

nals; which, without a flourishing agriculture, would be left without business, and consequently without profits.

We cannot do better than close these observations in the words of Professor Norton, of Yale College, a name with which most of our readers are already familiar.—[*The Farmer's Guide, Editor's notes, page 2.*]

"An attendance of two or three months in each year upon courses of lectures, relative to scientific agriculture, would expand and cultivate the mind, would open new sources of interest, and enable him to reason upon the various processes which he had observed during the summer. This would not figure him as a practical man; on the contrary, it would tend directly to his success. Labor during the usual season of occupation in the open air would invigorate the frame, as a winter's study would strengthen the mind.

"Farmers may write and talk about the elevation of their class for centuries to come, as they have done in years that are past; but they may rely upon it, that education is the only true road to that which they desire. Until they are ready to provide the means of regular instruction in the art of agriculture for their sons, mental instruction as well as physical, they will always be compelled, as heretofore, to submit to the lead of lawyers, manufacturers, literary men, and members of other professions, in which a special education is considered absolutely necessary to distinguished success.

"An institution which should unite practical with scientific teaching, if properly organized, would be the best of all preparatory schools; for there the union of instruction with actual work would be complete. Such establishments have hitherto, for the most part, been mere manual labor schools, with only the name of science. We may hope that a better day is coming; that we shall soon see institutions capable of imparting every description of knowledge that is to be desired by the practical man, and in addition to this so organized, that by means of extensive researches, conducted by men of undoubted ability, they may at the same time advance the range of our knowledge, and command the respect of every class in the community."

Two Lectures on Agricultural Chemistry;

By HENRY YOUNG HIND, Mathematical Master, and Lecturer, in Chemistry and Natural Philosophy, at the Normal School for Upper Canada. Toronto: Hugh Scobie, King Street, 1850. Price 1s. 3d.

This little work, we are informed in the preface, contains the substance of lectures on Agricultural Chemistry, delivered by the author during the past summer at preliminary meetings for the for-

mation of Teachers' Institutes, in various County Towns of Upper Canada; and he now presents it to the Farmers and Schoolmasters of this country, "with a hope that it may assist in calling forth a spirit of judicious enquiry, among the many intelligent and enterprising members of those numerous communities."

The author's style is smooth and perspicuous, and he has been successful in condensing a considerable amount of scientific information that is both interesting and useful to the practical farmer. The work without making any pretension of being an introductory, or systematic treatise, may be read with profit by persons having no previous acquaintance with Chemistry; the leading principles and doctrines of that beautiful and comprehensive science are expounded in a popular manner, and their applications pointed out to the cultivation of the soil, the raising of plants, and the management of animals. There can be no doubt that chemistry is silently influencing and improving the practice of the enquiring agriculturist; but the sanguine expectations held out by amateur farmers, political economists and some scientific men, a few years since have, as yet, fallen far short of realization. Although it may be difficult to trace any great agricultural improvement directly to the suggestions or teachings of science, strictly so called; yet it admits not of denial that both the theory and practice of agriculture have of late years been greatly improved; and that the researches of the chemist have proved highly suggestive and beneficial to the farmer, particularly in reference to the composition and application of manures.

We feel much satisfaction in recommending to the notice of our readers Mr. Hind's Lectures, and quote for their perusal a few of the concluding paragraphs.

Let us in concluding, take a cursory view of the several conditions of vegetable life and health, which unite with the operations of husbandry in establishing the results of which the Agriculturist is in quest. He can exercise no control whatever over the air plants and animals breathe; and yet many of the most terrible visitations he fears are dependent upon the condition of air. Upon its state, rests the appearance of Rust, Mildew and