THE RICHARDSON MINE

Upper Seal Harbor Gold District, Nova Scotia.

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The Richardson Gold Mine is situated about two miles from the Village of Goldboro, Guysborough County, which is located on the east side of Isaacs Harbor, an important harbor on the Atlantic coast of Nova Scotia, some 80 miles east of Halifax.

The mine was discovered in 1892 by a prospector named Howard Richardson, who found rich quartz in the bed of a brook known as Gold Brook. This has given the name Goldbrook to the settlement which has sprung up in the vicinity of the mine.

Local capitalists became interested and a fifteen-stamp mill was erected in February, 1893. In July, 1894, this was enlarged to a twenty-stamp mill. In 1896 twenty stamps more were added and the plant modernized to a certain degree. The returns for these first four years are as follows:—

Year.	Tons. Crushed.	Yield. Ozs. Gold.
1893	5,408	2,054
1894	6,997	1,674
1895	10,293	1,677
1896	16,626	2,186
1897	25,150	3,004
1898	24,124	2,478

The ore body or belt consists of a mixture of bands of slate and quartz. Under the early management an attempt was made to sort the ore, throwing out the slate as worthless and milling the quartz. The result of this policy was that the mine was nearly closed down and the manager resigned. The new manager, not only milled the whole belt, but actually crushed the waste dump from former operations with most satisfactory results.

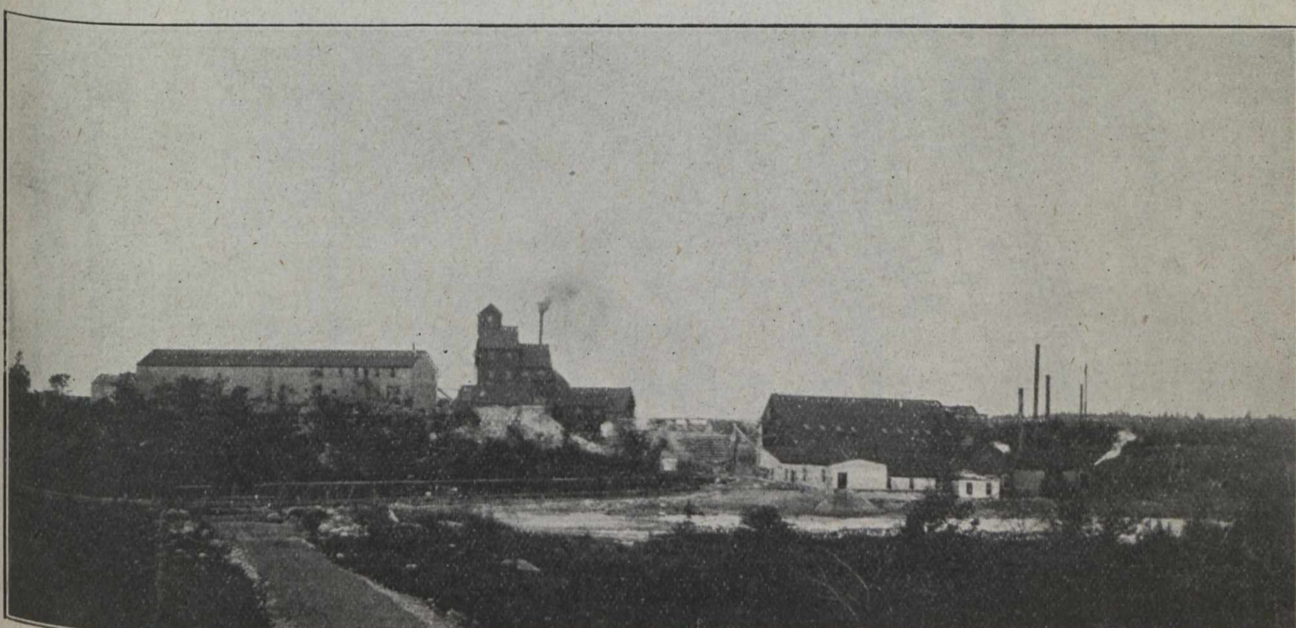
As a direct consequence of this policy the mill was enlarged to one of sixty stamps early in 1901.

The total production of the mine from February, 1893, to December, 1902, as shown by the sworn returns at the Mines Office at Halifax, was 28.054 ozs. of gold from 193.363 tons of quartz crushed, or a total value of nearly $600,000. It must be remembered that this value represents only the amount of free gold in the ore, and that large amounts went to waste can be seen by noting the amount of gold now being secured from the concentrates.

It is true that a large cyanide plant was erected to treat the tailings from the mill without concentration, but, while the percentage of recovery in the plant was satisfactory, yet the value of the mill tailings was too low to admit of economical treatment in this way.

In 1903 the Richardson Mine was taken over by the present owners, The Boston Richardson Mining Company, who spent the first year of their ownership in carrying out a new system of development, namely, sinking a 400-foot vertical shaft, rebuilding the 60-stamp mill and putting the plant in its present shape.

The accompanying plan shows a portion of the plant and property of the Boston Richardson Mining Company. It does not show, however, the location of the other belts, similar to the Richardson, which are being opened about 1,000 feet east of the vertical shaft at what is known as East Goldbrook, or the very rich and promising, though probably smaller belts, cut near the west end of the property, some 3,000 feet west of the vertical shaft, and known as West Goldbrook.



BOSTON RICHARDSON MINING COMPANY'S PLANT.—Looking West.

The geological conditions of the district are peculiar and will be the subject of a later paper. For the present it is sufficient to say that the outcrop or horizontal sections of the vein or belt has the shape of a horseshoe.

The three main working shafts used in the original system of mining were sunk in this ore body and dipped to the north, east and south, respectively, coming to a common deck-head at the surface.

The old workings are situated about 800 feet west of the present vertical shaft, which cuts the apex of the belt, as it pitches eastward, at a depth of about 400