

Wheat Growing in India.

Mr. R. Maconachie, now a resident of Canada, but for some years on the Civil Service of India (from which he is now retired), where his duties brought him directly in contact with agriculture in the great Punjab (or Panjab) district in North-western India, contributes an interesting article to this issue. We might add that in 1894 the wheat supply of India was 258,459,000 bushels, or about half as much as all North America. Irrigation and cheap labor are the secrets of the Indian wheat industry. Mr. Maconachie's letter is a revelation as to the primitive conditions under which wheat-growing is carried on. This season, however, crops appear to have been a failure, as wheat is now being shipped there from California, from whence it is going to Australia as well. The silver question has also its bearing on the situation in India.

Cultivation of the Mind.

To cultivate the soil successfully it is necessary to cultivate the mind. Good agricultural literature in the form of papers and books, is an essential part of farm equipment of to-day. This subject was admirably presented in a Farmers' Institute address by Mr. D. Z. Gibson, of Haldimand Co., Ont., who, by the way, is a graduate of the Ontario Agricultural College, where he earned gold-medal honors. His remarks were highly appreciated by all who heard them. We are pleased to observe that Mr. Gibson went further than to simply urge mental activity and improvement in order to secure food, clothes, and a competence—"the bread which perisheth"—and he would have his hearers so im- prove themselves that they may be equipped for the higher duties of life. A young man can make no greater mistake than to suppose that a school course completes his education, because it is little more than the foundation of it.

"We talk," said Mr. Gibson, "about the wonderful progress made in the sciences the last few years, and marvel as to what will come next, but if we turn to the life and work upon the farm we see equally as great development. The progress has been as rapid and as wonderful in its way as in any other line, and it is only beginning. It is an age of progress, and the keen competition is compelling the farmer to adopt new lines of work and also to put more thought upon his work. It is noticeable to one moving among the farmers, that the observing, reading men are the ones that are the most successful to-day upon the farm. Physical strength is not an item of so much importance to-day as it has been in the past, and as its importance has declined the necessity of greater mental strength has made itself more and more apparent. Every farmer knows that if he is to keep up the productiveness of his farm he must feed and cultivate the land; so, too, he must feed and cultivate his mind. If fed on the light, trashy literature of the day, he need not expect a development that will be of service to him. All know that there are certain conditions for successful growth, whether of vegetable or animal life; so, also, there are certain conditions for growth of the mind. One of these is the power of concentration; i. e., the ability to gather the faculties of the mind together and hold them on one subject, to the exclusion of all others. Another is the power to sift and classify thoughts and ideas and arrive at a clear understanding of any subject; and is closely associated with the power of judgment or discrimination. The power of expression now comes in, and by it we can make known our ideas to others. If a man cannot collect his thoughts and keep them on one subject he cannot expect to retain what he has been reading. If he reads for pleasure only and does not try to retain what he does read, he will lose the power of retaining anything he would like to know. He makes a riddle of his mind. Light, trashy literature sifts through and nothing is left. How can he sift and classify knowledge that he cannot retain?"

"There is plenty of opportunity to cultivate and develop the mind. The long winter evenings give a splendid chance to gain information and study the work of the farm. The farm journal brings news of various kinds that needs to be sifted and the good for the particular case taken out and applied. The Farmers' Institutes offer another source of information, and again the knowledge gathered requires to be sifted and adapted to particular cases, calling for judgment of no mean order. The College at Guelph offers another source of improvement. The many good books printed upon farm topics offer another opportunity to those interested to gain information on subjects that interest them. These books are written by practical men who know what they are writing about, and we cannot afford to cast them aside as useless. The home is ornamented to make the home-life more enjoyable; so too should the mind be ornamented by choice literature, good poetry, and sound prose.

"In the competition that is now going on the man possessed of the required knowledge will outstrip the one not having it, and as the days go by the strife will become more and more unequal between the farmer who knows and the one who does not know how to keep abreast of the advance in agriculture."

Advantages of the Ontario Agricultural College Course.

To the Editor FARMER'S ADVOCATE:

SIR,—A recent letter received from a fellow-graduate of the Agricultural College, Guelph, referred to the fact that the College was almost full of students at the beginning of the term which opened October 1st. This was particularly gratifying to me, especially when the remark was made that almost the entire number of new men were farmers' sons, most of them from Ontario Province. Having put in three sessions at that valuable Institution, I feel like congratulating every farmer's son who avails himself of the opportunity of securing as much as possible of what that Institution has to offer in a one, two, or three years' course.

Is it not a matter for wonder, however, in these times of keen competition and growing appreciation of agricultural products of a superior quality, which cannot be produced profitably without the exercise of keen discernment and scientific knowledge, that from this excellent Province of Ontario, with its intelligent rural population, not more than from forty to seventy new men come up from year to year to take the course, at once so practical, yet scientific, that is offered under such favorable conditions at that Institution? It is gratifying to observe that the old-time prejudice against what is called "scientific farming" is giving way to an appreciation of it; in fact, it is being found out by experience, which teaches, that slipshod, indifferent methods can no longer succeed in providing a farmer with a livelihood, except he is already in possession of a substantial backing, which is seldom probable with such men, except through inheritance or a wealthy marriage. These conditions are not for the masses, however; so it becomes us to meet the conditions of the day in a conquering spirit, accompanied with an understanding of the working of nature in the things with which we have to deal. I assume that no reader of the FARMER'S ADVOCATE will take exception to the term "scientific farming," because that is only farming in accordance with the divinely implanted laws of nature, so that, in reality, if a man is not a scientific farmer he is not a good practical farmer.

