basis, wholesale prices of industrial commodities have moved up about 6.5 percent since mid-1955.

Average prices of farm products have declined in recent weeks, reflecting in part a seasonal decrease in cattle and hog prices, but in early October the index of all prices received by farmers remained slightly above that of a year ago.

Consumer prices, which dipped a fraction of a percent in August, recovered in September to 117.1 percent of the 1947-49 level—a new high record for this index.

In spite of the generally favorable economic situation prevailing in the Ninth district economy, there exist two general soft spots, agriculture and residential building. Average farm prices and income, although stabilized in recent months, are down 20 to 25 percent since 1951. Residential building permit valuations in 1956 may be down as much as 15 percent from 1955. Last year was, however, by all odds the best year for residential construction on record.

*Following are summaries that highlight the current economic scene in the Ninth district:*

### Employment levels continue high

NINTH DISTRICT employment has been at an exceptionally high level. Information gleaned from employment reports points to an anticipated record employment during the fourth quarter of this year. In many commercial and industrial centers, several types of skilled labor were in short supply in September. Numerous employers estimate that labor requirements will remain high or continue to rise through December. Only in the resort areas, due to closing of the season, has employment begun the usual fall decline. Even in several of these communities, brisk fall business may hold the number of layoffs to a minimum.

*In Minnesota* nonfarm employment in September reached a new all-time high of 917,700 workers on payrolls. This total represents an increase of 15,400 from the previous monthly peak in September 1955. Most of the gain in employment in the state over the past 12 months has occurred in manufacturing firms producing durable goods. The layoffs in firms producing agricultural machinery have been offset by the steady hiring of additional workers by firms in other industries.

*In North Dakota* nonfarm employment during summer and early fall came well ahead of year-ago figures. The increase in employment has been centered in retail trade and service industries.

*In South Dakota* nonfarm employment has fallen below the 1955 level, but percentagewise the drop has been slight; in August it was down 1.2 percent from a year ago. Nevertheless, employment ran high in most areas of the state during September. Job openings were the highest in the past five years.

*In Montana* nonfarm employment in the latter part of the summer began to level off from a steady increase since December 1954. Employment in September (at 170,400) again was slightly above the total for a year ago. That the current employment may hold up or even increase before

### Pressure on district bank reserves eases

IN THE THIRD quarter of this year district member banks added less to loans than in either the first or second quarter. Borrowing at the Federal Reserve Bank also averaged less in the third quarter than in the other quarters.

The reduction in borrowing at the Fed after mid-year was associated with a reduction in the rate of loan growth and with the reversal of a seasonal deposit outflow. Loan expansion and deposit outflows both reduce the reserves of a bank.

Of the $123 million addition to total member bank loans in the first nine months of 1956, $77 million occurred at the city banks and $46 million at the country banks. These were percentage gains of 9.5 percent and 5 percent respectively.

At the end of September, deposits of city banks were under a year earlier by $6 million. At country banks deposits were up $39 million from a year earlier. The ratio of loans to deposits was 50 percent at the city banks in September 1956 and 47 percent in the September 1955 period.

From mid-September to mid-October member banks in the district borrowed between 4 and 5 percent of required reserves on the average; this was also the average for all member banks in the nation.

Since district member banks previously had borrowed a much higher fraction of required reserves than was true nationally, the most recent data suggest a lessening of pressure on district bank reserves.

| | Loan increase | Average Federal Reserve loans | Deposit change |
|---|---|---|---|
| First quarter | $28 million | 9.8% required reserves | $—53 million |
| Second quarter | 72 million | 12.6% required reserves | — 4 million |
| Third quarter | 23 million | 8.1% required reserves | +98 million |

cold weather sets in is reflected in city reports. For example, in Butte during September there was a shortage of hard-rock miners, as well as of carpenters, glaziers and plumbers.

*In northwestern Wisconsin and in the Upper Michigan peninsula* employment rose to a new high following the settlement of the steel industry dispute.

Although the rise in nonfarm employment has been steady in most district states, it has been at a slower rate than nationally. In the second quarter of this year, before the steel strike was called, the number of workers employed in the district was 2.3 percent above the total for the same period in 1955 as compared with a 3.4 percent national increase. This probably reflects a net migration of labor out of this district as unemployment insurance claims have declined this year.

