## Rambles through Forest, Lake and River.

No. II.

In my last I spoke of some of the trials and pleasures of camping-out in the wilderness, and gave a general view of the trip which I made in July last with Prof. Ganong through the system of lakes and streams which find their outlet in the right-hand branch of the Tobique River in northern New Brunswick.

On the morning of the fifth of July we found ourselves encamped on the lower end of Trousers Lake, twenty miles from the nearest settlement. Our guides had departed, leaving us to pick out our own way through the wilderness. It had taken us two days to cross over that intervening stretch of twenty miles, on a road that tried the endurance of the horses to the utmost, over hills and through bogs, crossing streams swollen by recent rains, and winding occasionally along their rocky beds, removing obstructions from the way, such as "windfalls," and repairing "corduroy" bridges. Occasionally the rain descended in torrents, and every branch and leaf that we touched seemed only too ready to pour down its accumulation of moisture on our devoted heads and shoulders. But what cared we? Did not our "dunnage" bag, securely protected, contain plenty of dry clothing, and did we not see at the end of the day's march the cozy little tent illumined by the blaze of the camp fire, and did not our nostrils already catch the aroma of coffee and our ears hear the refrain, dear to the woodsman's heart, of ham and trout gently sizzling in the frying pan? So we took the day as it came, rain or shine, and the woods echoed with the sounds of genial comradeship—the joke, the story, snatches of song.

Once our guide brought us a fine specimen of a "Jack-in-the-pulpit," or Indian turnip, with a well developed bulb at the base, with whose pungent qualities he did not appear to be acquainted. On our solemnly declaring that it was not poisonous he was prevailed upon to chew a piece of it. When the aforesaid pungent quality "took hold" he probably registered a vow that he would make other victims writhe in torture. But it was no practical joke on our part. Here was an opportunity to teach effectively the name and properties of at least one common plant by the laboratory method, and our guide assured us that he was zealous to begin the teaching.

Before reaching Trousers Lake we passed through a magnificent stretch of forest, where rock maple, yellow and white birch, beech and spruce, vied with each other in height, symmetry and beauty of foliage. The most impressive objects were the white birches, which pushed

their round, white boles skyward to the height of sixty or seventy feet, and the red spruces, from seventy to ninety feet high, straight as an arrow, with tops that tapered symmetrically like church steeples. This is the red spruce, though known to lumbermen as the black spruce. The latter is a smaller and less symmetrical tree, growing usually in swamps, and with a jagged and uneven top.

We were now entering what might he called the great spruce country of New Brunswick; and for weeks after our course lay through interminable dark forests of these trees, intermingled with birch and maple, especially on the ridges, with a few scattering white pines and no hemlock. If our lumbermen would select the largest and best trees for their operations, gathering the tops and branches, with some of the smaller growth in the denser portions, for the pulp mill manufacture great lumber region, and others through the province, would increase in value each succeeding year. The great need in these forests is a judicious pruning of small trees, especially on the low grounds, in order to give an opportunity for the stronger and more shapely trees to grow; and the careful removal of branches and tops to lessen the danger from forest fires. Thus the waste products of the lumberman, which have been the source of so much damage in times past to our forests, and the stunted and misshapen growth of smaller trees in the denser woods, would not only be removed, but much of it made use of for manufacturing purposes. The great lumber country around the Tobique Lakes has as yet been untouched by forest fires. The systematic and intelligent methods of the lessee of these vast forests, Mr. F. W. Hale, is adding to, rather than diminishing, their value from year to year, in spite of the quantity of lumber cut. This is the case in Germany, whose forests, in spite of the large and profitable lumber "cut" each year, are constantly becoming more valuable. And this is the result of trained and intelligent supervision. And so it would be in New Brunswick if similar methods prevailed. Our game and fish wardens should be trained in forestry. It would pay the government a hundred, yes a thousand-fold, to give our game commissioner added authority over forests, give him intelligent and trusted wardens, skilled not only in the knowledge and habits of game and fish, but also in forestry. It would take a little time to train such a body of experts, but the results would be great, placing New Brunswick in a position to preserve and add to what must prove the source of her greatest material wealth-her forests, her game, and her fisheries. At the same time she would place herself in line with those countries which, by wise and effective legislation, are