

Veins with  
copper and lead  
ores.

copper ores on the north-west side of the eastern arm of Lake Mattagama, in the vicinity of Flying Post. The quantity of ore in the veins where exposed is not such as would justify, in my opinion, expensive mining operations, but sufficient, taken in connection with the size and general character of the veins, to warrant careful exploration in the reasonable expectation that larger deposits of these useful and valuable metals may be discovered."

Wi-a-sitch-a-  
wan River.

Little  
Missinaibi  
Lake.

On my return to Missinaibi House, I found that Mr. Molson had arrived there from his exploration a few days in advance of me. He had ascertained the following facts: The upward course of the Wi-a-sitch-a-wan River is S. S. E. for two and one half miles in a straight line, when the outlet of Little Missinaibi Lake is reached. The river is broken by a succession of rapids and falls throughout the whole of its short course. The main body of the lake, which is narrow, has a general south-eastward direction, and a length of about five miles. Two narrow bays extend at right angles from the north-east and three from the south-west side. The southernmost bays, on opposite sides, have the same general direction, and the distance between their extremities is over five miles. A stream enters the head of each of them. The upward continuation of the main river is at the south-eastern extremity of the lake, and its course is the same as that of its central part. It was followed for about six miles, and here, leaving the river, Mr. Molson explored the country, for five miles further to the south-eastward, the distance being ascertained by pacing.

Gneiss: Trap  
dykes.

Throughout the whole of the country traversed from Lake Missinaibi, gneiss, with trap dykes cutting it, were the only rocks met with. At the Wi-a-sitch-a-wan Falls at the mouth of the river, the gneiss, which is grey and reddish-grey, and coarse in texture, runs S. 80° W., and is cut by a large dyke, having the same direction. Similar varieties of gneiss continued to and around Little Missinaibi Lake, the strike being from S. 10° E. to S. 40° E., averaging about S. 20° E. The dykes, of which several were seen cutting the gneiss, appear to run about S. 80° W. To the south-eastward of the lake, the strike of the gneiss is more variable, being from S. S. W. to W. N. W. The country just described was mostly of a rocky character, but Mr. Molson noticed some tracts of tolerably good soil. Near the Wi-a-sitch-a-wan Falls a light-coloured clay was observed between the ridges of gneiss.

Soil.

Head waters of  
Michipicoten  
and Magpie  
Rivers.

*Superficial Geology, Soil, &c.* The country around the lakes at the heads of the Michipicoten, Magpie and Kabinakagami Rivers is generally hilly and broken. Some patches of fair land, mostly of sandy and gravelly loam, were found among the hills in the neighborhood of all these lakes. The valleys of the Oba and Kabinakagami Rivers are over-spread with fine stratified sands which often contain much clay. On