### Cattle on feed

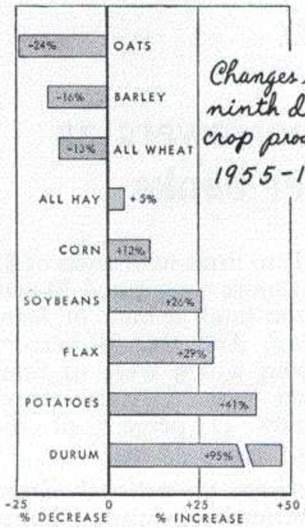
In the nine corn belt states, some 4 percent fewer cattle were on feed this October 1 than a year ago, according to the USDA's crop reporting service. The total on feed for the nation was up about 1 percent, however, due to large increases in some western states.

Among the Ninth district states, Minnesota was one of the few contributing to the slight national increase, with 15 percent more cattle on feed than a year ago. South Dakota farmers, with feed supplies down due to dry weather, had only 64 percent as many cattle on feed October 1 as a year ago.

Moisture has been deficient throughout much of the Dakotas and Montana this fall, resulting in generally dry pasture conditions and a shortage of good range feed. The hay crop was also short in many of the western areas of the district. This has resulted in somewhat greater marketings of range stock from such areas than has been true in recent years.

### District crop production totals large

Crop production in the Ninth Federal Reserve district, although roughly 10 percent smaller in total volume than last year, nevertheless amounted to a very substantial crop output in 1956. The results are particularly heartening when the rather extensive dry moisture conditions throughout the western Dakotas and Montana are considered.




District corn production reached a new all-time high this year as many of the dry areas of the Dakotas received enough moisture and at the right time to produce one of the better corn crops in several years. Feed grain production was considerably lower as substantial acreage of both small grains and wheat were hurt by the unusually hot weather in June. In the corn areas some oats and other small grains were plowed down and into the acreage reserve program of the Soil Bank. Some wheat also was plowed down because of poor stands and yields.

Durum production, on the other hand, almost doubled the output of last year as most of the durum area received adequate moisture, and weather conditions did not permit serious development of rusts and other diseases.

Production of late seeded flax and soybeans was also large, with a record crop of soybeans produced again this year.

The large out-turn of Ninth district farm crops not only helps to stabilize farm income in this area, but the resulting large volume of marketings also contributes importantly to the level of employment and activity in marketing and processing industries both within and outside the district. It also helps to assure an abundant supply of feed and food crops for the coming year.

### Prices of Minneapolis houses continue steady

Despite drastic cutbacks in housing starts and the increased number of unsold new houses, data on sales of existing houses during the third quarter reveal that prices are holding firm in the Minneapolis area. The average price of houses sold in the third quarter this year was $14,600, whereas in the same period a year ago the average was $14,300.

The slight increase in average prices from the third quarter last year to the same period this year also shows up in each of the three price categories, low, medium and high priced houses. The average prices for the third quarter 1955 and the third quarter 1956 respectively are as follows: low-priced houses $10,900 and $11,300; medium priced, $17,400 and $17,700, and high priced, $30,100 and $31,200.

These quarterly averages are based on sale price as recorded by a continuing sample of realtors in the Minneapolis area and relate to existing houses which changed ownership during the quarter. Newly constructed houses are not included in this survey. For an analysis of price changes including both newly constructed and existing houses, refer to the annual survey published in the *Monthly Review* for August 1956.

### End of season ore shipments pushed

IN THE MINING REGIONS, the present hustle and bustle of activity are evidence of prosperous conditions. But the mining of iron ore has been affected by the labor disputes in the steel industry and, later, in the Pittsburgh Steamship division of the United States Steel Corporation. These disputes reduced drastically shipments of ore to lower lake ports in July and August. At the first of October, the Lake Superior iron ore shipments were down 19 percent from the tonnage shipped by the same date in 1955.

Since the settlement of the labor disputes, the mining companies have been operating at capacity to move a maximum quantity of ore to the lower ports before harbors and channels freeze this fall. Some companies are augmenting their shipments by boat with direct shipments by rail.

Mining companies also are planning large scale stripping operations for this fall and winter, which are expected to hold employment in the mining industry at a high level this winter. Under these circumstances, the wages lost during the strikes soon may be recovered.

