

Agricultural Education and the Colleges.

Considerable attention is just now being given to agricultural educational matters. Apart from the question being one of the greatest importance, the Agricultural College Commission appointed by the Manitoba Government is now studying the matter in all its phases, and consequently this is the time for the farmers to push forward their claims for higher agricultural education. The following article from the able pen of the Rev. Henry Wallace, of Iowa, will be read with interest:

"If agriculture in the Western States is to be permanently successful, if the prairies are to furnish food for the hungry nations to the extent manifestly intended by their Creator, two things are essential. First, that the sons and daughters of their present owners and occupiers have an education along agricultural lines that will enable them to farm with the highest possible measure of intelligence and the greatest measure of profit; and second, that the experiment stations, usually in connection with agricultural colleges, have the means and the will to discover the unknown and verify the correctness of present apparently proven knowledge by far more extensive experimentation than has yet been done. The experiment stations aim to discover the unknown and verify that which is supposed to be known. The colleges teach the known.

"The Government has dealt liberally with the farmer. By the Morrill law enacted nearly thirty years ago, vast tracts of land were given as an endowment to colleges, the proceeds to be devoted to instruction 'in agriculture, and the mechanic arts and the sciences relating thereto.' Subsequent legislation has added to this endowment at the rate of from \$15,000 to \$25,000 per year for each college, besides a donation to the experiment stations of each State of \$15,000 a year. Unfortunately, the land endowment was frittered away by most of the Eastern States and some of the Western, and what remained largely perverted from the purpose intended by Mr. Morrill, whose foresight gave the farmers this magnificent grant. The administration of it fell largely into the hands of men with no knowledge of agriculture and no sympathy with it, who spelled 'the sciences relating thereto' in large capitals, the 'mechanic arts' in small letters, and 'agriculture' in the smallest type in the office. In other words, they aimed to make the agricultural colleges duplicates of the universities and normal schools, and to graduate doctors, lawyers and preachers instead of farmers.

"In those early days the farmers themselves did not feel the need of an agricultural education; often, in fact, scoffed at it and trampled under their feet the pearls which Mr. Morrill had sown so liberally about them. Naturally, the earlier graduates of these colleges, who had been fitted through them for other professions, became members of the board of trustees or regents, and, with quite a few notable exceptions, aimed in their shaping of the course of the colleges to make additional sheepskins or diplomas more valuable in their own estimation by making the colleges less agricultural and more literary or scientific. In some cases presidents were elected whose education, tastes and habits were as far removed from agriculture as possible, and not being broad enough intellectually to comprehend the necessity of agricultural education in great agricultural States, are still striving to maintain only enough agricultural education to retain the control of agricultural funds to teach something else.

"What is needed in the West is not more doctors, lawyers, preachers, school teachers or professors, but more educated farmers' sons, who, familiar by long practice with plowing, for example, will have an opportunity to learn why they plow and under what circumstances they should plow deep or shallow, early or late, and how they can best control the moisture which the Lord gives them; an opportunity to study the laws of the soil, the laws of growth in the plant and animal, the feeding values of different grains and grasses, and balanced rations, and thus become acquainted with the seen and unseen tools and raw materials with which they are to work in harmony with nature. Farming in the future, as land costs more dollars from year to year, must be done with more 'brains, sir,' from year to year, and any attempt to make the agricultural college, the farmer's heritage, or what little remains of it, a duplicate of the university and normal school is in one sense foolishness and in another sense robbery.

"How is the perversion of these college funds to be stopped? Simply by seeing that the trustees or regents, or whatever they may be called, elected by the legislatures to manage them, are in hearty sympathy with agriculture and elected because they have the good of agriculture at heart and not because they have been efficient henchmen for some successful seeker after office, or happen to be a little too big for a squire and not big enough for a member of the legislature. Kansas is not alone in the tendency to belittle agriculture while using agricultural funds to educate farmers' sons away from the farm, and there will be no peace until 'agriculture and the mechanical arts' are spelled in large capitals and 'the sciences relating thereto' in ordinary type."

