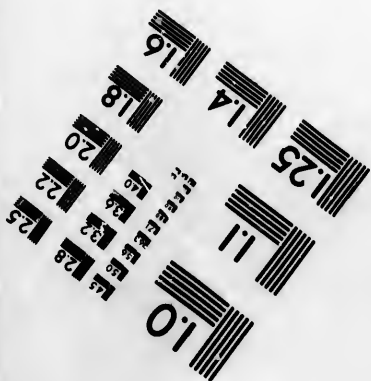
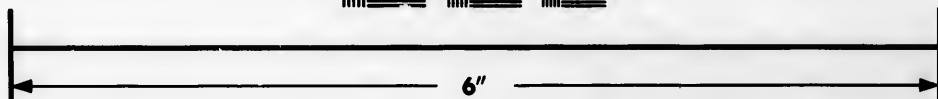
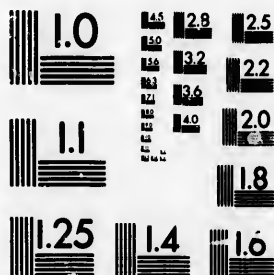


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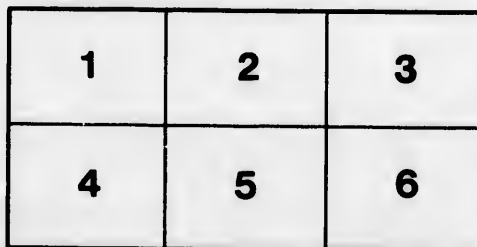
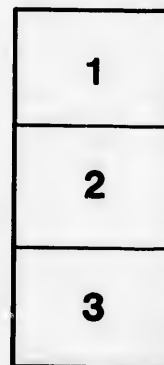
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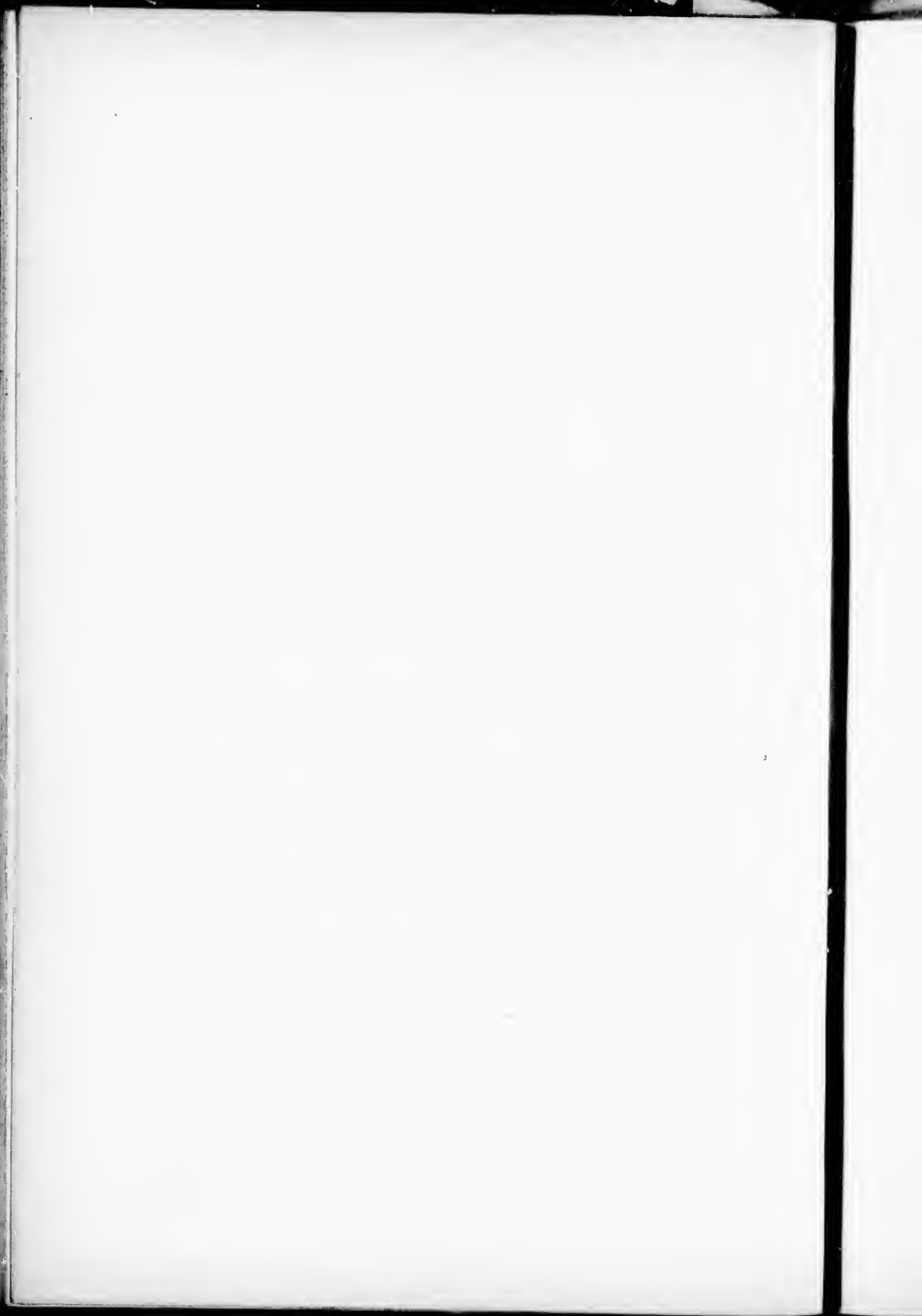
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ON AN EXPEDITION
DOWN THE
BEGH-ULA OR ANDERSON RIVER.

[Reprinted from the CANADIAN RECORD OF SCIENCE, January, 1890.]

ON AN EXPEDITION DOWN THE BEGH-ULA OR ANDERSON RIVER.

By MR. R. MACFARLANE, Chief Factor, Hudson Bay Company.

INTRODUCTORY.

