# BUSINESS AND FINANCIAL CONDITIONS 

THIRD FEDERAL PHILADELPHIA



## RESERVE DISTRICT

MARCH I, 1923
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## SUMMARY OF BUSINESS CONDITIONS IN THE UNITED STATES

Further increase in the volume of production in basic industries to a level higher than in 1919 or 1920, a continued advance in the prices of many basic commodities, additional borrowing from banks for commercial purposes, and somewhat higher money rates are the principal recent developments in the business situation.

Production in basic industries, as measured by the Federal Reserve Board's index, was 6 per cent higher in January than in December, and

## Production

 reached a volume exceeded only once in the past, in May, 1917. Production of steel ingots and of anthracite coal, and mill consumption of cotton showed particularly large advances, and most other important industries increased their output. Building operations have been maintained on a large scale.The expansion in production during January was accompanied by a substantial increase in freight shipments. Car loadings of forest products, reflecting the continued building activity, reached the highest monthly total on record, and loadings of merchandise and mis-

cellaneous commodities were higher than in any January of the past four years.

Industrial employment continued to increase during January, and shortages of both skilled and unskilled labor were reported by textile mills, steel mills, and anthracite coal mines. More wage increases at industrial establishments were announced than in December. There is still some unemployment in states west of the Mississippi. In industrial and commercial centers there has recently been a larger demand for office workers, although throughout the country there is much unemployment in this group.

The index number of the Bureau of Labor Statistics, computed from the wholesale prices of about 400 commodities, including finished and semi-fin-

## Prices

 ished products as well as raw materials, showed the same average level of prices in January as in November and December. Between December and January the prices of clothing, fuel, metals, building materials, chemicals and house furnishings advanced, but these advances were accompanied

by declines in farm products and food, so that the combined index remained unchanged. During recent weeks the prices of a number of basic commodities advanced rapidly and in many cases reached the highest points since 1920 or the early part of 1921. Among commodities reaching new high levels for the current movement were corn, beef, cotton, wool, silk, hides, lumber, rubber, linseed oil, copper, lead and pig iron.

An active distribution of goods for this season of the year is indicated by reports to the reserve banks both of wholesale and retail dealers for the month of

## Trade

 January. Sales of department stores in over 100 cities were 12 per cent larger than in January, 1922. Inventories for January show that there has been no large increase in stocks of goods held by department stores, and the rate of turnover continued rapid. In wholesale lines there were particularly large sales during January of dry goods, drugs, hardware, and farm implements.The larger volume of commercial borrowing at member banks in recent weeks has been contrary to the usual

## Bank

credit trend of the season. Commercial loans of reporting member banks on February 14 were $\$ 243,000,000$, or 3 per cent larger than at the end of December, and 7 per cent above the level

at the end of July, when the general demand for credit first showed an upward turn.

This increased demand for credit at the member banks has resulted recently in an increased volume of borrowing by the member banks at the reserve banks, chiefly Boston, New York, and Philadelphia. On February 21, the loans to member banks were $\$ 628,000,000$ or $\$ 248$,000,000 higher than in mid-summer. During the same period the volume of Government securities and bankers' acceptances held by all Federal reserve banks declined $\$ 160,000,000$, resulting therefore in a net increase of $\$ 87,000,000$ in the loans and security holdings of the reserve banks. The volume of Federal reserve notes in circulation, which showed the usual post-holiday decline in January, began to increase on January 31, a week earlier than last year.
Money rates also showed a tendency to become firmer, especially in recent weeks. The open market rate for commercial paper, which was 4 per cent last summer, rose during February from a range of $41 / 4-41 / 2$ to a range of $43 / 4-5$ per cent.

On February 23 the discount rate on all classes of paper at the Boston and New York reserve banks was advanced from 4 to $41 / 2$ per cent.

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THE business situation during February has been featured by large orders for almost all commodities, by heavy production and by further advances in price. During the first two weeks of the new year there was a slight decline from the marked activity of the close of 1922, but as the month progressed, the buying activity steadily expanded and continued to do so in February. Indeed, the demand for some goods has become so strong that for the first time since the beginning of the readjustment period in 1920 their markets are in the sellers' favor. Most of the business is for delivery within the next few months, and in many cases it is greater than producers can handle in the desired time. A large volume of orders for shipment next fall has also been booked, but because of uncertainties as to future prices, many manufacturers have refused to accept all of the business offered. As a result of the heavy demand, productive activity is large. Plants in this district, however, are not operating at capacity, because of labor shortage and delays in transportation. The scarcity of unskilled workers in many industries is especially noticeable, and with the approach of spring and the resumption of outdoor activity that will accompany it, the shortage in the factories and mills is expected to become acute. The supply of skilled labor, too, is inadequate. The freight situation has been relieved but little, and delays in receiving raw materials have been a factor in restricting production.

Although these are serious problems, manufacturers are more concerned over the matter of prices. The resistance to higher quotations previously met in certain quarters is becoming stronger, and they fear that further advances may check the present good business. In some lines, it is true, the resistance heretofore noted has disappeared, because of the scarcity of the goods and the great desire to obtain them. But in these cases, the uncertainty as to how high prices will move is causing manufacturers to refuse much of the business for distant delivery that is offered. The index number of all wholesale commodity prices, compiled by the Bureau of Labor Statistics, was the same in January as in December, -156 . But this was only because of decreases in the price of farm products and foodstuffs.

# SUMMARY OF BUSINESS CONDITIONS 

N THE
THIRD FEDERAL RESERVE DISTRICT
for all of the other groups of commodities on which this index is based increased in price. Further, current reports from manufacturers indicate that the February figures for several of these groups will be even higher. The recent advances in quotations on manufactured products is largely a result of increases in raw materials. The index number of 20 basic commodities published weekly by the Federal Reserve Bank of New York averaged 148.4 for December and 150.6 for January. For the weeks ending February 10, 17 and 24 , the respective figures were $153.8,155.5$ and 158.1.

The demand in the iron and steel industry is perhaps greater than in any other. More orders for steel products have been offered than can be handled, for operations are restricted to about 80 per cent of capacity by the transportation and labor situations. The demand for pig iron is not so great as that for steel products, but it also is good, and more business for the second quarter was received during February than was anticipated. Iron and steel prices have continued to advance, and premiums are being paid for prompt delivery. The building outlook is good, and actual construction is larger than is usual at this season of the year. Hence, the demand for all classes of building materials has continued to be brisk. Large sales have been made, not only for immediate delivery, but also in anticipation of spring activity. The Bureau of Labor Statistics' index number of building material prices was 188 in January, as compared with 185 in December, and reports received by this bank during February indicate that the prices of many building materials are still advancing.

In the textile industries the demand as a whole has continued to gain, and prices have advanced. Sales of cotton goods have equalled those in January, and are considerably larger than in February of last year. Cotton yarn sales, however, have been less than in January, because increased prices have met with considerable resistance. Both woolen and worsted yarns and cloths have been in greater demand than during January, and the call for silk goods has increased considerably since the middle of that month. Most of the business in silk goods has been for early delivery, but many sales of fall goods have also been made. So

## SYNOPSIS OF BUSINESS CONDITIONS

COMPILED AS OF FEB. 23, 1923

| Business | Demand | Prices | Finished Stocks | Labor Situation |  | Collections |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | SUPPly | Wages |  |
| Bricks | Good | Firm | Light | Sufficient | Unchanged | Good |
| Chemicals | Fair to good | Firm | Light, decreasing | Some scarcity | Unchanged | Fair to good |
| Cigars | Good | Firm | Moderate | Some scarcity | Unchanged to higher | Good |
| Coal, anthracite | Excellent | Firm | Light | Some scarcity | Unchanged | Fair to good |
| Coal, bituminous | Fair | Declining | Moderate | Sufficient | Unchanged | Fair |
| Coke | Good | Declining | Light | Some scarcity | Unchanged | Good |
| Cotton goods | Fair to good | Higher | $\begin{aligned} & \hline \text { Light, } \\ & \quad \text { decreasing } \\ & \hline \end{aligned}$ | Scarcity | Some advances | Good |
| Cotton yarns | Fair | Firm | Moderate |  |  | Good, slower |
| Drugs, wholesale | Good | Higher | $\begin{aligned} & \hline \text { Light to } \\ & \text { moderate } \end{aligned}$ |  |  | Fair |
| Drygoods, wholesale | Fair to good | Higher | $\begin{gathered} \hline \text { Normal, } \\ \text { increasing } \\ \hline \end{gathered}$ |  |  | Good |
| Electrical supplies | Good | Firm or higher | Moderate | Sufficient | Unchanged | Fair |
| Floor coverings | Excellent | Firm | Light | Sufficient | Unchanged | Good |
| Furniture | Good | Firm or higher | Moderate | Scarcity, skilled | Unchanged to higher | Fair to good |
| Groceries, wholesale |  | Generally higher | Moderate, decreasing |  |  | Poor |
| Hardware, wholesale | Good | Firm or higher | Light |  |  | Fair |
| Hosiery, full-fashioned | Fair | $\begin{aligned} & \text { Firm to } \\ & \text { slightly lower } \end{aligned}$ | Moderate | Sufficient | Unchanged to higher | Fair to good |
| Hosiery, seamless | Fair | Firm to higher | Moderate | Some scarcity | Unchanged to higher | Fair to good |
| Iron and steel | Good | Firm or higher | Light | Scarcity, unskilled | Unchanged to higher | Fair to good |
| Leather, belting | Good | Firm | Moderate | Some scarcity | Unchanged to higher | Good |
| Leather, heavy | Good | Firm | Heavy | Sufficient | Unchanged to higher | Good |
| Leather, upper | Fair to good | Firm | Moderate | Sufficient | Unchanged | Good |
| Lumber | Excellent | Firm to higher | Moderate | Some scarcity | Unchanged to higher | Good |
| Paint | Good | Firm to higher | Moderate | Sufficient | Unchanged | Fair |
| Paper | Very good | Higher | Light | Scarcity, unskilled | Unchanged to higher | Fair to good |
| Paper boxes | Good | Firm or higher | $\begin{aligned} & \hline \text { Light, } \\ & \text { increasing } \end{aligned}$ | Scarcity, skilled | Unchanged to higher | Fair to good |
| Rubber tires | Good | Higher | Moderate | Some scarcity |  | Poor |
| Rubber, mechanical goods | Fair | Higher | $\begin{aligned} & \text { Normal to } \\ & \text { light } \end{aligned}$ | Scarce | Unchanged | Fair |
| Shoes, manufacture | Good | Firm | Normal | Some scarcity | Unchanged | Fair to good |
| Shoes, retail | Fair | Firm | Normal |  |  | Fair to good |
| Shoes, wholesale | Fair | Firm | Normal |  |  | Fair to good |
| Silk goods | Fair, improved | Firm | Light, decreasing | Some scarcity | Unchanged | Good |
| Underwear, heavy weight | Good | Firm to higher | Normal | Sufficient | Unchanged | Fair to good |
| Underwear, light weight | Good | Firm to higher | Normal | Sufficient | Unchanged | Fair to good |
| Woolen and worsted goods | Good | Higher | $\begin{aligned} & \hline \text { Light, } \\ & \text { decreasing } \end{aligned}$ | Scarcity | Some advances | Fair |
| Woolen and worsted yarns | Good | Higher | $\begin{aligned} & \text { Light, } \\ & \text { decreasing } \end{aligned}$ | Scarcity | Higher | Fair to good |

large has been the demand that the production of silk goods is proceeding at a higher rate than at any time since 1920; indeed, some mills are working overtime. No large increases in the price of silk goods have occurred, because of the resistance offered by jobbers and retailers. Business in the hosiery industry has improved considerably over that of January, and the demand for underwear has been large. Manufacturers of the better grades of carpets and rugs have for some time been sold up for the balance of the season, and linoleum manufacturers are over-sold.

Shoe sales during February were heavy, and by the second week of the month most of the manufacturers in this district had booked all the orders they could fill for pre-Easter delivery. As a result, the leather markets have been very active, but increases in price have been only slight.

Paper manufacturers reported that the demand fell off somewhat in January, but it has improved considerably since that time and is now very good. Operations in the paper mills are proceeding at as close to capacity as the labor supply will permit. The turnover of unskilled labor in the paper industry has been especially high, and in an effort to retain the workers, wages have been raised to the level prevailing in other industries. Paper box manufacturers also report an increased demand, but with them too the labor situation is retarding operations.

In the cigar industry the demand has been larger than in February of last year, but has declined since January. Operating schedules, however, have not been reduced, and stocks are increasing slightly. But prices are unchanged. Heavy spring business in rubber tires is reported, and prices have advanced because of the increased cost of raw rubber and cotton. Also, chemical manufacturers report a stronger demand for their products.

## INDEX NUMBERS OF EMPLOYMENT AND WAGES

The problem of labor supply and wages has become of increasing, and in some industries of paramount, importance as a result of the rapid expansion that has occurred in industry and employment since 1921. But since little accurate and adequate information on the labor situation in this district has been available in the past, the Philadelphia Federal Reserve Bank has undertaken the construction of index numbers of employment and wages in the Third Federal Reserve District. The first results of this study, which are given in the accompanying tables, were compiled from the reports of 244 manufacturing firms in the district, which in January employed a total of 105,516 operatives. The tables show general industrial employment in reporting plants in the district and in each of the cities listed ; also, employment and wages in the various industries in January, 1923, as compared with the monthly averages
of 1922. It is significant that in practically all of the industries and cities mentioned both employment and wages are considerably higher than they were in 1922.

| Wages and employment in principal industries January, 1923 <br> Third Federal Reserve District |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Industries | Weights | Weekly wages |  | Employment |  |
|  |  | Average | $\begin{gathered} \text { Index } \\ \text { numbers } \\ \text { (Average } \\ 1922=100) \end{gathered}$ | $\left\|\begin{array}{c} \text { Number } \\ \text { of oper- } \\ \text { atives } \end{array}\right\|$ | $\left\lvert\, \begin{gathered} \text { Index } \\ \text { numbers } \\ \text { (Average } \\ 19222=100) \end{gathered}\right.$ |
| All industries | 100 | \$24.21 | 109 | 105,516 | 118 |
| Iron and steel products ..... | 12 | 26.98 | 131 | 15,916 | 120 |
| Foundries and machine shops. | 10 | 24.94 | 110 | 4,693 | 109 |
| Locomotive and car construction and repair | 17 | 26.38 | 110 | 18,512 | 169 |
| Shipbuilding .... | 4 | 25.22 | 98 | 9,527 | 112 |
| Automobiles and parts | 1 | 26.91 | 107 | 3,841 | 132 |
| Silk goods . | 11 | 18.74 | 110 | 7,290 | 105 |
| Cotton goods | 3 | 21.42 | 102 | 6,338 | 105 |
| Worsteds | 4 | 19.39 | 100 | 5,497 | 98 |
| Knit goods | 10 | 17.20 | 102 | 4,074 | 100 |
| Clothing .. | , | 19.10 | 105 | 2,896 | 99 |
| Boots and shoes. | 3 | 19.14 | 105 | 2,340 | 105 |
| Leather ......... | 4 | 23.61 | 109 | 5,719 | 105 |
| Tobacco products | 6 | 13.77 | 88 | 2,280 | 106 |
| Sugar refining... | 1 | 26.67 | 99 | 2,042 | 88 |
| Paper and pulp.. | 2 | 22.56 | 121 | 1,459 | 107 |
| Printing and publishing | 2 | 34.97 | 109 | 3,761 | 101 |
| Glass ........ | 2 | 24.89 | 109 | 427 | 117 |
| Chemicals and paints.... ... | 1 | 29.20 | 113 | 3,860 | 126 |
| Petroleum refining ............ | 1 | 23.35 | 107 | 5,044 | 104 |

At present, nineteen of the leading manufacturing industries in the district are represented in this index, and at some future date certain other important in-dustries-notably, the baking, slaughtering and meat packing, flour milling, confectionery and ice cream, electrical machinery, and coke industries-will be included. Those now comprising the index, however, are of such importance that the index numbers should be fairly representative of employment and wages in the factories of the Third Federal Reserve District. According to the 1919 Census of Manufacturers, these twenty industrial groups employed over 500,000 , or over half the total industrial operatives of the district. The total value of products manufactured by them in that year was $\$ 3,160,883,000$, or 61 per cent of the total for the district.

