 for August compared with 111 for July and 136 a year ago, all products of the forest sharing in the general decline from a year ago.

## COMMODITY STOCKS

Commodity inventories of manufacturers on August 31, as measured by the index of 45 basic commodities based on average monthly stocks in 1919 as 100, stood at 134 after adjustment for normal seasonal conditions as against 131 for July 31 and 125 a year ago, the increase in the general index being due to advances in all commodity groups except manufactured foodstuffs.

## SALES

Manufacturers' sales tended to increase in August. The unfilled order index for eight basic commodities, principally iron, steel, and building materials, based on 1920 as 100 stood at 46 for August 31 as against 44 on July 31 and 60 a year ago.
The index of wholesale trade, based upon the 1919 monthly average as 100 , stood at 83 for August as against 78 in July and 88 a year ago, declines from a year ago being noted in all lines except meats.
Sales of mail-order houses, as measured by the index of four houses based on 1919 as 100 , were computed at 74 for August as against 69 for July and 73 a year ago. The index of sales of five 10 -cent chain systems stood at 172 as against 163 in July and 153 a year ago.

## PRICES

Prices received by producers of farm products, as measured by the new monthly index of the Department of Agriculture based on the average prices during the period 1909 to 1914 as 100 , stood at 137 for August as against 130 for July and 128 a year ago. All groups of farm products except fruits and vegetables partook of this general increase over the previous month, with the principal increases occuring in the prices paid to producers for their grain, meat animals, and cotton.
The wholesale price index of the Department of Labor, based on 1913 average prices as 100 , stood at 150 for August as against 147 for July and 150 a year ago, all groups sharing in this general advance, except fuel and lighting which declined, and metals, building materials, and house furnishings which remained stationary. As regrouped by the Federal Reserve Board this index shows agricultural products at 195 against 176 in July and 152 a year ago, animal products at 123 against 114 and 125, forest products at 175 against 175 and 203, and mineral products at 166 against 167 and 177 . The group price index for raw products at 154 compares with 152 for July and 153 a year ago, while the price index for producers' goods
at 130 compare with 130 and 137 , and consumers' goods at 156 compare with 153 and 154 . On this page is given a chart showing the comparison since 1913 between prices for raw materials, 'producers' goods, and consumers' goods. Dun's and Bradstreet's index numbers of wholesalo prices showed relatively the same increase over July.

The Federal Reserve Board's indexes of wholesale prices for international comparison showed an advance for the United States from 156 to 158; a decline in the British index from 174 to 173; an increase in the French index from 440 to 442; an increase in Canadian prices from 147 to 140 ; and an advance in the Japanese index from 191 to 196. Wholesale prices in Swedon and India also advanced in August over the provious month.

Retail prices of food, as measured by the index of the Department of Labor based on 1913 average prices as 100 , stood at 144 for $A \mu$ gust as against 143 for July and 146 a year ago. The cost of living index advanced from 162 to 163 and compares with 162 for August a year ago. Other groups remaining stationary, advances in food and clothing costs alone accounted for the increase in the general index.

WHOLESALE PRICES FOR RAW PRODUCTS, PRODUCERS' GOODS, AND CONSUMERS' GOODS
(1013 average prices taken as 100 . August is latest month ploted)


## REVIEW BY PRINCIPAL BRANCIIES OF INDUSTRY AND COMMERCE

## TEXTILES

Reccipts of wool at Boston in August were slightly lower than in the previous month, but were 77 per cent above a year ago, the decline from the previous month reflecting smaller receipts of domestic wools. Both domestic and foreign wools were received in larger volume than a year ago, the percentages of increase over August, 1923, receipts being 85 and 36 , respectively. Imports of unmanfactured wool increased over the July figures, but were 16 per cent below the imports of August, 1923. During the first eight months of 1924 a total of $190,793,000$ pounds of wool were imported into the United States, representing a decrease from the same period of 1923 equivalent to 46 per cent.

Consumption of wool by textile mills increased over the previous month while machinery activity in woolen mills likewise registered an increase over July. Average prices of raw wool and worsted yarns increased in August, while prices of dress goods and suitings remained unchanged.


Receipts of cotton into sight in August increased in a seasonal movement, but were 27 per cent below a year ago. For the calendar year through August a total of $3,866,000$ bales of cotton were brought into sight, an increase of 10 per cont over the corresponding
period of 1923. Although August imports of raw cotton were 21 per cent larger than in August, 1923, the total inward movement during the first eight months of 1924 indicated a decline from the same period of a year ago amounting to 27 per cent. Exports of unmanufactured cotton increased in a seasonal movement over July, the August shipments abroad representing an increase of 14 per cent over the same month of 1923. The total outward movement of raw cotton during the calendar year thus far, amounting to $2,727,841$ bales, represents an increase of 24 per cent over the same period of 1923 .

Consumption of cotton by textile mills increased 3 per cent in August over the preceding month, but was 27 per cent below the same month of 1923. During the first eight months of 1924 a total of $3,516,510$ bales of cotton were consumed, representing a decline of 22 per cent from the consumption during the same period of 1923. Total stocks of raw cotton held at mills and warehouses aggregated $1,364,000$ bales on August 31 as against $1,983,000$ at the end of August last year. The world visible supply of American cotton at the end of August was 10 per cent below a year ago.

Exports and Consumption of Cotton


More spindles were active in August than in July and the activity per spindle was likewise greater, while compared with a year ago large decroases were registered. Spindle activity in terms of percentage represented 62.8 per cent of mill capacity in August as against 60.6 in July and 85.7 a year ago.
Orders, billings, and shipments of cotton goods in finishing plants increased in August over the previous month but compared with a year ago declines in all three of these items were recorded. Stocks of finished goods held by finishers declined from both the inventories on July 31 and a year ago. Operating activity of cotton finishers indicated operations amounting to 47 per cent of capacity as against 45 per cent in July and 52 per cent a year ago. Average prices for raw cotton in the New York market were
lower than those in July while wholesale prices for print cloth and sheeting averaged higher in August than in the previous month. Average prices for cotton yarns declined in August.

Imports of silk increased 9 per cent in August over the preceding month, while the total inward movement of raw silk during the eight months ending August 31, amounting to $34,131,000$ pounds, registered a decline of 17 per cent from the imports during the same period of 1923. Deliveries of silk to consuming establishments in August were 5 and 12 per cent smaller, respectively, than in the previous month or August a year ago. Silk stocks on August 31 werè 18 per cent larger than the inventories of a year ago, while the wholesale price of Japanese silk in the New York market, although 13 per cent higher than in July, averaged 17 per cent below a year ago.

Imports of burlap in August increased over both the previous month and a year ago, while the total inward movement during the first eight months of 1924, amounting to $404,825,000$ pounds, was 1 per cent below the imports in the same period of last year. Unmanufactured fibers were imported in smaller volume in August than in July, but were 22 per cent larger than a year ago. For the eight months ending August, 1924, the total imports of fiber amounted to 205,713 tons, a decline of 6 per cent from the same period of a year ago.

## IRON AND STEEL

Shipments of iron ore from the mines declined in August both from the previous month and a year ago. Receipts of iron ore at lake ports also declined from these two comparative periods, while consumption of iron ore in August, although only one half as large as a year ago, registered an increase of 9 per cent over the preceding month.

The output of pig iron increased 6 per cent in August, but was 45 per cent below the production of a year ago. For the first eight months of 1924 the figures indicate pig iron production amounting to $21,-$ 091,000 tons as against $27,969,000$ tons during the same period of 1923. Seven furnaces were blown in during August, making the total in blast 151 as against 240 a year ago and increasing the August capacity to 63,000 tons per day from the July capacity of 55,350 tons. The output of merchant pig iron declined in August, while sales, shipments, and unfilled orders increased. Wholesale prices of pig iron averaged higher in August, but were more than 20 per cent below a year ago.

Steel-ingot production increased 36 per cent over July, the August output, amounting to 2,542,000 tons, being 31 per cent below a year ago. For the eight months ending August 31 the output of steel ingots totaled $24,060,000$ tons, a decline of 21 per cent from
the production in the same period of 1923. Unfilled orders for steel on the books of the U. S. Steel Corporation on August 31 recorded an increase of 3 per cent over the figures on forward business as of July 31. New bookings for steel castings declined in August from both the previous month and August a year ago. Production, shipments, sales, and unfilled orders for steel sheets by independent stecl mills incroased in August over the previous month, the August production being equivalent to $65: 2$ per cont of plant capacity, as against 48.7 per cent in July. Wholesale prices of steel averaged lower in August.

Shipments of locomotives from principal manu-. facturers totaled 139 in August as against 140 in July and 272 a year ago. During the first 8 months of 1924 a total of 990 locomotives were shipped to domestic and foreign railroads as against 1,016 in the same period of 1923 . On August 31 orders for 301 locomotives were as yet unfilled as against 483 on July 31 and 1,497 a year ago. Freight-car orders in August increased over both the previous month and a year ago. Sales of mechanical stokers, in point of horse power, increased in August but were 42 per cent smaller than a year ago.

Llocomotive Shipments and Unfilhed Orders (August, 1024 latest ploted)


Shipments of steel furniture increased 6 per cent over the July totals but were 12 per cent smaller than a year ago. During the eight months ending August steel office furniture valued at $\$ 11,594,000$ was shipped by manufacturers, representing an increase of 2 per cent over the same period of 1923.

Bookings of fabricated structural steel, at 59 per cent of capacity, compared with 69 per cent in July and 57 per cent a year ago. Shipments of structural steel equaled 73 per cent of capacity as against 81 in July. Comparisons for earlier periods as reported to the Department of Commerce by 189 identical firms (and 7 additional firms now out of business), with a present capacity of 245,540 tons per month, are shown below, based on a total capacity of 250,000 tons per month in 1922 and 260,000 tons in 1923 and 1924:

Fabricated Structural Steel

|  | mookinas |  |  | SHIPMENTS |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual tonnage | Per cent of capacity | Computed tonnage | Per cent of cspacity | Computed tonnage |
| 1882 |  |  |  |  |  |
| April. | 205, 573 | 85 | 212,500 |  |  |
| May | 191,218 | 79 | 197,500 |  |  |
| June. | 175, 498 | 73 | 182,500 |  |  |
| July | 164,389 | 68 | 170,000 |  |  |
| August | 163,791 | 68 | 170,000 |  |  |
| Septembe | 153, 353 | 64 | 160,000 |  |  |
| October - | 138, 791 | 68 | 145,000 |  |  |
| November | 118, 493 | 40 | 122, 600 |  |  |
| December. | 145, 230 | 60 | 150,000 |  |  |
| 1923 |  |  |  |  |  |
| January .- | 179,337 | 72 | 187, 200 |  |  |
| February | 192, 270 | 77 | 200, 200 |  |  |
| March | 229,733 | 92 | 239,200 |  |  |
| April. | 193, 639 | 78 | 202,800 |  |  |
| May. | 140, 558 | 56 | 145,600 |  |  |
| June. | 125, 531 | 50 | 130,000 |  |  |
| July. | 125, 105 | 60 | 130,000 |  |  |
| August | 143,402 | 57 | 148,200 |  |  |
| September | 129,999 | 52 | 135, 200 |  |  |
| October.. | 121,298 | 49 | 127, 400 | 79 | 205,400 |
| November | 132,666 | 54 | 140, 400 | 70 | 182,000 |
| December. | 195, 607 | 80 | 208, 000 | 67 | 174,200 |
| 1924 |  |  |  |  |  |
| January-- | 175, 639 | 72 | 187, 200 | 63 | 163,800 |
| February | 179, 866 | 73 | 189,800 | 60 | 156,000 |
| March. | 174,465 | 71 | 184, 600 | 65 | 169,000 |
| April. | 159,254 | 65 | 169,000 | 71 | 184, 600 |
| May. | 145, 430 | 59 | 153,400 | 71 | 184,600 |
| June | 161, 525 | 68 | 171,600 | 77 | 200, 200 |
| July | ${ }^{1} 167,564$ | 69 | 179,400 | 81 | 210,600 |
| August. | 2137,400 | 59 | 153,400 | 73 | 189, 800 |

