

# A Unique Logging Railroad

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Crossing the Ontonagon River Valley

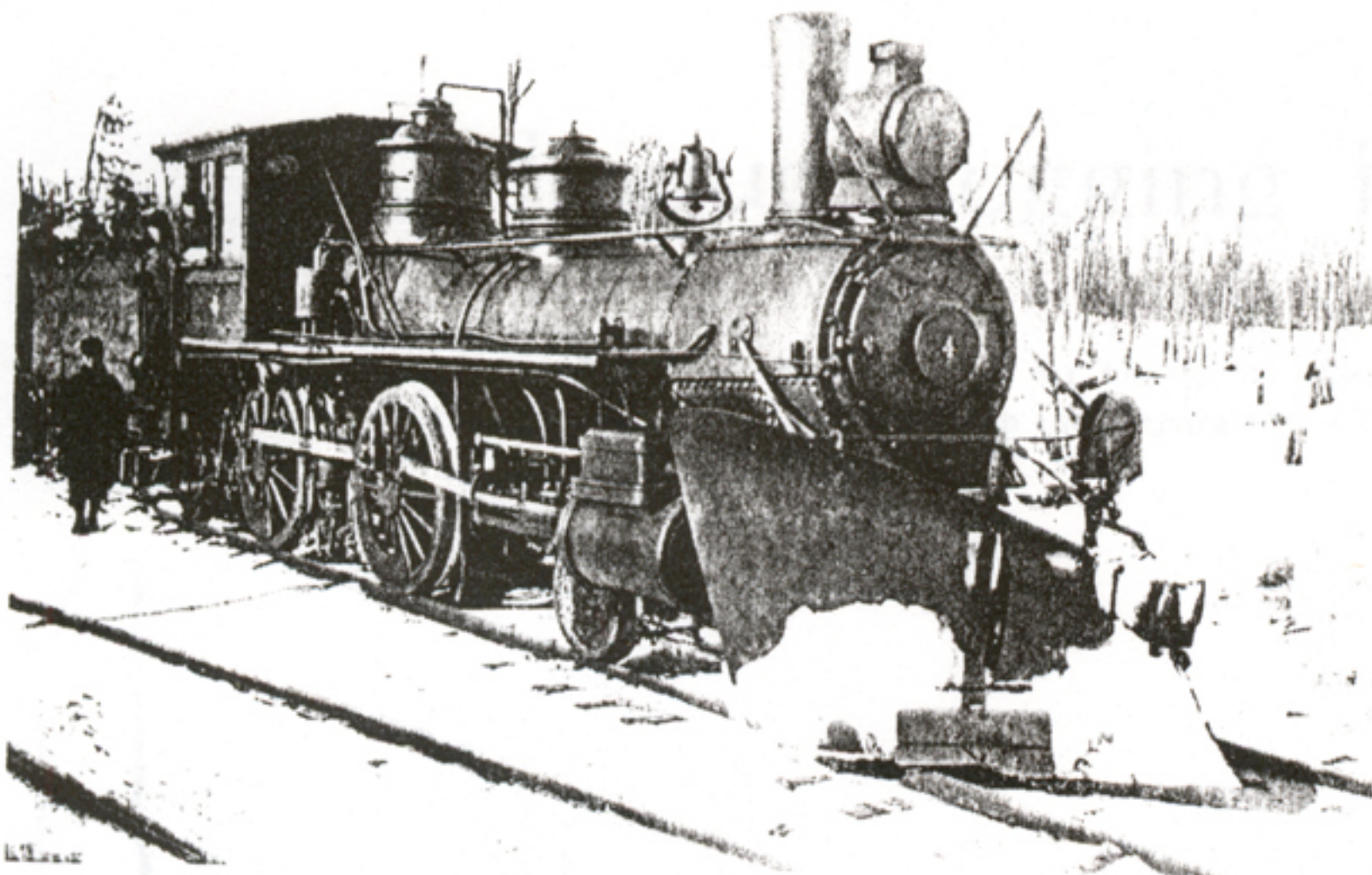


**A**MONG the most interesting railroads in the country are those owned and operated by logging companies. Such roads are frequently located in rough and hilly sections, and must, because of the character of the service, be economically built. This means that cuts, fills and bridges must be avoided where possible; and as a result the typical logging railroad presents many steep grades and sharp curves, and is by no means an easy piece of track to operate.

In Ontonagon County, Michigan, the Porterfield & Ellis Company, for a period of eight years, operated a logging railroad which was unique in more than one respect. The line was ten miles long, and ravines and valleys were passed over, wherever possible, by using gravity thrust and speed in going down and up the grades. The widest dip

crossed was the valley of the East Branch of the Ontonagon River. This valley is one mile wide, and there was a drop of 200 feet to the bridge. An accompanying illustration gives a vivid idea of this piece of track!

The work on this line was done by two Baldwin locomotives of the 4-4-0 type, which were originally built for the Detroit, Mackinac & Marquette Railroad in 1880 and were subsequently used on the Duluth, South Shore & Atlantic Railway and the Mineral Range Railroad. One of them is shown in an accompanying illustration. These locomotives were part of a group of six built for the Detroit, Mackinac & Marquette Railroad in 1880 and 1881. They originally burned wood and had Radley and Hunter stacks. The weight in working order was 66,000 pounds with



One of the Baldwin Locomotives Used by the Porterfield & Ellis Company

44,000 pounds on driving wheels. The cylinder dimensions were 16 x 24 inches, and the driving wheels were  $57\frac{1}{8}$  inches in diameter. As shown in the illustration of engine number 4, the Porterfield & Ellis Company's locomotives are now fitted for burning coal and have been improved by the application of air brakes and other equipment. They have made a remarkable record for durability, are still in serviceable condition, and as far as is known, have their original boiler shells.

In service on the Porterfield & Ellis Company's road, one of these locomotives could handle three flat cars loaded with logs, each loaded car weighing 100,000 pounds. The mile-wide valley of the Ontonagon River was frequently crossed in as short a time as 55 seconds. With good speed capacity and flexible spring rigging, these locomotives did their work with a remarkable record for safety. There were no fatal accidents to employes during the eight years that the line was in operation, and the damage to equipment was almost negligible.

The "roller coaster" method of operating logging roads has not

been confined to the Porterfield & Ellis Company's line. One of the illustrations shows a similar piece of track in Oconto County, Wisconsin, which was operated by the Oconto Company for about four years without an accident. Unfortunately, no record was kept of the steepness of the grade. Mr. G. J. Farnsworth, President of the Oconto Company, states that the line was abandoned in 1916 only because the timber supply in that direction had become exhausted.



On the Oconto Company's Railroad