

THE WATERSHED OF EASTERN ONTARIO.

The following is from Mr. R. W. Phipps' annual forestry report, published by the Ontario Government, and continued from our last issue:

Starting from Lake Nipissing, we find we must climb on the engine to travel along the line newly built. Passing on a little way, we see terrible evidences of fire. Here for miles, far as the eye can follow, is nothing but the bare upright whitening trunks of great dead pines surrounded by worthless brushwood. The pine is of little use after a fire—the worms attack the trees at once, and destroy them before the lumbermen could attempt to save them. Much valuable timber has been lost here. Arrived at the terminus, which, to save cutting, is seventy feet above the water, the southeast bay of Nipissing, stretching broad between its wooded banks, its surface dotted with islands of picturesque beauty, lies before us—the great expanse of water dark and tossing green below—the evening sun touching island and forest edge with gold above. Here, from the mass of logs, across broad, which float far below us, comes a spiked chain running in the bottom of an inclined trough 140 feet long. Towards this the logs are pushed by a pike-pole, they lie on the spikes of the chain, are carried along, and come up one after another, a string of black and wet-looking monsters, reaching from water to summit. Here they will be loaded directly on the cars, and, the five miles of railway past, they can float down the Ottawa.

Descending to beach, the foreman and myself enter a little green skiff and embark on Lake Nipissing, where, three miles along the shore, we are to see a lumber camp just in process of formation. Neither the cars nor the boat are of artistic formation, but the boatman is powerful, the boat flies across the blue waters, and reaches a beach of white sand and covered with stunted poplar and balsam. Here, on a green bank of some height, a space has been cleared, half a dozen tents pitched, trunks, luggage and tools lie all around, and the ubiquitous French cook, his big fire and big kettles, are at work as usual *à fresco* in the centre. This stunted bush is rising on the burnt ruins of a once magnificent pine forest. From here to the far distance there is little but *brule*, the poplar undergrowth, the innumerable lofty trunks of dead and worm-eaten pine. (This low poplar, it may be remarked, is of the aspen kind, and the whole yellow landscape of innumerable acres trembles and flutters in the lightest summer air.) The fire which swept the country here has, however, spared some thousands of good pine trees in this immediate neighborhood, and the object of the camp is to secure those which are sufficiently large. We walk a mile to the rear, and watch the process of erecting the lumber shanty. They have erected, of inferior or worm-eaten pine logs, four walls eight feet high, and are now roofing it with what are called scoops—trunks of pine trees flattened and hewn into troughs, a double layer of which, the upper layer inverted to shed the rain into the lower, forms the roof. Six stalwart choppers are cutting the grooves in these, while every now and then along the track into the bush comes a horse at full trot, his driver running by his side, a fresh flatted log of white pine dragging smoothly on the ground behind him.

Opposite the main shanty will be others for stables and stores, and in a few days the men will be in one, the horses, provender and tools in the others, and the winter work of getting out logs will commence in earnest. What is principally noticeable to the forester's eye in the whole operation is the quantity of tree tops and chips left everywhere on the ground where trees have been felled, thrown everywhere to right and left where roads have been cut already, when work is scarce begun. We again take our skiff and return to our railway terminus, as the shadows deepen over Lake Nipissing. Here we see Mr. Booth, the brother of the senior partner.

We stay here all night, and in the morning by rail, and boat, return to Callender station. Next day we drive a circuit of some miles round Callender, and find settlers located in pine forests, or so near them that one fire is pointed out as having burnt this summer a length of five miles, broadening so as to include

the pine strip in which it was running, but stopping at the hardwood, as is often its manner. Three fires, of which I saw the remains, have occurred in the parts of Mr. Booth's limits supervised by Mr. Cahill this summer. Many thousand dollars' worth have been lost here. Nothing is more pitiful than the aspect of these burnt forests. The pines are spectres—the soil is burnt—all is gone. What is worse is, it goes to obtain so little. The whole farm which is obtained by the burning will seldom give \$50 rent a year for many years.

The next stage is to the north shore of Lake Nipissing. We stay at Sturgeon Falls, and I see Mr. Mackey, who holds extensive limits here.

At the village of Sturgeon Falls, a small collection of new pine houses rising in all directions among a mass of stumps, surrounded by a low forest of balsam and cedar, the stream falls in a succession of small and picturesque cascades. It is now all cleared land here, but this must, when untouched forest, have looked inexpressibly beautiful. Far removed from the sounds of labor, or even the presence of civilized man, a lofty and secluded forest bordered either bank. It was a place where the Genius of the River might have been fancied descending these white and foaming steps overarched with sylvan green. Now, it is a stream falling over some ridge of rock, with a couple of sandy fields on each side.