1 Reported by 182 firms with a capacity of 243,880 tons.
2 Reported by 154 firms with a capacity of 234,170 tons.
The following table shows statistics of steel barrels reported to the Department of Commerce by 29 manufacturers operating 34 plants, in number of barrels:

Steel Barmels (in Number of Barrels)

| moStr | On hand first of month | $\begin{gathered} \text { Manufac- } \\ \text { tured } \end{gathered}$ | Shipped | On hand end of month | Unfilled orders, month |
| :---: | :---: | :---: | :---: | :---: | :---: |
| January | 45, 588 | 307, 189 | 303, 668 | 49, 109 | 615,485 |
| February | 49, 109 | 370, 960 | 362, 725 | 57,350 | 608,660 |
| March | 57, 350 | 394, 778 | 394,756 | 57, 072 | 601, 663 |
| April | 57,072 | 416,628 418,381 | 420, 129 | 53,571 | 614, 102 |
|  | 46, 555 | 385, 155 | 382, 550 | 40, 5165 49,160 | 582,022 421,870 |
| July. | 56,490 | 398, 397 | 407, 258 | 47,629 | 519,034 |
| August. | 46,398 | 335, 354 | 388, 141 | 43, 611 | 1690,480 |

1 Of the total unflled orders on hand at the end of August, 104, 131 barrels were for delivery within 30 days, and 496,349 barrels for delivery at later periods.

The following data on shipments of mining and industrial locomotives were reported to the Department of Commerce by nine firms comprising practically the entire industry:

Mining and Industrial Locomotives

| TYPE OF LOCOMOTIVE | quabter endina JUNE, 30, 1924 |  | Quarter ending Mar. 31, 1924 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number shlpped | Value | Number shipped | Value |
|  |  |  |  |  |
|  |  |  |  |  |
| Total. | 134 | 648,846 | 140 | 683,565 |
|  |  |  |  |  |
| Trolley or third-rail type. | 9 | 150, 112 |  |  |
| Storage-battery type....... | 12 | 69, 714 | 26 | 143,892 |
| Total. | 21 | 219, 826 | 45 | 291,031 |

Shipments of Electric Locomotives, Total for 1923

| TYPE OF LOCOMOTIVE | Number shipped | Value |
| :---: | :---: | :---: |
| Mining locomotives: Trolley type Storage-battery type | $\begin{array}{r}1,024 \\ \hline 249\end{array}$ | $\begin{array}{r} \$ 1,28,981 \\ 1,291,885 \end{array}$ |
| Total | 1,273 | 5,920,866 |
| Industrial locomotives: Trolley or third-rail type. Storage-battery type. | 10 51 | $\begin{array}{r} 60,042 \\ 239,362 . \end{array}$ |
| Total. | 61 | 300,304 |

## NONFERROUS METALS

The output of copper by domestic mines amounted to $133,140,000$ pounds in August, an increase of 3 per cent over the July production and 1 per cent over the output a year ago. Copper exports totaled 81,781,000 pounds, representing an increase of 5 per cent over the previous month and 19 per cent over a year ago. The wholesale prices of electrolytic copper in the New York market averaged 7 per cent higher in August.

New orders and shipments of brass faucets declined in August from both the previous month and a year ago, while sales of tubular plumbing goods in August increased over these two comparative periods.

The production of zinc declined in August from the output of the previous month, while the number of retorts in operation at the end of the month was larger than on July 31. Stocks of zinc held on August 31 were 3 per cent lower than the inventories at the end of the preceding month, but were 92 per cent larger than those held on August 31, 1923. Wholesale prices of zinc averaged higher in August.

Tin stocks in the United States declined, the inventories on August 31 indicating, however, an increase over a year ago equivalent to 20 per cent. Deliveries of tin to consuming establishments increased 22 per cent in August but were 13 per cent below those of a year ago. Imports of tin in August were 31 and 41 per cent, respectively, below the inward movement of the previous month and a year ago. The wholesale price of tin in August averaged 12 per cent and 32 per cent, respectively, higher than a year ago.

Relative Production and Stoces of Zinc


The output of lead in August was larger than in either the previous month or a year ago, while the average price of lead was likewise higher than in either of these two periods.

Data for August reported by 11 manufacturers of collapsible tubes to the Department of Commerce follow (including one company not reporting orders):

Collapsible Tubes


FUELS
Bituminous coal was produced in larger volume in August than in July, but the August output was 29 per cent below that of a year ago. Exports of bituminous declined in August from both the previous
month and a year ago, while the wholesale and retail prices showed no change from thoso prevailing in July.

The output of anthracite coal in August was 9 per cent and 20 per cent lower, respectively, than the production in the provious month and in August a year ago. Anthracito exports also declined from these comparative pariods. Wholesale prices of chestnut coal in the New York market averaged 1 per cent higher than August.
Below is given a table showing, for specified dates, estimated stocks of bituminous coal in the United States and stocks of anthracite coal held by 504 retail dealers as compiled by the Department of Commerce in cooperation with the United States Geological Survey.

| tear and yonti | estimated bituminous in unitid atatis. |  | metald anthinctita sos dealers) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 8bort tons | Days' | Short tons | $\begin{gathered} \text { Days' } \\ \text { supply } \end{gathered}$ |
|  |  |  |  |  |
| January. | $\begin{aligned} & 57,900,000 \\ & 40,100,000 \end{aligned}$ | ${ }_{31}^{42}$ | 980, 233 | ${ }_{81}^{36}$ |
| ${ }^{1920}$ : ${ }_{\text {March }}$ |  |  |  |  |
| June... | 20, 000,000 | 15 | 375, 134 | is |
| January. | 45, 500,000 |  | 208, 831 | 24 |
| April. | 39, 500, 000 | ${ }_{39}$ |  |  |
| $\stackrel{\text { August }}{\text { November }}$ | $\begin{aligned} & 41,000,000 \\ & 48,500,000 \end{aligned}$ | 43 |  | 48 |
| 1022: |  |  |  |  |
| January. | 48,000,000 | 41 | 1, 631, 217 | $\stackrel{4}{4}$ |
| April....... | : 63, 000,000 |  |  |  |
| September. | 22,000,000 | 17 | 160,127 | 5 |
| October... |  | ${ }_{23}^{21}$ |  | 1 |
| 1023: |  |  |  |  |
| January- | 136,000,000 | ${ }^{23}$ | 419,775 | 11 |
| February | ${ }^{3} 38,0000000000000$ | 2 |  |  |
| June... | 142,000,000 | 30 |  |  |
| July...- | - 52,00000000000 | 3 |  |  |
| Septembe | 156,000,000 | 146 | 812108 | 21 |
| October.. | ${ }^{1} 000000,000$ | ${ }^{1} 15$ | 691,073 |  |
| ${ }^{124}$ January | 262000,000 | 146 | 1,076, 763 |  |
| June. | 3 31720000,0000 | 149 | 1,30,082 | ${ }_{58}$ |

[^1]Beehive coke production was smaller in August than in July and a year ago, while the output of by-product coke was larger than in July. Coke was exported in smaller volume in August than in either the previous month or a year ago, while the wholesale price of coke at Connellsville averaged slightly higher in August than in July.

The output of crude petroleum increased in August over the previous month but was 10 per cent below the production of a year ago. During the eight months ending August the production of crude aggregated $474,783,000$ barrels, an increase of 122,000 barrels over the output during the same period of 1923. Stocks of petroleum continued to accumulate, being, on August 31, 17 per cent larger than the inventory of a year ago. Consumption of crude in August was less than in either the previous month or a year
ago, while for the eight-month period ending August 31 the consumption, amounting to $490,788,000$ barrels, represented an increase of 6 per cent over the same period of last year. Fewer oil wells were completed than in July or a year ago, while thus far this year 14 per cent fewer were opened for production than during the"eight-month period ending August 31, 1923. The wholesale price of petroleum averaged lower'in August.

## AUTOMOBILES

The total output of automobiles, both passenger and truck, recorded an increase of 6 per cent over the July production, but the August figures were 19 per cent below a year ago. Passenger-car production in August totaled 251,631 cars as against 237,668 in July and 314,431 a year ago, while the output of trucks amounted to 27,484 as against 25,235 in July and 30,872 a year ago. Thus far this year the total output of passenger cars and trucks amounted to 2,540,187 vehicles as against $2,704,541$ produced during the eight months ending August 31, 1923.

Cumblative Pagsenger Adtomobile Production at the End of Spectified Periods


Exports of automobiles in August were larger than in both the previous month and August a year ago. The August truck exports indicated smaller volume than in July or a year ago, the increase in total automobile exports over these two comparative periods being due to larger shipments abroad of passenger cars.

## RUBBER

Imports of crude rubber were 12 per cent larger than in July and 14 per cent larger than in August a year ago. During the first eight months of 1924 crude rubber imports totaled $455,839,000$ pounds, representing a decline of 13 per cent from the shipments into the United States during the same period of 1923.

Production and shipments of pneumatic tires, inner tubes, and solid tires increased in August over both the previous month and a year ago, while stocks of these three classes of rubber tires on August 31 were considerably below the inventories of a year ago. Consumption of crude rubber by tire manufacturers also increased in August over the previous month and a year ago.
Production, Shipments, and Stocks of Pnevmatic Tires


HIDES AND LEATHER
Imports of hides and skins in August were smaller than in the previous month and a year ago. As compared with a year ago, the imports of calfskins and cattle hides were larger, while goatskin and sheepskin imports were smaller. The total inward movement of hides and skins during the eight-month period ending August 31, amounting to $230,280,000$ pounds, represented a decline of 46 per cent from the imports during the same period' of 1923. Prices of cattle hides and calfskins averaged higher in August than in July or a year ago.

The production of sole leather, harness leather, and skivers increased in August, the output of these species of leather, however, being considerably below a year ago. Exports of both sole and upper leather increased in August over the previous month and a year ago, while the wholesale prices of leather averaged higher in August than in July.
Sales of leather belting in August, although 2 per cent larger than in July, were 30 per cent below a year ago. The output and exports of boots and shoes in August registered increases over their respective July totals, while wholesale prices of shoes showed no change.

The following table shows the number of leather gloves and mittens cut in August, with comparisons for August, 1923, as reported to the Department of Commerce by 206 identical establishments.

