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# The Light-Metals Industry

IN RESPONSE to prodigious wartime demands for aluminum and magnesium, the light-metals industry of the Sixth Federal Reserve District has undergone a major expansion. Although its only magnesium plant has already closed, because of the lessening of military demands, the District's new facilities for producing and fabricating aluminum have more than a fair chance of developing peacetime markets that will largely offset the loss of strictly wartime outlets. Naturally, the degree to which the current volume of aluminum production can be carried over into peacetime is of interest to the area.

Aluminum production in the District is confined to two companies. For many years the Aluminum Company of America has operated two plants in the Sixth District, one at Mobile and the other at Alcoa, Tennessee, near Knoxville. An alumina plant was built by Alcoa at Baton Rouge, Louisiana, for the Defense Plant Corporation early in the war. Alcoa operated this plant for the Government until it was closed some months ago when the aluminum program was cut back. The Mobile plant processes the bauxite ore into alumina. This product is then shipped to Alcoa, Tennessee, and the company's other metal-producing plants where it is reduced by an electrolytic process to aluminum pig. The pig is then processed into sheets, tubing, and other forms for sale to fabricators. During the war, the Aluminum Company's operations in the District have been vastly expanded, and at Alcoa the Aluminum Company now has capacity for producing more aluminum than was made in the entire country before the war. A new firm in the District, the Reynolds Metals Company, with general offices at Richmond, Virginia, has established a very large plant at Listerhill near Sheffield. Alabama. The Listerhill operation, in which the bauxite ore is processed all the way through to sheets, bars, and other forms, is the only integrated one of its kind in the aluminum industry.

Location of both the Alcoa and Listerhill plants in the District resulted primarily from the availability of large blocks of electric power, of which staggering amounts are consumed in the process of reducing aluminum from its oxide. For example, the Listerhill plant uses more power than the entire city of Birmingham.

As early as 1910 the Aluminum Company of America explored the power potentialities of the Little Tennessee River system and began a constructive program of storage and run-

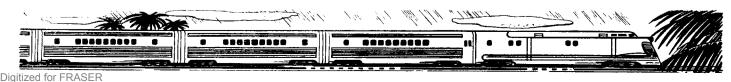
of-the-river hydrodevelopments. On the river the Aluminum Company now has a large power development of its own, with several hydroelectric dams near the North Carolina line. The enormous increase in power consumption at this plant, as the result of wartime expansion of capacity, has necessitated large power purchases from TVA in the last few years. TVA power is used altogether in the Listerhill operation of the Reynolds Metals Company.

The extension of the aluminum industry to the Southeast affords a peculiarly apt example of the comparative cost problems that are often overlooked in estimating probable trends of Southern industrialization. A view of the great potential water power of the Tennessee River 35 years ago coupled with a knowledge of bauxite deposits in Alabama, for instance, might naturally have led an observer to conclude that the growth of an aluminum industry in the area was predestined.

It is in normal times much cheaper, however, to use the higher-grade bauxite that is imported from South America than to process the Alabama ore. In addition, Alcoa's Tennessee operations were possible only because sufficient capital was available for the costly construction of the hydroelectric dams needed to realize the potentialities of the Little Tennessee. Had there been no additional large-scale development of the Tennessee River's power potentialities, the location of increased capacity at Alcoa during the war emergency would have been impossible. Similarly, if large blocks of power, provided by the TVA, had not been available—actually, not potentially—the Reynolds plant could not have been located at Sheffield, Alabama.

Aluminum is one of the most abundant metals in the earth's crust. It is, for example, technically possible to produce aluminum from many of the clays that are found in the South. Because the reduction of bauxite to alumina is less costly than other processes, however, the industry relies on that ore. Little of the high-grade bauxite remains in this country, and it is found principally in Arkansas. Alabama has lower grades of bauxite that are currently being utilized to some extent by the Reynolds Metals Company in its Listerhill operations. The chief supplies of bauxite for the District's aluminum industry are, however, imported from the Caribbean, mainly Surinam.

The Surinam ore contains approximately 55 to 60 per cent



aluminum oxide and less than 7 per cent silica. The quality of bauxite for aluminum manufacturing purposes is determined by these two ratios. The near-ideal is a large amount of aluminum oxide in the compound and a low amount of silica, the presence of which complicates the reduction of the aluminum from its oxide. When the Guiana bauxite is used, roughly two pounds of bauxite are required to make one pound of alumina, and two pounds of alumina are necessary to make one pound of aluminum. Extensive high-grade deposits are found in Brazil and elsewhere, so it seems likely that little, if any, of the Alabama bauxite will be used once the shipping situation improves and ocean freight rates and foreign bauxite costs, both now greatly inflated, fall.

It is not true, however, that the existence of large aluminum sources in the District necessarily means that extensive aluminum fabricating operations will be located near by. From the standpoint of freight costs, at least, the location of the market for the fabricated product is more important than the location of the aluminum source.

#### **Prewar Consumption**

According to figures of the U. S. Bureau of Mines, 327 million pounds of primary aluminum were produced in the United States during 1939, the last year before the nation's wartime expansion of aircraft manufacture made itself felt, and there was a net export of primary aluminum of about 46 million pounds. In that same year secondary production from scrap totaled 50 million pounds. World production of aluminum was estimated to be 675,000 metric tons, of which the United States produced 148,000. Germany in that year led the world with an estimated 200,000 metric tons.

In the Commodity Year Book, published by the Commodity Research Bureau, Inc., the industrial prewar uses of aluminum in the United States have been estimated as percentages of total aluminum consumption. The estimates indicate that 29 per cent went into transportation equipment, 15 per cent into machinery and electrical appliances, 14 per cent into cooking utensils, 10 per cent into electrical conductors, 8 per cent into building construction, 6 per cent into food and beverage packaging, 5 per cent into iron and steel metallurgy, 5 per cent to the chemical industry, 4 per cent into miscellaneous foundry and metal working, and 4 per cent into all other uses.

Right now, at a time when stepped-up battle operations make the need for aluminum sheet more critical than ever, production has been slowed by the current man-power shortage. Orders already received by the Aluminum Company exceed the anticipated production for the first quarter of 1945, and the company has been asked by the War Production Board not to accept any new orders before May 1. The war record of the aluminum suppliers has been excellent, and it is reported that no aircraft plant has been hampered by a shortage of aluminum. The present situation stems from a cutback in the production of aluminum sheet made during the latter months of 1944 with WPB approval, in anticipation of an early end of the European war. As a result of the action some labor was released from aluminum plants, and this followed by the WPB's sudden expansion of aluminumsheet requirements has been responsible for the present labor shortage.

The production of aluminum in the District does not employ an important part of the District's labor force. It does not compare with the cotton-textile industry, for example, as an employer of labor. When the persons involved in the fabrication of aluminum products are included, however, the industry is somewhat more important from the standpoint of employment, though no exact figures may be disclosed. During the war, many smaller firms in the District are gaining valuable experience in working aluminum as subcontractors in the aircraft construction program, and supposedly after the war a much larger number of persons and firms will be fabricating aluminum in the District than was the case before the war.

#### **Postwar Markets**

What the volume of aluminum production will be in the immediate postwar years is difficult to estimate. At the present time, the aircraft program is by far the largest end user of aluminum, and the completion of the war program will leave a broad gap in the market, particularly for aluminum sheet. Both the Aluminum Company and Reynolds Metals, however, have extensive programs under way for the development of new large-scale outlets in the postwar period. The major determinant of the postwar market for aluminum of course will be the cost as it compares with that of competing materials. Pig aluminum has fallen in price 25 per cent during the war, from 20 cents a pound to 15 cents, and further reductions are likely to take place in the near future.

So far as postwar markets are concerned, perhaps the most important quality of aluminum is its relative light weight per unit of volume. This quality makes it particularly useful in all applications where a saving in weight involves substantial savings in costs of operation. Though on a per pound basis aluminum at 15 cents is much more expensive than copper, for example, it is cheaper per cubic inch because of its light weight. The transportation field is, of course, the outstanding hope here. It seems certain that a great deal of aluminum will be used in the near future in the manufacture of rolling stock for the railroads and a lesser amount in busses and trucks. At this time the outlook for aluminum in the automobile industry is somewhat less clear. The present lower price of aluminum considerably improves the metal's opportunities in the automobile industry.

