

The Monthly Business Review

Covering business and industrial conditions in the Fourth Federal Reserve District

FEDERAL RESERVE BANK OF CLEVELAND

D. C. Wills, Chairman of the Board

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OUR American people are indulging in a wave of senseless extravagance. The reaction from the thrift and economy during the war period is widespread and disturbing. With no thought of price, with little provision for the future, our people, almost without exception, are demanding goods, especially luxuries, thus aiding an economic situation which they decry, yet take no active steps to combat.

During the period of the war millions of dollars were spent in propaganda calculated to encourage thrift and saving among our people. Neither of these qualities, unfortunately, is characteristic of Americans, and it took the shock of an expensive war to force us to realize the waste and lack of economy which we had hitherto permitted to go on, unnoticed and unchecked.

The signing of the armistice was apparently the signal for an outburst of the buying fever which has, from all indications, not yet reached its height. Essentials, then non-essentials, were bought in quantities which rapidly depleted the moderate stocks held by merchants and forced the people, surfeited with money and completely under the influence of a hypnotic "spending spell," to turn their attention to the class of goods properly called luxuries. As indicative of the extent to which our extravagance has led us, we repeat the statement of a prominent firm in this District that the amount paid by their customers in luxury taxes would more than equal the firm's income and excess profits tax.

There was a time, within the recollection of many of us, when price was a controlling factor in purchasing; but price no longer enters into our calculations. It has been demonstrated over and over again that goods will sell more quickly at an arbitrary 25 per cent increase than at the original price. A retail shoe dealer recently stated that he was compelled to mark up the price of his goods, as he found that customers were leaving his store and purchasing similar goods from his competitors, at higher prices. Buyers for merchandise houses are no longer concerned with price. The only question raised is that of delivery—knowing that the public will demand the goods regardless of cost.

All these instances indicate the extent to which the disease of spenditis is spreading. The remedy is plain. Production must be increased, and consumption limited to those things which we really need. We must learn to distinguish between luxuries and necessities. It is a common fallacy that, because incomes have doubled in the past few years, our standard of living has changed so that those things which we once regarded as luxuries are now classed as essentials. We must remember that the purchasing power of the dollar has declined in about the same ratio that incomes have increased.

It is the spendthrift, buying recklessly and without discrimination, who is the enemy of economy and the aggravation of the careful buyer. It is not the merchant who should be the most severely censured. To hold his trade a merchant must supply the wishes of his customers. If he does not do so, they will go to the places that will.

There are many retailers in the District who are just as sincere in their desire to put a check on this disease of spenditis as is one of our correspondents who says, "While we would like to stand pat, whenever we have tried to do so, our experience has cost us dearly. With no evidence that the public intends to let up in its purchasing, it is incumbent upon us, in order to protect our business, to continue to place orders under the conditions imposed upon us. We wish we could see our way to offset these conditions, but we have viewed it from every standpoint and find no opening of escape."

Among the retailers throughout the District there is a desire to lend themselves to any plan, as a body, which would tend toward bringing down the cost of living, for in most cases it is taxing their ingenuity to secure such costly merchandise and finance it.

Contrast this spirit with the text of a notice which a department store in this District is sending out to its trade:

"Your luxury taxes are deductible from your income tax return. The government rules that all funds paid for luxury or sales taxes may be deducted, when making your income tax returns. This means that one needs not hesitate about purchasing articles of apparel on which there is a tax."

Inasmuch as there is no tax except on luxuries, this is no time to send out advice which only tends to aggravate an already intolerable condition. The buying public surely needs no encouragement to spend money on luxuries.

While the following incident, sent us by our correspondent in the tobacco district, is, we hope, an exception, yet it is rather typical of the spirit of the times. Parenthetically, the tobacco crop this season is bringing record prices, and many of the tenant farmers are experiencing new-found wealth. One such tenant, after selling his crop, bought, not one, but two grand pianos, his only reason being that he had two daughters and they would always be "fussing" if they had only one piano.

A tremendous responsibility rests today upon the bankers of this country. As leaders in their communities, they must use their influence to point out the unsound viewpoint which permits or encourages extravagances. Both by education and example should they instruct the people to a clearer understanding of the situation as it really is. It is up to the people to correct it—but our bankers must point out the way.

An effective means which the Federal Reserve Banks have of bringing this lesson home is through discouraging unnecessary rediscounting by a closer inquiry into the purposes for which funds are to be used and by increased discount rates. Aside from these two means, together with the warnings which they will continue to send out, the Federal Reserve Banks must solicit the aid of their member banks in curbing an extravagant public. The commercial banks must do their part to impress upon the public that the resources of the Federal Reserve System are for legitimate industrial and agricultural uses and are not to be exploited for speculative purposes or for the purpose stated by an applicant for a teacher's certificate in a recent examination in answer to the question "What is the Federal Reserve Act?" that "The Federal Reserve Act is an act of storing money of the country and anyone who is without money or 'broke' can go to these banks and get what money they need."

No Shortage of Money for Legitimate Requirements. Passage of Edge Bill Brings New Hope in Foreign Financing. General banking conditions are satisfactory. While there has been a slight temporary tightening of money resulting in a rate little better than 6 per cent for the short-time loans, yet, by liberal rediscounting with the Federal Reserve Bank, there have been ample funds for all legitimate demands of business and manufacturing.

The acceptance market has again resumed much of its former activity, after experiencing an exceedingly dull and unsettled period following the advance in rediscount rates by the Federal Reserve Bank. In the past two weeks the supply and demand has steadily increased, and the rates have again become stable, bids ranging from $4\frac{3}{4}$ to $5\frac{1}{4}$. The low call-money rates and the increased return on acceptances has brought a demand from many new sources. There are still a number of larger banks who are not offering bills in the open market, yet the variety of bills is sufficient to meet the need. For some time following the change in rates, the volume of business dropped to a lower point than the market had seen for some months previous. More banks in this District are beginning to feel their way into the making of bank acceptances, especially through participations in acceptance credits established by large correspondent banks against staple commodities in warehouse or moving to market.

While the official reports of foreign trade show no evidence of the anticipated reduction in our exports, exporters who have been selling in European markets on long credits are showing no little concern over the steady decline in the foreign exchanges. As the premium on the American dollar rises higher and higher, the European buyer is less and less disposed to liquidate his obligations or to

make new commitments for American merchandise. Some relief is anticipated, however, from the enactment of the Edge bill, under which credits for longer periods and in larger volume than the banks can handle, under present conditions, may be worked out.

Strong Demand for Steel, but a Shortage in Supplies. Severe operating problems have been occupying the attention of iron and steel producers, and trade and market conditions for the time being have been subordinated. It has been the case with these manufacturers that, having just emerged from the disturbing effects upon production caused by the steel strike, they have been forced to face an even more serious upsetting of operations due to the coal strike and the consequent restrictions on fuel supplies. When the coal miners agreed to accept the government's offer of terms December 10, the operating position of blast furnaces and steel works had reached the critical stage. This was the effect produced by the reduction to the extent of 25 per cent ordered by the government in the supplies of coal available to the beehive coke ovens and of the restrictions on fuel supplies generally which had been put in force. A second cut of 25 per cent on coking coal tonnage was imminent when the adjustment of the coal strike was reached. As a result of this contraction of supplies many blast furnaces early in December were obliged to bank and a number of steel works and finishing mills also were closed. Recovery of these operations under the circumstances could not be complete or immediate and in fact it is likely to be several weeks before operations are restored to their former basis. This means that the further loss of output suffered by the industry in December through the coal prices has been considerable, and has compounded that already sustained by reason of the steel strike. It is estimated that the loss of production during the past three months from the rate of activities prevailing October 1 has been something like 2,000,000 to 2,500,000 tons of iron and steel. This total promises to be further increased before the plants again are functioning regularly and efficiently.