Leather Gloves and Mittens Cut (ri Dozen Pairs)

|  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |

## PAPER AND PRINTING

Imports of wood pulp, both mechanical and chemical, were larger in August than in July, while for chemical pulp the August imports were also larger than a year ago. During the first eight months of $1924,909,802$ tons of wood pulp, both species, were imported into the United States as against 904,682 tons during the same period of 1923.
Production and shipments of newsprint paper in August increased over the July figures but were below a year ago. During the year 1924 through August the output of newsprint totaled 980,767 tons, a decline of 4 per cent from the total output during the same period of 1923. Imports of newsprint declined in August from both the previous month and a year ago, while for the eight months ending August 31 the inward movement, amounting to 896,989 tons, represented an increase of 4 per cent over the same period of last year. Stocks of newsprint at mills on August 31 were 10 per cent larger than a year ago. Shipments of sales books in August were larger than in July, but smaller than a year ago.
Production of paper-board shipping boxes was larger in August than in July or a year ago. Sales of abrasive paper and cloth, although larger than in July, were smaller than a year ago.
The following figures reported to the Department of Commerce by manufacturers of box board indicate the activity in this industry since November, 1923:


## BUILDING CONSTRUCTION

Building costs in August showed no change from the previous month, but were about 5 per cent below a year ago. Contracts awarded for now building construction were larger than those of the previous month and August a year ago. The contemplated expenditure of contracts awarded during the first eight months of 1924 , amounting to $\$ 2,612,212,000$ for 27 States represents an increase of 11 per cent over the awards of the same period of 1923. Of this amount $\$ 1,234,775,000$ represents residential building, an increase of 19 per cent over 1923; $\$ 349,427,000$ business building, an increase of 14 per cent; $\$ 187,977,000$ educational building, an increase of 20 per cent; and $\$ 225,797,000$ other public and semipublic building, an increase of 28 per cent.

The following monthly statistics covering the awards for construction in 36 States represent seven-eighths of the total awards in the United States:

Construction Contracts Amarded in 36 States ${ }^{1}$

| CHARACTER OF CONStruction | 1924 |  | 1923 $\qquad$ <br> August |
| :---: | :---: | :---: | :---: |
|  | July | August |  |
| Grand total: |  |  |  |
| Value $\qquad$ thousands of dollars. | 347, 184 | 354, 413 | 293, 629 |
| Floor space....thousands of sq. ft. | $50,522$ | 50. 767 | $47,910$ |
| Number of projects...................... |  | 11,093 |  |
| Business: |  |  |  |
| Value................thousands of dollars.. | 49,346 | 41, 151 | 37,457 |
| Floor space.........-.thousands of sq. $\mathrm{ft}^{\text {. }}$. | 8,923 | 8,361 | 8,484 |
| Number of projects...-.-................----- | 1,248 | 1,221 | 1,192 |
| Industrial: ${ }_{\text {Value }}$ thousends of dollars, |  |  |  |
| Value $\ldots$.-...........thousands of dollars.- | 19,604 | 30,380 | 19,359 |
| Floor space...........thousands of sq. ft ..- | 3, 017 | 3,967 | 3,798 |
| Number of projects..........---.--........... | 275 | 301 | 335 |
| Residential: |  |  |  |
| Value.....--......-.thousands of dollars.-. | 128,072 | 148,232 | 126,831 |
| Floor space......---thousands of sa. it. - | 25,474 | 27,938 | 27, 423 |
| Number of projects..........................- | 7,005 | 7,422 | 6,279 |
| Educational: ${ }^{\text {a }}$ |  |  |  |
| Value............... thousands of dollars.-. | 30,511 | 31, 771 | 25,861 |
| Floor space.........--thousands of sq. It... | 6, 150 | 4,401 | 4,411 |
| Number of projects. | 527 | 411 | 412 |
| Other public and semipublic: ${ }^{\text {2 }}$ : ${ }^{\text {a }}$ |  |  |  |
| Value..--.-...-.....thousands of dollars..- | 38.575 | 47,603 | 20,458 |
| Floor space_........- thousands of sq. ft.- | 6,059 | 4,968 | 3,795 |
| Number of projects.....---......--........... | 552 | 552 | ${ }^{467}$ |
| Poblic works and utilities: |  |  |  |
| Value...--.........thousands of dollars.. | 71, 717 | 65,296 | 62,684 |
|  | 1,104 | 1,183 | 1,161 |

${ }^{1}$ As compiled from data turnished by the F. W. Dodge Corporation.
I Includes haspitals and institutions, public buildings, social and tecreational
buiddings, and relgious and memorial buldags.

VOLUME OF BUILDING CONTRACTS AWARDED IN 27 NORTHEASTERN STATES


BUILDING MATERIALS AND EQUIPMENT
Lumber production made a seasonal increase over July but was smaller than a year ago for all pecies reported except North Carolina pine and walnut. Shipments were generally larger than in August, 1923, exceptions being noted for Douglas fir, redwood, and northern pine. New orders for lumber increased over July for redwood and California white pine, while southern pine orders declined; compared with a year ago increased orders were shown for southern pine and California white pine and decreased orders for redwood. Reported stocks of lumber were larger than at the end of July except for southern pine, while stocks of all reporting species of lumber declined from a year ago, but stocks of walnut logs held by lumber manufacturers declined.

Exports of lumber declined slightly both from July, 1924, and from August, 1923. Prices of softwood lumber, as indicated by the composite index number advanced over the early part of July, while hardwood prices declined. The price of southern pine for August advanced over July, while the Douglas fir price declined.

Shipments, new orders, and unfilled orders of piano benches and stools increased over July but declined from August, 1923.

Shipments, new orders, and unfilled orders for oak and maple flooring were greater than in July but stocks declined. Production of oak flooring increased but maple flooring declined. Compared with a year ago, increases occurred in all items for oak flooring and in new orders and stocks of maple flooring, while declines took place in production, shipments, and unfilled orders of maple flooring.

Slight increases over July occurred in production, shipments, new orders, and stocks of clay fire brick, while unfilled orders declined. Compared with a year ago, all items declined except stocks. Silica-brick production increased over July, but declined from a year ago, while shipments increased over both periods and
stocks declined from both periods. Face brick statistics reported by 32 identical plants on production, stocks, shipments, and unfilled orders all increased over July; compared with a year ago production and shipments increased and stocks and unfilled orders declined. Paving brick statistics declined from July, except shipments, while stocks alone increased over a year ago. Production of paring brick ran at 74 per cent of capacity as against 81 per cent in July and 88 a year ago. Prices of common brick declined.
Cumblative Volume of Building Contracts Awarded in 27 States at the End of Spectfied Periods


NEW bOokings for architectural terra cotta and new contracts awarded for building CONSTRUCTION IN 27 NORTHEASTERN STATES.
(1919 monthly averages $=100$. August, 1821, latest plotted.)


NEW ORDERS FOR ENAMELED BATHS AND NEW CONTRACTS AWARDED FOR RESIDENTIAL CONSTRUCtion in 27 NORTHEASTERN STATES.


Production and shipments of Portland cement increased over both the previous month and a year ago. Stocks declined from July in a seasonal movement but were greater than a year ago. No change occurred in current prices from July. Concrete paving contracts let in August increased over both July and over a year ago, though contracts for country roads were smaller.

Production of roofing felt and total stocks increased both over July and a year ago, but dry felt stocks doclined from both periods.

Now orders, shipments, and stocks of all classes of enameled sanitary ware increased over July, except for stocks of baths and lavatorics and new orders for baths. Unfilled orders declined for both baths and small ware. Compared with a year ago, stocks increased for all classes, unfilled orders declined, while shipments and new orders increased for baths and miscellaneous ware and declined for lavatories and sinks.

The'following figures reported by 34 floor-and-walltile manufacturers, making about 73 per cent of the total volume of floor and wall tile produced in the year 1922, indicate, since January, the operations in that industry:

Floor and Wali Tile (All Classes)

| MONTII | Production | Shipments |  | Stocks (end of month) |
| :---: | :---: | :---: | :---: | :---: |
|  | Square feet | Square feel | Value | -Square feet |
| January | 4,850, 197 | 3,759,218 | \$1, 222, 214 | 6,613,305 |
| February | 5, 177, 246 | 3, 662, 808 | I, 129, 865 | 7, 162, 921 |
| March. | 5, 138, 169 | 4,122,279 | 1, 215, 081 | 7,733, 116 |
| April. | 4,698, 634 | 4,297, 191 | 1, 343, 271 | 7,960,352 |
| May | 4, 066, 207 | 3,744, 281 | 1,259,429 | 7,954, 328 |
| June. | 4,127,174 | 4,009,276 | 1, 350, 798 | 7,905, 715 |
| July. | 4,301,117 | 3,853,910 | 1,297, 709 | 7,664, 972 |
| August. | 4,386,925 | 4, 120, 155 | 1,370,752 | 8,303, 355 |

## CHEMICALS AND OILS

Exports of sulphuric acid and the value of dye exports increased over July while fertilizer exports declined. Compared with a year ago declines occurred in exports of sulphuric acid and fertilizer but the value of dye exports increased. Imports of potash declined both from July and from a year ago while imports of nitrate of soda increased over both periods. Prices of crude drugs and of drugs and pharmaceuticals declined from July while essential oils showed an increase. The price of sulphuric acid remained unchanged. The index of chemical prices increased over July.

Receipts of both turpentine and rosin at southern ports declined from July and from a year ago: Stocks of turpentine and rosin at the end of August increased over July and also over a year ago.

Exports of vegetable oils declined from July and also from a year ago. Imports of vegetable oils were greater than in July but less than in August, 1923. The domestic movement of cottonseed and cottonseed oil made a seasonal increase, stocks of cottonseed being fless than a year ago and production and stocks of
cottonseed oil greater. The price of cottonseed oil advanced over the July average. Receipts, shipments, and stocks of flaxseed at Minneapolis and Duluth and shipments of linseed oil and oil cake from Minneapolis declined from a yoar ago.

## CEREALS

Compared with August, 1923, the wheat movement was considerably larger, increases being shown in receipts, shipments, visible supply in both the United States and Canada, and exports. The production and apparent consumption of wheat flour declined from a year ago, however. The price of red winter wheat advanced over the July average while northern spring whoat declined. Flour prices were higher than in July.

Wheat flour figures reported by over 1,000 mills to the Department of Commerce follow:

Wheat flotr Prodoction


The corn movement, as represented by receipts, shipments, and exports, was smaller than a year ago, but the visible supply was almost three times as large. The price of corn was higher than in July and also higher than a year ago.
Receipts and exports of oats declined from a year ago, while the visible supply was larger. The price of oats declined from July, but was higher than a year ago.

Declines occurred from August, 1923, in the receipts and exports of barley. The price of barley increased over July and also over a year ago.
Receipts of rye were larger than a year ago and exports were smaller. Prices increased both over July and over a year ago.
Total grain exports in August were slightly less than a year ago. Visible supplies of wheat, corn, and flaxseed in Argentina were considerably larger than a year ago.

Total movement of paddy rice to mills was larger than a year ago, due to the greater shipments from California warehouses. Stocks of paddy at California warehouses declined from a year ago, as did the entire movement of rice in the Southern States. Imports of rice were larger than a year ago but exports were less.

Car-lot shipments of potatoes, onions, and citrus fruits were larger than in August, 1923, but shipments of apples and receipts of hay at terminal markets declined.

## MEATS AND DAIRY PRODUCTS

The movement and slaughter of cattle and calves was less than in August, 1923. Exports of beef products also declined from a year ago while cold-storage holdings increased. Prices of cattle and beef showed a declining tendency from July and also from a year ago, except carcass beef.

The movement and slaughter of hogs was also less than a year ago, and exports and storage holdings of pork products also showed declines. Lard exports were smaller than'a year ago, but storage holdings were larger. Prices of hogs and pork products increased over July and were also, except for smoked hams, larger than a year ago.
The movement and local slaughter of sheep and lambs increased over August, 1923. Cold-storage holdings of lamb and mutton also were larger than a year ago. Prices of lambs declined both from July and from a year ago, while prices of ewes were the same as the July average but higher than August, 1923.


Poultry receipts increased over a year ago, while storage holdings declined. The fish catch was smaller than a year ago, but storage holdings were 25 per cent larger.

The production of milk in the Minneapolis district and receipts of milk at Boston each increased about 7 per cent over a year ago. Exports of condensed milk were 41 per cent above the August, 1923, exports.