In a bark canoe, paddled by a boatman at either end, all day long I go up this stream, passing many a mile of forest, yellow with approaching fall, dropping their overhanging leaves into the waves along which our canoe glides, silently, easily, but so slowly as ever to bring longings for the cedar skiffs of Toronto Bay, their rattling rowlocks, the long sweep of their oars, and their treble speed—passing many a clump and stretch of valuable pine, darkening tall against the sky—many a great cliff of overhanging granite, its summit one hundred feet above; its lofty crags disjointed and threatening to fall, but all, firm and loose, covered high with pine, spruce and cedar, growing apparently from rock alone, their roots deep in crevices, their shafts awaying in the fierce winds that sweep along the cliff, but holding tenaciously their place—passing, too, many a long stretch of burned land, where innumerable whitening spectres of former pine trees fill the scene from the river back to the distant horizon—an interminable array of ghastly trunks above, a mass of tangled brush below, red and yellow with the colours of autumn. This roar of rapids is heard ahead, and presently here is a good opportunity of seeing one method by which lumbermen pass these obstructions. Here is a long embankment of high rocks extending diagonally across, over which the river used to plunge at two points close to either bank. Mr. Mackey, on whose limits we now are, has built all along three fourths of this ledge a mass of crib work of heavy logs, faced against the current with a great sheeting of other logs, smooth and flat, stand on the river bed and leaning against the crib work. This, which is 200 feet long, closes up one opening, and runs the river, and, of course logs in the driving season, over the other. Over this the whole mass of the Sturgeon river now goes with terrific force. Even yet this fall is divided—one half—that farthest from you as they stand on shore—falling perpendicularly—the other rushing down aslant—a bright green darting mass against the white foam beyond—as if a great sea monster sprang perpetually through an eternal cauldron—both together falling into a boiling gulf, rising and falling into white cataracts again, till it tears its way past the enclosing rocks, and forms again the quiet river below.

Up this cataract somehow we must get, and now we see the superior points of the bark canoe. I walk along the bank past the falls—the two men easily shoulder the boat and follow, and in the calm river above we embark again, and pursue our way up the stream, till, some miles further, we reach the Smoky Falls, so called from the vast mass of vapor which overhangs them. This fall is of unique beauty. Over high rocks, diagonal, as the other, across the river, the level torrent pours, falls in mass on a great projecting shelf not far beneath, and is thrown outward—a giant whirling semicircle of

foam, falling full below, still confined by another shelf of granite crossing the river bed, and boiling white and over it to the depths beyond, across which, beneath sun, a bright rainbow ever glows—the whole accompanied by a volume of sound scarcely imaginable.

Other sounds, however, rise above it as we look—a perfect uproar of yelling and scraping on the hard rocks—and here are a large party of lumbermen, as many as can cling on all sides of a forty foot boat and pull it with ropes ahead, dragging it by main force over the portage—here a hundred feet rise and fall of solid rock. One of them hurriedly hands us a letter to post, and away they go screaming in French, shouting in English, down the mountain side, to embark again for their winter camp high on the banks. Here on this beach lie all the trunks, barrels, conspicuous are monster ones of molasses—tents and blankets, axes and augers—a mass of material ominous to many a grove of giant pine whose branches the north wind, their visitor for over two hundred years, shall shortly know no more. But we must retrace our steps. On our way back we examine a lumber camp of last winter. It is reached by a path from the water's edge up a gulley to the level. Here is the scene of square timber "getting out," and it shows but too well how much is wasted. Here lie many great logs of good pine, three feet through, spoiled by deep cuts made to see if the heart was sound, without which it would not answer for squared timber, though quite good for sawing purposes. Here are short ends—nine, eight, seven, and four feet, in multitude, cut off to leave a sound stick, left to rot, though excellent for board, lath and shingle purposes. And here, above all, is such a compound mass of heads of trees, lying with their branches drying in the air, across of them nearly, strewn through the woods—such piles on piles of chips and rubbish as to leave no doubt of the inflammable nature of lumber debris. The lying timber in the untouched forest is not so. We advance into it, near by, where no trees have been cut. What is here is not equally dangerous. All is more or less covered with moss or damp. Ignition would be here difficult—there very easy.

From these notes of the preceding journey, some idea will be had of the scenery and surroundings, among which the lumbermen carry on their hardy trade. It would, however, take years to visit, in the manner sketched, all the lumbering regions of Ontario, which are wide stretching and often difficult of access, while the men employed in procuring and sawing the timber form many small armies of no insignificant numbers. It is not uncommon for a lumbering firm to employ from a thousand to fifteen hundred men, and there are many firms. These men will be under the charge of perhaps half a dozen foremen, who will each have his district, his depot for supplies, and his shanties erected at the numerous points where his men are chopping, such as we have seen them some pages back. Winter and summer, throughout immense territories, along a thousand and rough-hewn roads, up a thousand streams, supplies are pushing their arduous way to the lumber camps, with, as Horace says, "what toil of men, what sweat of horses," can scarcely be conceived. All winter the axes resound, the pine trees fall at a million different points, and all summer again great argosies of logs float to Quebec to await shipping for Europe; or, stopping at Ottawa, or some inland point, are saved, distributed through Canada, or sent to States.

