## News from the Arctic Regions.

SCHOOL FOR ARCTIC OFFICERS.

Lecture Delivered by Mr. C. W. Woodworth, Chemist of the Museum of the College Academy of Sciences, we are permitted to publish the following interesting letter from our friends, Messrs. Kane, Kennicott, now on a tour of scientific research in the Arctic regions:

HOME OF THE ESQUIMAUX, MACKENZIE RIVER DISTRICT, Hudson Bay Co.'s Territory, ——— 18, 1859.

DEAR SIR: Perhaps the last mail, Mr. Rae, chief factor from Moose River district, with nine people, left Fort Simpson in twelve native canoes and, after the manner of Lake Winnipeg from Lake Winnipeg to the Fort. I started from the Fort on the 1st of August, and we arrived here about the 15th, having floated on the large stream we meet and called "a good part of the way." The river up behind three dams at long way; Portage at Cache, we paved two yards a half mile; the Clear Water river is 200 river narrow very beautiful scenery. The Clear Water is narrow and crooked stream, with many rapids and sandbars; the shores mostly high hills, hills rising wooded; Athabasca river, below the mouth of the Clear Water, is one and a half miles wide, but shallow, and with numerous low islands and sandbars. The water is quite turbid, and it runs through an alluvial soil above, as it does all the way below this point we entered at. For some distance after we left the Clear Water, the shores rise into high hills, but farther down, the country within sight is all low, and the appearance brings strongly to mind that of the lower Mississippi. The piles of driftwood, the muddy water, the low shores, the high banks, look very like Mississippi, and the turbidity of the water, and the low islands, are very strong. Many of the trees have broken down by the spring freshets are very large, and evidently grew far up near the Rocky mountains in the southwest. At the debouchure, Elk River flows through an immense marsh, which, like the lower Mississippi, is full of dead trees, and lined with cane, and piled with drift wood, indicating a strong and liberal prospect. The northeast shore of the lake, which is here only 15 or 20 miles wide, is, however, high and rocky—the rock granite. The lake in its bottom is built in a rocky basin, like the lake of the lake. There we passed down a narrow and rapid stream 60 or 70 miles long called Rocky river into Peace or Slave river. The latter resembles the lower part of Elk river, but is deeper and wider; it also is turbid. From Fort Resolution to Slave lake, we coasted around the southwest side of the lake to the head of Mackenzie river, down which we rowed, sailed, and floated in two days to Fort Simpson. The Mackenzie is a magnificent stream, deep, rather rapid, and averaging over 1 miles in width; the shores are high, 20 to 50 feet, but the country back is hilly within sight of the river. In spring, when the ice is breaking up, the water rises some 40 feet above its present level. The water is clear above, but is rendered turbid at this point by the entrance of the Liard, a large river rising in the Rocky Mountains and entering the Mackenzie at Fort Simpson. They are so immense rapids in the Mackenzie, and a steamer could doubtless go from the coast to Slave lake. The first snow fell at Fort Simpson early in October, and we began to drift in the river. Drifting ice the middle of the month. About the first of November the thermometer fell to zero, and, before the 15th, was once 25° deg. below. The coldest ever known here was 33 deg. below, but weather 50 deg. below is not uncommon. Snow falls toward spring, to the depth of three or four feet. The river breaks up late in May or first of June. Slave and lake in the mountains and open till July, though generally by June 20. The tides rises here now after 9 A. M., and sets before 3 P. M.

I dress pretty much in the costume of the country—wear Indian shoes, of course, with one or more pairs of Daffle socks inside. Since the cold weather I wear a pair of moccasin breeches, with fringe—*la sauvage*, and garters fastened by grisly bears' claws! I am not appreciably fatter, but far stronger and healthier than when I left home. Last week I started off with one savage, who did not know a word of English, to make a line of marten traps, and, for two days, while the savage, with fire below zero most of the time, and down to about twenty degrees below on the last day, and night. Our provisions consisted only of dry meat and tea. I was dressed no warmer than I used to be at home for a cold day's ride in early winter, and had only two blankets, one of them a bear's skin. We used to get together a big pile of wood, and make a roaring fire, along side of which was piled a lot of spruce brush for sleeping on, protected from the wind by staking branches to windward. We used have to build, at least, a pound of dried meat, a good, part clear fat, washed down by a quart of tea; after that, I would smoke half or three-fourths of a pipe of "nigger-head tobacco," and then laying one blanket under us, with the other and a small one of the savage's over us, we lay down to sleep with our feet to the fire, till their getting cold, when we would renew the supply of wood. I did not feel very cold, while covered by the blankets at least, though when standing with my back to the fire, so close as to scorch my leggings, my breath froze on my whiskers and beard in the form of icicles, prevent my getting on so comfortably. Twelve months since, at home, I think I would actually have perished from such exposure. To-day, with the temperature 25 degrees below zero, I walk out with bare hands and a light coat, feeling the cold less severely than I have felt it several times during equal exposure at a temperature above zero. So you see I don't intend to freeze to death.