This loss of tonnage has come at a time when the producers could afford it least in view of the magnitude of the general demand. Thousands of tons of orders which were booked for 1919 delivery now must be carried over into the new year, thereby absorbing a large part of future production in the early months. The shortage of material already apparent has been intensified accordingly and now is most acute. Very few manufacturers now are able to offer iron or steel for early or assured delivery. Some of them have enough business on their books to carry them well into the second quarter of next year and even beyond. The effect on prices has been the natural one. In many lines lots available for early shipment are commanding from \$2 to \$20 per ton premium over the regular market levels. The underlying economic strength of the market is threatening to upset the strong influences toward keeping prices in check, which for several months have been cast upon the market by some of the larger companies. To a considerable degree the minimum prices which have been named by these interests have become nominal, because the material has not been available, and this is letting prices more and more seek their own level in accordance with supply and demand.

Pig iron especially has shown a sharp upturn and the advance starting about November 1 now has reached from \$10 to \$15 per ton. Foundry pig iron in a number of districts during the past week has reached or passed \$40. This is the highest level that the market has attained since before the period of government control dating from September 24, 1917. The furnaces have been shipping much more iron than they have been making and have been drawing upon their stock piles for this amount. In November the total drawn from the stocks was approximately 90,000 tons. Semifinished steel has advanced from \$8 to \$10 per ton. It is apparent that the coke market in view of the shortage would have soared decidedly had it not been for the restoration of government control. This has kept prices at a fixed level of \$6 to \$7 Connellsville. Before government control was reestablished spot coke had brought from \$10 to \$12.

The demand for steel is strong in all lines, but there is not much new selling in the absence of supplies, except in those heavier products where the previous activity has been light or moderate. As it is this selling is for deferred delivery. A number of the railroads have been placing round tonnages of rails for 1920 delivery, subject to their return to private control. Orders placed or under negotiations on this tentative basis total 800,000 to 1,000,000 tons. Large lots of ship steel, reflecting increased

activity of American yards on commercial work now that government contracts are running out, are being placed or inquired for.

Pig iron production which increased in November to 2,397,175 tons as against 1,864,424 in October, according to the statistics compiled by The Iron Trade Review, promises to be set back again in December as a result of the many furnaces banking because of the coal strike. The number of furnaces in blast November 30 was 252 compared with 216 on October 31 and 163 on September 30.

Coal Strike Ended as Predicted. Distribution Apt to be Handicapped by Lack of Car Movement. The return to work of the coal miners has relieved what might have been a serious blow to business. As predicted in a recent Review, the miners' strike proved to be of short duration, for the reasons we stated. Some localities were affected by a shortage, and regulations governing distribution were again brought into force, in consequence of which certain classes of business suffered from restrictions in coal allotments. Complete immediate relief is not to be expected. Much depends upon the ability of the railroads to move cars from the West and Middle West to the coal fields of Pennsylvania and West Virginia, and effect their redistribution. With the supply of cars none too plentiful the railroads may be hard pressed to keep a sufficient supply of coal moving to prevent temporary shortages in some sections of the District.

The greatly increased demand for fuel oil mentioned in our last Review has added to demands made upon the industry, and an advance to a price perhaps approaching that of 1917 is looked for. An advance of 25 cents a barrel during the past month is noted, but this increase has not stimulated production to the point desired. New drilling is highly speculative, and it is unlikely that any considerable new development work will be undertaken until crude oil prices find higher levels. The demand for oils of all grades is constantly increasing—another factor which points to an increase in the price of crude oil.

The oil industry in eastern Kentucky is rapidly passing from speculators to the hands of experienced oil men, and it is expected that this field will develop into a stable, money-producing business.

The production of coke was somewhat curtailed by reason of the miners' strike, and fancy prices are being paid for that fuel. This, however, is but a temporary condition which will adjust itself when coal production again approaches normal.

Heavy Loss to Great Lakes Fleet Owners. The finish in the lake trade was unsatisfactory, like the rest of the season, and although many of the bulk freighters were sent to winter quarters much earlier than usual, boats that were on the market early in December could not get cargoes.

The severe weather in the Northwest cut off ore shipments and in a number of cases ore carriers that were partly loaded had to lay up at the loading ports. Little shifting could be done as there was not much demand for tonnage in the grain trade and a number of steamers were dropped at the upper lake ports.

A big cut was made in earnings in 1919, due to the reduction in carrying charges, the slow start and the great loss of time in port during the last half of the season, which was caused by labor trouble ashore.

A general reduction of 20 per cent was made in carrying charges on ore, and coal rates were cut from 5 to 12 cents a ton. That of course would make quite a reduction in the earnings of the vessels, but the demand for tonnage was light in all trades during the early part of the season, and before all the freighters were in commission the labor trouble started at the upper lake ports. Boats in many cases were held in port from three to five weeks with crews aboard, and later there was considerable delay at the end of the route as the furnaces could not take the ore forward owing to the strike of the steel workers. Up cargoes were very scarce after November 1 due to the coal miners' strike.

The cost of everything was higher than in 1918 as top wages were paid and there was no let-up of the expense in other lines. Some of the boats were idle nearly half of the season, and with the reduced rates and great loss of time it is not hard to figure how they finished the season. Not including the few cargoes moved in December, ore shipments for the season were 47,130,733 tons. That is a

loss of 14,091,163 tons compared with 1918. Stocks of ore at Lake Erie ports are the largest on record as on December 1 the docks were holding 10,454,843 tons. Coal shipments were a little short of the estimated requirements and with the start the weather has made there will be very little if any coal carried over at the upper lake ports at the opening of next season. Grain figures are not available, but the movement will show a big loss compared with 1918.

The indications are that unless labor trouble breaks out in a new spot to cause delay, 1920 will be an active season. That there will be a heavy coal movement is quite certain. From the rate it is moving off the docks in the upper lake ports, there will be very little coal in storage in the northwest at the opening of next season. With a big demand in all lines of iron and steel a large amount of ore will be used during the winter, and the ore bulk will furnish employment for more tonnage than it did in 1919. It will probably be a month or more before the furnace men place orders for their requirements for the season.

Much Corn Still in Shock. Winter Wheat Seeding Late. Hessian fly infestation is very general in wheat seeded this fall previous to the "fly free" dates as established by our experimental station and other farm crop experts. The full effect of this infestation will not be noted until the spring period, when the brood, greatly multiplied, covers the affected region. Should heavy rains occur at the time of emergence in the spring, the tendency will be to check the ravages of the brood, otherwise material damage may be anticipated. In Ohio, especially, wet weather came on at about the time of the "fly free" seeding date, and as a result, a considerable percentage of the seeding was late, some very late; in fact, we have records of seeding up to November 20. This very late seeding naturally went into the winter with practically no growth and the ultimate result of this is very problematic. The great bulk of the crop, however, escaped both infestation and extremely late seeding, and went into the winter in very good condition.

As husking progresses, it is found that considerable damage has been done to the fodder by the excessive rains; also the grain has been damaged to some extent from the same cause. Husking and shredding have been very slow, on account of the wet fall. A prominent crop expert estimated that on December 1 only about sixty per cent of the Ohio corn crop had been husked.

Stock raising continues unattractive to farmers at present price levels. The price of feed has not yet been adjusted to the price of beef and pork, and until these prices come into harmony it is not expected that the raising of stock will receive much attention at the hands of the farmer.

During the present period of chaotic conditions, the attitude of the farmer in this District is to "sit tight" and not "rock the boat." While he may feel that his high-priced feed has been fed to low-priced live stock, that farm labor is very scarce and very expensive, that there seems to be no maximum to what he must pay and no minimum for what he may be paid, nevertheless he registers his protest, then continues with his "eight-hours-twice-a-day" system, realizing that increased production is our salvation. His stabilizing influence must surely be felt.

