

made in entering upon the details of this subject, and were no other advantages included but those which bear directly upon the daily pursuits of the farmer, ample inducement would exist, to render an acquaintance with the theory of his occupation, a most desirable attainment.

A very cursory view however of the Irish series of school books, now being generally introduced into the Common Schools of Canada, will suffice to exhibit the importance which the compilers of those works placed upon a study of the vegetable world as a mental culture. Among popular descriptions of many sciences, that of Vegetable Physiology, and its dependant branches, occupies a considerable portion of the reading lessons, and is there introduced in such a manner as to excite not only a lively interest in its details, but also to create a strong desire to enter into a deeper and more comprehensive study of this branch of Natural Philosophy. We discover further, that a few of the more advanced pupils attending schools situated in towns, their immediate vicinity, or in well settled districts, are accustomed to engage in the study of some branch of Philosophy, such as Astronomy, Chemistry, &c., as a mental culture. Equally, therefore, to them do the varied phenomena of the vegetable world offer a most interesting field of useful enquiry, peculiarly adapted to the culture of the mind and taste, and possessing one powerful attraction which many other sciences do not ordinarily admit of, namely, the association of experimental investigation, with the study of the science, in the favourite and engaging pursuit of gardening and horticulture.

The great utility which a general acquaintance with the science of Agricultural Chemistry is capable of proving to the young farmers and mechanics of this country, cannot be more conveniently shown than by describing its general details, and the mode in which it will perhaps be found most advantageous to convey the necessary instruction in this important branch of Education.

A theoretical study of Agriculture implies an acquaintance, to a limited extent, with the science of Chemistry. A popular and very general view of the nature of some fourteen or fifteen elementary bodies is the first requisite. The primary laws of chemical composition and decomposition, together with the nature and properties of a few compound bodies, whether resulting from the decomposition of existing substances or the union of elementary ones, is the next important step immediately connected with chemistry.

The chemistry of vegetables, and the functions of their various parts, may then claim attention, leading the way to a comprehension of the sources from which they derive those substances which enter into their composition and are necessary or favourable to their development.

Having obtained an acquaintance with the foregoing details, the pupil is prepared to enter upon a study of the origin and composition of soils; the necessity of the presence of certain substances in the soil to induce a luxuriant vegetation; the rationale of the mechanical operations for ameliorating the condition of the soil; the use and action of manures; the reasons which compel a proper rotation of crops, and a judicious fallowing of the land.

The mode in which this information may be impressed upon the memory, will, perhaps, be sufficiently established by referring to the following tables, which were compiled from the Agricultural works of LIEBIG, JOHNSTON, and BOUSSANGAULT, expressly for the use of the Students attending the NORMAL SCHOOL :—