The base used in the preparation of the index of employment for each manufacturing group was the average employment in 1922 of the firms reporting in that industry. In other words, employment in January is represented as a percentage of the average monthly employment in 1922, the latter being considered as 100 . Thus the 23 firms included in the

| Employment in reporting plants in principal cities January, 1923 <br> Third Federal Reserve District |  |  |  |
| :---: | :---: | :---: | :---: |
| Cities | Number of reporting firms | Number of operatives | $\begin{gathered} \text { Index numbers } \\ \text { (Average } \\ 1922=100) \end{gathered}$ |
| Philadelphia | 97 | 57,388 | 122 |
| Reading | 14 | 7,213 | 123 |
| Allentown | , | 1,296 | 105 |
| Camden | 8 | 4,583 | 96 |
| Harrisburg | 8 | 2,584 | 111 |
| Scranton .. | 8 | 1,292 | 115 |
| Williamsport | 7 | 860 | 103 |
| Wilmington | 7 | 2,956 | 105 |
| York .. | 7 | 568 | 100 |
| Chester | 6 | 4,299 | 105 |
| Pottstown | 4 | 1,194 | 109 |
| Wilkes-Barre | 4 | 813 | 106 |
| Bethlehem | 3 | 307 | 114 |
| Easton | 3 | 685 | 98 |
| Hazleton | 3 | 2,350 | 120 |
| Lancaster | 3 | 1,626 | 115 |
| Norristown | 3 | 639 | 112 |
| Trenton | 3 | 659 | 102 |
| All other | 47 | 14,204 | 110 |
| Total | 244 | 105,516 |  |

iron and steel group reported a total employment of 15,916 in January, 1923, and an average monthly employment of 13,274 in 1922. Hence the index of employment in the iron and steel industry is the quotient of 15,916 divided by 13,274 or 120 . The other group index numbers are calculated in the same manner, and the final index of industrial employment is a weighted average of the twenty group-index numbers. The weights used in calculating the final index represent the approximate relative importance of each industry as measured by the number of workers engaged in it in 1919. Thus the weight assigned to the iron and steel industry, 12 , represents the percentage which the number of workers in that industry is of the total number employed in all the industries included in the index. In the same manner the weight assigned to each industrial group represents its proportion of the total employment. The index numbers of wages were calculated in the same manner as those for employment, and the final index is a weighted average of the group index numbers.

The present index numbers, it must be noted, represent employment and wages not in general but in manufacturing industries only. Eventually, indices will be constructed and published for each of the other important occupations of the district, viz., mining and quarrying, transportation, agriculture, and miscellaneous occupations. These various indices will thus reflect labor and wage conditions in each of the important branches of industry and commerce, and the final combined index will represent those conditions in the whole Third Federal Reserve District.

## FINANCIAL CONDITIONS

In the four weeks ending February 14 total loans and discounts of reporting member banks in the Third Federal Reserve District decreased from 592 to 591 millions, owing to a decrease in secured loans of 5 millions and an increase in commercial loans of 4 millions. Investments declined from 318 to 306 millions and total deposits decreased from 810 to 788 millions.

The Federal Reserve Bank of Philadelphia reports a material increase in discounted paper in the four weeks ending February 21, but little change in holdings of purchased bills and United States securities. Note circulation moved upward, deposits and reserves decreased, and the reserve ratio declined from 76 to 70 per cent. Comparative figures in millions of dollars follow:

| ( 000,000 's omitted) | February 21 | January 24 |
| :---: | :---: | :---: |
| Discounted bills | 58 | 41 |
| Purchased paper | 26 | 26 |
| U. S. securities.. | 29 | 29 |
| Total earning assets. | 113 | 96 |
| F. R. notes. | 205 | 197 |
| Total deposits | 116 | 121 |
| Total reserve | 225 | 242 |

Following a period of low activity in January, the stock market in February has shown much greater activity and higher prices. The average

## Securities

 of 20 industrial shares now stands at $\$ 103.56$, slightly above the peak of last October; and the average of 20 rail shares is only a few points below the high point then attained. Up to the 20th of February there were eleven days on which sales totaled more than a million shares, as compared with but three in the whole month of January. Bond prices and sales are practically the same as they were a month ago.Comparative statistics follow:


[^0]Savings deposits in 80 reporting banks in this district increased from $\$ 436,122,000$ on January 1 to $\$ 442,083,000$ on February 1, or 1.4 per

## Savings deposits

 cent. That this is usual is indicated by the fact that in the three preceding years of which we have record, January was marked by gains. In 1921 and 1922 developments later in the year carried deposits downward, as the chart shows:

Source-Reports of 80 savings banks to the Federal Reserve Bank of Philadelphia
Comparative data by cities follow:

| Savings deposits in the Third Federal Reserve District (80 banks) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\left.\begin{gathered} \text { Number } \\ \text { of } \\ \text { reporting } \\ \text { banks } \end{gathered} \right\rvert\,$ | Per cent increase or decrease February 1, 1923, compared with |  |  |
|  |  | $\begin{aligned} & 1923 \\ & \text { January } \end{aligned}$ | $\begin{aligned} & 1922 \\ & \text { February } \end{aligned}$ | ${ }_{\text {February }}{ }^{1921}$ |
| Altoona | 5 | $+3.2$ | +11.8 | $+12.0$ |
| Chester | 5 | +2.5 | + 4.4 | - 10.5 |
| Harrisburg | 4 | +1.9 | +60.4 | +103.3 |
| Johnstown | 6 | +2.0 | +3.7 | $-.1$ |
| Lancaster | 3 | +5.6 | +32.1 | + 45.8 |
| Philadelphia | 9 | +1.7 | +3.5 | + 4.3 |
| Reading ... | 3 | $-.6$ | +9.4 | + 10.4 |
| Scranton | 6 | -4.5 | - 9 | + 12.9 |
| Trenton | 6 | $+2.7$ | + 7.7 | + 5.1 |
| Wilkes-Barre | 5 | +1.7 | -3.8 | + 12.0 |
| Williamsport | 4 | +2.1 | $+11.1$ | + 12.8 |
| Wilmington . | 5 | +1.4 | +13.2 | +13.7 |
| York .. | 5 14 | +4.4 +1.6 | +15.7 $+\quad 9$ | +22.4 +10.6 |
|  |  |  |  |  |
| Total | 80 | $+1.4$ | + 4.2 | + 6.5 |

Sales of commercial paper in this district during February have been disappointingly small, and in the

## Commercial paper

 New York district also business has fallen off. Dulness in these larger eastern markets, combined with the greatly increased demand for money for commercial purposes both from the banks and from the open market, has caused paper rates to advance steadilyduring the month. The middle western districts, Chicago especially, have been active buyers and are still purchasing at $4 \mathrm{t} / 2$ per cent. The south, too, has entered the market and has taken more paper than in many months. But large as they are these markets have not been able to absorb the increasing offerings, and brokers' lists are now of considerable length. By about February 1, offerings at $41 / 4$ per cent had disappeared, and by the middle of the month, although $41 / 2$ per cent names were on dealers' lists, no sales could be made in this market at less than $43 / 4$ per cent, and some strictly high-grade names were offered at 5 per cent. Higher rates have proved to the liking of the country banks, and although buying by them has not been large because of the better demand from their customers, they are now more interested in paper than during the past few months.

During January the sales by six reporting firms in the Third Federal Reserve District were $\$ 9,447,000$. Of this sum, Philadelphia banks purchased $\$ 4,527,500$ and out of town institutions bought $\$ 4,919,500$. Total sales were the largest for any month since May, 1922, when they amounted to $\$ 9,588,000$; and as compared with December, they increased 40 per cent.
Five dealers reported sales for January, 1922, and in that month sold $\$ 5,943,515$ as compared with $\$ 6,836$,500 in January, 1923, a gain of 15 per cent. Sales were made approximately as follows:

> 10 per cent of total at $4 \mathrm{I} / 4$ per cent 60 per cent of total at $41 / 2$ per cent 20 per cent of total at $43 / 4$ per cent 10 per cent of total at 5 per cent

The demand for bankers' acceptances has improved during the past month, but sales of bills originating in

## Bankers' acceptances

 this district have been restricted by the small amount available. Twelve of the principal accepting banks in this district report the amount executed during the month ending February 10 as $\$ 3,764,000$, as against $\$ 5,007,000$ in the same period last year. But this small sum is insufficient to care for the demand here, as the Federal Reserve Bank alone purchased $\$ 18,725,000$ in the month ending February 10.Average weekly sales in the four weeks ended February 11 , as reported by five dealers operating in the district, again increased, but purchases largely declined. The Federal Reserve Bank continues to be the principal purchaser. Weekly averages follow:

| (000's omitted) | Purchases | $\begin{gathered} \begin{array}{c} \text { Sales } \\ \text { to } \\ \text { F. R. Bank } \end{array} \end{gathered}$ | $\begin{aligned} & \text { Sales } \\ & \text { to } \\ & \text { others } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: |
| Weekly average for period from- |  |  |  |  |
| Jan. 15 to Feb. 11....... | \$299 | \$2,815 | \$135 | \$2,950 |
| Dec. 17 to Jan. 14....... | 861 | 2,237 | 236 | 2,473 |
| Nov. 13 to Dec. 16....... | 224 | 1,670 | 605 | 2,275 |
| Oct. 16 to Nov. 12....... | 919 | 1,483 | 284 | 1,767 |
| Sept. 17 to Oct. 15....... | 336 | 1,317 | 132 | 1,449 |

The exporting of grain and cotton, the importing of silk, wool, and coffee, and the storage of cotton and sugar, account for many of the acceptances executed recently. Toward the close of January rates declined slightly, but soon returned to 4 per cent bid and $4 \mathrm{I} / 8$ per cent offered, for bills up to 90 days and they have since remained at that point.

During the past month the foreign exchanges have been largely affected by political conditions, and some

## Foreign exchange

 of them have lost several points. Sterling changed very little during the latter part of January, but early in February, following the announcement of the acceptance of the American debt funding terms by the British, it advanced, and upon the ratification of these terms by Congress, rates continued upward and have recently touched $\$ 4.7154$-the highest point since the "peg" was removed in March, 1919. The accompanying chart

Sterling is now higher than at any time since March, 1919, when the British government removed its support from the foreign exchange market. Francs have dropped considerably since the occupation of the Ruhr in January, and are now near the low point touched in 1920. Quotations on German marks were not available before July, 1919
Sources-"Commercial and Financial Chronicle" and the Federal Reserve Bank of New York
shows the fluctuations of sterling, French francs, and marks since 1919. It will be remembered that during the greater part of the war both British and French exchanges were "pegged" at slightly below par. German rates were not quoted in New York from the time the United States entered the war until July, 1919.

Since the occupation of the Ruhr, French, Belgian and German rates have weakened considerably. On January 31, marks touched $\$ .000021$, or about 50,000 marks to a dollar. After that date, however, heavy purchases by the German Government caused the rates
to stiffen, and on February 15 they were quoted at $\$ .000051$, which represented a gain of over 100 per cent in two weeks. French and Belgian francs touched low points on January 31 also, the French rate being $\$ .0582$, and Belgian $\$ .0512$, both new low points in the recent movement. Since the beginning of February these rates too have advanced, although they are still near the low point touched in 1920. Lire, on the other hand, have been quite steady, varying but little from $\$ .0480$.

The former neutral exchanges fluctuated somewhat in sympathy with sterling, but on the whole showed little change during the month. It is reported that the Bank of Sweden has been buying heavily in order to keep kroner at par, and that it has accomplished its purpose is evidenced by the fact that at no time since kroner ceased selling at a premium on January 26 have they been lower than one per cent under par.

Although the Far Eastern and South American exchanges on the whole have been steady, Chilean pesos are quoted at about one cent below last month's rate. Indian rupees, on the other hand, advanced somewhat in late January and on the twenty-fourth touched the highest point since the war. A certain amount of gold has been shipped to India, and although various explanations for this movement have been offered, it seems likely that the present favorable trade balance of that country is the most important.

The table below shows comparative rates for the principal foreign exchanges:

Foreign exchange rates

| (Noon cables) | $\underset{\substack{\mathrm{Par} \\ \text { value }}}{ }$ | $\left.\right\|_{1923} ^{\text {February }} 20,$ | $\begin{gathered} \text { January } 19, \\ 1923 \end{gathered}$ | $\begin{gathered} \text { February } 20, \\ 1922 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| London | \$4.8665 | \$4.7154 | \$4.6619 | \$4.3919 |
| Paris | . 1930 | . 0609 | . 0665 | . 0915 |
| Antwerp | . 1930 | . 0536 | . 0606 | . 0670 |
| Milan | . 1930 | . 0483 | . 0478 | . 0504 |
| Berlin | . 2382 | . 000042 | . 00005 | . 004424 |
| Vienna | . 2026 | . 000014 | . 000014 | . 000241 |
| Amsterdam | . 4020 | . 3968 | . 3959 | . 3800 |
| Copenhagen | . 2680 | . 1931 | . 1941 | . 2078 |
| Stockholm | . 2680 | . 2665 | . 2689 | . 2651 |
| Madrid | . 1930 | . 1568 | . 1559 | . 1589 |
| Berne | . 1930 | . 1891 | . 1867 | . 1949 |
| Buenos Aires | . 9648 | . 8425 | . 8417 | . 8337 |
| Shanghai | . 7082 | . 7135 | . 7221 | . 7115 |

## RETAIL TRADE

Retail trade continues to expand, and preliminary reports for February indicate that sales are running considerably ahead of those of a year ago. Prices at retail show as yet little change, but they always ad-
vance somewhat later than manufacturers' and wholesale prices, and it therefore seems probable that recent increases in many quotations at the factories have not had sufficient time to be reflected in final prices to the consumer.