Butter receipts and storage holdings increased over a year ago, while prices declined from July as well ne from a year ago.

Cheese receipts declined from a year ago, but storage holdings were larger. Prices advanced slightly over July, but were considerably less than a year ago.

Receipts and storage holdings of egge declined in a seasonal movement and were less than a. year ago.

## SUGAR, COFFEE, AND TEA

Statistics of imports, meltings, and stocks of raw sugar showed increases in August over a year ago, and exports of refined sugar were much larger than in August, 1923. Receipts of domestic cane sugar at New Orleans were less than a year ago. Prices of sugar declined from a year ago in all positions, but increased over the July average, except for retail prices, which were less than in July. The Cuban situation shows reported increases of over 100 per cent in receipts and exports over a year ago, while stocks were slightly larger.
Imports and visible supply of coffee in the United States and receipts in Brazil were larger than a year ago, while the world visible supply and clearances from Brazil were less. Tea imports increased over July, but were less than a year ago.

## TOBACCO

Tax-paid withdrawals of large cigars declined in August from the previous month and a year ago, while withdrawals, indicating consumption of cigars during the first eight months of the year were 6 per cent smaller than during the same period of 1923. Small cigarettes withdrawn from warchouses, although less numerous, than in July, were 8 per cent greater than a year ago. During the eight-month period ending August 31 indicated cigarette consumption totaled $47,449,000,000$ cigarettes, an increase of 11 per cent over the same period of last year. Manufactured tobacco and snuff was produced in larger volume in August than in July, but less than a year ago.
Exports of unmanufactured' leaf tobacco in August were larger than in either the previous month or a year ago, while for the calendar year thus far a total of $391,070,000$ pounds of leaf were exported, representing an increase of 29 per cent over the same period of 1923. Cigarette exports in August, although larger than in July, were smaller than a year ago.

Sales of tobacco at loose-leaf warehouses were 10 per cent smaller in August than a year ago, while the crop estimate of September 1, indicating a production of $1,195,000,000$ pounds of tobacco, was 23 per cent smaller than the estimate of a yoar ago.

## RAILROAD TRANSPORTATION

The net available surplus of freight cars during the last week of August, although almost twice as large as a year ago, averaged considerably below the surplusage during the last week of July 1. Freight cars in bad order continued to increase, numbering 210,109 cars on September 1 and representing 9.2 per cent to the total cars in use as against 8.9 per cent on August 1 and 7.7 per cent a year ago.

Car loadings in August totaled 3,823,000 cars as against $3,527,000$ in July and $4,112,000$ a year ago. While the total loadings in August were less than a yoar ago, grain and grain products and miscellaneous merchandise required more freight cars to move them than were necessary in August, 1923. Thus far this year $30,536,000$ cars were loaded with all classes of commodities as against aggregate loadings amounting to $32,059,000$ cars during the eight months ending August 31, 1923.

The following table shows the current condition of railroad freight car equipment on Class I railroads:

| Equipment, Freight Cars |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| TEAR AND MONTH | OWNED (END OF MONTH) |  | $\begin{gathered} \text { mstalled During } \\ \text { MONTM } \end{gathered}$ |  |
|  | Number | Aggrezate capacity (pounds) | Number | Aggregate capacity (pounds) |
| 1923 |  |  |  |  |
| December | 2,307,097 | 201, 055, 000, 000 | 18,690 | 1,762,000,000 |
| 1024 |  |  |  |  |
| January--....- | 2,310,2,312,2, | 201, 288,000,000 | 15, 569 | 1,415,000,000 |
| March. |  | 202, $313,000,000$ | -9,562 | $1,189,000,000$ $892,000,000$ |
| April...- |  | $202,447,783,106$$202,606,400,427$ | 8,7180,199 | $731,956,198$$879,032,000$ |
| May | 2, 312, 074 |  |  |  |
| June- | $\begin{aligned} & 2,314,798 \\ & 2,322,068 \end{aligned}$ | $203,139,187,427$$204,777,305,883$ | 10,909 | $1,076,236,000$$2,302,601,000$ |
| July... |  |  |  |  |
| August | 2,329,582 205,600,083,991 |  | 15, 452 | 1, $3700,576,083$ |
| tear and mostin |  |  |  |  |
|  | hetired during monti |  | Unfilled orders end of month (number) | Building in railroad shops (number) |
|  |  | Agregate capacity (pounds) |  |  |
|  | Number |  |  |  |
| $\begin{array}{r} 1023 \\ \text { December..... } \end{array}$ | 14,411 | 1,088, 000,000 | 24,379 | 1,515 |
|  |  |  |  |  |
| 1924 |  |  |  |  |
| January... | 12,329 | 1,033,000,000 | 21,696 | 2,417 |
| February........-. | 10,460 8,726 | 822,000, 000 | 40, 030 | 2,715 |
| April.-.---.-......-....... | 8, 726 | 705, 000,000 | 64.340 | 2,697 |
|  | 9,059 | 612, ${ }^{67724}$, 878 | 59, 550 | 2, 739 |
| June... | 8,347 | 642, 189, 000 | -57, 735 | $2{ }_{2} 269$ |
| July ---.......-......... | 8, 413 | 633, 855,844 | 61, 156 | 4,602 |
| August .-.-...-...-.... | 8,834 | $666,347,975$ | 40,901 | 3,618 |

## $\therefore$ WATER TRANSPORTATION

Entrances of vessels in foreign trade, measured in tonnage, declined in August from both the previous
month and a year ago, while vessels clearing from American ports increased over these comparative periods. For both entrances and clearances the tonnage of American vessels in foreign trade, however, was larger in August than a year ago. The declines in the total movements being solely due to decreased tonnage of foreign bottoms. For the eight months ending August tonnage of American vessels cleared and entered were above 10 per cent larger than during the same period of 1923, while a similar comparison for foreign bottoms indicated a decline from 1923 amounting to more than 3 por cent.

Traffic on the Sault Ste. Maric Canals declined from both July and a year ago, while the total movement for the 1924 season thus far was 16 per cent below a year ago. River traffic on the Ohio between Pittsburgh and Wheeling, although larger than in July, was considerably below a year ago.

## EMPLOYMENT

Factory employment in August showed no change in the aggregate number employed in July, the number on the pay rolls in August being however 15 per cent below a year ago. Food, textile, leather and stone, clay, and glass factories registered increased employment over the previous month, while the greatest decline from a year ago at 23 per cent was recorded in the iron and steel industry, and the smallest decline at 1 per cent was registered in tobacco products.

Reports from State and city agencies indicate larger employment in New York State and Detroit and smaller employment in Wisconsin. Pay roll data for New York State factories indicate larger wage payments in August than in either the previous month or a year ago, while for Wisconsin factories wage disbursements, although larger than in July, were considerably below a year ago.

## DISTRIBUTION MOVEMENT

Sales at retail by mail-order houses increased 8 per cent and 7 per cent, respectively, over July and a year ago. Two large houses recorded sales amounting to $\$ 226,522,000$ during the first eight months of 1924 as against $\$ 215,999,000$ in the same period of last year.

Chain ten-cent stores also registered larger sales in August than in either the previous month or a year ago, while for the year thus far the business of four leading systems aggregated $\$ 214,101,000$, an increase of 12 per cent over a year ago.
Advertising in September magazines was larger than in either the previous month or a year ago, while newspaper advertising, although larger than in July, was smaller than a year ago. Postal receipts in 50 selected cities were smaller in August than in July or a year ago.

## EMPLOYMENT IN MANUFACTURING INDUSTRIES BY MAJOR INDUSTRIAL GROUPS

(Drawn from data compiled by the U. S. Department of Labor and representing weighted indexes based upon the uumber of wage carners in tho respective industries in 1910. Detailed data may be found in the August issue (No. 36), page 176)
(A verage monthly employment $1923=100$ )


## BANKING AND FINANCE

Check transactions as indicated by both bank debits and bank clearings were smaller in August than in July, but were well above a year ago for New York City as well as the country outside.
Bills discounted held at the end of August by Federal reserve banks were smaller than the holdings at the end of July and a year ago: Total investments of reserve banks continued to increase, while notes in circulation were smaller in August than in July or a year ago. Reserves, deposits, and the reserve ratio also declined in August. In the member banks, loans, discounts, investments, and demand deposits continued to increase. Interest rates both call and commercial averaged lower in August.

Savings deposits continued to increase the balance to the credit of depositors on August 31, being 7 per cent larger than a year ago.
Prices of stocks, both railroad and industrial, averaged higher than in July and a year ago, while bond prices in general likewise recorded increases over the previous month and August, 1923. Fewer shares of stock were transferred on the New York Stock Exchange than in July, but the August transactions were considerably above a year ago.

Number of Business Failures and Amount of Depaulted Liabilities


New sales of life insurance and life insurance premiums collected declined seasonally in August, while the admitted assets of life insurance companies continued to mount.

Defaulted liabilities of failing business firms were larger in August than in July a year ago, whilo the number of defaults, although larger than in August, 1923, were smaller than in July.

COMPARISON OF WHOLESALE PRICES AND STOCK PRICES
(Twolve-month moving monthly averages)


Loang and Discounts and Total Invegtments of Federal Reserve Member Banks


Bills Discounted and Tóal Investments of Federal Reberve Banks


Debits to Individual Accounts Ghouped dy Frderal Reserve !Digtricts and adjubted for Seabonal Variations
(1910 monthly averages-100. Aususs, 1924, litest ploted)


# DEBITS TO INDIVIDUAL ACCOUNTS AT PRINCIPAL CLEARING-HOUSE CENTERS 

## grouped by federal reserve districts

[Relative numbers based on 1010 as 100]

