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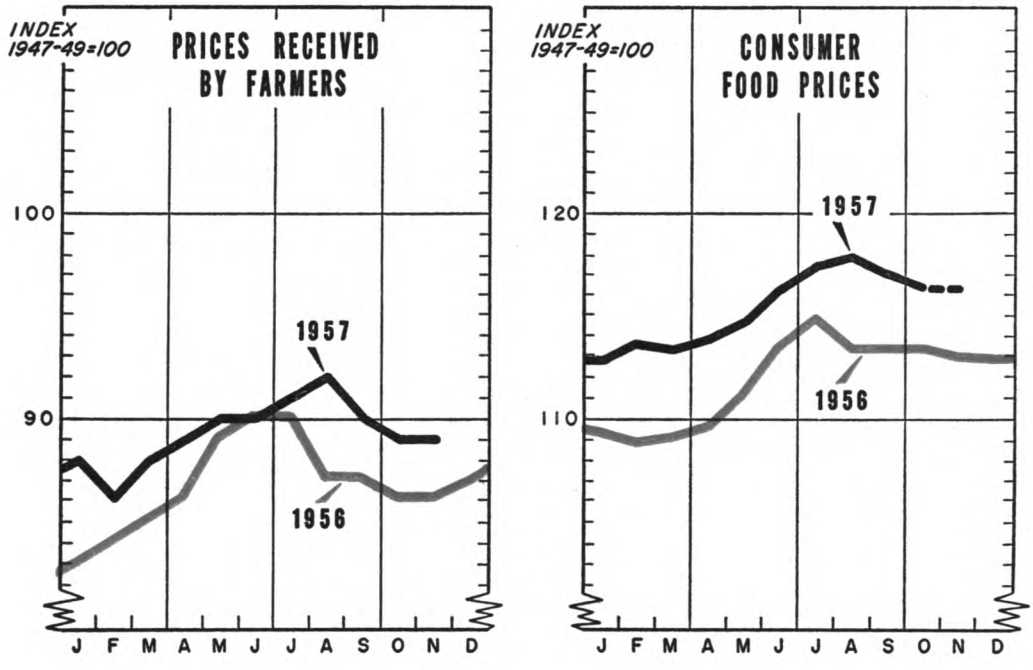
Since mid-'57, farm prices and food prices have switched to a declining tendency, ceasing to add impetus to general commodity price averages. A part of the change, but probably not all of it, is seasonal in character. ***(See p. 2.)***



Major Agricultural Developments of 1957

SINCE MID-AUGUST, prices of farm and food products have exerted a restraining influence on the general level of prices. The prices of products at the farm and of food at retail generally turned down in September and have shown weakness in subsequent months.[1] Meanwhile, wholesale prices of commodities other than farm and food held steady at advanced levels and consumer prices of non-food items continued upward.

The situation since late summer is in contrast to that which prevailed earlier this year when much of the advance in the general level of prices reflected a fairly persistent rise in the prices of farm and food products. Can the recent downturn in farm and food prices be solely ascribed to seasonal influences, or have there been other contributing factors? A review of some of the major agricultural developments of the year may serve in part to answer this question.

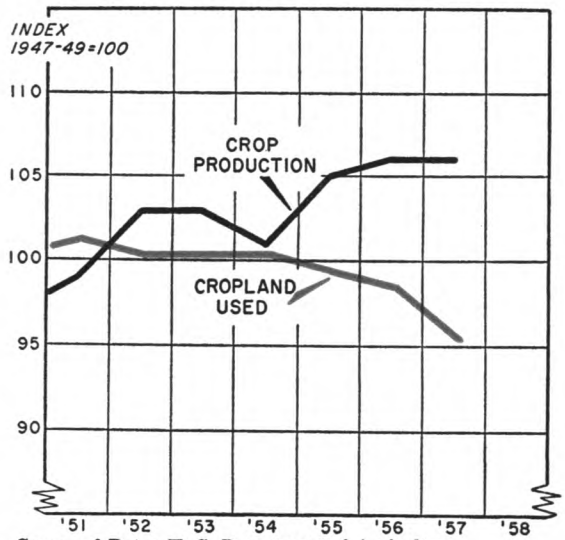
Farm Output Equaled Previous Record

The total farm output this year matched the peak performance of 1956, despite reduced plantings and some decline in meat animal production. Better than average growing conditions in the latter part of the crop season permitted yields which were much higher than had been anticipated earlier in the summer. The result was a volume of crops which seldom, if ever, has been realized from so few acres. The acreage from which crops were harvested in the nation this year was the smallest in forty years, but the total outturn of crops as indicated in the accompanying chart equaled the record of the preceding year.

