

and then up Reindeer River and across the whole extent of Reindeer Lake to its north end, where a remote northern fur-trading store and a Roman Catholic Mission are situated. Up to this time the party had been travelling through country which had already been more or less definitely surveyed, but the character and age of its underlying rocks was little known, and still less was known about the effect that the ice of the glacial period had produced upon it. A careful geological examination was therefore made of the sides of the lakes and rivers along the line of the route throughout this distance of 650 miles.

556. From the north end of Reindeer Lake the regular geographical and geological survey was begun by Mr. Tyrrell. Ice River, the eastern outlet of Wollaston Lakes, was ascended and surveyed for 115 miles to near its northern bend, beyond which the canoes were carried over portages, and paddled over small lakes, to the head waters of Thlewiaza River, and thence down that stream through Thanout to Theitaga Lakes. From this lake the river is said to flow through Noo-el-tin, or Island Lake, to the west coast of Hudson Bay, between Egg Island and Cape Eskimo. From Theitaga Lake a small stream was ascended with difficulty to the height of land north of which is a rapid descent to Kasba or White Partridge Lake, the large reservoir near the head of the Kazen or White Partridge River, at an elevation of about 1,270 feet above sea level. The survey was continued a'ong the east shore of Kasba Lake, and down the Kazen River, which flows from it to Ennadai Lake, which lies on the edge of the "Barren Grounds." The Indians, in their birch bark canoe, accompanied the party to this point, acting as guides and assisting in carrying supplies, but they refused to go beyond into the land of the Eskimo. The party thus diminished, and now, without guides, proceeded northward in the two Peterboro' canoes, searching their way through the crooked, irregular lakes and down the unknown rapid stream. A few days later the reindeer were met on their annual migration southward, and from that time onward the party had an abundant supply of fresh and dried reindeer meat. On the eighth day, after the Indian guides turned back, the party met several families of Eskimos camped on the bank of the river, and here the need of an Eskimo interpreter was keenly felt. However, by signs and presents of trifles such as needles, thimbles, gun caps, &c., and the promise of a double-barrelled gun, two of the men were at length induced to accompany them as guides down the river. Under the skilful guidance of these active watermen the party descended the Kazan River through Titmeg and Yathkyed Lakes to an Eskimo camp about latitude $63^{\circ} 5'$, where it was learned that the Kazan River flows into Chesterfield Inlet not very far from the mouth of Telzoa River, descended in 1893, but that by a series of long portages a stream could be reached flowing into Hudson Bay near the Seahorse Islands. By following this stream there would be little danger of want of provisions, while the experience of the previous year showed that the men would probably starve if they attempted to follow Chesterfield Inlet and the shore of Hudson Bay from it southward so late in the season. The two Eskimos did not know the route by the portages and the other stream, but they secured the services of a third Eskimo to act as their guide.

557. Kazen River was left on the 1st September, and on the 18th of the same month the two white men, with their four Indian or half-breed canoe-