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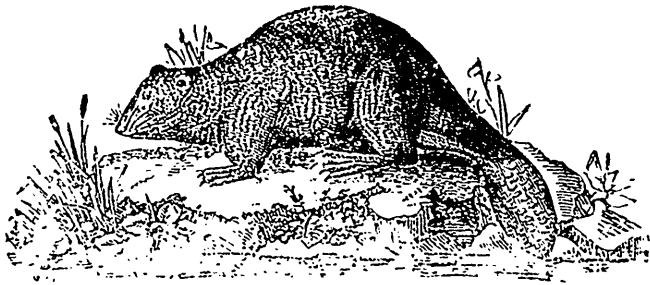
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October, 1893.

THE
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VOLUME VII. No. 7.



THE BEAVER (*Castor Canadensis*, Kuhl).

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NARRATIVE OF A JOURNEY IN 1899, FROM GREAT
SLAVE LAKE TO BEACHY LAKE, ON THE
GREAT FISH RIVER.

From the Journal of Mr. James M. Kinley, officer in charge at Fort Resolution, H. B. Co.
By D. B. DOWLING, B.A. Sc.

(Continued from page 92.)

the walking on the ice very bad. Collected all the small drift willows at the points passed, as there is no wood here. Made about five or six miles and camped on a low point a short distance from a small river that falls in on this side the lake. The banks of this lake appear to be low and covered with grass, gradually rising as they recede from the lake. The Indians are now nearly all carrying canoes on their sleds, picked up here and there, where they had been cached on the route.

“ June 27th. - Followed the north shore of the lake, and found it nearly level and good walking, but had to take the ice to avoid streams which were open. The north shore continued level, but we crossed a deep bay where the hills came to the lake again. Here we camped on a small island after travelling about eight miles. Willows, etc., for firewood, have to be carried on our sleds from wherever they can be picked up.

“ June 28th. - Started off again in a north east direction, making about eight miles. We have kept the north side of the lake all along. It is indented by many long bays, and dotted with islands. A greater portion of the hill sides are grassy slopes, and the level plateaus covered with moss and grass, with here and there ridges of rocks and stones. There seems quite enough feed for horses and cattle in summer, but there is not a sign of anything in the shape of bushes large enough to make a fire. Moss is the only thing in this region that will burn. The canoe route to Slave Lake stretches away to the south east, through an arm of this lake, then through several other lakes connected by the Lockhart River, to the eastern end of Slave Lake. From the western extremity of McKay Lake to the eastern end of this lake is about one hundred and fifty miles, general course, east and west, all of good navigable water. The route to Fish River from here is north east to the end of the bay running in that direction, then a portage of some length to the headwaters of that river.

July 1st. Started late on account of fog, but made the end of this day, called Sandy Bay, which we have been following, and camped on a high bank of sand. Close by to the north of us, a range of sandy hills and banks runs east and west, at the foot of which a small stream, one of the sources of the Great Fish River, runs. The country in sight and surrounding, consists of prairie ridges, with most of the hollows occupied by small lakes. We have finished our sled work, and as our large canoe is in good condition, we are prepared for a trip down the river, having plenty of ammunition and fishing gear. We will probably have a few days delay where we finally part with the indians, getting shoes made and meat dried to cache along our route, to insure our way back.

" July 2nd. Remained in camp at Sandy Bay, repairing canoes, dressing leather &c.

" July 3rd. The indians with their small canoes, portaged to the south west, crossing a narrow lake on the ice, and then turned northward, and camped when they reached the river. Our men passed down by the small river, but had much trouble getting through, breaking the canoe shortly after starting, as the river was very shallow and full of stones. Seven portages had to be made, and much time spent following the open waters on the margin of the larger ice covered lakes, so that it was about two o'clock when they joined the camp. The camp on Sandy Bay is probably not over four or five miles from us here, in a straight line to the southeast. Among the rocks on the river bank, there are enough dry sticks for firewood. No pines of any description are to be seen, nothing but willows; but they grow to a good size for this quarter. The country is a rolling prairie, with more moss and stones, but less grass than the prairies south. The banks and bed of the stream, are stoney, widening out here and there into narrow lakes, connected by the river which is there generally rapid.