Household furnishings of all kinds continue in heavy demand, and a scarcity is reported in the supply of Wilton rugs of the highest grade. Women's wear in fashionable lines has sold remarkably well for this season of the year, and indeed most lines have shared in the increased sales as compared with February, 1922. The higher prices asked by manufacturers of men's outer wear for next autumn and for shirts are reported to have curtailed, in some measure, purchases by retailers. Stocks of merchandise in the hands of most retail stores, although heavier than they were a year ago, are not large. The following table shows that orders outstanding are likewise larger than at this time last year.

Orders outstanding on the last day of the month compared with total purchases during the previous calendar year
(Compiled from the reports of retail stores in the Third Federal Reserve District)

|  | 1921 | 1922 | 1923 |
| :---: | :---: | :---: | :---: |
| January | 4.5\% | 8.3\% | 11.6\% |
| February | 7.4 " | 8.0 " |  |
| March | 7.3 " | 6.8 " |  |
| April | 7.8 " | 6.2 " |  |
| May | 7.0 " | 6.1 " |  |
| June | 7.5 " | 7.3 " |  |
| July | 7.8 " | 8.7 " |  |
| August | 8.7 " | 9.0 " |  |
| September | 7.1" | 9.0 " |  |
| October | 7.2 " | 9.5 " |  |
| November | 6.8 " | 8.1 " |  |
| December | 5.9 " | 8.0 " |  |

During January, sales throughout the district made a most encouraging gain of 15.3 per cent, as compared with January, 1922. From the anthracite region col-

Condition of retail trade during January, 1923

|  | Comparison of net sales |  | Comparison of stocks |  | Rate of turnover* |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Jan., } 1923 \\ \text { with } \\ \text { Jan., } 1922 \end{gathered}$ | $\begin{gathered} \text { Jan. } 1 \text { to } \\ \text { Jan. } 31,1923 \\ \text { with } \\ \text { Jan. } 1 \text { to } \\ \text { Jan. } 31,1922 \end{gathered}$ | $\begin{aligned} & \text { Jan. } 31,1923 \\ & \text { with } \\ & \text { Jan. } 31,1922 \end{aligned}$ | $\begin{aligned} & \text { Jan. } 31,1923 \\ & \text { with } \\ & \text { Dec. } 31,1922 \end{aligned}$ | $\begin{gathered} \text { Jan. } 1 \text { to } \\ \text { Jan. } 31, \\ 1923 \end{gathered}$ | $\begin{gathered} \text { Jan. } 1 \text { to } \\ \text { Jan. } 31, \\ 1922 \end{gathered}$ |  |
| All reporting firms (138)..... Firms in-Philadelphia ....... -Allentown, | $\begin{aligned} & +15.3 \% \\ & +13.9 \end{aligned}$ | $\begin{aligned} & +15.3 \% \\ & +13.9 \end{aligned}$ | $\begin{aligned} & +4.9 \% \\ & +1.7 \% \end{aligned}$ | $\begin{aligned} & -.8 \% \\ & -1.1^{\prime} \% \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 3.8 \end{aligned}$ | $\begin{aligned} & 2.8 \\ & 3.5 \end{aligned}$ | $\begin{aligned} & 11.6 \% \\ & 12.0 \text { " } \end{aligned}$ |
| Bethlehem \& Easton <br> -Altoona <br> -Chest | $\begin{aligned} & +20.7 " \\ & +17.1 " \\ & +43.8 " \end{aligned}$ | $\begin{aligned} & +20.7 " \\ & +17.1 " \end{aligned}$ | +2.1" | +5.6" | $\begin{aligned} & 2.5 \\ & 2.7 \end{aligned}$ | 2.0 2.3 | 10.3 " |
| - Haster ........... | + +17.7 " | +17.7 " | +28.1" | - 2.3 " ${ }^{\text {c }}$ | $\dddot{2.7}$ | $\dddot{2.7}$ | ....... |
| -Johnstown ....... | +23.2" | +23.2" | +10.2" | + .8"" | 2.9 | 2.6 |  |
| - Lancaster | +24.9" | +24.9" | +10.3" | + 6.3" | 2.4 | 2.1 | 13.2 " 9.8 |
| -Reading .......... | +18.4" | +18.4" | + 9.0" $+220 "$ | +1.8" | 2.0 | 1.8 | 9.8 " |
| -Scranton .......... | +14.8" | +15.8" | $\pm 22.9{ }^{\prime \prime}$ | -3.6" | 2.6 | 2.5 2.3 | . |
| -Wilkes-Barre .... | $+10.2^{\prime}$ ' | +10.2" | +16.9" | -1.3" | 3.0 | 3.1 |  |
| -Williamsport ...... | +3.3" | +3.3" | + 5.7 " | + 9.4" | 2.3 | 2.5 |  |
| -Wilmington ....... | +27.6" | +27.6" | + .5" | - 2.7 " | 1.3 | . 9 | 5.1 " |
| -York <br> -All other cities. | $\begin{aligned} & +17.9 " \\ & +7.8 " \end{aligned}$ | $\begin{aligned} & +17.9^{\prime \prime} \\ & +7.8 \end{aligned}$ | $\begin{array}{r} -4.6^{\prime \prime} \\ +11.2 \end{array}$ | - $2.8{ }^{\prime \prime}$ | 1.6 | 1.7 | 13.1. ${ }^{\text {\% }}$ |
| All department stores. | +15.2" | +15.2" | + 7.2 " | + 1.6 " | 3.0 | 2.8 | 13.0 " |
| Department stores in Phila.... | +15.2" | +15.2" | + 4.5 " | + 2.2 " | 3.6 | 3.3 | 14.1" |
| Depart. stores outside Phila... | +15.2" | +15.2" | +11.3" | + .7" | 2.4 | 2.3 | 10.9 " |
| ${ }_{\text {All }}$ apparel stores | +11.6" | +11.6" | - 4.8" | -10.8" | 3.6 | 3.3 | 4.9 " |
| cris apparel stores -in Phila..... - outside Phila. | $\begin{aligned} & +15.8^{\prime \prime} \\ & +18.4 \end{aligned}$ | $\begin{aligned} & +15.8 " \\ & +18.4 \end{aligned}$ | $\begin{aligned} & +10.8 " \\ & +\quad .1 " \end{aligned}$ | $\begin{aligned} & -12.3 " \\ & -7.4^{\prime \prime} \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 1.9 \end{aligned}$ | 2.9 | $8.7 \%$ |
| omen's apparel stores -in Phila. <br> -outside Phila....... | $\begin{aligned} & +13.1 " \\ & +8.7 \end{aligned}$ | $\begin{aligned} & +13.1 " \\ & +8.7 \end{aligned}$ | $\begin{aligned} & -16.0^{\prime \prime} \\ & +3.7 \end{aligned}$ | $\begin{array}{r} -15.1 " \\ -6.4 \end{array}$ | $\begin{aligned} & 7.0 \\ & 3.9 \end{aligned}$ | $\begin{aligned} & 5.6 \\ & 3.7 \end{aligned}$ | 4.6" |
| Credit houses | +30.7" | +30.7" | +15.2" | +6.6" | 1.7 | 1.5 | 24.9 " |

[^1]lections are reported to be improving. The miners are paying off the debts contracted during the suspension of operations and, it is expected, will have cleared these up completely within the next few months.
The following chart shows the percentage of the year's business transacted in each month of the years 1921 and 1922 in 54 stores in this district.


The percentage of the annual sales made in each month was smaller during the early months of 1922 but considerably larger during the last four months than in the corresponding months of 1921. March and April should be considered together as Easter was in March in 1921 and in April in 1922.
Source-Federal Reserve Bank of Philadelphia

## WHOLESALE TRADE

Although the volume of sales was less in January than in the preceding month in all our reporting wholesale lines excepting drugs and dry goods, the decline was surprisingly small. This fact, together with the heavy increases over the sales figures for January, 1922, is indicative of the excellent conditions now prevailing.
The trend of collections in wholesale drugs and dry goods is illustrated in the accompanying chart. A comparison of this chart with that which appeared in the article on wholesale trade last month shows that among the four reporting wholesale lines-dry goods, drugs,


Reports received from wholesale dealers in the Third Federal Reserve District show that in both drygoods and drugs, collections improved during March, and grew slower in April. In dry goods, the ratio increased in April, November and December, but in August it declined Source-Federal Reserve Bank of Philadelphia
hardware, and groceries-it was only in dry goods that collections improved during 1922.

Although the amount of business actually booked during February by wholesale shoe dealers for prompt

## Wholesale shoes

 delivery has been light, except by those houses fortunate enough to have rubber goods, the total shipments on account of orders previously taken have been in fair volume, and early estimates indicate that they will be larger than they were a year ago. A particularly encouraging feature of the month's business has been the heavy sales of rubber goods for autumn, for at this time last year they were practically nil. Delivery of shoes coming from the New England factories has been much delayed by the slow freight movement in that section, and wholesalers fear that unless this condition improves, a number of shoes will arrive too late for the Easter season. In men's shoes this condition has been somewhat offset by the fact that certain factories made unusually early shipments against their contracts.Collections are reported by some dealers to be slow,

but others state that the heavy sales of rubber goods by retailers have enabled the latter to pay their bills promptly.

During January, sales by the reporting firms in this district increased 48.9 per cent as compared with those of January, 1922, but decreased 24.7 per cent, as was to be expected, as compared with December, 1922. The ratio of accounts outstanding increased from 241.5 per cent in December to 284.7 per cent in January but is much lower than it was in January, 1922, when it stood at 438.0.

Since the January demand in the wholesale grocery trade is usually dull, the decrease of 4.7 per cent in

## Wholesale groceries

the sales of that month, as compared with those of December, was only to be expected. In fact, for January the
sales were surprisingly good, and greatly exceeded the figures for January, 1922. Since February 1, the demand has somewhat improved, but it is still slow. Many wholesalers have offered 1923 pack tomatoes, corn, and peas for future delivery and have found an encouraging response. The goods that are selling best are canned vegetables on spot, but other staples such as milk, butter, fruits, dried beans, soups, soaps, sardines, coffee, and sugar are moving readily. Sales of sugar have been stimulated by the rising quotation on refined, which after declining to 6.50 cents a pound, advanced sharply.

In the accompanying chart, we give for the first time an index number of wholesale grocery sales, which -hereafter will be published regularly. The index of sales in dollars is charted with the index of wholesale food prices of the Bureau of Labor Statistics, and since both of these indices are presented on the same base,


Both sales and prices have been expressed on the same basis; 1922 averages $=100$. Evidently the smaller volume of sales in 1921 and 1922 as compared with 1920 is attributable largely to the decline in prices
Source-Federal Reserve Bank of Philadelphia

1922 equals 100 , they are comparable. The food-index is not a perfect indicator of wholesale grocery quotations, but it shows that although sales in 1922 were smaller than those in 1919 in dollars, they were larger in physical volume.

Except on sugar, no sharp price changes occurred, but the trend was upward. This is shown by the fact that the advances were twice as numerous as the declines. Articles that increased in price, in addition to sugar, were coffee, dried beans, tomatoes, peas, milk products, and soaps. On the other hand, prunes and raisins have declined in the east, although in the primary markets they are holding firm. The heavy seasonal demand for these goods will probably come in about a month.

As usual in January, wholesale stocks decreased, but the rate was not rapid, and as the canned goods that had been accumulated last fall were disposed of, they were partially replaced by flour and sugar.
Collections are slow, and in the anthracite district are less prompt now than they were during the strike. Wholesalers report that a considerable number of checks are protested, and that customers occasionally deduct the discount for cash even though they do not pay within the discount period. The January ratio of accounts outstanding to sales was 115.6 per cent, as compared with 115.0 for December, and 117.8 per cent for January a year ago.

As in other wholesale lines, the dry goods sales in January were much heavier than those of a year ago,

## Wholesale dry goods

 the percentage of increase being 23.8, and in comparison with those of last December, they showed a 11.1 per cent increase. Except in the anthracite district, the demand for wholesale dry goods is good. Anticipating further price advances, retailers are ordering spring goods for prompt delivery in considerable volume. A few firms report also a large proportion for future delivery. Of the spring wash goods, crepes and ratines are attracting the most attention.Stocks are about normal, but as is customary at this period of the year, they are increasing. However, it is difficult to obtain goods from the mills, and deliveries are further delayed by railroad congestion.

Wholesalers now pay from 10 to 20 per cent more for cotton goods than they did early in the year, and the increase on woolen merchandise has been even heavier.

As shown by the chart on page 10 , collections in dry goods improved during 1922 whereas in drugs, they became slower. They were also better in January than in December, as indicated by the fact that the ratio of accounts outstanding to sales declined from 239.5 per cent for December to 212.4 per cent for January.

Sales in January, as reported by 33 wholesale hardware firms in this district, fell off 15.6 per cent from

## Wholesale hardware

 those of December, but were 33.6 per cent larger than those of January, 1922. The demand is considered good, however, for this season, and factories, mines, and building contractors are still the heaviest buyers. Orders for immediate delivery predominate, but in many instances a fair amount of future business also is being placed. Dealers state that customers frequently want guaranteed prices on certain orders for future delivery, but most wholesalers prefer not to sell under such conditions. Embargoes have continued to hamper the receipt of goods and have also caused some difficulty in shipments. Collections are fair, but that they are slower is shown by a comparison of the ratio of accounts outstanding to sales. This for January was 182.7, as compared with 161.1 for December, and 199.7 for January, 1922.Commencing with this issue we shall print an index of the monthly sales of twenty wholesale hardware firms. The accompanying chart shows this index, together with the Bureau of Labor's price index for metal products. Both of these factors are calculated


Both sales and prices have been expressed on the same basis; 1922 averages $=100$. Evidently the smaller volume of sales in 1921 and 1922 as compared with 1920 is attributable largely to the decline in prices
Source-Federal Reserve Bank of Philadelphia
with 1922 as a base; that is, sales for 1922 and the price index for the same year are taken as 100 per cent. Although it is realized that the price index for metal products is not exactly comparable to wholesale hardware prices, it is believed that metal products quotations are reflected sufficiently in hardware to make the index valuable. It will be noticed that actual sales in 1919 and 1922 were practically the same. As a matter of fact, for the twenty reporting firms there was a difference of only $\$ 1000$ in total sales for the two years. Taking into consideration the higher prices
prevailing in 1919, it is evident that the actual volume in 1922 was considerably larger.

January sales of drugs at wholesale were heavier than those of December and were very much larger

## Wholesale drugs

 than in January, 1922. The current demand is exceptionally good.Stocks are moderately light, but in the case of some items are increasing. However, the arrival of spring merchandise is made slow by freight congestion, and a small percentage of business has been lost because supplies of some items were too short to permit the filling of orders completely.
During the past month the trend of drug prices has been slightly upward, and botanicals that are scarce, such as Spanish saffron flowers, have advanced still higher. The index of 40 botanicals, compiled by the "Oil, Paint and Drug Reporter," advanced to 150.1 for the week ending February 19 from 125.1 for the same week a month previous.
Although in January the ratio of accounts outstanding to sales decreased to 128.1 from 142.4 in December, this improvement is seasonal. However, as shown by the chart on page 10 , payments are now slower than they were two years ago.

