

# In 1874, Ashland's hopes to be great iron city of the West were dashed

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In November 1873 the Ashland Weekly Press announced that "inexhaustible beds of iron ore" had been discovered on the Penokee Range and that the first ore had been shipped.

While iron ore had been found, the true extent of the deposits and whether the ore could be profitably mined were unknown, and only a few tons of ore had been shipped for testing and analysis.

The probable basis of statements regarding the "inexhaustible" iron-ore deposits on the Penokee Range were the reports of explorations conducted more than 20 years before.

In 1849, Charles Whittlesey traced the ore beds (magnetic ore or magnetite) from the principal meridian west to English Lake. He judged that the ore would yield "50 to 60 percent. metal" but noted that it also contained a relatively high proportion of silex or quartz.

His conclusion was that "If the silex of this ore is not so excessive as to make it refractory (difficult to melt), or if in practice that difficulty can be remedied by use of magnesian slates, which are abundant, these mines may be wrought hereafter at a profit, and rival the works of Northern Europe."

In 1858, Increase A. Lapham explored the range and concluded that while the ore beds were co-extensive with the range and contained "practically inexhaustible" quantities of ore, it was only "where the ore was easily worked (on the surface) and where water power was at hand" that mining the ore would be profitable.

It was undoubtedly the selective reading of the Whittlesey and Lapham reports, plus a strong dose of credulity, that gave rise to the expectation that Ashland was destined to be "The Grand Iron and Commercial City of Lake Superior."

Ashland would not only be a shipping port for iron ore, it would refine the ore in charcoal

furnaces using the nearby "inexhaustible forests" and limestone mineral deposits, then use the iron to manufacture finished products.

In the early 1870s there were four mining companies with land on the range, but only one of these, the Lapointe Iron Company, attempted actual mining operations. It began work in September 1873, digging test pits and a shaft. Several tons of ore were extracted and transported to Ashland by rail and then by ship to Cleveland.

Analysis of ore samples supposedly showed "61 percent pure iron." This was a much higher percentage of "pure iron" than was typical of the deposits being worked by the company, and the presence of a large proportion of refractory quartz in the ore was ignored.

An office and quarters for the workers were constructed, and arrangements made for the erection of a blast furnace and rolling mill at Penoka or Ashland if rich ore in sufficient quantity were found. Work was suspended in November due to the depressed economic conditions but resumed in February 1874.

Apparently there were some people who did not share the optimistic view of the potential of iron-ore mining on the Penokee Range. In March 1873, the Legislature authorized a geological survey in Ashland and Douglas counties, and Lapham was appointed chief geologist. From June to September 1873 Roland D. Irwin surveyed the range and its ore resources. His report to Lapham was not favorable. He noted that the high proportion of quartz in the ore made it difficult to smelt and that the ore would have to occur in thick deposits of 50 percent to 60 percent metallic iron in order to compete with the rich ores coming from the mines at Marquette, Mich., and Menomonee, Wis.

Irwin suggested that the stratigraphy (series of rock beds) of the Penokee Range was a continuation of that found to the east in Michigan, and that the bed containing the rich ore found at Marquette was probably present in the Penokee Range.

If so, it was located farther north, from the bed where the Lapointe Iron Company was attempting to mine the lean (less rich) magnetite. The bed, if there, was covered by a deep layer of glacial drift with no outcrops, however, and no work was done to determine if in fact it contained richer ore.

The report was not published but was seen by people in Ashland, who were critical of Irwin's conclusions and demanded a new survey. A second survey of the range was conducted by Charles E. Wright beginning in August 1876, but his conclusions were essentially the same as Irwin's.

Meanwhile, in July 1874 the Lapointe Iron Company stopped its mining operations due to the depressed price of iron ore, the shaft it had excavated being reported in August to be filled with water. Ashland's hopes of becoming the great iron city of the West were dashed, at least for the time being.



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