The curtailment of plantings associated with the Soil Bank program brought notable reductions in production of tobacco, cotton and food grains (principally wheat) as shown in the accompanying tabulation. These reductions in output, together with those indicated for vegetables and oil seed crops, were fully offset, however, by substantial increases in feed grain, hay and sugar crops.

A compensating factor for the reduction in harvested acreage was an outturn per

Declines in cropland acreages have been accompanied over the years by increases in the production of crops.



Source of Data: U. S. Department of Agriculture.

(1) Prices of farm products were fractionally higher in mid-November. The change was insufficient to be reflected in prices received on a 1947-49 base as shown on the cover chart.

FARM OUTPUT

1947-49=100

	Indicated 1957(1)	% change from 1956
Total Farm Output	113	—0—
All Crops	106	—0—
Sugar crops	126	+15.6
Hay and forage	127	+14.4
Feed grains	119	+ 7.2
Fruit and nuts	112	+ 0.9
Oil crops	151	— 2.6
Food grains	77	— 7.2
Vegetables	95	—10.4
Cotton	83	—11.7
Tobacco	83	—21.7
All Livestock and Products	121	— 0.8
Dairy products	111	+ 0.9
Poultry and eggs	135	— 0.7
Meat animals	121	— 1.6

(1) Based on November 1 estimates.

Source: Statistical Summary, Agricultural Marketing Service, U. S. Department of Agriculture.

acre for 28 of the major crops which exceeded that of any previous year of record. The estimated average yield of those crops this year was more than one-fourth greater than in the early postwar years of 1947-1949.

The output estimates for livestock and products nearly duplicated the record volume of the previous year. The indicated volume of dairy products exceeded that of any previous year. The output of poultry products equaled the high of the previous year, and meat animal output was down only slightly from last year. The gain in output per animal, although of smaller proportions than the increase in yield per acre, was nearly sufficient to counterbalance a small decline in the number of units of breeding stock.

Farm Prices Advanced

This year, for the first time in six years, prices of farm products averaged higher than in the previous year. The combined influence of a strong domestic demand and a substantial expansion in agricultural exports brought about a 3 percent gain in farm product prices for the year, although the price trend in the latter part of the year has been downward, as shown on the cover chart.

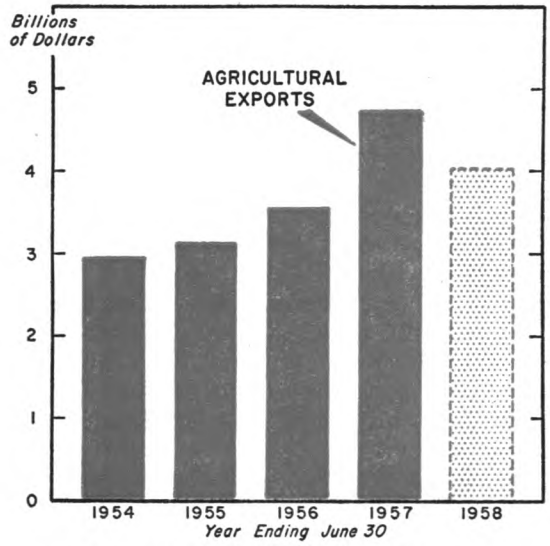
Prices of farm commodities advanced steadily from February to August, reaching a three-year high in that month. Much of the gain was due to higher prices for hogs, beef cattle, vegetables and wool, reflecting smaller marketings. Other commodities registering minor price gains from the third quarter of 1956 to the third quarter of 1957 were tobacco, oil bearing crops, cotton and dairy products. Prices of a few commodities such as feed grains, hay and potatoes, meanwhile, registered substantial declines. These price declines, together with minor declines for fruit, poultry meat, eggs and food grains, were more than offset by an advance in prices of a majority of the principal farm products. The present level of farm product prices as a result is about 3 percent above a year ago despite a somewhat more than seasonal downturn since mid-August.