" July 4th. -- Portaged the canoe over a bad part of the river, to a lake, around the edge of which there is a narrow passage. Striking inland, I crossed a couple of small streams falling into this river, and saw a large lake to the west. The country is grass covered ridges, with here and there, mostly on the margins of small lakes, piles of rocks. The course of the river to-day, is about due north, or, which we have

made only about five miles, camping at the mouth of a small branch entering this lake expansion, which is called Musk Ox Lake.

“ July 5th. —Started off again this morning, but made poor headway, as the canoe has to follow the shore line, where there is only a small passage free from ice. We made probably four or five miles on Musk Ox Lake, which lies nearly north and south, and is from a mile to a mile and a half in breadth. This shore of the lake is pretty much the same as that seen yesterday, being bordered by grassy hills and valleys, but from here north is yet more hilly and rocky. The eastern shore appears rough and rocky ”

Near the northern end of this lake, there appears to be a favorite crossing for deer, that being possibly a narrower pass, and as there is an island there the deer in swimming has a resting place in the middle of the swim. Here the indians expected to make a big hunt, or to slaughter great numbers in the water, and thus make a supply of dry meat for the trip onward. From the hides they make their shoes, and often other articles of wearing apparel. Consequently the party halted here, moving their camp the next evening a few miles further north, to a commanding position overlooking the probable place of slaughter. A party consisting of a few hunters had been despatched a few days previously to this place, but very few deer had been seen and consequently the hunt was not very satisfactory. This necessitated a much longer delay than was expected, and any game that could be had was taken. Generally the Musk Ox is not relished as an article of diet, but they were compelled to shoot numbers of these animals to supply the larder. Of this lake and vicinity the Journal says :—

“ To the east of our camp across the lake, are the Musk Ox mountains, more properly hills. Northward the country appears to get wild and rocky again. At a distance of three or four miles, a ridge of hills runs north and south, at the foot of which is a river flowing from the westward out of a large lake to this river. The rocky ridge on which we are camped extends to the north west, and from a hill on it, a couple of miles out, can be seen the west branch of this river, of about the same size as the one we followed, flowing in a large valley, apparently a mile or two in breadth, sloping up

gradually to the hills by which it is bordered. A smaller stream flowing from some small lakes in sight, joins the river just below this place. A few remains of snow drifts still are to be seen here and there, but the country generally appears green and fresh."

Several very stormy days on which it snowed pretty steadily, kept them all in camp, after this they decided from the small hunt to move on, so that after a stay of eight or ten days, they were again going northward. The river leading from the lake was very shallow and nearly impassible, so a portage, two miles and a half in length, was made northward over rocky country, to a lake, apparently in the same chain. Camp was made on the shore of this lake, and on the morning of July 18th, they started in the canoe again.

"Found the lake to be of about two miles in length, just as the river leaves it there is a rapid, in the centre of which is a small island on which we made a portage. Onwards, we found the river the whole way, with the exception of three small rapids, two of which we ran, more of the nature of narrow lake expansions than a river. It has very little current, and is very deep, with a width averaging two hundred yards. We passed through two lakes beside the one on which we camped last night, of two or three miles in length. On both sides of the river the country is rough, being covered with hills and bluffs of grey rock and stones. The general course of the river is north east. After having made eighteen miles we camped at the point where the river leaves the third lake, on the western bank where there is a fine sandy beach with a grassy bank rising to a hill behind. This Mr. Pike and I climbed and from there we had a good view ahead. The country we found fine and smooth, again with grassy ridges and valleys.