| DIsthict | 1024 |  | 1923 | DISTRICT | 1924 |  | 1983 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | August | Sontember | Septomber i! |  | August | September | September |
| United States, 141 clearing-house centers.--- | 103.3 | 104.1 | 01.0 | St. Iouis district: |  |  |  |
| Boston district: |  |  |  |  | 101.9 | 103.8 | 91.0 |
| Total, 11 conters. | 112.5 | 111.6 | 99.5 |  | 100.0 | 101.8 | 98.1 |
| . Boston | 118.6 | 110. 5 | 100.6 |  | 74.3 | 86.8 | 84.6 |
| Hartford. | 115.2 | 119.6 | 106.5 | Little Ilock. | 152.8 | 188.9 | 147.2 |
|  | 92.3 | 92.3 | 88.9 |  |  |  |  |
| New Haven --.-.-.-.-----..------------ | 115.3 | 125.0 | 112.5 | Minneapolis district: | 90.4 | 117.4; | 96.3 |
| New York mistrict: |  |  |  | - Dutath.-- | 87.8 | 117.4 | 97.8 |
|  | 103. 1 | 102.3 | 83.3 | Minncapolis. | 91.0 | 120.1 | 91.9 |
|  | 125.2 | 126.4: | 98.8 | St. Paul..... | 92.6 | 94.4 | 98.8 |
| Buffalo. | 101.9 | 106.5 | 107.6 | Hellona. .-. | 81.8 | 90.9 | 72.7 |
| Rochoster | 120.0 | 120.0 | 110.8 | Billings..... | 06.7 | 77.8 | 88.9 |
| New York. | 1028 | 101.9 | 82.5 |  |  |  | - |
|  |  |  |  | Kansas City district: | 88.1 | 89.1 | 86.8 |
| Pijladelphia district: |  |  |  | Total, 14 centers...- | 88.1 | 113.7 | 86.8 |
|  | 107.6 | 110.4 | 102.8 | Denver-j---- | 113.7 89.8 | 113.7 91.0 | 114.4 85.0 |
|  | 105.6 | 107.6 | 100.5 |  | 89.8 | $\begin{array}{r}91.0 \\ \hline 754\end{array}$ | 85.0 |
| Seranton. | 128.3 | 141.5 | 118.9 | Omaha.--------------------------- | 71. 6 | : 75.4 | 75.8 |
| Trentop-- | 130.3 | 151.2 | 127.9 |  | 69.4 103.0 | 67.0 113.3 | 69.4 101.5 |
| Cleveland district: |  |  |  | Tulsa | 83.0 | 79.8 | 83.0 |
|  | 100.9 | 101.7 | 102.1 |  |  |  |  |
| Akron.--- | 73.3 | 81.1 | 82.2 | Dallas migrict: |  |  | 1038 |
| Cincinnsti. | 114.6 | 117.0 | 121.9 | Total, 11 centers. | 86.4 | 108.6 | 114.8 |
|  | 87.4 | 91.4 | 93.9 | Dallas... | 90.1 | 118. 6 | 112.8 |
| Pittsburgh. | 107.3 | 101.0 | 99.5 | IIouston...- | 81.9 | 110.9 | 103.8 |
| Youngstown | 80.7 | 101.7 | 101.7 | Fort Worth. | 68.5 | 81.5 | 72.8 |
| Toledo. | 141.4 | 147. 4 | 137.1 |  |  |  |  |
| Columbus. | 100.9 | 114.7 | 127.6 | Sax Francisco district: |  |  |  |
| Dayton.- | 122.0 | 132.0 | 134.0 |  | 122.3 | 129.3 207.0 | 121.5 |
| Richmond disthict: |  |  |  |  | 85.1 | 92.8 | 88.4 |
|  | 93.9 | 00.4! | 91.2 | San Francisco. | 103.4 | 105.0 | 100.0 |
|  | 96.5 | 90.1 , | 85.4 | Seattle_---.-- | 86.9 | 88.8 | 82.5 |
| Norfolk. | 71.4 | 06.6 | 83.3 | Oukland, Calif | 207.9 | 187.3 | 185.7 |
| Richmond. | 109.0 | 105. 2 | 112.9 |  |  |  |  |
| Charleston | 56.8 | 59.5 | 54.1 | Distmict totals corrected for seasonal |  |  |  |
|  |  |  |  | VARIATION: |  |  |  |
| Attanta districi: |  |  |  | United States, total..-- ----------------- | 112.2 | 109. 6 | 95.8 109.5 |
| Total, 15 centers. | 91.5 | 103.4 | 90.0 | . Hoston district | 127.7 | 122.8 | 109.5 |
| Atlanta | 100.0 | 108.1 ! | 98.8 |  | 114.8 | 110.5 | 99. 0 |
| Birmingham. | 178.0 | 103.2 | 169.5 |  | 113.5 | 114.2 | 100.3 104.8 |
| New Orleans. | 87.8 | 104.6 | 82.6 |  | 106.0 | 104.4 | 101.8 |
| Jacksonvillo. | 116.6 | 114.6 | 95.8 |  | 96.9 | 94.7 | 93.5 |
|  | 74.2 | 77.4 | 73.1 | : Atlanta district. | 101.4 | 107.3 | 03.4 100.4 |
|  | 54, 1 | 81.1 | 81.7 | Chicago district. | 108.0 | 105.8 | 100.4 103.1 |
|  |  |  |  | St. Louis district.... | 109.1 | 109.4 | 103.1 87.1 |
| Chicago district: |  |  |  | Minneapolis district. | 94.5 | 106.2 | 88.1 |
|  | 105.3 | 104.5 | 99.2 | Kansas City district | 86.3 | 88.0 | 85.7 100.3 |
| Chicaro..... | 102.3 | 100.5 | 91.0 | Dalles district...... | 96.1 | 101.9 | 100.3 |
| Detroit.. | 124.4 | 123.3 | 119.7 |  | 126.0 | 121.1 | 120.3 |
| Indianapolis | 105.1 | 106.6 | 103.7 |  |  |  |  |
| Milwaukee. | 100.4 | 103.8 | 109.5 |  |  |  |  |
| Des Moines. | 114.5 | 112.1 | 86.8 |  |  |  | - |
|  | 8\%, 3 | 89.3 i | 92.0 |  |  |  |  |
| Sioux City | 120.6 | 125.4 | 111.1 |  |  |  |  |

## PUBLIC FINANCE

The gross debt of the Federal Government declined in August, showing a reduction of more than 4 per cent since August 31, 1923. Customs receipts increased over both July and a year ago. Both ordinary recoipts and expenditures chargeable against ordinary receipts declined from July and a year ago.

## GOLD AND SILVER

Domestic receipts of gold at the mint were 2 per cent larger in August than in July, but 8 per cent below a year ago. The output of gold by the Rand mines, although larger than a year ago, was smaller than in July. Gold imports declined 4 per cent and 45 per cent, respectively, from the inward movement in the previous month and a year ago, while exports of gold in August were larger than the shipments abroad in either of these comparative periods.

The domestic production of silver increased in August over both the preceding month and a year ago, while both imports and exports of silver, although smaller in August than in July, were well above their respective movements a year ago: The price of silver in the New York market averaged higher in August than in July and a year ago, while at London silver prices, although higher than quotations of a year ago, were lower than those prevailing in July.

## FOREIGN EXCHANGE AND TRADE

Exchange on all principal countries averaged higher in August except Sweden and Brazil, which remained stationary, and Japan, which declined. The general index of foreign exchange relative to par as 100 stood at 61 for August as against 59 for July and 62 a year ago.

Imports into the United States amounting to \$254,630,000 were 8 per cent smaller than in either
the prerious month or August, 1923. Exports from the United States including reexports amounting to $\$ 330,806,000$ were 20 per cent and 6 per cent larger, respectively, than the shipments abroad during the previous month and August, 1923.

## CIVIL-SERVICE EMPLOYEES

The following monthly figures reported by the United States Civil Service Commission give a comparative summary of the operations of the civilservice systom:

Civil-Service AppliCations, Examinations, Appointments, and Sepalations ${ }^{1}$

| gear and MONIII | NUMBER of APTLICATIONS IRECEIYRID |  | NUMBER OF NUMBER OF <br> PERSONS FEISONS <br> EXAMINED APYONTED |  |  |  | Numper of remsons seliaftated |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ¡Depart <br> - mental servico | Hield service | Departmental service |  |  |  | Depart- <br> mental service | Field servico |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 1023 |  |  |  |  |  |  |  |  |
| Junc.... | 3,930 | 9,898 | 3,515 | 11,031 | 509 | 5,629 | 878 | 6,990 |
| July | 4,175 | 13, 918 | 2,320 | 12, 660 | 499 | 6,787 | 523 | 8,373 |
| August | 3,875 | 15,218 | 1,817 | 11, 70 | 018 | 5,791 | 54.5 | 6, 159 |
| September | 2, 050 | 18,538 | 1,793 | 16, 824 | 702 | 7,514 | 937 | 7, 743 |
| October.-. | 2,415 | 19,203 | 3, 033 | 16, 893 | 552 | 6, 172 | 823 | 6,338 |
| November | 2, 053 | 15,511 | 2,478 | 15, 104 | 509 | 8, 059 | 604 | 6, 900 |
| December. | 2,410 | 12,85t | 1,397 | 0,710 | 360 | 6,021 | 475 | 6, 74 |
| $19 \% 4$ |  |  |  |  |  |  |  |  |
| January- | 8, 129 | 15,304 | 3,120 | 13, 534 | 212 | 7,045 | 2401 | 5, 687 |
| February | 6, 560 | 20, 639 | 7,536 | 14, 219 | 390 | 5, 745 | 479 ! | 4, 134 |
| March.- | 2, 213 | 21,250 | 2,0c3 | 22, 851 | 399 | 7,271 | 451 | C, 208 |
| April. | 1,535 | 42,910 | 2,038 | 14, 435 | 422 | 8,660 | 544 | b, $0 \times 3$ |
| Mas | 2.700 | 22, 114 | 1,803 | 42,743: | 371 | 9,131 | 520 | 6,234 |
| June. | 6,747 | 17,807 | 8,581 | 11,825 | 591 | 6,863 | 607 | 6,27 |

${ }^{1}$ By departmental service is meant service in Washington, D. C. exelusive of the jurisdiction of the fourth civil-service district with offices in Weshington. By the service in Weshington under the jurisdiction of the fourth civi-serviee district.

## CENSUS OF MANUFACTURES: 1923-PRELIMINARY REPORTS

The Bureau of the Census has announced preliminary figures on 52 additional manufacturing industries collected pursuant to the census of manufnctures for the year 1923. The following table summarizes the more important data made available since those published in the September issue, and as further similar reports are released they will be correspondingly summarized for the readers of the Survey. More details can be obtained with respect to each of the industries above outlined from the bureau's complete preliminary statement for each industry in connection with the census of manufactures for 1923.

Census of Manufactures Ritumna: 1923


[^2]The following table gives such September data as have been received to and including Oclober 14, 1924. Text matter covering September data s given on p. 1


SEPTEMBER DATA-Continued


## INDEXES OF BUSINESS

The index numbers presented in this table are designed to show the trend in production, prices, trade, etc., in various groups of industry and commerce. They consist in general of weighted combinations of series of individual relative numbers; often the individual relative numbers making up the sories are also given. Tho function of index and relative numbers is explained on the inside front cover. $\Lambda$ condensed form of this table is given on page 7.


INDEXES OF BLSINESS-Continued


[^3]INDEXES OF BUSINESS-Continued


INDEXES OF BUSINESS-Continued


INDEXES OF BUSINESS-Continued


I Since January, 1921.
August, 1023, average not compiled because of earthquake.
3 January, 1920; no other figures for 1920 nvailablo.

## TREND OF BUSINESS MOVEMENTS

The following table contains a summary of the monthly figures, designed to show the trend in inportant indual rial amd commercial movements. The numerical data for the latest months are given and in addition relative numbers for the last four monthe and for two corresponding months of a year ago. In many lines the figures do not lend themselves readily to blatistical unifurmity, due to lateness of their publication or publication at other than monthly intervals; therefore the following explamations of the various headings are offered to make clear such distinctions and in general to facilitate the use of the table:

July, 1024.-This column gives the July figures corresponding to those for August shown in the next eolumn-in other worls, cover the previous month.
August, 1024.-In this column are given the figures covering the month of August or, as in the case of stocks, ete, the situation on August 31 or September 1.
Corresponding month, July, 1923, or, A ugust, 1023.-The figures in this column present the situation exactly a year previous to those in the "Augast, 1924," column (that is, gencrally August, 1023), but where no figures are available for August, 1024, the July, 1923, figures have been inserted in this column for comparison with the July, 1924, fiyures.
Cumulative total from January 1 through latest month.-These columas set forth, for those items that properly can be cumulated, the cumulative totals for the eight months ending August 1923 and 1924 , respectivelv, exeept where tho August, 192.1 , figures are lacking, in which case the eumulative totals for the first seven months of 1023 and 1924 are given.
Percentage increase ( + ) or decrease ( - ) cumulative, 1924 from 1923.-This column shows the per cont by which the camulated total for the eight months ending August, 1021 , is greater $(+)$ or less $(-)$ than the total for the correipending periodended August, 1923.
Base year or period.-For purposes of comparison with a previous more or less normal period, all items, fio far as possible, are related to such a year by relative numbers. The period taken for each item, called the base, is the monthly average: of the year or period stated in this column. Wherever possible, the year 1913 is taken as a base, and if nu pre-war tigures are available, 1919 is usually taken to avoid using a war year as a basis. In some cases it will he noted hat figure; were not available prior to 1920 or even 1921, and that sometimes a month, or an average of a few months, has to bu wed rather than a year's average. Also, for some industries, 1919 would not be a proper base on acconnt of extranrdinary conditions in the industry and therefore some more representative year has been chosen.
Relative numbers.-In order to visualize the trend of each movement, relative numbers (see explanation on inside front eover) are given for the last four months and for two corresponding months of a vear ago. These relative numbers are computed by allowing the monthly average for the base period, usually 1913 or 1919, to equal 100. It the movement for a current month is greater than the base the relative number will be greater than 100 . If the converse is true the relative mumber will be less than 100. The difference between 100 and any relative number gives at once the per cent increave or decrease compared with the base period. Relative numbers may also be used to compute the approximate per cent increase or decrease from one month to the next.
Percentage increase ( + ) or decrease ( - ) August from July, and August, 193.f, from 4 ugust, 1933 .- The last two columns show the per cent increase or decrease of the figure for the last month compared with the preceding month and the correaponding month last year.