END

## Findings of the 1955 business loan survey

# Part II:* small-business borrowers at Ninth district member banks

AMONG THE RESULTS of the 1955 survey of business loans were estimates of the numbers and amounts of loans outstanding to firms of various sizes. Total assets of the borrower were used as the criterion of size. Percentage distributions based on the Ninth district estimates are given in the first two columns of table 1.

In terms of number of loans the findings are very striking. Over half of all bank loans in the Ninth district were to borrowers with totals assets under $50,000, and 90 percent of the loans were to borrowers with total assets under $250,000. On the other hand, borrowers with $5 million or more of total assets had only 1 percent of the number of loans.

Because larger firms tend to borrow in larger amounts, the share of the amount of total loans which goes to them is of course larger than their share of the number of loans. As the table shows, the 1 percent of the loans which were made to firms with assets of $5 million or more constituted 30 percent of the total amount of loans outstanding. And the 54 percent of the loans which were to firms with assets under $50,000 represented only 11 percent of the amount of loans.

*Comparison to national data*—Ninth district banks made a larger share of their business loans to very small firms and a smaller share to very large firms than is the case for all members banks in the nation. This is true in terms of the amount of loans made to borrowers of various business sizes, as shown in the table, and also in terms of the number of loans made to borrowers of various business sizes. It reflects the smaller size of typical Ninth district banks, the comparative scarcity of manufacturing concerns in this district, and the fact that many of the larger manufacturing and mining firms operating in the district have head offices and sources of bank credit located elsewhere.

Ninth district figures for the average sizes of business loans made to borrowers with assets up to $5 million are very little different

TABLE I

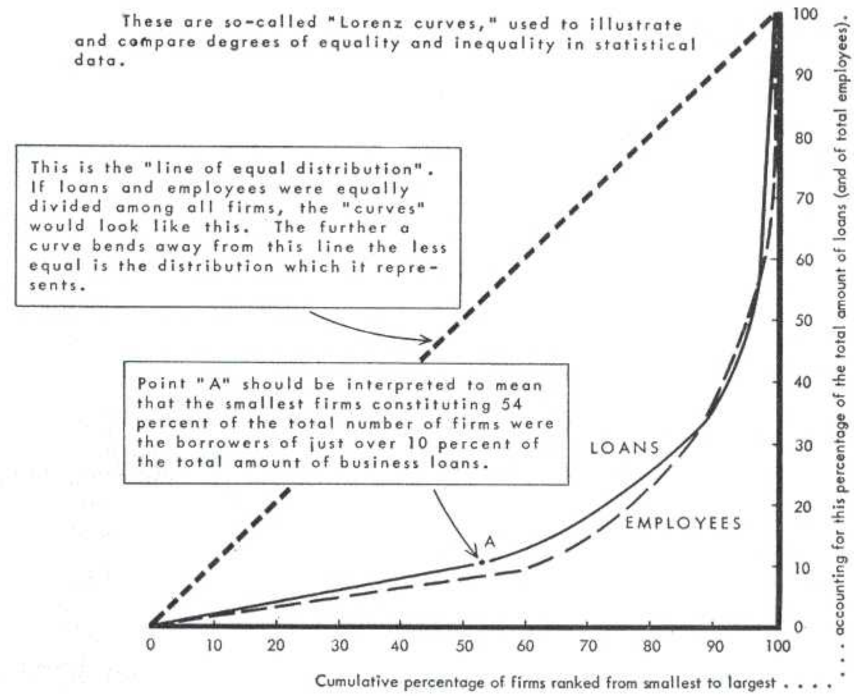
Percentage Distributions and Average Size of Business Loans by Size of Borrower, Member Banks in the Ninth District and the United States, October 5, 1955

| Size of borrower (total assets, in thousands of dollars) | Percentage distributions | | | Average size of loans | |
|---|---|---|---|---|---|
| | Number of loans, Ninth district | Amount of loans: Ninth district | Amount of loans: United States | Ninth district | United States |
| All borrowers | 100.0% | 100% | 100% | $ 13,300 | $ 23,400 |
| Under 50 thousand | 53.6 | 11 | 5 | 2,600 | 2,800 |
| 50-250 | 36.0 | 23 | 14 | 8,600 | 9,500 |
| 250-1,000 | 7.7 | 22 | 16 | 37,400 | 34,200 |
| 1,000-5,000 | 1.6 | 15 | 18 | 120,800 | 122,900 |
| 5,000-25,000 | .4 | 14 | 16 | 446,800 | 372,500 |
| 25,000-100,000 | .3 | 7 | 11 | 291,700 | 689,000 |
| 100,000 and over | .3 | 9 | 18 | 374,100 | 849,300 |
| Unknown | — | — | 1 | — | 7,800 |

