

Report of Provincial Farm Commission.

To the Hon. Provincial Secretary.

Sir,

The undersigned Commissioners appointed by His Excellency the Lieut.-Gov. of Ontario in Council to "inquire and report with reference to the Government Farm near the Town of Guelph, and especially in regard to all matters proper to be considered in order with a due regard to economy, to adapt the said Farm and the management and control thereof, to the purposes of a model and experimental Farm, and in such manner as may conduce to the greatest possible benefit of the agricultural interests of the Province," have the honor to report that they have given the important matters entrusted to them their most careful attention, and have agreed unanimously to the following Report.

The Commissioners, in all their deliberations, have endeavoured to keep steadily in view that the great object sought to be attained by the establishment of this Institution is the advancement of practical Agriculture in the Province. They have sought to keep before them the existing position of this great industrial interest in Canada, and to ascertain in what manner the Guelph Farm can best be made conducive to the extension among us of a higher and more profitable system of husbandry. They have had careful regard to the character and results of the Agricultural Colleges established in other countries—and while anticipating the enlargement of the scope of the School and the elevation of its scientific curriculum, from year to year, under the guidance of experience, they have endeavoured to avoid the error of sacrificing the practical to the theoretical, into which so many similar Institutions have unhappily fallen, and to place its operations (at the outset at any rate), on a strictly practical basis.

The Commissioners, it will be observed, have recommended that the knowledge necessary for admission to the School shall be at first merely that which, under our School Law, every boy must possess in passing from a Common School into a High School of the Province; and that by giving each Township Council in Ontario in turn the nomination of a competent pupil for admission, a wide spread interest in the success of the School is sought to be quickly created.

The agricultural interest greatly surpasses all the other industrial interests of Ontario in magnitude and importance. Its successful prosecution gives life and tone to all classes of business; and a bad crop, here as elsewhere, entails stagnant markets and monetary stringency. By no other way could the prosperity of our country be so vastly and rapidly increased, as by the general adoption of an improved system of farming. It has been estimated that the cash difference in value between a good crop and a bad crop in Canada exceeds fifty millions of dollars per annum,—but this sum falls far short of the enhanced cash gains which could be annually realized from thorough drainage, improved tillage, skilful manuring, and the general improvement of our Herds and Flocks.

The undersigned entertain the strong conviction that the Guelph School of Agriculture,

if efficiently conducted, may be made eminently conducive to the promotion of these most desirable ends—and they thoroughly believe that the amount of public money necessary to its proper establishment will be abundantly and quickly repaid by the stimulus given to this chief industry of our land.

The Commissioners have deemed it most convenient to submit their conclusions in the form of separate propositions, as follows:—

1. That the name of the Institution should be "The Ontario School of Agriculture and Experimental Farm."

2. That the objects of the Institution should be: *First*, To give a thorough mastery of the practice and theory of Husbandry to young men of the Province engaged in Agricultural and Horticultural pursuits, or intending to engage in such. And, *Second*, To conduct experiments tending to the solution of questions of material interest to the Agriculturists of the Province, and publish the results from time to time.

3. That a carefully prepared Design of the Farm and Establishments, as they ought to be when the Institution is in full operation, should be prepared with all speed by one or two competent parties, in conjunction with the Principal. That this design should provide for buildings of a plain and substantial character for all the purposes of the Institution, and make ample allowance for their easy enlargement from time to time as required.

4. That the existing Buildings on the farm should be utilized for present purposes; but in the event of their being found unsuitable for the efficient and economical prosecution of the daily work of the farm, they should gradually be replaced by others constructed on the principles set forth herein, and forming part of the systematic plan herein recommended.

5. That the Farm should be separated into five distinct departments, namely,

(1.) The Field Department.

(2.) The Horticultural Department.

(3.) The Live Stock Department.

(4.) The Poultry, Bird and Bee Department, and,

(5.) The Mechanical Department—including Carpenter, Blacksmith, Waggon, Harness and Paint Shops.

6. That the plan of the Farm should provide for a clear separation between these departments of farm-work; and that in locating each department due regard should be had in the site selected to the special suitability of the soil, convenience of access, and the compactness and tasteful appearance of the establishment as a whole.