Manufacturers of Motor Cars and Trucks Far Behind in Production. Manufacturing in General Very Satisfactory. Though more or less handicapped by the various causes which have contributed to decreased production in the manufacturing field, a distinct note of hopefulness is sounded in the reports reaching us this month. Especial emphasis is placed upon what seems to be a generally improved attitude of labor in nearly all plants, though pre-war efficiency has not yet been obtained. One large manufacturing concern in this District says that their men are working more satisfactorily than at any time during the past four years.

Some difficulty has been experienced in obtaining certain steel products. Prices are stiffening and deliveries are being extended. Some shapes are being sold with no promises made as to delivery.

Automobile makers report capacity business with orders booked for months ahead. The manufacturing of trucks is particularly active, the performance of American-made trucks under all conditions during the war removing doubt from the minds of many prospective purchasers as to the adaptability of motor trucks for all kinds of service. The belated "good roads" work now being done adds another reason for increased sales.

Manufacturers of labor-saving machinery of all classes are active, and a considerable foreign movement is noted in spite of the unfavorable exchange rate.

Makers of tools report better business than at any time during the past year.

The general conditions of manufacturing in the Fourth District may be summed up as quite satisfactory, with every indication for continued prosperity during the coming year.

Local Exporters are Compelled to Compete with Germany's Reduced Prices and Prompt Deliveries. The foreign trade as a whole has been normal, but there is considerable difference among the various markets. Europe still wants finished products as well as foods and raw materials, but the continued disadvantageous exchange and our need for quick monetary turnover are severe handicaps to the consummation of sales. The necessity for intermediary machinery, whereby the buyer may have credit and the seller may get his money, is becoming more and more evident. Germany's prices and prompt deliveries present an attractiveness hard for local manufacturers to compete. In spite of the great need in Europe, shippers from this District find other markets quite as profitable.

South America and the Far East are buying more than ever before. Correspondents of Cleveland firms report active markets for Cleveland machinery and allied products even to Punta Arenas on the tip of South America. One local manufacturer reports surprisingly good results from India. In view of the fact that these territories are not competitive, but are in that stage of development where they will use our products, it behooves producers to cultivate these markets against the time when Europe will be sufficiently productive to enter them.

Housing Situation Slowly Improving. Little Immediate Reduction in Cost of Material Expected. A good volume of building is assured for the coming winter. Extreme cold weather seems to be the only thing which will interfere with operations in this line. The high wages now paid to building-tradesmen offer sufficient inducement to keep them steadily at work, and an improvement in the housing situation is already discernable.

Some home-builders are waiting for a break in the price of building materials, but there is nothing in the present situation to justify any belief that lower prices shall be an event of the near future.

Notwithstanding the exceedingly high cost of construction, contractors and builders are receiving many inquiries from manufacturers for enlargements and for new construction.

Sharp Increase Expected in Freight Movements which will Probably Result in Shortage of Carriers. Figures submitted by the terminal manager for November, 1918 and 1919, showing traffic handled by rail into and out of Cleveland are as follows:

| | 1918 | Inbound | Outbound | Total |
|------|------|-----------|----------|-----------|
| Cars | | 36,678 | 23,754 | 60,432 |
| Tons | | 1,347,027 | 801,924 | 2,148,951 |
| 1919 | | | | |
| Cars | | 20,986 | 21,825 | 51,811 |
| Tons | | 884,871 | 694,341 | 1,579,212 |

Figures for November, 1919, when compared with those of October, 1919, and when taken in connection with the existence of the coal strike are self-explanatory. There is a sharp drop in the total amount of tonnage handled, but it is to be noted that most of the reduction is in freight received, that is to say, bituminous coal.

A similar comparison between those of November and October, 1918, shows a very different situation. There was a similar sharp reduction in the total amount of freight handled, but it is to be noted that there was almost as great a proportional reduction in the number of cars forwarded as in the number of cars received. In other words, the great reduction in the freight movement of last year showed a considerable change in commercial conditions, whereas the reduction which has occurred is chargeable properly to the coal strike. This being the case it would seem that the settlement of the coal strike, if

such settlement is permanent and satisfactory, will mark the beginning of about as sharp an increase in freight movement as the strike itself has already caused decrease. This condition may cause the carriers to be unable to furnish the necessary supply of box cars and should the settlement of the coal strike mean the immediate resumption of mining, there will be a great scarcity in the open top equipment.

The larger tonnage producing industries advise us that they have orders which will keep them working at their fullest capacity from a minimum of three months in some cases to a maximum of two years in others. With the carriers themselves, much depends upon the action taken by the Senate in regard to the turning back of the railroads to their corporate owners and the subsequent legislation.

Special Survey of Glass Industry in the Fourth District. In accordance with our policy of preparing surveys for our readers of the various industries in this District, we offer below a special report of the glass industry.

The glass industry in general is undergoing many changes in the different stages of manufacture. These new and modern methods were brought about in all branches of the glass industry by the action of labor and particularly that of the unskilled employee in and around factories. Although the improvements made to date have been wonderful, yet there is room for further advancement, and the next few years are going to witness added improvements. As in all other industries, the modernizing of factories and the increasing of production has caused an increased demand for all character of glass and glassware.

PLATE GLASS:—A condition is confronting the plate glass industry today that is entirely new. This condition is due to the curtailment in this industry, during the war at the request of the government, in order to save fuel and labor needed in war work and the shutting down of plate glass factories in England, France, Belgium, and Germany caused by the war. There has been a shortage of plate glass in the markets of the world recently. The capacity of the plate glass factories in the United States, England, France, and Belgium is sufficient to soon overcome this shortage. Another reason for the scarcity of this commodity is the fact that the automobile industry today consumes more plate glass annually for windshields and for enclosed limousines than was produced by all plate glass manufacturing concerns in this country 15 years ago. A large amount of plate is also used for mirrors, furniture covers, etc. It is estimated that the requirements for domestic and export business in this branch for the coming year, will be nearly one hundred million square feet, twenty-five million more than was manufactured in 1917. For many years there was no change in the manufacture of this commodity, but in recent years there has been wonderful improvement made by installing large grinding and polishing tables measuring up to 36 feet in diameter, modern lehrs, and new devices for handling the glass in its different stages of manufacture. The most modern equipped factories to be found in the world are located in Ohio and Pennsylvania. During nine months ending with September, 1919, 6,357,100 square feet of plate glass were exported, valued at \$3,677,194, while imports during the same period amounted to 11 square feet valued at \$5.

WINDOW GLASS:—The window glass industry of the United States is greatly overbuilt. There is at present a capacity, including both hand and machine operated window glass factories, and if they were to be operated continuously and only allowing time to make necessary repairs to furnaces, etc., they would produce around 20 million 50-foot boxes of window glass a year. As the domestic requirements of the United States, and that required for export purposes has never exceeded 11 million 50-foot boxes a year, and reached that amount only once, it can be readily seen what would happen to the industry if factories were to operate anything like full capacity. There are 2200 hand pots in shape to operate, but there are only about 1700 skilled blowers to man the pots; of this number 200 are what are termed "roadmen," that is, men who travel from one factory to another, and cannot be depended upon to stick to a job any length of time. There are about 325 machines of six different types, installed for blowing window glass by the cylinder process. Some of these machines are capable of turning out as high as 270 fifty-foot boxes of window glass every 24 hours. The cylinder can be drawn up to 42 feet in length and about 32 inches in diameter. The glass ranges in thickness from the very thin glass used in the manufacture of dry plates, which is one thirty-second of an inch in thickness, to

the heaviest glass drawn by machines, which is styled 39-ounce glass and is about equal in thickness to quarter inch plate glass. At the present time considerable of this heavier glass is being utilized in the automobile industry.

LENSES:—A few years ago the world depended upon Germany for the supply of the highest grade of lenses for all purposes. Today, thanks due to the late George A. Macbeth, the United States is producing the best lenses in the world. Other manufacturers in this country have developed optical glass for binoculars, telescopes, gun-sights, periscopes, camera lenses and other optical instruments that are superior to those made by any other country. The Bureau of Standards at Pittsburgh is deserving of great credit for the developing of this character of glass. This Bureau served the Government well in a very trying period.