Another promising field for the expanded use of aluminum in the postwar period is the construction industry. The Aluminum Company, for example, plans to push the use of aluminum for window frames and sills, and a substantial tonnage of aluminum may find its way into these and similar uses, particularly if the widely expected postwar housing boom materializes.

Primarily the Aluminum Company is a supplier of basic material. Its activities include the production of pig and ingot aluminum and the transformation in most cases of this material to sheet, extruded shapes, bar, rod, wire, and other items. In a few cases Alcoa carries fabrication to the final product, for example, aluminum caps and seals and aluminum cooking utensils. The company maintains a development division whose engineers work closely with the company's customers in their problems of using aluminum. Although it does not itself produce raw magnesium, through its subsidiary, the American Magnesium Corporation, the Aluminum Company is the largest fabricator of magnesium products in the country.

Though aluminum and magnesium are complementary to some extent and a number of very useful alloys are formed by combining them, in many applications they are competitive. This is particularly the case in the transport field. Since magnesium is one third lighter than aluminum and now sells for 201/2 cents a pound, it competes with the latter at 15 cents a pound on a basis of weight per unit of volume. Magnesium sold in the United States during 1915 for \$5 a pound, but the largest part of the price reduction took place a number of years before the war, and by 1939 the price was only 27 cents. This is, therefore, no temporary wartime reduction. Some important technical problems still remain to be solved, however, before magnesium can be processed as readily as aluminum.

Magnesium capacity in the United States on a percentage basis has expanded much more rapidly during the war than aluminum capacity. In the average prewar year only some six million pounds of magnesium were produced in the United States, but in 1943 the production was 400 million pounds. In the summer of 1944, magnesium production was at the rate of 36 million pounds per month. It has since been cut back sharply, largely because of a reduction in the incendiary-bomb program, and is now running at the rate of about 100 million pounds yearly.

Magnesium Cutback

The cutback was responsible for the closing of the one magnesium plant in the Sixth District. This facility, which was owned by the Defense Plant Corporation and operated by the Mathieson Alkali Company at Lake Charles, Louisiana, has been declared surplus and is now for sale. Moreover, because the production of magnesium there was a relatively high-cost operation, the plant will probably never again be used for that purpose. At Lake Charles, magnesium was produced by electrolyzing the chloride, which had in turn been obtained by treating calcined dolomite with waste soda-ash liquor and carbon-dioxide gas.

A recent estimate of postwar magnesium consumption is 50 million pounds yearly. This estimate would represent a substantial increase from the six million pounds used during prewar years, but it is still far smaller than the probable con-

sumption of aluminum in the postwar period.

To speak of aluminum and magnesium production in pounds perhaps gives an exaggerated impression of the size of the postwar problem in these industries. This custom is a holdover from the days of small output when figures in tonnage terms would have been very small indeed. The present capacity of two billion pounds of aluminum a year is after all, however, only one million tons, or about 1 per cent by weight of steel capacity, while magnesium capacity is only a fourth as much.

At peak war production more than 90 per cent of Alcoa's aluminum output was going to the aircraft program. That the aircraft industry is still the largest user of aluminum points up sharply the problem of finding new markets to replace the military aircraft market for aluminum when the war is over. Just prior to the recent expansion of aluminum-sheet demands, the aluminum industry was producing at a rate three times greater than the 1939 rate. Even before that time, however, a number of Government-owned aluminum plants had closed.

One of the more promising postwar uses of aluminum is in the manufacture of aluminum foil. Prior to the war Reynolds was the largest producer of aluminum foil, and that company as well as Alcoa and several other large foil producers are planning to promote the use of this commodity as rapidly as possible. Aluminum foil had a widespread market even before the war for packaging such items as cigarettes, cheese, chocolate, tea, yeast cakes, and dried fruits. An even greater Digitized for FRASER

usefulness of aluminum foil in packaging has been demonstrated during the war; the price has fallen; and an expansion of this market for aluminum is expected after the war.

A number of companies are engaged in building aluminum rolling stock for railroads. The Rock Island Railroad, the Alton Railroad, and the Minneapolis and St. Louis Railroad, have purchased 30 freight cars built of Reynolds aluminum. Primary material in the construction of these cars has been the new aluminum alloy R301. Each of the cars weighs approximately 36,500 pounds, which is 10,000 pounds lighter than the average freight car now in use.

Alcoa is currently supplying aluminum for 25 hopper cars under construction at American Car and Foundry for the Missouri Pacific Railroad, Also, a new type of aluminum hopper car has been built for the Burlington, and a revolutionary type of aluminum boxcar has been placed in service on the Great Northern Railroad. In the design and construction of these cars, the Aluminum Company co-operated with the railroads and supplied the metal. These freight cars are in addition to at least a dozen all-aluminum, streamlined passenger trains already in use, for which Alcoa has furnished the basic material.

Advantages claimed for aluminum rolling stock include lower maintenance costs and longer life, as well as lighter weight. Lighter weight means less wear and tear on road beds and greater hauling efficiency.

# **Aluminum Alloys**

The past two years have seen the introduction of a number of new aluminum alloys with strength characteristics exceeding those of the alloys previously used. Two of these have been Reynolds' R301 and R303. Alcoa's 75S is also now in commercial use. All of these are high-strength alloys with tensile-yield strengths that for Reynolds R303 and Alcoa 75S are more than twice that of ordinary structural steel. Their uses are confined at present chiefly to the aircraft industry, but after the war their applications will be widespread.

Much of the experience of numerous smaller firms in the District in working with the light metals, particularly aluminum, has been gained in connection with the military aircraft program. One of the difficulties faced by the light metals producers before the war was the disinclination of metalworking firms to shift to the use of the new metals. In part, this disinclination resulted from inertia, but, in addition, significant costs are often involved in changing over to the processing of a new metal. These costs include those of new machine tools and the retraining of labor. To secure war subcontracts many smaller metal-working firms in the District have been obliged to make the change-over to aluminum and magnesium, and the potential postwar industrial customers of the light-metals producers have been increased as a result.

Apart from price, perhaps the most important single factor affecting the utilization of light metals in the United States after the war will be the level of general business activity. Even if the level is a high one, however, the production of aluminum will offer no great promise of enriching the District through the supplying of raw materials. Such promise lies rather in the potential development of increased fabrication of aluminum products in the area. The present welldirected efforts of Reynolds Metals and the Aluminum Company to develop broader markets in general should do much to assure a large aluminum production in the District.

BUFORD BRANDIS

# The Peanut Industry Looks Ahead

THE PRESENT prosperity of the peanut industry is by far the greatest of its experience. Wartime demands for peanuts and peanut products have resulted in an unprecedented production by the processors as well as by the growers. Realizing that such demands are highly abnormal, leaders of the industry are taking steps to meet a postwar situation that will offer many challenges. As one of the chief producing areas, the Sixth District is extremely interested in the outcome.

Peanut production has increased rapidly since the beginning of the current war. Acreage planted in peanuts in 1944 was 4.4 million, compared with an average of 3.0 million for the years 1933-42. Production of farmers' stock picked and threshed in 1944 was 2.3 billion pounds, whereas the annual average for 1933-42 was 1.3 billion pounds. These increases of 49 per cent in acreage and of 62 per cent in production represent a striking response to war demands. The 1944 crop, picked and threshed, had a total farm value of approximately 188 million dollars, compared with 34 million for the 1916 crop, 74 million for the 1919 crop, 41 million for 1939, and 179 million for 1943. What the peanut industry wants to do is to hold these gains after the war.

## **Disturbing Factors**

One unsettling factor has been that the peanut industry, in effect, has but one customer, the Commodity Credit Corporation, under the authority of the War Food Administration. This agency was the only authorized buyer of 1944-crop peanuts, and it bought at supported prices that were exceeded only during the first world war. Prices on 70 per cent sound-kernel content to farmers for the 1944 crop were \$160 a ton for Spanish, \$172 for Virginia and Valencia, and \$156 a ton for Runner types. Premiums and discounts for other than base qualities were provided. The average price of 8.15 cents a pound received during December 1944 compares favorably with the average of 9.6 cents a pound for the 1919 crop, the highest point ever reached, and is far above the average of 3.4 cents a pound paid for the 1939 crop.

