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ACADIAN DIKES.

Almost every visitor to the "Land of Evangeline" has been struck by the sylvan beauty of the diked lands of the Annapolis valley and other parts of Nova Scotia, but few of those who have not studied the records of the Acadians know the story of their origin, and fewer still know anything of the system of construction of these dikes, or what transformation they have made of many sections of Nova Scotia and New Brunswick. Thousands of acres of what are now the most fertile lands on the continent were once the sport of the powerful tides of the Bay of Fundy, and might have remained so till now but for the patient skill and industry of the French Acadian settlers. Readers of "Evangeline" naturally place the first construction of these dikes in the Annapolis Valley, or about "the lovely basin of Minas," but the county of Cumberland was really the scene of the first dike building by the Acadians.

Under the grant to De Monts a number of peasants from the neighborhood of Rochelle and Poitou, in France, came out to Acadia in 1671, and reaching the Bay of Fundy, came up into Chignecto Bay, coasting along till they came to the low narrow neck of land which joins Nova Scotia to New Brunswick. Upon the marshes spreading away beyond the reach of the tides deer were grazing in thousands among the mild marsh grass, and here the peasants determined to build their homes. Was it instinct or the hand of Providence which led these peasants from Rochelle and Poitou, the dike lands of France, to the very spot in all the whole

continent best suited for establishing diked farms in America? They began at once to erect the dikes and reclaim the land from the sea at the extreme limits of the tides, and by 1786 the settlement at this point numbered 127 souls, who had 476 acres diked about and possessed thousands of cattle. In the course of time, following the experiments in Cumberland county, settlements were made on the marsh lands of Annapolis, Hants, Kings and Pictou counties in Nova Scotia, and Westmoreland and Albert in New Brunswick. Longfellow has made the scene at Grand Pré familiar in the opening description of the valley where Evangeline dwelt:

Dikes that the hands of the farmer had raised with labor incessant, Shut out the turbulent tides; but at stated seasons the flood-gates Opened, and welcomed the sea to wander at will o'er the meadows.

The work of the humble and industrious Acadian farmer has been carried on until over 60,000 acres of land formerly made waste by the impetuous tides are now under cultivation, making farms unequalled for richness. These lands will one day be known as the Holland of America, for owing to the saline nature of the sea-made soil, no grub, or worm, or insectivorous pest, to which inland farms are liable, ever ravages crops here, while for raising all kinds of vegetables such as cabbage, kale, cauliflower, etc., it seems precisely adapted. As for the marsh hay, the saccharine qualities of the natural grass of these regions puts fat on a horse or cow the moment the animal begins to eat it. One remarkable thing is the vast depth of the soil. Ages of the daily silting action of the tides has stored up the soil here till in some places, as at Misquash, it has attained a depth of 50 feet; and when it is stated that two inches of this marsh mud spread over ordinary land will manure it for twenty years, one may form some conception of the fertilizing power stowed away in these flats. Some of these lands, we are informed by Judge Morse of Amherst, who has made a special study of the subject, have been cropped every year for the past 200 years without a particle of manure, and producing 1½ to 2 tons per acre of rich marsh hay. In the fall and winter farmers come from many miles inland to purchase this mud as a manure, for which they pay 20 cents a load; and no doubt in future it will be used over a much greater region of country when the farmers get to know its value. The lower strata of these deposits consist of a blue clay, known chemically as a proto-sulphate of iron. When exposed for a time to the action of air it changes its color to a reddish mud, caused by oxidation. This change of color may be, and is, reversed, the change back to blue being caused by the action of vegetable acids such as those in grass and moss. Strange to say, no chemical analysis yet reveals the true secret of the richness of this peculiar soil, and it is thought by some to be a mechanical combination.

Through the courtesy of B. E. Paterson, editor of the Amherst Press, and of Judge Morse of Amherst, both of whom have paid much attention to the subject, the writer was shown the method of construction of these dikes. It is worthy of noting, at the commence-