TUBING:—Until the last year, glass tubing was manufactured by the skilled labor method. Today there are factories equipped with tube drawing machines that do the work automatically, and are capable of drawing tubing ranging in size from one-sixteenth to one-half inch in diameter at a rate upwards of 150 feet per minute. The demand for tubing is steadily increasing, but the new method of manufacture will easily take care of all requirements.

BULBS:—Since the use of electricity has become universal, there has been a steady increase in demand for electric bulbs, until today the requirements for this article reach an astounding figure. These bulbs were originally hand blown, but now machines are turning them out in an endless string. A bulb machine in operation is practically human in its every action.

There is one factory operating in the United States that draws the glass in a sheet form direct from the tank. This is a new departure, but has passed the experimental stage. We understand that the widest sheet that can be drawn by this method is 72 inches, the speed of the draw being around 50 inches per minute. While the export of window glass during nine months ending with September, 1919, totaled 738,099 fifty-foot boxes, valued at \$3,730,875, it is doubtful whether this export business can be retained by this country, as window glass factories in England, France and Belgium are again in operation. The most modern known machines are in the above named countries and also in Japan where the cost of labor is small in comparison to that in the United States. This places American manufacturers under a handicap. Imports of window glass during nine months ending with September, 1919, totalled 9265 fifty-foot boxes valued at \$68,927.

BOTTLES:—Wonderful strides have been made in the manufacture of glass bottles in the last generation. Up until the late nineties, all the bottles produced in the United States were hand made. Today the industry is practically mechanical and in a short time human skilled labor will be utilized on a very limited amount of ware in this branch of the glass industry. Machines have been invented that will produce as high as 165 two-ounce bottles per minute. Machines of the same make are so constructed that they will manufacture 6 five-gallon water bottles per minute. Another type of machine is capable of producing 59 quart fruit jars every minute. Still another type of machine turns out 32 pint or 28 quart milk jars every minute. In the most modern plants bottles are practically manufactured automatically. In some of the factories the raw material is dumped from railroad cars into bins by pressing a lever. The required amount of raw material entering the batch is run into a mechanical mixer. From here it is fed into the furnace by conveyors. After the glass is melted it is blown by full automatic machines that discharge the bottles onto a mechanical conveyor that takes the ware through the lehrs. Here it is that the first human hand touches the bottle since it was shunted on to the siding in the shape of raw material. Here a man inspects the ware and places it in a box. When filled the lid is nailed on by a mechanical nailer, and the filled box is again hustled on its way to the railroad car or warehouse on conveyors. It does not matter whether the warehouse is on the first, second or third floor, the conveyor takes it to its destination without complaining.

PRESSED WARE:—Manufacturers who devote their energy to producing pressed glassware have not made as much progress toward mechanical means as other branches of the glass industry. The reason for this is that in manufacturing tableware and lighting goods there are so many different styles and shapes that it is very hard to make it by mechanical means. The scarcity of labor and particularly the annoyance caused by the boy labor in factories has caused manufacturers to double

their efforts toward introducing the iron man into this trade. As a result there are many new styles of machines being tried out at the present time, and in the course of a few years this line of ware will be produced largely by machine.

The manufacturers of illuminating glassware in the Pittsburgh district, which represents the majority of the production in this country, find themselves crowded with orders. Many factories are refusing to accept orders, unless it is provided that the price shall be that ruling at the time of shipment. All factories have enough business to keep them busy for several months after January 1, 1920.

The demand is very heavy and, in spite of the restrictions imposed by the manufacturers, customers seem anxious to get glass at any price and many are willing to place orders subject to price when shipment is made.

It is difficult to tell the cause of this demand, but most manufacturers are of the opinion that this is due to the anticipation by dealers and jobbers of next year's requirements, who believe that building will then be booming.

Export business is constantly increasing, but the same difficulty in supplying this market makes it impossible for American manufacturers to take full advantage of their opportunities in foreign countries.

The manufacturers of glassware for table, drinking, and decorative use have been gradually increasing their business each month since the armistice was signed. In the early part of the year business was not particularly good, but it has been very good since the first of July and indications are that it will continue good the balance of this year, and, unless some unforeseen thing happens, it will be particularly good next year.

During the war the cost of both material and labor increased constantly and owing to the lack of production that cost increased even in greater proportion than labor and material. During the year 1918 the decreased production was particularly marked and became very serious. It was caused by a shortage of labor and a tendency on the part of the skilled glassworkers to limit production.

The skilled glassworkers in these industries are most all members of the American Flint Glass Workers' Union, who believe in closed shops and limited production in many lines. On certain other lines, however, it is permissible for a man to make all the money he possibly can. It is worthy of note that the officers of the union are conservative labor leaders, opposed to strikes until every other means of adjustment is used.

The production of this kind of glassware since the first of August has been largely in excess of the same period last year, and it is believed that the glassworkers appreciate the fact that a policy of restricting production will be disastrous not only to the manufacturer but to the worker.

There is no indication of any reduction in prices of glassware, and while some prices seem particularly high, the advance has not been in the same proportion as the advance in costs, and as there is little indication of any reduction in the cost of material and labor, there is only one way for the reduction to come about and that is for the production to be as large as it was in 1912, in which case the decreased overhead charges might make it possible for a reduction.

The export trade in this branch is not a very large factor. It amounts to considerable, but under ordinary circumstances there is a market at home for the goods; consequently, the majority of the manufacturers are not sufficiently interested in export so long as they can sell all they can make at home and not have the worry and excess costs incident to foreign shipments.

LIST OF GLASS FACTORIES IN THE FOURTH DISTRICT

1. Pressed and blown ware.
2. Bottles and hollow ware.
3. Window glass.
4. Plate glass.
5. Wire, glass rough and ribbed and glass tile factories.

