

"Renewal and Improvement Fund" and for new equipment should be taken into account, although, in view of Chicago and Northwestern's maintenance expenses, it would seem that these charges should be included under regular maintenance expenses and not be treated as extra expenses. Since 1896, the first year of these charges, they have been as follows:

|            | Renewal and Improvement Fund. | New Equipment. |
|------------|-------------------------------|----------------|
| 1891.....  | \$1,185,000                   | \$1,111,256    |
| 1892.....  | 1,550,000                     | 1,475,306      |
| 1893.....  | 1,325,000                     | .....          |
| 1894.....  | 1,125,000                     | .....          |
| 1895.....  | 200,000                       | .....          |
| 1896.....  | 350,000                       | .....          |
| Total..... | \$8,335,000                   | \$2,586,561    |

Taking account of the above, the percentage earned on the preferred and common stocks for the six years has been: In 1901, 10.8 per cent.; in 1900, 11.6 per cent.; in 1899, 12.8 per cent.; in 1898, 9 per cent.; in 1897, 7 per cent. on the preferred and 6.1 per cent. on the common; in 1896, 7.8 per cent.

The statement of earnings for June, issued the past week, shows an increase in gross earnings at the rate of over \$10,500 a day. The monthly increases in the gross and net earnings for the full year just ended have been:

|                    | Gross.      | P. C. | Net.        | P. C. |
|--------------------|-------------|-------|-------------|-------|
| July, 1901.....    | \$3,011,714 | 11.2  | \$196,198   | 16.9  |
| August.....        | 3,093,366   | 10.2  | 100,845     | 7.4   |
| September.....     | 4,222,030   | 11.3  | 138,874     | 11.1  |
| October.....       | 2,422,430   | 5.6   | 121,258     | 7.1   |
| November.....      | 3,689,134   | 10.2  | 68,010      | 4.5   |
| December.....      | 2,083,321   | 5.5   | 51,500      | 3.4   |
| January, 1902..... | 2,801,370   | 8.4   | 36,322      | 3.2   |
| February.....      | 2,384,264   | 7.4   | 41,674      | 4.5   |
| March.....         | 2,093,464   | 5.8   | 126,481     | 10.2  |
| April.....         | 1,933,712   | 5.8   | 105,176     | 13.7  |
| May.....           | 2,522,207   | 7.7   | 92,254      | 11.7  |
| June.....          | 3,177,726   | 8.0   | 29,161      | 2.5   |
| Total.....         | \$3,244,110 | 7.6   | \$1,024,120 | 7.1   |

The increases in gross earnings for the latter part of the year have not been on as large a scale as during the earlier months, although they are again assuming larger proportions as represented by the returns for May and June. The total increase for the year was \$3,244,110, or 7.6 per cent., a very respectable addition to the already large earnings.

Operating expenses for the past year have remained at almost the same rate, having been 66.2 per cent. against 66 per cent. for the previous year, so that in all probability the amounts charged in operating expenses for improvements and new equipment in the year ended June 30, 1901, will be duplicated in the year just ended. The increase of \$1,024,120 in net earnings will not be clear gain in surplus, as the amount of common stock outstanding is larger than for the previous year, but it is safe to assume that the surplus over dividends will be about \$500,000 greater than for the year ended June 30, 1901.

When such facts as the foregoing have been considered, it is not to be wondered at that the real owners of Chicago, Milwaukee and St. Paul stock should consider their property worth the present market quotation, and that the price of the common shares should have lately crossed the previous high record, 188, made in the month of May, 1901.

At the present prices for the preferred and common stocks, (say, 105 for the preferred, netting about 3.50 per cent., and about 188 for the common, netting about 3.19 per cent.) it would seem that the preferred stock was the cheaper of the two, besides being more certain of a continuance of its dividends at the rate of 7 per cent. per annum, the margin of safety being of course greater; besides the preferred is entitled to share equally with the common in any distribution of earnings above 7 per cent. However, any one who attempted to acquire a line of the preferred stock would probably soon find that there was little stock to be had under materially higher prices.

There has been some talk of the common stock dividend being raised to 7 per cent., but it would seem, in view of the conservative policy heretofore pursued by the management, that the rate will be kept at the present figure for a time at least.

A. S. K.

# ST. PAUL AND NORTHWESTERN RAILROADS

A Comparison, and, Likewise, An Analytical Indication That St. Paul Dividends Are High Enough for the Present.