## CHEMICALS

The excellent condition of industry in general is reflected in an increased demand for most of the chemicals. With the exception of those producing glazed kid, tanneries are buying chemicals in fair volume, and the textile trade, which now is exceptionally active, is consuming large quantities. Dyes are in good demand, and the excellent condition of the paint industry has increased the orders for many pigments, such as lithopone, to a point never reached before. However, the call for fertilizers is not as strong as it was last year. Nevertheless, the tonnage shipped is increasing as the spring season approaches. Owing to the shortness of their shipping period, fertilizer manufacturers are much concerned over the difficulty of sending shipments to points in New York and New England.

Although fertilizers are being ordered ahead, nearly all orders for chemicals are for spot delivery. Since the French occupation of the Ruhr, foreign inquiries have increased, and potash has attracted attention because of the possible effect of the occupation on its supply.

At this time, stocks of fertilizers are naturally heavy, but supplies of chemicals are light and are decreasing. Plants are operating at about 80 per cent of capacity. The proper kind of skilled help is difficult to obtain, and there is also some shortage of unskilled labor.

In spite of the fact that quotations on ammonium sulphate and nitrate of soda are higher than they were a year ago, prices of mixed fertilizers are a trifle lower. Quotations on industrial chemicals have been stiffen-
ing, as is indicated by the index number of the "Oil, Paint and Drug Reporter," which for the week of February 19 was 439.3 , as compared with 429.8 for the month previous, and 418.7 for the corresponding week a year ago. Owing to the shortage of arsenic, both calcium arsenate and paris green are high in price, and these insecticides threaten to be costly during the coming season. The strongest items at present are the metal derivatives, such as blue vitriol, because of recent advances in the metal market.

Collections are fairly good and are better than they were a year ago.

## IRON AND STEEL

All producers in the iron and steel industry, with the exception of manufacturers of pig iron, have had more business than they could well handle during the past month. Not only are all classes of local consumers in the market for various types of finished and semi-finished steel products, but many inquiries are being received from new customers in the middle west. Pig iron is moving fairly well, and although the aggregate sales have been considerable, there are not as many inquiries for delivery in the second quarter as might be expected at this time of the year. A large amount of business, it is true, has been placed for the second quarter, but there is not the same active market for iron as there is for steel. In many instances the sales made by local steel producers have been so large that they have been obliged to refuse further orders. Manufacturers of various types of machinery are especially busy, and foundries have received substantial orders from railroads, mines, and jobbers. Plate mills, too, have made heavy sales. Unfilled orders of the United States Steel Corporation on January 31 were 6,910,776 tons, or 165,073 tons more than were on the books at the end of December and the largest total for any month since February, 1921.

Production has been maintained at a high level, the average in this district being about 80 per cent of capacity. Pig iron production for January was $3,229,604$ tons, as against $3,086,898$ tons in December. This represents the largest monthly total since October, 1920, when furnaces produced 3,292,597 tons. There was a net gain of 9 active blast furnaces during the month, the number in blast on January 31 being 262, as compared with 253 at the end of December. It is necessary to go back to October, 1920, to find a month in which more furnaces were blowing.
This increase in pig iron production is impressive, but it is not so great as that in steel ingots. Estimates of the American Iron and Steel Institute for the 30 companies which in 1920 produced 87.50 per cent of the total, were $3,251,694$ gross tons or nearly 500,000 tons more than they produced in December, and the largest monthly output since March, 1920. With these striking evidences of high production it might be ex-
pected that exports were increasing, but although more inquiries are being received from abroad than heretofore, exports are still below the level of 1913. It is quite evident then that the large buying movement is confined almost entirely to this country.

Lack of labor continues to curtail production in many instances, and further increases in wages have been announced by certain manufacturers. With the coming of warmer weather an even more serious shortage of both skilled and unskilled labor is expected. Embargoes continue to offer many difficulties, and shippers in some localities are working almost entirely on a permit basis. In certain cases it is said that these conditions make production schedules difficult, as operations must be adjusted to meet shipping facilities.

Quotations on nearly all classes of steel products have advanced during the past month. Iron bars are quoted at 2.475 cents a pound, as against 2.325 a month ago, and plates and beams have increased proportionately. Billets and wire rods are also considerably higher than they were last month, and during the second week of February sheets, nails, and wire advanced, in line with higher quotations on other products. Although pig iron quotations in other districts are higher than they were last month Philadelphia 2X iron is firm at $\$ 29$, furnace. The "Iron Age" composite price on finished steel on February 20 was 2.631 cents, as compared with 2.474 cents on January 16, and the same journal's composite price for pig iron advanced from $\$ 26.33$ to $\$ 27.38$ during the same period.

## BUILDING

Although the estimated value of building permits issued in fourteen cities of the Third Federal Reserve District continued to fall off in January, as is shown in the table on page 14, it was 42 per cent greater than that for the same month in 1922. The fluctuations in the value of permits issued since 1918, both in Philadelphia and in the fourteen cities of the district, are shown on the chart on page 14 . It will be noticed that in spite of the decline in January, the decrease was not so great as it was in the corresponding period of building activity in 1920 .

The open weather during the past month has permitted the continuation of operations, and contractors have consequently been buying more heavily than is customary at this season. Practically all classes of dealers in building materials have made large sales, not only for immediate use but for delivery as soon as the spring activity commences.
Orders for building bricks have been exceptionally large for this period of the year, and many manufacturers have their books well filled for

## Building bricks

 several months ahead. Indeed, in some instances they have been obliged to refuse further orders. Not only has the demand been large for immediate delivery, owing to the open

Estimated value of building permits in 14 cities in the Third Federal Reserve District and in Philadelphia. Although there was a decrease in January, the totals for that month were far above those for the same month during the last five years
Source-Federal Reserve Bank of Philadelphia
weather that has permitted building operations to continue, but exceptional orders for future delivery have also been placed because of the large amount of construction to be started in the spring. To meet this heavy demand manufacturers have attempted to continue operations at capacity, but in spite of all efforts, cold weather and the necessity of closing down for repairs have curtailed operations considerably. Cold weather alone hampers production to some extent, but the greatest difficulty is found in the rains followed by freezing, which make the clay lumpy and cause reduced output. As a result of the curtailed operations and the heavy demand, stocks in general are even lower
than they were a month ago and in many instances are nil.

Prices are unchanged from last month, but present quotations are on the average about 10 per cent above those of the corresponding period of last year. Although there is no surplus of labor, the supply in general is sufficient for the present volume of operations, and no recent wage changes have been reported. Collections continue to be good.

All classes of lumber dealers report exceptionally large sales during the past month, in some cases the totals being two or three times those for

## Lumber

 the same period last year. Demand is well distributed as to source, and not only are retailers and building contractors placing large orders for both immediate and future delivery, but mines, railroads, and factories have also been heavy purchasers. So great has been the demand in some cases that retailers have been willing to accept unseasoned lumber, preferring to have even this kind in their yard rather than risk receiving only a portion of later orders. Certain high grades are becoming increasingly difficult to obtain, and the greater part of the former heavy stock of low-grade lumber has been moved. Although mills have striven to hold up their production, inclement weather has hampered operations considerably. For several weeks reports of mills to the North Carolina Pine Association and the Southern Pine Association have shown orders far in excess of production and shipments. Figures issued by the former association for the four weeks ending February 10 follow :| C | 33,099,044 feet |
| :---: | :---: |
| Shipments | 36,261,366 |
| Orders | 44,508,197 |

Stocks at the mills are quite low, but with dealers in

## Building permits issued and their estimated cost-January, 1923

Third Federal Reserve District

|  | 1923 |  |  | 1922 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Permits | Operations | Estimated cost | Permits | Operations | Estimated cost |
| Allentown <br> Altoona <br> Atlantic City <br> Camden . <br> Harrisburg <br> Lancaster <br> Philadelphia <br> Reading <br> Scranton <br> Trenton <br> Wilkes-Barre <br> Williamsport <br> Wilmington <br> York | $\begin{array}{r} 19 \\ 61 \\ 173 \\ 51 \\ 37 \\ 28 \\ 747 \\ 128 \\ 40 \\ 49 \\ 42 \\ 13 \\ 66 \\ 32 \end{array}$ | $\begin{gathered} 35 \\ 69 \\ 173^{*} \\ 52 \\ 49 \\ 28 \\ 967 \\ 131 \\ 40 \\ 52 \\ 42^{*} \\ 13 \\ 80 \\ 32 \end{gathered}$ | $\$ 107,725$ 141,300 $1,144,564$ 551,798 151,925 238,625 $6,504,100$ 345,925 187,955 84,183 100,933 19,105 149,286 39,720 | $\begin{array}{r} 20 \\ 31 \\ 236 \\ 72 \\ 19 \\ 23 \\ 976 \\ 85 \\ 16 \\ 50 \\ 30 \\ 10 \\ 40 \\ 15 \end{array}$ |  | $\$ 66,900$ 36,362 902,827 339,010 432,625 74,700 $4,411,320$ 141,650 60,925 95,860 93,062 13,210 198,617 10,655 |
| Total for January. | 1,486 | 1,763 | \$9,767,144 | 1,623 | ...... | \$6,576,523 |

[^2]this district, owing to recent heavy orders, they are fair. Manufacturers in this district are operating at capacity unless weather or other obstacles hinder.

Owing to the heavy demand and the decreasing stocks, quotations have continued to advance, and up to the present time have met with little or no resistance. The fear is expressed in some quarters, however, that the steadily rising prices of both materials and labor will act as a check to building operations, and consequently lessen the demand for lumber. But as yet no such condition is noticeable.

The labor situation on the whole is satisfactory, and although a few shortages of skilled labor are reported, the situation is by no means serious. Transportation, too, has improved, the only difficulties at present being embargoes to some points in New England and other northern states.

Collections in some cases are slow, but in general they have improved and may be classed as good.

Dealers in electrical supplies report a good demand for practically all of their products. Especially notice-

## Electrical supplies

 able are the heavy sales of radio equipment, which, following a slump in the summer and autumn, have increased tremendously. Sales of this equipment have been so large that many dealers have practically no stocks and are making strenuous efforts to obtain further supplies from manufacturers. Specialties such as toasters, grills, and washing machines are moving well for this season of the year, and although this is usually a dull period, materials for wiring houses and buildings are in good request. Contractors, too, report that the volume of work is large, although competition is extremely keen and many jobs have been taken at cost or less.With the exception of radio equipment, supplies are fairly easy to obtain, although some dealers state that transportation conditions have delayed the receipt of some of their orders. In the majority of cases stocks are light, owing to the heavy sales. Prices for insulated wire, conduit pipe, and for supplies manufactured from iron and steel, are slightly higher than they were a month ago, but quotations on specialties are for the most part unchanged. The advances that have taken place have met with little or no resistance.

Collections vary from fair to good and show some improvement during the past month.

Paint manufacturers report one of the best months for this season in years, and sales to all classes of consumers have been large. Especially noticeable is the increasing demand from industries. Some orders

## Paint

 have been accounted for by the fact that manufacturers raised their prices last month and gave dealers the opportunity of placing one order at the old quotations. Furthermore, it is the custom in the trade to sell goods at this time with April-first dating, and many dealers have taken advan-tage of these terms to build up their stocks for spring business. Practically all factories are operating at capacity in order to meet the heavy demand and to keep up their reserves. At present, stocks are about normal, but they are decreasing. Raw materials continue to advance and force up the costs of production. Lead in oil is now quoted at $\$ 12.82$ a hundred pounds. This is, of course, a reflection of the recent advances in the quotations on pig lead, which is now being offered at .08 cents, New York, and .078 cents, East St. Louis, as against .0470 and .0440 respectively at this time last year. Linseed oil, too, is higher, recent quotations being $\$ 1.01$ a gallon by the barrel.

No labor shortages are reported and there have been no wage changes in recent weeks. The transportation situation is causing little or no trouble. Collections are from fair to good, although some difficulty is reported in the rural districts.

## COAL

Both domestic and steam sizes of anthracite continue to move quickly, and despite the high level of production, it has so far been impossi-

## Anthracite

 ble to attempt any storage. In some anthracite circles it is thought that the lower quotations on bituminous coal will to a certain extent curtail the consumption of steam sizes, and that as a result operators will be able to start storing some buckwheat and rice before many weeks.Production has been maintained at slightly over $2,000,000$ tons a week, which is considerably better than that for the same period last year. Estimated output for the four weeks ending February 10 and for the corresponding weeks in 1922 was as follows:

| (In net tons) |  |  |
| :---: | :---: | :---: |
| Week ending | 1923 | 1922 |
| January 20. | 2,010,000 | 1,443,000 |
| January 27. | 2,119,000 | 1,607,000 |
| February 3 | 2,056,000 | 1,811,000 |
| February 10. | 2,023,000 | 1,822,000 |

Practically all mines are working at capacity, but in a few cases lack of men has reduced operations slightly. One or two small strikes have developed here and there, owing to local differences between miners and operators, but these have been settled within a short period and have not appreciably curtailed the total production.

The supply of cars continues to be adequate. In fact, in the anthracite region there is seldom any difficulty on this score, for the roads serving that region were, for the most part, constructed primarily to carry coal. The roads serving the bituminous fields, on the
contrary, are in general trunk lines, to which coal carrying is incidental to other operations. Moreover, anthracite production varies comparatively little the year round, and consequently there is seldom any abnormal strain on the carriers' equipment.

Quotations on the whole are unchanged, although during the last month certain independent operators have reduced rice coal by from 25 to 50 cents a ton.

The demand for bituminous has fallen off considerably since the middle of January, largely because consumers had accumulated fairly heavy

## Bituminous

 stocks during the previous month, and no doubt also because announcement was made late in January of the signing of the agreement between the United Mine Workers and the Illinois, Indiana and Ohio operators extending the wage agreement to March 31, 1924. As was generally expected, similar agreements have been signed by some of the operators and union officials in certain Pennsylvania districts. Some authorities, however, believe that the effect of the announcement that there would be no strike had been largely discounted beforehand, and that the present slackening in demand is due to the good-sized stocks on hand and to the approach of warmer weather. Steel companies and other industrial users have been the most active buyers, but even they have made only nominal purchases.A recent report made by the United States Geological Survey showed that on January 1 stocks of bituminous coal in the hands of consumers were approximately $36,000,000$ tons, or about $4,000,000$ tons more than those on November 1. These stocks have doubtless been further increased since that date, even though production has decreased to a certain extent during the past three weeks. Output for the four weeks ending February 10 is estimated as follows:

| (In net tons) |  |
| :---: | :---: |
| January 20. | 10,925,000 |
| January 27.. | 10,985,000 |
| February 3 | 10,686,000 |
| February 10 | 10,836,000 |

In this district shortage of cars has continued to hamper production, and the general average of output was not above 45 per cent of usual capacity. Nevertheless, the supply has been more than ample, and owing to embargoes effective on shipments to New England, further tonnage has been released for this territory. As a result of the curtailed market and the lessened demand, quotations on spot coal have declined considerably during the past month, and prices of certain low-grade coals are $\$ 2$ below those of early January. Some high-grade low volatile coals, however,
have not declined in the same proportion. Pool 10, for example, which on January 15 was quoted at $\$ 5.25$, was selling during the middle of February at from $\$ 3.65$ to $\$ 3.80$. Although a considerable amount of coal is being shipped on contract, there is a noticeable tendency among buyers to prefer the spot market and to hesitate to sign contracts under present conditions.
The supply of miners is in general adequate for the present percentage of operations, and there are reports that men are drifting to other industries in which employment is steadier.
Although demand for coke for household consumption has fallen off somewhat, sales are still of good proportion. Blast furnaces continue to buy,
Coke but the greater production and the difficulties in distributing to northern points have increased the supply in this district, and consequently prices have softened. Output of both by-product and beehive coke has been increasing steadily since last August, as is shown in the accompanying chart. Especially noticeable is the high total of by-product coke. Figures for monthly production are not available for the years 1919 and 1920, but it will be seen that the output for December was considerably above the average for any previous month.