Contracts were made by the Commodity Credit Corporation with shellers, crushers, and producer co-operative associations, who agreed to purchase the farmers' peanuts at not less than the supporting prices for the account of the War Food Administration. The WFA in turn agreed to make peanuts available for processing and distribution at prices that conformed to applicable ceilings.

Subsidy payments by the Government have been another abnormal factor. Since November 1, 1943, a peanut-butter subsidy of 4.5 cents a pound has been paid. This payment, however, is restricted to sales to primary distributors, wholesalers, and retailers in containers of the two-pound size or smaller. No subsidy is paid in connection with the sale of peanut butter to be used by the military services and by the candy trade and other industries.

Distorting the normal demand situation have been Government purchases for the armed forces and for the lend-lease program. About 30 per cent of the total edible peanut production is estimated to be going into war uses. A large part of the Government purchases goes into rations for the Army and Navy. Approximately 21 per cent of the total crop, it is said, is going into oil that is used for wartime purposes. This proportion is much smaller than was originally anticipated Digitized for FRASER

when Far Eastern vegetable-oil supplies were cut off by the war.

At the same time that demands for military purposes have mounted, demands for civilian purposes have also increased. As various foods have gone on the ration list, the demand for substitute foods has risen; and peanut products have proved to be favorite substitutes. When chocolate bars, fancy candies, and similar products have been unavailable, salted peanuts and peanut confections have often taken their places. Supplies of imported peanuts for civilian consumption have largely been cut off during the war. Furthermore, normal overseas supplies of vegetable oils have been reduced, leading to an increased demand for peanut oil. To increase civilian consumption, moreover, the industry has carried on an intensive educational campaign, stressing the nutritional value of peanuts and peanut products. Then, perhaps more influential than any other factor in increasing civilian demand has been the vastly increased personal income that has come with the wartime economy. People have had more money to spend than ever before, and, because peanut products have been available, the sales of such products have risen sharply.

These demands took some 675 million pounds of shelled peanuts during the calendar year of 1944. Edible shelled peanuts, as reported by 675 firms, were put to their various uses in the following proportions: candy, 23 per cent; salted peanuts, 32 per cent; peanut butter, 43 per cent; and all others, 2 per cent. The industry realizes that it is faced with the formidable postwar problem of expanding civilian consumption of peanuts in order to offset its loss of the strictly wartime markets. Such expansion, it is recognized, must come from improving the quality of present peanut products, creating new products, developing new industrial uses, and, in general, extending peanut markets.

#### The Interest of the Growers

Peanut growers have as much at stake in the postwar period as has any other group in the industry. They are located in three principal areas: (1) the Virginia-North Carolina area; (2) the Southeastern area; and (3) the Southwestern area.

Areas of heaviest concentration are in southeastern Virginia, northeastern North Carolina, southwestern Georgia, and southeastern Alabama. For the 1944 crop year, according to preliminary estimates, the Virginia-North Carolina area produced 558 million pounds. Of this total, Virginia produced 198 million pounds, North Carolina 351 million pounds, and Tennessee 9 million pounds. The Southeastern area produced 1,320 million pounds, of which South Carolina produced 32 million, Georgia 813 million, Florida 83 million, Alabama 378 million, and Mississippi 13 million. The Southwestern area produced 468 million pounds of which Arkansas accounted for 9 million, Louisiana 5 million, Oklahoma 131 million, and Texas 323 million. In the prewar year of 1939 production in the three major producing areas was as follows: Virginia-North Carolina, 474 million; Southeastern, 570 million; and Southwestern, 167 million.

Naturally, having experienced these substantial increases, the producers are reluctant to fall back to the prewar level. In addition to being concerned in the expansion of the market, the growers are vitally interested in production problems. Participating in technical research in such problems is the Georgia Experiment Station, Experiment, Georgia. It is assisted by, and works in co-operation with, the United States Department of Agriculture, the Tennessee Valley Authority, the National Peanut Council, the Georgia Coastal Plain Experiment Station, and the Alabama Agricultural Experiment Station. Present technical research includes new crop-rotation procedures, improved fertilizing methods, superior seed varieties, better planting practices, and a search for the most productive types of soil. Important work is also being done in the control of plant diseases. A notable accomplishment has been the development of improved spraying and dusting powders to combat leaf diseases.

### The Interest of the Processors

The peanut processors have an equal interest with the farmers in the postwar future of the industry. After the peanuts have been grown, harvested, and threshed, processing them for final consumption requires the services of a number of industry groups. First, the peanuts must be prepared for the market. This service is provided by the cleaners and graders. For peanuts that are to be sold in the shell, the cleaning process involves passing them through reels for the purpose of removing dirt, sticks, and other foreign material. Then the peanuts are passed through a cylinder to remove the stems that connected the pods to the vines. After they have been stemmed, the peanuts are run through fans and aspirators to remove lightweight kernels, chaff, empty pods, and dirt pellets. Next the peanuts are run through graders that, by means of slotted openings and other devices, remove the smallest pods. After that, the pods are run through a polishing drum which dusts them with kaolin or tale, giving them a uniform grayish color and covering up blotches or discolorations.

Handpicking is the final step in cleaning. This must be done because discolored or defective kernels cannot all be removed by machine methods. It is performed by workers, usually Negro women, who stand or sit at each side of a moving belt on

which the pods are run under bright lights.

When the peanuts are to be used for candies, confections, and peanut butter or are to be sold in shelled form in packages, the shellers enter into the processing sequence. Shelling plants are usually located in the areas where the peanuts are grown. In the shelling process, additional cleaning is necessary to eliminate sticks, stems, pellets of dirt, and other foreign matter. Much of this additional cleaning is done by air blasts and by screens. The shelling machine cracks the pods by running them through a series of round, corrugated steel blades. Once the kernels are separated from the pods, they are run through shakers and air blasts and then over picking tables where discolored or defective kernels and foreign matter are removed by hand. In some factories an electric eye is used to assist in removing unwanted material.

Preparation of the shelled peanuts for market entails the work of several additional processors. More than 40 per cent of the shelled peanuts are used by peanut-butter manufacturers. Usually these manufacturers buy unroasted shelled peanuts, though some of them buy peanuts that have already been roasted and blanched. In making the peanut butter, the first step is to roast the peanuts if they have been bought in a raw state, a step that is usually preceded by further cleaning. When the peanuts have been cooled, they are blanched, a process in which the red skins are taken off the kernels by means of revolving brushes or corrugated blades. Some manufacturers remove the hearts from the kernels as well as the skins. After further cleaning, the kernels are then run through

a grinding mill, to which is attached an automatic salt feeder. The ground and salted mass streams through a spout into the containers. A single modern peanut-butter mill may produce 1,400 pounds of peanut butter an hour.

Taking almost a third of the total produced, the salters are the second largest users of shelled peanuts. The salting process involves cooking the peanuts in oil vats. Peanuts of the Spanish variety are usually salted without being blanched, but peanuts of the Virginia variety are customarily blanched. The oil in which the peanuts are cooked is usually a vegetable oil, now increasingly peanut oil. Before the war coconut

or babassu oil was used for this purpose.

Candy and confectionery manufacturers are the third largest processors of peanuts. They used some 31 million dollars worth of shelled peanuts in 1943. Peanut candy, chocolatecovered peanut bars, peanut brittle, and chocolate-covered or sugar-coated peanuts are familiar to all candy buyers. Illinois has become the chief candy-manufacturing section in the United States, with Chicago alone reported as having some 65 of the 80 candy manufacturers in the state. Chicago is the destination of more than half of the shelled peanuts shipped out of Georgia and Alabama. The other chief candy-producing sections are New York, Pennsylvania, and Ohio.

Cleaners, graders, shellers, salters, and the peanut-butter and candy manufacturers are greatly concerned with improving their products and increasing the normal peacetime demand for them. Technical research agencies are being called upon by these processors to assist them in improving their products. Studies are being made on the proper control of temperature, light, and air, insofar as they apply to the edible qualities of the peanut. The prevention of rancidity and the extension of the shelf life of the peanut offer problems that the processors believe must be solved. Improved methods of cleaning, heating, and otherwise processing the peanut are constantly under study and review.