The Chicago, Milwaukee and St. Paul Railway Company has for some time been pointed out as an example of what conservative management will do in developing a railroad property, and in view of the recent developments in Northwestern territory it is of interest to review the company's operations for the past ten years, during which period, especially in the last five or six years, changes have taken place in the handling of traffic, (brought about principally by declining rates,) necessitating large expenditures for reducing grades, straightening alignment, and for new rolling stock of much greater capacity in order to haul traffic as cheaply as possible.

The preferred stock, long considered a high-class investment, sells around 195, at which price it returns 3.59 per cent., and is held by many institutions and investors, having paid 7 per cent. continuous dividends since 1878, with the exception of 1888 and 1889, when 6 per cent. and 4 1/2 per cent., respectively, were paid. The common stock, as one of the favorite speculative issues on the New York Stock Exchange, is a recognized market leader. The total sales of St. Paul common for the first six months of the present year aggregated over seven and one-half times the total amount of stock outstanding, prices ranging between 160 1/2 and 176 1/2—a record for the time second to none.

During the ten years under review the dividends paid on the common stock have averaged 4.2 per cent., and for each year have been as follows: In 1892, 2 per cent.; in 1893-4, 4 per cent.; in 1895, 2 per cent.; in 1896, 4 per cent.; in 1897 to 1900, inclusive, 5 per cent., and in 1901, 6 per cent. These dividends have been paid out of the income for each year ended June 30.

The amount of earnings over dividends paid which the company has been able to show in the past few years has been very large, and the surplus has been augmented from year to year until on June 30, 1901, it amounted to the large sum of \$17,626,229.24; besides, liberal expenditures for improvements and additions have been charged to earnings.

It has lately been claimed by the friends of St. Paul that it was the intention to place the company in a position where it would be able to fully compete with the recent consolidation of railroads in the Northwestern territory, and if necessary do a little building in the direction of the Pacific Ocean on its own account in order to protect itself. From the condition of the company's treasury on June 30, 1901, and considering the earning capacity of the system, both present and past, it would seem that the road is certainly in a position to carry out any such plans that might be deemed necessary, being fully able to provide for the annual charge on a large additional outlay of capital and still maintain present dividends. It is extremely doubtful, however, that Chicago, Milwaukee and St. Paul would undertake such a radical procedure, or that the other roads interested would countenance such a move without at least having exhausted every possible means for an amicable adjustment of the differences.

The Chicago and Northwestern Railroad Company is located in practically the same territory as the Chicago, Milwaukee and St. Paul Railway Company, and reaches many of the same cities, and it therefore affords a very good comparison for Chicago, Milwaukee & St. Paul, and has been used as such in a number of instances in these statements. The Chicago and Northwestern is dominated by the Vanderbilt interests and Chicago, Milwaukee and St. Paul mainly by Standard Oil interests.

Both companies operate in practically the same territory, and their traffic must naturally be affected to a certain extent by the same conditions. The Chicago and Northwestern, however, extends further west when the Fremont, Elkhorn and Missouri Valley Railroad is taken into account, but this road is operated separately, and is not included in any of the following statements. Comparative mileage shows as follows:

|                   | St. Paul. | Northwestern. |
|-------------------|-----------|---------------|
| Illinois.....     | 847.27    | 535.91        |
| Wisconsin.....    | 1,704.47  | 1,640.65      |
| Iowa.....         | 1,783.02  | 1,451.30      |
| Minnesota.....    | 1,120.00  | 604.48        |
| North Dakota..... | 118.21    | 14.28         |
| South Dakota..... | 1,224.05  | 750.93        |
| Missouri.....     | 140.27    | .....         |
| Michigan.....     | 158.94    | 521.10        |

|                                      | St. Paul. | Northwestern. |
|--------------------------------------|-----------|---------------|
| Total miles main track owned.....    | 6,596.32  | 5,576.80      |
| Main track used under contract.....  | 150.26    | .....         |
| Total miles main track operated..... | 6,746.58  | 5,576.80      |
| Second track owned.....              | 275.51    | 714.06        |
| Sidings and other tracks.....        | 1,737.50  | 1,975.43      |
| Total miles of track operated.....   | 8,759.59  | 8,266.29      |

Average main track operated during the year.....\$512.38 5,507.16

Of the 6,596.32 miles of road owned by the Chicago, Milwaukee and St. Paul, 25.64 miles are owned jointly with other companies.