Early in 1919, for the first time, the output of by-product coke in the United States exceeded that of beehive, and since that time has been consistently larger. Production of both grades has increased steadily since last August. For the years

1919 and 1920 average monthly production of
by-product coke is represented
Source-United States Geological Survey
Quotations for spot coke, after advancing during late January, commenced to decline, and on February 13 Connellsville furnace coke was quoted at $\$ 7.00$ and foundry grade at $\$ 8.50$.
Embargoes have hampered distribution, and there continues to be a shortage of labor, although this factor has not greatly curtailed production.

## COTTON

In February, the upward climb of raw cotton quotations continued, reaching 29.80 for spot cotton

## Raw

cotton in New York on the twenty-third, indicating the strong position of the staple. Not only was the domestic consumption of 610,375 bales during January, much heavier than the 527,945 bales taken in December, but the consumption in this country during the six months ending January 31 was 261,000 bales in excess of that of the same period a year ago. In fact, the domestic consumption of last January was the largest on record, and in spite of the troubled conditions abroad exports have been well maintained. The status of last season's crop as compared with that of the two previous years is shown by the table below.

Supply and takings of American cotton*

| (In bales) | $\begin{aligned} & \text { Season of } \\ & 1922-1923 \end{aligned}$ | $\begin{aligned} & \text { Season of } \\ & 1921-1922 \end{aligned}$ | $\begin{aligned} & \text { Season of } \\ & 1920-1921 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Visible supply, American, at end of previous season (July 31). | 1,968,159 | 4,112,651 | 2,943,882 |
| Crop in sight, American, to February 23 | $9,475,277$ | $7,999,088$ | $7,831,199$ |
| Total | 11,443,436 | 12,111,739 | 10,775,081 |
| Visible supply, American, on February 23 | 2,873,190 | 4,080,181 | 4,726,436 |
| World's takings of American cotton to February 23...... | 8,570,246 | 8,031,558 | 6,048,645 |

* Compiled by New York Cotton Exchange.

The figures above show how much the visible supply of cotton has diminished as a result of the small yields in 1920 and 1921. In fact, according to the Department of Commerce, the world's stocks of American cotton at the beginning of this season (August 1) were only $5,123,000$ bales. If the same quantity of cotton is consumed during the last half of the season as during the first half, the total consumption of the 1922 American crop will be $13,270,000$ bales, and since the 1922 crop was but $9,964,000$ bales, according to the forecast of the Department of Agriculture, there will be a deficit this year of $3,306,000$ bales, which will reduce the carryover to $1,817,000$ bales. The carryover estimate of the Department of Commerce, which asSumes a consumption of $12,312,000$ bales, is $2,775,000$ bales. This accounts for the strength of cotton in the face of international trouble that directly affects two of the heaviest consuming countries. The following chart shows that, if exception be made for the Civil War, the price of cotton remained near the same level from 1822 to 1914. Such stability indicates that, until the latter date, production and consumption expanded at the same rate. It will be noticed that prior to 1914,


In spite of frequent sharp fluctuations the general level of raw cotton quotations has remained about the same throughout most of the last century. But this was possible only because production kept pace with consumption. Whether prices
will return to this level depends both on the
ill return to this level depends both on th
strength of the future demand and on
our ability to limit the ravages of the boll weevil
Sources-"Journal of Commerce" and "Cotton Facts"
the annual yields increased at uniform speed but that crops of the last two years have been but little more than half as big as they would have been if production had continued to grow at this speed.

The cotton trade is already trying to forecast the acreage that will be planted, since this is one factor affecting the yield. According to the chart below, it appears that the trend of the price paid to the producer toward the end of any year, is an indicator of the acreage planted the year following. Thus the price declined in 1914, and in 1915 the acreage showed a de-


The trend of the price paid to producers has had an influence on the acreage planted the year following. Declining prices were followed by the planting of smaller acreages, and advancing prices by larger acreages. In 1922 the price trend was upward. The dotted line shows the estimate made by "Commerce and Finance'' of cotton acreage for 1923 Sources-Department of Agriculture and Department of Commerce
crease; in 1915 the price advanced, and the acreage planted in 1916 was considerably larger; in 1920 the price fell sharply, and much less cotton was planted in 1921.

In comparison with those of a year ago, the actual sales of cotton yarn in the Philadelphia market, in

## Cotton

yarns February, were larger both in value and in volume, but they were smaller than those of January. Although inquiries are still numerous, the effective demand for cotton yarns has been curtailed by rising prices. Weavers, who in January had been heavy buyers, were so well covered that they were not forced to buy at the prevailing quotations. They maintain that it would be difficult for them to obtain for their finished products prices high enough to pay for yarns bought at the February quotations. In spite of the quieter demand for weaving yarns, the demand for heavy-weight carded yarns for underwear and low-grade hosiery has improved; but here, too, dealers are encountering resistance to any increases. Mercerized yarns have been in less request than carded, and the demand for them is only fair. Makers of mercerized hosiery seem to have difficulty in obtaining price advances to meet the higher quotations on yarns. Carpet mills continue to consume their grades of yarn quite steadily.

Orders have been booked by spinners for shipment as far ahead as June, but many manufacturers have such faith in the strength of cotton that they are not anxious to sell their production far in advance. In fact, spinners' quotations are very firm, but yarns in the hands of dealers have been obtained at slight concessions. Reflecting the good demand for carded and the small demand for combed yarns, prices of the former are relatively much higher than of the latter. Carded yarns have advanced 5 per cent during the month and are now from 50 to 75 per cent higher than they were a year ago.

Stocks are moderately light, and those of dealers are decreasing. Stocks of mercerized yarns, however, are heavy.

Collections are good, but they are tending to become slower because high priced yarns cause textile manufacturers to have more money tied up in stock.

The cotton goods business during February was fairly satisfactory, but the demand fluctuated with the

## Cotton goods

 price of raw cotton and was most active when cotton advanced. Sales were on a par with those of January, and were distinctly larger than they were a year ago. Print cloths are in request, but the activity in sheetings has been only moderate. Haircloth is in good demand, and plush mills report that orders for heavy draperies have arrived much earlier than usual and that customers are anxious to have the merchandise shipped as soon as manufactured. The cail for mohair plush for furniture covering still continues.Prices have advanced from $21 / 2$ to 5 per cent during the month and are still tending upward. Although some resistance to the advance has developed, it has not greatly affected the demand. Supplies of raw material range from normal to heavy, but stocks of finished goods are light. Both are decreasing.

A scarcity of both skilled and unskilled labor has somewhat hindered production. Female help is especially difficult to obtain. Wages in some plants have advanced from 5 to 20 per cent. Collections are good and are improving.

## WOOL

The demand for fall goods, both woolen and worsted, is excellent, coatings ranking first and cloakings sec-

## Woolen and worsted goods

 ond. Some dress goods manufacturers have not yet opened their fall lines, but in the case of those who have, the advances made on both men's and women's wear have been so moderate as to attract a large volume of business. Duplicate orders for men's wear for spring continue to be received, and mills are busy working on business booked several months ago. Dress goods are in good demand, Poiret twills being the leading fabric. The light colors are in greatest request, and therefore competition among manufacturers to dispose of the dark staple colors, such as navy blue, is keen. The demand for infants' wear has been exceptionally brisk during the past two months. But in the cloak and suit trade buying has been delayed this year, and since an early Easter will shorten the season, the volume of business threatens to be curtailed greatly. The dress goods situation has also been complicated by the strike among operatives in the New York dress and waist industry.The majority of mills are operating 100 per cent of their equipment, except when sickness or lack of labor has kept looms idle. Since the first of the year sickness has been very prevalent, and skilled help is scarce and unskilled is becoming hard to obtain. A number of manufacturers have raised wages, the advances averaging 10 per cent. Owing to heavy production schedules, mills are carrying larger supplies of raw material than usual, but finished stocks are light and are decreasing. Goods are in most cases being shipped as fast as manufactured.

Because of railroad congestion, manufacturers have difficulty in securing yarns and in making shipments. As a result, costs are increased when shipments are made by express, and in some cases mills are threatened with cancellations.

Although collections are better than they were a year ago, they are about the same as they were last month and may be called fair.

Worsted yarns are in good demand from the knitting trade, and weavers, especially of men's wear, are also
placing considerable business. The call for wool and merino yarns is only fair, but inquiries are numerous.

## Wool

 yarns Demand is now somewhat heavier than it was a month ago, and is much larger than that of a year ago. The orders booked call for deliveries during the next four months, and a few mills have sold their production for six months ahead. In order to make deliveries on these contracts, the majority are operating at 100 per cent of capacity. Spinners report a scarcity of skilled labor as well as of really good unskilled labor, and have advanced the wages of the latter from 5 to 12 per cent and of the former from 10 to 12 per cent.Prices have increased during the month and range from 30 to 40 per cent higher than they were a year ago. Owing to the strength of raw wool, the trend of yarn quotations is still upward. Mills in general hold heavy supplies of raw material, but yarn stocks are light and are decreasing.

Freight embargoes have delayed shipments of both yarn and wool, and this has made it more difficult for mills that deal in affected regions to obtain orders. Collections are on a par with last month and with February, 1922. They are fairly good.

The demand for raw wool is quiet, because large mills bought heavily last year in anticipation of their

## Raw wool

 wants, and the present activity is largely confined to the buying of smaller establishments that are following a hand to mouth policy. Since dealers' supplies of domestic wool are practically exhausted, imported wools, and cross-breds in particular, are now the center of interest. That imports of wool have been greatly increased by the lack of domestic wool is shown by the receipts at the Port of Boston, which between January 1 and February 15, 1923, were $78,479,000$ pounds, as compared with 39,314,000 pounds during the corresponding period of 1922. Dealers in waste report that the demand has improved and is much better than it was a year ago.The increase between September and December, 1922, in the stocks of wool held by manufacturers, and the decrease in those held by dealers are shown in the table below:

| Wool stocks of dealers and manufacturers* <br> (Grease equivalent in pounds) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Total | Dealers | Manufacturers |
| December 31, 1922. September 30, 1922... | $\begin{aligned} & 515,543,585 \\ & 525,173,618 \end{aligned}$ | $\begin{aligned} & 213,383,230 \\ & 231,306,753 \end{aligned}$ | $\begin{aligned} & 302,160,355 \\ & 293,866,865 \end{aligned}$ |

* Bureau of the Census.

In spite of the slack demand, wool prices have been very strong, and sales on foreign markets have taken place at higher prices than those prevailing in this country. Just how scarce fine wools have become in
the last few years is reflected in the prices of wool tops in Bradford, England. Whereas 40 's Colonial prepared, which was quoted at $141 / 2$ pence in 1914 , could be bought on January 1, 1922, for $121 / 2$ pence, and on January 1, 1923, for 16 pence, the high-grade 70 's Colonial warp, which in 1914 was 28 pence, was quoted on February 1 at 70 pence. This price, however, has since declined.

The comparative price trends of yarn and wool are shown in the accompanying chart.


Since January 15 the demand for silk goods has improved materially. Not only have inquiries for fall been received two months earlier than last year, but actual orders are more plentiful than they were in 1922. The majority of those booked are for early delivery, but some manufacturers have so much business ahead that they cannot promise shipments before April. The orders booked for future average about one-third of the total. The demand is largely confined to crêpe fabrics, especially cantons, and taffetas are less prominent than they were before Christmas. Flat crêpes sell readily, but the difficulties encountered in producing them have discouraged their manufacture.

The improvement in the silk business has caused such an increase in production that mill activity is perhaps greater than it has been at any time since the crash of 1920, and some manufacturers are operating half their equipment at night. But others, whose looms are not adapted to making crêpes, have considerable idle machinery, since yarn-dyed fabrics are in small request. Some production has been lost because of a scarcity of skilled help. Except in a few mills, in which advances of from 5 to 25 per cent have been made, wages remain stationary.

Uncertainty regarding the price trend of raw silk
has curtailed manufacture for stock, and whatever accumulation exists is diminishing. Supplies of raw material vary from normal to light, but higher production schedules have caused them also to decrease. As the supplies bought at cheaper prices become exhausted, prices of silk goods move to higher levels, but the advances since last month have been small, for resistance to higher prices is strong. One manufacturer observes that such resistance is now less than it was a few months ago, but in spite of the excellent demand the feeling exists that caution is advisable both in the raising of prices and in the accumulation of stock.

Collections are good.
During the past month, business received by throwsters has somewhat increased, but the demand is
Thrown silk still quiet and spasmodic. Manufacturers are placing only small orders for early delivery, for there is considerable lack of confidence in the stability of prices. Stocks in the hands of throwsters, of course, are light.

On account of the quietness of the demand, throwsters are not operating their plants at more than 60 per cent of capacity. Quotations during the past month have remained practically unchanged, and the resistance to advancing price levels is very marked. It is said that partly because of better running silk, the price charged by commission throwsters for crêpe twists is less now than it was in 1913.

Since manufacturers have largely liquidated their stocks of a year ago, they are better able to meet obligations, and collections are satisfactory.

The silk market was featureless until late in the month, for the demand was quiet and the price fairly Raw
silk stable. Quotations remained at the same level as they reached at the first of the year. Although seasonal reasons caused mill consumption to be less in January than in October, as shown by the table below, January deliveries to mills were heavier than those of the previous month.

| Silk imports, stocks and deliveries to American mills* (in bales) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\left\|\begin{array}{c} \text { Storage at } \\ \text { beginning of } \\ \text { month } \end{array}\right\|$ | Imports during month | $\left\|\begin{array}{c} \text { Deliveries } \\ \text { to } \\ \text { American } \\ \text { mills } \end{array}\right\|$ | Storage at end of month |
| 1923 |  |  |  |  |
| January | 49,174 | 32,593 | 34,680 | 47,087 |
| December | 47,159 | 33,057 | 31,042 | 49,174 |
| November | 45,893 | 36,733 | 35,467 | 47,159 |
| October | 36,795 | 46,569 | 37,471 | 45,893 |
| January 1921 | 44,536 | 9,499 | 22,176 | 31,859 |
| December | 19,601 | 26,133 | 20,930 | 24,804 |
| November | 19,304 | 26,812 | 26,515 | 19,601 |
| October 1920 | 23,036 | 23,084 | 26,816 | 19,304 |
| December | 48,357 | 6,341 | 10,162 | 44,536 |
| November | 49,807 | 9,285 | 10,735 | 48,358 |

* Silk Association of America.


