

GENERAL LAURIE'S paper on Nova Scotian Agriculture, read at the Montreal Meeting of the British Association for Advancement of Science, has already appeared in the *Morning Herald*. The supply of copies being exhausted, we now reprint it in the *Journal of Agriculture*, by special request:—

When first asked to prepare a paper on the agricultural resources of Nova Scotia, I at once raised the question whether I was limited to facts and results already obtained, or whether I must be permitted to refer to possibilities, which might be considered to touch on the realm of opinion or even speculation. I was given to understand that I must confine myself to solid fact, but the more I looked into the matter, the more certainly it came home to me, that to point out the agricultural resources of the province is of necessity to deal with much that is yet undeveloped. Its agricultural history will sufficiently explain how it comes to be very backward, and yet the returns of its yield will show what, even under these disadvantages, it produces. It is but fair then in dealing with its resources, to consider what, under a favourable system, it would produce. The first settlements in the province were established rather for military than commercial reasons; hence, with all due respect to my profession, the previous training of the new settlers did not especially qualify them for an agricultural life. Soldiers and sailors have as great a power of adapting themselves as any class of men; but they hardly form the best foundation for an agricultural colony. The loyalists, from whom so large a portion of our population are descended, came largely from the professional ranks in the towns of the United States,—men who were quite unaccustomed to manual labour, or the cultivation of the soil; and the Sutherland and Argyll crofters who came to us from the Highlands, when the land owners abolished small holdings, and unintentionally deprived the army of one of its best recruiting grounds, brought a most valuable and law-abiding addition to our population who settle down with all earnestness to carve out for themselves homes from the forest. Industrious and patient, but for the most part, without any real knowledge of farming beyond spade and hoe culture of small patches, and, as the new experiences were chiefly of work among the stumps, their training did not lead them to very productive or commercial farming ways. In 1818 when England's enormous war expenditure had ceased, earnest Nova Scotians were led to seek the cause of, and remedy for the dull times, and Mr. John Young, the father of our ex-chief justice, Sir William Young, published a series of very forcible

letters, under the *nom de plume* of "Agricola," which called attention to the discreditable state of agriculture. Mr. Young states that at that time, a horse hoe or cultivator were implements of which even the names had hardly crossed the Atlantic to us; grain fans were almost unknown, and a common roller was a wonder, of which some counties did not possess a single specimen. Mr. Young gave an impetus to agriculture that has never been forgotten, but the energy and capital of the people has rather been employed in working coal and plaster, lumbering, ship building, fishing, the products of which were carried to more developed countries in exchange for the fruits of the soil; consequently farming did not receive the attention it deserved. Less than half of our people are professional farmers, and many of those combine other occupations with agriculture, which latter generally suffers in consequence. When the mackerel or shad strikes in along the shore, the potatoe hoe or the scythe, is at once abandoned for the oar and the net, and teams that should be ploughing are too often employed in hauling timber from the forest to the ship yards.

Our leading men have so often boasted of the half million tons of shipping that Nova Scotia owns, that it became an article of faith that all obtainable funds should, in certain districts, go into ships, and I call to mind visiting a locality in which I was informed the recent loss of a ship had forced the sales of their farms on ten well to do men who had been bitten by the prevailing mania and had mortgaged their farms to build a ship which was lost on the first voyage. Our iron and coal miners, gypsum quarry men, shipwrights, fishermen and factory hands, consume the surplus products of our farmers, but our trade returns shew that we have, of late years, exported a large amount of agricultural produce. As long ago as 1851 we exported about \$670,000 worth and our re- as for 1883 showed an export of over \$1,500,000, and this by no means represents our actual sales over and above provincial consumption. About 400 steamers called at one port, Sydney, C. B., for coal, last season. Each of them would, of course, lay in a stock of fresh provisions for the crew. We fit out a large fleet of fishermen from our own province, and our American neighbors, who fish on our coasts, provision themselves in our ports throughout the season. Halifax is also a port of call for a large amount of ocean traffic, and the garrison and squadron, as well as visiting men of war, require a large amount of supplies. A constant outflow of cattle and fruit passes from our western counties to St. John, N. B., across the Bay of Fundy, but, not leav-

ing the Dominion, does not appear in the returns. Cattle, butter, vegetables of all kinds go to Newfoundland and St. Pierre, Mig., from Cape Breton; whilst from the Annapolis valley an enormous quantity of potatoes is shipped to the United States. One hundred thousand barrels of apples are annually carried over the Windsor and Annapolis railway, and the manager informs me that he does not carry half the output; as water communication competes very advantageously with his railway, and he calculates that, as the orchards already set out come into bearing, the quantity will be far more than doubled. Of all agricultural countries, Nova Scotia lies nearest to Europe, and apples and cattle are perishable articles, to be put into market with the least possible carriage, and these are essentially articles for the raising of which Nova Scotia has great natural advantages.

The weevil was so destructive to our wheat crops between 1860 and 1870 that the cultivation of wheat was almost abandoned, but, with greater care and better method, it has been resumed, and using only round figures, we have increased from 300,000 bushels in 1851 to nearly 530,000 in 1881. Oats have increased to nearly 2,000,000 bushels. Potatoes have increased in the same time from 2,000,000 to 7,500,000. Turnips to over 1,000,000 bushels from one third the quantity. Other roots, to 326,000 bushels, an increase of over 1,000 percent since 1851. And these increases show that cattle are better fed, a sure sign of improved farming. Hay has increased from 300,000 to 600,000 tons. Butter from 3,500,000 pounds to 7,500,000 pounds. Cheese shows nearly a 1,000,000 pounds. Apples, of which some were imported in 1851, show in 1881 a product of 900,000 bushels, and other fruit increased from 4,000 to 18,000 bushels: hops show nearly 19,000 lbs. in 1881, and could be most profitably grown as they grow in profusion, but the cost of labor in picking checks the cultivation. Grapes, which do not appear on statistics till 1871, and then only 8,000 lbs., have increased in 1881 to 35,000 lbs., showing that our people have found our climate well suited for their growth.

300,000 horned cattle and 400,000 sheep were owned in Nova Scotia in 1881 and 63,000 cattle, and 151,000 sheep were sold for consumption in that year. Of the 13,000,000 acres of which Nova Scotia consists, a large proportion is lake, of which the shores are generally somewhat stoney. The southern coast is, for the most part, rocky and unfertile, as if a huge breakwater had been established by nature, to the eastward of the continent to breast the Atlantic