Note: Details may not add up to totals due to rounding. Figures represented by 100 percent in the first three columns, respectively, are 46,066, $612 million, and $30,820 million.

*This is the second of a series of brief reports based on the findings of the 1955 business loan survey. The third part follows on page 6 of this issue. A full report and analysis of the survey results, **Bank Financing of Business Enterprise in the Ninth District**, is planned for publication in the near future.

COMPARISON
OF
SIZE OF BUSINESSES
WITH
DOLLAR AMOUNT OF LOANS
OBTAINED BY THEM
FROM
NINTH DISTRICT MEMBER BANKS




from those for the nation as a whole. For larger borrowers the national average size of loans then becomes much greater than the district average. This indicates that it is the influence of the very large borrowers in other districts which makes the over-all average size of business loan for the nation so much larger than that for the Ninth district.

*Bank financing of small business* —The survey data cannot give a definitive answer as to whether the banks are doing a 'proper' job of financing small business concerns. Indeed, no definitive answer could ever be given without, first, a clear comprehensive definition of small business, and second, a specific criterion as to what constitutes a proper job of financing. However, by any reasonable criterion the survey indicates that Ninth district small businessmen do, in very large numbers, obtain credit from their banks.

One suggested criterion of whether or not a firm is a small business is based upon the amount of assets typically required by that kind of enterprise.[1] Manufacturing and mining firms, commodity dealers, sales finance companies and public utilities are considered small if their assets are not more than $1 million. Trade, construction, real estate and other nonfinancial enterprises are considered small if their assets are under $50,000. By this criterion 63 percent of the total number of loans outstanding at Ninth district member banks on October 5, 1955, and one-fourth of the total amount of such loans, was to small businesses.

*Loan concentration compared to business concentration*— However, merely to know the share which small business receives of total bank loans does not answer questions as to the adequacy of credit to small firms if—as the rejected loan applicant is apt to do—one questions whether the actual shares are the 'fair shares.' 'Fair shares' is one of those generalities which can mean whatever the user wishes them to mean. Perhaps the most reasonable rule-of-thumb as to 'fair shares' would be loans proportionate to size of firm.

Analysis along these lines is carried out in chart 1. Subject to several assumptions which will be mentioned below, the chart above illustrates the concentration of the amount of bank loans to businesses and of the number of employees in Ninth district businesses. By 'concentration' is meant the degree of inequality in the distribution of the total loans and total employees among the business firms. The number of employees is used here as the criterion of size of firm, no data being available on asset concentration.

The two curves are very nearly the same, and insofar as they do differ the loan curve appears to show slightly less concentration than the employee curve. The conclusion suggested is that Ninth district small businesses get bank loans in almost exact proportions to their importance in the business

[1] Federal Reserve Bank of Cleveland, **Monthly Business Review,** June 1956, pp. 11-12.

structure. This conclusion should be taken only as suggestive, since a number of assumptions and qualifications are necessary. The curve for employees was developed from federal reports based on social security tax collections in 1953, and involved an estimated allocation of total employees among groups of firms reported only as having zero to three employees, four to seven employees, etc.[2] It was assumed that this estimated 1953 distribution of employees was a reasonable criterion of the distribution of firms by size in 1955.

No data being obtainable on the number of firms having assets of various amounts, it was necessary (in drawing the curve for concentration of the amount of loans) to use the number of loans as a measure of the number of firms. This involved an assumption that cases of more than one loan to a given firm are equally probable among firms of all sizes, and the further assumption that the frequency of firms doing no borrowing from banks is proportionate to the number of operating firms in all size groups. Loans obtained by district borrowers from banks outside the district, a factor which would increase the share of bank credit received by larger firms, were not taken into account in the analysis. On the other hand, neither could any account be taken of the bank credit originally extended to equipment dealers and wholesalers which then flows through these firms to their small business customers. These assumptions and qualifications leave much to be desired, but the scarcity of relevant data leaves no choice. If the conclusion that small business receives good treatment at the loan desks of Ninth district bankers is left subject to doubts, at least it is clear that the available data provided no support to the idea that banks discriminate against smaller businesses in favor of larger ones.

