ORIGINAL.

No. 3.
FORESTS OF NEW-BRUNSWICK.

That the forest growth which clothes the surface of these Provinces, is not primœval, I am convinced by a number of concurrent circumstances, and that it has been devastated at intervals, is not only congenial to appearances, but according with the traditions of the Indians, and the relations of the earliest settlers. People are living who can recollect a terrible conflagration which commenced its ravages in Maine, and only ceased its devouring influence at the river St. John, destroying nearly the whole forest between the south west branch of the Oromucto and the Bay of Fundy. That territory was, until the fire of 1825, spread with a thick growth of all the different forest trees—the pines of which attained the height of seventy or eighty feet, and a thickness exceeding eighteen inches. Around the Grand Lake and the Washademoak, a growth of trees is seen rather larger than those on the tract above described, but which clearly shew the effects of fire on the soil, not greatly anterior; and it is highly probable that the same fire which desolated the shores of those lakes, extended its ravages south-eastward to the Kennebeccasis, and upwards on the banks of that river to its sources. Modern visitations of so awful a description are more apparent and more easily traced, but vestiges of those which occurred in former times are sufficiently distinct to prove that the most tremendous in extent occurred long before the Province was settled. But the damage occasioned to the timber which was the only loss incurred in those times, was of incalculably less value than the consequences of those of late occurrence, which at one fell swoop, and with electrical suddenness, consumed the labours of a life, and closed the existence of many.

The distribution of the forest is not such as an Englishman accustomed to the *cultivated* woods in his own country, might reasonably imagine; and instead of being tastefully intermingled in accordance with the reveries of St. Pierre, nature has disposed the growth *generally* in stripes, ridges, or groves,—the deciduous tress for the most part by themselves, and changing suddenly—often with scarcely a shade of admixture,—to an evergreen growth. The great distinguishing denominations of wilderness land, as usually understood throughout North America, are hard-wood and soft-wood land, and barren plain. The hard-woods are the birches, the maples, oak, ash, beech, and all the deciduous trees;—the soft woods are the pine, hemlock, spruce, cedar, the larch (though not an evergreen) included. Barren or Carriboo Plains, bear on the peat, which is often many feet in depth, a few scattered stunted spruces, and creeping cranberries, and these parts of the country have yet received no attempts to reclaim the soil. The land which produces the hard woods, is generally good, and is brought into cultivation with the least expense; but both kinds of growth are often found intermingled, and where the wood is large and thrifty, this soil is known to be the best for the varied purposes of the settler. Land covered with a growth of spruce or pine alone, is *seldom* found to repay the outlay of the farmer, although some land of this description on the Richibucto river, near its confluence with the tide, and in some other situations, I have found to be a noble exception. High land, entirely covered with beech, generally proves a gravelly, cold and hungry soil, and every way less desirable for the settler than many kinds of swamp; but that species of growth is found on the low banks of the Porto Bello, covering a whitish clay, and at Buctouche it is the produce of an excellent clayey loam. Clay generally predominates in a cedar swamp, the closeness of which soil, by offering to the spring confer an impermeable bed, affords to that evergreen the moisture it loves. This is not liked by the new settler, but if he can afford the outlay of capital, necessary for eradicating the stumps, particularly if the colour of the clay incline to redness, and then turn up the surface to the joint influences of the summer sun and winds, and the winter frosts and snow, it will be found to repay his labour, in a far greater degree than hard-wood upland. This fact I have ascertained by extensive experiments; but those who are inclined to dispute an anonymous authority, will have their doubts removed by closely observing the natural growth of grasses springing in those parts of the road from Chatham to Richibucto, where a turnpike has been carried through a cedar swamp.

Land of an alluvial origin is generally overspread with a growth of elm, maple, birch, with a few thrifty spruces and firs; and where this growth is found, particularly if butternut trees be interspersed, the soil is invariably of the best quality. The elm and the butternut delight in the alluvion of rivers, and they seem to be the favorite, and almost spantaneous production of that kind of soil; but in some parts of the Province, particularly on the Butternut Ridge, at the head of the Washademoak river, and the settlements of Richmond and Jackson Town, on the steppes or high plains which characterize in so peculiar a manner, the right bank of the river St. John, that kind of growth is found, thickly interspersed with the other deciduous woods on high land. A thick growth of alders, is the produce of a vegetable soil, the creation of moisture and fermentation, and is highly productive of the natural and artificial grasses, but the sub-soil is nearly always a bed of sand, or some other hungry formation.

The alluvion formed by means of salt water, is in this Province of two kinds. The most extensive, and by far the most valuable, are the clayey formations on the œstuaries of the rivers which disembogue into the head of the Bay of Fundy created solely by the deposition of the mud which every returning flood tide bears in solution; and these heavy lands have been reclaimed from the dominion of the sea, by lengthy and expensive embankments. The most beautiful, and the most valuable estate I know of in this country, is an extensive diked marsh, situated at the mouth of the œstuary of the Petite de Mer, and belonging to the Honourable Judge Botsford. The marshes on the tide way of that river, the Eau de Sac, the Memramcook, and the Peticoudiac are of so great extent and richness, that they are the chief source of wealth to Westmorland, and, together with the fresh water alluvion of Majorville, Sheffield, and Waterborough, comprise the garden of New-Brunswick. The alluvial formations on the Gulf shore are entirely changed in character by the waters which periodically lave them, and are composed of a vegetable turfy soil, lying on a sub-soil, consisting of a bed of sea sand, resembling in many of their features, the alluvions found in the woods, producing a growth of alders. This kind of marsh is not considerably improved in productiveness by being diked; although candour compels me to say, that our judgment in this particular, is very probably not sufficiently matured, owing to a deficiency of such improvements, and the absence of numerous experiments.