| NAME | LOCATION | Fur-naces | Pots | Rings | Tanks | Ma-chines | Pro-ducts |
|--------------------------------------|-------------------------|-----------|-------|-------|---------------|-----------|-----------|
| Advance Glass Co..... | Newark, Ohio..... | 1 | 22 | ..... | 2 day | ..... | 5 |
| American Window Glass Co..... | Pittsburgh, Pa..... | ..... | ..... | ..... | 13 continuous | 118 | 3 |
| Atlantic Bottle Company..... | Tarentum, Pa..... | ..... | ..... | ..... | 2 continuous | 10 | 2 |
| Beaver Valley Glass Co..... | Rochester, Pa..... | 2 | 28 | ..... | ..... | ..... | 1 |
| Bellaire Bottle Co..... | Bellaire, Ohio..... | ..... | ..... | 20 | 2 continuous | ..... | 2 |
| Belmont Tumbler Co..... | Bellaire, Ohio..... | ..... | ..... | 4 | 1 continuous | ..... | 1 |
| | | | | 2 | 1 day | ..... |  |
| Boldt Company..... | Cincinnati, Ohio..... | ..... | ..... | ..... | 10 continuous | ..... | 2 |
| Bonita Art Company..... | Wheeling, W. Va..... | ..... | ..... | 6 | 2 day | ..... | 1 |
| Brockway Machine Bottle Co..... | Brockwayville, Pa..... | ..... | ..... | 7 | 1 continuous | ..... | 2 |
| Brookville Glass & Tile Co..... | Brookville, Pa..... | ..... | 30 | ..... | ..... | 6 | 3 |
| Brownsville Window Glass Mfg. Co.... | Brownsville, Pa..... | ..... | 60 | ..... | ..... | ..... | 3 |
| Bryce Bros..... | Mount Pleasant, Pa..... | 3 | 28 | ..... | ..... | ..... | 3 |
| Buckeye Window Glass Co..... | Columbus, Ohio..... | ..... | 27 | ..... | ..... | ..... | 3 |
| California Bottle Co..... | California, Pa..... | ..... | ..... | 6 | 1 continuous | ..... | 2 |
| Cambridge Glass Co..... | Cambridge, Ohio..... | 4 | 54 | ..... | ..... | ..... | 1 |
| Cameron Glass Co..... | Cameron, W. Va..... | ..... | ..... | 12 | 1 continuous | ..... | 1 |
| | | | | 1 | 1 day | ..... |  |
| Capstan Glass Company..... | Connellsville, Pa..... | ..... | ..... | 9 | 1 continuous | ..... | 1 |
| Central Glass Works..... | Wheeling, W. Va..... | 3 | 36 | ..... | ..... | ..... | 1 |
| Central Glass Co..... | Urbana, Ohio..... | 1 | 12 | ..... | ..... | ..... | 2 |
| Christenson & Son Co..... | Akron, Ohio..... | ..... | 6 | ..... | ..... | ..... | 1 |
| Columbus Glass Co..... | Lancaster, Ohio..... | ..... | ..... | ..... | ..... | 6 | 1 |
| Columbia Plate Glass Co..... | Blairsville, Pa..... | 7 | 140 | ..... | ..... | ..... | 4 |
| Consolidated Lamp & Glass Co..... | Coraopolis, Pa..... | 3 | 30 | ..... | ..... | ..... | 1 |
| Co-operative Flint Glass Co..... | Beaver Falls, Pa..... | ..... | 32 | ..... | ..... | ..... | 1 |
| Coshocton Glass Co..... | Coshocton, Ohio..... | ..... | ..... | 25 | 3 continuous | ..... | 2 |
| Crescent Bottle Co..... | McDonald, Pa..... | 1 | 14 | 6 | 1 continuous | ..... | 2 |
| Crescent Glass Co..... | Wellsburg, W. Va..... | 1 | 12 | ..... | 1 day | ..... | 2 |
| Crown Window Glass Co..... | Maumee, Ohio..... | ..... | 30 | ..... | ..... | ..... | 3 |
| Cunningham Glass Co..... | Pittsburgh, Pa..... | ..... | ..... | 8 | 2 continuous | ..... | 2 |
| Diamond Flint Glass Co..... | Cameron, W. Va..... | ..... | ..... | 2 | 1 | ..... | 1 |
| Diamond Glass Ware Co..... | Indiana, Pa..... | 1 | 10 | 4 | 1 day | ..... | 1 |
| Du Bois Glass Company..... | Du Bois, Pa..... | ..... | ..... | 16 | 2 continuous | ..... | 2 |
| Duncan & Miller Glass Co..... | Washington, Pa..... | 2 | 30 | ..... | ..... | ..... | 1 |
| Eagle Manufacturing Co..... | Wellsburg, W. Va..... | ..... | 48 | ..... | 3 continuous | ..... | 1 |
| Eastern Ohio Glass Co..... | Barnesville, Ohio..... | ..... | 36 | ..... | ..... | ..... | 3 |
| Eldred, W. G., Co..... | Punxsutawney, Pa..... | ..... | 42 | ..... | ..... | ..... | 3 |
| Erie Window Glass Co..... | Sandusky, Ohio..... | ..... | 30 | ..... | ..... | ..... | 3 |
| Erskine Bros. Glass Co..... | Wellsburg, W. Va..... | ..... | 8 | ..... | 1 continuous | ..... | 1 |
| | | | 8 | ..... | 2 day | ..... |  |
| Essex Glass Co..... | Mt. Vernon, Ohio..... | ..... | ..... | 32 | 5 continuous | ..... | 2 |
| Fairfield Glass Co..... | Lancaster, Pa..... | ..... | 36 | ..... | ..... | ..... | 3 |
| Federal Glass Co..... | Columbus, Ohio..... | ..... | ..... | 48 | 3 continuous | ..... | 1 |
| Federated Glass Co..... | Point Marion, Pa..... | ..... | 36 | ..... | ..... | ..... | 3 |
| Flaccus Glass Company..... | Tarentum, Pa..... | ..... | ..... | 40 | 5 continuous | ..... | 2 |
| Fosteria Glass Co..... | Moundsville, W. Va..... | 4 | 56 | ..... | 2 day | ..... | 1 |

| NAME | LOCATION | Fur- naces | Pots | Rings | Tanks | Ma- chines | Pro- ducts |
|---|------------------------------|---------------|------|---------|--------------------------------|---------------|---------------|
| Fostoria Glass Novelty Co..... | Fostoria, Ohio..... | 1 | 12 | 6 | 3 day | | 1 |
| Fry Glass Co., H. C..... | Rochester, Pa..... | 2 | 36 | | 1 | | 1 |
| General Electric Co..... | Bridgeville, Pa..... | 2 | 24 | | | | 1 |
| Gill Bros., Co..... | Steubenville, Ohio..... | 4 | 57 | | | | 1 |
| Toronto Branch (Ohio)..... | | | | 10 | 1 continuous | | 1 |
| Gray & Son Glass Co. (2 lehrs)..... | Falls Creek, Pa..... | 1 | | | | | 5 |
| Hamilton, J. T. & A., Co..... | Pittsburgh, Pa..... | | | 24 | 3 continuous | | 2 |
| Hazel-Atlas Glass Co..... | Wheeling, W. Va..... | | | | 19 continuous 20 continuous | | 1 2 |
| Heindenkamp Plate Glass Co..... | Springdale, Pa..... | 5 | 120 | | | | 4 |
| Heinz Co., H. J..... | Sharpsburg, Pa..... | | | | 3 continuous | | 2 |
| Heisey & Co..... | Newark, Ohio..... | 3 | 48 | | | | 1 |
| Highland Glass Co..... | Washington, Pa..... | 1 | | | 4 continuous | | 5 |
| Hocking Glass Co..... | Lancaster, Ohio..... | | | 20 4 | 2 continuous 1 day | | 1 |
| Houze Convex Co..... | Point Marion, Pa..... | | | | | | 5 |
| Houze Window Glass Co..... | Point Marion, Pa..... | | 24 | | | | 3 |
| Imperial Glass Co..... | Bellaire, Ohio..... | 2 | 28 | 25 | 2 continuous | | 1 |
| Imperial Glass Co..... | Charleroi, Pa..... | | | 15 | 2 continuous | | 2 |
| Independent Glass Co..... | Sistersville, W. Va..... | | 24 | | | | 3 |
| Industrial Glass Co..... | Cameron, W. Va..... | | | 6 | 1 continuous | | 1 |
| Jeannette Glass Co..... | Jeannette, Pa..... | | | 16 | 2 continuous | | 2 |
| Jeannette Shade & Novelty Co..... | Jeannette, Pa..... | | | 8 | 3 day | | 1 |
| Jeannette Window Glass Co..... | Point Marion, Pa..... | | 60 | | | | 3 |
| Jefferson Glass Co..... | Follansbee, W. Va..... | | 1 | 16 | 1 continuous (15 ton) | | 1 |
| Branch at Millersburg, Ohio..... | | | 1 | 14 | | | 1 |
| Kearns Gorsuch Bottle Co..... | Zanesville, Ohio..... | | | 26 | 3 continuous | | 2 |
| Keystone Bottle Mfg. Co..... | Uniontown, Pa..... | | | 6 each | 2 continuous | | 2 |
| Knox Glass Bottle Co..... | Knox, Pa..... | | | 5 | 1 continuous | | 2 |
| Lancaster Glass Co..... | Lancaster, Ohio..... | | | 10 | 1 continuous | | 1 |
| Lancaster Lens Co..... | Lancaster, Ohio..... | 1 | 6 | | 3 day | | 1 |
| Libbey Glass Co..... | Toledo, Ohio..... | | 139 | | | | 1 |
| Licking Window Glass Co..... | Utica, Ohio..... | | 42 | | | | 3 |
| Macbeth-Evans Glass Co..... | Pittsburgh, Pa..... | | 120 | | 2 continuous 6 day | | 1 |
| Marienville Glass Co..... | Marienville, Pa..... | | | 4 | 1 continuous | | 2 |
| Marion Glass Co..... | Marion, Ohio..... | | | | | | 1 |
| Masontown Glass Co..... | Masontown, Pa..... | | 42 | | | | 3 |
| Morris Glass Company..... | Point Marion, Pa..... | | | 8 | 1 continuous | | 2 |
| McKee Glass Co..... | Jeannette, Pa..... | 6 | 93 | | | | 1 |
| New Bethlehem Window Glass Co..... | New Bethlehem, Pa..... | | 30 | | | 8 | 3 |
| New Cumberland Glass Co..... | New Cumberland, W. Va..... | | | 4 | 1 | | 1 |
| New Martinsville Glass Mfg. Co..... | New Martinsville, W. Va..... | 1 | 14 | 4 6 | 1 day 1 continuous | | 1 |
| Nivison-Weiskopf Co..... | Reading, Ohio..... | | | 24 | 3 continuous | | 2 |
| N. Wheeling Glass Bottle Co..... | Wheeling, W. Va..... | | | 12 | 2 continuous | | 2 |
| Northwood Co..... | Wheeling, W. Va..... | | 28 | | 1 day | | 1 |
| Owens Bottle Machine Co., No. 1 Factory | Toledo, Ohio..... | 1 | | | | 2 | 2 |
| Patterson Glass Mfg. Co..... | Cameron, W. Va..... | | | 15 | | | 3 |