"July 19th - Starting out, we found a strong current with small rapids widening out again, after about a mile, into a long narrow lake possibly ten miles in length. A river from the west was noticed shortly after leaving camp. The banks on both sides were rocky. Leaving this lake the river flows for three or four miles with strong current having three or four rapids all of which we ran, then we enter a small lake on which, on finding a fine sandy beach on the east shore, we camped. From the north end of the long lake the country is pretty level prairie

with sandy hills and plenty of grass. A little before we reached the lake another stream enters from the west.

" July 20th. Remained in same camp. From a hill back of camp saw a large lake still apparently covered with ice.

" July 21st. Paddled to the end of the lake, about a mile. Here a ledge of rock runs across, to pass which we were obliged to portage everything, then we cross a small lake perhaps two miles long, entering the river again. It has here a small current but no real rapids. In a very short distance the river expands into a lake of a mile in length, then contracting into a narrow channel with a rapid. Thus we ran light, portaging the cargo. From the foot of this rapid the river widens out with a sluggish current for two miles, then a lake expansion for another two miles. To this point the morning's course has been nearly due north. From this lake we enter rough water, two miles being nearly all rapids. The upper half it was impossible to run so portaged but ran the lower half and entered a narrow winding lake, on which we made three or four miles and camped on a sandy ridge. A great deal of the country passed to-day consisted of benches and ridges probably grass covered, the banks of the river and lakes being high enough to conceal the view. Near the camp the banks of the lake become much lower being merely a long grassy slope to the sandy beach. There is very little wood in this part of the country and we have to use moss and green stuff for fire.

" July 22nd. --About four miles' paddling brought us to the end of the lake—direction about due north—then into the river again for about a mile, strong current but deep and good, we then cross a small lake of perhaps two miles in length. Here we turn to the east, the river flowing out of a bay at that end."

Here the party discovered an abandoned camp where the Esquimaux had spent some part of the previous season. After searching the place carefully, the indians determined the probable date of their departure and also the time of occupation, number of families and other details. Starting again the river was followed for nine or ten miles and found to be a large and deep stream, with strong current flowing through a fine prairie flat, with hills which appeared

smooth and grass covered, standing well back from the river. Then they entered a small lake on the north shore of which they pitched their camp under a rocky hill. Here there was fortunately a good supply of willow for fire wood. The prairie tract through which they had passed was sandy and dry, while near the rocks which they seem to have reached again more scrub willow is found growing in the sheltered corners where there is a little soil. The general course since leaving the Esquimaux abandoned camp "has been well to the east." The river leaves this lake at its north eastern end and is noted as consisting of alternate stretches of small lake expansions and narrow channel with strong current. There are two rapids but both were run. The series of lake and river stretches are estimated at ten miles. Beechy Lake is then entered upon and here on July 23rd the party had lunch after crossing over to the north shore. Before camping that evening they travelled eastward along the north shore of the lake about ten miles. Finding no further signs of the Esquimaux in this direction, they concluded they were on the wrong trail and decided to start again at the abandoned camp. This was done and they succeeded in finding the route by which the Esquimaux had come, viz. by a small stream from the west. They were then certain the Esquimaux were only to be found near Bathurst Inlet and as the party had not the time at their disposal to make the journey across country to the Inlet, they turned their faces homewards. The eastern route by Clinton Golden Lake, Artillery Lake and a small chain of lakes was taken to the western end of McLeods Bay, where the Companys' boat was waiting their arrival.

The first pine tree they saw on their way back was noticed on the river between Ptarmigan Lake and Artillery Lake and the first clump of pines about twenty miles down Artillery Lake. Of Artillery Lake Mr. McKinley has given a short description. "The lake lies nearly north and south, and at the northern end, in fact for most of its length, it is seven or eight miles wide. For about twenty miles the banks on both sides are prairie, but from that point the west shore is pretty thickly grown with pines of a fair size. The east bank throughout is prairie except here and there a few pines in a sheltered spot." The southern end of this lake was reached on the 13th of August and the Great Slave

lake on the 15th. The journey down the lake was made under more favorable circumstances than in the spring, they had now a large boat with a crew of indians, and waiting for favorable wind, they could make the run in about three or four days. They left the camp at the east end of McLeods Bay on the 19th, and camped on the evening of the 20th near the point of their departure from the lake in the spring.