The capitalization of both companies at the closing of their 1901 fiscal year was as follows:

|                           | St. Paul.     | Northwestern. |
|---------------------------|---------------|---------------|
| Outstanding—              |               |               |
| Funded debt.....          | \$129,941,500 | \$145,204,000 |
| Preferred stock.....      | 44,655,400    | 22,395,120    |
| Common stock.....         | 55,321,300    | 39,114,377    |
| Total capitalization..... | \$227,917,700 | \$206,713,497 |

|                                   | St. Paul. | Northwestern. |
|-----------------------------------|-----------|---------------|
| Per Mile of Road—                 |           |               |
| Miles.....                        | 6,596.32  | 5,576.80      |
| Funded debt.....                  | \$19,244  | \$26,047      |
| Preferred stock.....              | 6,770     | 4,016         |
| Common stock.....                 | 8,463     | 7,014         |
| Total per mile of road owned..... | \$34,477  | \$37,077      |

Chicago, Milwaukee and St. Paul's capitalization is less per mile of road than Chicago and Northwestern's, but in Chicago and Northwestern's total is included \$9,800,000 bonds issued against the Chicago, St. Paul, Minneapolis and Omaha common and preferred stock owned, and also \$15,201,500 bonds issued against Fremont, Elkhorn and Missouri Valley bonds and stock

owned, making a total of \$25,001,500 bonds outstanding, or at the rate of \$4,483 per mile. Chicago, Milwaukee and St. Paul's fiscal year ends June 30 and Chicago and Northwestern's ends May 31.

The earnings for each year since 1891 have been as follows:

|                             | St. Paul.    | Northwestern. |
|-----------------------------|--------------|---------------|
| Average Miles Operated..... | 6,512        | 5,577         |
| Gross Earnings.....         | \$42,369,012 | \$43,095,537  |
| Operating Expenses.....     | 41,884,602   | 42,950,805    |
| Net Earnings.....           | 38,310,632   | 38,016,313    |
| 1891.....                   | 6,154        | 5,077         |
| 1892.....                   | 6,154        | 5,077         |
| 1893.....                   | 6,154        | 5,077         |
| 1894.....                   | 6,154        | 5,077         |
| 1895.....                   | 6,154        | 5,077         |
| 1896.....                   | 6,154        | 5,077         |
| 1897.....                   | 6,154        | 5,077         |
| 1898.....                   | 6,154        | 5,077         |
| 1899.....                   | 6,154        | 5,077         |
| 1900.....                   | 6,154        | 5,077         |
| 1901.....                   | 6,154        | 5,077         |

While Chicago, Milwaukee and St. Paul's earnings for the year 1901 were the largest on record up to that time, they were only \$560 greater per mile of road operated than for the year 1893. In 1894 there was a considerable shortage in the crops throughout Chicago, Milwaukee and St. Paul's territory, and general business conditions were in a deplorable state, as every one knows, which is reflected in the decrease in earnings for the years 1894 and 1895. Since 1895 the gross earnings per mile of road have shown increases each year, except in 1897 and 1901. Chicago and Northwestern's earnings per mile of road have always been greater than Chicago, Milwaukee and St. Paul's, for the year 1901 being 20 per cent. Chicago, Milwaukee and St. Paul's gross earnings per mile of road for the ten years have increased 35 per cent., while Chicago and Northwestern's have only increased 19.7 per cent.

|                         | ST. PAUL.    | NORTHWESTERN. |
|-------------------------|--------------|---------------|
| Net Earn. Per Mile..... | \$14,391,509 | \$15,568,588  |
| 1901.....               | 13,463,855   | 15,956,701    |
| 1900.....               | 14,347,799   | 13,187,599    |
| 1899.....               | 12,938,097   | 12,304,075    |
| 1898.....               | 11,900,228   | 11,038,422    |
| 1897.....               | 13,005,020   | 12,030,789    |
| 1896.....               | 10,291,619   | 9,590,645     |
| 1895.....               | 11,213,618   | 11,078,252    |
| 1894.....               | 11,436,046   | 10,416,593    |
| 1893.....               | 11,468,503   | 11,085,833    |
| 1891.....               | 9,137,724    | 9,502,608     |

While in net earnings Chicago and Northwestern is again ahead of Chicago, Milwaukee and St. Paul in the average per mile of road, examination of operating expenses shows that Chicago and Northwestern has always had to spend more of its gross earnings for the direct cost of operating the property than Chicago, Milwaukee and St. Paul. The following comparison per mile of road shows the amount spent by each company for maintenance and all other expenses:

|                        | ST. PAUL. | Northwestern. |
|------------------------|-----------|---------------|
| Maintenance Per Mile—  |           |               |
| Way and Structure..... | \$909     | \$2,480       |
| Equip-ment.....        | \$464     | \$433         |
| Other.....             | \$253     | \$239         |
| Total.....             | \$1,626   | \$3,152       |