#### Search For New Markets

To be coupled with this constant research is an extensive and continuous advertising program designed to increase the number of retail outlets for the sale of peanuts and peanut products. Grocery stores, filling stations, eating and drinking places of all types, drugstores, and confectionery shops will be assisted in every way possible to expand their sales of peanut products.

New edible uses for the peanut are also being sought. Peanut milk and peanut ice cream are comparatively new. Peanut oil has important properties as a cooking and salad oil. It can be heated to high temperatures without smoking and is thus especially suitable for deep-fat frying of potato chips, doughnuts, and fish and chicken. It is used in shortening, in oleomargarine, and in mayonnaise. It has also been used in

the preparation of sardines for canning.

The use of peanut oil in the postwar period will be enhanced by improved oil-extraction methods that are now being developed. Peanuts are now processed for oil in cottonseed-crushing plants. This method of processing, using existing equipment, is not entirely satisfactory for extracting oil from peanuts because it involves heating the proteins so that their characteristics are altered. What is needed is a solventextracting plant erected for the express purpose of extracting peanut oil. This need will probably be met.

Flour made from peanuts has important commercial possibilities. Only one peanut-flour mill is now in operation. This mill, operated by the Traders Oil Mill Company of Fort Worth, Texas, is not able to keep up with the demand for the product. Though at present the market is largely confined to bakery and confectionery operators, the flour should presently find its way into many processed foods for use in the home.

While concentrating most heavily upon developing the edible uses of the peanut, the leaders of the industry are by no means neglecting possible new industrial uses of their product. Foremost, perhaps, in research for such industrial uses are the regional research laboratories operated by the Bureau of Agricultural and Industrial Chemistry, Agricultural Research Administration, United States Department of Agriculture. Two of these laboratories, the Southern Regional Research Laboratory at New Orleans and the Northern Regional Research Laboratory at Peoria, Illinois, have done valuable work with peanuts. The Georgia Agricultural Experiment Station is also doing significant work in this field.

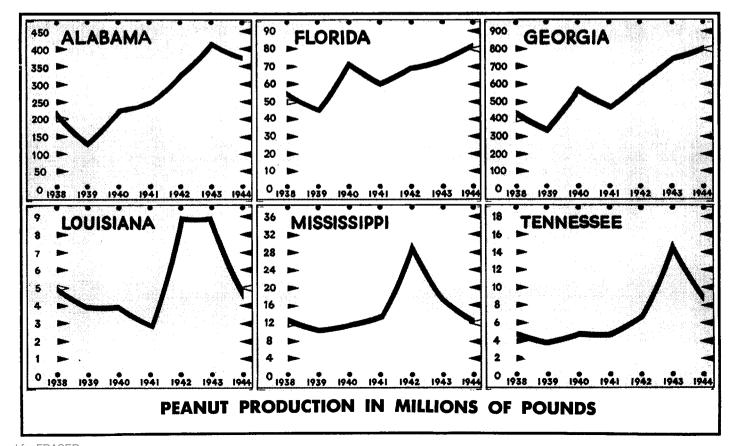
Some of the products developed in these laboratories and by other research specialists seemingly offer promising industrial markets for the peanut and its by-products. From peanut-protein cake has been made a textile fiber much like rayon. A hat manufacturer has expressed great interest in this fiber because it can be dyed to precise tints, making it possible to have hatbands of this material that will match exactly the color of the hat felts. From peanut hulls, shoe soles have been constructed that apparently possess good wearing qualities. Also from peanut hulls, promising gasket material has been made. Another fiber that has been made from peanut protein has wool-like characteristics, but fibers made from peanut protein under this process are not yet available in commercial quantities.

#### The National Peanut Council

Spokesman for the industry is the National Peanut Council, Inc., with headquarters in Atlanta, Georgia. The council, which was formed in 1940, is made up of representatives of the growers, cleaners and shellers, crushers, peanut-butter manufacturers, salters, brokers, confectioners, and representatives of other businesses and organizations that have an interest in the peanut industry.

The functions of the council are of a varied character. First of all, the council gives encouragement and assistance in the offering of a better product. In this endeavor the association is concerned with better seed varieties, control of insect infestation, and improved methods of cleaning, shelling, and processing the peanuts. Its second function is to widen the market for peanuts. In this work, the agency encourages research for new industrial uses of the peanut and the peanut vine. It fosters educational programs in the use of the peanut and, in general, attempts to develop public receptivity for the peanut and products derived from it. Finally, the council serves as a general trade association for all members of the industry. The organization intends to carry out this program with a war chest of about \$300,000 a year, derived from charges assessed upon its members according to industry groups.

With vigorous research, production, and marketing programs already under way, the peanut industry is being prepared to resist a possible relapse to prewar levels. If the program meets with success, the industry will play an increasingly important part in the economy of the Southeastern states and of the nation as a whole.



# The District Business Situation

DUSINESS activity in the Sixth District during February exhibited unusually diverse trends. On the one hand, production in some of the District's major industries tended to turn downward. On the other hand, financial activity and retail sales activity moved upward to new high levels.

#### **Industrial Production**

The war-production picture in the District is currently a rather complex one, with cutbacks in such lines as shipbuilding occurring simultaneously with feverish efforts to increase production of such items as cotton duck and shells. The War Department announced in February an award of a contract for the manufacture of 105 millimeter artillery shells at Sheffield, Alabama. The J. A. Jones Construction Company, a large shipbuilder of the area, won the contract. The plant will cost about 7.8 million dollars and is expected to be in operation by June 1. A tire and rubber plant also in the Muscle Shoals area of Alabama is to be expanded, and some \$500,000 will be spent in expanding capacity of the Robbins Tire and Rubber Company of Tuscumbia, Alabama.

While expanding its force at Sheffield, Alabama, the J. A. Jones Construction Company is cutting its pay roll in Brunswick, Georgia, by 2,500 workers. The reduction in its shipbuilding personnel at Brunswick is attributed by the company to difficulties in securing raw materials. At Mobile the Alabama Dry Dock and Shipbuilding Company has reduced shift time from nine to eight hours, and it is expected that shippard employment at Mobile will fall by as much as 8,000 by June 1. According to the War Manpower Commission, no labor surplus is expected to develop in the Mobile area since other activities in the area are in need of workers. F. B. Spencer, general manager of Alabama Dry Dock, states that the reduction in personnel is the result of a shortage of propulsion engines.

The labor shortage in the naval stores belt in southern Georgia and Alabama and in northern Florida is more acute than ever. A poll of the American Turpentine Farmers Association Co-operative indicates that 314 large producers of turpentine are short 3,603 laborers. The goal for gum naval stores production in 1945 has been set by the United States Forest Service at 350,000 barrels of turpentine and 934,000 drums of rosin. That this goal can be met is extremely doubtful in view of the labor shortage in the woods.

In spite of bad weather there was some expansion in lumber production during late January and early February. The order files of almost all the mills reporting to the Southern Pine Association continue to grow, however, because the mills are unable to produce rapidly enough to meet the increasing demands for lumber for war purposes. Reports continue to indicate that the lumber industry is losing needed workers.

Steel-mill activity in the Birmingham-Gadsden area, according to *The Iron Age*, averaged 97.8 per cent of capacity in January, compared with an average of 91.7 per cent for the country as a whole. In the first half of February, Alabama mills operated at an average of 97 per cent of capacity, whereas the national average for that period was 90.0 per cent.

Though much remains to be done to bring cotton-textile output up to schedule, progress is being made. In January cotton mills in Alabama, Georgia, and Tennessee used a total of 304,767 bales, an increase of 11 per cent over their December consumption. The January consumption of cotton in District mills was the largest since June 1943, with the single exception of that in March 1944. In part, the increase in cotton-textile production is the result of the Army's new policy of furloughing former cotton-mill workers for temporary employment in the District's mills.

In mid-February the War Production Board announced that production of cotton duck was 20 per cent below military requirements in the first quarter of 1945. But the increase in output is still more than 400 per cent above the prewar level. According to the WPB, a shortage of trained workers, particularly in Georgia, Alabama, the Carolinas, and Texas, is preventing three-shift operations. In Georgia alone it is estimated that some 30 mills must increase their output of both cotton and tire cord by one third if military needs are to be met.