[2] U. S. Bureau of the Census and U. S. Bureau of Old-Age and Survivors Insurance, cooperative report, **County Business Patterns**, First Quarter, 1953, Parts 4, 5, and 9, U. S. Government Printing Office, Washington, D. C., 1955.

# Part III: maturity periods of business loans made by Ninth district member banks

THE BUSINESS LOAN survey of October 5, 1955, provides information on the maturity periods of loans to business borrowers by Ninth district member banks. Loans repayable on demand or within periods up to a year are classed as short-term loans. Loans with maturity periods of more than one year are here classified as long-term, or simply term loans. However, it should be noted that if the common three-way breakdown were used, in which periods of one to five years are labeled intermediate, much of what are here called long-term loans would fall in that category.

One-fifth of the dollar amount of outstanding business loans at Ninth district member banks on the survey date was repayable on demand. Other maturities up to one year accounted for half of the volume of loans, so that in all 70 percent of total business loans were short-term. Long-term loans constituted the remaining 30 percent. The percentage distribution of business loans into these and more detailed maturity categories is illustrated in chart 2.

*Relation of maturities to business of borrower.* — There are very great differences in the maturity distributions of loans to different kinds of businesses. As noted, one-fifth of all business loans was repayable on demand. But two-thirds of the loans to commodity dealers were demand loans, as were more than one-third of those to food, liquor and tobacco manufacturers and about a fourth of those to metal products, construction and real estate firms. By contrast, firms

TABLE 2

**Percentage Distributions of the Amount of Business Loans by Maturities and Size of Borrower, Member Banks in the Ninth District, October 5, 1955**

| Size of borrower (total assets, in thousands of dollars) | Total | Short-term (1 year or less) Demand | Short-term (1 year or less) Other | Long-term (over 1 year) |
|---|---|---|---|---|
| All borrowers | 100% | 21 | 49 | 30 |
| Under 50 thousand | 100% | 9 | 41 | 50 |
| 50-250 | 100% | 18 | 49 | 33 |
| 250-1,000 | 100% | 22 | 50 | 28 |
| 1,000-5,000 | 100% | 34 | 44 | 22 |
| 5,000-25,000 | 100% | 29 | 42 | 29 |
| 25,000-100,000 | 100% | 26 | 49 | 25 |
| 100,000 and over | 100% | 2 | 78 | 20 |

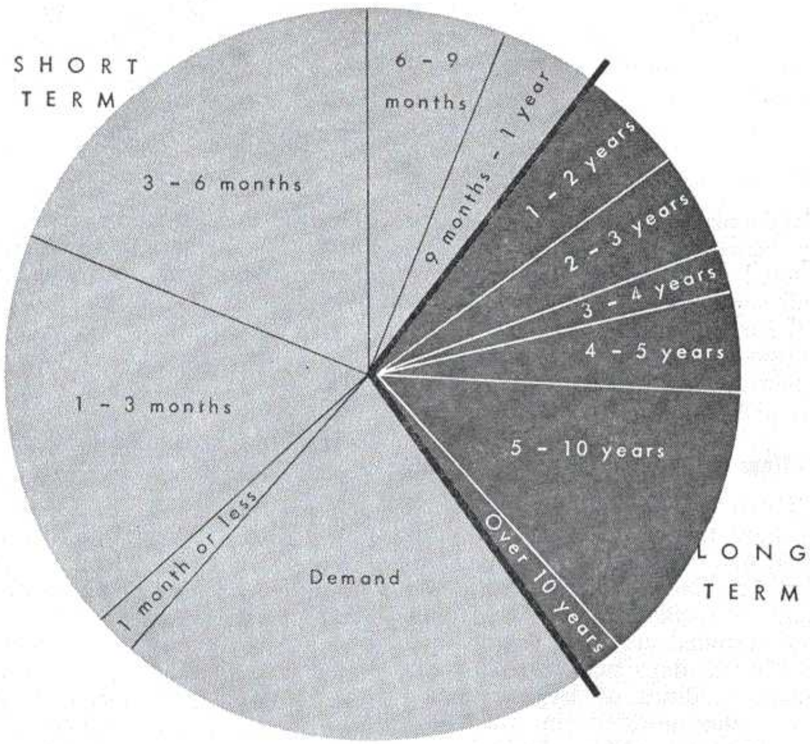
TABLE 3

**Percentage Distributions of the Amount of Business Loans by Maturities and Size of Bank, Member Banks in the Ninth District, October 5, 1955**

