

Takkipy lake lies in a basin surrounded by nearly bare hills. The outlet flows from the north end of a narrow arm where the river breaks through a ridge of reddish granite-gneiss, with a fall of eight feet. A portage of one hundred paces is made over heavy bedded gneiss dipping north-east at an angle of 30° to 40° . The valley below this fall continues in the same northerly direction but soon narrows to a canyon with steep rocky sides through which the river falls fifteen feet in a distance of two hundred yards. At the lower end of the portage is a small thicket of poplar and spruce, but the timber on the higher parts, both at the portage and on the surrounding hills, consists of small Bankian pine only.

From below the fall the northern edge of the high rocky country which surrounds Takkipy lake runs to the west, but on the east it is not so definite, as rocky ridges extend to the north. From a valley on the north a small branch enters and half a mile below this the river falls about four feet in small rapids. The rocks are quite massive and appear to be nearly horizontal but dip slightly to the north. After passing a small round hill on the west side, a branch, the largest yet seen, joins the stream from the west. From this to Beaver fall the stream is fringed with rushes and the current is sluggish.

Island of
garnetiferous
gneiss at
Beaver fall.

At Beaver fall the river divides and falls fifteen feet nearly perpendicularly on each side of an island of garnetiferous gneiss. A portage is made across the island over bare rocks to the foot of the fall, a distance of about twenty-five yards. The rocks are nearly horizontal. Before reaching the portage they appear to be dipping slightly to the south but at the foot they are dipping slightly to the north. The beds are of garnetiferous gneiss interstratified with a light red granite-gneiss. Protected surfaces show glacial striae running $S. 39^{\circ} W.$ On the banks there is some good soil on which is growing fair sized timber, mostly poplar. The area of good land in this part of the valley must be small as the rocky hills are but a short distance back from the river.

The lake into which Kississing or Cold river enters is on the same level as the Churchill river, with which it is connected by a narrows at Shaving point. It occupies a deep rocky valley dotted with many islands. Along the sides of the valley and covering the summits of the islands is found a deposit of clay in which are noticed many small concretions somewhat similar to those from the clay of the Nelson River valley. It is confined here, however, to a narrow strip along the valley of the Churchill.