The gain in farm prices this past year was sufficient to more than offset a slightly lower level of farm marketings. Both gross and net farm income are expected to show some improvement over the previous year, partly as a consequence of the price rise and particularly because of an increase in government payments from the soil bank program. Despite some increase in production expenses, realized net farm income is currently expected to be slightly above the $12.1 billion of 1956.

Agricultural Exports Set Records

While much of the gain in farm product prices was realized on commodities sold largely on domestic markets, there was an unprecedented volume of agricultural exports. Foreign shipments of non-surplus items contributed in some measure to the gain in farm prices. (See chart.) For the fiscal year ended June 30, 1957, agricultural exports, in value as well as in physical volume, topped all previous records. In terms of value, the $4.7-billion worth of farm products exported in fiscal 1957 was 35 percent above that of the

Exports of agricultural products rose to a new high in 1957, but are expected to decline in 1958.



Source of Data: U. S. Department of Agriculture.

previous year; the volume was up 40 percent in the same period.

The expansion in foreign shipments of agricultural products during the year ended last June stemmed from an increase in commercial sales as well as from an increase in exports under government programs. Shipments under each category increased by more than a third from the previous year. Spectacular increases occurred for a number of commodities. Cotton exports, for example, rose from 2.2 million bales in the previous year to 7.6 million bales in fiscal 1957, wheat rose by 200 million bushels to set a new high of 550 million bushels, and rice exports doubled. Export shipments of fats and oils also rose moderately from the high level of the previous year.

The export market for agricultural products is likely to be subject to some contraction during the current fiscal year (year ending June 1958) for the reason that several foreign countries, which have been active purchasers of this nation's agricultural exports, experienced appreciable declines in their foreign gold and dollar holdings this past year. Furthermore, heavy cotton stocks in importing countries and good wheat harvests in Western Europe will have a tendency to reduce foreign demand. Some indication of the proportion of this contraction in agricultural exports is indicated by the Department of Agriculture's estimate of agricultural exports for the year ending June 30, 1958, shown in an accompanying chart.

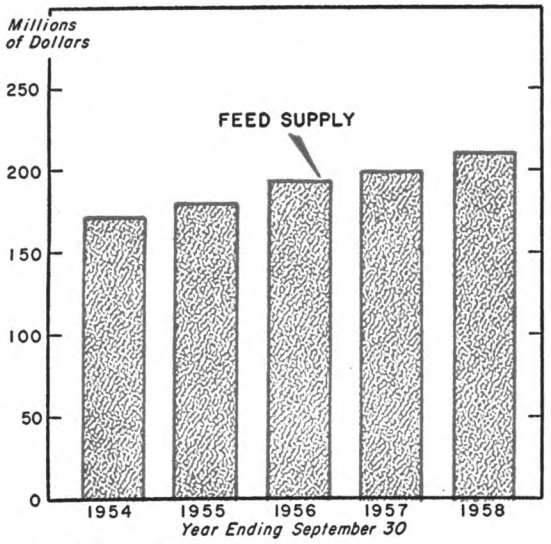
Assuming that funds are available to continue a high level of agricultural exports under government programs, it seems probable that much of the anticipated contraction in export shipments will be confined to the commercial sale of farm products abroad and will presumably have some adverse influence on farm product prices. Foreign shipments under government-financed programs, since they are drawn quite largely from accumulated holdings of the price support programs, tend to have a less direct effect on prices. Such shipments, however, have been significant in reducing the Commodity Credit Corporation investment in price support loans and inventories by over one billion dollars, or 13 percent, in the past year.

Feed Supplies Continue to Mount

While supplies of some farm products such as cotton and wheat have been pulled down somewhat by aggressive surplus disposal programs here and abroad, the total supply of feed grains and other concentrate feeds has continued to mount. The supply of feed concentrates advanced to new highs in each of the past four years as shown on an accompanying chart. Moreover, a further increase in feed concentrates to a record 213 million tons is indicated for the feeding year which began October 1.