\*Other expenses are for the amounts charged to renewal and improvement account. In 1901 \$171 was spent for new equipment; also \$232 in 1890, which amounts are included under this account.

|                        | ST. PAUL. | Northwestern. |
|------------------------|-----------|---------------|
| Maintenance Per Mile—  |           |               |
| Way and Structure..... | \$1,006   | \$700         |
| Equip-ment.....        | \$700     | \$3,238       |
| Other.....             | \$238     | \$4,044       |
| Total.....             | \$2,706   | \$8,002       |

It will be seen that Chicago, Milwaukee and St. Paul's regular maintenance of way and structure expenses have been quite some smaller than Chicago and Northwestern's, but Chicago and Northwestern has always operated considerably more second track than Chicago, Milwaukee and St. Paul, so in order to make the comparison more accurate it is necessary to take this fact into consideration. Chicago, Milwaukee and St. Paul's reports only back as far as 1896 allow ready comparison of second track, but for the past five years the average spent on main and second track has been a little less on Chicago, Milwaukee and St. Paul than on Chicago and Northwestern. Taking into consideration the amounts charged to renewal and improvement account, the result is somewhat in favor of Chicago, Milwaukee and St. Paul.

Chicago and Northwestern's maintenance of equipment expenses have averaged much more than Chicago, Milwaukee and St. Paul's, and although Chicago and Northwestern has always possessed more equipment than Chicago, Milwaukee and St. Paul, this certainly does not account for the larger amount spent by the Chicago and Northwestern. The equipment of each road on hand at the close of the last fiscal year, and also that of Chicago, Milwaukee and St. Paul, for the year ending June 30, 1891, in order to show the increase in the ten years, was as follows:

|                            | 1901.  | 1891.  |
|----------------------------|--------|--------|
| Locomotives.....           | 897    | 13     |
| Passenger equip-ment.....  | 800    | 13     |
| Freight and work cars..... | 38,327 | 5,88   |
| Total.....                 | 40,024 | 29,014 |

The St. Paul account registered as "Cost of road and equipment," for the year ended June 30, 1901, shows an increase of \$34,664,104.78 over the year ended June 30, 1891. The reports for the years 1892 and 1893 do

not give the exact amounts which were charged to "cost of road and equipment." In these two years this account increased \$5,598,505.76, and the amounts given under "equipment and improvement expenditures" only amount to \$4,518,956, making a difference of \$1,079,549.76 between the latter amount and the increase for the two years. The items which make up the increase for the ten years are as follows:

|  |                 |
|--|-----------------|
| Improvements and betterments.....        | \$10,636,129.26 |
| New equipment.....                       | 6,200,637.02    |
| Stock of other companies.....            | 902.00          |
| Discount.....                            | 1,113,320.00    |
| Other items.....                         | 97,268.71       |
| Difference in 1892 and 1893 reports..... | 1,079,549.76    |
| Milwaukee & Superior Railway.....        | 341,174.83      |
| Des Moines, North & West R. R.....       | 2,406,595.71    |
| Prairie du Chien & McGregor R. R.....    | 90,000.00       |
| Milwaukee & Northern Railroad.....       | 13,254,710.75   |
| Total.....                               | \$35,369,778.04 |
| Deductions.....                          | 705,673.26      |
| Increase.....                            | \$34,664,104.78 |

The amount spent for improvement and betterments and new equipment, as above, is \$16,896,166.28, besides \$8,921,561 has been charged to operating expenses for new equipment and "renewal and improvement fund," making a total of \$25,817,727.28. Regular maintenance expenses have also been charged with considerable amount for new passing tracks, ballast on lines not previously ballasted, new rails, new stations, and other items which represent betterments to the property of a more or less permanent character.