Perhaps the most promising development in February from a long-range point of view was the reported finding of oil-bearing sand in Georgia. The Gibson No. 1 well in Toombs County near Vidalia, it has been announced, struck oil-bearing sand at 2,300 feet. Though the new well may not prove to be a commercial producer, it seems to verify the presence of oil-bearing sands in Georgia. The finding of these sands will undoubtedly encourage further exploration for oil in the state.

During the month additional oil wells were brought in in Mississippi. Figures released late in February indicate that Mississippi produced 1,543,594 barrels from 461 wells in December, compared with 1,512,115 barrels from 449 wells in November. Nevertheless, because the original Tinsley field has declined more rapidly than the new fields in southern Mississippi have been developed, total production in Mississippi in 1944 was the lowest since 1941. This drop is in part the result of a shortage of oil-well equipment and of trained drilling crews.

#### **Financial Activity**

Sixth District Federal Reserve note circulation continues to increase. In times that are more nearly normal, currency flows back into the banks and to the Reserve Banks in January, following the holiday shopping season. Last year this return flow of Sixth District Federal Reserve notes amounted to about 8 million dollars. During the three weeks from January 3 to January 24 this year the net circulation of the Federal Reserve Bank of Atlanta declined about 13 million dollars, but since the latter part of January it has resumed its rise.

On February 14 net circulation amounted to 1,291 million dollars, whereas 12 months earlier it was 964 million dollars. Last month the Bank's net circulation increased about 6 million dollars, the smallest monthly increase since November 1941. The January increase resulted from a gain of about 10 million dollars in the circulation of bills of the 50-dollar and larger denominations. This increase was offset in part by a decline of four million dollars in bills of the 5-, 10-, and 20-dollar denominations. Currency is constantly wearing out and being retired from circulation, and in January the amount of this Bank's 5- and 10-dollar notes retired for that reason were much larger than the amounts issued.

In the past 12 months notes of the larger denominations have constituted an even larger part of the Bank's net circulation. In January of 1943 and in the same month of 1944

## Sixth District Statistics

WHOLESALE SALES AND INVENTORIES* — JANUARY 1945					15	
Item	Firms Jan. 1945 from Fi		No. of Firms	INVENTORIES Per Cent Change Jan. 1945 from		
None	Report- ing	Dec. 1944	Jan. 1944	Report- ing	Dec. 1944	Jan. 1944
Automotive supplies. Drugs and sundries. Dry goods. Electrical goods. Fresh fruits and	11 8 6 5	+ 23 + 21 + 114 - 48	+ 47 + 13 + 11 + 30	9  4	— 1 + 5	+ 21 7
vegetables	3 6	+ 9 + 21 - 17	+ 24 + 2 - 17			
wholesalers Groceries—specialty line wholesalers Beer Hardware—general Hardware—industrial	34 10 3 8 3	+ 9 + 12 + 7 + 12 + 10	+ 9 + 27 - 2 + 7 + 37	16 5 	— 2 — 2 	+ 4 + 1
Machinery, equip- ment and supplies. Paper and its products	3	- 2 + 3	+ 28			
products	12	- 2 + 16 + 7	+ 2 + 5 + 12	22 56	- 6 - 4	— 9 — 3
*Based on U. S. Depa	rtment o	Commerc	ce figures			

1	DEBITS		OUAL BANK		'S	
Place	No. of Banks	Jan.	Dec.	Jan.	Per Cen Jan. 19	t Change 45 from
11400	Report- ing	1945	1944	1944	Dec. 1944	Jan. 1944
ALABAMA Anniston Birmingham Dothan Gadsden Mobile Montgomery	3 3 2 3 4 3	20,004 217,428 9,143 11,556 122,658 41,599	19,648 215,371 10,137 13,386 127,072 42,246	16,886 197,395 7,891 9,962 116,850 38,064	$\begin{array}{c} + & 2 \\ + & 1 \\ - & 10 \\ - & 14 \\ - & 3 \\ - & 2 \end{array}$	+ 18 + 10 + 16 + 16 + 5 + 9
FLORIDA Jacksonville Miami	3 6	192,973 145,152	212,454 165,425	165,406 135,603	— 9 — 12	+ 17 + 7
Greater Miami* Orlando Pensacola St. Petersburg Tampa	10 2 3 3 3	201,068 37,232 28,176 32,177 94,531	233,856 34,173 30,475 30,081 92,525	178,827 28,874 23,065 23,177 79,709	- 14 + 9 - 8 + 7 + 2	+ 12 + 29 + 22 + 39 + 19
GEORGIA Albany Atlanta Augusta Brunswick Columbus Elberton Macon Newnan Savannah Valdosta	2432423242	11,861 514,760 36,127 16,312 39,728 2,010 42,056 5,495 83,670 6,858	14,065 571,616 43,216 20,098 43,315 2,388 51,711 5,715 102,028 8,030	11,046 437,647 37,079 15,502 39,228 1,661 36,979 4,436 83,014 6,848	- 16 10 16 19 18 19 18 15	+ 7 + 18 - 3 + 5 + 1 + 21 + 24 + 24 + 1 + 0
LOUISIANA Baton Rouge Lake Charles New Orleans	3 3 7	48,266 19,567 476,205	46,985 20,538 500,077	39,898 23,672 405,892	+ 3 - 5 - 5	+ 21 17 + 17
MISSISSIPPI Hattiesburg Jackson Meridian Vicksburg	2 4 3 2	14,132 71,435 17,566 20,445	14,497 63,747 18,208 25,447	12,493 49,930 15,319 22,109	- 3 + 12 - 4 - 20	+ 13 + 43 + 15 - 8
TENNESSEE Chattanooga. Knoxville Nashville	4 4 6	105,408 133,443 185,247	105,103 130,250 231,211	108,397 98,058 17 <b>4</b> ,787	+ 0 + 2 - 20	— 3 + 36 + 6
6TH DISTRICT32 Cities	114	2,803,220	3,011,237	2,466,877	_ 7	+ 14
UNITED STATES 334 Cities		82,743,000	91,271,000	71,904,000	_ 9	+ 15
*Not included in	Sixth Di	istrict Total	<del>-</del>			

notes of the 50-dollar and larger denominations accounted for 28 per cent of the total, but in January of this year the proportion had risen to 32 per cent.

At the 20 weekly reporting member banks in the District total loans declined 21 million dollars between mid-December and February 14. During that period security loans declined about 11 million dollars and commercial, industrial, and agricultural loans approximately the same amount. From September 12 to December 20, 1944, however, total loans had risen 80 million dollars, 59 million of the increase being in commercial loans and 20 million in security loans. Total holdings of investment securities declined somewhat in the latter part of January 1945, but the banks' holdings of United States Government securities were larger on February 14 than they were at any earlier time. Demand and time deposits at the 20 reporting Sixth District banks were also greater at the middle of February than ever before.

#### **Agricultural Production for 1944**

The total value of agricultural products for 1944 in Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee was 8 per cent larger than that for 1943. Annual crop summaries issued by the agricultural statisticians of the United States Department of Agriculture assigned to these states indicate that the principal crops grown in 1944 were valued at 1,883 million dollars, compared with a corresponding total of 1,741 million dollars for the year before. Mississippi, because of its large cotton crop, ranked first in value of crops with a total of 414 million dollars. Georgia was second with 373 million dollars, and Tennessee third with 293 million dollars, followed by Alabama's 289 million dollars, Florida's 277 million dollars, and Louisiana's 238 million.

All six of the states recorded increases over 1943, but the increases were not uniform. A record-breaking citrus crop marketed at favorable prices caused the value of Florida's crops to increase 18 per cent. Mississippi's crops were valued at a total 14 per cent greater than the year before, and Louisiana had an increase of 10 per cent. In Georgia the gain over 1943 was 4 per cent, and in Alabama and Tennessee it was 2 per cent.

In total value cotton outranked, as it usually does, all other crops in the District. The total value of cotton lint and seed produced in these Six States in 1944 was 647 million dollars, greater by 8 per cent than the value of the 1943 crop. Last year's cotton crop of 5,037,000 bales was only 3 per cent larger than that produced in 1943, but the farm value of the crop had increased 10 per cent. Cottonseed from the 1944 crop was about the same, in production and in value, as it was the year before. Production and value figures were somewhat lower in 1944 for Georgia, Louisiana, and Florida, but these decreases were more than offset in the six-state total by increases in Mississippi, Tennessee, and Alabama.

