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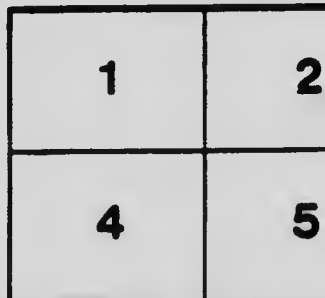
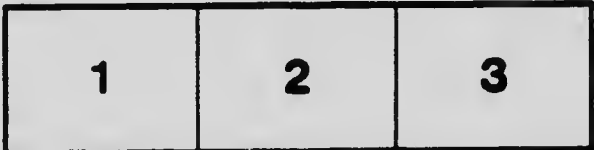
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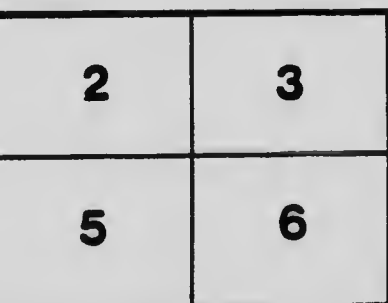
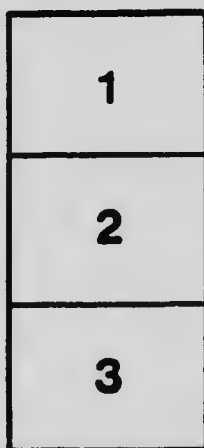
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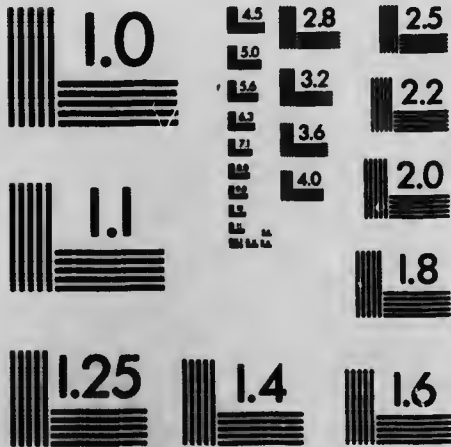
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**RELATIVE TO THE
SOIL AND TIMBER
IN NEW ONTARIO**



As described by
MR. T. B. SPEIGHT, O.L.S.,
President of the Ontario Land Surveyors
in his
Address delivered February 25th, 1913
to the
Association of Ontario Land Surveyors

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RELATIVE TO THE SOIL AND TIMBER IN NEW ONTARIO

Mr. T. B. Speight, O.L.S., President of the Association of Ontario Land Surveyors, and who, for the past thirty years, has been engaged by the Department of Lands, Forests and Mines in surveying and exploring Crown Lands in Northern Ontario, in his address to the Association of Ontario Land Surveyors, delivered February 25th, 1913, after describing in a general way the development that has taken place during the past year in Northern Ontario in the construction of railways, the development of mining enterprises, etc., gave a very full description of the lands in the Clay Belt, of which the following is an extract:—

“In 1900, I was given charge of Party No. 2 to make an exploration of the country north of Lake Abitibi, by running a base line east from the 198th mile post on the Algoma-Nipissing District boundary for a distance of seventy miles to the Quebec boundary. The late Mr. Alexander Niven was given charge of a party which ran west from the 198th mile post for a distance of 102 miles, besides a certain amount of general exploration work. The field examined by these two parties disclosed an almost unbroken stretch of good clay land for a length of 120 miles, and reaching northward a further distance of about 50 miles.”

These lines above referred to are situate thirty miles north of the town of Cochrane, on the National Transcontinental Railway.

"The other parties operating to the west and south discovered continuations of this class of soil, and the now famous name of 'Clay Belt' was applied to the whole region, comprising an estimated area of 16 million acres. This estimate has since been found to have been unduly conservative."

Referring to Mr. Niven's report on his work of 1900, coupled with his knowledge gained in preceding seasons, we find: "Summing up the whole line, it may be said that, from start to finish, it runs through as fine a tract of farming land as can be found in Ontario. Where else in Ontario can a tract of land, 100 miles square, be found all alike, level and good? Muskegs there are in it, of course. Seventy-five per cent. of the whole country could be cultivated, as soon as cleared and the moss burned off, and of the remaining 25 per cent., a considerable portion could be drained and cultivated."

My subsequent work in that region warrants me in fully corroborating Mr. Niven's words, and I am convinced that the Clay Belt, extending at least 250 miles from east to west, and with an average breadth of about 100 miles, comes largely under the same description. In places, sandy and gravelly ridges and areas occur, but this, in most cases, may be regarded as beneficial rather than otherwise, in furnishing material for road improvement, concrete construction, etc., needs which will be felt when settlement is attempted.