| NAME | LOCATION | Fur-naces | Pots | Rings | Tanks | Ma-chines | Pro-ducts |
|---------------------------------------|---------------------------------|-----------|-------|---------|-----------------------|-----------|-----------|
| Phoenix Glass Co..... | Pittsburgh, Pa..... | 4 | 46 | ..... | 2 day 1 continuous | ..... | 1 1 |
| Pleasantville Glass Co..... | Pleasantville, Ohio..... | ..... | 24 | ..... | ..... | ..... | 3 |
| Pioneer Window Glass Co..... | Marietta, Ohio..... | ..... | 36 | ..... | ..... | ..... | 3 |
| Pittsburgh Lamp Brass & Glass Co..... | Pittsburgh, Pa..... | 5 | 50 | 2 | 2 day | ..... | 1 |
| Pittsburgh Plate Glass Co..... | Charleroi, Pa..... | ..... | ..... | ..... | ..... | ..... | 5 |
| Pittsburgh Plate Glass Co..... | Mt. Vernon, Ohio..... | ..... | 96 | ..... | 2 | 24 | 3 |
| Pittsburgh Window Glass Co..... | Washington, Pa..... | ..... | ..... | ..... | 1 continuous | 6 | 3 |
| Pittsburgh Plate Glass Co..... | Pittsburgh, Pa., 12 Plants..... | 50 | 856 | ..... | ..... | ..... | 4 |
| Point Marion Window Glass Co..... | Point Marion, Pa..... | ..... | 24 | ..... | ..... | ..... | 3 |
| Rhodes Glass & Bottle Co..... | Massillon, Ohio..... | ..... | ..... | 12 | 2 continuous | ..... | 2 |
| Rochester Bulb Corp..... | Rochester, Pa..... | 3 | 52 | ..... | ..... | ..... | 1 |
| Rodefer Glass Company..... | Bellaire, Ohio..... | 2 | 30 | 4 5 | 2 day 1 continuous | ..... | 1 |
| Sandusky Glass Mfg. Co..... | Sandusky, Ohio..... | ..... | 30 | ..... | ..... | ..... | 3 |
| Sheffield Glass Bottle Co..... | Sheffield, Pa..... | ..... | ..... | 22 | 3 continuous | ..... | 2 |
| Smith Glass Company..... | Mt. Pleasant, Pa..... | ..... | ..... | 19 | 3 continuous 1 day | ..... | 1 |
| Standard Plate Glass Co..... | Butler, Pa..... | 6 | 120 | ..... | ..... | ..... | 4 |
| Tarentum Glass Co..... | Tarentum, Pa..... | 1 | 14 | ..... | 1 day | ..... | 1 |
| Toledo Bottle Co..... | Toledo, Ohio..... | ..... | ..... | 10 | 1 continuous | ..... | 2 |
| United States Glass Co..... | Pittsburgh, Pa..... | ..... | ..... | 52 4 | 5 2 day | ..... | 1 |
| Utica Glass Company..... | Utica, Ohio..... | ..... | 48 | ..... | ..... | ..... | 3 |
| Wheeling Glass Letter & Novelty Co... | Wheeling, W. Va..... | ..... | ..... | 6 | 2 day | ..... | 1 |
| Wightman Bottle & Glass Mfg. Co..... | Parkers Landing, Pa..... | ..... | ..... | 7 | 1 continuous | ..... | 2 |
| Wightman Glass Corp..... | Punxsutawney, Pa..... | ..... | ..... | 10 | 1 continuous | ..... | 2 |
| Winslow Glass Co..... | Columbus, Ohio..... | ..... | ..... | 14 | 2 continuous | ..... | 2 |
| Wormeer Glass Co..... | Pittsburgh, Pa..... | ..... | ..... | 12 | 2 continuous | ..... | 2 |

Special Report on the Lexington Burley Tobacco Market. Today Lexington, Kentucky, lays claim to being the largest Burley tobacco market in the world. It is located as a hub of 80,000 acres of tobacco land which last year produced 70,000,000 pounds. Twelve years ago it was little more than a packing point. The tobacco was brought to Lexington, packed into hogsheads, then re-shipped to Louisville and other points for marketing.

About twelve years ago a small group of Lexington business men, thinking that Lexington should be getting the benefit of its tobacco crop, conceived the idea of the loose leaf tobacco market, with the result that last year 55,785,520 pounds of tobacco, selling for \$21,427,751, passed through the Lexington market. It is estimated that 75,000,000 pounds will be sold over their warehouse floors this season, which, at the present average of over 70c per pound, will cause \$60,000,000 to pass through the banks of Lexington. The tobacco dealers and banks have only high praises for the Federal Reserve System and confess that were it not for the money and credit which is being supplied to Lexington they would be unable to move the crop.

A somewhat unusual condition exists in the tobacco situation this season. Usually at this time of the year the tobacco movement is nearly or quite over, having been in evidence for six or eight weeks. This year the humidity of the season and the heavy rains and other matters pertaining to the harvesting and maturing of tobacco operated to obstruct the movement in its start, and the tobacco barns and warehouses of Kentucky are filled almost to bursting with a large crop of tobacco awaiting transportation to market at a record price. Where \$2,000,000 or \$3,000,000 was formerly required to take care of

the tobacco crop, by reason of the spreading out of the market in which the money realized from early shipments aided in the financing of following shipments, this year the movement was confined to the two or three weeks prior to Christmas, thus taxing transportation and the banks to the utmost and requiring probably \$12,000,000 to take care of the movement.

Today, new world records are being broken in Burley tobacco sales. At time of going to press, the highest crop sales averaged \$97.38 per hundred, with the highest day's average of \$69.99, while the highest basket sale was \$1.01 a pound. With an average production of about 1200 pounds per acre, this year's crop is bringing the growers from \$600 to \$1,000 per acre. It is very evident that land values around Lexington are greatly increasing. Prices are ranging from \$250 to \$500 per acre.

On account of the destructiveness of a tobacco crop on the fertility of the soil, a five or six year rotation is almost essential to a satisfactory crop. On account of the great amount of labor necessary in caring for a crop of tobacco, the average farm has little more than ten to fifteen acres planted with tobacco. The cost of producing one acre is approximately \$150.

Burley tobacco is a summer crop and is marketed during the winter months, the sales opening on or about December 1 and continuing until on or about the first of the succeeding April.