ZOOLOGICAL NOTES.

BARREN GROUND CARIBOU, *Rangifer Grœnlandica*, Linn.—On the present expedition the party lived almost exclusively by their guns, and as the most abundant, largest and best of the game animals was the caribou, the Journal is very exact in the account of the numbers seen and shot each day. This, of course, would vary in different localities.

This animal is essentially a rover, moving southward in the latter part of summer, wintering in the partly wooded districts and returning northward in the spring early before the ice is gone from the lakes. This season they had evidently started before the expedition, as none were seen along the north shore of Slave Lake nor on their trip inland until they were past Lac du Mort on June 1st. After this the party were not in the desperate straits recorded in the Journal up to that time. By following the bands of deer they were able to supply their larder whenever needed. Their dogs were better fed and stronger. The deer here seem to be all males and Mr. McKinley explains and states the fact as follows:—"They are the bucks on their way out after the does which have left some time ago to have their young near the sea coast. They (the bucks) move out as the snow disappears and meet them out on the barren ground on their return."

Their movement northward was at about the same rate as the travelling of the party of hunters. Occasionally these had to hurry up to get among the deer again. On July 12th, after a stay of ten days on Musk-ox Lake, they concluded the deer were nearly all north of them as they had been unsuccessful in killing many at a well-known crossing. On the 10th of June a note is made that the horns on the bucks were then a foot and a half in length and were much prized by the Indians as an article of diet.

The MUSK-OX, *Oribos moschatus*, Linn.—This is an animal that inhabits only the barren or treeless area of northern Canada. As will be seen from the Journal in regard to the appearance of the country passed over, the treeless area is not entirely barren, but in many places sustains bunches of a coarse grass and plenty of moss or lichen, which afford ample food for this great rush of caribou and the more sedate wanderings of the musk-ox.

The barren or treeless area was reached practically before they came to Lockhart River, but no mention of any signs of the musk-ox is made until they reach the small lake on the Lockhart River. Here on the north side were two skulls of animals killed two seasons before by a hunter who was present in the party. The north shore is called by Mr. McKinley "the native soil of the musk-ox."

The first one killed was seen on the north shore of Aylmer Lake. From there northward large numbers were seen as far as the expedition went. They do not wander in such great bands as the caribou, but feed in smaller herds around the hills, moving in search of food. The cows in the summer generally are more together, the bulls feeding apart or in couples.

Of the smaller mammals the following were noticed:—

WHITE FOX, *Vulpes lagopus*, Linn.—No mention is made of any of the party having seen these animals, but that they are to be found is evident from the many holes seen.

"June 30th —White or arctic fox holes we have come across now and then of late. The first we saw on the portage to the Lockhart River."

WOLVERINE, *Gulo luscus*, Sabine.—Mr. Pike shot three, August 2nd, and mention is made in several places of caches being robbed by these animals.

ARCTIC HARE, *Lepus timidus* Linn. var. *arcticus* Leach. The first signs of this animal were observed on Lac du Mort which is not a great distance north of Great Slave Lake. The note is to the following effect:—"Saw signs of the Arctic Hare on the banks of this lake, which is probably as far south as they come. They are now off out again to the open farther north."

The first one seen was near Bear Head Lake, June 3rd. Others were shot, one on June 6, one on June 11, and another June 30th on north side Aylmer Lake.

PORCUPINE, *Erethizon dorsatus*, Linn. —Are rather abundant in the northern timbered area. Mention is made of some being captured on the shores of Great Slave Lake early on the trip.

MARMOT, probably *Arctomys monax*, Gmel. —“ May 29th. Several ground hogs have been trapped. They are smaller than the mountain hog.” North end Lac du Mort.