## HOSIERY

A lack of uniformity still prevails in the hosiery business, but on the whole conditions are improving and more mills are busy than was the case a month ago. Prices, too, in a number of instances are higher. The greatest percentage of advance has been in the cheaper grades of cotton hosiery, but as the quality becomes better the difficulty in obtaining higher prices increases. In women's seamless silk hosiery no change in price has been made on the fairly standardized stocking that retails for $\$ 1$. Nor has the selling price of full-fashioned hosiery advanced; on the contrary, some manufacturers have reduced their quotations. But on certain other lines of silk, silk and fibre, and wool and fibre hosiery recent orders have been taken at slight increases.

During the month higher prices have prevailed for both cotton and woolen yarns, but silk yarns have remained almost stationary at the recent high levels.

The accompanying charts show the monthly fluctuations in production and orders booked by the reporting mills in this district, selling to the wholesale and to the retail trade. In reading these charts the total number of pairs sold through each method of merchandising is relatively unimportant, as there are more reporting firms using one method than the other; and it is quite possible also that those selling to the wholesale trade are larger producers than those selling to the retail trade. The important points to be noted are those to which attention is drawn in the sub-heads of the charts. The summary, on page 21, of the business done by reporting firms in the Third Federal Reserve District shows that in January production of firms selling to the wholesale trade increased 16.0 per cent, and of



Production at the beginning of 1921 was at a low point because of the general business depression, and stocks of hosiery were large. During that year the output increased until late in the autumn, with only slight seasonal fluctuations. By 1922, however, hosiery manufacturing had become more nearly nor
mal, and production in that year followed more closely the seasonal demand
Source-Federal Reserve Bank of Philadelphia
firms selling to the retail trade 47.9 per cent as compared with December, 1922.

| Operations in the hosiery industry |  |  |
| :---: | :---: | :---: |
| (In terms of dozens of pairs) | $\begin{gathered} \text { Jan., 1923, } \\ \text { compared with } \\ \text { Dec., 1922 } \end{gathered}$ | $\begin{gathered} \text { Jan., 1923, } \\ \text { compared with } \\ \text { Jan., } 1922 \end{gathered}$ |
| Firms selling to the wholesale trade: <br> Number of reporting firms-35 |  |  |
| Product manufactured during January | +16.0\% | 6.7\% |
| Finished product on hand January 31 | +6.1" |  |
| Orders booked during January.. | +20.1" | + 12.0 " |
| Cancellations received during January | -63.0" | - 30.6" |
| Shipments during January....... | +16.0" | 6.0 |
| Unfilled orders on hand January 31 | + 2.9" | + 5.8 " |
| Firms selling to the retail trade: Number of reporting firms- 12 |  |  |
| Product manufactured during January | + 47.9\% | + 86.9\% |
| Finished product on hand January 31 | -16.9" |  |
| Orders booked during January. | +40.5" | $\text { - } 31.3^{\prime \prime}$ |
| Cancellations received during January | -53.5" | +234.6" |
| Shipments during January...... | -22.9" | + $17.3{ }^{\prime}$ |
| $31$ | -23.0" | - 40.6" |

## UNDERWEAR

Manufacturers' sales of underwear for spring have been in good volume, and resistance to price advances, although still in evidence, has become less strong. Increased prices have been obtained in many instances,
and conditions throughout the industry are in most cases reported to be satisfactory. This increased activity in light weights has been the feature of the month's business, although heavy weights have by no means been neglected, and in these too the prices obtained have shown some advances. In both light and heavy weights the orders booked are in the majority of cases reported to be considerably in excess of what they were at this time last year.
Cotton yarns have again advanced to higher levels. As an example of the continued strength in yarn prices, one grade largely used by underwear manufac-turers-single 30-has risen about 33 per cent during the past few months. Labor is in fair supply, and only a few instances of scarcity have been noted. Wages are as a rule unchanged, but certain manufacturers report that they have made some increases during the month. Collections are in most cases said to be satisfactory.
Reports received from manufacturers in the Third Federal Reserve District tabulated below show that during January the production of summer underwear decreased 26.4 per cent and that of winter underwear increased 4.1 per cent, as compared with January, 1922, and that orders on hand at the end of the month increased 6.4 per cent in summer weights and 111.5 per cent in winter weights, as compared with January 31, 1922.

Conditions in the underwear industry

| (In terms of dozens) | Jan., 1923, compared with Dec., 1922 | $\begin{gathered} \text { Jan., 1923, } \\ \text { compared with } \\ \text { Jan., } 1922 \end{gathered}$ |
| :---: | :---: | :---: |
| Summer underwear: |  |  |
| Number of reporting firms-13 |  |  |
| Product manufactured during January | $+32.3 \%$ | - $26.4 \%$ |
| Finished product on hand January 31 | -12.7" | + 55.9 " |
| Orders booked during January... | +189.3" | + 17.2" |
| Cancellations received during January |  |  |
| Shipments during January | + 83.4 " | - 14.8" |
| Unfilled orders on hand January $31$ | + 3.7" | + 6.4" |
| Winter underwear: <br> Number of reporting firms- 9 |  |  |
| Product manufactured during January | - $25.9 \%$ | + $4.1 \%$ |
| Finished product on hand January 31 | - $49.4{ }^{\prime \prime}$ | + 26.1" |
| Orders booked during January... | - 59.1" | - 7.8 " |
| Cancellations received during January |  |  |
| Shipments during January | - 43.0 ${ }^{\prime \prime}$ | + 27.5" |
| Unfilled orders on hand January $31 \text {.................................... }$ | + 13.4 " | +111.5" |

## FLOOR COVERINGS

Nearly all the mills making the four principal qualities of carpets and rugs-Wiltons, Axminsters, velyets, and tapestries-are completely sold out for the balance of the season. A few mills, however, that had not contracted for their entire product beyond March 1, have announced an increase in price of 5 per cent to take effect on that date. The cheaper grades of rugs, including art squares, ingrains and wool fibres, are in somewhat better demand than they have been, but the mills that depend solely on these lines for their activity are still running at less than full capacity. These grades, however, with each succeeding year occupy a less important position in the industry.
Linoleum manufacturers, although working their plants at capacity, and indeed in some cases producing more than ever before, are unable to keep up with their orders, and during the month have fallen further behind in deliveries. Recently the heaviest demand has been for the lighter weights, but all qualities are selling well. It is expected, however, that the continued activity in building, especially of commercial structures, will result in a strong demand for heavy linoleums during the coming season.

Felt-base lines have been advanced in price by from 3 to 5 per cent, but these advances have not checked buying. Cork-base goods, however, are unchanged in price.

The freight movement is better in some localities, but to New England and to some points in New York embargoes are still in force. Labor is in sufficient supply, and no change in wages has been reported during the month. Collections continue to be good.

## FURNITURE

Although the early winter months constitute a slack season in furniture manufacture, all of the manufacturers in this district are at present well supplied with orders. The demand for all kinds of furniture is good. It is slightly greater than it was a month ago, and many manufacturers state that their orders are at least 50 per cent larger than they were in February, 1922. Furniture wholesalers and retailers are buying liberally, and several factories have closed large contracts to furnish new hotels now almost completed. Office furniture and desks are in good request, but the heaviest demand is for home furniture, particularly suits. Cabinet makers have large orders from phonograph producers and makers of radio sets. Plant operations vary from 75 to 100 per cent, the average for the industry in this district being about 85 or 90 per cent. Practically all orders are for immediate delivery, but several plants, especially those having hotel contracts, have some large orders for future delivery. One manufacturer states that he has called in his salesmen from the road because he is heavily oversold.

The following table, based on combined returns to

| Operations in furniture industry |  |  |
| :---: | :---: | :---: |
|  | Third Federal Reserve District | United <br> States |
| Number reporting | 8 | 88 |
| Production, percentage of normal. | 87.1 |  |
| January, 1923, orders | \$273,397 | \$4,516,319 |
| December, 1922, orders. | 158,586 | 2,053,619 |
| January, 1923, shipments......... | 214,373 | 2,982,831 |
| December, 1922, shipments....... | 261,979 | 3,235,876 |
| January, 1923, cancellations...... | 9,081 | 162,511 |
| December, 1922, cancellations..... | 10,506 | 240,874 |
| February 1, 1923, unfilled orders.. | 291,430 | 5,466,568 |

Associated Furniture and to the Federal Reserve Bank of Chicago shows the increased activity of the furniture industry in January, 1923, as compared with December, 1922.

Recently some manufacturers have advanced their price lists from 5 to 10 per cent, but the movement has not yet become general. All-wood furniture, such as tables, desks, chests, beds, etc., has been advanced 5 per cent, and furniture containing plate glass and mirrors has risen from 8 to 10 per cent. In general, prices are from 10 to 20 per cent higher than they were in February, 1922, but determined resistance to increasing prices on the part of retailers has probably prevented many manufacturers from joining in recent advances. Lumber and veneer prices are higher than they were on January 1, but plate glass and mirrors have advanced even more sharply. Plate glass manufacturers are experiencing an unprecedented demand from the automobile industry because of the great increase in the number of closed cars, and this, together with heavy demand for buildings, has caused a scarcity of their products.

Finished stocks at the factories are moderate and at most plants are about normal for this season; but some manufacturers report that railroad embargoes to many of their shipping points have caused a heavy accumulation. Stocks of raw materials, too, are moderate and about normal, except those of plate glass, which in general are light.

Skilled laborers, such as cabinet makers and finishers, are becoming scarce at several factories, and for this reason it is impossible for some plants, especially those in the Williamsport district, to operate at capacity. Wages have been advanced about 10 per cent since January 1 at many factories and are very nearly back to the 1920 levels. The supply of unskilled labor is not so scarce and is adequate at nearly all plants.

Rail embargoes have seriously hampered outgoing shipments to New England and northern New York, and some manufacturers report long delays on inbound shipments of lumber and veneer from points in Indiana.

The reports concerning collections show much variation. However, collections are better than they were a year ago, and may be described as from fair to good.

## LEATHER

Shoe factories in this district have sold all the shoes that they can deliver by April 1, Easter, and many cannot accept any business for shipment before
Shoes May. Production, however, is not at full capacity, as it is being checked by a shortage of skilled female labor in the fitting rooms of many of the plants and by the extra amount of work required to turn out many of the women's shoes of the prevailing fashions.

Leather shoes show no change in price and in this respect differ from many other lines of merchandise. Canvas shoes, however, have advanced in sympathy with the strength in all lines of cotton fabrics. Business booked for delivery after Easter is in good volume in white shoes, and grey suede models show no sign of decreasing in popularity. Sport shoes in an almost bewildering number of combination effects are already making their appearance and promise to be active during the spring. Among the novelties, shoes of bright colors, both solid and in combination with other colors, are being sampled in increasing numbers.

According to Department of Commerce reports, the production of shoes in the United States last year was only a little over 2 per cent less than in 1919, the largest year on record, and the gain, as compared with 1914, was $31,209,990$ pairs. The figures follow:

| 1922 | . $323,876,458$ | pairs |
| :---: | :---: | :---: |
| 1921 | 285,518,453 | " |
| 1919 | .331,224,628 |  |
| 1914 | .292,666,468 |  |

In the Third Federal Reserve District the production of shoes by reporting firms during January, as shown in the following table, increased 14.8 per cent as compared with December, 1922, and ${ }^{\circ} 9.1$ per cent as compared with January, 1922.

| Conditions in the boot and shoe industry |  |  |
| :---: | :---: | :---: |
| Number of reporting firms-38 <br> (In terms of pairs) | January, 1923 compared with December, 1922 | January, 1923 compared with January, 1922 |
| Production | + 14.8\% | + 9.1\% |
| Shipments | + 14.6 " | + 4.9 " |
| Orders booked | - 5.2 " | + 22.3 " |
| Orders on hand | - 11.0 " | + 25.7" |
| Cancellations | +111.9" |  |
| Stocks on hand | +17.1" | - 5.4 " |
| Number of operatives on payroll | + 3.8 | + 9.2 " |

Sales of shoes at wholesale during the month have not been large, as February is always a dull month in retail trade. From the table printed on page 10 it will be seen that sales at wholesale during January, although as usual smaller than in December, have in-
creased 48.9 per cent as compared with those of January, 1922.

February sales in retail shoes, except in rubber goods, have been small, but advance information indicates that they will compare favorably with those of last February. During January, as shown in the following table, sales increased 12.6 per cent as compared with January, 1922, and stocks decreased 11.6 per cent as compared with December, 1922, and 7.4 per cent as compared with January, 1922.

## Retail shoe trade

[^3]2, Stocks (selling price):
(a) Jan., 1923, as compared with Dec., 1922... - $11.6 \%$
(b) Jan., 1923, as compared with Jan., 1922.... - 7.4 "
3. Rate of turnover (times per year based on cumulative pericd):
(a) January 1 to January $31,1923 \ldots \ldots \ldots \ldots$.......... 3.0
(b) January 1 to January 31, 1922.
2.4

Number of stores reporting above items:
$1 \ldots \ldots \ldots .30 \quad 2$ and $3 \ldots \ldots \ldots .26$

The tone of the leather markets during the month has been distinctly firm; prices in all lines are well maintained, and some have advanced.

## Leather

 The sales of heavy leathers have been large, offal is moving freely, and some sales are reported at an advance in price. Sole leather in heavy and extreme light weights, and belting butts, continue to be in good demand, but medium weights of sole leather are still in rather heavy supply and are difficult to sell.In upper leather, sales of calf leathers are increasing, especially in the lighter weights, and the premium paid for heavy weights is now only about 2 cents per foot as compared with from 5 to 7 cents earlier in the season. Kid leather sales are reported by most tanners to be in fair volume and are nearly as large as production. At this time in the year it is quite usual for tanners to accumulate some stock. Because of the high prices of goat skins of all descriptions, quotations for kid leather are well maintained and for some selections are slightly higher. Large skins are moving slowly and stocks of these have become somewhat bigger during the past sixty days.

The demand for sheep leathers, especially for chamois and hat leather, shows no sign of diminution, and advances in price made necessary by the higher prices demanded for raw stock are easily obtained.

Sales of patent leather have declined somewhat. The demand for patent-leather shoes appears to be decreasing although this leather has been by far the most popular material for uppers during the past two years.

Exports of the leading upper leathers during the past two years are given in the following table:

|  | 1922 | 1921 |
| :---: | :---: | :---: |
| Goat and kid.............. Sq. ft . | 41,945,330 | 27,090,494 |
| Calf and whole kip......... " | 22,050,591 | 11,613,132 |
| Side, (incl. finished splits)... | 16,922,593 | 6,193,587 |
| Patent leathers............. | 38,016,924 | 19,715,975 |

This table shows a gratifying increase in our export trade, in spite of the fact that the average price of all these leathers was higher in 1922 than in 1921.

Stocks of the following finished leathers, according to the report of the Department of Commerce, continued to decrease during December, as indicated in the following table:

| Belting but | 4.2 per cent |
| :---: | :---: |
| Cattle side upper | 2.7 |
| Calf and kip. | 1.9 |
| Goat and kid | . 9 |
| Cabretta |  |

Slight increases, however, were recorded in the stock of the following leathers:

Backs, bends and side $\qquad$ 1.4 per cent

Offal, sole and belting $\qquad$
but as production of these two had increased 3.5 and 8.5 per cent respectively, sales were considerably larger than output.

