AKE, 1898-9.

JOURNEY FROM CHESTERFIELD INLET TO GREAT SLAVE LAKE, 1898-9. 73

ndstone pure. lard to break d large slabs, res composed ints and small

Exposures ds, which cap Specimen 4, 1 the rock has of a dark grey atey cleavage ;. irface of rock Another speciirface of rock idence of this 3 lying around on the Barren flat-topped, on ng around on innumerable. form the subrlies the thin bed of shells For 6 miles akes-in fact, oss and grass. (Specimens of

1.)

boulders, gravel, dirt; shores sandy. Several miles to the south Kazan river cuts through a range of hills. Did not have opportunity of visiting them.

July 15.-West side of mouth of Kazan river : land extending from shore for 2 miles inland, dead, flat, and dotted with small lakes innumerable; then rising to a height which gives it the appearance of a long low ridge, as viewed from away east; sandstone beds here showing. Wherever sandstone formation exists, the land flat or slightly undulating, and grass-covered.

July 16 .- Ascended rising land in form of a ridge, which lies to south-west of the mouth of Kazan river, which has an altitude of from 300 to 400 feet above the level of the lake. Exposure of sandstone on summit of ridge, which has the appearance of a rather altered rock. Dip difficult to determine; all that could be seen were small pieces of rock projecting perpendicularly. Surface of the main bed which showed was smoothed and rounded; terraces, semicircular or rim-shaped, at summit of ridge, composed of angular and irregular shaped fragments of sandstone, some of it differing from that in situ.

July 21.-On the portage between King-ak (which is a deep bay to the south of the mouth of river flowing from Schultz into Baker lake) and Koo-ook (which is the name of the river itself), which we struck 2 miles up from its mouth, we passed over several low ridges, all felspathic granite, cut by veins and associated with quartz; beds horizontally lying. Distance across portage, 5 miles.

July 22 .- Travelled 14 miles up Koo-ook. Granitic formation; this granite in some places contain hornblende, in others it is of a felspathic character, the felspar occasionally being very much in the ascendant. Ridges, which run parallel to river on the south side and about one mile distant, all similar, cut by narrow veins, and associated with white quartz, occasionally in large quantities. Exposures numerous; beds mostly horizontally placed; smoothed and grooved. North-east side of river not examined, but more rocky than south-west side.

July 23 .- Proceeding up Koo-ook. Scattered fragments along the shore, giving evidence of a new formation in the vicinity, which we struck after travelling ke: more ex- 4 miles-a greenish or grey-coloured schist, having a very slatey cleavage. w assume the Large exposures along ridges south-west of the river; general dip of beds nearly flat, with low vertical. A short distance further on, this rock is cut by a vein of white quartz est from head 10 feet thick, and in many places by smaller veins. At 13 miles the river cuts h-brown sand- through this rock to a depth of 80 feet; the rock on south side is deeply grooved bout 25 yards by glacial action. A short distance inland, large slabs have been uplifted from This exposure the matrix by the action of frost, and are left sticking up, resembling large slabs striæ trending of slate upended.

July 24 .- Went on 7 miles up Koo-ook. Rocks similar schists, at one place red sandstone dipping south-east at an angle of 60°.

July 25 .- Reached the rapids near east end of Schultz lake after travelling s exposures of a about half a 2 miles. Just above the rapid, granitic formation again. Similar, although angular-shaped varying slightly in character, to the rocks on King-ak portage. One outcrop , as they slope appeared to be a granitoid gneiss. Extensive exposures on both sides of river. over by fields Dip of beds at one place north 25° W. at an angle of 40°. East end of Schultz lake, ged surfaces of granitoid gneiss; 10 miles up the lake on north side, and a short distance inland,), but the beds exposure of very coarse-grained red or brown sandstone. On the top of these beds, ther on, sand- and also near by, rested some huge circular chunks of conglomerate, in which were mound-shaped embedded large quartzite pebbles, some of them the size of a man's head.

July 26 .- Delayed by heavy head winds; took a walk back from camp, i.e. with numerous north-east. Rocks, conglomerate predominating, containing usual quartzite pebbles. iver : no rocks A few exposures of red-brown, very coarse-grained, quartzitic sandstone.

July-31 .- East end of Aberdeen lake. Rocks in situ ; conglomerate and sandposures; loose stone, thick and horizontally bedded. Proceeding along north shore as far as