Of the birds the most numerous was the willow Ptarmigan, *Lagopus albus*. They were numerous around Lac du Mort and were a very important item till the caribou were found. They were likely as numerous farther on but not as much sought for. On June 2nd, “ Their neck is now dark brown, the rest of their plumage white.” June 20th, “ The hen partridge is in summer plumage—speckled brown, but the cock is still white with brown neck.”

Geese and ducks were seen in several places and a general note to the effect that geese and ducks were flying north was made.

Swans were seen going north towards McKay Lake June 3. This may have been the whistling swan, *Cygnus columbianus*.

A small goose, called in the Journal a white wavic, was seen flying northward June 2nd and 8th and feeding in the ponds on June 11th. This may have been the Lesser Snow Goose, *Chen hyperboreus albatus*.

A grey wavic was shot on June 9th, and on Aylmer Lake they were seen in large numbers. This probably was the American white fronted goose, *Anser albifrons gambeli*.

The smaller Ptarmigan were first seen on Lockhart River. These are the Rock Ptarmigan *Lagopus rupestris*. “ June 25th. The smaller kind, of which we have seen a few, I believe are more plentiful farther on. They are smaller than the white partridge. The cock bird is entirely white so far, but the hen bird is brown already.”

The Great Northern Diver *Colymbus torquatus*, was seen frequently, and one was shot on June 12th.

The Black Throated Diver *Colymbus arcticus* was shot by Mr. Pike on June 11th near Davids Lake.

METEOROLOGICAL NOTES.

May 7th, Fort Resolution.—Water knee deep on the ice on Great Slave Lake and most of the snow gone.

May 8th, Great Slave Lake.—Wind north, froze hard enough to bear party on the ice.

May 9th, Great Slave Lake.—Cold, party crossed to Island.

May 20th, North shore Great Slave Lake.—Wind north, thawing in the sun.

May 22nd, North shore Great Slave Lake.—Wind north, very cold.

May 23rd, North shore Great Slave Lake.—Wind north, thawing slightly in middle of the day.

May 24th, North of Great Slave Lake.—Wind north, cloudy and thawing fast on the tops of the hills. The snow is mostly gone, except in the hollows.

May 25th, Among hills north of Lake.—Wind east, heavy thaw.

May 26th, Lac du Mort.—Wind north, thawing.

May 27th, North end Lac du Mort.—Wind north, thawing.

May 28th, Near north end Lac du Mort.—Very cold, north west wind with hard frost.

May 29th, Near north end Lac du Mort.—Very cold north wind.

May 30th, Near north end Lac du Mort.—Wind north and cold but calmed in evening.

May 31st, Near north end Lac du Mort.—Wind south and warm.

June 1st, Near north end Lac du Mort.—Fine day but wind turned north in evening and cleared up with frost.

June 2nd, Near Bear Head Lake.—Thawing during day. Wind south west and fine.

June 4th, Bear Head Lake.—Fine bright morning, thawing after midday, a heavy storm of snow and sleet came from north west.

June 5th, Bear Head Lake.—Snowed a little all night and throughout the day. Snow drifting on lake like mid-winter, wind north west.

June 6th, Bear Head Lake.—Fine warm day, wind south.

June 7th, Bear Head Lake.—Snowing in the morning and continued to midday, wind northerly and chilly.

June 8th, Near Bear Head Lake.—Wind north but thawing slightly.

June 9th, North of Bear Head Lake.—Wind north east, thawing.

June 10th, Small Lakes north east of Bear Head Lake.—Wind north east but warm, water on all the lakes and the snow fast going.

June 11th, Blind Mans Lake (?)—Wind north east but a regular thaw, water running in all the hollows, and the snow in slush. Fog came up in evening.

June 12th, Sand Ridge.—Heavy fog in morning but cleared up about 9 a.m. Did not freeze much in night. Lakes forming in all the hollows.

June 13th, Sand Ridge.—Wind north east and raw, with now and again a few drops of rain. A slight fog towards evening arose but later on came very thick and storming. Most of the country is free from snow but large drifts still in the hollows.

