

THE PROFESSION OF AGRICULTURE AS A SCIENCE.

Agriculture, if an imperfect system of tillage may be so called, has necessarily been more or less practised in all ages and all countries; and so long as land was fertile and the population scattered, the rudest art sufficed to obtain from the soil, sufficient for the support of the few who tilled it. But as men became more numerous and more intelligent, they improved upon the common methods of cultivation, and rendered more available this most important source, whence the first wants of a people are supplied; and without which communities could scarcely exist—certainly could not increase in numbers, wealth, or importance. Still these improvements were but improvements in the art of culture; the land was perhaps better tilled, and the implements of husbandry less rude of construction. But the utmost that was attained, was the taking better advantage of the land's natural fertility. It remained for the genius of the present age to discover and apply to agriculture certain scientific principles, so as to increase the natural productiveness of the soil, and cause it to yield its fruits more plentifully for the support of an increased population. Art sufficed to teach man to till and gather the produce of the soil. It required the aid of science to enable him to do this in such a manner that the same soil should yield an increase year after year, and century after century.

"Agriculture, in common with other arts, may be practised without any knowledge of its theory, that is, established practices may be imitated; but in this case, it must ever remain stationary. The mere routine practitioner cannot advance beyond the limits of his own particular experience; and can neither derive instruction from such accidents as are favourable to his object, nor guard against the recurrence of such as are unfavourable. He can have no resource for unforeseen events, but ordinary expedients; while the man of science resorts to general principles, refers to their true causes, and adapts his means to meet every case."

This doctrine is now by no means new. Many years ago it was expounded, and the positions it contains, proven and admitted to be correct; while

directions were given, by following which they might be rendered practically useful. But like many other important and wholesome truths, these were for a long time little regarded, and seldom applied. This may have been owing to that averseness to innovation so general among agriculturists; and, perhaps, in some measure to the want of education among large portions of the rural population. The removal of these causes is now apparent. Fresh discoveries have been made, and others brought more prominently before the public; and agriculture now, like other arts, owns the beneficent aid of science. The people of Britain have become convinced, that unless their soil can be made to produce much more than it does at present, the consequence of the further increase of population, must be an increase of misery. And the people of Canada, it is hoped, are generally impressed with the incontestible fact, that the produce of their soil is, and must continue to be, their only real source and means of prosperity.

It was not until about the middle of the seventeenth century\*, that agriculture began to be thought of as a science; since which time many able men have written on the subject. Still, as in every other branch of learning, the more that is made known, the wider appears the field of inquiry, and the greater the room for improvement. Many important discoveries have been made, but they convince us that there are more to make; and the vast advantages derivable from the improvements already become general, should induce us to attempt others; as well as to adopt those already proven to be advantageous.

In this Province, the works of the great writers on scientific agriculture, though of immense value to farmers, have not obtained a very general circulation, nor have the principles and practice taught in them, been to any perceptible extent adopted; notwithstanding the fact that most of them are as applicable to the climate, soil, and circumstances of Canada, as to those of the many parts of Europe, where they are in use.

\* Rotation of crops, and the cultivation of clover and turnips as fodder, were first recommended by *Blythe*, in a work first published in 1649.—See *Jackson*.

\* London.