

of the mileage under operation at the beginning of the same fiscal year." But this activity on the main line to the west was only one item in the extension programme. In the years between 1882 and 1888 the stone arch bridge and terminals in Minneapolis were completed; the Dakota line down the Red River was finished to a connection with the Canadian Pacific; the Casselton branch was purchased; a line was built from Willmar to Sioux Falls; and afterward extended to Yankton; some railroads in South Dakota were bought; the Montana Central was taken over at cost, and an elevator and large terminals at West Superior were arranged for. In 1889 the line to Duluth and West Superior was completed, giving terminals and dock accommodations which today are not surpassed anywhere in the country. The total mileage operated had now increased to 3,030 miles. The Company had also begun to operate its own steamships, through the Northern Steamship Company, on the Great Lakes. These boats, which began to run in 1888 and 1889, not only afforded greater dispatch in the carriage of grain and flour from the head of the lakes to Buffalo and other lake ports, but they made the railroad independent of other lake lines. It was thus enabled to protect its patrons, and to prevent its reductions in rates from being absorbed by increases made by the lines east of its lake terminals.

In 1889 the Great Northern Railway Company was organized, to bind into a compact whole the various properties that had grown too large for the

charter limitations of the old Manitoba. It leased all the property of the latter company, and was prepared to finance the undertakings about to be completed or in contemplation. By 1893 the line was opened through to Puget Sound. In the next five or six years many improvements were made by relaying track with heavier rails and by changes in equipment and large additions thereto. Branches and feeders were built to round out the system. In 1897 a more direct line from the head of the lakes to the west was created by purchase and construction that completed a road across northern Minnesota to a connection with the main line. The taking over of the Seattle & Montana which, like the Montana Central, had been built by us to assure adequate terminals on the Pacific Coast and to enable construction to go forward from both ends of the line at once, extended the system from Seattle to Vancouver, British Columbia. In 1889 it had entered the ore-producing regions of northern Minnesota that was to give it a large addition to its traffic.

Just as, in the building of the Montana Central and the Seattle & Montana, it was necessary to know thoroughly the country in advance of railroad construction and to act upon that knowledge, so these ore lands in northern Minnesota had to be examined; and some of them it seemed desirable to acquire, with a view to the effect upon the future of the Company's business. In January, 1899, I purchased the Wright & Davis property, consisting of a line of railroad, some logging road and a large quantity of ore lands. The

purchase for \$4,050,000 was made by me individually. My purpose was to secure the shipments of ore from these properties for the Great Northern; and the profits from the mines, if there were any profits, for the stockholders of the Company. The railroad was turned over to the Great Northern at cost. The ore property was transferred at cost to the Lake Superior Company, Limited, organized October 20, 1900, to hold in trust, together with other ore interests acquired later. A trust to administer the Great Northern Ore Properties was formed December 7, 1906, under resolutions adopted by the Great Northern Company. This trust took over the ore interests acquired by me, additional ore lands subsequently secured and other properties. It issued against them 1,500,000 shares of certificates of beneficial interest, which were distributed, share for share, to holders of Great Northern stock at the time. The stockholders were thus put in possession of all the benefits accruing from the whole transaction. At the end of the last fiscal year the trustees had distributed a total of \$7,500,000 to the certificate holders; while the future value of the properties so covered, owing to the quality and accessibility of the ore and the demand of the iron industry for new supplies of raw material, must be very large.

In 1901 the Company decided to open negotiations for the joint purchase of the Chicago, Burlington & Quincy System by the Great Northern and the Northern Pacific. These were carried to a successful completion by the issue of joint collateral trust bonds to the

amount of \$215,154,000, secured by the stock of the company acquired. Time has confirmed the wisdom of this act, by which through traffic arrangements have been simplified, and the public has gained much by the drawing together of markets and the quick and cheap distribution of products between Chicago, St. Louis and the Pacific Coast.

It was planned, through the formation of the Northern Securities Company, to form a holding concern for the control of these three great properties. The purpose was to prevent a dispersion of securities that might follow where large amounts were held by men well advanced in years, and so to secure the properties against speculative raids by interests at best not directly concerned in the progress of the country served by these lines. This was declared illegal, under the Sherman anti-trust law, by a divided court, upon suit by the United States government, and the Northern Securities Company was dissolved.

In 1907 the subsidiary companies controlled by the Great Northern, including fourteen railway companies operated as a part of it, were purchased and incorporated into the Great Northern System, making of these related parts one homogeneous whole. In the same year I resigned the Presidency of the System, and became Chairman of the Board of Directors,—the office that I lay down today. The work of extension and improvement has gone forward steadily. By the construction of the Spokane, Portland & Seattle line, along the north bank of the Columbia River, the Great

Northern and the Northern Pacific obtained jointly entry over their own tracks into Portland. Lines are now being constructed through eastern Oregon that will open up a large and productive country. In 1909 the Burlington obtained control of the Colorado & Southern; so that the Great Northern covers, directly or over the tracks of allied lines, a territory reaching from Chicago, St. Paul, Minneapolis, Duluth and Superior on the east to Puget Sound and Portland on the west, and from Galveston to Vancouver, British Columbia. The Great Northern System has grown from less than 400 miles of the original purchase to 7,407 miles.