In 1857, Mr. MacFarlane carried out an exploratory expedition from Fort Good Hope on the Mackenzie River, to the Anderson River, and down that river, returning by a different route to Fort Good Hope. A report on this expedition was made by him to the late Mr. James Anderson, then in charge of Mackenzie River district, for the Hudson Bay Company. This report was not written for publication, but a copy of it was handed to me about a year ago by Mr. J. Anderson, son of the late Chief Factor. As the report contained much information respecting a region of which scarcely anything is known, I applied to Mr. MacFarlane for his permission to have it printed. This permission Mr. MacFarlane kindly accorded, and the narrative is here given as written by him in the year of the exploration, with the omission merely of some portions of the original, bearing upon the fur trade and business of the Company.

Mr. MacFarlane's services to science in the extreme northern portions of the continent are well known, and his report of his journey to the Anderson River, gives further evidences of close and accurate observation, which would be creditable as the result of an expedition undertaken for scientific purposes, instead of primarily in the interests of the fur trade.

The region traversed lies to the east of the Mackenzie and to the north of Great Bear Lake, within the Arctic circle. A short notice of the Anderson or Begh-ula river is to be found in Sir J. Richardson's *Journal of a Boat Voyage* (Vol. I., p. 265), and a brief description of the country in its

vicinity is given by Abbé Petitot, in the *Bulletin de la Société de Géographie*, (Vol. X., p. 173). The map accompanying the article of Abbé Petitot, is the best available of the region in question and may be consulted in following Mr. MacFarlane's route. His course was northward and eastward from Fort Good Hope to the Lockhart River, thence down that river and the Anderson (of which it is a tributary), nearly to the Arctic coast, where he was turned back by the Eskimo. He then returned southward by land, and after examining an additional portion of the Anderson, above the mouth of the Lockhart, together with another tributary named the Ross, he struck across in a westward direction to the Psau de Lièvre or Hare-skin River by which he returned to Fort Good Hope.

Mr. MacFarlane has also furnished me with an additional short general description of the Barren Grounds, to the east of the Anderson River, between that river and Franklin Bay, crossed by him four times in 1862 to 1865 for the purpose of collecting birds, eggs, etc., for the Smithsonian Institution.

Some fossils collected by Mr. MacFarlane in the course of these expeditions are described by Meek in his paper, published in the *Transactions of the Chicago Academy of Science*, (Vol. I., p. 75). These are referred to in my *Notes to Accompany a Geological Map of the Northern Portion of the Dominion of Canada*, (Annual Report Geol. Surv. Can., 1886., p. 30r,) but Mr. MacFarlane's valuable observations were not then available for reference in connection with the compilation of the map. It would now appear from them, that between the Mackenzie River and Franklin Bay, the Devonian and probably also the Cretaceous rocks, came further south than was supposed, covering a portion of the region coloured as Archæan on the map.

GEORGE M. DAWSON.

On the afternoon of June 4th, 1857, accompanied by Jerome St. George, dit Laporte, and four Indians, I started from Fort Good Hope for Canoe Lake, carrying with us such further

necessaries as were required, and we reached that place about noon of the 8th.

In proceeding thither we pursued a northerly course, and on the 5th came to a lake called "Loon Lake," along which we continued, camping that night at its northern end. It is about twelve miles in length, with a breadth of from two to five miles. On the 6th we encamped on the west side of a larger lake, and next day crossed a smaller and halted at the southern end of another, in size equal to "Loon Lake," to which I gave the name of Chief Trader Murray. These lakes, together with a chain of from forty to fifty small ponds or sheets of water, varying in extent from one-eighth to two miles, lie in a flat or valley formed by two ridges of rising ground running parallel with each other, and extending on the southward from within a short distance of the Mackenzie (the country thence being undulating) to Murray Lake, where they subside into a series of gentle hills or eminences, to Canoe Lake. The country appeared to be well timbered in every direction with pines, juniper, several species of willow, and a few small groves of poplar and birch. Marshy plains and swamps occurred at intervals, and the soil, where not composed of moss or vegetable mould, consisted of a thin layer of dark loam, with a whitish clay or reddish sand underneath. Ice was still as firm as ever on the larger lakes, and wild fowl were exceedingly numerous wherever water appeared. On the west side of "Lac Rory" (where we camped June 6) several fossils similar to those found in the limestone forming the Ramparts on the Mackenzie [Devonian] were picked up. The beach was shingly and no rock *in situ* could be discovered in that quarter.

Canoe Lake is larger than any of the above and is of a triangular form, with high banks and hilly ground tolerably wooded in its vicinity. At its northeast end we found the Iroquois, who had the canoes and everything in excellent order. Finding that the river issuing from the lake was too insignificant to admit of being navigated by canoes even of the smallest size, I determined on making a portage

to a part of it lower down, where the Indians informed us it was sufficiently deep. Till noon of the 9th was accordingly spent in doing so, and during the remainder of that day and till the afternoon of the next: we toiled in a river from one to ten yards wide, extremely tortuous in its course, with the navigation impeded by immense quantities of drift-wood. We had considerable difficulty in getting on. The wood had to be cut and afterwards removed before we could proceed. On the afternoon of the 10th it was found utterly impracticable to make any further progress. The drift-wood was in such large piles as would occupy more time for its removal than we could spare. Another portage was therefore decided on. Several Indians who had joined us on our route hither were sent on ahead, with all the 'pieces,' to the junction of this river (called the Iroquois after my steersman) with that coming from a lake known as the "La Porte," and lying three days' march to the north-east of Good Hope, and we made a portage of six miles with the canoes to a part of the Iroquois, on which we launched them. Finding it deeper and clearer of drift-wood we reached its mouth early next day. The Iroquois flows through a flat plain, bounded on both sides by two ridges of ground composed of sand and fragmentary rock, and well covered with pine and willow. The driftwood on this river is doubtless the accumulation of many years. Its course is so very tortuous that any floating wood easily gets jammed between the growing trees on both banks, and thus forms into large piles, so that very little of it ever reaches its mouth.