| Size of bank (total deposits, in millions of dollars) | Total | Short-term (1 year or less) Demand | Short-term (1 year or less) Other | Long-term (over 1 year) |
|---|---|---|---|---|
| All banks | 100% | 21 | 49 | 30 |
| Under 2 million | 100% | 13 | 42 | 45 |
| 2-10 | 100% | 12 | 49 | 39 |
| 10-50 | 100% | 15 | 58 | 27 |
| 50-250 | 100% | 20 | 56 | 24 |
| 250 and over | 100% | 26 | 45 | 29 |

PERCENTAGE DISTRIBUTION OF BUSINESS LOANS BY MATURITIES

Member Banks in the Ninth District, October 5, 1955




in the transportation, communication and public utilities group had obtained only 1 percent of their loans in demand form, and sales finance companies only 8 percent.

Compared to the 30 percent of all business loans which were for periods of more than a year, two-thirds of the borrowings by public utilities were in the longer form, as were over half of the total borrowings by service firms and 44 percent of those by the petroleum, coal, chemicals and rubber group. On the other hand, term loans were 5 percent or less of total loans to commodity dealers, sales finance companies, and textiles, apparel and leather manufacturers.

*Relation of maturities to size of borrower.*—As shown in table 2, Ninth district member banks make a relatively larger volume of long-term loans to small business firms than to the largest enterprises. A full 50 percent of the loans to businesses with assets under $50,000 was made for periods of more than a year, including 20 percent of the total which had maturities over five years. A partial explanation of this is the frequency, among the smallest borrowers, of service firms which do much of their borrowing through term loans.

With some exceptions, the share of loans which were for more than a year declined as size of borrower increased, and was lowest, at 20 percent, for borrowers with assets of $100 million and over.

The share of total loans which were repayable on demand increased with size of borrower from 9 percent for firms with assets under $50,000 to 34 percent for firms with assets between $1 million and $5 million. With further increases in size of borrower, it fell to only 2 percent for firms with assets of $100 million or more. The relative importance among these large borrowers of sales finance companies and public utilities, which receive few demand loans, helps explain the figure of only 2 percent.

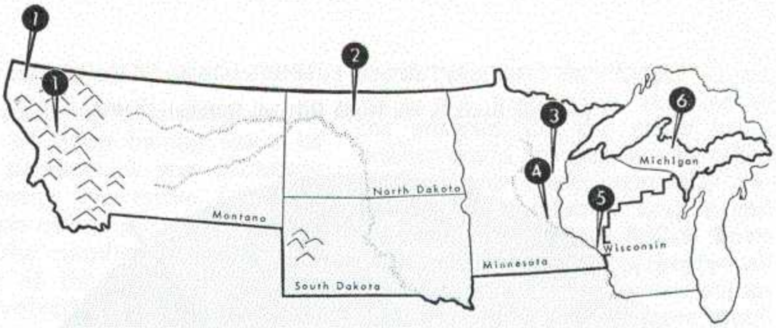
*Relation of maturities to size of bank.* — Percentage distributions of business loans by maturities for banks of various sizes are given in table 3. Loans running more than a year constituted 45 percent of the total amount of business loans at banks with deposits under $2 million, and 39 percent at banks with deposits of $2 million to $10 million. In other words, the small banks make upwards of half of their total loans on a term basis. The high proportion of term loans by smaller banks and the high proportion of term loans to smaller businesses are of course related to each other, in that the smaller banks more often lend to the smaller firms.

With increasing size of bank, the share of business loans which was in term loans declined to a low of one-fourth for banks having deposits of $5 million to $250 million. For still larger banks, however, the ratio was somewhat higher.

