

Map represents  
an area larger  
than England.

Age and  
distribution of  
the rocks.

The work of  
1881.

larly to the geology of this district. The country represented on the map is 344 miles in length from east to west, and 224 miles in breadth from north to south, and embraces an area greater than that of England. The distribution of the rock-formations, as shewn on this map, is only provisional, but it is considered worth publishing the map to show the present state of our knowledge both of the topography and the geology of this great region, and also that it may serve as a basis to be improved upon in the future. In some parts, both the topographical and the geological lines will be found tolerably accurate, while it is believed that none of the geographical features marked in continuous lines are very far out of position. The junctions of the formations were correctly ascertained along the rivers and lakes surveyed or explored. In the case of the boundaries between the Laurentian and Huronian rocks, as these formations appear to be conformable to each other in this region, the course of the lines dividing them could often be inferred, with some degree of accuracy, by the prevailing strike of the two sets of rocks throughout a great thickness of the strata on either side of the observed contacts.

It will be noticed that a large part of the country represented on the map is occupied by Huronian rocks, which are generally rich in economic minerals. The prospect for the discoveries of metallic ores is increased in some districts by disturbances, and by the frequent intrusion of diorites, syonites and granites. This is especially the case in the region extending from the sources of the Montreal River eastward to the Abittibi Lake.

The present map will no doubt prove useful in many ways, now that the Canadian Pacific Railway is about to be built through the southwestern part of the territory represented and other railways are projected to traverse various parts of it.

A short account will now be given of the investigations made in 1881, in the region under consideration. Having, in 1875, mapped the canoe-route between Lake Superior and Moose Factory, by way of the Michipicoten and Missinaibi Lake and River, this was used as a base for the operations of the present season. At Lake Mattawagaming, the third from Lake Superior, a leading canoe-route diverges to the northward, and this was adopted as a means of obtaining access to the country in that direction. In connection with the geological investigation of the region, a track-survey, checked by numerous latitudes, was made of the north-west arm of Lake Mattawagaming, Lake Wabatongwashene, Oba Lake and River, Kabinikagami Lake and the river of the same name to latitude  $49^{\circ} 35'$ .

At the same time Mr. C. Molson, B.A., Assistant Geologist, made a similar survey of Esnagami Lake at the head of the Magpie River, a