Halting for an hour, we then embarked the 'pieces' and commenced the descent of Lockhart River (I have named it after a friend and brother officer), finding it much broader and deeper than the Iroquois and the adjacent country better timbered. The river varies in breadth from 50 to 300 yards, the greater breadth occurring near its mouth, where it receives the waters of three small rivers, two of them coming from the westward and the third from the east. A strong head wind greatly retarded us in

descending it. This was, however, effected by noon of the 13th, when the Begh-ula River was reached.

The formation of the banks of the Lockhart for some distance after we fell upon it, consisted of a bituminous coal, resting on a bed of limestone, with an upper layer of vegetable mould covering a bed of from two to ten feet of clay, underneath which the carboniferous stratum appeared. Lower down, the formation was perceived to be stratified shale and the beach sandy, and near its debouchement the banks were composed of a dark blue and gravel-mixed clay. The banks were high and sloping and in parts steep; a few small islands and sandy *battures* occurred, and the current was smooth and swift, broken only by a few shallows which form rapids at a lower stage of the water.

Rabbits were in great numbers, as well as geese, ducks and swans. Two out of seven black bears were shot, six reindeer fired at and missed, and an otter, a beaver, a mink and two wolves were seen. The surrounding country is doubtless a fine tract for fur-bearing animals, and I believe but little hunted owing to its distance from Good Hope, the Hare Indian country being situated more to the southward. The Lockhart is said to be navigable from its source and only broken by a few not very formidable rapids in its upper portion.

The Begh-ula, or Anderson River, was found to be drifting thick and the beach lined with ice. Perceiving a fire on the opposite side of the river, we crossed over with much difficulty and there found an assemblage of some fifteen or eighteen Indians, mostly Bâtard Loucheux belonging to Fort Good Hope. From these we ascertained that the river had only broken up the previous day. I therefore got up my tent, the pickets of which could not be driven home, and employed the remainder of the 13th in engaging some Indians required to make up our complement, as well as in making other necessary arrangements.

It was a party of these Indians who paid a visit to the Esquimaux of this river in April last. They informed us, that on that occasion they had a rather narrow escape with

their lives from a large party of western Esquimaux who had come there for the purpose of trade, and it was only through the interposition of the former, whom they found very friendly, that they were permitted to return. On coming to a halt shortly after parting with the Esquimaux the Indians discovered that one of their number was missing, who, strange to say, had not since been heard of. But more of him anon.

On the 14th June we embarked on Anderson River in two canoes, our party numbering ten in all. The general appearance of the country, to the lodges of the Upper Esquimaux which were reached about noon of the 15th, differed materially from that previously passed. The banks of the river were higher and of a more hilly character, and had a considerable sloping tendency upward, the summits of these hills occasionally presenting a smooth rounded surface covered with moss and dwarf willow, and the slopes with timber of a medium size. In some parts also, on the east side, the summits were perfectly flat, with a few clumps of tall willow. The banks on the left generally consisted of a succession of small hills, intersected by several valleys, through which small streams made their way. The course of the river was pretty direct, chiefly in a northerly direction. Its breadth varied from 500 to 1500 yards, with abundance of water for loaded craft. Very few sandy *battures* or islands occurred.

Some time before reaching the Esquimaux lodges, we were joined at intervals by fifteen of these people, who had been employed hunting reindeer on the slopes and summits of the river banks. They rarely hunt at any distance beyond, probably from fear of being attacked by hostile Indians. When an Esquimaux succeeds in killing a deer, he drags the animal as it falls to the water's edge, into which it is plunged. The hunter then inserts an arrow into the carcass, so that on its floating past the lodges it may be taken possession of for the benefit of the party by whom it has been killed.

On landing at the chief's encampment I immediately marked out a line on the beach, and directed my interpreter

to inform him that if the Esquimaux, in accordance with messages previously sent through Indians, wished to open up and maintain a friendly intercourse with us, it would be expected of them to respect such arrangements as we should deem necessary for that purpose, one of which consisted in not attempting to cross the said line. To this they at once agreed and accordingly ranged themselves beyond it. A small present of tobacco, a commodity of which they seemed inordinately fond, having been made to each person assembled, the objects of the expedition were then entered into and discussed at great length, evidently to the satisfaction of the Esquimaux, who expressed much pleasure at our visit to their lands. They regretted not having been apprized of our visit at an early period of last season so as to have had a large collection of furs against our arrival, but promised faithfully to exert themselves during the ensuing winter. They also informed us that they have two sources of trade—the first with their brethren to the westward, and the other with some Indians whom they were occasionally in the habit of meeting on their hunting excursions up the river, and that the remuneration received for their furs was too trifling to stimulate exertion among them, although foxes were in great numbers on their lands.

The Esquimaux of Anderson River are certainly fine specimens of the race—tall and well formed, active in their movements, lively in their conversation, good-humored, with smiling open countenances, and affable, though, it must be confessed, rather troublesome in their deportment. Their clothing consisted of trowsers of deerskin, with the hair side next the body, shirts of the same material, and an outer shirt or coat, with the hair outside, having a hood fringed with the fur of the wolf or wolverine attached; boots or shoes of sealskin, water-tight and neatly made. The crowns of their heads were closely cropped, and the front hair in a line with the forehead. A few of them also sported tolerable mustaches and imperials. The dress of the women differed only in being ornamented with beads, and in their having a short tail appending to the hind part

of their shirt or coat, which was tied in front. The lofty top and side hair knots, so fashionable among the Esquimaux of the Mackenzie and Cape Bathurst, prevailed here, and in my opinion did not at all tend to improve their appearance. The women are decidedly better looking and cleaner in their habits and persons, so far as I had an opportunity of judging, than the generality of Indian women in the North. Their cheeks were red and rosy, the expression of the face always amiable, and their behaviour in perfect accordance with the latter quality. The kayaks and oomiaks are precisely similar to those in use among other tribes of Esquimaux, and their arms comprised a bow and quiver of arrows—iron, bone and ivory pointed—a spear a long and short knife, and a long prong which they use in darting at wild fowl. There were eight lodges at this place. The covering consisted of half-dressed sealskins mounted on poles placed upright in a slanting position, the interior being covered with deerskins and robes for sleeping. The kettles we saw were of sheet iron and copper, the former large and the latter of various sizes, and had evidently been traded from our Indians. The knives were mostly of English manufacture, but the larger beads were different from those used for the trade of the "R" District. The chief "Pabina" had a common gun and horn with some powder and ball, which he told us he had received from one of the Good Hope Indians who visited the Esquimaux last spring. The gun was marked "Barnett, 1854."

