

As Others See Us.—A New View of Canadian and American Agriculture

Statistics are one of the most valuable of modern improvements; but although so useful, nay, invaluable, when properly applied, nothing can be more dangerous when people make use of them either to construct new theories, or to support preconceived ideas. A most notable instance of this has lately occurred in our respected and generally thoroughly reliable contemporary, the *Gardener's Chronicle and Agricultural Gazette* of England.

In the number of that journal of the 28th August the editor seems to have had a fit of statistics, and to have bent them to his own preconceived ideas, the following being a part of the results. There is a great deal more, equally mistaken, but which does not affect Canada.

After quoting "McUlloch" to prove that "America generally has been greatly over-rated as a grain-producing country," the editor goes on to say that—

"The small wheat crop of the rich soils of the United States is popularly attributed to the slovenly system of cultivation. But this is an error. The cause of the extremely irregular wheat harvest lies deeper than the mere defects of tillage, which might be corrected, and it is irremediable. If the wheat region of North America were coloured on a map, it would be seen to include only a very small part of the country. The northern limit may be tolerably well marked by a line drawn from Kingston, through Lake Simcoe, to Lake Huron. And it is because the *inhospitable soil and rigorous climate north of this boundary line* precludes the profitable cultivation of wheat that Canada has disappointed the original expectation of her exporting capabilities."

And again, further on, he says:—

"In Upper Canada the wheat district extends farther from the river (*i.e.*, than in Lower Canada), and some grain is grown for exportation into the States, and outward by the St. Lawrence. But the wealth of Canada is derived from the lumber trade, and not from agriculture, for *which she is naturally unfitted by the extreme rigour of the climate, and the poverty of a great portion of her soil.*" The italics are ours.

Poor Canada. It is well "that we live not in the report" of such statisticians, and that we can afford to laugh at such assertions; but these wholesale denunciations of our soil and climate may influence emigration in a most mischievous degree, and cannot be too soon met or too strongly denied.

The climate of Canada is the most healthy in the world. The records of British troops prove this, and they are the most reliable bills of mortality that can be referred to. Our climate is also one especially adapted to the growth of fall wheat of the finest quality, as has been proved a thousand times. No one doubts that we used to grow enormous

crops of the finest white wheat, the sample of which has never been surpassed and but seldom equalled. If we have fallen off in the production of that class of wheat, the fault lies not in the climate, for the climate is the same as it ever was, except in variations common to the climates of other countries. That we have fallen off in the production of such wheat is not denied, and the cause will presently be shown, but it is certain that it is not the climate which is in fault.

Then again, the other broad assertion, namely, that the falling off is caused by the poverty of the soil, is also most strenuously denied. Upper Canada alone shows one continuous tract of some hundreds of miles in length, from 50 to 150 miles in width, and which comprises all the settled portion of the Province, of the most evenly fertile land in a similar latitude in the world. Taken altogether, our Western Peninsula, bordered on the south and west by the great lakes, and on the north by unsettled territory, has less waste and poor land, area for area, than even England and Scotland. The falling off in the wheat is not to be attributed to sterility or poverty of the soil. What is then to be blamed? Simply, THE MIDGE, which has for a number of years past devastated our wheat crops, and caused that falling off in exports which we all feel so acutely, and suffer from so much.

The history of the destruction of the wheat crop of Canada is the history of the midge, and as our cotemporary may not be acquainted with it, and as the history of such a misfortune must always be interesting, it may not be amiss to give it in as condensed a form as possible.

It has been the habit of late years to say that the midge was caused by bad farming, by want of drainage, by foul seed, and by various other causes, all tending to throw the blame on the carelessness of our Canadian farmers. These several allegations the writer denies. The midge has simply been a plague, which no human efforts could stop or control, and which, like other plagues, is wearing itself out. This present year has verified these assertions. The midge is now of but little injury in many parts of the Province formerly devastated; it has now met with its own natural destroyer, and hundreds of thousands of acres of wheat have been grown this season on land on which, for the last fifteen years, the cultivation of fall wheat had been abandoned. And the best feature of this state of things is that in all this wheat there is more or less of midge, but it has only done a small per centage of harm, thus going to show, not that the present is an exceptional season, but that the natural check to the midge is in operation, and that by that natural check it is kept within bounds. This fact is a most important evidence that the old time for good fall wheat is again coming, and that an improved exports will soon give a most agreeable contradiction to all croaking against the soil or climate of Canada.

The midge has long ago proved that it is quite as capable of destroying forty bushels of wheat per acre as fifteen, and that it attacks the new, virgin soil as well as the old, and that hitherto, just in proportion to the crop of wheat, so has been the crop of midge the following year. Then again, what ought to silence all such assertions as to bad farming, want of drainage, &c., is the simple fact that the midge is never produced on the *stetel of wheat which it destroys*—it has been raised and hatched elsewhere, and not on the individual field which it devastates.

The midge came into Upper Canada from the United States a number of years ago. It first crossed the River St. Lawrence below Lake Ontario, and devastated the peninsula which lies between the Rivers Ottawa and St. Lawrence. It then crossed the Niagara River, on the peninsula which divides Lakes Ontario and Erie, and proceeded inland. A very few years afterwards it crossed the St. Clair River, and attacked the western portion of the Upper Canadian peninsula. It advanced from all three points about nine miles a year, spreading itself over the whole country, and carrying devastation with it.

The period at which the midge appears has always been dependent in a great measure on the season. It first assumes the fly shape in June, earlier or later according to the heat of the season, and flourishes for about three weeks. During this time all wheat which is just blossoming, or which has just begun to form in the ear, is affected. That which is so far formed as to have a tolerably firmly coated grain escapes, and that which has not yet arrived at the flowering stage, during the days of the existence of the insect, also escapes. Hence the very early wheat has always been free; that which is very late has also escaped. It is only the heavy intermediate crop which has been affected; and the better the land, or less early the wheat, the more injury was done. This is the *natural* course of this plague, but it is altered according to circumstances.

The cocoon of the midge, when it is in the shape of a yellow seed, and after the maggot has done its work, is either carried into the barn with the crop, or it falls on the surface of the field in which the wheat was grown, —mostly the latter—passes the winter in the soil, and comes out in its shape as soon as the weather is fitted for it; then it goes off to the nearest wheat field, to commence its depredations.

In Canada we generally seed down our wheat with clover; indeed, most of the clover which is grown is seeded with the wheat, and this clover forms an admirable nursery for the midge. And if we seeded down all our wheat stubbles, the midge would come up with far greater regularity than it now does. But sometimes the land is not clean enough, or the clover does not *take*, or other circumstances occur requiring the use of the last year's wheat field for other purposes. It is then, of course,