The tobacco is cut usually during the month of August or September, and hung on sticks in the tobacco barn to cure. The curing process takes as a rule about two months' time.

After a sufficient curing period the tobacco is allowed to come into "case," i. e., to absorb enough moisture from the atmosphere to enable it to be handled without breaking. It is then stripped, roughly graded, and tied into hands. The story of the many processes through which tobacco passes from the time it leaves the growers until it is packed into hogsheads for shipping or storage is interesting.

The tobacco as it comes from the farmers' drying barns, hanging from the drying sticks, is packed onto wagons and brought to the Lexington market. At the present price of tobacco a load no higher than 4 feet brings from \$2,000 to \$2,500.

Lexington today looks as though the world's greatest circus has just arrived in town, for on every street and side street in the warehouse section are the long rows of white canvas-covered wagons waiting to be unloaded.

The wagons are driven into the warehouse, and the tobacco transferred in loose form to flat baskets enabling the buyer to pull out samples and determine the quality throughout the basket. This way of open selling is the thing which has made this method of loose leaf selling so popular. Each basket is weighed and a tag showing the weight and name of owner is thrown on each basket. These baskets are then arranged in long rows on the sales floors and graded. All the warehouses are equipped with skylights which show up the various grades to greatest advantage.

While a charge of 25 cents per hundred pounds and a 2½ per cent commission is charged on the sales floors, yet this commission includes insurance and auction fees. The strong competitive buying far offsets the small commission charged and assures the growers highest prices. Every important tobacco company in the United States has buyers on the floor, and foreign buyers are also present. Last season there were 56 buyers in the Lexington market.

As the sales progress the baskets of tobacco are auctioned off to the highest bidder with great speed—as many as six baskets a minute, and the New York curb market has nothing on these men when it comes to the sign language. The auctioneer and buyers pass down the aisles without stopping. Following the auctioneer is a man who records the buyer's name and amount of sale on the card found on each basket. Following this man are two expert accountants so rapid in mental calculation that they multiply the number of pounds by the price while they are putting the figures on paper. The record of each grower's crop is kept on a separate account sheet and within fifteen minutes from the time his tobacco is sold on the sales floor his payment check is waiting for him in the office.

At the close of the day's sales, the tobacco is transferred to the redrying plants where it is washed, artificially cured, and packed into hogsheads for storage or to be used by the manufacturer.

With a sales floor space in their 17 warehouses, capable of handling 7,000,000 pounds of tobacco per week; with redrying plants capable of redrying practically a million pounds a day, and with storage facilities of 100,000,000 pounds of tobacco a year, it is readily seen why Lexington can well claim its title of being the greatest Burley tobacco center in the world.

TOBACCO FIRMS HAVING REDRYING PLANTS IN LEXINGTON SHOWING DAILY CAPACITY

| | |
|--|----------------|
| Liggett and Myers Tobacco Company..... | 250,000 Pounds |
| R. J. Reynolds Tobacco Company..... | 250,000 " |
| American Tobacco Company..... | 175,000 " |
| J. P. Taylor Tobacco Company..... | 75,000 " |
| W. L. Petty Tobacco Company..... | 75,000 " |
| Kentucky Tobacco Company..... | 75,000 " |
| G. F. Vaughn Tobacco Company..... | 75,000 " |
| Total | 975,000 " |

TOBACCO WAREHOUSE COMPANIES LOCATED IN LEXINGTON

Shelburne Tobacco Warehouse Company (2 warehouses).
 Headley Tobacco Warehouse Company (2 warehouses).
 Fayette Tobacco Warehouse Company (2 warehouses).
 Central and Planters Tobacco Warehouse Company (2 warehouses).
 Growers Tobacco Warehouse Company.
 Geary and Buckley Tobacco Warehouse Company.
 Burley Tobacco Warehouse Company.
 Independent Tobacco Warehouse Company.
 Jewell Tobacco Warehouse Company.
 Stivers Tobacco Warehouse Company.
 Tattersalls Tobacco Warehouse Company.
 Maxwell Street Tobacco Warehouse Company.
 Peoples Tobacco Warehouse Company.

BUILDING OPERATIONS FOR MONTH OF NOVEMBER

| | Permits Issued | | | | Valuations | | | | Increase or Decrease of total valuations 1919 over 1918 | Per Cent of Increase or Decrease |
|-------------------|-------------------------------|------------|--------------------------|------------|--------------------------|-----------------------------|---------------------|---------------------|--|---|
| | New Construction 1919-1918 | | Alterations 1919-1918 | | New Construction 1919 | New Construction 1918 | Alterations 1919 | Alterations 1918 | | |
| Akron..... | 392 | 77 | 60 | 33 | \$3,042,030 | \$ 83,260 | \$ 35,425 | \$ 21,550 | \$2,972,645 | 2857.6 |
| Cincinnati..... | 212 | 54 | 449 | 194 | 1,048,635 | 27,090 | 248,560 | 148,910 | 1,121,195 | 636.9 |
| Cleveland..... | 269 | 39 | 563 | 293 | 3,039,800 | 363,000 | 455,200 | 181,950 | 2,950,050 | 542.2 |
| Columbus..... | 181 | 53 | 73 | 49 | 400,675 | 87,150 | 128,780 | 230,405 | 211,900 | 66.5 |
| Dayton..... | 102 | 59 | 29 | 24 | 354,518 | 110,525 | 9,351 | 16,296 | 237,048 | 188. |
| Erie..... | 66 | 27 | 21 | 22 | 175,900 | 34,410 | 29,568 | 29,030 | 142,028 | 225.3 |
| Lexington..... | 20 | 6 | 46 | 32 | 102,000 | 18,500 | 42,870 | 11,000 | 115,370 | 396.5 |
| Pittsburgh..... | 283 | 68 | 50 | 67 | 1,713,691 | 241,419 | 96,180 | 88,799 | 1,479,653 | 448.1 |
| Springfield..... | 15 | 3 | 10 | 2 | 112,710 | 1,250 | 7,450 | 2,000 | 116,910 | 3866.6 |
| Toledo..... | 139 | 55 | 84 | 42 | 645,410 | 57,965 | 103,250 | 23,450 | 667,245 | 823.4 |
| Wheeling..... | 22 | 3 | 12 | 9 | 15,260 | 1,900 | 1,880 | 1,065 | 14,175 | 7000. |
| Youngstown..... | 89 | 62 | 18 | 15 | 228,765 | 115,610 | 11,650 | 7,275 | 117,530 | 95.9 |
| TOTAL..... | 1790 | 506 | 1415 | 782 | 10,879,394 | 1,142,079 | 1,170,164 | 761,730 | 10,145,749 | 1333.1 |

CLEARINGS

| | November 16 to December 15 | | Increase or Decrease | Percent of Increase or Decrease |
|-------------------|----------------------------|----------------------|----------------------|---------------------------------|
| | 1919 | 1918 | | |
| Akron..... | \$ 43,565,000 | \$ 28,404,000 | \$ 15,161,000 | 53.3 |
| Cincinnati..... | 271,406,958 | 252,271,806 | 19,135,152 | 7.5 |
| Cleveland..... | 489,508,816 | 390,060,545 | 99,448,271 | 25.4 |
| Columbus..... | 58,216,900 | 46,884,200 | 11,332,700 | 24.1 |
| Dayton..... | 19,901,312 | 18,070,916 | 1,830,396 | 10.1 |
| Erie..... | 9,607,060 | 8,862,775 | 744,285 | 8.3 |
| Greensburg..... | 5,106,440 | 4,470,212 | 636,228 | 14.2 |
| Lexington..... | 10,447,000 | 4,373,000 | 6,074,000 | 138.8 |
| Pittsburgh..... | 640,248,499 | 556,333,309 | 83,915,190 | 15. |
| Springfield..... | 6,939,531 | 4,831,976 | 2,107,555 | 43.6 |
| Toledo..... | 72,928,000 | 47,606,657 | 25,321,343 | 53.1 |
| Wheeling..... | 26,927,086 | 17,494,223 | 9,432,863 | 53.9 |
| Youngstown..... | 16,754,936 | 14,127,345 | 2,627,591 | 18.5 |
| TOTAL..... | 1,671,557,538 | 1,393,790,964 | 277,766,574 | 19.9 |

