

Reclaimed Muck Lands

-BY-

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THE word "Everglade" has become so associated with Florida that to speak of one, will bring the thought of the other. Indeed, so prevalent is this idea, that the dictionary will tell you that everglades are low, inundated lands, covered with coarse grasses, especially the lands of this description in the southern part of Florida. It is an interesting fact, however, that similar lands exist in other parts of the country, the condition of which gives us a good idea of what the Floridian everglades will be, when drained, making due allowance, of course, for a difference in climatic conditions. The Everglades of Florida are semi-tropical, while the other less known everglades are located in our north central states and have a temperate climate.

The recession of glacial waters left the land water-soaked and where the lack of drainage caused stagnant waters, the land became a swamp. In those parts where the water flowed freely, keeping the soil saturated with fresh water, the region was everglade. This distinction between "swamp" and "everglade" must be observed. Only in swamps of stagnant water do we find unhealthy conditions—malaria, miasma, poisonous plants and mosquitoes. Everglade lands are notably free from unhealthy characteristics.

Another distinction to be borne in mind, is the difference between "peat" and "muck." The rich black soil of all these water-logged lands is very largely vegetable matter, made up of the successional growths of aquatic plants. Where thoroughly disintegrated, it is called muck. The term peat refers to vegetable matter only partially decomposed.

Geologists tell us that the region of the Great Lakes was once much

more extensive than at present. Most of Ohio, Indiana, Illinois, Michigan and New York were once under water. The surface of these states is varied, showing valleys and moraines, left by the glaciers, and the mighty waves of ancient lakes which were in fact a great inland sea. The drainage system of the country has changed several times, and rivers are being turned in opposite directions, great bluffs formed by the lodgement of sand and gravel, low valleys shut off and turned into swamp, and deep gullies opened to a depth that exposes a subterranean stream whose power is sufficient to have turned the pioneer grist mills that once existed in these rural districts. The fertile farmlands of the states above named owe much to the everglades which once existed in these localities. The reclamation of these wet lands should (although as a rule they do not) redound to the honor of the sturdy pioneers who emigrated soon after the close of the Revolution, and settled in the "Northwest Territory." The privations which they suffered and the strenuous work of clearing and draining which they accomplished has given to their grandchildren the rich farm lands for which these states are famous.

Among these reclaimed lands of the north, may be named the farming districts of Michigan. The report of the Field Operations of the Bureau of Soils shows that Allagan County alone contains 49,280 acres of muck and peat lands. Around Saginaw are 46,784 acres. Prof. Taylor's monograph on this region, published by the Bureau of Soils, in 1912, gives a very interesting description of the glacial effect upon this region which was once the great inland sea. The

celery belt in Michigan owes its fertility to the presence of muck with sand, all the result of the overflow of this region in by-gone days.

Likewise in northern Indiana there are rich vegetable lands, which as late as 1823 were known as "swamps." The so-called "Black Swamp" extending between Fort Wayne and Huntington, is perhaps one of the best noted. This consists of a stretch of low, black muck land, several miles long and ranging in width from one to two and a half miles. Geologists affirm that this is the bed of an old outlet of the Great Lakes. The current was then turned the opposite of what it now is, through the Maumee River and this old channel to the Wabash River at Huntington, thence to the Ohio River. Nature changed her mind, and by a tilting of the continent sent the waters in another drainage channel, leaving this old channel submerged and without an outlet. It was soon overgrown with aquatic plants, and in time became a great marsh, and gave to the Indian a favorite place for hunting of water birds, and gathering of wild rice.

