

have a general east-and-west trend. Between the inlet and the head of Trout Lake, a distance of about a mile, the rocks on both sides consist of rather coarse, dark-coloured hornblendic schists, with a general westward strike, and a dip to the north of  $60^{\circ}$  to  $70^{\circ}$ .

The country around Trout Lake is hilly, especially to the south-westward. The river, in entering its eastern side, passes down a steep rapid, with a fall of 144 feet from the head of the portage, which is three quarters of a mile in length; it continues rapid for another mile, but beyond this it is very tortuous with a smooth, moderate current. The elevation of the highest point we reached was ascertained by means of the barometer to be 254 feet above Trout Lake. The rocks in this interval consist of Laurentian gneiss, having a general strike a little to the south of west, and dipping to the north in most cases.

From information derived from Mr. A. R. Ramsey, and Mr. B. R. Poulin, engineers of the Pacific Railway, and also from Mr. E. B. Borron, stipendiary magistrate, it appears that Huronian schists prevail around Flying Post Lake and Lake Mattagama, lying to the south of it. During the season of 1881, Mr. Borron, who was sent by the government of the Province of Ontario, explored the country from Missinaibi House to the Flying Post, and thence to Mattagami Post to the east, which I had reached in 1875 from the Montreal River, a branch of the Ottawa. In the summer of 1882, the same gentleman explored a canoe-route by way of the Mississagui River, from the north shore of Lake Huron to the Flying Post and thence by the Kakozhishk, or Ground-hog River to its junction with the Mattagami. Mr. Borron has a good knowledge of mining and geology, and made valuable notes on the rocks he met with on his journeys. These have been of assistance in laying down the distribution of the formations in the region referred to. We are also indebted to Mr. Borron for a copy of his "log," containing the courses and estimated distances along some of the routes which he travelled.

On his last named journey he crossed the height of land, a short distance east of longitude  $83^{\circ}$  W. and struck Lake Wakamagaming at the source of the Ground-hog River. In descending this stream he saw no rocks excepting Laurentian gneiss until reaching Cache Lake, the centre of which is near latitude  $47^{\circ} 40'$ , longitude  $82^{\circ} 46'$  W. "A schistose rock, Huronian, here forms the shore." From Cache Lake, the river runs a little north of east to a point within about nine miles of the southern extremity of Lake Mattagama, "following nearly, as it appeared to me, the strike of the Huronian rocks at or about their junction with the Laurentian. The river then, finding a passage, turns north, crossing the Huronian ridges, and at the end of nine miles tumbles into a large basin at the south end of Lake Mattagama." (Mr. Borron's Report for 1882, page 23.) At page 30, he says: "I met with lead and

Huronian rocks  
in the vicinity  
of Flying Post.