



NEWFOUNDLAND SOILS

The Origin, Derivation and Composition of Soils, considered from a Geological point of View, with particular reference to the Soils of Newfoundland

[By JAMES P. HOWLEY, Esq., F.G.S.]

St. JOHN'S, June 11th, 1889.

P. R. Bowring, Esq.,

DEAR SIR.—The paper on the subject of soils, which I handed you the other day, was written two years ago. It was my intention to have read it before the Agricultural Section of the H.L.E.S.; but circumstances prevented the carrying out of that intention. I was requested lately to have it published. The present would seem an opportune time for doing so; now, especially, when we are about to enter upon railway extension northward, and so much discussion has recently taken place relative to our resources, agricultural lands, &c. One of the chief objects of the paper was to endeavour to remove the false impression as to the character of our soils—to show that they could not greatly differ from those of other countries, being composed of the same mineral constituents, &c. I reasoned purely upon geological grounds, and from personal observation all over the island. As a proof of the correctness of my conclusions, I would draw especial attention to the analysis at the end of the paper, of the average soil in the St. George's Bay district.

It was only last autumn, more than a year after I had written the paper, that I was kindly favoured with a copy of this analysis by Mr. Wm. W. Bonnyn, C.E., &c., of the Telegraph Land Co., who has also recently given me permission to make use of the same. It is a complete confirmation of what I had previously written about the soils of that district, and being such a reliable, independent testimony founded upon actual ascertained fact (analysis), which there can be no gainsaying, should, I think, forever settle the question of the character of the soil in that section of the country, at least.

Yours sincerely,
JAMES P. HOWLEY.

INTRODUCTION.

The cultivation of the soil is one of the most noble occupations of our race. In every age, and in every country, it has justly occupied the foremost place amongst the civilized industries of mankind. No country without agriculture,

at least where such is possible, can claim to be thoroughly civilized. It marks the line between civilization and barbarism. Prehistoric man was, in most cases, a wild, nomadic hunter, eking out a precarious existence from the product of the chase—at times wallowing in abundance, but just as frequently pinched by gaunt hunger and starvation. He required immense tracts of territory over which to extend his hunting invasions in order to supply his needs. The ancient Swiss lake-dwellers seem to have been the earliest European people who attained to any marked success in agricultural development. They had undoubtedly arrived at the culture of cereals by a process of selection from wild stocks which entitles them to our greatest respect. The Celtic race, also, early attained to a considerable progress in agriculture and domestic pursuits. When we turn to Asia and America we again find the Chinese and Japanese of the former, the Peruvians and Mexicans, or Toltec and Aztec races, of the latter, all far advanced in this noble science and, consequently, in civilization, while the more barbarous hordes of both hemispheres were still in the hunter state of existence and utter savages. In fact, agriculture and civilization were so closely allied that the one was the natural outcome of the other. Today it is agriculture which marks the onward march of progress, before which the less stable pursuits of the savage have retreated step by step, and the savage himself disappeared from the face of the earth. What was once the home of the buffalo and wild red man of America, is now converted by this giant industry, into the smiling, golden-cared wheat fields, of the "world's greatest granary."

Here in our own Terra Nova, ^{lately}, of all the civilized countries of the globe, ^{was} agriculture been proscribed. It is true we have improved the original red man off the face of the earth long ago; but, unlike our neighbors, we have not occupied his place. Another dusky denizen of the forest—the Miemac bunter of Nova Scotia and Cape Breton, driven out from his ancient home—has come into the inheritance of the Beothuk, and still roams over our vast interior