Second in value was the corn crop, with a total value of 336 million dollars. The corn crop was, in the Six States as a whole, 7 per cent smaller than it was in 1943, and its total value was down 3 per cent. Production declined in each of the Six States. The farm value of the crop was also smaller than that for 1943 in all the states except Mississippi, where the crop was only slightly smaller and the value of the crop was 2 million dollars higher.

Third in point of value, 140 million dollars, was the Florida citrus crop. From the bloom of 1943, 46 million boxes of oranges and 31 million boxes of grapefruit were produced. These figures represent increases of 24 per cent and 14 per

cent, respectively, over production of the preceding season. The orange crop was valued at 96 million dollars, larger by 28 per cent than that for the previous season, and grapefruit production was valued at 44 million dollars, a gain of 41 per cent.

Fruit from the bloom of a given season begins to move to market in the latter months of the same year, but the bulk of the crop is marketed in the first half of the following year. Prospects for the current crop, that from the 1944 bloom, were reduced somewhat by early freezes and the October hurricane, but if the current estimates materialize there will be more oranges this season than in any previous one, excepting the record 1943-44 season, and there will be a crop of grape-fruit that has been exceeded in only a very few seasons.

Peanuts ranked fourth in total value in 1944. Their production declined 13 per cent in comparison with the record crop of 1943, but the proceeds, 88 million dollars, were only 4 per cent below those of 1943. Production was lower in each of the Six States. The decrease in Georgia was small, however, and the total value of the Georgia crop increased slightly.

Fifth in rank stands tobacco. A total of 231 million pounds of tobacco was produced in Tennessee, Georgia, and Florida in 1944, and the total value is reported at 87 million dollars. In volume of production, last year's crop is not the largest on record, although it was 32 per cent greater than that produced in 1943, but in value tobacco was up 20 per cent from 1943, and the 1944 total value was more than twice as large as the total for any year prior to 1942.

Other important District crops in order of value in 1944 were sweet potatoes, oats, rice, sugar cane (for sugar), potatoes, sugar cane for syrup, pecans, wheat, sorghum for syrup, and soybeans. Almost 35 million bushels of sweet potatoes were produced in 1944, a decrease of 13 per cent from the large 1943 crop. The value of the 1944 crop was reported at 62 million dollars, which is 20 per cent lower than the value of the 1943 crop but considerably higher than the returns from any earlier crop.

A record crop of oats—42 million bushels—was produced in the Six States in 1944. The value of this crop was placed at 43 million dollars. In volume of production, the oat crop increased 36 per cent over 1943. In value, the increase was 50 per cent over the 1943 figure, and the 1944 total value was more than double what it had been in any year prior to 1943. All the Six States shared in the increases, in both value and volume of production.

Rice production in Louisiana exceeded 22 million bushels in 1944, an increase of 2 per cent over the 1943 crop but slightly less than that of 1942. Except for the 1942 crop, however, 1944 production was the largest on record. The value of the rice crop in the latter year was 39 million dollars, 2 per cent less than in 1943, but, with that exception, a record exceeding other previous years.

Total production of sugar cane for sugar in Louisiana and Florida in 1944 was 6,126,000 tons. Although this figure is down 5 per cent from the 1943 production, the reported value of 31 million dollars was 4 per cent higher than the preceding year's total. The 1944 production of potatoes amounted to 16 million bushels, down 23 per cent from that of 1943, and brought 24 million dollars, which was a reduction of 30 per cent.

A little more than 20 million gallons of sugar-cane syrup were produced in 1943 and again in 1944. The value of the 1944 production was reported as 20 million dollars, an in-

# Sixth District Indexes

DEPARTMENT STORE SALES*								
		Adjusted*	•	Unadjusted				
	Jan. 19 <b>4</b> 5	Dec. 1944	Jan. 1944	Jan. 1 <b>94</b> 5	Dec. 1944	Jan. 1944		
DISTRICT Atlanta Baton Rouge Birmingham Chattanooga Jackson Jacksonville Knoxville Macon Miami Montgomery Nashville New Orleans Tampa	263 300 254 285 265 289 387 373 236 208 285 238 248 309	258 248 390 245 259 231 329 283 270 206 234 264 227 306	224 240 236 243 224 221 316 300 235 183 251 267 207	211 220 169 201 210 198 279 276 163 233 212 170 190 255	418 400 415 398 419 375 552 480 473 380 417 445 373 518	179 177 157 172 172 178 226 222 162 206 157 191 159 223		

DEPARTMENT STORE STOCKS									
<u>_</u>		Adjusted*	•	Unadjusted					
	Jan.	Dec .	Jan.	Jan.	Dec.	Jan.			
	1945	1944	1944	1945	1944	1944			
DISTRICT	165	166	176	155	149	165			
	263	274	246	231	222	216			
	140	127	133	121	111	115			
	191	187	170	169	158	151			
	316	291	303	258	248	247			
	130	127	158	113	111	138			

	COTTO	CONSU	MPTION*	COAL	PRODUC	TION*
	Jan	Dec.	Jan.	Jan.	Dec.	jan.
	1945	1944	1944	1945	1944	1944
TOTAL.	166	150	162	1 <b>7</b> 1	146	183
Alabama	176	159	167	177	152	185
Georgia Tennessee	164 139	149 124	163 136	158	iżż	iżż

	MANUFACTURING EMPLOYMENT***			GASOLINE TAX COLLECTIONS			
	Dec.	Nov.	Dec.	Jan.	Dec.	Jan.	
	1944	1944	1943	1945	1944	1944	
SIX STATES Alabama Florida Georgia Louisiana Mississippi Tennessee	156	156	166	101	104	99	
	184	182	194	111	109	107	
	163	164r	192	102	92	87	
	148	147	151	98	102	96	
	170	171r	176	107	101	104	
	144	145r	156	76	108	111	
	133	133	143	107	119	102	

CONSTRUCTION CONTRACTS								
	January 1945	December 1944	January 1944					
DISTRICT Residential Others Alabama Florida	140 86 167 354 94 69	148r 43r 198 141 126	72 71 72 88 80 30					
Georgia Louislana Mississippi Tennessee	51 94 164	135 196 220	100 110 46					

cos	T OF LI	VING		ELECTRIC PO	OWER P	RODUC	TION*
	Dec. 1944	Nov. 1944	Dec. 1 <b>943</b>		Dec. 1944	Nov. 1944	Dec. 1943
ALL ITEMS	132 145	132r 144	128 143	SIX STATES	276	277	251
Clothing	140 114	139 114	134 114	generated.	242	230	178
Fuel, elec-	114	114	114	generated.	320	338	341
tricity, and ice Home fur-	109	109	109	ANNUAL RAT	E OF T		ER OF
nishings. Miscel- laneous	141 127	139 126	125 121		Jan. 1945	Dec. 1944	Jan. 1944
CRUDE PETR IN COASTA		SIANA .		Unadjusted Adjusted** Index**	17.8 16.0 61.9	20.6 17.9 69.3	19.0 17.1 66.1
	Jan. 1945	Dec. 1944	Jan. 1944	*Daily avera	r seaso	nal varia	
Unadjusted Adjusted**	202 198	202 210	192 188	***1939 month indexes,	ly avera 1935-39	ge = 10 = 100	0; other

# Sixth District Statistics

DEPA	DEPARTMENT STORE SALES AND STOCKS					
		SALES		INVENTORIES		
Place	No. of Stores	tores Jan. 1945 from S		Stores Jan.		Change 15 from
	Report- ing	Dec. 1944	Jan. 1944	Report- ing	Dec. 1944	Jan. 1944
ALABAMA						
Birmingham	5	47	+ 22 + 23	2 4	+ 9	+ 5
Mobile		<u>        62                            </u>	+ 22 + 23 + 41	4	······ <del>·</del>	
Montgomery	4	<b>— 47</b>	<b>∔</b> 41		+ 7	+ 12
FLORIDA   Jacksonville		40		3		
Tampa		- 48 - 49	+ 28 + 19	1 -		
GEORGIA	3	49	+ 19	• •	• • • • •	
Atlanta	6	<b>— 43</b>	+ 29		+ 4	+ 7
Augusta		— 51	+ 29 + 31 + 5	, ; 5	7 7	
Macon	š	- 64	+ 5	l	4	iė
LOUISIANA	•		, ,	''	-	
New Orleans	4	47	+ 24	3	+ 2	18
MISSISSIPPI	_		·	_	'	
Jackson	3	— 55	+ 28	3		
TENNESSEE		40		• • •		
Chattanooga	3 3 5 15	48	+ 40	• • •		
Knoxville Nashville	3	40 46	+ 27 + 24	4		+ 4
OTHER CITIES*	15	— 46 — 48	+ 24 + 21	20	+ 4	+ 4
DISTRICT	68	— 46 — 47	+ 40 + 27 + 24 + 21 + 26	42	+ 4 + 3 + 4	

\*When less than 3 stores report in a given city, the sales are grouped together under ''other cities.''