Collections are reported by all tanners to be good.
Purchases of packer hides have been in sufficient quantity to take care of offerings, and prices have

Hides and skins changed but slightly during the month. As this is the season when the quality is the poorest of the year, the fact that prices have held firm is considered an indication of considerable strength. Calf skins have also been bought in fair quantity, and although prices are about a half cent lower than they were a month ago, they are firm. In these also the poorest skins of the year are being marketed. The demand for the light weight skins is considerably better, which is due to two facts, the increased demand for light-weight calf leather and the preponderance of heavy weights at this season in the raw skins. Goat skin markets are still strong, and although tanners as a rule continue to buy sparingly, they are now paying prices which a month ago they absolutely refused to consider. The Indian market shows only little change as compared with a year ago, but the rise in exchange during the year has increased
the cost to the American tanner about 10 per cent. Sales of Chinas, although not as large as usual at this season of the year, are becoming heavier, and prices are well maintained. It may be stated that in nearly every quarter of the world prices are firm, and on this account the tanner is being convinced that he must reenter the market and buy at least enough to keep his plant running. Sheep skins are higher, and as the demand for this leather is good, the tanners have been purchasing in moderation. New Zealands, which a year ago sold at $32 / 6$, including buyer's commission, are now $45 /$ plus $21 / 2$ per cent commission; and other descriptions have advanced in about the same proportion. The gain in exchange during the year must also be added to the cost to the tanner.

## RUBBER

Stimulated by rising prices, the tire industry has been improving month by month. The volume of

## Rubber

 tires end of 1922, was fairly large, and in comparison with the corresponding period of last year, the January and February demand showed a considerable gain. The custom of dealers to place orders in the fall for spring delivery has developed to such an extent that perhaps 75 per cent of the total orders on the books are for delivery during the spring months.As a result of the sharp advances in the quotations on both crude rubber and raw cotton, tire manufacturers raised their prices at the first of the year by from 8 to $12 t / 2$ per cent. Although wages have been advanced but little, other costs have increased so much that an advance in tire prices was inevitable. That it did not take place sooner was doubtless due to the stiff competition between the large and small manufacturers. It is of great significance that whereas the small manufacturer with little or no stock had the advantage on the falling market, he is now at a great disadvantage in competition with tire makers who bought their crude rubber cheaply. Companies that wrote off large sums in 1921, because of the shrinking of inventory values, and that made but little profit last year on account of rebates to dealers, look forward at last to a period of prosperity.

That the steady increase in the life of tires caused the number of tires required per car each year to decline, until 1922, is shown by the downward course of the ratio of tires produced to cars registered, as portrayed by the chart at top of page 25. The upturn of the ratio in 1922 may be accounted for by the fact that the average life of tires has been reduced by the more extensive use of inferior or sub-standard tires.

Aided by the heavy output of closed cars during last fall, the demand for tires since October has been sufficient to maintain production, and even to increase it, at a time when operations are usually curtailed. At


Until 1921, the number of automobiles registered increased faster than the production of tires, for the life of tires increased in length.

Consequently the number of tires per car fell from 5.27 in
1916 to 2.61 in 1921, but the increasing use of substandard tires in 1922 caused the ratio to rise to 3.32
Source-National Automobile Chamber of Commerce
present many plants are working night shifts. Most manufacturers have disposed of a large part of their finished stocks, and in this district these may be termed light. Although many dealers have liquidated their heavy inventories and now carry stocks of normal size, others still hold considerable quantities.

The freedom with which established dealers have often granted credit to their customers has made collections a serious problem for the manufacturer.

Although it is too early in the year to determine how great a demand for mechanical goods is likely to

## Mechanical goods

 develop, manufacturers report that the business booked is larger than in 1922. In December, the demand was poor, and in January it was but little better; but it has now improved sufficiently to be described as fair. Iron and steel mills have perhaps been the best buyers. Orders are fairly well distributed among all kinds of mechanical goods, but the improvement in the demand for hose since the first of the year is outstanding.Some price lists have been raised 10 or 15 per cent, and other advances are announced for the near future. But in spite of the higher quotations on cotton duck and crude rubber, price increases on mechanical goods have not been universal; in some cases they have been prevented by competition among manufacturers. Plants that can use reclaimed rubber find that quotations on scrap have advanced relatively less than those on crude rubber.
Although the majority of the orders booked are for spot delivery, some plants report that 50 per cent of their orders are for shipment during the next four months. Those companies that cannot secure sufficient orders at acceptable prices and those that lack
desirable help are operating at between 65 and 75 per cent of capacity. Both skilled and unskilled labor is more scarce. Wages have not advanced.
Manufacturers' supplies of raw material are ample, and with the possible exception of cotton goods, are easily obtainable. Stocks of finished goods are not increasing and range from normal to light. Freight conditions continue to be very unsatisfactory, and it is impossible to make quick shipments to New England.

Forced upward by the operation of the Stevenson plan for the restriction of exports from the British

## Crude rubber

 plantations in Ceylon and the Federated States, the price of plantation rubber advanced from the 15 cent level maintained from February to October of last year to a new level of about 35 cents. The quotation of 15 cents was low in comparison with the average price of Para rubber for the six-year period from 1913 to 1918, of 67 cents, and was admittedly below the cost of production. The low market value of rubber resulted both from overproduction on the British and Dutch estates in the East Indies and from the lack of demand in this country, which consumes almost 75 per cent of the world's output.That the Stevenson plan was effective in raising rubber quotations 140 per cent in such a short period is due to two reasons. First, over 72 per cent of the plantation rubber is grown in British colonies and its export can be controlled by a tax. Secondly, the plan was adopted at a time when the American rubber industry needed large quantities of crude rubber. As shown by the chart below, imports of crude rubber during 1922 were much heavier than in 1921, and their increase has been coincident with the advance in prices.


Imports of crude rubber averaged much higher in 1922 than in 1921 , which caused surplus stocks in the world to decrease. That the price advanced 140 per cent in four months has been du not only to the restriction of exports from plant tions under British cont increase of the American demand
Sources-"Dun's Review" and "India Rubber World"

In spite of the weaknesses that have been pointed out in the details of the Stevenson plan, such as the inaccuracy of using the 1920 output as the "standard production" for plantations with trees of different ages, and the liability of hoarding or of tax evasion, the promise of stabilized prices is extremely attractive to many manufacturers. This is by mo means the first instance in which attempts have been made to diminish the ill effects of over-production by controlling the supply during the period when the readjustment of supply and demand is taking place, for the supplies of coffee, wool, and silk have at times been under partial control.

## PAPER

The demand for paper is now very good and shows marked improvement since last month. Paper makers report that their orders are considerably in excess of those of a year ago, and manufacturers of wrapping papers, who last month were placing part of their output in stockrooms, now have sufficient orders to absorb their entire production. Nearly all of the mills in this district are running at capacity or very near it. Producers of magazine and book papers find the demand exceptionally good for this season of year and are running their plants at about 95 per cent of capacity. Paper-board makers have noted a decrease in the call for some grades of board, but they are still well supplied with orders and are operating at about 90 per cent. Manufacturers of glazed paper state that the demand is heavy and that plant operations are at capacity. Makers of envelopes report a decided improvement over last month in the call for their products and are running at 75 or 80 per cent. About 90 per cent of the orders booked by manufacturers are for immediate delivery, but makers of magazine and book papers have a fair amount of orders for future delivery. Paper wholesalers found the demand rather dull during the first few days of the month, owing to heavy buying at the close of last month, but since then business has picked up.

On February 1 most manufacturers advanced their prices, -5 per cent on the cheaper grades of paper, and from 8 to 10 per cent on the finer grades. The advance was caused by the sharp rise in chemical pulps last month, but was expected by the trade and resulted in a flurry of buying in the closing days of January. Boxboards, notably chip and news board, declined slightly early in the month from the peak price at the close of January; but they have held firm since the drop. They are now from 15 to 25 per cent higher than they were on January 1. Waste paper stock used in the manufacture of board has also declined slightly. Both foreign and domestic mechanical pulp quotations are higher than they were a month ago, and imported chemical pulps are holding firm at the advanced prices of last month, as the strike in the pulp
and paper industry of Sweden is still unsettled and is actually growing in proportions. The foreign pulp manufacturers have regained their pre-war trade in this country and now furnish over one-fifth of the chemical pulps used in our paper mills, as the following chart shows:


Despite the fact that the Scandinavian countries, which are our chief foreign sources of chemical pulps, were neutral during the war imports from them showed a decline from 1916 to 1919

Foreign countries now furnish us with over 20 per cent of our chemical pulps, having more than regained their pre-war trade with the United States (1922 imports partly estimated)
Sources-Department of Agriculture, Federal Trade Commission and "Monthly Summary of Foreign Commerce"

In general, the finished stocks at the mills are light and are about the same as they were at the close of January. And no mills are increasing them. The majority of manufacturers have covered their requirements in raw materials for two or three months and some have placed orders to meet their needs until July 1. Of coal, however, few mills are buying more than a 30 day supply, because they expect further declines in price.

Transportation difficulties are still causing manufacturers some concern, particularly on outbound shipments to northern New York and New England. Some railroads in Michigan have put embargoes into effect, and manufacturers who secure raw materials from that region are obliged to secure permits before their goods can be shipped.

Labor is not quite so abundant as it was last month, and many manufacturers report an increasing turnover, especially of unskilled labor. Some mills, particularly those in the larger cities, have granted wage advances during the month in order to bring their pay scales to the same level as in other industries. Envelope makers state that it is practically impossible to secure girl workers at present rates, and as a result their output is lower than the orders on hand justify. Paper mills in country districts, however, have an am-
ple supply of all kinds of help and their wage scales are unchanged.

Collections are slightly better than they were last month. Manufacturers report that they are from good to very good, and wholesalers that they are from fair to good.

## PAPER BOXES

Box makers, without exception, report that the demand for paper boxes is better than last month and from 15 to 20 per cent greater than it was a year ago. The shoe, shirt, hardware, and candy trades are buying heavily, and the hosiery industry is purchasing more boxes than it has for many months. Candy manufacturers are working on Easter orders, and those who make Easter specialties have placed large orders for boxes. Although all box makers who manufacture hosiery boxes note an improvement in business, they state that the demand from hosiery manufacturers is still far from heavy. Folding cartons, display containers, and mailing tubes are in good request, as are also extra fancy boxes for perfumers. Plant operations vary greatly. A few manufacturers are running at only 50 per cent of capacity, chiefly because they do not care to quote as low prices as their competitors; but the majority are operating at from 75 to 100 per cent. The average for the district is about 75 or 80 per cent. Manufacturers of fibre containers and corrugated boxes report that considering the season the demand is good. But in this branch of the industry heavy price cutting is causing some manufacturers to curtail output, and plant operations are at only 70 per cent of capacity. The big majority of orders are for im-


The seasonal trend of the paper-box industry is well reflected in the output of paper-board mills. November and December are months of declining board production, and the monthly output usually reaches its lowest point in December. Normally, December and January are the dullest months of the year in the paper-box industry
Source-Federal Trade Commission
mediate delivery, but a few box makers report that 50 per cent of their orders are for delivery in March.

The output of box makers during the year 1922 exceeded that of any previous year except 1920. The preceding chart, based on statistics compiled by the Federal Trade Commission, shows that the production of paperboard in the United States during 1922 exceeded that of 1919 but did not equal that of 1920 . The recovery of the industry from the depression of 1921 is very marked.

Although there have been no recent changes in board prices, all grades of box boards are from 15 to 25 per cent higher than they were on January 1. Because of the keen competition in the industry, few manufacturers have been able to advance prices sufficiently to cover this increase in raw materials. However, most box makers raised their prices slightly early in the month.

The labor supply at many box factories is inadequate, and manufacturers report increasing difficulty in securing skilled workers and good unskilled help. The turnover of labor is growing, and despite the advances in wages which many producers have granted, box makers find it increasingly difficult to hold some of their operatives. In fact, some factories that are well supplied with orders are unable to operate at more than 85 or 90 per cent of capacity because they cannot get labor. Wages are firm or advancing.

Many railroads have re-established embargoes on certain classes of goods, and box manufacturers find that these are seriously affecting their business. Inbound shipments of raw materials are coming in very slowly, and the manufacturer's outbound shipments to northern New York and the New England states are being delivered many days, and even weeks, late.

Although a few makers report that collections are better, the majority note no change, and they may be classed as from fair to good.

## TOBACCO

The exceptionally good demand for cigars which was noted by all manufacturers last month has not conCigars and
cigarettes tinued with some, although all cigar makers report that orders are more plentiful than they were a year ago. The large manufacturers find that the call for cigars, particularly of Class C grades, is very good for this season of the year, and nearly all are working at or close to capacity. Some of the smaller manufacturers find demand seasonally dull, but many have sufficient business to warrant capacity output. The average rate of production in factories in this district is about 85 or 90 per cent. Makers report that the biggest increase in demand over that of February, 1921, is apparent in the larger industrial centers, and that business in the purely agricultural districts shows a decrease from
that of a year ago. Producers of smoking and chewing tobaccos find the demand very active and are operating at capacity. Makers of Turkish cigarettes state that the demand is only fair and is no better than it was a year ago, production being at about 50 per cent of capacity. Consumption of Turkish cigarettes has shown a marked decline from the high mark of 1919 and 1920, whereas the demand for American cigarettes has been steadily growing.

The following chart, based upon sales of internal revenue stamps, shows that in January, 1923, there was a marked increase in production of the major classes of cigars and of small cigarettes over that of January, 1922.


The production of cigars was 26 per cent !arger, and that of cigarettes
44 per cent larger, in January, 1923, than in January, 1922. December, 1922, and January, 1923, are the only months since August, 1920, in which the output of Class B cigars showed an increase over that of the same months in the previous year
Source-Sales of Internal Revenue Stamps by the Commissioner of Internal Revenue

Prices for cigars are firm and unchanged, although trade concessions and advantages offered to buyers last year have been entirely withdrawn by manufacturers. Smoking and chewing tobacco prices are steady, but cigarette prices still show some signs of softening. The cost of all grades of tobacco entering into the manufacture of smoking products is considerably higher than it was a year ago; but during the past month there have been only slight advances. Cigar manufacturers state that they will be forced to advance their prices when they start using 1922 tobaccos, but on account of the determined resistance to higher prices by retailers none have found it expedient to do so yet.

Cigar stocks at many factories are increasing and are considerably larger than on the first of the year; but they are by no means heavy. Class A and Class B cigars are accumulating, but stocks of Class $C$ grades are still light. Most manufacturers have ample stocks
of fillers and binders, but their supply of wrappers, especially Sumatra, is only moderate.
At the beginning of the month many of the large Philadelphia manufacturers advanced the wages of cigar makers in their city factories by from 10 to 11 per cent. Outside of Philadelphia, however, wages have not changed, as the labor supply in the smaller cities and towns is more plentiful.
Freight shipments to Western and Southern points have shown decided improvement during the past thirty days, but to the Northeast express shipments are still being resorted to because of the great delays in freight movements to that region.
Collections continue to be good with large producers, but many of the smaller manufacturers find that they are only fair.