TOTAL DEBITS BY BANKS TO INDIVIDUAL ACCOUNTS

| | Week Ending | | Increase or Decrease | Percent of Increase or Decrease |
|-------------------|--------------------|--------------------|----------------------|---------------------------------|
| | Dec. 10, 1919 | Dec. 11, 1918 | | |
| Akron..... | \$ 21,817,000 | \$ 14,956,000 | \$ 6,861,000 | 45.8 |
| Cincinnati..... | 56,127,000 | 53,326,000 | 2,801,000 | 5.2 |
| Cleveland..... | 154,746,000 | 141,275,000 | 13,471,000 | 9.5 |
| Columbus..... | 28,659,000 | 22,987,000 | 5,672,000 | 24.6 |
| Dayton..... | 11,631,000 | 10,426,000 | 1,205,000 | 11.5 |
| Erie..... | 6,534,000 | 6,496,000 | 38,000 | .5 |
| Greensburg..... | 4,250,000 | 3,098,000 | 1,152,000 | 37.1 |
| Lexington..... | 8,238,000 | 3,467,000 | 4,771,000 | 137.6 |
| Oil City..... | 2,837,000 | 2,869,000 | 32,000— | 1.1— |
| Pittsburgh..... | 173,742,000 | 156,824,000 | 16,918,000 | 10.7 |
| Springfield..... | 3,663,000 | 2,595,000 | 1,068,000 | 41.1 |
| Toledo..... | 28,191,000 | 22,896,000 | 5,295,000 | 23.1 |
| Wheeling..... | 8,748,000 | 6,512,000 | 2,236,000 | 34.3 |
| Youngstown..... | 11,526,000 | 12,562,000 | 1,036,000— | 8.2— |
| TOTAL..... | 520,709,000 | 460,289,000 | 60,420,000 | 13.1 |

PICKUPS ON BUSINESS TOPICS

ORGANIZATION of the National Committee on European Finance, to study definite plans for supplying the necessary long-time credit for Europe's purchases in the United States, was announced by the Chamber of Commerce of the United States, following the recommendation of the Committee on Credit and Finance of the International Trade Conference at Atlantic City.

The task before the committee is to devise ways and means for speeding up a return to normal in the trade relationships between the United States and Europe. The chairman of the new body is Harry A. Wheeler, Vice-President of the Union Trust Company of Chicago. The chairman of the Executive Committee is James S. Alexander, President of the National Bank of Commerce in New York. Among the members are: Henry P. Davison, Homer L. Ferguson, Myron T. Herrick, Charles E. Hughes, Alfred E. Marling, William Fellowes Morgan, William C. Redfield, Charles H. Sabin, Charles M. Schwab, Alfred H. Smith and former President William H. Taft.

The American Relief Administration will return to the United States government approximately \$88,750,000 of the \$100,000,000 appropriated by Congress for relief in Europe, according to the preliminary report of Herbert C. Hoover. The money will be returned in the form of Treasury notes from various European governments which shared in the relief work. Because of the foreign exchange situation in Europe, Mr. Hoover said it was impossible at present to obtain reimbursement in cash for supplies contracted for by various governments in relief areas. Remainder of the \$100,000,000 fund was expended for supplies which were donated on a charitable basis and for which there will be no reimbursement.

Child labor in the United States has decreased more than 40 per cent since the child labor tax provision of the Revenue Act went into effect April 25 last. This provision places a tax of 10 per cent on the net earnings of plants employing children under fourteen years, or between fourteen and sixteen, for more than eight hours in the production of commodities entering into interstate commerce.

A second meeting of the Pan-American Financial Conference has been called by the Secretary of the Treasury to convene at Washington, for the purpose of strengthening the financial and industrial interest bonds between the United States and Latin-American countries. The financial requirements of the Latin-American republics, better transportation and better postal, cable and wireless facilities will be subjects for discussion. Banking topics, including exchange, credit expansion, wider use of acceptances will also be discussed.

The division of purchase and storage of the Quartermaster General's office has established an exhibit section where all standard articles of purchase are to be exhibited. In cases where the articles are too large to be kept in the exhibit rooms, drawings to scale, with specifications, will be substituted. The exhibit section was established in order that standard articles of purchase might be at all times accessible to manufacturers desiring to submit bids. At present there are on hand approximately two thousand standard articles.

It was learned recently that Washington authorities regard the speculations current in oil and farm lands as even more serious than that in securities, to which a check has recently been administered. It is believed that a drive against speculation along these lines will shortly be in order.

More than \$150,000,000 was appropriated for advertising by leading firms of the country in 1919, and it is expected that this record will be exceeded in 1920, according to the Association of National Advertisers.

Mexico bought \$14,000,000 worth of United States postal orders in the ten months ending with June 30, 1919.

THE great depreciation at present of the Austrian crown offers an unusual opportunity for the investment of American capital, both financially and industrially. The situation is being taken advantage of by other countries. Reports indicate that the Italians have bought the control of three of the largest steamship lines and four of the largest steel plants; that the state and southern railroads are about to be purchased by the French, who have bought the Lander Bank; that the Galician and Carpathian Petroleum Companies will be under the control of the British, while several of the largest banks in Vienna are attracting English, French and Italian capital. A British Chamber of Commerce has been organized in Vienna.

An American economic society has been founded in Spain for the development of commercial relations between Spain and America. Four expositions will be permanently established in Spain for the products of American manufacturers. Expert advice on publicity and sales methods will be furnished free by the society, which will publish a bi-weekly review. The society has offices in Barcelona, Madrid, Seville and Bilbao.

Julius H. Barnes has announced that effective December 15, export and import embargoes on wheat and wheat flour will be eliminated. This release of embargo permits Canadian wheat and flour to enter American markets free of duty under rulings of the customs service. It is expected that this will greatly enlarge the United States' supply of spring wheat flours which are favorites in the baking trade and which have this year been in relatively light supply.

Representatives of American, British and French banks in Spain, have appointed a committee to formulate a protest to the government against the proposed tax on foreign banks doing business in that country. The tax is to be one peseta per thousand on the total declared capital and surplus of foreign banks, and, in addition, the usual tax upon profits, which, according to foreign bankers, will destroy their business in Spain.

The National Association of Credit Men announces that its newly organized foreign credit bureau has discovered a manipulator who has defrauded American exporters of as large a sum as \$25,000,000. This is an instance wholly in keeping with warnings issued by banking houses, describing the dangers of dealing with unknown foreign customers, without some means of determining their true credit rating.

The invention of a new steel, far in advance of any high speed steel hitherto made, is ascribed by the London Daily Mail to John Oliver Arnold, Professor of Metallurgy at Sheffield University. Professor Arnold is prevented by the law of Great Britain from utilizing his invention industrially, and is forbidden to communicate the details of his discovery to anybody in Great Britain, except under censorship.

Production of wheat flour for the season ended November 7 was 52,433,000 barrels against 43,174,000 barrels the previous year. Stocks now on hand are 50 per cent above the same time last year. The United States Grain Corporation will offer to the retail trade, under its own brand, standard wheat flour at prices that will permit resale two cents a pound cheaper than the Fair Price Committee's present quotations.

The Shipping Board is making preparations for an extensive passenger service operating on all the principal world routes. The first sailing will be December 15. The Board's plans call for allocation of about sixty liners to the passenger service. Of this number about twenty-five will be converted German ships.

American firms will have the opportunity to bid on \$50,000,000 worth of aeroplanes during the third Pan-American Congress at Havana the week beginning February 21, 1920.