Feed grain production, which provides the bulk of the feed concentrate supply, has exceeded consumption in each of the years shown on the chart with the result that a steady increase in carryover stocks has occurred. Carryover stocks on October 1, the beginning of the current feeding year, were at a record 47 million tons — more than double the carryover of a year as recent as 1952—and a further increase seems prob-

A record supply of feed grains and other concentrates is available for the current feeding season.



Source of Data: U. S. Department of Agriculture.

able as the record feed grain crop of 1957 exceeded probable consumption.

Supplies of feed concentrates are, therefore, more than ample for the current feeding year, and the prospect that carryover stocks will be even larger next fall gives assurance of adequate supplies well into the following year. Moreover, feed supplies are reported to be better distributed by areas than in any of the last four years. This condition also prevails for hay, which is in record supply.

This buildup in the supply of feed for the nation's livestock population seems virtually certain to foster an expansion in the output of livestock products. The output of meat animals, particularly pork, seems most likely to reflect the abundance of feed. Evidence for this prospect can be found in a 3 percent increase in the fall pig crop and indications that the spring pig crop may increase by as much as 7 percent or more, according to surveys of intentions of producers in the ten principal producing states.

The current abundance of feed is also expected to encourage a high volume of cattle feeding. Cattle will likely be fed to heavier weights than in some recent years. Another anticipated effect of the abundance of feed is that it may tend to slow down the present decline in cattle numbers, thereby shortening the length and extent of the current downswing in the cattle cycle. While the latter development cannot be expected to augment the output of meat animals in the near future such as is probable in the case of pork, it may tend to limit the contraction in beef production now under way as a result of the cyclical downturn in cattle numbers.

The unprecedented supply of feed for the current feeding year may also serve as a powerful stimulant to expanding the output of dairy and poultry products. Feed grain prices in mid-October were the lowest in 14 years. In most instances they were below or barely equal to the reduced level of price supports. While substantial quantities will undoubtedly move under the price support shelter, sufficient producers may for various reasons elect to convert this feed into milk, eggs and poultry meat to give a substantial increase in these livestock products as well.

Impact of Major Developments

The upswing in farm and food prices which characterized the first half of the year was apparently brought to a standstill by late summer. At that time it became apparent that farm output would equal the record of the previous year. Moreover, export shipments of agricultural products, which had been at peak levels for more than a year, began declining as foreign supplies became easier and as some foreign countries found it necessary to conserve their dwindling foreign exchange balances. As a consequence of these developments, prices of farm products turned down somewhat more than seasonally. A record outturn of feed grains forced prices of these farm products in mid-October to the lowest level in over 14 years and presumably set the stage for expansion in the output of livestock products. The likelihood of a substantial increase in the output of pork is already evident in the 3-percent increase in the fall pig crop and in the prospect that the spring crop may be increased by 7 percent or more.

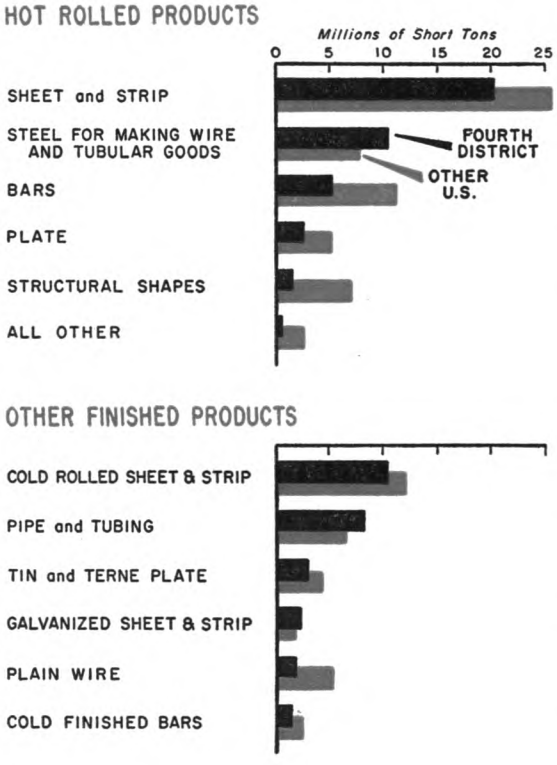
Expansion in Steel Finishing Capacity

Fourth District

TWO OUT OF EVERY FIVE tons of steel produced in the United States are poured and finished at mills located in the Fourth Federal Reserve District. This proportion has changed very little during the past few years. The District's "share" of the nation's ingot capacity has remained unchanged since 1954, but relatively larger increases in finishing capacity in other areas reduced slightly this District's share of the country's hot finishing capacity in the 1954-56 period. Expansion plans of the steel industry for the years 1957 through 1959 suggest some further slight attrition in the District's share of the nation's steel producing capability.