Since March of last year, when cigar tobacco prices touched the lowest level since the war, prices of leaf

## Tobacco leaf

 have moved upward, and today some grades have almost reached their wartime levels. This is especially true of Pennsylvania and Ohio tobaccos; but Wisconsin, Connecticut, Florida, Havana, Porto Rican and the better grades of Sumatra and Java tobaccos are also considerably above last year's levels.The Lancaster tobacco market, the center of the Pennsylvania tobacco-leaf district, has been very active for the past three months. Reports from there state that buying by manufacturers and dealers is much heavier than it was a year ago. Most of the 1922 crop has been purchased from the growers, only 10 or 15 per cent being still in the hands of farmers. In February of 1921 the average price for good sound. Pennsylvania tobacco was from 12 to 14 cents per pound ; today the average price is from 16 to 20 cents per pound. Some 1921 Pennsylvania tobacco is still in the market, and 1921 wrappers are selling at from 25 to 30 cents per pound, whereas the few fillers that are still left are bringing from 10 to 15 cents. The 1922 wrappers are selling at from 16 to 20 cents per pound, but some exceptional lots have sold at 22 cents, and fillers in the bundle are bringing from 4 to 6 cents per pound at the farm. Some dealers have sold 1922 fillers in large quantities for as much as 8 and $81 / 2$ cents. Leaf dealers agree that the quality of the 1922 crop is better than that of the 1921 crop, as there is little spotting and discoloration of the leaves and not quite so much is flea-bitten. Some very fine binders have been secured from the early 1922 crop, and the cure of the 1922 tobacco is highly satisfactory.

The better grades of Ohio tobacco have been bought up by dealers and manufacturers, and the situation in the Ohio district is closely analogous to that in Pennsylvania. These two districts, which are free of pool control, have been fairly well bought out at prices to farmers which aproach war-time levels. The Connecticut and Wisconsin pools have made heavy sales
at prices from 15 to 20 per cent above those of last year, and the markets in these districts show increasing activity.

The best grades of Havana and Porto Rican have almost disappeared from the market, although the poorer grades are still in abundant supply. The new crops are now being grown, and reports from Cuba state that cool dry weather at a time when warm moist weather would help the crop wonderfully, is retarding the growth. Florida and Georgia growers are now planting their seed beds for the 1923 crop. The shadegrown tobacco raised last year by these districts proved very satisfactory for wrappers of the lower priced cigars and was rapidly bought up by manufacturers.

Next month the inscriptions on Sumatra tobacco will open at Amsterdam. The best grades of the color desired by American manufacturers are reported as not very plentiful, but the poorer grades such as are used in Continental Europe are more or less of a drug on the market. Some Sumatra was sold early in the month to Americans, out of hand, at prices reported higher than the opening price of last year at Amsterdam. As the tobacco is en route from Sumatra it is difficult to tell just how good the quality was. The buying of Java wrapper will also begin at the Amsterdam inscriptions.

## AGRICULTURE

The farm value of farm products, as estimated by the United States Department of Agriculture for the states of New Jersey, Pennsylvania, and Delaware, show a slight appreciation over those of a year ago. Apples, potatoes, and sweet potatoes are considerably below last year's prices, but extra large yields of these


[^4]crops will counterbalance to a big extent the lower price per bushel. Wheat and corn, the two principal grain crops, are considerably higher than they were at the beginning of 1922. Hay is slightly lower, but better yields than in 1921 are the cause of the decrease. Poultry products and butter are lower, but hogs, turkeys, milk cows, and horses have increased in value. On the whole, the farmer in this district has realized a slightly better gross return for the products which he raised in 1922 than for those of 1921. The following table gives the Department of Agriculture's estimate of farm values of the chief products raised in this district:

| Estimated farm value of important products |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December 15, 1921 and 1922 |  |  |  |  |  |
|  | New Jersey |  | Pennsylvania |  | Delaware |  |
|  | 1922 | 1921 | 1922 | 1921 | 1922 | 1921 |
| Hogs, per 100 lbs . | \$9.00 | \$9.00 | \$9.30 | \$8.50 | \$10.10 | \$9.80 |
| Beef cattle, per 100 |  |  |  |  |  |  |
| lbs. | 6.00 | 7.50 | 7.20 | 6.30 | 7.00 | 6.60 |
| Turkeys, per lb. | . .54 | . 49 | . 50 | . 47 | . 45 | - 41 |
| Milk cows, per head | 85.00 | 80.00 | 65.00 | 65.00 | 66.00 | 70.00 |
| Horses, per head | 150.00 | 140.00 | 120.00 | 120.00 | 85.00 | 89.00 |
| Apples, per bu. | 1.25 | 2.30 | 1.10 | 2.60 | . 57 | 2.40 |
| Beans (dry) per bu.. | 3.90 | 3.50 | 4.20 | 3.50 |  |  |
| Timothy hay, per ton. | 25.00 | 24.70 | 15.00 | 17.00 | 16.50 | 15.10 |
| Clover hay, per ton... | 24.00 | 23.40 | 14.00 | 16.00 | 15.00 | 12.80 |
|  | January 1, 1922 and 1923 |  |  |  |  |  |
|  | 1923 | 1922 | 1923 | 1922 | 1923 | 1922 |
| Wheat, per bu. | \$1.18 | \$1.11 | \$1.17 | \$1.04 | \$1.12 | \$1.00 |
| Corn, per bu. | . 82 | . 59 | . 74 | . 58 | . 80 | . 50 |
| Oats, per bu. | . 61 | . 50 | . 48 | . 46 | . 58 | . . . |
| Rye, per bu. | . 93 | 1.03 | . 88 | . 87 | 1.08 | . . . |
| Potatoes, per bu...... | . 75 | 1.28 | . 71 | 1.24 | . 70 | .... |
| Sweet potatoes, per bu. | . 88 | 1.52 | 1.20 | 1.90 | . 46 |  |
| Hay (loose), per ton. | 19.70 | 21.50 | 15.00 | 15.00 | 19.50 | 16.00 |
| Butter, per lb......... | . 53 | . 51 | . 51 | . 49 | . 42 | . 50 |
| Eggs, per doz | . 63 | . 74 | . 56 | . 55 | . 41 | . 55 |
| Chickens, per 1 b . | . 30 | . 328 | . 22 | :217 | . 23 | . 24 |

Yields of the important crops in 1922 were, on the whole, bountiful, and the per acre production of hay, wheat, apples, potatoes, and sweet potatoes was considerably greater than in 1921 . The preceding chart, giving the average of the per acre yields in the states of New Jersey, Pennsylvania, and Delaware, shows that the yield of wheat and potatoes equalled previous high records and that that of corn equalled the ten-year average.

At the present time farmers are purchasing their fertilizers and seeds in preparation for the spring plantings. An interesting fact revealed by fertilizer manufacturers is that the farmers' purchases of commercial fertilizers so far this year are no greater, or are even
smaller, than they were in 1922. Either the farmer has not the cash to buy, or his confidence in some of his principal money crops has been badly shaken by very low prices at the time of harvest.
The prices of mixed fertilizers are from 5 to 10 per cent lower than they were in February, 1922; but some of the ingredients of mixed fertilizers, particularly nitrates and ammonia salts, are nearly 10 per cent higher. Muriate of potash is the same as it was a year ago, and acid phosphates are 10 per cent cheaper. Potash has regained its pre-war importance as a fertilizer ingredient, and from 90 to 95 per cent of the total amount used in this country is again coming from Germany. The production of potash from kelp and other submarine plants has practically stopped, because it became unprofitable after the opening of world markets to the German potash mines. Farmers to-day are doing more home mixing of fertilizers than in prewar days, and manufacturers state that they are not buying full-mixed fertilizers in nearly as large amounts as in 1914. But the total amount of commercial fertilizers used on the farms of the United States is much larger than it was in 1914, the greatest increase in the past ten years having taken place in the South.

Much has been said of the farmer's lack of interest in foreign events. Whether or not he is as indifferent as he is said to be, the fact remains that he is vitally concerned in the welfare of the rest of the world, as foreign countries, by their purchases of domestic surplus production, make better farm prices possible. This is especially applicable to the wheat grower and the cotton producer, because one third of the wheat crop and over one half of the cotton crop is consumed in foreign countries. As the following chart shows, most of our corn output is consumed at home. In fact, about

PRODUCTION AMD EXPORTS OF WHEAT, CORN AND COTTON


Although foreign countries, principally European, take only a negligible part of our corn crop, they are heavy purchasers of American cotton and wheat. Hence the prosperity of the weste
wheat regions and the southern cotton belt depends
largely upon the buying power of Europe
Sources-Department of Agriculture and Department of Commerce
two-thirds of the corn raised seldom leaves the farm, being used principally as a cattle feed and fattener; and therefore corn has not the commercial importance of wheat or cotton.
The weather thus far has not been favorable to the winter wheat crop in the Third Federal Reserve District. The lack of snow has left the wheat fields exposed to the ravages of alternate thaws and freezings, and consequently the amount of wheat which is winter killed is considerable. This, in addition to the poor start that much of the wheat had last fall because of the dry weather, makes it unlikely that this year's crop will be as good as last year's.

This business report will be sent regularly without charge to any address upon request

THE THIRD FEDERAL RESERVE DISTRICT

Population (1920)...................................
Area in square miles.
Persons per square mile (1920)
Number of industrial workers (1919)
Number of industrial establishments (1919)
Value of manufactured products (1919) $\qquad$
\$5,216,756,886
6,753,690
36,844
183.3

894,878
23,731

Counties of Third Federal Reserve District

| County | Population | Manufactures |  |  | County | Population | Manufactures |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | No. of wage earners | No. of establish. ments | Value of products |  |  | No. of wage earners | No. of establishestabish ments | Value of products |
| Pennsylvania |  |  |  |  | Montgomery .... | 199,310 | 28,580 | 712 | \$175,263,478 |
| Adams | 34,583 | 2,040 | 145 | \$8,564,398 | Montour | 14,080 | 1,636 | 51 | 6,148,154 |
| Bedford | 38,277 | 1,404 | 159 | 9,080,375 | Northampton | 153,506 | 32,676 | 427 | 200,405,171 |
| Berks | 200,854 | 41,072 | 1,031 | 193,859,538 | Northumberland | 122,079 | 11,468 | 285 | 50,149,508 |
| Blair | 128,334 | 19,973 | 167 | 87,860,380 | Perry | 22,875 | 992 | 106 | 4,466,442 |
| Bradford | 53,166 | 4,529 | 147 | 22,091,853 | Philadelphia | 1,823,779 | 281,105 | 9,064 | 1,996,481,074 |
| Bucks | 82,476 | 15,086 | 498 | 68,575,038 | Pike | 6,818 | 174 | 49 | 414,740 |
| Cambria | 197,839 | 15,023 | 276 | 97,554,133 | Potter | 21,089 | 2,028 | 81 | 14,180,744 |
| Cameron | 6,297 | 989 | 21 | 7,779,461 | Schuylkill | 217,754 | 12,060 | 457 | 50,345,292 |
| Carbon | 62,565 | 7,398 | 116 | 40,833,425 | Snyder | 17,129 | 785 | 85 | 4,512,527 |
| Center | 44,304 | 1,985 | 169 | 7,251,650 | Sullivan | 9,520 | 404 | 41 | 2,714,451 |
| Chester | 115,120 | 12,561 | 336 | 76,895,119 | Susquehanna | 34,763 | 2,055 | 81 | 7,124,401 |
| Clearfield | 103,236 | 5,904 | 267 | 27,516,334 | Tioga | 37,118 | 1,773 | 94 | 19,886,255 |
| Clinton | 33,555 | 5,907 | 133 | 23,662,546 | Union | 15,850 | 973 | 52 | 4,799,323 |
| Columbia | 48,349 | 6,064 | 183 | 47,115,637 | Wayne | 27,435 | 2,453 | 170 | 9,356,881 |
| Cumberland | 58,578 | 4,289 | 188 | 17,430,992 | Wyoming | 14,101 | 510 | 53 | 4,843,139 |
| Dauphin | 153,116 | 23,765 | 416 | 163,518,414 | York ... | 144,521 | 27,117 | 1,023 | 122,964,979 |
| Delaware | 173,084 | 67,396 | 302 | 382,989,130 | New Jersey |  |  |  |  |
| Era ${ }_{\text {Franklin }}$ | 34,981 62,275 | 5,793 5,293 | 96 170 | 43,207,007 | Atlantic | 83,914 | 2,970 | 259 | 12,680,094 |
| Fralton | 62,275 9,617 |  | 170 44 | $25,059,673$ 399,912 | Burlington | 81,770 | 9,431 | 201 | 61,319,903 |
| Huntingdon | 39,848 | 3,611 | 179 | 12,519,662 | Camden | 190,508 | 48,325 | 428 | 246,555,714 |
| Juniata .... | 14,464 | 656 | 81 | 2,332,326 | Cape May | 19,460 | 612 | 88 | 2,718,908 |
| Lackawanna | 286,311 | 21,124 | 484 | 73,583,554 | Cumberland | 61,348 | 9,094 | 254 | 29,505,313 |
| Lancaster | 173,797 | 23,590 | 906 | 112,445,407 | Gloucester | 48,224 | 3,003 | 132 | 24,824,967 |
| Lebanon | 63,152 | 10,076 | 313 | 43,940,189 | Mercer | 159,881 | 30,515 | 497 | 158,361,221 |
| Lehigh | 148,101 | 24,215 | 567 | 149,098,110 | Ocean | 22,155 | 468 | 90 | 1,523,294 |
| Luzerne | 390,991 | 24,856 | 579 | 94,702,494 | Salem | 36,572 | 6,058 | 108 | 30,725,756 |
| Lycoming | 83,100 | 12,081 | 317 | 58,912,199 | Delaware |  |  |  |  |
| McKean | 48,934 | 5,419 | 206 | 38,241,405 | Kent | 31,023 | 1,043 | 108 | 5,086,966 |
| Mifflin | 31,439 | 4,917 | 76 | 22,208,481 | New Castle | 148,239 | 25,751 | 357 | 152,272,331 |
| Monroe | 24,295 | 2,000 | 100 | 8,544,527 | Sussex | 43,741 | 2,241 | 203 | 7,713,712 |


[^0]:    * On February 23 Boston and New York rates were advanced to $4 \frac{1 / 2 \%}{2}$.

[^1]:    * Times per year, based on cumulative period.

[^2]:    * Do not report operations.

[^3]:    (In terms of dollars)

    1. Net sales:
    (a) Jan., 1923, as compared with Dec., 1922.... -33.6\%
    (b) Jan., 1923, as compared with Jan., 1922... $+12.6^{\prime \prime}$
[^4]:    At no time have the yields of corn and wheat fluctuated as violently from year to year as have those of potatoes. Potatoes have a very high water content and the yields are adversely affected by too much or too little rain. The years of 1920 and 1922 were ideal for potato culture
    Sources-"Monthly Crop Reporter" and "Weather, Crops and Markets"