${ }^{1}$ Twelve months' average, July to June, inclusive, ending the yoar indicated.

TREND OF BUSINESS MOVEMENTS-Continued


## TREND OF BUSINESS MOVEMENTS-Continuod



TREND OF BUSINESS MOVEMENTS-Continued


TREND OF BUSINESS MOVEMENTS-Continued


TREND OF BUSINESS MOVEMENTS-Continued


- Rerised.
${ }^{4}$ Data prior to June, 1923, include reports of 600 publishers, while current months inciude about 450.

TREND OF BUSINESS MOVEMENTS-Continued

'Twelve months' average. July to June, inclusive, ending the ycar Indicated.
Incluiles hospitals, pablic buildings, social, religious, and memorial buildings, formerly shown separately in the Survey of Current Business.

TREND OF BUSINESS MOVEMENTS-Continued

${ }_{8}^{7}$ Prices are averages of quotations reported os of the first week of the following month indicated.
 to data

TREND OF BUSINESS MOVEMENTS-Continued


TREND OF BUSINESS MOVEMENTS-Continued


- July, 1923.
"Est!mate made as of the first of the second following month indicated; i. e., the July and August columns show estimates as of September 1 and October 1 , respectively.
FRASER

TREND OF BUSINESS MOVEMENTS-Continued


TREND OF BUSINESS MOVEMENTS-Continued


## TREND OF BUSINESS MOVEMENTS-Continued



## TREND OF BUSINESS MOVEMENTS-Continued



TREND OF BUSINESS MOVEMENTS-Continued


TREND OF BUSINESS MOVEMENTS-Continued


TREND OF BUSINESS MOVEMENTS-Continued


TREND OF BUSINESS MOVEMENTS-Continued


## TREND OF BUSINESS MOVEMENTS-Continued



ARCHITECTURAL TERRA COTTA BOOKINGS ${ }^{1}$

${ }^{2}$ Compiled by the $U$. S. Department of Commerce, Bureau of the Census from the reports of 26 identical manufacturers who produced about 95 per cent of the architectural terra cotta made in 1922 .
${ }^{2}$ Values exclude freight, cartage, duty, and setting charges.

## WORLD PRODUCTION OF CANE SUGAR AND FLAXSEED*

| Yfab | cane sugar |  |  |  |  |  |  |  | Flaxseid |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | World | Java | United States | Brazil | Hawall | $\begin{aligned} & \text { Porto } \\ & \text { Bico } \end{aligned}$ | Cuba | Indla |  | $\begin{gathered} \text { Argen- } \\ \text { than } \end{gathered}$ |  | Vnlird state | Canada! |
|  |  | May | Oct. | Oct. | Nov. | Doc. | Dec. | Dec. |  | Jan. ${ }^{\text {d }}$ | Apr. | Aug. | Aug. |
|  | Thousands of short tons |  |  |  |  |  |  |  | Thousands of hustws |  |  |  |  |
| 1000-1913 average... | 9,971 | 1,514 | 311 | 138 | 567 | 363 | 2,295 | 2,614 | 110,092 | 31,050 | 10,500 | 10,30: | 12,040 |
| 1014--............. | 11, 293 | 1,054 | 247 | 344 | ${ }_{6} 6$ | 346 | 2,2067 | 2,757 | 81, 658 | 36,928 | 15,448 | 13, 413 | 7,173 |
| 1915-...------------1....--- | 12,776 | 1,797 | 139 | 450 | 593 | 484 | 3,437 | 2,950 | 103, 215 | 45,010 | 15, 5 so | 14,030 | 10,623 |
| 1016. | 13,442 | 2,009 | 311 | 413 | O45 | 503 | 3,442 | 3,058 | 82,151 41,033 | 39,293 4032 | 19,040 | 14,200 0,104 |  |
| 1917. | 14, 503 | 1,960 | 246 | 403 | 577 | 454 | 3,057 | 3,703 | ${ }_{61,81}^{41,03}$ | 4,032 | 21,040 | 9, 104 <br> 13 <br> 139 | 5,038 0,055 0,58 |
| 1918-..------................ | 13,321 | 1,478 | 284 | 440 | 600 | 403 | 4,597 | 2,017 | ${ }_{61,1821}$ | 10,589 | ${ }_{8}^{20,400}$ | 13,369 7.250 | 0,053 8,473 |
| 1819. | 13,799 | 1,473 | 122 | 400 | 550 | 485 | 4,209 | 3,361 | 81,602 | 30,735 | 0,400 $10,-60$ | 7.258 10.74 | 8,473 8,093 |
| 1920..---.-...-.....-........ | 13, 050 | 1,579 | 176 | 580 | 522 | 490 | 4,409 4.517 | 2,820 2925 | 87,964 83,288 | 42,038 80,470 | 10,700 10,500 | 10,764 8,020 | 7,038 4.112 |
| ${ }_{1} 1021 .-$-.------.............. | 14,56314,711 | 1,006 | 328 295 | ${ }_{5667}^{551}$ | ( $\begin{array}{r}502 \\ 1837\end{array}$ | 408 .379 | 4,517 14,083 | 2,925 13,409 | 83,288 94,000 | 50,470 47,578 | 10,5010 17,431 | 8,029 10,375 | 4.112 8,003 |
| 1922. |  | 1,093 | 205 | 2667 | 1837 | 1379 | 14,083 | 13,409 | 94,000 | 6,878 | 12,44, |  | 8,003 |
| 1923 latest estimutes .......... 15,505 |  | 1,976 | 168 | 480 | 040 | 445 | 4,838 | 3,658 | 127,000 | 3s, 54 | 21,330 | 17, 900 | $\begin{array}{r}7,140 \\ \hline 10849\end{array}$ |
|  |  |  |  |  |  |  |  |  |  | 18, 150 | 28, 600 | 10,819 |

${ }_{1}^{1}$ Loulsiana and Teras.
1 From private sources.
${ }^{1}$ Exports.
WORLD PRODUCTION OF BEET SUGAR*

| Ye.in | World total | United States | $\underset{\text { Gany }}{\text { Ger }}$ | zechoorakia | Russia | Poland |  | Belglum | Erance | Italy | Spain | Den: | 8weden |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thousands of shart tons |  |  |  |  |  |  |  |  |  |  |  |  |
| 1009-1913 average.......-...--. | 8,432 | 610 | 2,296 | 1,017 | 1,720 | 279 | 210 | 276 | 759 | 203 | 110 | 123 | 154 |
| 1914. | 8,331 | 722 | 2,721 | 1,001 | 1,879 |  | 310 | 215 | 331 | 168 | 112 | 168 | 170 |
| 1915 | 6,056 | 374 | 1,678 | 812 | 1,824 | 230 | 204 | 120 | 150 | 160 | 117 | 243 | 140 |
| 1916-...--..---................. | 5,803 | 821 | 1,721 | 805 | 1,457 | 293 | 250 | 140 | 204 | 160 | 139 | 121 | 151 |
| 1917. | 5,203 | 765 | 1,726 | 534 | 1, 134 | 253 | 215 | 136 | 221 | 102 | 151 | 149 | 144 |
| 1918. | 4,592 | 761 | 1,404 | 683 | 312 | 210 | 182 | 78 | 121 | 120 | 103 | 160 | 143 |
| 1919 | 3,400 | 726 | 803 | 559 | 80 | 106 | 263 | 152 | 171 | 185 | 91 | 149 | 141 |
| 1020. | 4,997 | 1,089 | 1,212 | 770 | 55 | 105 | 314 | 205 | 370 | 150 | 104 | 1 CS | 151 |
| 1921. | 5,443 | 1 1,074 | 1,416 | 720 | 61 | 193 | 412 | 315 | - 319 | 234 | 80 | 158 | 250 |
| 1922 | 15,732 | 1711 | 1,605 | 1811 | 1,3245 | ${ }^{1} 347$ | 304 | 1293 | 515 | 300 | 1176 | 94 | ${ }^{179}$ |
| 1923 latest estimates.. | 6,468 | 927 | 1,240 | 1,084 | 393 | 457 | 275 | 339 | 346 | 363 | 157 | 115 | 165 |

TCrops in all countries hero given are harvested beginaing in September. $\quad$ Includes Ukraine; data from private sources.
${ }^{2}$ From private sources.

## WORLD PRODUCTION OF RICE*



WORLD PRODUCTION OF COTTON*

${ }^{1}$ From private sources.
${ }^{\prime} 1922$ acreage $12,496,000$ compared with $11,976,000$ in 1921.

## WORLD PRODUCTION OF WHEAT*

| Country................... | World total | $\begin{gathered} \text { Argene } \\ \text { tlna } \end{gathered}$ | Australia | India | United States | Spain | Italy | France | Germany | Rumania | Canada |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New crop availablo.. | -...----- | January | January | March | July | August | August | August | August | August | September |
|  | Millions of bushels |  |  |  |  |  |  |  |  |  |  |
| Normal consumption (1009-1913) |  | 64 | 37 | 301 | 581 | 136 | 236 | 361 | 221 | 34 | 116 |
| 1909-1913 average............ | 3, 577 | 157 | 85 | 351 | 690 | 130 | 183 | 318 | 152 | 87 | 197 |
| 1914.....-........-............ | 3,586 | 105 | 103 | 312 | 891 | 116 | 170 | 283 | 146 | 49 | 161 |
| 1015... | 4,199 | 169 | 25 | 377 | 1,026 | 139 | 171 | 223 | 142 | 89 | 394 |
| 1016.. | 12,609 | 169 | 179 | 323 | 636 | 152 | 177 | 205 | 2110 | 78 | 203 |
| 1017. | 12,288 | 80 | 152 | 382 | 637 | 143 | 140 | 135 | 282 |  | 234 |
| 1918. | 12, 504 | 224 | 115 | 370 | 921 | 136 | 183 | 228 | 186 | ${ }^{3} 18$ | 189 |
| 1919. | 12,743 | 150 | 76 | 280 | 968 | 129 | 170 | 2182 | 480 | -66 | 193 |
| 1920. | ${ }^{12}$ 2, 868 | 217 | 46 | 378 | 833 | 139 | 141 | 4237 | - 83 | 161 | 263 |
| 1921. | ${ }^{1} 3,069$ | 156 | 146 | 250 | 815 | 145 | 194 | - 323 | - 108 | 179 | 301 |
| 1922. | 13,096 | 191 | 129 | 367 | 868 | 125 | 162 | 4243 | 472 | 492 | 400 |
| 1923, latest estimates. |  | 196 | 109 | 369 | 786 | 157 | 225 | 276 | 106 | 102 | 474 |
| 1024, latest estimates..... | .........-. | 247 | 120 | 304 | 837 | 136 |  |  | 93 |  | 292 |

1 Russia excluded. No accurate statistics are available.
New boundatios.
inceludes Alsact-Lorraine.

- Former kingdom, Bessarabia and Bukowina.
- Data compiled by U. S. Department of Agriculture, Bureau of Agricultural Economics, and correeted monthly in accordance with latest avallable information received by that department or by U. S. Department o Commerce, Bureau of Porcign and Domestic Commerce. Countries are placed in the order in which crops are harrested. Corrected to September 20, 1924.