June 14th, Sand Ridge.—Wind a little east of north, stormy and a very unpleasant day.

June 15th, Sand Ridge.—Wind north east. Rain, snow and sleet all day.

June 16th, Davids Lake.—Wind north east, storm continued to 10 a.m. then cleared up. Water and slush on portages.

June 17th, Davids Lake.—Wind north east, cloudy, milder.

June 18th.—Wind south, warm, a fine bright day.

June 19th.—Wind south and warm.

June 20th.—Wind north east but light and warm.

June 21st.—Wind north east, light and hot. Vegetation is pushing ahead rapidly, leaves starting on the small willows and flowering plants, in fact green grass showing with every sign of spring.

June 22nd.—Wind south and warm.

June 23rd.—Wind in morning, west and hot, but at midday heavy clouds came up with rain, wind veered round to north east.

June 24th.—Wind south.

June 25th, Lockharts River.—Wind south and fine. River open. Flowering plants are coming rapidly into bloom, and little or no snow to be seen.

June 26th, Lockhart's River.-- Wind south and fine.

June 27th, Aylmer Lake.--Wind westerly, with a shower or two of rain. Turned colder towards night with frost.

June 28th, Aylmer Lake.--Ice on small pools in morning. Wind southerly and fine. The ice on the lake still good and sound, with snow in sheltered spots not melted from the edges yet. All the willows out in leaf and many flowers in bloom.

June 29th, Aylmer Lake.--Wind south west. The day started in with heavy rain and fog, but towards evening turned fine.

June 30th, Aylmer Lake.--Wind south west, fine and hot in the morning. Thunder storm about midday.

July 1st, Sandy Bay.--Wind north west strong and changeable. Fog in morning.

July 2nd, Portage to Fish River.--Wind north west, fine and warm.

July 3rd, Portage to Fish River.--Wind west ; rained early in the morning but soon turned fine. The small lakes are now open but on the large ones there is only a small passage round the edge.

July 4th, Fish River.--Wind south and hot. Saw a loon's nest with eggs. All the other birds are about hatching.

July 5th, Musk-Ox Lake.--Wind southerly.

July 6th, Musk-Ox Lake.--Wind southerly and hot.

July 8th, Musk-Ox Lake.--Wind west and very hot all day, cloudy and close towards evening and lots of mosquitoes.

July 9th, Musk-Ox Lake.--Wind south-west and hot. A few remains of snow drifts here and there, but the country looking green and fresh.

July 10th.--Musk-Ox Lake.--Wind north-west, warm in morning and lots of mosquitoes. Later on thunder with light showers of rain after which it turned very cold and quite the appearance of snow.

July 11th, Musk-Ox Lake.--Strong north wind. Stormy with showers of hail all day. Wind increased in evening to a regular storm.

July 12th, Musk-Ox Lake.--Wind north-west ; still stormy, snowed the whole of the day.

July 13th, Musk-Ox Lake.--Weather still unsettled.

July 14th, Musk-Ox Lake.--Wind west, cloudy.

July 15th, Musk-Ox Lake.--Wind west, clearing.

July 16th.—Wind west, cloudy with showers passing.

July 17th.—Wind south, fine.

July 18th.—Wind south-west ; a very fine day.

July 19th.—Wind south-west.

July 20th.—Wind south-west ; very hot.

July 21st.—Wind north-west.

July 22nd.—Wind north ; strong, heavy mist, hiding distant view.

July 23rd.—Wind westerly and light.

July 24th.—Rained most of night ; wind east with heavy rain all day.

July 25th, Beechy Lake.—Cloudy with showers of rain, wind north-east.

July 26th.—Wind east.

July 27th.—Wind north-east.

July 28th.—Wind north-east.

July 29th.—Wind south-east and very hot.

July 30th.—Wind south-east, rained 2 hours and during night.

July 31st.—Before mid-day began to rain and continued all night.

August 1st.—Wind north-east, rained heavily all day till near 6 p.m., wind north east.

August 2nd.—Wind south, fine day.