In the tour previously partly sketched, (for of course many places were visited, and many opinions obtained, besides what space would allow to quote) I found that two suggestions seem to have presented themselves to the minds of all who considered the question of preserving our fine forests. First, increasing the number of men employed in summer to watch the forest and prevent fires. Next, the setting apart of a portion of territory for forest exclusively.

After placing myself in communication with those best acquainted with the localities, I have obtained the following opinions, which appear unanimous, namely:—That there is but one territory in Ontario south of Lake Nipissing where the last scheme can be carried out, which is a part of the Nipissing District, where there

are between twenty and thirty townships with few or no settlers. There are also there valuable pine forests. Speaking also from a forestry point of view, irrespective of the lumbering interest, I should be glad to see this portion kept in forest, as it is one of the chief watersheds of Ontario, and nourishes many streams flowing north, east, south and west, which, of course, are of great value to the cultivated areas through which they flow. Mr. Russell, of Pembroke, Crown timber agent for the region, defines it as "Commencing at township No. 2 of Nipissing—Elora, Maria, Head, Rolph, Wylie and McKay in Renfrew, extending west to townships Laurier, Paxton, Butt, Hunter and Peck, inclusive." If settlement at any bordering point has made progress, which cannot be to any great extent, the reserving line could be drawn to suit it. Much of the region is unfit for agriculture, but would be very valuable if kept in forest.

It appears to me that throughout the whole country visited, as well as, from report, many parts adjacent, settlers are too apt to locate themselves on soil unfit to be of lasting value for agricultural purposes. It is evident that if this could be checked by directing these men to better and separate localities, it would tend greatly to reduce the number of forest fires, for settlement necessitates the use of fire in clearing, and, especially when at all carelessly managed, the fire is too likely to get beyond control, and spread far into valuable timber. Such men as were retained in summer to watch fires could, I should think, in certain localities, being themselves well acquainted with the country, direct settlers to proper sections, and act in conjunction with the Crown land agent in charge. It has been suggested, also, that if settlers who set out fire were obliged to give their neighbors notice, proof could then always be obtained as to whether it was done carefully or not. The general opinion is that lumbermen, settlers and sportsmen are alike too often careless in the use of fire, and that some measure should be taken to enforce the provision of the Fire Act by all. This, and the suggestion concerning a reservation of land in the Nipissing District, are the two measures I consider needed, as far as the country south of Lake Nipissing is concerned. It is important that some steps should be taken in the matter, as the loss by fire is very large.

AUSTRALIA.

The monthly circular of Messrs. Lord & Hughes' dated Melbourne April 2nd, says:—Since our last circular, dated 11th ultimo, we have to report moderate offerings of all descriptions of timber at auction, and the demand has been met by importers at about prices ruling at date of last circular; imports have been on a liberal scale, and have fully met requirements.

Deliveries from the yards have been regular and large, and the trade generally is in a healthy condition, demand still continues for building purposes, while building allotments at the various land sales are sought after eagerly, the indication of which is continuation of building operations.

RED DEALS.—Imports: 255 standard, 13,250 pieces from the Baltic. The arrivals have been Govalia from Hudikavall, and Veritas from Gothenburg. There have been no public sales since our last advice. Stocks in first hands are heavy and sales difficult to effect.

SPRUCE DEALS.—Imports: 179 pieces spruce, 2,412 pieces Baltic white. Arrivals have been—Ariadne from Boston, and Veritas from Gothenburg. On the 26th ult. the cargo ex Lake Leeman was all sold by auction, 9x3 spruce realizing 2½d. per foot running of 9x3; 11x3 red pine at 3½d., 9x3 at 3½d. to 3d.; the only other sales being parcels ex Haroldine and Penobscot, 9x3 spruce at 3d., 11x3 at 3½d., and 3-7-16d. per foot 9x3.

OREGON TIMBER.—Imports: 1,351,537 feet super. The arrivals have been Dunstaffnage, Nehemiah Gibson and Fleetwing; the cargo ex Dunstaffnage comes to the order of one of the trade, and goes into yard for consumption. The only sale by auction has been cargo ex Fresno on 20th ult., at prices ranging from £6 7s. 6d. to £5 15s.

LUMBER.—Imports: Clear pine, 303,126 feet