SOURCES OF DATA
$==-\ldots$ source


[^4]* Multigraphed or mimeographed shects.


## SOURCES OF DATA-Continued

| nounce | data | curreat publacation | date of plblication |
| :---: | :---: | :---: | :---: |
| I--REPORTS FROM GOYERNMENT DEPARTMENTS-FEDERAL, STATE, AND FOREIGN-Continued |  |  |  |
| U. S. Department of Commerce: Bureau of the Censts (Con.)..- | Produc. indexes of raw materials aud manirs.- | Surrey of Current Busines | Monthly. |
|  | Frats and oils, production, consumption, and | Statistics of fats and oils * | Quarterly (one month after end of |
|  | Fabricated struc. steel salcs from Apr., 1022. | l'ress release | 15 th of month. |
|  | A utomobile production from July, 1921....- | Press release | 20th of month. |
|  | Wood chemical operations.-- | Press release | 30th of month. |
|  | Steel furnituro shipments. | Press relcase | 20th of month. |
|  | Locomotive shipments and unfilled orders..... Earnings of public utilitics................ | Press relcase Survey of Current Busine | lothot month. |
|  | Plumbing goods price index. | Press release. | 10 th of month. |
|  | Architectural terra cotta --.- | Press release | 15th of month. |
|  | Fish catch at principal tishing ports | Monthly statement | Last wcek of month. |
| bureay of Fisieries. beread of Formiga and Domestic Comuerce. |  |  | Last week of month. |
|  | principal clearing ports. <br> Tonnage of vessels, entered and cleared in | Monthly Sum. Forcign Commerce (Pt. II) | Middle of next month. |
|  | United States forcign trade. |  |  |
|  | Data on trade, employment and coal and iron production of forcign countries. | Varlous forelgn sources. |  |
|  | Wholesale price of wool... | Wholesale Prices | Yearly. |
|  | Vessels under construction completed, and lost. | Commurce leports.... | First weckly issue of month (Mor- |
| Btreau of Standards.. | nuiding materlal price inderes... | Not published. | days). |
| u. S. Grain Corporation <br> U. S. Department of the İterior:- <br> bereau of Mines | Wheat flour production, prior to Juls, 1020 | No longer publishe |  |
|  | Refined petroleum products, production, tte.. | Refinery statistics | Sceond week of month. |
|  | Explosives, production, shiprnents, etc. | Explosive statistics | Mionthly. |
| Geological Suavey............... | Portland cement, production, ete..--. | Report on Portland cement output | 20 th of month. |
|  | Cosl and coke production.-.-.-. | Weckly report on production of coal | Second or third treenly issue of mo 25 th of month. |
|  | Electrie power production.... | Production of clectric pow | Fnd of month. |
|  | Consumption of fuel by public utility plants.- | Production of electric power | End of month. |
|  | Figures on nonferrous metal production....... | Mineral Pesources | Ammally. |
| Digision of National Pabes. | Patents granted---...---- | Not published | Monthly. |
| U. S. Departient of Laboh: Emplotment Seryice |  |  |  |
|  | Number on pay roll-United States factories.- | Industrial Survey** | First week of month. |
|  | Employment agency operatious............-.-- | Report of Activities of State and Municipal Emplosment Agencles. | Evers 4 or 5 weeks. |
| Bureat of Immoration.......... Bereay of Labor Statisica.... | Immigration and emigration statistics........- | Not published.----........- |  |
|  | Wholesale prices of commodities, including | Wholesalc Prices of Commoditie |  |
|  | Wholesale price inder - .-. | Monthly Labor Rev | Monthly. |
|  | Retnil price index of foods..........----............-- | Monthly Labor Review | Monthy. |
|  | Retail coal prices..--...-......-.-................ | Monthly Labor Review | Monthly. |
| U. S. Post Office Department....- | United States Postal savings | Postal Savings News Bulletin. | 12th of month. |
|  | P'ostal rcceipts | Statement of Postal Receipts * | 7 th of month. |
| U. S. Department of Stare...-..... |  | Not published --...-----........ |  |
| U. S. Treastry Defartment | Government debt, receipts and disbursements. | Daily Statement of the U. S. Treasury | Last das of month. Monthls. |
|  | Money in circulation from July 1, 1922.......... | Circulation of raney. Not published. | Monthy. |
| bureau of Internal Revenue.- | Oleomargarine production.. | Not published |  |
|  | Consumption of manufactured tobacco, snuf, | Statement of tax-paid products | First week of month. |
|  | Internal levenue tares on specifled articles. | Classifted collectlous of Int |  |
| U. S. War Department: <br> Engineer Corts. |  |  |  |
|  | Iron ore movement | Monthly statistical re | Monthls during season. |
|  | Sault Ste. Marie Caual trall | Monthly statistical repor | Monthly during season |
|  | Ohio River cargo trafic. |  | Monthy. |
| Missisimpi-Warrior Service <br> War Finance Corporation. | Barge traffic on Mississipp | Not publisher |  |
|  |  | Not published in form used. |  |
| War Finance Corporation........- | Wisconsin factory carnings and employment.- | Bulletin on Wisconsin labor market | 15th of month. |

II.-REPORTS FROM TRADE ASSOCIATIONS AND PRIVATE ORGANIZATIONS
(Exeluding individual firms reporting data to be combined with other firms or trade associations)

Abertaat Construction Co Abeasive Paper and Cloti Manufactirers' Exchange.
Assoclated Corn Products Manc-
american Bureat of Metal StaTISTICS.

Amprican face Brice Association.
Amierican Newspafer Publishens; Asiersoclation.
amprican Iron and Steel Institute
American Petroleum Institute...-
American Petroleum institute....
Aberican Pig Iron Association...-
abenicas Rallway
(Car Service Division).
american Telerione and Tele
ABERAPL CO.
abrerican Walnut Mangeacturers Association.
Amemicar Wasmig Mifachine Mant facturers association
american Writic Paped Coypany
American Zinc Institute Coypany
Anturacite bureau of Information.
Associated Knit Undehwear ManAssactitiens' association.
Association of life insurance
Presidests. presidents.

Agtomodile Mandracturebs' Association.
boston, Cape Cod and New Yori

| Building costs. Sale of abrasive paper and cloth. |
| :---: |
| Corn ground into starch, glucose, ete |
| Copper, silver, and lead production |
| Zine production in Belpium |
| Zine stocks in United Kingdom |
| Face brick production, stocks, ctc |
| Stocks of newsprint paper.. |
| Steel ingot production. |
| Gasoline and kerosene consumption |
| Nerchant pig iron production, etc. |
| Freight car surplus and shortage. |
| Car loadings and bad-order cars. |
| Stockholders in the company. |
| Walnut lumber and logs. |
| Washing machine sales. |
| Purchases and sales of paper |
| Produc. aud stocks zine, retorts ope |
| Anthracite shipments and stocks. |
| Knit underwear production. |
| New life Insurance business. |
| Premium collections. |
| Distribution of assets. |
| Automobile accessory salos |
| Cape Cod Canal traffic. |



## SOURCES OF DATA-Continued



SOURCES OF DATA-Continued


## PUBLICATIONS OF THE DEPARTMENT OF COMMERCE

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

## OFFICE OF THE SECRETARY

Property Accounting.-Department Circular No. 204 (third edition), June 4, 1924.

Laws and Regulations for Protection of Fisheries of Alaska.Department Circular No. 251 (tenth edition), June 21, 1924.
Simplified Practice Recommendations: Bed Blankets, Cotton, Wool, and Cotion and Wool Mixed. Recommendation No. 11. Price 5k.

## BUREAU OF THE CENSUS

(For circulars giving plan of publication nud distribution of census publications ddress the Director or the Census.)

Biennial Census of Manufactures, 1921.-1,637 pages, price $\$ 1.75$. This report presents the statistics of the first biennial census of manufactures for the United States which covered industrial operations cluring the calendar year 1921.
rinancial Statistics of Cities Having a Population of Over 30,000, 1922. - 307 pares, price 75 . This is the annual report of the Burean of the Census showing the financial transactions of 261 cities for the fiscal year 1922, the assessed valuation of taxable property in thos eities and the taxes levied thereon during that year, and their indebtedncss and specified assets at the close of that year.
Telephones, 1922. -5 pages, price 104 . This report is one of the series giving the results of the census of electrical industries taken quinquennially by the Census Bureau.

Farm Population of Selected Counties.- 238 pages, price 254. This report gives data relating to the farm population of the following eight selected counties in typical agricultural sections of the Jnited States: Otirgo County, N. Y.; Dane County, Wis.; Now Madrid and Scott Cominties, Mo.; Cass County, N. Dak.; Wake County, iv. C.; Ellis County, Tex.; and King County, Wash

Consumption of Vegetable Tanning Materials.-4 pages, price 5t. 'This roport, which is compiled in cooperation with the Department of Agriculture Forest Service, shows the crude vegetable materials and vegetable extracts consumed in tanning for 1923 and 1919.

State Compendiums, 1920.-Yndiana, 183 pages, price $35 \phi$; Maryland, 101 pages, price 206; Now York, 268 pages, price 65¢; and Okhahoma, 131 pages, price 25\$. Bach compendium contains detailed statistics of popalation, agriculture, manufactures, and mining for the State named. A summary for the United Ślates is also given, with a map showing the centers of population, agricultural products, and manufactures.

## BUREAU OF FOREIGN AND DOMESTIC COMMERCE

Monthly Summary of Foreign Commerce of the United States, May, 1924.-Parts I and 1I. Owing to the advanced cost of printing it has been necessary to advance the subseription price of the Monthly Summary from $\$ 1$ to $\$ 1.25$ a year. The single-copy price of Part I will be $10 \phi$, and of Part LI, 5¢.

Commerce Reports.- A weekly survey of foreign trade, cable summaries of world conditions, and articles on situation in various ecmmodities in foreign countries. Quarto, 72 pages. Price 10 es per copy; \$3 a year ( $\$ 5$ for foreign).

Index to Commerce Reports, Nos. 14-26, April, May, June, 1924. Price É¢.

Domestic Market Possibilities for Electrical Merchandising Lines, Analysis of lerceningo i'istribution by States, by IR. A. Iandquist a:nd II. It. Way.-Trade Promotion Series No. 9. Price ad.

Glossary of Automotive Terms and Instructions to Exporters for Guidance in Properiy Listing and Classifying Automotive Apparatus and Supplies in Shippers' Export Declarations, prepsred in the Automotive Division.-Trade Promotion Series No. 3. 1rice 5d.

Nonintoxicating Beverages in Latin America, prepared in the Foodsiulís Division.-Trade Information Bulletin No. 260.

Welsh Coal Trade in 1923, by ledgar C. Soule, American Consul, Cardiff, Wales.-Trude Information Bulletin No. 261. Labor, Wages, and Unempioyment in France, by Lllwood A. Weiden, Huropean Division.-Trade Information Bulletin No. 262.