I spent three weeks during September and October in making a trip to Fort Liard river, which empties into the Mackenzie here. Saw one moose, but couldn't get a shot. Killed plenty of spruce partridges and ducks, besides some rare birds and mice, and shot a Canada lynx—put a ball clean through him. We were, for some days, passing along a spur of the Rocky mountains, on which there are plenty of mountain sheep, though I saw none. Got brave of a tall one on a cliff, but missed him, as well as plenty of fresh moose meat. Had a jolly time. Went up in a boat and floated down, with two Indians, in a small canoe—running the rapids in fine style, and sleeping at night in most rascally camps, on frozen ground and rocks, with a scanty supply of fire wood. But all these little discomforts, when taken as a matter of course, don't trouble one much after a little. It is a most egregious error to suppose that people at the north are miserable. I was never in a happier community in my life. If anybody asks another to help him a bit, or to perform some necessary duty, the reply is, "Wait a bit till I have a smoke," and after that is done the other will find it necessary to have a smoke too, and so on, ad infinitum. We have much better than would be expected, having a good supply of tea, sugar, milk, and butter, with bread in limited allowance, and plenty of good venison; at present we get daily dry moose meat and fish, but hope for fresh meat soon. I come out about the 20th of November, and shall, when stamping feet, and think I shall really drink a pint of melted moose tallow on Christmas, as I promised I would. I make a note of this physiological fact, that the muscles of my jaws are developed in an extraordinary manner from eating of old Indian. I can chew moose hide! It is as tough as to demand violent exercise from the jaws.

The Esquimaux, last fall, gave Mr. Rae some swords and a ship's copper that undoubtedly came from the wreck of Franklin's ship. I hope to secure some of those relics. Nothing definite is yet learned respecting Franklin's fate, though circumstantial evidence proves pretty strongly that his ship was crushed in the ice, or, at any rate, deserted. When the necessary part is established on the Anderson, in the Barren Grounds, for trade with the Esquimaux; the whole matter will doubtless be cleared up. Many collections, though not large, will be rare, prove highly interesting to naturalists generally. I have secured, of all some five hundred varieties of birds, mammals, and invertebrates; all of which, from such a locality, must be more or less valuable. I have a number of vertebrates not in any American museum, and some species and genera Richardson, but never found in America, and at least two or three never mentioned at all by him. Of insects, easily, and crustacea, I hope I have still more. Unknown species. But, I have not yet had a really fair opportunity to collect. I arrived here too late in the season. Next spring, on Slave lake, I hope to get more in the one month of June than all I've collected hitherto on my journey.

My plans for the future are as follows: Next March I'll go with Vogt or some other to Fort Resolution, Slave lake, stay there till the boats begin going to Fort Simpson, in August, or else after the bird-nesting season, go to Fort Rae on Salt Lake; make a short trip in the barren grounds near that post, and then to Big Island, at the head of Mackenzie river, and join the boats as they go down. In the fall, if I am alive, nothing shall stop me from going to the Yukon, in Russian America. If I get permission to remain more than two winters in the District, I'll stay at the Yukon till August, 1861, then go to La Pierre's House in the Rocky Mountains, and spend the Fall there; winter at Mc Pherson, making a trip to the Esquimaux on the coast; and in spring walk to Fort Good Hope in time for the boats going from there to Fort Simpson and Portage La Loche. Perhaps I'll stay another year, spending a summer at Fort Halkett, Rocky Mountains, or Dunvegan river at the Mackenzie, and the fourth winter at Dunvegan, near the head of Peace river. If I get permission from the Russian Government, I may come home by way of the Western coast." Yours, &c., W. J. KENNICOTT.

We learn from Mr. Woodworth that the Hudson Bay Company have granted Mr. Kennicott permission to stay in their territory beyond two years; and that the Russian authorities have not only granted him permission to extend his expedition into their possessions, but have instructed their officers and men to render him all the assistance in their power. We are glad "Bob" is lasting so well for his own sake, as well as on account of the good use he will make of all his advantages in the prosecution of scientific research.—[Eds. P. and E.

EXULTING IN DEFEAT.—Gen. George Washington Bowman, who styles himself "Editor and Proprietor" of the Washington *Constitution*, and who is more notorious for his success in securing a fat printing job than for his literary attainments, places the following paragraph at the head of the *Constitution's* editorial columns:

"Whatever else may be affirmed or denied of the late National Democratic Convention at Charleston, it will be universally acknowledged by the friends of the sagacity and patriotism of the Democracy, that the nominee of the Convention, if the nominee shall be elected, will be the nominee of the Democratic States. By the common and cordial consent of the Democracy, any man may safely allow himself that his name should be the nominee of those States whose votes are necessary to his election, and he can, in case of defeat, exclaim with such a feeling of security that it will be a pleasant exercise to see the Democracy of the Charleston Convention, it must be acknowledged that the cliques interest with which Gen. George Washington Bowman is, or pretends to be identified, have no power in the country, and that their political ruin is a fixed fact. They may be politically ruined, but the Democracy of the West has the strength to survive his cliques in his ruin."—*New York Sun.*

ILLEGAL RELEASE OF CAPTAIN FARNHAM, OF THE SLAVE YACHT WANDERER.—The "Savannah Republican" of the 1st inst. says: "Captain Farnham, the Wanderer, went to the jail about 7 o'clock P. M. Mr. Stone, the jailer, was absent during duty as a member of the Republican Rifles. Peter Leddy, the new jailer, was placed in charge. Captain Farnham was in the jail an hour, when the Rifles, returning, the jailer was relieved by the other prisoners. Leddy, on being questioned, said he was ordered by Mr. Stone, the jailer, to release the prisoner, and he did so