Although it looks as if the Fourth District's capacity to produce finished steel products will not expand as rapidly as that of the rest of the country during the years 1957-59, it appears that mills in the District are adding the bulk of the industry's new pipe mills and finishing lines for hot and cold rolled sheet and strip. The District has long specialized in finishing and coating sheet and strip and in producing tubular products and it appears that this specialization will be intensified in the future.

District finishing capacity is concentrated largely in flat rolled products and tubular goods.



Capacity Expansion, 1954-1959

In the 1954-56 period, District mills added 3,608,000 tons of steel ingot capacity, accounting for two-fifths of the industry's 9,129,000-ton expansion during these three years. At the same time, hot finishing capacity of mills in the District was increased by 1,910,000 tons, or only 27 percent of the country's 6,981,000 ton expansion. The District's relatively slower expansion reduced very slightly its "share" of the nation's capability to produce hot rolled steel products, that is, from 41 percent on January 1, 1954, to 40 percent at the beginning of 1957.

New ingot capacity now being built or planned for completion in the United States during 1957, 1958, and 1959 totals over 14½ million tons, or 50 percent more tonnage than was added in the 1954-56 period.[1] However, only a little over one-fourth of this new ca-

(1) Ingot capacity figures for the beginning of 1958 will be released by the American Iron and Steel Institute in January. However, the Institute does not compile steel finishing capacities on a regular annual basis. In recent years, the compilations have been made triennially. New estimates of finishing capacity are not expected until 1960.

pacity is being added at District mills, where the 3,827,000-ton expansion program now under way for 1957-59 is only 6 percent greater than the tonnage added in the previous three-year period. According to present plans, District ingot capacity at the beginning of 1960 will be 58 million tons out of a national total of 148 million tons.[2]

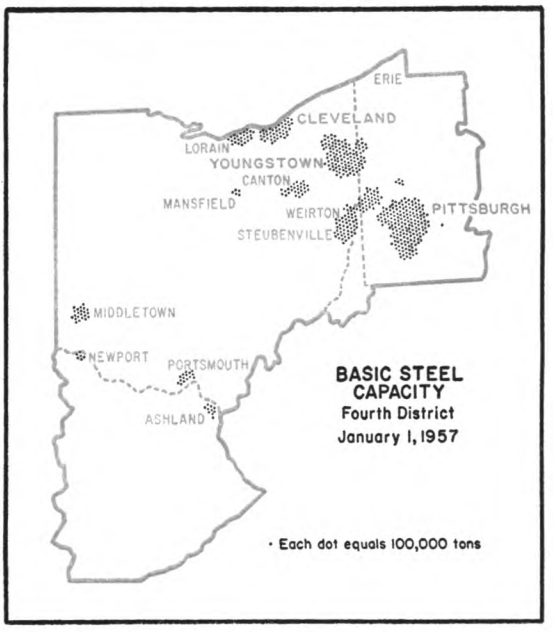
Sheet and Strip Capacity

At the beginning of 1957, about 45 percent of the nation's sheet and strip producing capacity—both hot rolled and cold rolled—was located in the Fourth District. On a tonnage basis, nearly one-half of the District's hot rolling capacity is devoted to making sheet and strip. The table on the following page gives District capacities for selected steel products on January 1, 1957, expressed both as tonnages and percentages of total U. S. capacity. The table also shows growth in capacity occurring in the previous three years.

The concentration of sheet and strip capacity in this District reflects the fact that stamping (particularly for autos and appliances) and sheet metal work weigh heavily among its industries.

The considerable capital expansion program of the last several years seems to have intensified — rather than diluted — the District's predominance in metal working. Estimates of employment during the first half of 1957 suggests that two out of every three manufacturing jobs in the District were in either the primary metals or metal fabricating industries. The estimates also suggest that over 18 percent of all workers employed in these industries were working in establishments located in the District.