The Petroleum Industry of Russia, by William A. Otis, Mineral Division.--Trade Information Bulletin No. 263.

Haiti: An Lconomic Survey, prepared in the Latin-American Division.-Trade Information Bulletin No. 264.

Austrian Iron and Steel Industry and Trade, by E. M. Zwickel, Assistant American Trade Commissioner, Vienna.Trade Information Bulletin No. 265.

Budgetary Control in Retail Store Management, prepared in Domestic Commerce Division.-Trade Information Bulletin No. 266.
Postwar Conditions in the German Toy Industry, by Arthur J. Grey, American Trade Commissioner, Berlin.-Trade Information Bulletin No. 267.

Turkey's Foreign Debt, by James R. Mood, European Divi-sion.-Trade Information Bulletin No. 268.
Retail Store Location, prepared in Domestic Commerce Division.-'Irade Information Bulletin No. 269.
Nitrogen Survey: Part IV.-The Nitrogen Situation in European Countries, by Harry A. Curtis, Bureau of Foreign and Domestic Commerce, and Frank A. Eirnst, Fixed Nitrogen Research Laboratory, United States Department of Agricul-ture.-Trade Information Bulletin No. 270.

## BUREAU OF FISHERIES

Variation in the Maximum Depth at which Fish Can Live during Summer in a Moderately Deep Lake with a Thermocline, by Frank Smith.-Document No. 970. Price 5\&

Iodine Content of Sea Foods, by Donald K. Tressler and Arthur W. Wells. Document No. 967. Price 5申.

Propagation and Distribution of Food Fishes, Fiscal Year 1923, by Glen C. leach. Document No. 964. Price $15 \notin$.

## BUREAU OF STANDARDS

Formulas, Tables, and Curves for Computing the Mutual Inductance of Two Coaxial Circles, by Harvey I. Curtis and C. Matilda Sparks.-Scientific Paper No. 492. Price $15 \phi$.

Tests of Some Girder Hooks, by Herbert L. Whittemore and Ambruse II. Stang.-Technologic Paper No. 260. Price 10é.

Influence of Sulphur, Oxygen, Copper, and Manganese on the Red-Shortness of Iron, by J. R. Cain.-Technologic Paper No. 261. Price 10 e.

Saturation Relations in Mixtures of Sucrose, Dextrose, and Levulose, by IRichard I. Jackson and Clara Gillis Silsbee. -「echnologic Paper No. 259. Price 10ф.

Recommended Specifications for Quicklime and Hydrated Lime for Use in the Absorption of Carbon Dioxide. Circular No. 189. Price $5 \phi$.

United States Government Specifications:
Writing Ink. Circular No. 183. Price 5¢.
Stamp-pad Ink. Circular No. 185. Price 5¢.
Asphalt for Unsurfaced 1Built-up Roofing. Circular No. 168. Price 5 5 .

Computing and Recording Machines. Circular No. 188.
Record and Copying Ink. Circular No. 182. Price 5¢.
Typowriter Ribbons. Circular No. 186. Price 5\&.
Battleship Iinoleum. Circular No. 191. Price 5ф.
The above specifications have been oflicialiy adopted by the Federal Specifications Board as a standard in parchasing materials for use by (lovermuent departments and other Government establishments

## BUREAU OF NAVIGATION

American Documented Scagoing Merchant Vessels of 500 Gross Tons and Over, September 2, 1924.-Serial No. 82. Price 10\& a copy; annual subscription price $75 \%$.

Radio Service Bulletin, Septomber 2, 1924.-No. 89. Price 5\& a copy; annual subseription price 2jé.

Commerical and Government Radio Stations of the United States. Jdition June 30, 1924. Price 15t.
Nore.-All orders for radio publieations listed by tho bureau of Navigation and inquiries concerning these publications should be addressed to the Superintendent Documents, Goverument Printing ofice, Washingtou, D. C. Do not make remittances to the bureau of Navigation or to radio inspoctors.

## COAST AND GEODETIC SURVEY

Precise Triangulation, Traverse, and Leveling in North Carolina, by Walter D. Sutelifte and Henry G. Avers. Special Publication No. 101. Prico 25¢.

A Gravimetric Test of the "Roots of Monntains" Theory, by William Bowie. Serial No. 291.
Aerial Survey of the Mississippi River Delta, by G. C. Mattison. Serial No. 271. Price 10¢.

## LIGHTHOUSE SERVICE

Buoy List, 1924.-Sixth District, Cape Lookout to Hillsboro Inlet (corrected to Septernber 1). Irice 20\&.

# DEPARTMENT OF COMMERCE 

HERBERT HOOVER, Secretary of Commerce

## bureau of THE CENSUS

William M. Steuart, Director<br>Chief functions

The taking of the decennial census covering population, agriculture, manufactures, mines and quarries, and forest products. Decennial report of national wealth, public debt, and taxation, including principal financial statistics of Federal, State, county, city, and township governments.

Annual financial statistics of State and municipal governments, including sources of revenue, objects of payments, debt, tax levics.

Decennial statistics relating to inmates of institutions, including paupers, insane, prisoners, and juvenile deliquents.

A quinquennial census of agriculture, a biennial census of manufactures, a quinquennial census of electrical public utilities, Including electric railways, light and power stations, telephones, telegraphs, etc.

Annual statistics of births, deaths, marriages, and divorces.
Quarterly statistics of leaf tobacco stocks and of production, stocks, and consumption of fats and oils.

Monthly or semimonthly statistics of cotton ginning; cotton stocks and consumption; the production, stocks, and consumption of hides and leather; the production of shoes; and statistics of active textile machinery and of production in an increasing number of other industries.
The compilation and publication, in the "Survey of Current Business," of monthly commercial and industrial statistics.

## BUREAU OF FOREIGN AND DOMESTIC COMMERCE

## Julius Klein, Director

Chief functions
The compilation of timely information concerning world market conditions and openinge for American products in foroign countries secured through commercial attachés and trade commissioners of the Department of Commerce and the foreign service of the Department of State. The distribution of such finformation to American business through weekly "Commerce reports," special bulletins, confidential circulars, the news and trade press, correspondence, and personal contact.

The maintenance of commodity, technical, and geographical divisions to afford special service to American export industries.
The compilation and distribution of names of possible buyers and agents for American products in all parts of the world and publication of weekly lists of specific sales opportunities abroad.

The maintenance of district and cooperative offices in 33 cities In the United States to expedite delivery of market information to business men and to keep the departruent adivsed as to the urgent requirements of American trades and industries.

The publication of oflicial statistics on imports and exports.
The study of the processes of domestic trade and commerce, with a view to their improvement and tive dissemination of information obtained for the benefit of the public, as well as of those directly concerned.

## BUREAU OF STANDARDS

## George K. Burgess, Director Chief functions

Custody of standards of measurement, quality, performance, or practice adopted or recognized by the Government. Development and construction of such standardis when necessary. Testing and cailoration of apparatus and comparison of standards used by scientific or other institutions with those in the custody of the burean.
Determination of physical constants and properties of materials.

The testing of materials and establishment of standards and processes in cooperation with commercial firms or organizations.
Industrial researches covering strustural, engincering, and miscellaneous materiats, radio, radium, mechanical appliances, sugar technology, leather, paper, rubber, and textiles; clay products, glass, and refractorics, metals and metallurgy, and similar groups of subjects.
The collection and dissemination of information showing approved methods in building, planning, and construction, includlng building materials and codes and such other matters as may encourage, improve, and cheapen construction and housing.
Studies on simplified commercial practices and establishment of such practices through cooperative business organizations.
The burcau publishes six series of scientific and technical publications, reporting the results of its researches and giving technical data fundamental to industry.
The Director has supervision of the preparation of technical specifications through the Federal Specitications Board.

## BUREAU OF FISHERIES

## Henry O'Malley, Commissioner

Chief functions
The propagation of useful food fishes, including lobsters, oysters, and other shellfish, and their distribution to suitable waters.

Investigations of fish culture, fish diseases, and for the conservation of fishery resources and the development of commercial fisheries.

The study of the methods of the fisheries and fishery industries and the utilization of fishery products.

The collection of statistics of fisheries.
The administration of the Alaska salmon fisheries, the fur-seal herd on the Pribilof Islands, and the law for the protection of sponges off the coast of Florida.

## BUREAU OF LIGHTHOUSES

## George R. Putnam, Commissioner

Chief functions
The establishment and maintenance of lighthouses, lightships, buoys, and other aids to navigation on the sea and the lake coast and on the rivers of the United States, including Alaska, Hawaiian Islands, and Porto Rico.

The publication of Light Lists, Buoy Lists, and Notices to Mariners, including information regarding all aids to navigation maintained by the Lighthouse Service.

## COAST AND GEODETIC SURVEY

## E. Lebter Jones, Director

Chief functions
The survey of the coasts of the United States and the publication of charts needed for the navigation of the adjacent waters, including Alaska, the Philippine Islands, Hawaii, Porto Rico, the Virgin Islands, and the Canal Zone.

A comprehensive geodetic system, extending into the interior, connects and coordinates the surveys of the coasts, and is designed to furnish accurately determined points and elevations in-all parts of the country. These are available as a basis for Federal, State, and municipal surveys, and engineering projects of every kind. The magnetic declination has been determined at a large number of stations throughout the country, and the results are avaitable for the use of surveyors and engineers.

The technical operations include base measures, triangulation, traverse, precise leveling, the determination of latitude and azimuth, the determination of difference of longitude by telegraph or radio, magnetic observations and researches, the preparation of magnetic maps, the determination of the force of gravity, topography, hydrography, deep-sea soundings, water temperatures, tidal and current observations.

The results are published in the form of charts on various scales, annual reports, coast pilots, tide tables (published annuaily in advance), current tables, digests of geodetic publications, and special publications.

## BUREAU OF NAVIGATION

## D. B. Canson, Commissioner

 Chief functionsGeneral superintendence of commercial marine and merchant seamen.

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

The enforcement of the navigation and steamboat inspection laws and the laws governing radio communication, as well as duties connected with fees, fines, tonnage taxes, refunds, etc., originating under such laws.

## STEAMBOAT INSPECTION SERVICE

## George Uhler, Supervising Inspector General

 Chief functionsThe inspection of vessels, the examination and licensing of the officers of vessels, and the administration of laws relating to such vessels and their officers. The certification of able seamen who form the crews of merchant vessels.

The inspection of vessels, including the types of boilers; the testing of all materials subject to tensile strain in marine boilers; the inspection of hulls and of life-saving equipment.
The investigation of violations of the steamboat-inspection laws.


[^0]:    Subscription price of the Survey of Current Business is $\$ 1.50$ a year; single copies (monthly), 10 cents, quarterly issues, 20 cents. Foreign subscriptions, $\$ 2.25$; single copies (monthly issues) including postage, 14 cents, quarterly issues, 31 cents. Subscription price of Commerce Reports is $\$ 4$ a year; with the Survey, $\$ 5.50$ a year. Make remittances only to Superintendent of Documents, Washington, D. C., by postal money order, express order, or New York draft. Currency at sender's risk. Postage stamps or foreign money not accepted.

[^1]:    ${ }_{1}$ At current rate of consuraption.
    At least e3,000,000 tons. No canvass made of consumers for this date.
    Subject to repision.

[^2]:    1 A minus sign ( - ) denotes decrease.

[^3]:    - Fluctuations between marimum and minimum largely due to sessonal pariations.

[^4]:    'This is not necessarily the source of the figures published in the Surver, as many of them are obtanned direct from the compilers prior to publication in the