When the early pioneers penetrated into the northern part of Indiana, the "Black Swamp" was the home of the mosquito, and the cause of the malaria and ague with which the older generation suffered. This is in general true of the whole state of Indiana, which in its virgin state was largely wet prairie and water soaked forest, caused by the recession of glacial waters. For many years the Black Swamp remained a menace to the health of the community, until, in the course of events, the population increased and legislative appropriation finally provided for the drainage of this swamp. It is now the richest farm land in Indiana, producing vegetables, rhubarb and strawberries that are unexcelled, and in the markets of Fort Wayne, Ind., the writer has compared the products from this drained muckland with those of the ordinary dry land in the same county, and found the former to grade fancy, as above the Class A of the dryer land.

An examination of the soil of this

former "Black Swamp" land shows it to be decidedly muck, and when laid beside muck taken from the Florida Everglades the resemblance was very close. A chemical analysis shows them to be, in the main, similar, the Indiana muck having some slight traces of potash which were wanting in the Floridian muck, while the Floridian had a trace of phosphate, which was lacking in the Indiana specimen. The pioneers who grieved that their homesteads contained part of the Black Swamp, and contested that their land was worthless, have left to their descendants a rich heritage, as is shown in one case in which the farmer told us that his father sold his swamp land for the privilege of cutting timber on a neighbor's tract: the neighbor wanted the swamp land to get the pelts of muskrat, mink and other animals in that locality. Now the farmer's son says he would not take any price for the few acres he owns, and wishes he could get back at least some of what his father thought worthless.

Another rich farming district which owes its fertility to its previous water-soaked condition, is the prairie lands of Illinois. The Desplaines River which a few years ago was turned into a ship canal, is also an old outlet of the lakes. When the engineers turned the Chicago and Desplaines rivers backward, they simply re-established an old drainage line. With the clearing that has come as settlements advanced, the wet lands of Illinois have become fertile farm lands, owing to the humus provided by the old muck deposits.

All through Ohio, we find similar conditions. The northern part of the state was once covered by the waters of Lake Erie, while the Ohio River and its tributaries formed another pre-historic lake, the recession of whose waters left many wet valleys. These in course of time were drained and became the farm lands of today. Much of this drainage work was done in recent years. When in the years immediately succeeding the Revolutionary War, Generals Harmer, St. Clair and Wayne marched against the

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Indians of the Maumee Valley, our soldiers waded the swamps and boggy forests, only to be cut down by the hidden foe, as, reeking with fever and ague, ill-fed and half-clothed, they stumbled through the wild, wet growth of these primeval lands. The tragic fate of Colonel William Crawford, was due to the inability of his army to penetrate the morasses of Tymochee, which today is a flourishing farmland region. St. Clair's defeat, near Fort Recovery, and the destruction of Harmar's army at the Fords of the Maumee, were both largely due to the soft, wet muck through which the soldiers waded, and from which they could not extricate themselves when set upon by the allied Indian tribes. The visitor today walks over the same lands, following the old blaze on the trees, and sees the rich black soil planted to luxuriant crops of corn, tobacco, potatoes and vegetable gardens. "Wayne's Trace" is now a much used road through the best farmlands of western Ohio and eastern Indiana.

Fifty years ago, the Germantown District in Montgomery County, Ohio, was a "Black Swamp." The Mohawk valley of New York is a muck deposit,

and where General Herkimer and his handful of patriots intercepted the march of General Howe, at Oriskany, the battle ground which is still preserved and marked by a monument, was, when visited a few years ago by the writer, a mere bog overgrown with cattails and scouring reeds. It is wet muck. The cultivated portions of the same valley are in flourishing crop farms.

Thus we could go on and show that mucklands in all other states, have been drained and become valuable farmlands. Why then should we not expect the same for the mucklands of Florida? The Floridian everglades are so vast in extent that it will take a greater engineering work to reclaim them. Where the drainage is effective, good crops are growing. There will probably be portions which will not be worth much, but the great amount of land that will be added to our available farmland will be worth all it is going to cost. These Floridian everglades will be semi-tropical, and therefore have advantages which the northern lands will lack. We cannot afford to neglect the Everglades of Florida.



"Neath the Shade of the Old Orange Tree