Finding the Esquimaux so very friendly, I somewhat relaxed my demeanour towards them, and accordingly permitted several of them to cross the barrier referred to, at the same time directing the crews to prevent any attempts at pilfering; they however presumed on this occasion, doubtless encouraged to do so by the fear which the Indians evidently had of them, and which from their natural acuteness they clearly perceived. One of them (a Coast Esquimaux) went so far as to steal a silver fox which I had shortly before traded from him, I was at the time occupied in talking to the chief at some distance from the canoes, but on being

made aware of the theft, immediately made up to the fellow, wrenched the skin out of his hand and warned them all not to attempt anything of the kind again. This fellow helped himself to the fox in presence of the Indians, not one of whom attempted to prevent him, I could already see that the Esquimaux looked upon them with contempt, invariably addressing them as "nonga," which, in their language, signifies "spittle." Even Laporte was favored with this mark of their esteem.

On making enquiries of them regarding Captain McClure's despatches, I could obtain no satisfaction; they all denied having seen or heard of any such having been delivered to the Esquimaux, but from the change which the countenances of several of them underwent during the examination, and other causes, I had every reason to suspect that they knew something about them. These Esquimaux are exceedingly fond of written or printed paper, and it has been no uncommon thing with the Indians to exchange their debt bills with them for arrows, &c. It may therefore readily be presumed that McClure's despatches have been cut up, and may thus be, in minute portions, in possession of a great number of Esquimaux.¹ From the inability of Laporte on this and every subsequent occasion to make himself thoroughly understood by the Indians who acted as Esquimaux interpreters, I could not ascertain the origin of this fondness for written paper, or whether they attributed any medicinal or other virtue in its possession.

After a stay of some hours, we again started, embarking the chief in Laporte's canoe so as to facilitate our intercourse with the Esquimaux lower down. Most of his men also wished to accompany us, but as they would have proved a source of much annoyance, I peremptorily ordered them to return. Two Coast Esquimaux were allowed to follow. Until we camped at half-past 10 p.m., we saw several small parties from whom we traded a few fox skins; the women put off to us in their boats, and on receiving the

¹ An account of the discovery of McClure's despatches in 1862, will be found in Hargrave's "Red River," published in 1871.

customary present of tobacco, thanked us and immediately returned, as did also the men, with a few exceptions. These were not permitted to encamp with us, but camped on the opposite side of the river, where they sat up till next morning.

Our encampment lay at the foot of a high hill, moss covered and entirely destitute of wood, its face steep and intersected by small clefts or hollows. These hills occasionally form bends of the river. The banks on the left were, as usual, rather better timbered, the breadth of the river more uniform, the current smoother, and the beach sandy, stony and muddy at intervals. The country was almost entirely covered with snow, and the shores thickly lined with ice, the latter clearly proving that the river had broken up but very recently.

Resuming our course early next morning (16th June) we put ashore at 11 a.m., at a large encampment of Esquimaux under "Dowlas," the head chief of this river (they are governed by two chiefs), who received us very kindly; his conduct then and afterwards was in perfect keeping with this reception. This fine old man labored under an affection of the thorax, which prevented him from making himself heard at any distance; he appeared, however, to possess considerable influence over his people, and we had therefore little or no trouble while we remained at his place. I was here informed that with the exception of a few lodges about two miles below, no more Esquimaux would be seen until we got near the coast, which was still at some distance; and that these Esquimaux were not, in the words of the chief, "too good." Understanding from my interpreters that they were Anderson River Esquimaux and under the command of Dowlas, and also that they had some furs in their possession, I saw no reason to prevent us from going not only down to them, but as instructed, to the mouth of the river, especially as he volunteered to accompany us for the purpose of exercising his authority in our favor. On the contrary, from their being of Dowlas' party, I expected

to find them as easy to deal with as the others, and therefore decided on proceeding.

The lodges (5) above alluded to were reached about 1 p.m. We halted for dinner, and here, as wherever we landed, we were treated to several dances performed to a low monotonous song chanted by the women. The utmost harmony existed among this interesting people, who appeared to feel much affection for their children. We saw very few old people and they seemed to be well taken care of. The married women are all very slightly tattooed, and the men wore the usual mouth ornaments. The oomiaks are taken up the river by means of a line made of walrus hide, hauled by three or four women and as many dogs. We met several boats thus hauled *en route* for above. A large *Inconnue* (*Salmo Mackensii*) and white-fish, both of excellent quality, were here traded. The first-named fish, together with carp, loche, herring, jack, blue and white-fish abound in this river. The Esquimaux use nets made of deer sinews for taking them. Small heras of reindeer were seen browsing on both banks and venison was everywhere in great abundance, in fact, deer were to be had when required.

After leaving last night's encampment, we found the country barer as we advanced and but thinly wooded, willow being more abundant than pine. Two great bends occurred, across which the Esquimaux make a portage when ascending the river. In one spot we observed a bed of shale similar to, but more friable, than that on Lockhart River. From that time until 9 p.m., when it was found necessary to abandon the canoes, the river gradually increased in breadth with longer reaches and a slow current. The immediate banks were at intervals low and muddy, and extended for some distance in an undulating plain to the base of the hilly ground which now ran parallel with the river. Wood at first appeared in clumps, but the country latterly was quite barren, the ground was covered with snow, the weather cold, and not a stick of drift-wood to be seen.

