

Rail Conquest of the Cascade Range

by EDWARD T. MYERS

ONE of the largest and most efficient railway systems in the United States is the Great Northern Railway, which connects Chicago with the Pacific coast. It pierces first the Rocky Mountains and then the Cascade range on its way to Seattle, Tacoma, Portland and other towns and cities on the west coast. Its lines also stretch into Canada, serving Winnipeg on the one hand and Vancouver on the other, and altogether it operates 9,288 miles of main line track, including the Chicago, Burlington and Quincy system, in which it has a controlling interest.

The story of the Great Northern Railway is intimately associated with the success of James J. Hill, its Canadian-born founder, and with the development of the fertile plains of the North West. Through Hill's vision and guidance, the Great Northern grew from the first standard-gauge steam railroad in the North West to its present position as a great transcontinental line extending from the Mississippi River to the Pacific Ocean. Hill built his line on a firm financial basis without Government help, a thing considered impossible at the time.

For many years the great region west of the Mississippi had no rail connection with the east or the west coast. One railroad from the east reached the Mississippi, and during the summer a line of steamboats plied on the river between St. Paul and this rail connection, while a few boats steamed farther south to the lower Mississippi. The only other means

of transport was by wagon overland, and there was great need for better facilities if the country was to become settled. Steps therefore were taken to charter a railway to run from St. Paul to the point where the Red River crosses the Canadian boundary, with the result that in 1862, the St. Paul and Pacific Railway Company completed 10 miles of railroad.

James J. Hill had begun by working as a shipping clerk for steamboat companies, and gaining experience and knowledge of the productive possibilities of the region to be traversed by the proposed railway. By 1871 he had established a regular through service to Winnipeg and other points on the Red River by rail, road and steamboat, and by the time he was 40 years old had accumulated a fortune of 500,000 dollars and was just ready to begin the career that made him famous. He realised that the difficulties with the railroads already built or planned was that they started nowhere and ended nowhere, and in 1879 he reorganised the defunct railroad as "The St. Paul, Minneapolis and Manitoba Railway Company." Extensions had been constructed to the Canadian boundary, where connection was made with a Canadian line to Winnipeg, and thus Hill now had a railroad with 560 miles of completed line.

Mr. Hill and his associates had risked their fortunes in this project because of their faith in the fertile wheat country to which the line gave access. It has been said that "Hill was more than a builder of railroads. Other sections of the West were settled from the

ox cart. Mr. Hill's country was settled from the box car." He built his railroad, attracted settlers from the East and also from Europe by advertising, and then showed them the best methods of farming and even furnished breeding stock free.

Hill was not without keen competition, for the Northern Pacific Railroad reached the Pacific coast in 1883, when the St. Paul, Minneapolis and Manitoba was only reaching out into the prairie region and acquiring lines to the head of Lake Superior.

By 1889, the railroad had become too large for its charter and the Great Northern Company was formed by Mr. Hill to take over the lines. Plans were now made to build the Pacific extension, and surveying parties were sent out to find a way through the Rocky and Cascade Mountains.

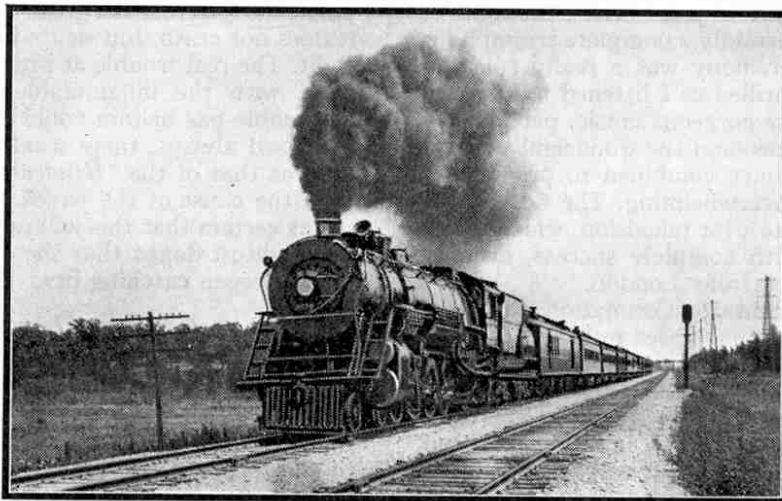
Hill desired a line with low gradients and little curvature, and he wanted the mountains crossed at a low level. Indians had often told stories of a good pass, but Lewis and Clark, the pioneer explorers of the North West, and subsequent government and railway engineers had failed to find it, and the Northern Pacific Railroad therefore had been built through a less desirable pass to the south. John F. Stevens, locating engineer for Mr. Hill, found the pass in 1889, however. This was one of the outstanding achievements of the history of railroad engineering.

The long-sought way through the mountains was discovered in midwinter.

Mr. Stevens' only companion in the quest was a halfbreed, who was left in camp, because he said he was ill, while the engineer looked for the way through the mountains. Actually the halfbreed was afraid of evil spirits believed to protect the legendary pass. After trailing through two false passes that only brought him once more on the east of the divide, Stevens finally reached the real summit in December 1889. After continuing through the low wide valley, which had but little resemblance to a mountain pass, Stevens at last found himself looking westward over an expanse of lower mountain ranges, and knew he had found the elusive pass! With the thermometer falling to 40 deg. F. below zero, he spent the night tramping backward and forward through a runway in the snow in order that he might not freeze to death. A statue of the great engineer stands at the spot to-day, where it is visible to passengers in the great steel trains roaring past.

The crossing of the Cascade Mountains by rail also was not easy to plan, and required the construction of a tunnel 13,000 ft. in length. In order not to delay construction, temporary switch-backs with 1 in 25 grades were constructed so that trains could climb to the summit. Switch-backs are troublesome as well as dangerous, however, and the tunnel was started as soon as possible.

The Great Northern has always continued to improve its methods of operation. When atmospheric conditions in the tunnel through the Cascades ultimately became intolerable, and even dangerous,



The "Empire Builder" of the G.N.R. on its way to the Pacific Coast, hauled by a "Mountain" locomotive. Photograph by our reader A. Hobart, Minneapolis.