SESSIONAL PAPER No. 13

vi

Owing to the thick smoke, which at the time spread over the country and appeared to originate from fires raging in the valley of this tributary. I did not care to spend any time on its exploration, but continued the survey of the Nisutlin river.

The general course of the Nisutlin is N. 20° E. from its mouth to a point two miles above the confluence, where a sudden change occurs in its direction to N. 25° W. which it maintains for fifty-five miles. Here the river divides into two branches. The principul one or main stream is diverted towards the east, whilst the secondary branch continues in a southerly direction for another mile. At that point it receives its principal tributary from the west. Thus increased in volume the secondary branch again alters its course and gradually approaches the main river, which it finally joins at two miles below the bifurcation.

The striking change from the clear bluish water of the Nisutlin to a turbid colour brought about by the mixing of the waters of Muddy river with those of the Nisutlin river is what led to the discovery of this tributary.

Up to August 12, the smoke had been an insuperable obstacle to any photographic work, but a strong wind blowing constantly from the north had cleared the atmosphere to a certain extent and permitted the taking of photographs. With this prospect in view, I established a main camp on the bank of the Nisutlin river, and left it in charge of the cook while with the rest of the party I entered Muddy river. Near its mouth the current is rapid, averaging probably three miles an hour. Its waters being very muddy are evidently in great part derived from melting snow. On August 13, I camped at the mouth of the first tributary of this river from the south east. While the men were preparing for the night, I went along this creek and after following it for four miles, I was surprised to find that its size increased considerably. Its bed was both deeper and wider than nearer its mouth. This continued for a few miles more, where the creek changed to a turbulent stream, rushing by rocks and boulders, some of great size. The low and flat country here gives place to high hills, timbered with pine, around which the creek Its water is of a darl: brown colour, and is undoubtedly from swamps near meanders. the foot of the mountain range.

The next day I continued the ascent of Muddy river and passed two other large creeks; also rising from the south east. I continued up stream all that day and part of the next one, when finding myself close to the foot of a group of mountains which occupies the point formed by the Muddy river and the Nisutlin, I established my last camp. This stream is very tortuous and its width at our eamp was not over one chain. Just above our camp its channel was blocked by great piles of drift wood. The valley is not more than two miles in width. While the country west of the stream is hilly and broken, that on the opposite side is low and marshy and considerably cut up by old channels which in the early part of the summer carry away the surplus waters. Beyond these marshes there are rough hills upon which the timber has been killed by fire; they culminate in high mountains rising 3,000 feet above the river.

From the top of these mountains I obtained the first glimpse of the southern end of Quiet lake, but only for a few moments. Towards the west there looms up a high and serrated range of mountains, a continuation of the range which separates the valley of the Nisutlin from that of Teslin river. The valley of Muddy river is connected with the depression in which Quiet lake lies, by a low pass just north of the mountains which I had occupied as a station. Although I remained on the summit of these mountains for four days, I could not take any photographs, but was compelled to make sketches of different sections of country which came into view, when by the sudden shifting of the wind the moke was driven in another direction. I was, however, enabled to trace the course of the stream eight miles beyond our camp, where it branches off into several streams heading from the mountains and is fed by the melting snow which caps the mountains in that district late in the summer. On the fifth day, seeing that no better results could be obtained by remaining there any longer, we retraced our steps towards the camp very much disgusted with the poor success which resulted from this, our first attempt in the mountains this seasen.

The mountains to the east of Nisutlin river do not form a continuous range, but are in groups separated from one another by deep and sometimes very wide valeys whose general trend is east and west. Near the mouth of the river they are bet or called hills

A. 1900

ich at the y this hay a markets. the Teslin expected open to be ere. The warded to end of the

every day, The season ore suitable the circumup, to begin esent itself 80 miles of

middle one a point two o the south. ons through am), though river proper,

ice above its follows close covered with a consider-, which have imbedded in ugh a single ter, but one e channel is nich the river he river soon putary which luence, is 100 current, and blui-h. The ird of that of the east. A ice below the ng elaim. At kable signs of n the surface tributary the licularly from ce below and other hand, is d cottonwood, nd give a fine