August 3rd, Musk-Ox Lake.—Rained at intervals through the night, wind south-west, blowing hard, showers passing all day.

August 4th, Musk Ox Lake.—Wind south-east, blowing very hard all day.

August 5th, South end Musk Ox-Lake.—Wind west.

August 6th, Portage.—Wind north-west.

August 7th, Aylmer Lake.—Wind south-west, fine day ; slight frost on grass and moss.

August 9th, Clinton Golden Lake.—Calm morning.

August 10th.—Wind west.

August 11th.—Wind north-west.

August 12th.—Wind northerly.

August 13th.—Wind south.

August 14th.—Wind south.

August 15th.—Wind north.

August 16th.—Wind light and southerly.

August 17th.—Calm.

August 18th, Great Slave Lake.—Wind south-west, rained heavily nearly all night and well into the day.

August 19th.—Wind north-west, but very light.

August 20th.—Wind west, but light.

August 21st.—Wind north.

CONCHOLOGY.

Edited by F. R. LATCHFORD, B.A.

The presence in Ottawa of the Rev. G. W. Taylor, and his enthusiasm as a student of mollusca life, led the Conchological branch to organize an excursion to the Laurentian lakes on September 22nd. Behind a fine team of bays driven by Landreville, five enthusiastic naturalists left town, as dawn was breaking through a heavy downpour of rain. The vehicle was uncovered, but rubber coats and tarpaulins successfully repelled the attacks of Jupiter Pluvius. With tales of flood and field, of wild adventure on the Fraser, Columbia and Peace, and the prairies of Sumass and Manitoba, the time passed pleasantly and rapidly. The mountains were reached before nine, and to please the botanists present, an expedition was led to a defile, into which the Walking-leaf Fern *Camptosores rhizophyllus* has retreated from the vandals who have exterminated it nearer Ottawa. A few specimens showing the tip of the frond taking root were selected, and the remainder left to increase and multiply, in their own peculiar way. The graceful little *Asplenium trichomanes* and *Aspidium Braunii*, both rare species here, were also noticed. On the side of the mountain where these ferns are found, many land shells were taken. The journey was then resumed in the rain, but frequent halts were made, now to collect a fern or dainty moss, now a Catocala moth, and again a fine specimen of the Ginseng, *Aralia quinquefolia*, whose bright fruit though hidden in the dense foliage on the mountain side had caught the watchful eye

of Mr. Fletcher. The scenery along the route was very beautiful and was enjoyed despite the rain. The road ran round and up and down the old Laurentides, which were clothed to their summits with maples, birches and other deciduous trees, showing softly through the mist all the changeful hues of autumn. As day advanced the rain abated, the clouds broke up, and some descending, hung upon the breasts of the mountains, adding new beauties to the ever changing scene.

Meech's Lake was reached and a brief stop made in one of the intervals of brightness which were ever inspiring the more sanguine with hopes of fair weather; but the rain coming on again, the journey was resumed. Near Mr. Tilley's cottage is a bay where *Limnæa megasoma* was found some years ago, and here a halt was ordered, and fine specimens of the much desired shell was soon obtained. Like other precious things, their number was limited; and the search for them was attended with much difficulty. One of the party in his eagerness lost his foot-hold on a slippery log and took an involuntary plunge into the lake. When he recovered his breath he declared the water was warmer than the air, but no one was thus induced to test the veracity of his statement. The work of collecting went merrily on, resulting in upward of thirty examples of *L. megasoma*, *L. Stagnalis* and *Physa Lordi* were also found. Lake Harrington was sighted about ten o'clock, but the mountain air had so whetted the appetites of the party, that it was unanimously decided to dine forthwith. Mr. Gillespie kindly placed his hospitable farm house at the disposal of the party. Boxes and baskets were opened, displaying all sorts of edible treasures, which, with tea freshly brewed and fragrant, soon disappeared from view. After the good dinner the weather brightened and the rain at last ceased to fall. Owing to a dam recently built across the outlet, the lake was found much above the ordinary level. Shells were few and far between along the shores. A group of islands nearly a mile up was said to afford numerous shells, but on visiting them in a boat, few specimens were found. *Unio complanatus*, *Limnæa Stagnalis*, *Physa Lordi*, *Planorbis hirsutus*, *Pl. Campanulatus* were however noted, and a plant, *Eriocaulon septangulare*, not known to occur nearer Ottawa than Masham.