A comparison of the capitalization for the two years—1891 and 1901—shows the following changes in the past ten years:

|  |              |
|--|--------------|
| Bonds canceled.....                                    | \$7,871,000  |
| Bonds exchanged for preferred stock.....               | 22,459,500   |
| Bonds exchanged for common stock.....                  | 1,122,000    |
| Decrease in bonds.....                                 | \$31,452,500 |
| Bonds issued for old bonds canceled.....               | \$9,493,000  |
| Bonds issued for improvements.....                     | 9,390,000    |
| Bonds issued for Des Moines, Northern and Western..... | 2,467,000    |
| Milwaukee and Northern's bonds.....                    | 7,247,000    |
| Increase in bonds.....                                 | 28,597,000   |
| Net decrease in bonded debt.....                       | \$2,855,500  |
| Preferred stock exchanged for bonds.....               | 22,459,500   |
| Common stock exchanged for bonds.....                  | 1,122,000    |
| Common stock issued for improvements.....              | 8,673,200    |
| Total.....   | \$32,254,700 |
| Common stock written off.....                          | 691          |
| Net increase in stocks.....                            | \$32,254,009 |

Most of Chicago, Milwaukee and St. Paul's funded obligations bear 5, 6, and 7 per cent. interest, and only two small issues become due before 1910—\$5,106,500 bonds in 1900—the bonds due before 1900 having the provision for exchange into preferred stock. In 1910 some \$22,097,000 bonds become due, the refunding of which will be quite a saving in the annual interest charges. The remaining bonds are due up to and including 1926, not including, of course, the general mortgage bonds which bear 3 1/2 and 4 per cent. interest and extend to 1989. The only change in the funded debt since June 30, 1901, according to the latest available information, has been in the number of bonds exchanged for preferred stock. In January, 1902, \$2,362,100 common stock was issued, making the amount outstanding at present \$53,183,900.

The following table will give some idea of the amount earned on the preferred and common stocks during this period. The surplus for the ten years over charges of every description and dividends amounted to \$12,155,377.71. The preferred and common stocks are entitled to share pro rata in any distribution of earnings after 7 per cent. has been paid on the preferred stock and 7 per cent. on the common stock. In Chicago, Milwaukee and St. Paul's reports income account is so arranged that the dividends paid in the month of October are deducted from the surplus reported at the closing of the previous year, and then the balance is added to the income for the year, after the dividends payable in April have been deducted from it, and the remaining amount is the surplus. To show what amounts have been earned on the stocks each year it is necessary to rearrange this account, and in the following table the dividends paid are the amounts which have actually been paid out of each year's earnings:

|           | Dividends Paid. | Surplus Carried Forward. |
|-----------|-----------------|--------------------------|
| 1901..... | \$3,998,180     | \$3,059,112              |
| 1900..... | 2,686,610       | 2,357,105                |
| 1899..... | 2,411,123       | 2,341,405                |
| 1898..... | 2,200,968       | 2,301,330                |
| 1897..... | 1,971,928       | 2,301,342                |
| 1896..... | 1,572,178       | 1,841,090                |
| 1895..... | 1,825,208       | 920,545                  |
| 1894..... | 1,816,423       | 1,339,699                |
| 1893..... | 1,800,463       | 1,838,308                |
| 1892..... | 1,648,423       | 919,154                  |

|           | Rate of Dividend Paid. | Per Cent. Earned. |
|-----------|------------------------|-------------------|
| 1901..... | 7                      | 8.5               |
| 1900..... | 7                      | 8.5               |
| 1899..... | 7                      | 10.2              |
| 1898..... | 7                      | 7.8               |
| 1897..... | 7                      | 7.0               |
| 1896..... | 7                      | 7.4               |
| 1895..... | 7                      | 7.0               |
| 1894..... | 7                      | 7.0               |
| 1893..... | 7                      | 7.0               |
| 1892..... | 7                      | 7.0               |

A few words of explanation are necessary showing how the foregoing percentages have been derived. From each year's surplus has been deducted the difference in the rate of dividend paid on the common stock and 7 per cent. figured on the amount of common stock outstanding at the close of the year. The amount remaining has been divided by the total amount of preferred and common stock outstanding at the close of the year, and the result has been added to 7 per cent., which gives the percentage actually earned. In the years the common stock has not shown 7 per cent. earned, each year's surplus has been divided by the common stock outstanding at the close of the year, and the result added to the rate of dividend paid, which gives the percentage actually earned.

It will be seen that the amount distributed in dividends to the common stockholders has been well within the total available. In the year 1894, \$25,000 was charged to income account for the sinking fund on the Dubuque Division bonds for the years 1887 to 1894, inclusive, which accounts in part for the deficit of \$579,315, as given for the year 1894.

In five years out of the ten—1896, and 1898 to 1901, inclusive—the surplus, after deducting the preferred dividends, was more than equal to the present 6 per cent. dividend on the common stock now outstanding.

In order to give a fair statement of the percentage earned on the stocks, the amounts charged in operating expenses for