About 8 o'clock we arrived at nine lodges on the right

bank of the river (all the lodges passed were on that side) where I was surprised to find only two men with the women and children, of whom there were 35. They informed us that the others had not yet returned from hunting, and that they had no furs to trade. Embarking under sail, the wind being fair, we were very shortly overtaken by 15 kayaks, to the occupants of which the usual presents were made, but without eliciting any thanks. The dress of these men was observed to differ from the others in being ornamented with beads, and in most of their coats being made of the skin of the wild goat or sheep, animals only to be had in the vicinity of the Rocky Mountains. I supposed that they had received them from the western Esquimaux, and although I noticed that their manner and the expression of their countenances (which was fierce) were anything but prepossessing, it never occurred to me that they were from the vicinity of Mackenzie River, as I had no idea of encountering any of that tribe at this period of the season.

Continuing on we passed another group of lodges, from which upwards of 20 men put off to us, but no women. Finding them very troublesome and in our way, the wind having changed right ahead, I peremptorily ordered them back, and as they would not return I stopped the canoes and caused the crews to present their guns at them (this was the first occasion we had to show our arms), which had the effect of making them keep a little behind; but they persisted in following, and while we were occupied in dealing with another party who met us, those behind came up and joining the last they surrounded both canoes, laying hold of Laporte's, evidently with the intention of dragging it on shore, a proceeding which, after much trouble, aided by the chiefs, we succeeded in preventing. We were constantly joined by new arrivals, who were shouting at a great rate and making much noise, and I now saw that owing to the interpreters not having thoroughly understood what Dowlas told them regarding these Esquimaux, whom we had no doubt were from the westward, we had got into a dilemma from which retreat *with the canoes* was

impossible and that there was at least as much risk in attempting to return as in proceeding agreeably to my instructions. I fully expected to encamp that night on the shores of the Arctic Sea, and should certainly have done so but for the reasons which will after appear.

Determined to go forward at all hazards, especially as from the banks of the river here being muddy and nearly level with the water, covered with ice and no drift-wood—in short, utterly unfit for any defensive purposes, I could not land, and well knowing that the Esquimaux would never resort to extreme measures while we kept on the water, so long as we did not allow them to lay hold of our canoes. With my own canoe we always made our way; not so, however, with Laporte's, despite order after order given him to keep them off he would or could not, and it was therefore necessary for us to protect him in addition to opening up a road through the kayaks before us. Guns were again presented, which had now the effect of making the Esquimaux, if anything, more troublesome than before. Seven guns were held up to intimate to us that they were as well armed as ourselves, and such of them as had none dipped their bows in the water and arranged their arrows before them. These appearances, though certainly indicating hostile intentions, were, I suspected, made at present with the view of adding to the fears of the Indians, and they had the desired effect. The latter now became anxious to be put ashore so as to return overland, of course leaving everything. This I could not agree to, and therefore continued on.

About 9 p.m. we arrived opposite to a large encampment, from which some thirty or forty canoes were seen putting off, which caused the others to close around us, and thereby almost drove us on shore. Extricating ourselves with much difficulty we managed to go on a little further and were about twenty yards from the left bank when the new arrivals approached, seeing whom, six of the Indians suddenly got out of the canoes and made for land on a *batture* which extended for some distance from the shore. The Iroquois and I immediately jumped out,

dragged the canoe to land, and with some trouble I succeeded in making the Indians turn back. They were ordered to re-embark, but refused. Seeing that they would not, I ranged them in a line along the beach with their guns presented, so as to prevent the Esquimaux from landing. The beach at this place was low and flat, the mud knee deep, ice in large sheets, with snow and water immediately in the back ground, not a stick of drift-wood and the position perfectly untenable. The Indians were clamouring to be off, some of them who had been at Peel River recognized many of the Esquimaux as recent frequenters of that post, and "Brulez" also informed me that he had seen the gun and horn of the missing Indian with one of the Esquimaux.

Finding that with these crews I should never be able to get back with the canoes, even if they had agreed to remain, I at length very reluctantly consented to accompany them, and we accordingly set out with all the property, leaving behind only what was too cumbersome to be carried, viz., our stock of dried meat and pemican (5 pieces), tracking line, kettle, tent, oil-cloth, a tin pan, &c. It is but just to state that throughout, the Iroquois and "Crashey" the Esquimaux interpreter, were the only two who duly supported me. Had the conduct of the others, *from the first*, been equally satisfactory, it is my firm belief that we could have passed on and returned despite of the Esquimaux, notwithstanding their notoriously bad character and that they were well armed with guns and other weapons. Their chief object was to get possession of our guns and stock of ammunition which, added to their own, would have made them rather formidable in the event of an encounter with the Peel River brigade. While occupied in giving out the tobacco, ammunition and other trading goods, a number of Esquimaux had landed above and below where we were; those in front of us were prevented from landing by the Iroquois and interpreter. The whole proceedings, after I decided on saving the ammunition, &c., occupied but a few minutes, and it was only on consenting to abandon the canoes that I could at all prevail on the Indians to remain.

The chiefs were, if possible, in greater fear than the Indians. The Esquimaux paid not the slightest attention to what they said. I had ascertained when too late that they were not of their tribe, but from the westward, being some of the same Esquimaux who wished to pillage the Indians last spring. The chiefs wished to accompany us, but I left them with the canoes, telling them that these would yet be demanded at their hands. Their reply was a strong regret at what had occurred and that they had done all in their power to prevent it. It was plain enough to be seen that the party of western Esquimaux whom the "Good Hope" Indians saw last spring, apprized of our intended visit, had returned to their camps and afterwards, with their families and some others, came across land from the westward *via* Esquimaux Lake, and had accordingly prepared to intercept us. The chiefs informed me that this lake only existed as an inlet of the sea. We were also told that a number of the above people usually pass the winter with the Anderson River Esquimaux.