I have some pride in the fact that, while constantly increasing both the volume and the efficiency of its service, the Great Northern has at the same time carried to market the products of the country at rates which have greatly developed the territory served by its lines. If the freight and passenger rates in force in 1881 had remained unchanged until 1910, the total revenue collected from both sources for the thirty years would have been \$1,966,279,194.80. The revenue actually collected was \$698,867,239.91. The saving to shippers by the rate reductions which this represents was \$1,267,411,954.89, or nearly twice the total amount received by the railroad. The average par value of its outstanding stock and bonds in the hands of the public during the same time was \$155,576,917. Rate reductions in thirty years saved to the public more than eight times the average capitalization. In other words,

the railroad could have paid cash for the entire par value of its stocks and bonds in less than every four years out of its earnings. I hope this may be considered a fair division.

The results herein summarized could not have been obtained without the co-operation of a staff of able and devoted assistants, trained to administrative work and grounded in right methods. It was clear to me from the first that the railroad must net more for the money it expended than the returns generally accepted at the time. High efficiency could be achieved only through the work of highly efficient men working with the best appliances. The staff was built up by recognizing intelligence and merit through promotions as vacancies occurred in the Company's service, and by establishing throughout a morale that was recognized by employes from the highest to the lowest. The result has been competence and loyalty, physical efficiency and financial success.

I shall give only a short summary of the financing of this great undertaking. The Great Northern was built by the money furnished by its stock and bond holders and with what it earned. As part of the property of the St. Paul & Pacific it obtained some fragments of a land grant in Minnesota to that company. With the proceeds of the sales of these lands nearly \$13,000,000 of bonds were retired and the annual interest charge has been correspondingly reduced. All the other transcontinental lines had received large subsidies in cash or land grants, or both. They suffered the

check of financial stresses and passed through receiver-ships and reorganizations. The Great Northern, which includes the Manitoba, never failed, never passed a dividend, never was financially insecure in any time of panic. For thirty-three years its credit has been unimpaired and its resources equal to any demands upon them; and in times of financial distress it has been able to assist materially in moving the crops of the Northwest. The security of the investments of the holders of stock and bonds has always been a first consideration; and the success and prosperity that attend the Company today have not been purchased either by any doubtful transactions in the stock market or at the cost of one dollar ever committed by man or woman to this Company in trust.

When we obtained an option on the securities of the old St. Paul & Pacific Company, no individual or financial house in Europe or America, outside of those associated with us, would have taken the bargain off our hands. By a few it was regarded as a doubtful venture, by most as a hopeless mistake. As has been said, obligations aggregating about \$44,000,000 were capitalized at a little over \$31,000,000. The first stock issue was \$15,000,000. The increase of capitalization from that day to this has followed step by step the growth of the property, though falling far below its aggregate cost. Millions of earnings have been used in betterments and new construction that are usually covered by the sale of stock and bonds.

The stock of the St. Paul, Minneapolis & Manitoba

was limited by its charter to \$20,000,000. When the Great Northern was organized it took over the charter of the Minneapolis & St. Cloud Railway Company. The capital stock was made \$20,000,000, which was afterwards increased to \$40,000,000, in half common and half preferred. This was further increased to \$45,000,000 in 1893 and to \$75,000,000 in 1898, none of which was issued as common stock, but all made uniform in character and all shares having equal rights. As the addition of mileage, the purchase of many minor companies, the consolidation of all the originally separate corporations into one system, with the exchange of its stock for theirs, and the addition of equipment and betterments required, the capital stock was added to from time to time. In 1899 it became \$99,000,000; in 1901, \$125,000,000; in 1905, \$150,000,000; and in 1906, \$210,000,000, at which figure it stands today. Every dollar of this represents honest value received. But the problems of its issue and disposal, the creation of a market for securities, the safeguarding of it against attack and its maintenance as an investment attractive and secure were difficult and slow of solution. The Company has now acquired a standing which nothing in the ordinary course of events can impair.

The issue and placing of bonds was in some respects simpler and in some more complex than the distribution of stock. At the time when the St. Paul, Minneapolis & Manitoba was organized and for many years thereafter the railroad world was governed by a code now done away with. It was the general practice

to build new roads with the proceeds of bond issues. The accompanying stock was considered the legitimate property of the promoters, who were accustomed to use part of it as a bonus to the subscribers for bonds. When profits were large, stock dividends were held perfectly proper; and the general practice of railroads was to divide all profits in sight, and charge to capitalization all expenditures that could be so covered. This code and these policies were those not merely of speculators or railroad managers, but were publicly sanctioned both as a part of the necessary conduct of the business and ethically. This difference of standards has to be borne in mind constantly whenever one deals with railroad developments dating much earlier than twenty-five years ago.

During 1878, before the road was organized, 112 miles of track were built, and more than that the year following. A large amount of equipment was bought. To cover this outlay a part of the proceeds of the second mortgage issue of \$8,000,000 was used. There was originally a limit of bond issues to \$12,000 per mile of single track road; which was found to be insufficient even for work mostly on prairie. In 1880 the Dakota Extension mortgage was authorized of which \$5,676,000 of six per cent. bonds were issued from time to time, and this total of less than \$22,000,000 covered the whole bonded indebtedness of the Company down to 1883. But it by no means covered the actual expenditures for which bonds might legitimately be issued.

The period from 1879 to 1883, when the railroad