

under noble trees stood a puffing engine and several men were working in the midst of that lonely forest at what seemed to me a hopeless undertaking. In the neighbourhood, however, some settlers had already taken up their abode on the good alluvial soil. The forest was burned over, only a few charred rampikes rose here and there; plain log houses were built in which, however, there was an air of comfort. We also came upon a school in the midst of the forest as we returned.

At Rat Portage also, on the boundary between Huronian and Laurentian rocks, gold appears. Consequently this little town at the northern end of the Lake of the Woods is growing rapidly and the lake is crossed by numerous steamboats. The principal deposit lies on a little island in the lake; this mine, the Sultana, was the object of an excursion for which we were as much indebted to the municipality of Rat Portage as we had been to that of Sudbury two days before for the trip to Vermilion Lake. A little steamer took us through the labyrinth of islands and narrow channels past Indian camps and burial grounds to the Sultana, where most of the labourers are Scandinavians. We had a jolly picnic, viewed the galleries and workings of the mine and then the active members of the party hurried to the highest point of the island which had already been cleared of wood. The view from above was wide and striking—the lake in the woods, the wooded islands in the lake, rising as smooth, polished, rocky humps like the point on which we stood, and a cloudless sky above it all. Toward evening we went to another little island where peculiar breccia appears in the Huronian slate, the so-called agglomerate; whilst next morning Prof. Coleman showed us Huronian conglomerate in the town of Rat Portage. They can be recognized as such at once on the surface of the rounded humps, but one cannot strike off fragments from them. They leave it certain that the material of the Huronian slate has here originated in the destruction of an old land. Undoubtedly we have in this case a clastic formation. However, the so-called Laurentian gneiss made the impression on me of a rock mass, consolidated at a great depth, of a bedded granite somewhat like the Central gneiss of the Alps. The occurrence of the gold of the Sultana mine reminded me forcibly of that of the Hohen Tauern. There, too, the gold is found on the border between bedded granite and dark slate, the so-called Neuern, which is exactly like the Huronian of Canada. The exposures themselves did not seem to me, however, at all remarkable, only I was obliged to marvel how they could be discovered. This applies also to the nickel and anthracite of Sudbury. Only a very close investigation of the country could lead to their discovery. Such an investigation is in fact carried on by the “prospectors” who traverse North America in all directions even to the depths of the remotest forests in their search for iron and coal.

Between Sudbury and Rat Portage we came on the most beautiful landscapes of the Laurentian country which, with all its charms, is in general monotonous. In the night of August 28th-29th we crossed the watershed, some 400 or 500 meters high, between the Ottawa and Lake Superior, which latter we reached at noon the next day. The Laurentian country rises 200 or 300 meters above it and descends towards it with a bold fringe of precipitous rocks. Its valleys run under the water, the inlets of the lake extend far into the land. The railway winds along the shore for about 300 kilometers. Now it ascends the foot-hills from which a delightful prospect unfolds itself upon the sea-like lake which covers more space than Bohemia, Moravia and Silesia together; now it passes around charming bays in some of which are friendly havens.

A way had been prepared for it by the earlier shore line of the lake; the whole coast up to 120 meters above the level of the water is terraced in the plainest possible fashion by the old shore lines; gorges are to be seen in the foot hills, and piles of debris in the bays. It is the declivity of a mountain range along which we are travelling. But from the Nipigon Bay on the scenery changes. In front of the Laurentian heights with their irregular rise and fall, lie table mountains of a peaceful form. They consist of irregular beds of pre-Cambrian age, whose mighty tops are of trap. The boundary between this table mountain material and the Laurentian rocks is very remarkable. At the station, Mazokama, one can see how the latter is continued with its irregular upper surface under the former. One gets the impression that its typically characteristic irregularity dates from pre-Cambrian times. The same thing is seen in the northwest of Scotland, where the