In emergencies of this kind, Indians, or at least those of the Hare tribe, who are the most peaceable in the country, are not to be depended upon. One shot fired while we were on the water would have been followed by the sacrifice of the whole party, and on land, excepting the position was really good, they would all have deserted after the first round even if they could have been brought to fire. The crews were good enough while we had to deal with the Esquimaux of Anderson River, who were merely troublesome and somewhat addicted to pilfering; and, as to those lower down, I was loath to resort to extreme measures, as in any event it was impossible to bring back the canoes, and such a proceeding would certainly have been attended with very bad results. It would have put an end to all future prospects of trade, and they are good with the Esquimaux, not only of this river, but with those along the coast, east and west of Liverpool Bay. I therefore conceived it best to act as I did, especially as I could not persuade the Indians to remain with me.

After being compelled to abandon the canoes, we pursued a course to the westward of the river and at a distance of several miles, so as to avoid the bends in its course as well as any Esquimaux, against whom the Indians now threatened the direst revenge! The country extended in a flat plain or morass covered with slush and water, to the foot of a chain of undulating hills, along which a small deep river flowed. On ascending the summit of the highest hill we had a view to seaward. The outline of the coast was distinctly seen and beyond it what appeared to us to be the sea, of course, entirely covered with ice. The country before us consisted of a series of undulations interspersed with plains of some extent and several small sheets of water.

Continuing on until 6 a.m. of the 17th June, we encamped, finding the country as before described and destitute of timber, a few small clumps of dwarf willow occurring at long intervals. With much difficulty, a few small half dry pine sticks about an inch in diameter were collected, a fire was made and part of a deer, which one of the Indians killed, cooked. Next day, or rather that afternoon, we resumed our course through a country similar in appearance, having a low chain of hills or ridges running in a parallel direction to the right of us. Towards midnight stunted trees became frequent along the banks of several small streams which were passed, in the valleys formed between the hills observed in our descent of the river. The snow was very deep in the valleys, and altogether the walking was dreadfully bad.

From this until the 24th of June, when we reached the Indian encampment at the mouth of Lockhart River, the country was more hilly and better wooded, intersected by numerous small and two middling sized streams having their rise in the south-west. The Anderson also receives the waters of a large lake lying in the Barren Grounds on the left. Reindeer were pretty numerous and as many were shot as we required. Traces of moose were seen for three days below the said encampment. There are no musk oxen to be found on the west side of the Ander-

son. These animals are however pretty numerous in the country to the eastward which is said to be hilly and destitute of wood. A few small lakes were passed on our route. The composition of the hills, when exposed, was of a reddish clay mixed with sand and small stones. Our course latterly lay along the beach where the walking was rather better, and on the 22nd we met six Esquimaux who had been hunting higher up. They expressed much regret on learning what had occurred below, but trusted that it would not be attributed to their tribe which, they stated, had nothing in common with the others.

On reaching the encampment I procured a small Indian canoe, an old rickety affair, but the only one to be had, with which I determined on examining the upper part of the river (Anderson). With this view, as I could not take them with me, I paid off most of the party, who proceeded overland to Good Hope, and by whom I forwarded the trading goods and furs. On the 25th I set out accompanied by the Iroquois, Laporte and two Indians. One of the party steered the canoe, the others tracking in their turn, but always walked along the shore as the canoe was too small to carry them. On the 29th, Laporte and one of the Indians were sent home as I found that I could as well get on without them, and the remainder of the voyage was performed by the Iroquois and Brulez.

After leaving, we found that the river trended to the eastward, the banks were well wooded, low, and composed of clay and alluvial mud, the current smooth, and the river deep but not so broad as below. The country also differed in appearance. On the 27th we encamped above a shallow part of the river which the Indians dam up with willow, &c., in the fall of the year when the water is low, and by this means take immense numbers of inconnues, white, jack and other fish. The banks on the left (E.) at this place are composed of a blue slaty marl and stone probably resting on a bed of limestone. About noon of the 28th we encountered the first rapids, three in number and small. We had however to make a portage. Several more rapids were thus met and

passed the same day. On the 28th another succession of more formidable rapids flowing over a rocky bottom were met, and next day we encountered several more, and at one part also, where the banks were high and perpendicular, a portage was rendered necessary. The breadth of the river in the intervals between each succession of rapids varied from a fifth to half a mile, but contracted considerably where these rapids occurred, in some instances being less than 100 yards. The banks were now high and tolerably wooded, and the country had a flat appearance, occasionally diversified by low ridges of rising ground. The rapids generally occurred where the course of the river assumed a south-westerly tendency. Ice was still in large quantities along the beach, rendering the tracking anything but good. Our canoe also delayed us very much, it being so frail and leaky as to require repairs several times a day.

In general, the banks of the river, where no rapids occurred, were composed of clay mixed with sand and fragmentary rock; but along and in the vicinity of rapids the formation was limestone containing fossils, frequently resting on a bed of harder rock, and often overlaid by a stratum of blue slaty-marl or clay-slate and a species of pudding-stone or soft sandstone. A few boulders were also passed as well as a small sulphur spring.

On the 1st July we encamped at the foot of a long succession of rapids, being the first seen since the afternoon of the preceding day, where we shot a moose-deer. A portage of two miles was made next morning and the mouth of a small river coming from the south-east passed. Late in the evening we encamped at the foot of a defile of high perpendicular rocks through which the water flows with great velocity, forming numerous rapids, some of them rather formidable. The river here is about 30 yards wide. A portage of six miles had therefore to be made the following morning (the 3rd). I have called this defile the Lower Ramparts on account of its resemblance to the Ramparts near Good Hope on the Mackenzie. Shortly afterwards we

ascended a small rapid and made another portage, above which we began to perceive indications of coal along the beach. The banks were here of a dark blue clay in which thin seams of coal were observed. A number of boulders similar in size to mill stones, but rounded on one side were also met with. They had evidently tumbled from the left bank, higher up, where the formation was clay and gravel mixed with like stones. Continuing on, our course being more southerly than before, we passed another sulphur spring flowing at the base of a rock, and encamped a short distance above the mouth of a river having its rise in the south-west, which will be described hereafter, and to which I gave the name of Chief Trader Ross. The breadth of the Anderson was now from 50 to 400 yards, and we had many narrow escapes in the smaller rapids which were mostly ascended with the line. The canoe had also become so very leaky that it was only by constant baling and frequent repairs that we could at all get forward.

