

heavy rapids, and is quite impassable with canoes. If such were not the case, the Indians would never use the portage route that leads from the Romaine to the St. John river. This route follows a number of small lakes and streams in deep, narrow valleys between rugged hills of gabbro, that rise nearly 3000 feet above sea-level, or considerably higher than the general level of the interior tableland. The total length of the route is 65 miles, with thirty-one portages, in all 19½ miles long, and together forming the longest and worst portage route in any part of Eastern America.

Before reaching the St. John river, the general level of the country falls more than 1500 feet. This river has a valley from half a mile to two miles wide, with steep rocky walls. Down the valley the river flows rapidly as it winds from side to side, and is only broken by one small fall until it empties into the Gulf of St. Lawrence, about 40 miles below where the portage route joins it.

We arrived at the mouth of the river on August 22, after an absence of nearly six months from any base of supplies, during which 906 miles of micrometer survey and 280 miles of track surveys were made. These surveys have since been mapped, and the manner in which they tie with previous surveys reflect great credit on Mr. Eaton, to whose careful work the accuracy is due.

The practical and scientific results of the exploration, beyond the additions to the geographical knowledge, may be summed up as follows: All the exposures of rock along the various routes were examined, and a large quantity of information was obtained in regard to the relations of the various rocks that make up the Archean complex, which occupies over nine-tenths of the area of Labrador. A great area of supposed Cambrian rock, which can be correlated with the iron-bearing rocks of Lake Superior, was discovered extending from latitude 50° north-westward to, probably, beyond the west side of Ungava Bay. Many interesting facts were gathered in regard to the ancient configuration of this great area, along with others relating to the glacial phenomena. Among these may be mentioned the evidence of a confluent ice-cap over Labrador, except on the highlands along its north-east coast, and that the movement of the ice was everywhere outwards from the central interior towards the coast.

Large collections of rocks, minerals, plants, birds, birds' eggs, and insects were brought home. These, in conjunction with the notes taken, will add greatly to the knowledge of the natural history, and the distribution of life, animals, and plants, in these regions.

Meteorological observations were regularly kept, together with notes on the thickness of ice, snowfall, and other subjects bearing upon the climate. About 250 photographs were taken to show the characteristic features of the country passed through, and other subjects of interest.

The elevations of different points along the routes have been partly