7. That all the Buildings on the farm should be model buildings, so far as their adaptability to the purposes for which they are constructed is concerned; and that, while due regard should be shown to the demands of artistic taste in the design and site of each erection, yet the chief aim ought to be to have all the buildings in simplicity of style, completeness of arrangement, solidity of construction, drainage, ventilation and economy of labour, models worthy of imitation by the farmers of the Province, and attainable at a cost within their reach.

8. That the laying out of the fields, the system of drainage, the construction of internal roads and bridges, the planting of shade and ornamental trees, the growing of hedges, the erection of fences and bridges, and all other permanent improvements on the farm, should be carried out on a gradually developed system, and in such a manner as to exhibit and test the comparative values of the most approved modes of executing these several works, and to test the cost and convenience and durability of the different new appliances from time to time recommended for adoption on the Farms of the Province.

9. That the permanent principal building on the farm should be the Boarding-house for the pupils. It should be erected in the plain, substantial style suitable for the purpose to which it is to be applied. It should be three stories in height, with ceilings not less than eleven feet high, and warmed throughout by steam, or heated air from a furnace, supplied throughout with gas, and thor-

oughly ventilated on the most approved plan. It should be 240 feet long by 30 feet wide. The ground-floor should be devoted to the necessary class-rooms, dining-room, sitting-rooms, storerooms, and the private apartments of the Rector. The other two stories should have no permanent division walls, but along the sides of each story should run ranges of sleeping-rooms for the pupils 10x12 feet each, and formed by wooden partitions, seven feet high, with a passage of eight feet wide running the entire length of the building between the ranges. That there should be a water cistern constructed in an elevated part of the building, large enough to furnish a constant and sufficient supply of fresh water for the establishment, and to give security against damage by fire; that in each sleeping-room there should be two single beds, and not more than two pupils.

10. That there should be a building attached to the said Boarding-house, and having one passage connecting it therewith, for the Kitchen, Washing-house, Laundry, Cellars, Store-rooms, and other appurtenances of the House-keeper's department. That it should also contain a private sitting-room and bed-room for the house-keeper, and bed-rooms for her assistants. And that in this building the furnace for heating the main edifice should be utilized for the purposes of cooking, washing and heating, if found practicable and economical.

11. That there should also be a building attached to the main edifice, containing a sufficient supply of baths for the use of the pupils, and, if possible, a swimming-bath. That water-closets should also be erected in this building, and a room where each of the pupils should clean his work-shoes in the morning, and on returning from work, exchange them for house-shoes before proceeding to the sitting-rooms.

12. That there should be erected on convenient sites upon the farm, separate residences for the Principal, the Horticultural Director and the Live Stock Director; with suitable accommodation in each for a family, and outhouses and gardens attached. That the public approach to these residences should, if possible, be distinct from the approaches to the farm buildings, with which they should only be connected by a private passage.

13. That in the Horticultural Department,—if we select it to give a specimen of details—provision should be made as follows:

(a) That there should be a vegetable garden in which should be grown a full assortment of vegetables, and in which the qualities of different varieties may be tested as occasion arises, and their excellencies or deficiencies determined.

(b) That there should be a fruit garden in which a full assortment of small fruits should be grown and new varieties may be tested.

(c) That there should be a vineyard of hardy grapes, wherein various methods of training and pruning may be exemplified, varieties tested, and their value ascertained.

(d) That there should be an orchard in which a large variety of apple, pear, plum, and cherry trees should be grown, that the scholars may be made familiar with the appearance and quality of the several sorts, their peculiar habits of growth, their adaptation to this climate and proper modes of culture, and that new varieties may be tested.

(e) That there should be a nursery in which the propagation of fruit and ornamental trees and plants, and the operations of grafting, budding, layering, pruning, &c., may be taught and performed.

(f) That there should be a lawn, in which the principles of rural adornment can be exemplified in the grouping of trees and shrubs, the laying out of walks and planting of flowers.

(g) That there should be greenhouses in which the art of cultivating plants under glass may be acquired, including the methods adapted to the propagation and growth of each variety, and in which the principles of erecting, heating, and ventilating plant houses may be exemplified and taught.

(h) That there should be vineries in which exotic grapes are grown under glass, and the methods of cultivation with or without artificial