Allowing for these deductions, I feel confident that from 65 to 75 per cent. will be found to be good farm land, and that comprehensive drainage will make considerable addition.

Outcroppings of rock, with mineral possibilities, have been found in various parts, the value of which is yet to be demonstrated.

It has been suggested that the report of a surveyor is liable to take colour from the fact that he may desire to justify the expenditure of public money on exploration work. A very slight consideration of such a theory should convince the critic that neither the surveyor nor the Government has anything to gain by placing on record anything which is not honestly believed to be facts. Later investigations could not fail to bring discredit upon either or both, if the straight-forward course had been deviated from.

In view of the above soil conditions, it seems reasonable to conclude that the clay belt of Ontario is more favored than the dead-level clay stretches in Manitoba, where farming has proven so successful. All are more or less familiar with the exhibits of farm produce from the Timiskaming region, and I can find no reason why the results there should not apply to the greater part of the clay belt.

As to the climate, there are, to my mind, no great difficulties to be anticipated. True, the winters are long and severe, but, on the other hand, the long days of summer in that high latitude, which ranges from that of North Dakota to 50 miles north of Winnipeg, tend to promote and mature vegetation at a rate unknown in older Ontario. I have seen at

Alexandria, 50 miles west of Cochrane, the intersection of the National Transcontinental Railway and Timiskaming & Northern Ontario Railway, near the centre of the clay belt, nearly every variety of vegetable and flower common to older Ontario, brought to maturity, and with a yield not to be surpassed in York County. This is not an exceptional case, and it has happened more than once that potatoes, which we saw in process of planting on our journey to the surveys in the latter part of May, had, in the short space of three months, come to maturity, as our menu attested on the return trip.

Summer frosts are experienced occasionally, but was not this the case in the early settlements near Lake Ontario? It has been abundantly shown that the general opening up of farms, the elimination of peaty turf, and the introduction of drainage, work wonders in the way of banishing summer frosts.

In the matter of timber, it is not to be expected that the monarch pines, oaks, maples, etc., formerly flourishing in Southern Ontario, can be found in the North. Instead, we meet spruce, poplar, balsam, tamarac, cedar, and birch, usual, within reach of the prospective settler, but of comparatively small girth and height, except in the vicinity of the rivers and creeks. The clearing of the land is, therefore, correspondingly lighter. The prevalence of moss gives to the uninitiated the impression that much of the country consists of swamp lands, but a more intimate acquaintance corrects it. We find that the first fire consumes a part of the timber and kills the remainder. A second burning causes the dead timber to vanish, and with it the moss, transforming the apparent swamp into a stretch of country requiring the minimum of labor to prepare it for the plough.

Where drainage on a large scale will be found necessary, Nature has, in nearly every case, provided outlets in the rivers which, at intervals, traverse the country.

These rivers constitute a tremendous asset in the shape of hydro-electric energy, a feature gaining rapidly in recognized value. In an exhaustive paper, prepared by Mr. L. V. Rorke, in 1910 this subject was ably dealt with, and while the available data was then necessarily somewhat meagre, detailed information on a part of the Mattagami River has since shewn that his estimates were well founded. I am convinced that within the clay belt not less than one million H. P. will yet be harnessed and used by its inhabitants, supplying them with heat and with power for operating railways and for the many purposes for which it is already being demonstrated that the farmer can profitably utilize power. No doubt, in due course, the details of the potentiality of the various rivers will be procured by the government as has been done in Finland and other European countries.

The first requisite in opening up a district is transportation to and through it. On the southern boundary of this region, the Canadian Northern Railway is now under construction. The National Transcontinental Railway passes through the heart of it, the first train load of grain having been shipped from Winnipeg, Manitoba, to Port Colborne, Ontario, the last day of December, 1912. This new addition to our transportation facilities, although meaning so much in the advancement of a great territory, received but a passing notice in the daily press. The Timiskaming & Northern Ontario Railway already serves a considerable

part of it, and the needs of the country will ensure a continuation of that line to James Bay in the near future. The Algoma Central Railway is expected to be completed as far as the town of Hearst during 1913, and a direct route from Sault Ste. Marie thereby made available.

Railways can, however, serve, directly, only a narrow fringe on either side of themselves, and, leading from them highways must be constructed by the Province.

In my judgment, dairying and stock raising should be capable of successful operation, and will eventually become general in this part of our Province, mixed farming being that which insures against the element of chance entering so largely into a district where any specialty is the sole support.