Resuming our course next day (July 4th) by making a series of portages equal to two miles, we then had some fine water until the afternoon, when we encountered another defile of rocks similar to, but lower than, that lately passed. Several long portages had to be made, but not before our canoe had become nearly useless. It was so very frail and leaky that it was impossible to proceed farther up the Anderson, it being rapid to its source. Another such day as the last would have completely finished our canoe. The Indian Brulez informed me that the Ross River had its rise in a "Great Fish Lake" lying to the eastward of the La Porte, and that it flowed through a chain of smaller lakes, and was broken but by a few rapids. I therefore decided on proceeding by that route, in order to examine the adjacent country, and be able to report on any advantages that it might possess over the others, as a means of communication with the Anderson. Before leaving the latter, however, the Indian and I set out next day to examine a portion of it beyond our encamp-

ment, which we did for several miles, finding the river narrow and very rapid. We also perceived that it assumed a south-easterly course, which he informed me it maintained until near its head. He also stated that the distance thither overland was about three days' march. I conceived also that I was now on the nearest point of the river to Good Hope. A log-stick marked with a cross was made, and we returned to the camp, where we found that the Iroquois had patched up the canoe. We then dined and retraced our steps to Ross River, which was reached and ascended for several miles. A few small rapids were passed near its mouth, but there was abundance of water higher up—breadth from twenty to fifty yards, with a smooth current, the banks high, sloping and partially timbered.

The country along the Anderson was latterly very well wooded, and some goodly pines were seen. We also saw several rafts which had been used by Indians in crossing last spring, but no Indians were met with. This quarter is seldom hunted by them, their wintering grounds being situated more to the westward. The tract of country embraced by a line drawn west from the borders of the woods on the Anderson to the Mackenzie, southward to the Peau de Lièvre River at Good Hope, is very well timbered, and doubtless rich in martens and other fur-bearing animals, as well as rabbits and moose, and reindeer in their season—and this tract is but partially hunted by the Loucheux and Hare Indians.

The Lower Ramparts are composed of a hard, compact limestone, and the rocky banks seen below and above them, not already described, as well as the Upper Ramparts, are also of limestone, but of a less durable quality. Some blue rock resembling granite was seen at one place, and also a species of shale. No fossils were noticed in the rocks passed after the 29th ult. A few deer and great numbers of geese were seen daily, and moose- and bear-tracks were not very scarce.

On the 6th July, Ross River was ascended to a lake

about twelve miles in length by five in breadth, which we skirted on the north side, on account of the ice that still partly covered it. The banks were of sand, low, and but thinly wooded, and the lake shallow near land. Some strata of shale was observed on the Ross shortly before the lake was reached. On the 7th we had to make several portages over long necks of land to avoid the ice, and then paddled to the side of the lake opposite the exit of the Ross, when we made a portage of four miles through a swampy country interspersed with morasses and small sheets of water to the next lake, the river thither being too rapid for our canoe. This lake we found almost entirely covered with ice, a narrow lane of water only appearing in its centre, which we followed and got safely through, though at great risk, the ice having begun to close on us so that we had to cut our way at one spot with the axe. We then continued along the lake until we reached the Ross. It was ascended next day to another and larger lake. From a sandy knoll at its entrance, we had a view of a high and rocky mountain of an angular form, at the base of which the Anderson is said to take its rise. It then lay N.E. $\frac{1}{2}$ E. of us.

The afternoon of that day and some portion of next was occupied in proceeding along this lake, when we crossed over and made a portage of five miles to another lake, in the vicinity of which we expected to find some Indians. We therefore halted and made a large fire, which was shortly answered by a volume of smoke rising in the east, in the direction of which Brulez and I set out, and reached it in an hour and a half, when we found six lodges of Hare Indians under the Chief, "La Rocque." They were employed fishing on the banks of a small river, which empties itself into the Anderson some distance above the Upper Ramparts. All the rivers and lakes in this part of the country abound with white, blue and jack fish, the former of excellent quality. The summer is passed by the greater portion of the Hare Indians in fishing among the rivers and

lakes in the tract alluded to, until the deer begin to approach the woods, about the middle or end of August. A few of the Bâtard Loucheux tribe hunt along the east side of the Anderson below the mouth of the Lockhart. Their lodges consist of poles placed nearly upright with a partial covering of turf, and their dress and appearance was extremely dirty, thus presenting a great contrast to the Esquimaux, whom they affect to despise. The country in this quarter was sandy and marshy, with several plains and numerous small lakes and its general appearance flat. The Anderson River Mountain was now much nearer and bore E.N.E.

We left the Indians in the evening, reached the Ross, and there encamped. We next day saw three more lodges on another lake, and were supplied with some half dried fish. From this place we made a portage of two miles to a smaller lake, which we crossed, and then reached a larger, along which we continued until we came to a narrow strait dividing it from another lake. These lakes were less encumbered with ice than the others, and our progress, therefore, was better. The country in the vicinity was high and hilly. Small sandy hills or knolls of a conical form were invariably observed near the entrance and outflow of the river, as well as along the banks of the several lakes.

On the 10th we ascended the Ross to the largest lake (named "Colville Lake") yet seen, which was reached about noon and found to be almost entirely covered with ice. We, however, followed a narrow space of water on the right shore, and by means of a few portages we succeeded in getting to the other end of the lake about midnight. On this occasion, while paddling along at a distance of 150 yards from land, the canoe sprung a leak which threatened to sink us, and it was only by very hard paddling we managed to save ourselves. The canoe, however, sunk in four feet of water. It was taken on shore and again repaired. In our course thither it required constant baling, but had at length become useless. The banks of Colville Lake are

low, the soil moss and vegetable mould covering sand, the beach stony, shingly and sandy at intervals. A large hill or rocky mountain (several hundred feet high), destitute of wood, lay at the end (S.E.) of the lake, beyond our encampment, and a chain of lower and well wooded hills encircle the Lake. The river thence to the Great Fish Lake, said to be the largest lake in the Hare Indian country (and now named after Sir George Simpson), which then lay to the west of us, at the distance of a few miles, could not be ascended with the canoe. It was, therefore, determined on proceeding overland to Fort Good Hope. These lakes lie to the west and southwest of the Anderson. Rabbits and partridges were pretty numerous, but very few geese, and no deer were seen after leaving that river.

