

Quincy Mine Hoist

by Robert Fox

There are many mining related sights located in Michigan's Copper Country, but one sight that amazes all who stop to see it is the Quincy Mine Hoist. Housed in the original mine hoist building, the hoist has been preserved by the Quincy Mine Hoist Association, Inc.

The world's largest steam mine hoist was manufactured by Nordberg Manufacturing Company, located in Milwaukee, Wisconsin. The remarkable hoist was installed at the Quincy Mining Company, Shaft No. 2 in Hancock, Michigan.

Bruno V. Nordberg, a brilliant young Finnish engineer arrived in America in 1879. He began work as a design engineer with the E.P. Allis Company, a supplier of steam-powered machinery to the mines in Michigan's Upper Peninsula.

In 1886, Nordberg founded his own firm to manufacture a revolutionary steam cut-off governor. The Nordberg Manufacturing Company prospered, and in 1897 Dr. Nordberg used his early experience in hoist design to develop what was at the time the largest hoist in the world, for the Tamarack Mining Company of Calumet, Michigan. By 1918 thirty-seven Nordberg Hoists had been installed in northern Michigan.

Construction of the mammoth machine began before World War I, but was forced to be put aside during the war years. The hoist was completed in 1920 and operated until the 1930's, hoisting copper ore from a depth of 9260 feet on the incline in the No. 2 shaft, a depth of 5640 feet vertically. All mining operations ceased in 1945.

The hoist has a winding capacity of 10,000 feet of 1 5/8 inch rope reaching down an incline shaft to a vertical depth of 6,600 feet. When winding the rope down the second cone of the drum, it has a capacity of 13,300 feet reaching a vertical depth of 8,600 feet.

The hoist can raise a load of 20,000 pounds of rock at a speed of 3,200 feet per minute. The engine is a "cross-compound" engine having two high pressure and two low pressure cylinders. The drum is of the cylindro-conical type, familiar in the Lake Superior Copper District. There are eight piston pulses per revolution. This, coupled with its 516,000 pound mass eliminates practically all pulsation in the rope. Total cost for construction of the hoist was \$371,051.15

The hoist was designated a National Historic Mechanical Engineering landmark in 1984. The American Association for State and Local History has presented a Certificate of Commendation to the Quincy Mine Hoist Association, Inc., for its preservation of the hoist.

Truly one of the wonders of the mining world, the Quincy Mine Hoist attests to the mechanical genius of Bruno Nordberg and all of the people who were involved in the design, manufacturing and installation of the hoist.

My sincere appreciation to the Quincy Mine Hoist Association, Inc. for the information that they supplied to me as well as for the photographs used in this article.

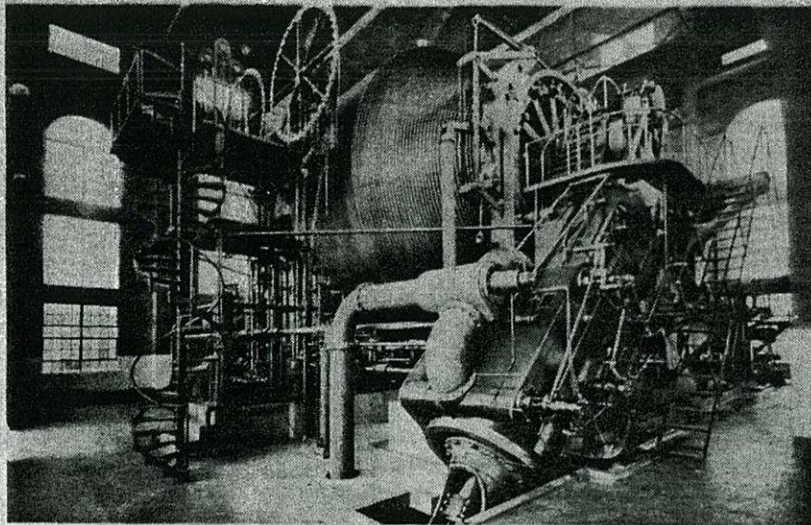
References: WORLD'S LARGEST STEAM HOIST: 3 Brochures, no dates.

THE WORLD'S LARGEST COMPOUND STEAM HOISTING ENGINE: 2 pages; no author or date.

Postcard showing Quincy Mine Hoist. Reverse side reads:

A HOIST OF UNUSUAL SIZE

This mammoth hoist with its 30 foot diameter drum, reached down an incline shaft over two miles in length. Each trip the 1 5/8 in. rope brings to the surface a total load of 30,000 pounds at a speed of about forty miles an hour. The entire hoist weighs 1,765,000 pounds.



THE WORLD'S LARGEST HOISTING ENGINE

Installed at Quincy Mining Company, No. 2 Shaft, Hancock, Michigan.
Built by Nordberg Mfg. Co., Milwaukee.
Nordberg Diesel Engines, Uniflow Engines and Hoists are noted for their performance.



The **MAC** Clan getting ready to go on one of their frequent mining artifact "acquisition trips". These "foraging" trips are remarkably successful, always resulting in truckloads of rare and valuable artifacts. Standing (L - R): Dave "The Dealer" Johnson, Mark "Jethro" Bohannon, Tony "Floyd" Moon, Dave "Doc" Thorpe, Len "Zeke" Gaska, and Jim "Zeb" Steinberg. Seated: Ted "Papa" Bobrink, the head of the clan, and his two rug rats.