

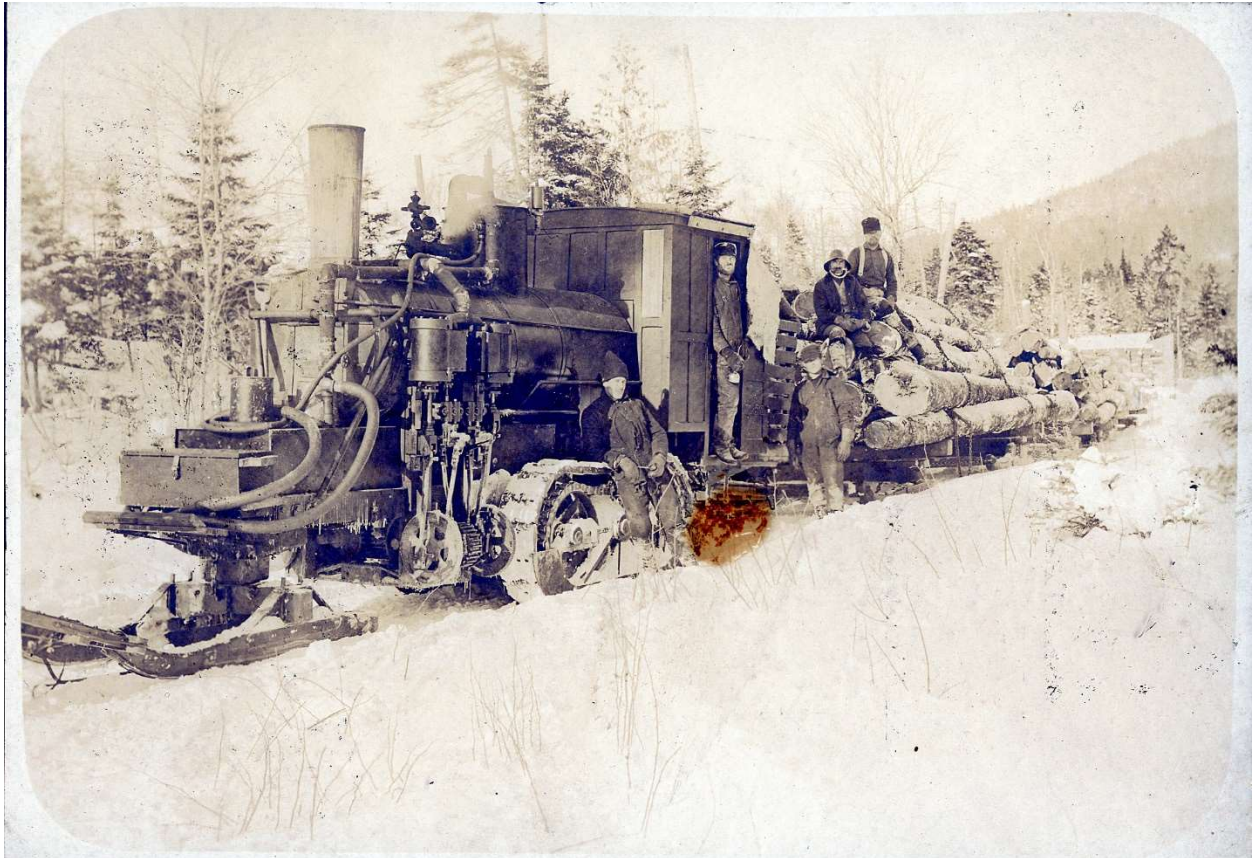
It's a train, it's a tractor!

The Phoenix Manufacturing Company of Eau Claire, Wisconsin, manufactured this unique piece of steam history in the early 1900's for use by the G.W. Jones Lumber Company at its mill from 1909 to 1935. The machine is a unique mixture of steam locomotive, steam tractor, and treaded-excavator that was used to haul long sleds of logs from the forests to the lumber mill in Wabeno, Wisconsin. It was used in both summer and winter, with two skis attached in place of the wheels for winter operations. Interestingly enough, the device burns hardwood scraps and uses water picked up along the way (or from snow), and it could thereby be an example of "old school sustainability."



The Lombard Steam Log Hauler (patented 21 May 1901 [Lombard Patent US854364](#)) was the first successful commercial application of a continuous track for vehicle propulsion. Lombard licensed his patented track design to Phoenix for the production of additional log haulers. Many Lombard steam log haulers were recycled for scrap iron during World War II, and only 6 of the original 83 machines are known to still exist and 3 of these are in running condition. The concept was later used for military tanks during World War I and for agricultural tractors and construction equipment following the war.

These log haulers resembled a saddle-tank steam locomotive with a small platform in front of the boiler where the cow-catcher might be expected. A steering wheel on the platform moved a large pair of skis beneath the platform. A set of tracked vehicle treads occupied the space beneath the boiler where driving wheels might be expected. The locomotive cylinders powered the treads through a gear train. The log haulers mechanically resembled 10- to 30-ton snowmobiles with a top speed of about 4.5 miles per hour (7.2 km/h).



While the ground was covered with snow and ice, a log hauler could tow a string of sleds filled with logs. Each sled train required a crew of four men. An engineer and fireman occupied the cab behind the boiler, and a steersman sat on the platform in front. A conductor rode on the sleds with a bell-rope or wire to signal the crew in the cab. The earliest log haulers pulled three sleds, and later models were designed to pull eight sleds, with a record train length said to be 24 sleds. The steersman was regarded as the hero of the crew. In sub-freezing temperatures down to 40 degrees below zero, he sat in an exposed position in front of the train. Sparks flying out of the boiler stack above him would sometimes set his clothing on fire as avoidance of trees required his full attention and effort turning the large iron steering wheel. Some steersmen earned enough money to purchase fire-resistant leather clothing. Some log haulers had a small roofed shelter built on the steering platform, but the shelter limited the steersman's ability to jump clear when collision became inevitable, and he would require luck to avoid injury from the following trainload of logs.

The "Phoenix" was donated to the Town of Wabeno in 1944 by the lumber company, and a group of citizens restored it to operation in 1965. Each year Wabeno hosts a "Steam Up Days" to show off its unique, operating piece of history and hosts a bunch of other lumberjack-related equipment. The machine is often operated at the Rock River Threshere on Labor Day weekend in Edgerton, WI.