Growth of the Farmers' Institute.

We have received from the Ontario Department of Agriculture the Report of the Superintendent of Farmers' Institutes for 1900, which, in its record of the year's progress, presents some features of unusual interest. The growing utility and popularity of Farmers' Institutes is indicated by a decided increase in the membership. A new departure in the publication of the report has been taken, in accordance with which it will hereafter appear early in the year, the reports of the local Institutes in detail being given in a separate annual bulletin. The membership has increased from 18,058 in June, 1900, to 20,387 in June of the current year. The number of meetings held increased from 715 to 725, the total attendance numbering 131,628. The largest Institute is that of Halton, with 748 members; the second being North Hastings, with 578. In the matter of attendance, Halton also heads the list, with a total of 5,490; South Bruce, with

able opportunities for presenting to large numbers of people the latest scientific processes and ideas. This work has been aided by the appointment of Superintendent Creelman as assistant secretary and editor of the Association of Canadian Fairs and Exhibitions, in which he can render excellent service to the movement. A strong effort was made to ensure a large attendance at the Provincial Winter Fair, the educational features of which were much appreciated by the 1,518 members of Farmers' Institutes who attended. A special programme was provided for the benefit of Institute workers, including addresses by Hon. John Dryden; Prof. I. P. Roberts, of Cornell; F. W. Hodson, Dominion Live Stock Commissioner; Thomas Crawford, M. P. P.; and President Mills and a number of the professors of the Agricultural College.

A new feature successfully introduced by several Institutes is an annual seed fair in March, when prizes for the best exhibits of seed grain are awarded, and an opportunity is given to buy or exchange seed. The system is likely to be adopted in other localities. The work of the Institute has been introduced into New Ontario, where an Institute has been established and a number of special meetings held in several localities.

The volume includes a number of addresses and papers by agricultural specialists and practical farmers, and a full report of some of the important discussions held at Institute meetings, embracing a great variety of topics. President Mills has a paper on a trip through Britain, with special reference to agricultural conditions. The management of soils is treated of by A. W. Peart, Burlington; F. M. Lewis, Burford; and F. A. Sheppard, Queenston. Simpson Rennie, Toronto, deals with noxious weeds. J. E. Orr, Fruitland, has a paper on the extermination of the codling moth. The cold-storage question finds an able exponent in G. C. Caston, Craighurst. "Canadian horses in the African War" is the topic of a paper by Lieut. John McCrae. W. S. Fraser, of Bradford, treats instructively of beef rings. Poultry is the topic of W. R. Graham, Guelph; Prof. A. G. Gilbert, Ottawa, and G. R. Cottrell, Milton. These are only a few of the valuable contents of the report, but they will suffice to give some idea of its comprehensive character and utility.

DAIRY.

"Worth Its Weight in Gold."

New subscribers will receive the "Farmer's Advocate" from now till the end of 1902 for \$1. Old readers concede that to be the best dollar's worth any farmer can possibly secure.