#### ASSETS AND LIABILITIES OF ALL MEMBER BANKS OF THE SIXTH FEDERAL RESERVE DISTRICT AS OF DECEMBER 30, 1944, AND OF DECEMBER 31, 1943\* (Amounts in Thousands of Dollars)

ASSETS	Dec. 30 1944	Dec. 31 1943	Per Cent Change
Loans and discounts. United States Government obligations.	700,433	663,928	+ 5.5
direct and guaranteedObligations of states and political	2,623,264	1,941,412	+ 35.1
subdivisions Other bonds, notes and debentures	240,569 40,169	208,360 41,52 <b>4</b>	+ 15.5 - 3.3
Corporate stocks. Cash, balances with other banks.	8,344	8,602	- 3.0
including reserve balance. Bank premises owned.	1,471,716 45,883	1,267,915 47,712	+ 16.1 - 3.8
Real estate owned other than bank	1,281	2,702	— 52.6
premises Investments and other assets indirectly representing bank premises or other	5,255	2,7.3=	,
real estate. Customers' liability on acceptances.	3,157 2,472	3,454 2,337	+ 5.8
Other assets	14,588 5,151,876	4,199,074	
LIABILITIES			
Demand deposits of individuals, part- nerships, and corporations Time deposits of individuals, partner-	2,432,453	2,037,261	+ 19.4
ships and corporations.  Deposits of United States Government Deposits of states and political subdi-	703,260 580,663	525,242 390,133	+ 33.9 + 48.8
visions	338,644 794,863 39,799	315,637 655,597 36,821	+ 7.3 + 21.2 + 8.1
TOTAL DEPOSITS Acceptances outstanding Other liabilities	4,889,682	3,960,691 2,784 9,792	+ 23.5 + 12.3 + 39.5
Other habitities	4.906,469	3,973,267	+ 23.5
Capital. Surplus Undivided profits Reserves	100,295 97,471	99,415 83,083 27,549 15,760	+ .9 + 17.3 + 13.4 + 4.0
TOTAL CAPITAL ACCOUNTS	245,407	225,807	+ 8.7
TOTAL LIABILITIES AND CAPITAL ACCOUNTS	5,151,876	4,199,074	+ 22.7

\*Figures for December 30, 1944, are preliminary. The member banks for both 1944 and 1943 number 316, but they are not identical.

INSTALME	instalment cash loans							
Lender	Number of Dec. 1944 to Jan. 1945							
render	Reporting	Volume	Outstanding					
Federal credit unions. State credit unions. Industrial banking companies. Personal finance companies. Commercial banks	28	34 30 + 20 + 0 1	- 1 - 4 + 2 - 3 + 1					

crease of 2 per cent for the year. Pecans grown last year amounted to 69 million pounds, 3 per cent more than in 1943, but the total value of 17 million dollars is slightly less than that of the preceding year's production. Wheat grown in Tennessee, Georgia, and Alabama in 1944 amounted to 10 million bushels and was valued at 16 million dollars, reflecting increases of 55 per cent in production and 64 per cent in value over the 1943 figures. Sorghum-syrup production increased slightly in 1944, and the value of production in 1944, 8 million dollars, was up 12 per cent from the year before. Soybean production increased in Tennessee and Alabama, but declined in other states of the District in 1944. The total crop was down 17 per cent, while the total value was 12 per cent less than it was in 1943.

Confirming these annual estimates that indicate an increase in the farm value of crops are the statistics compiled by the United States Department of Agriculture showing from month to month the estimated amounts that farmers receive for crops, livestock, and livestock products. In the first 11 months of 1944 farmers in the Six States of this District received 1,659 million dollars from their marketings, and this total is 11 per cent larger than that for the corresponding part of 1943. For the individual states the increases range from 5 per cent for Louisiana and 6 per cent for Alabama to 11 per cent for Florida, 13 per cent for Tennessee, 14 per cent for Mississippi, and 16 per cent for Georgia.

## **Retail-Sales Activity**

Department-store sales at all reporting cities in the District continue well above such sales for the corresponding periods of previous years. In the first three weeks of February, sales reported by approximately 30 department stores located in the larger cities of the District averaged 20 per cent greater than in the corresponding period last year. Atlanta led with an average increase of 32 per cent, followed by Birmingham with a gain of 24 per cent; Nashville's average increase was 18 per cent, that for Miami 13 per cent, and that for New Orleans 11 per cent. If all the 80 reporting stores located throughout the District registered the same gain during February, the unadjusted index of daily sales will rise by 10 per cent.

In January, sales at Sixth District department stores were 26 per cent higher in dollar volume than they were in January 1944, although there was a substantial drop from December. The December to January decrease was, however, slightly less than usual, and the adjusted index rose 2 per cent, from 258 per cent of the 1935-39 average for December to 263 per cent for January. In comparisons of the January 1945 sales with those a year earlier, Montgomery led with a gain of 41 per cent. Chattanooga was in second place with an increase of 40 per cent, and in third place with an increase of 31 per cent was Augusta, Georgia, which is included in the statement this month for the first time. Sales increased 29 per cent at Atlanta; 28 per cent at Jackson and Jacksonville, 27 per cent at Knoxville, 24 per cent at Nashville and New Orleans, 23 per cent at Mobile, 22 per cent at Birmingham, 19 per cent at Tampa, and 5 per cent at Macon.

At those stores that were able to classify their sales, cash sales accounted for 58.7 per cent of the January total this year against 60.0 per cent last year, while open-book credit sales accounted for 37.6 per cent of the total this January against 35.7 per cent a year ago. In December also cash sales accounted for a smaller proportion of the total, and open-book credit sales a larger proportion, than was the case a year

http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis earlier. For many months prior to December, however, the reverse had been true.

January inventories averaged 4 per cent larger than those at the end of December but were slightly smaller than they were a year ago. Increases in stocks over January 1944, were, however, reported at Atlanta, Birmingham, Montgomery, and Nashville.

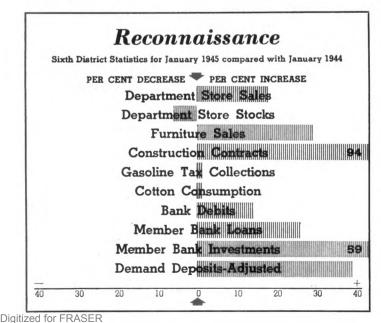
There was also a sharp seasonal drop in sales at retail furniture stores in January, following the Christmas holiday season, but the decline was smaller this year than it was a year ago. January inventories at furniture stores increased, following a three-months decline. Total January sales by 109 reporting furniture stores averaged 36 per cent less than in December, but were 26 per cent greater than in January last year.

Of the total number of stores that reported for January, 98 classified their sales, and at these 98 stores cash sales dropped 40 per cent from December but were 34 per cent greater than they were a year ago, while instalment and other credit sales declined 36 per cent from December and were 25 per cent greater than in January 1944.

Accounts receivable outstanding at the end of January were down 8 per cent from December, but were 5 per cent larger than for January last year. In actual amount, January collections were about the same as those in December, and were 13 per cent greater than in January 1944.