We set out early on the morning of the 11th July, and had dinner on the summit of the ridge at this end (S.) of the lake, to the right of the mountain alluded to, which was now perceived to be the commencement, as well as the highest, of a chain of similar hills stretching for a considerable distance to the east and south-east. The walking hither was over a series of undulations, gradually ascending as we advanced, the top of each ascent being flat, the ground dry or swampy alternately, well wooded and interspersed with small lakes. This ridge has also a similar descent on the other side. The country thence to another ridge, which we reached next day, was flat and broken by some small mounds and knolls, with lakes and marshes as usual. Until we reached the Peau de Lièvre River, on the evening of the 13th, after three long days' march, the general appearance of the country did not differ very materially. It comprised several valleys lying between ridges resembling those described, and is bounded on the left by the chain of rocky hills before mentioned, on the right, occasionally, by lower ridges of wooded ground. One lake several miles in extent, and numerous smaller ones, were passed, such of them as lay in our path having to be skirted. The soil consisted of moss, vegetable mould, turf and clay, the higher ground being sandy, mixed with clay

and rock. Before reaching the Peau de Lièvre, the said rocky chain disappeared behind us, and two others arose to the south, viz : that at the Sansault Rapid, above Good Hope, and the other on the east side higher up the Mackenzie. The timber consists of pine, juniper, fir, willow, and a few groves of poplar and birch. Some of the pines were of a large size.

From the spot where we halted for dinner on the 11th, we had a fine view of a large bay on Simpson Lake. The ice thereon was still as white and firm as in mid-winter, and the Indian informed me that it never broke up until late in the season. The banks appeared high and well timbered. He also informed me that its waters were deep and of a bluish color, and its shores rocky. A great number of families pass the severe months of the winter on this lake in which fish are obtainable all the year round.

Finding near our encampment a raft which had been used by Indians in crossing the Peau de Lièvre, last spring, we launched it and continued the descent of that river until noon, when we found an Indian canoe on the beach. This we repaired, and going on much quicker with the paddle, we arrived at Fort Good Hope late in the evening of the 14th July, after an absence of forty-one days—the Indians sent home having preceded us by nine and Laporte by seven days. Had we not lost our own canoes, this trip would have been performed in less time, as most of the rapids on Anderson River could have been ascended with the line, and all of them—one only excepted—might be run by a North canoe.

From the date of our departure until the 3rd of July we had but a few hours of rain or snow, the weather being always fine. After that date we had rain and cloudy weather until we reached the Peau de Lièvre, the descent of which was effected under a severe thunderstorm, accompanied by torrents of rain. The prevailing winds were from the north and northeast. It was also misty at night near the coast. After leaving the Anderson, musquitoes were in

myriads, and proved very annoying. Vegetation had made considerable progress during our journey.

The natural history of the tract of country examined resembles that of the Mackenzie. We observed moose and reindeer, black bears, otters, wolves, wolverines, siffleurs, beaver, musquash, marten, mink, squirrels, rabbits and foxes; also frogs and mice; Canada, laughing, snow and Esquimaux geese, stock, king, teal and long-tailed ducks, divers, loons, swans, hawks, owls, swallows, gulls, plovers, robins, snow buntings, willow grouse and white partridges, or ptarmigan; white, jack and blue fish, grayling, inconnu, carp and loche.

The Barren Grounds to the East of Anderson River.

The belt of timber which at Fort Anderson¹ extends for over thirty miles to the eastward, rapidly narrows and becomes a mere fringe along the Anderson River and disappears to the northward of the 69th parallel of latitude. The country is thickly interspersed with sheets of water varying in size from mere ponds to small and fair-sized lakes. In travelling north-eastward toward Franklin Bay, on the Arctic coast, several dry, swampy, mossy and peaty plains were passed before reaching the Barren Grounds proper. The country thence to the height-of-land between the Anderson and the deep gorge-like valley through which the Wilmot Horton River (MacFarlane River of Petitot's map) flows, as well as from the "crossing" of the latter to the high plateau which forms the western sea-bank of Franklin Bay, consists of vast plains or steppes of a flat or undulating character, diversified by some small lakes and gently sloping eminences, not dissimilar in appearance to portions of the north-west prairies. In the region here spoken of, however, the ridges occasionally assume a mound-like, hilly character, while one or two intersecting

¹ Established on Anderson River in 1861 and abandoned 1866. Approx. Lat. 68° 35'.

affluents of the Wilmot Horton flow through valleys in which a few stunted spruce, birch and willows appear at intervals. On the banks of one of these, near its mouth, we observed a sheltered grove of spruce and willows of larger growth, wherein moose and musk oxen had frequently browsed. We met with no more spruce nor any traces of the moose to the eastward, and I doubt if many stragglers range beyond Lat. 69° North.

The greater part of the Barren Grounds is every season covered with short grasses, mosses and small flowering plants, while patches of sedgy or peaty soil occur at longer or shorter distances. On these, as well as along the smaller rivulets, river and lake banks, Labrador tea, crow-berries and a few other kinds of berries, dwarf birch, willows, etc., grow. Large flat spaces had the honey-combed appearance usually presented in early spring by land which has been turned over in the autumn. There were few signs of vegetation on these, while some sandy and many other spots were virtually sterile. * * * Traces of the dark bituminous formation seen on the Lockhart, Anderson and Ross rivers, of the 1857 report, no doubt exist along the Wilmot Horton River and the greater part of Franklin Bay, especially to the north of our camping point [near its southern extremity.] The foregoing Barren Grounds are chiefly composed of a peaty, sandy, clayey or gravelly soil, but stones are rare, and rock *in situ* (limestone?) was encountered but two or three times on the line of march from the woods to the coast.