Loans payable on demand constituted 12 percent to 15 percent of total business loans at small and medium-sized banks. But for banks with deposits of $250 million and over they were 26 percent of total business loans. END

# ECONOMIC *Briefs*

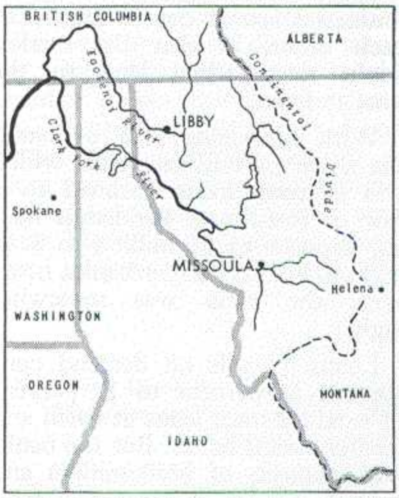
## SIGNIFICANT HAPPENINGS IN THE NINTH DISTRICT




### 1-Pulp mills planned in Montana

Sites in western Montana have been named by two paper companies which plan to erect new pulp mills – the first in Montana.

St. Regis Paper Company proposes to build a pulp and paper mill of 400 tons daily capacity in the vicinity of Libby on the Kootenai river near timberlands owned by J. Neils Lumber Company. Construction of the new mill is contingent on stockholder and SEC approval of St. Regis' proposed purchase of the Neils company, and on final engineering survey of the site. The Neils company owns 200,000 acres of timberland in western Montana and operates one of the largest sawmills in the state.




On October 22 Waldorf Paper Products Company of St. Paul confirmed plans to build a $6 million mill of 250 tons daily capacity near Missoula. The mill will produce unbleached sulfate pulp. The site was chosen because of the availability of large amounts of wood-chip waste from three nearby sawmills, which have contracted to keep the new Waldorf mill supplied with this raw material for pulp-making. Pulp will be shipped to the firm's St. Paul plant where it will be used in the manufacture of a variety of boxboards.

### 2-New G. N. freight yard at Minot

Great Northern Railway opened its new freight classification yard at Minot, North Dakota on October 12. Called Gavin Yard, the modern facilities of the $6.5 million terminal are expected to save 61,000 car-days per year. Box-car repair facilities of large capacity were incorporated in the new freight yard plant which is expected to become an important terminal for Great Northern's expanding 'piggy-back' operations.

### 3-Minnesota paper plant expansion

Northwest Paper Company has announced an expansion of plant that will involve an investment of $5 million and the probable employment of 200 additional workers at either their Cloquet or Brainerd mill. The company has ordered an additional papermaking machine, a 200-inch 2000-feet-minute Foudrinier capable of 150 tons per day output. The new machine, which will be delivered in about two years, will involve new building and the installation of auxiliary and service equipment.

### 4-T. C. hydrogen plant under way

National Cylinder Gas Company of Chicago has begun construction in St. Paul of a $400,000 plant for the manufacture of hydrogen gas by the electrolytic method. The gas is used by such industries as electronics and metallurgy. The plant will serve Ninth district states and northern Iowa.

The plant, described as the only one of its kind in the Twin Cities area, will be completed early next year.

### 5-Trane Co. expanding facilities

By the end of 1957 the expansion program of Trane Company, La Crosse, Wisconsin, manufacturers of heating and air conditioning equipment, will call for a $13 million outlay. Two new manufacturing plants with a combined capacity of 128,000 square feet, additions to research and testing facilities, a new engineering office building, a shipping plant, a warehouse and a paint storage center are major items in the production-expansion program.

### 6-Upgraded ore moves into market

The first mid-October cargo of beneficiated and pelletized jasper ore moving from the Upper Michigan peninsula's Marquette range toward blast furnaces marked the first commercial return on the $25 million capital outlay made by Marquette Iron Mining Company on its low-grade ore program. Company officials expect 70,000 tons of ore pellets will be shipped this season. The mining and pelletizing capacity of the Marquette company plant is 600,000 tons annually, a capacity which can be boosted to 1,800,000 tons yearly.

Steelmen are quoted as saying that jasper ore pellets raise the efficiency of a blast furnace from 10 to 30 per cent so that at $2.50 to $3.50 a ton more than standard ore the beneficiated product is competitive.