

*Churchill River.*Churchill
river.

The uneven nature of the rocky floor of the valley is seen in the many island-studded lakes along its course. From Shaving point westward for five miles the channel is generally wide with a moderate, even current, but where there are contractions the current becomes stronger and at two or three places for short distances reaches four miles an hour. On the lake the gneisses seem to be running east-and-west, and are generally studded with garnets. The glaciation here is all to the south-west.

At the foot of Pukkatawagan fall the rocks are contorted garnetiferous gray gneiss which seems to have been so much crumpled and contorted as to have lost all general strike. On the lower part of Kissing river the included fragments in the granite dykes were less altered than here and preserved a rude alignment. Here, there has been more movement in the magma and greater alteration. At the fall there is a beautiful cascade of twelve feet broken by an island in the centre. On the north side two other falls occur on another channel which runs to the north of a large island. The portage is on the south side, 340 paces long, mostly over bare rock. This is a dark-gray gneiss dipping north at an angle of thirty degrees, broken into in many places by large red granite dykes.

Portage over
high terrace.

Continuing in the same general direction for another mile the stream falls through a rocky cañon in a long rapid, with a total fall of about twenty-five feet. The portage road on the north-east side runs over a high terrace and point of rock for 600 paces coming down to a bend in the river below the rapid. On the terrace the soil is clay with boulders and upon this and the slopes near the river are small groves of poplar. The higher parts are sandy and thinly covered by Banksian pine. Many of the hills above this level are quite bare. The rocks at the fall are horizontal thick-bedded red granite-gneiss.

Near the Churchill river the valley is almost free of timber, except a little on the slopes of the hills and near the mouth. The rocks are massive granite-gneisses with a slight dip to the north. At the mouth the rocks are massive granites with contorted inclusions of darker gneiss. Wherever there is any foliation it is east-and-west with a high dip.

Above the fall the river expands again into another lake which continues on to the west for six miles and then turns to the north-west for about the same distance. On the north side, near the bend, the

Trading post.