It will be necessary to inform an old countryman, that the land which he understands by *alluvial*—or if he pleases, *diluvial*, when found on the banks of fresh water rivers and streams, is universally called in America 'Intervale;' but the marshes washed by salt water here preserve the same distinctive appellative as those at home.

The distinguishing features of the face of the country, are the prevalence on the shore of the Gulf of St. Lawrence, of an almost perfect level, the only inequalities of which are preceptible on the banks of the rivers and brooks, which have in the course of ages, scooped for themselves a deep bed; but advancing into the interior, and approaching towards St. John's river on the west, and the Restigouche on the northern boundary, the surface gradually assumes a bolder and more elevated cast. On the isthmus formed by the Gulf on the East, and Cumberland Basin and the Peticoudiac on the West, there are no elevations deserving notice; and in the whole interior, between that rivers northward to the valley of the Nipisiquid, the inequalities are but inconsiderable undulations; but to the southward of the Peticoudiac, the land rises into lofty and rocky aclivities, and is broken into abrupt hollows and deep ravines Proceeding Westward from a line joining the mouth of the Anagance, extending through the interior northward to the mouth of the Upsalquitch, advancing across the St. John to the Chiputnitticook and the boundary line of Maine, the inequalities are lofty and abrupt, frequently assuming the character of mountains, and the forest presenting in an eminent degree, the higher characteristics of soil. Along the shore of the Bay of Fundy the Spruce growth prevails in the woods:—indeed the hard blue rock which there presents an impassable barrier to the mountain wave of the Atlantic, is covered by so little soil, that none but the spruce can derive a nourishment. But along that line of sterile coast, if the labour of the agriculturalist is poorly repaid, nature presents herself to the eye of the astonished traveller, in the most sublime and romantic dress. The Shepody mountain near the upper extremity of the Bay of Fundy, the white granite capped heights which enclose the vale of the Nerepis, the rocky ridges which rise in gradations from the Bay, extending from the Petticoudiac to the Chiputneticook: the beautiful cascades on Poulet river and the Le Proe; the majestic falls near the city of St. John, and the picturesque scenery on the Maguaguadavic and the St. Croix, can not be surpassed in beauty or grandeur in any country, where the exuberance of the natural growth offers a barrier to an extensive prospect.

With a birds-eye, or panoramic view, as seen from the top of a tall pine, standing on high land, the forest assumes a patched, but very beautiful appearance, exhibiting where the evergreens prevail, a deep green tint, and in the deciduous woods, a lighter colour, variegated with all the various shades of green. On such a scene, I have often loved to dwell, and a picture of it would, I am persuaded, besides the merit of originality, be of surpassing beauty; particularly in a part of the country where the surface swells into eminences, and which diversify the sameness by their *oceanic* undulations

The leaves and wood of the overgreens abound with resin or gum, which renders them so highly inflammable, that on exposure to the action of fire, the flames ascend to the top of the tree with a roaring crackling noise. The moss, dry leaves, and dead wood, which cover the surface of the ground, assisted by the wind, communicate the fire to other trees, and if the breeze be violent, no human being can anticipate where the raging element will terminate its violence. But fire seldom ravages in the hard wood, owing to the absence of materials of a highly inflammable nature, which tend to increase its fury; consequently so soon as it may have passed through a spruce swamp, and arrived at a ridge covered with a deciduous growth, an obstacle is opposed to its further progress. But in the event of a long continued drought having prepared every rotten wind-fall into touch wood, and should the fire be attended with a strong wind, the sparks, and ignited bark will be driven through the hard wood ridge, and in a few minutes the next evergreen woods will be in a fearful blaze, destructive of life and vegetation to every thing within the scope of its influence; leaving the trees, and even their limbs standing, but scathed and charred, resembling in many respects the collection of masts of merchant vessels in a very large port. Fire will continue to exist in every rotten log or decayed tree until rain in sufficient abundance to penetrate into all its recesses and concealments falls, and until this auspicious event, no one residing in its neighbourhood considers himself in safety.

The effect of fire on the standing timber, is so superficial, that provided it be cut down and hewed without delay, none but practised eyes can discern the difference between it and that which may have been cut green; but after the next succeeding winter, the worm finds entrance, and will quickly eat the whole of the sap into holes, and render the timber useless.

September 10. W.

TO THE EDITOR OF THE GLEANER.

Sir—Permit me through the medium of your Paper, to enquire, why no improvement has been made this season on the Road between Nappan Settlement, and St. Andrew's Chruch.

The Road between Baie des Vent Bridge, and Richibucto; formerly, in many places a dangerous swamp, may now be travelled with ease and safety, and the same may be said of the line extending between the former and Nappan Bridge. while from that point to Chatham is in a deplorable condition.

We know that a liberal sum has been granted by the Legislature, for the improvement of the *whole* line of Road, *connecting Richibucto with Chatham*, and what we want to ascertain is—why an important part of that *line* has been neglected.

It is certainly of some moment that a good Road