Returning to the outlet near Alexander's Mill, search was made for *Anodonta undulata*, a fine form of which, resembling *A. Unadilla*

Dekay, was known to occur in the discharge from Meech's and other Laurentian lakes. For a time the stream afforded only *Physa Lordi*, and *U. complanatus*, but *A. undulata* was at last found. As the discovery of specimen after specimen was announced, one member of the party after another made his way into the water accoutered as he was; and soon the strange spectacle was presented, of five able bodied men, fully clothed, plunging their upper as well as nether limbs, into the stream and ejaculating at brief intervals, "I've another." "Every one to his trade, but this palls on me," was the remark of one of the natives, as he stood on the bridge and looked down upon the clam hunters. It would be of interest to know what he thought, and left unsaid. Notwithstanding his adverse criticism, the search was continued until the most avaricious conchologist expressed himself content. And well might he be! *A. undulata* was taken by the hundred, beautiful specimens in every stage of growth. Several *Magaritana undulata* were also found, the younger shells being of remarkable beauty. Time was flying, and as it was intended to visit another locality on Meech's lake before it became too dark for collecting, the return journey was begun at five o'clock, after another hearty meal. What with the rain and the plunging in mire and stream, every article of clothing was saturated. Fortunately the evening was warm and the road excellent. The desired point on Meech's lake was reached while it was yet daylight and a united advance was made into its waters. *L. megasoma* was again taken, and very large *Physa Lordi*. But one of the special objects of the excursion was the extraordinary form of *Planorbis bicarinatus* which Meech's lake and Brome lake of all the waters of America are alone known to furnish. About thirty-five specimens were obtained before a cloud settled down with darkness on the lake. The drive homeward was continued through a dense mist. Wet but happy, the party reached the city about nine, having collected forty one species of shells. The excursion was on the whole, one of the most successful ever made by the conchological branch of the club. L.



SUMMARY

— OF —

Canadian Mining Regulations.

NOTICE.

THE following is a summary of the Regulations with respect to the manner of recording claims for *Mineral Lands*, other than Coal Lands, and the conditions governing the purchase of the same.

Any person may explore vacant Dominion Lands not appropriated or reserved by Government for other purposes, and may search therein, either by surface or subterranean prospecting, for mineral deposits, with a view to obtaining a mining location for the same, but no mining location shall be granted until actual discovery has been made of the vein, lode or deposit of mineral or metal within the limits of the location of claim.

A location for mining, except for *Iron*, shall not be more than 1500 feet in length, nor more than 600 feet in breadth. A location for mining *Iron*, shall not exceed 160 acres in area.

On discovering a mineral deposit any person may obtain a mining location, upon marking out his location on the ground, in accordance with the regulations in that behalf, and filing with the Agent of Dominion Lands for the district, within sixty days from discovery, an affidavit in form prescribed by Mining Regulations, and paying at the same time an office fee of five dollars, which will entitle the person so recording his claim to enter into possession of the location applied for.

At any time before the expiration of five years from the date of recording his claim, the claimant may, upon filing proof with the Local Agent that he has expended \$500.00 in actual mining operations on the claim, by paying to the Local Agent therefor \$5 per acre cash and a further sum of \$50 to cover the cost of survey, obtain a patent for said claim as provided in the said Mining Regulations.

Copies of the Regulations may be obtained upon application to the Department of the Interior.

A. M. BURGESS,

Deputy of the Minister of the Interior.

DEPARTMENT OF THE INTERIOR,
Ottawa, Canada, December 1892. }

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