

indicated on the accompanying map, some of the Indians we met with had an idea that it might join the Kenogami, a branch of the Albany at the place called Mammattawa. (See Geol. Survey Report for 1871 page 113).

Mr. Molson, in his track-survey of Esnagami Lake, the upper part of the Magpie River, and the canoe-route thence back to Oba Lake, found only Laurentian gneiss, which presented no characters worthy of special description.

Exploration
from Missinaibi
House towards
Flying Post.

Having completed our labours in this direction, we proceeded to Missinaibi Lake, from which Mr. Molson was sent to make a track-survey of the Wi-a-sitch-a-wan River, which enters the south-east side of this lake, and of Little Missinaibi Lake at its head; while I descended the Missinaibi River to Flying Post Brook, about eight miles from its outlet; and leaving the river here, followed a canoe-route towards the Flying Post, as far as Trout River. This stream flows from the south and joins the Kapuskasing River, just below the outlet of the lake of the same name. It was followed for fifty-two miles in a straight line, and its course, as well as the lakes through which it passes, were carefully laid down. These topographical features are sufficiently well shown upon the accompanying map and do not require any special description.

Kapuskasing
Lake and
River; Trout
River.

Rocks between
Missinaibi and
Trout Rivers.

Between the Missinaibi and Trout River the rocks observed consisted entirely of Laurentian gneiss, having an average strike of about S. 60° W. It is mostly massive, but on Lake Tehi-tchi-ga-mog, eight miles south of Kapuskasing Lake, much of it is of a grey, slaty, micaceous character. Along the Trout River, different varieties of gneiss were met with as far as Trout Lake. Along this stretch of the river the direction of the dip and the angle of inclination changed frequently.

Rocks of Trout
Lake.

Trout lake is five miles in length, in a north-and-south direction. Gneiss was observed on the north-west side of the outlet, but on the east side, silicious hornblendic schists appear to occupy the shore to a point half-way up the lake. Here a variety of red and reddish-grey syenitic granite, and of diorites are met with. Three miles south of the outlet, and one mile north of the inlet of the lake, the reddish granite is cut by veins of yellow-weathering pearl-spar, and it holds patches of grey amygdaloid in which the spots, consisting of white calespar, from mere grains to the size of peas, are thickly disseminated. Along with the amygdaloidal patches, there are others of white calespar, and light green apatite, the latter occurring in small thickly disseminated crystals in the calespar, and as patches of a granular and very friable character associated with it. The amygdaloid also holds crystals and scattered masses of crystalline bright green fluorspar.

Schists.

Granite.

Amygdaloid
Calespar.

Apatite.

Fluorite.

Syenitic granites, similar to those just described, are met with on the opposite side of the lake, and the mass to which they belong appears to