During the first six months of 1957, about three-eighths of the finished steel products shipped to domestic users from the nation's steel mills were sheet and strip. This proportion represented over 16 million tons of finished flat rolled products and included both



hot and cold rolled flats plus all coated sheet and strip (including tin and terne plate, black plate, and galvanized sheets) as well as electrical sheets and strip.

The automotive industry took about one-third of the industry's domestic shipments of sheet and strip during the first half of the year—mostly uncoated stock. About 44 percent of the shipments went to other manufacturing industries in the metal-fabricating group—half to container manufacturers and half to producers of commercial, industrial and domestic machinery and equipment. Warehouses and distributors received about 10 percent of the shipments made during the first half; some of this sheet and strip undoubtedly ended up in the hands of the aforementioned manufacturers also. In general, those manufacturing industries which consume close to eight out of every ten tons of the nation's sheet and strip output account for nearly 47 percent of the factory jobs in the Fourth District.

Relative to all other steel mill products, sheet and strip production shows the fastest rate of growth in the United States between

(2) The capacity estimated for the beginning of 1960 is based upon published accounts of individual steel company expansion plans. It assumes no extensive retirements of existing facilities beyond those already allowed for in the individual company announcements.

STEEL MAKING AND FINISHING CAPACITY

Fourth District, January 1, 1957

PRODUCT	Capacity 1957 (000's net tons)	PERCENT CHANGE '54 to '57	4th Dist. as Percent U.S. 1957
INGOTS AND STEEL FOR CASTINGS	54,146	+ 7%	41%
HOT ROLLED STEEL PRODUCTS [1]	41,366	+ 5	40
Rails	189	—14	11
Structural shapes	1,656	+14	19
Plates	2,916	+14	32
Sheet and strip [2]	20,160	+ 5	44
Bars	5,358	— 4	32
Steel for further conversion into wire and tubular products [3]	10,525	+ 6	57
Other hot rolled products	562	+ 2	22
OTHER FINISHED STEEL PRODUCTS [4]			
Pipe and tubing	8,294	+ 5	55
Cold finished bars	1,682	— 4	42
Plain wire	2,027	+ 1	28
Cold rolled sheet and strip	10,237	+10	46
Galvanized sheet and strip	2,394	+ 9	57
Long terne sheets	168	—28	63
Tin and terne plate	3,037	+ 7	42

(1) Capacities of hot rolled products are limited to steel available from own ingot capacity plus estimated steel supply normally obtained from others.

(2) Also includes coils for cold reduced black plate and tin plate.

(3) Wire rods, skelp, and blanks, tube rounds or pierced billets for seamless tubes.

(4) Capacities of other finished products are annual capacities without regard to the available supply of ingots or semi-finished steel or hot rolled products.

Source: American Iron and Steel Institute.

1940 and 1950. Since 1950, however, sheet and strip production has been expanded at about the same rate as the output of other mill products.

Pipe and Tubing

Fourth District mills have the capacity to produce more than one-half of the country's pipe and tubing on a tonnage basis, and a much larger proportion on a linear basis. The bulk of the nation's small diameter pipe-making facilities are located in the District. However, electric-weld facilities for making the larger diameter pipe (24 to 36 inch) used in cross-country transmission lines are mostly located near markets in the Southwestern gas and oil fields. In tonnage terms, large diameter pipe capacity weighs heavily in the total.

The concentration of pipe and tubing mills in the District may appear somewhat surprising from certain points of view. Pipe mills usually must be located near the source of the hot-rolled mill products used in their manufacture (skelp, tube rounds, sheet, strip, or plate) although consideration of markets would also appear to be in order.[3] It is hard to pinpoint these markets from the data on

(3) Considerations of market location are especially important to electric-weld mills for making large diameter transmission pipe. In this instance, it is cheaper to ship plate than to ship the finished pipe.

mill shipments provided by the American Iron and Steel Institute since over half of the shipments go to warehouses and distributors. But, some idea of the many applications of pipe and tubing can be gleaned from the product classification of mill shipments.

