We copy the following article from that excellent paper the *Albany Cultivator*.—The propriety of having agricultural schools, in connection with model farms established in this Province, is clearly shown, by the apathy which is evinced on the part of the junior farmers, in adopting measures for the general improvement of the agriculture of the country. This indifference upon matters of so much real importance to themselves and the nation, can only be removed by improving the tastes and cultivating the minds of the rising generation. Agriculture being the chief employment of the population of this country, it is only rational to infer that it should be the principal object of improvement by those who govern and are governed, by those who are in exalted stations in society and those who move in humble spheres, and especially by those who are directly engaged in the culture of the soil. It is through the establishment of agricultural societies, such as we have frequently pointed out to the Canadian farmers, that the moving power to the several other associations requisite to secure the greatest possible amount of prosperity to the farmer and the country is to be given; and until the patriotism and intelligence of the people have been directed to this true channel of real greatness, we need scarcely hope that other and higher measures will be taken to advance the prosperity of agriculture. The whole problem then may be solved, simply by the negative or positive answer to the question—Canadian farmers, will you aid in this great work of agricultural improvement? If the former be given, then it will follow as a matter of course, that the country will remain as it is at present, at least twenty years behind the age in general improvement. If the latter be echoed throughout the length and breadth of the land, then may we hope to see the country rise, and agriculture take the stand which legitimately belongs to her. No true friend of his country can remain neutral or indifferent to the success of such institutions as are calculated to develope the latent genius of the country; and probably no class of associations could be devised, that could be made so available to the practical farmer, as agricultural schools and model farms—and these can only be successfully established in countries where the people are aroused to the importance of the advantages that would accrue from a general spread of practical and scientific knowledge of agricultural topics. The farmers then, must first set the example, by laying the corner stone to this great structure, which will be found to consist in supporting agricultural publications and local and general agricultural societies; and when the government is apprised that they require aid, it will no doubt be liberally granted them to any reasonable amount. Nothing could be more congenial to our feelings than to see institutions springing up throughout the length and breadth of the land, such as are mentioned in the following communication; and every thing shall be done in our power to convince the Canadian agricultural population, that it is as necessary that they should have institutions established adapted to their calling and circumstances, for the proper education of their youth, as it is that colleges and universities should be established and chartered for the education of students for the learned professions, as they are termed.

AGRICULTURAL INSTITUTIONS

BY ALFRED L. KENNEDY

That the ignorance of true theories and improved processes of agriculture which prevails in most sections of our country, can be radically removed only by establishing agricultural schools and colleges, is a proposition that receives the universal assent of intelligent men. The question on the *necessity* of these institutions is settled throughout the civilized world. Our duty now manifestly is, *to adopt the best plan, and then to put it in execution forthwith*. This duty is of no mean proportions. The causes of the difficulties, changes and failures of like projects, must be well studied ere we can expect to profit sufficiently by their experience to avoid their fate. That these difficulties are not invariably fatal, is evidenced in the continued and flourishing existence of schools, which are widely illuminating the toil of the cultivator. We propose to sketch a few interesting particulars of the most prominent of these institutions. They may be most conveniently treated under two heads. Those which, to an *academical* course, unite the theory and practice of agriculture, and those which teach agriculture only.

The Schools of the first class, are based upon the institution at Hofwyl, in Switzerland, under the direction of its noble founder, the philanthropic M de Fellenberg.* It consists of three schools, literary, agricultural and intermediate. In addition, lectures to teachers are annually given. The literary school commenced by the introduction of three children into the family of the principal. In 1807 the first building was erected for it. In a few years the number of professors gradually increased to 20, and the pupils to 80. The studies comprise, in addition to those taught in our colleges, music, dancing, fencing, and cabinet-making. The latter gives facility in the use of tools, incites habits of industry, and as the product of the student's labour becomes his own, and is generally sent home as a present, neatness of execution and filial affection are encouraged.

The object of the Agricultural School is to afford children of poor parents an opportunity of acquiring an excellent education, while they gain a practical familiarity with the most improved farming processes. This was commenced in 1808, under the most unfavourable auspices. The children were of the worst possible description—brought up in idleness, they were literally taken from the hedges and highways. Yet by receiving a few at the onset and slowly increasing the number as the first became subject to the admirable discipline, a perseverance that nothing could daunt, has successfully established an institution whose benefits have excited the admiration of the friends of education every where.

"The pupils are admitted at an early age, there being, however, no fixed limits, and are expected to remain until 21, if supported gratuitously. By so doing, they would be enabled by their manual labour to repay the expense of their maintenance and education, so as to leave the institution without pecuniary obligation. They would besides be detained beyond what is considered the most critical age. In practice, however, it is found difficult to induce this lengthened stay, the actual expediency of which must depend so much upon individual circumstances. In addition to the gratuitous pupils, others are taken, who pay in part or entirely for their education. In summer, the time occupied in labor is from eight to twelve hours per day, and in instruction from two to four hours. In winter, the amount of labor is less, and of study more. During the time of harvest and hay-making, the instruction is omitted altogether."

In winter, the hours not devoted to the care of cattle, threshing, and other farm labour, are employed in the agricultural machine shop in making baskets, straw mats, in selecting seeds, and in breaking stone for repairing roads. The pupils are encouraged to labor on their own account.—Each has a small portion of land for the culture of vegetables and flowers, the profits of which are his own.

As an example of *incidental* instruction, we subjoin the following:—

"In laying out the ground for different crops, for planting, or for spreading manure, care is taken in determining the points, in drawing the lines parallel, in measuring the distances, and the intervals of the plants with the eye or by paces. The number of plants or heaps of manure is calculated, and *the whole is a lesson in geometry* and arithmetic, as well as an exercise of accuracy and foresight."

"In cutting the trenches for watering an artificial meadow, the level of different portions is observed by some; others trace the lines in such a manner that the water shall perform the circuitous route necessary to supply the whole of a given space without descending below its level; and and others still place the sluices necessary to prevent excess in on part or deficiency in another. All these operations are practical lessons upon the laws of gravitation, and are often employed in the most striking manner to lead the pupil to the existence and influence of this universal agent. If the pupils are engaged gathering the stones out of the fields, these become the subjects of examination, first in reference to colour, hardness and texture, then the uses to which they are respectively applicable, and finally their name, either in the moments of rest, or in some of the lessons of the day. The instructions thus received, are recalled almost involuntarily at every fresh operation of the same sort; and such associations serve to divest this lowest of agricultural occupations of its purely mechanical character."

"If they are clearing the ground of weeds, the name, characteristics and qualities of each one are made the subject of remark. The relative effect of sun and air and moisture and cultivation, upon these plants and those of a useful nature, is necessarily brought to view by the observation of the pupil, and by the instructions given him, and inferences are then drawn as to the best mode of exterminating them."

The intermediate school was established to supply an education for the sons of the "middling classes," in a style correspondent to that of the parental roof. Free from the glare and show that

* For an acquaintance with this distinguished man and his noble undertaking, the English reader is mainly indebted to Rev W C Woodbridge, Editor "Annals of Education," to Prof A D Bache, in his able report to the Councils of Philadelphia, on Education in Europe, and to "Letters from Hofwyl, by a Parent," London, 1812. From these authorities we have freely quoted.