#### **Gasoline-Tax Collections**

Despite rationing programs, gasoline-tax collections in the six states of the District have not declined appreciably. Indeed, in January such collections averaged higher than they did in 1939. Throughout 1944 an index based on total gasoline-tax collections in the states of Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee approximated the 1939 figures and in some months exceeded them. In no month of 1944 were collections of gasoline taxes in the District less than 90 per cent as much as the average monthly figure for 1939. In five states of the District, collections in January 1945 exceeded those of January 1944, although presumably fewer automobiles were operated last month than were operated a year earlier.



# Sixth District Statistics

(In	Thousand	ds of Dolla	rs)			
	Dec. Nov. Dec. January-Decem					
	1944	1944	1943	1944	1943	
SIX STATES Alabama Florida Georgia Louisiana Mississippi Tennessee	186,969 21,451 37,518 28,979 27,972 26,680 44,369	269,187 39,897 29,570 46,617 47,908 70,571 34,624	204,528 27,684 30,193 29,341 30,148 40,564 46,598	1,846,447 245,830 323,278 365,213 237,802 345,159 329,165	288,612 319,401 230,157 319,652	

RETAIL FURNITURE	STORE OPE	RATIONS		
Item	Number of Stores	Per Cent Change January 1945 from		
	Reporting	Dec. 1944	Jan. 1944	
Total sales	73	<b>— 79</b>	+ 29	
Cash sales	73 62 62	- 40 - 29	+ 29 + 36 + 30	
Accounts receivable, end of month.	70 70 48	5	+ 8	
Collections during month	70	+ 5	+ 12	
Inventories, end of month	48	+ 6	_ 4	

SELECTED ITEMS FROM STATEMENT OF FINANCIAL CONDITION.

Item	Feb. 21 1945	Jan. 17 1945	Feb. 16 1944	Per Cent Change Feb. 21, 1945, from	
неш				Jan. 17 1945	Feb. 16 1944
Bills discounnted	700 19	22	50 108	14	+ 40 - 82
guaranteed	947,825 948,544 1,292,897		501,791 501,949 964,390		+ 89 + 89 + 34
Member-bank reserve deposits	624,577 12,591	6,095		$-1 \\ +107$	+ 17 61
Foreign bank deposits. Other deposits. Total deposits. Total reserves.	3,662 684,430	4,461 678,870	8,822 623,420	- 18	- 7 - 58 + 10 - 4

Item	Feb. 14 1945	Jan. 17 1945	Feb. 16 1944	Per Cent Change Feb. 14, 1945, from	
				Jan. 17 1945	Feb. 16 1944
Loans and investments—					
total Loans—total Commercial, industrial.	1,802,573 344,570	1,822,228 357,949	1,588,941 372,980	$-\frac{1}{4}$	+ 13
and agricultural loans Loans to brokers and	203,821	211,194	213,433	— 3	— 5
dealers in securities Other loans for pur-	5,814	6,204	9,219	<b>—</b> 6	— 37
chasing and carrying securities	2,608	23,722	27,108	+ 3 + 6 - 4 - 0	- 18 - 10 +122 - 7 + 20 + 26 - 86
Obligations guaranteed by U. S. Other securities Reserve with F. R. Bank Cash in vault.	126,607 345,950 29,966 149,962	123,362 332,860 28,180 153,376	283,702	+ 4 + 6	+ 14 + 22 + 22 - 6
banksDemand deposits—adjusted	1,313,013	1,138,324	957,537	+ 15	+ 37 + 34
Time deposits	339,268 221,248 506,147		287,413	8	- 23 + 9
Borrowings					

# The National Business Situation

FACTORY output continued to increase in January despite severe weather conditions. Department-store sales during the first seven weeks of this year have been 14 per cent above the high level maintained during the same period last year.

#### **Industrial Production**

Total output at factories and mines rose slightly in January, and the Board's seasonally adjusted index was 234 per cent of the 1935-39 average as compared with 232 in the preceding three months.

Activity in munitions industries was maintained in January at the December rate, although slight increases were scheduled. In February it was announced that schedules for 1945 production of aircraft and army ordnance items had been increased further. Output of open hearth and Bessemer steel in January was at the lowest rate since July 1942, largely due to severe weather conditions in several important steelmaking areas. Output of electric steel, however, which had been declining since the end of 1943, rose 10 per cent in January, reflecting new military requirements for alloy steel. The War Production Board early in February ordered a 10 per cent increase in aluminum-ingot production and announced that a large increase had occurred in output of aluminum since December 1.

Output of nondurable goods rose 2 per cent in January. Production of liquor and beverage spirits increased sharply as a result of the release of distilleries from industrial-alcohol production for the month of January. Output of manufactured food products also showed a gain for the month, reflecting increases in the canning and baking industries, after allowing for seasonal changes. Activity at meat-packing establishments declined 10 per cent in January and was at a rate 25 per cent below the same month a year ago. Production in the chemical industries continued to rise, largely reflecting further increases in output of small-arms ammunition. Activity at textile and paper mills showed little change.

Output of coal increased in January, but the tonnage was 8 per cent less than the large volume for January 1944. The production rise was limited by shortages of cars at mines due to congestion in ice-clogged northern railroad yards. In the week ending February 10 output of bituminous coal was the largest for any week since last November.

#### **Distribution**

Department-store sales continued in January and the first half of February at about the same high level that prevailed in the last quarter of 1944, after allowance is made for the usual sharp seasonal decline. Value of sales was 14 per cent greater than in the corresponding period a year ago, with a higher rate of gain shown in February.

Freight carloadings increased in the early part of January due chiefly to larger shipments of fuel and war materials. At the end of January and in the early part of February, however, two short embargoes were placed on rail shipments of most nonwar goods. These embargoes were limited to the northeastern states.

## **Bank Credit**

With a steady succession of Treasury calls on war-loan balances, both demand deposits (adjusted) and the deposits at member banks increased from mid-January to mid-February. Time deposits maintained the rather rapid rate of increase that has prevailed for the past several months. During this period reporting member banks in 101 cities reduced their total holdings of Treasury bills in order to meet increases in required reserves and a currency drain. At the same time, however, banks continued to make sizable purchases of Treasury bonds, mostly in the eight- to ten-year maturity range. Commercial loans declined slightly.

During the five weeks ending February 21, Reserve Banks increased their holdings of Treasury bills by 630 million dollars and sold 65 million of Treasury bonds. The bill purchases, together with advances of 165 million dollars to member banks, enabled banks to meet a 450-million-dollar currency drain and a 270-million-dollar growth in required reserves. Although currency in circulation had declined through most of January, the outflow was renewed in the last days of the month and continued at an accelerated pace in February. Excess reserves declined to below one billion dollars late in January, about the average level at which they have been between drives during the past year.

#### **Government Security Yields**

Following the close of the Sixth War Loan Drive in December, the Government security market was strong during January and the first part of February. The average yield on medium-term, taxable Treasury bonds declined from 1.94 per cent during the last week of December to 1.78 per cent during the week ended February 17. The average yield on long-term, taxable Treasury bonds declined from 2.47 per cent to 2.39 per cent in the same period, the lowest since early December 1941.

(This article was written by the staff of the Board of Governors of the Federal Reserve System)

#### ANNOUNCEMENT

Thomas K. Glenn, chairman of the board, Trust Company of Georgia, Atlanta, Georgia, resigned as a Class A director of the Federal Reserve Bank of Atlanta on January 31, 1945. Mr. Glenn was serving his second term as a director of the Bank, having first taken office on January 1, 1940. To fill Mr. Glenn's unexpired term, which will end December 31, 1945, the Group 1 banks elected Robert Strickland, who is president of the Trust Company of Georgia, Atlanta, Georgia. Mr. Strickland assumed his new office on February 6, 1945.

Bert C. Teed, executive first vice president of the First National Bank in Palm Beach, Palm Beach, Florida, resigned as a director of the Jacksonville Branch of the Federal Reserve Bank of Atlanta, effective January 20, 1945. Mr. Teed had held this office since January 1, 1940. To fill the unexpired term of Mr. Teed, J. S. Fairchild, cashier of the First National Bank of Winter Garden, Winter Garden, Florida, was appointed by the directors of the Federal Reserve Bank of Atlanta at their meeting of February 9, 1945. Mr. Fairchild's term will end December 31, 1945.