Mill shipments of over 5½ million tons of pipe and tubing to domestic users during the first six months of 1957 were split among the five major product classifications as follows:

Line pipe	35%
Standard pipe	27
Oil country goods	26
Mechanical tubing	8
Pressure tubing	4

Line pipe is mainly the heavy, large diameter pipe used in cross-country gas and oil transmission and is made largely at mills outside the District. It is in the production of the remaining four types of tubular goods that the District leads the rest of the country.

Oil country goods are a specialized product, used largely outside the District. The remaining three types of pipe and tubing cover a wide variety of tubular goods, having many different industrial applications. These range from the more familiar plumbing applications to furniture, automobile exhaust pipes, bearings, conduit, fence posts, high pressure steam lines, printing press rolls, bushings, shaftings, and bridge and roof trusses—to name a few. The automotive, machinery, appliance, and the other industrial and commercial equipment industries are the major consumers of pipe and tubing in the District.

Other Mill Products

Providing a clear contrast to the District's predominance in light, flat rolled products and tubular goods is its smaller share of hot-rolling capacity for rails, structural shapes, plates and bars and its share of wire-drawing capacity.

Structural Shapes and Rails. Fourth District mills are relatively low in both structural and rail rolling capacity, accounting for less than one-fifth of the nation's capacity to roll structural shapes and only about one-tenth of its capacity to produce rails. Both are specialized products with production centralized in a relatively small number of companies.

Plate. Mills in the Fourth District reported less than one-third of the nation's plate making capacity at the beginning of 1957.[4] During wartime, of course, plate is extremely important in shipbuilding and ordnance. But, plate has many other industrial applications. During the first half of 1957, for example, the construction industry received 26 percent of the mill shipments of plate to domestic users, the transportation equipment producers received 25 percent (roughly one-half going to railroad car builders, one-third to shipbuilders, and the rest to the automotive industry), the manufacturers of machinery and equipment received 23 percent, largely for industrial machinery and equipment, and most of the remainder went to warehouses and distributors.

Light plate may be turned out by rolling mills now producing sheet and strip without any major changes of mill equipment. Roughly 7 million tons of light plate could be produced in this manner to augment the industry's estimated 9.2 million tons of plate capacity at the beginning of 1957. Such a switch was effected during World War II and during the Korean conflict. Also, in the spring and summer of 1957 when demand for plate remained strong while demand for sheet and strip slackened, considerable light plate tonnage was rolled on strip mills.

Bars. About one-sixth of the nation's hot-rolling capacity is devoted to making bars and nearly one-third of this capacity is located at Fourth District mills. However, 42 percent of the country's facilities for cold finishing bars are in the District.

The bar classification covers a wide variety of mill products used by many industries. Generally speaking, bars may be grouped into three main categories: hot rolled, cold fin-

(4) Plate is thicker than sheet or strip. In general, sheet and strip run up to about 0.20 inch in thickness, while plate is over 0.20 inch thick. All have a high ratio of width to thickness.

ished[5], and tool steel. The latter, as the name implies, is a specialty product, accounting for a very small proportion of total bar tonnage. However, tool steel has a relatively high value in comparison with other types of bars.

The large consumers of hot rolled bar shapes are the automotive industry, construction (mainly for concrete reinforcement and for light structural applications), the machinery and industrial equipment industries, the forging industries and ordnance. The automotive and industrial machinery industries are important district consumers of cold finished bars. Nationally, these industries took nearly one-half of the cold-finished bar shipments made during the first six months of 1957.

(5) A cold finished bar is a hot rolled bar that has been further processed (without heating) by drawing, turning, or grinding in order to improve its surface or mechanical properties.

NOTES

Among the articles recently published in the monthly business reviews of other Federal Reserve Banks, the following may be of special interest to our readers:

"The Aluminum Industry — Part II: Growth of the Market," Federal Reserve Bank of San Francisco, October 1957.

"Profits under Pressure," Federal Reserve Bank of Chicago, November 1957.

"The New York Foreign Exchange Market," Federal Reserve Bank of New York, November 1957.

Note also the recent publication of a 39-page booklet on *The Federal Funds Market, Its Origin and Development* by Parker B. Willis, Federal Reserve Bank of Boston.

Copies may be obtained by writing to the Federal Reserve bank named in each case.

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