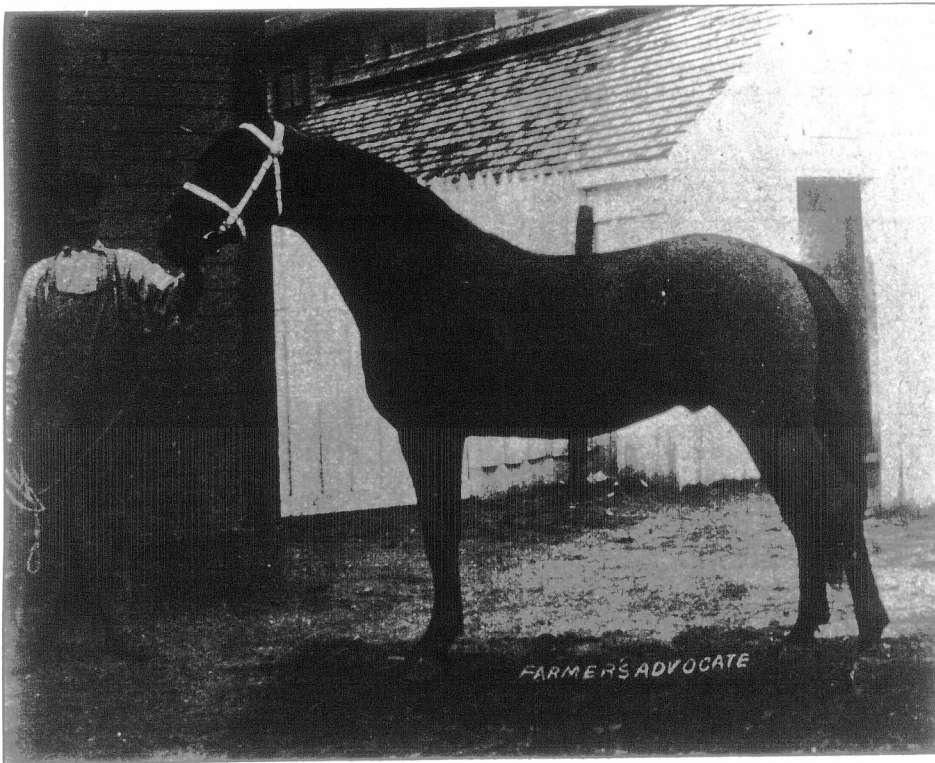
If any neighbor or acquaintance is not getting the paper, you will confer a favor by advising him of the fact that for \$1 the paper may be obtained for 14 months.

The above liberal offer will enable you very easily to have your own subscription extended for twelve months simply by sending us the names of two new subscribers, accompanied by \$2. This is one of the most popular propositions we have ever made.

Is the testimony of other readers needed as to the paper's merit? Mr. Hugh Hill, of Huron Co., Ont., writes: "I think the 'Farmer's Advocate' is the best agricultural paper published. It is worth its weight in gold." Mr. Wm. L. Falkingham, Grey Co., writes: "The 'Farmer's Advocate' is a welcome visitor to our home. We could not do without it. It is improving, too. Its plans are plain and complete, and its engravings fine." Miss Lydia Redman, of Ontario Co., writes: "The Home Magazine department is of exceptional merit throughout."

What does the proposition mean? Just this: That by conferring a boon on two other persons, you secure the paper to yourself for another year without any charge. Do not miss the opportunity, and, what is equally important, take advantage of it early.

See that all ditches and water courses are open before winter sets in. In cases where the fall is insufficient, great improvement may be made in a few hours with plow and scraper.



AUCTIONEER.

First-prize three-year-old Carriage stallion, and second sweepstakes for best Carriage stallion any age, at the Western Fair, London, 1901. (See Gossip, page 690.)
BRED BY AND THE PROPERTY OF W. C. BROWN, MEADOWVALE, ONT.

4,200, holding the second place. Women's Institutes have increased in number to 32, with a total membership of over 1,500.

A number of changes of a beneficial character have been made in the arrangements. The Department has taken over the lecture work formerly carried on by the horticultural societies, and introduced the desirable feature of afternoon addresses to school children, which are much appreciated. Many of the Institutes now hold their annual meetings at the nearest fruit experiment station, where they have all the practical advantage of demonstrations in pruning, grafting and spraying.

The growing demand for Canadian poultry in Britain has rendered it important that the tastes of the consumer in the matter of dressing and preparation, as well as in the quality of the fowls, should be consulted. The subject has been made a specialty in Institute work, and the speakers at poultry meetings have given demonstrations as to the most appropriate methods of killing and preparing birds for the market. Another subject to which particular attention has been given is cold storage. The Institute delegates have received instruction in the different processes of refrigeration in connection with the plant at the Agricultural College, and have also inspected the car fitted up for the carriage of fruit for shipment abroad, rendering them able to disseminate accurate information on the subject.

The Department has made a special endeavor to get thoroughly in touch with the fairs and exhibitions held throughout the Province, realizing that these occasions offer particularly favor-