

A small island, situated a few hundred yards south of the outlet of Kabinakagami Lake, consists of rather coarse, greyish gneiss, dipping north-east, cut by a dyke of crystalline, greyish-green diorite, fifty or sixty yards in width, running N. 20° E. and S. 20° W. The relation of the great north-and-south dykes of the region north of Lakes Superior and Huron to the topographical features, has been pointed out in former reports. It is probable that the dyke just referred to, has had something to do with the position of the outlet, and the course of the lake immediately above it and of the river for some miles below. In connection with this subject, it may be mentioned that a similar diorite, apparently forming part of a great dyke running down the centre of Oba Lake, was discovered upon an island in the narrows, about midway between its extremities.

Kabinakagami
Lake and River

A fragment of dark-green serpentine, with rusty surfaces, was found on the small island near the outlet of Kabinakagami Lake. It resembles the serpentines of Lake Abittibi and Pigeon Lake, on the Montreal River.

A strong rapid, with a fall of thirty-three feet, occurs just where the Kabinakagami River leaves the lake. The portage past this obstruction is on the west side, and is 1145 paces in length. The rock at the rapid is a dark-green, fissile-hornblende schist, the strike of which varies from N. 45° W. to N. 80° W. At fourteen miles in a straight line below the lake, mica-schists, mostly coarse in texture and grey in color begin, and thence occupy a breadth of about one mile. They are vertical, and strike S. 80° W. Ten miles below this band, dark silicious mica schists make their appearance, and are found again three miles further down. These rocks, however, probably have a greater breadth to the southward than above indicated, since the strata for a number of miles before reaching the first exposure are concealed by a thick deposit of stratified sand. They may have a total breadth of seven or eight miles along the river. These two mica-schist bands appear to indicate the western extension of the great Huronian belt, which, coming from the eastward, crosses the Missinaibi between the Devil's Rapid and the junction of the Brunswick River, and which is largely made up of similar mica-schists.

Huronian
bands.

An exposure of syenitic granite occurs at about a mile and a half below Kabinakagami Lake, and dark, greenish-grey crystalline diorite, apparently belonging to large dykes, was met with in several places as far as the river was descended. The point at which I turned back was found to be in latitude 49° 35'. With the exceptions above noted, the rocks found along this stream were entirely Laurentian gneiss, mostly of massive varieties. The stratification was usually much contorted, but the general strike was about east and west.

Although the Kabinakagami River appears to join the Missinaibi, as