

translated. This enters the Saskatchewan just at the foot of Sentinel mountains, and is there so deep and swift as to be fordable with difficulty. It takes its source 40 miles to the westward in a delightful lake of blue-green water, cold and trout-haunted, fed by a magnificent spring 40 feet wide. Pinto lake, as we named it, is 5850 feet above the sea. A single range of mountains separates the valley of the cataract from that of the Saskatchewan to the south.

Turning north-west from Pinto lake, we crossed a divide, which may be called Cataract pass, rising 7550 feet above the sea, and made our way down to the Brazeau, one of the largest tributaries of the Saskatchewan. The pass is not an easy one, since snow-slides have mowed down the forest for half a mile in width at one place, and the fallen trunks make a most disheartening obstacle for ponies to cross. At the summit we found so much snow on July 24, that a wide *détour* up the mountain side was necessary to gain safe footing for our horses. Several glaciers come down to the level of the pass, and one feeds an indigo-coloured pond amidst the snows of the summit. The peaks on each side are of a very bold and rugged character.

A sharp descent of 1200 feet leads to the head-waters of the Brazeau, whose valley is walled in by high mountains of the tilted block or inclined plane type, having steep escarpments toward the north-east, and a slope, following the dip of the strata, of  $25^{\circ}$  to  $50^{\circ}$  toward the south-west. A number of the peaks which we climbed rose above 9000 feet, and one at the head of the river reached 10,150. Few or no summits toward the east rise higher than this, but a number of those seen toward the west are much higher.

The previous summer we followed the north fork of the Brazeau up to a lake 5 miles long,\* and then crossed by Poboktan pass† and creek to the Sun-wapta; but this year we took a more direct pass suggested by chief Jonas. The trail climbs quickly up through ever-green woods into a narrow desolate side valley, treeless for 7 or 8 miles, and clammy with half-melted snow from a storm the night before, when we crossed it. The descent towards the Sun-wapta leads over muskegs, past beaver ponds, and through horrible burnt woods where the soil has been consumed, leaving sharp stones that roll under the horses' feet on the steep side of the gorge. The pass, which we named for chief Jonas, reaches 7700 feet, and has a rapid descent to the Sun-wapta at 5000 feet. From a height of 10,000 feet on a mountain near by we looked down upon the valley, where the river spreads out into narrow interlacing channels like a skein of unravelled silk flung upon the ground—a common feature of glacial streams near their head-waters. They are perpetually clogging their channels with

\* Unconnected with any river on those maps which show it at all.

† So named from the owls which we saw on the trees near by.