Now, since the inception of the College it has ever been the effort of the Agricultural Department to equip the Institution with men and appliances in the best possible manner to meet the requirements of the times. To say that admirable success has been attained in that direction is to put it very mildly, because this Institution is looked up to as a model, viewing it from a practical standpoint among the other agricultural colleges of the world. The truth of this statement is borne out by the fact that students find their way to this College from very many foreign countries where good agricultural colleges exist, viz., among others, Great Britain, Poland, Spain, New Zealand, and the United States of America. To say that a course at this Institution is valueless or even indifferent in its worth to one who intends to follow farming is displaying ignorance of the grossest sort. Of course, a fool could not be given brains within its walls, nor an indolent student industrious habits (though example there should be a check to laziness), but an industrious son of a progressive farmer, having ordinary intelligence, cannot fail to receive with his diploma or degree that which will make him a wiser, better, broader, and, therefore, more useful member of society, and also develop his capacity for greater financial success in his favored pursuit. This I can say with becoming modesty, along with very many more ex-students, without fear of successful contradiction. For the information of young men who have never visited the College or received a College circular, I will refer briefly to some of the many lines taken up. The whole subject of agriculture receives detailed attention. Rotation of crops, fertilization of land, drainage, green manuring, catch crops, dairying, bee-keeping, etc., are all made clear and easily understood. With regard to stock, one has an opportunity of familiarizing himself not only with some ten of the best breeds of cattle, nine breeds of sheep, five or six breeds of hogs, but also all the best breeds of poultry for the farm. The feeding and care of all these animals is skillfully taught, as well as a practical veterinary course given, a knowledge of which every keeper of stock should possess. Speaking for myself, I have no hesitation in saying that the training there has been of immense advantage in relation to actual farm management and work.

When I think of the comparative few who yearly come up to the Agricultural College for instruction, the reason for such is not easy to discern. The stringency in the times, no doubt, has much to do with it. For while the cost of the course itself is very meager, the supplying of a man in the place of the would-be graduate is not so cheaply disposed of. In the case of large families of boys, one can be spared at a time without serious inconvenience, especially when the whole business of the others is to be benefited by his taking the course. With regard to the actual cost of the course, I may say that my three years' course was covered with a cash outlay of something like \$170 all told. In my second year I held the County nomination, which saved me \$20 tuition fee. Had I remained and worked upon the farm between the first and second, and second and third years, I have no doubt much of the \$170 would have been earned upon the place. I considered my time was worth as much at home during that time, so that I consider

my B. S. A. holds me in debt for something over \$1,000 in actual value. I may say that a number of men, to my knowledge, have gone to the College and come away in three or four years' time Bachelors of Scientific Agriculture, with more cash than they had when entering the Institution. Whether or not such could be done now I cannot say, but I do know that every faithful student who gives two or three years in pursuit of the studies laid down in the prescribed course of the College makes a very profitable expenditure of time and money.

It is especially encouraging at this particular time for bright farmers' sons to secure a correct knowledge of agriculture, in view of the upward tendency of the times. Within the last few months the gradual improving of prices of grains, dairy and other products augurs a general improvement in the conditions of farming, which will do more than any other agency to stop the exodus from country to town which so many lament. It will restore faith in farming, and turn workers to the soil—man's original avocation.

With regard to the ever-improving equipment in connection with the College, I, along with many ex-students of a few years ago, regret that our opportunities there were so early terminated. Our visits, from time to time, fill us with envy as we see the advantages at the command of this-day students. While some are complaining of the heaviness of the course, I might say that honest work, with ordinary intelligence, will succeed in giving in every case a grand education, and in 49 out of 50 cases a diploma or degree, or both, according to the years taken at the course.

With regard to the moral and religious influence thrown around the students, I am sure some mothers, at least, will have special concern, especially if their sons leave the home circle and influence for the first time to take the course. To this I may say no anxiety need be indulged in, because a large majority of the professors are Bible-class teachers or Sunday-school workers, while the Young Men's Christian Association, which holds a weekly prayer meeting and Bible class on Sunday afternoons, managed and largely conducted by the students themselves, receives the heartiest support of nearly all the boys. I have known the active membership of the Association to reach well on to fifty, while a large proportion of the remaining students were associate members. Speaking personally, I may say that the influence from my connection with that College Association will never be forgotten. With very few exceptions, I have no hesitation in saying that during my college life bad boys got no worse, boys of a medium moral character became good, and good boys attained to a high plane of living. With regard to the influence of the city near by, the boys have very little to do with it, as a rule.

Trusting not to have trespassed upon too much of your valuable space, I remain,
AN EX-STUDENT.

Cause and Remedy of Agricultural Depression in Britain.

British farming at present, as an industry, is described by Chas. Rintoul, in a short treatise, to be in a state of decay, notwithstanding the fact that it is associated with the best system of husbandry, the best climate for green cropping, the best breeds of cattle and sheep, and the best markets in the world. The paper referred to, which was read recently before the British Association, at Liverpool, attributes the decay, in a degree, to the abolition of the corn laws, which Act was a Government security to the farmer for safe investment of his capital and labor in producing or manufacturing food for the nation. The depression, however, was substantially stayed for a time by the expenditure by the Government of large sums of money upon land drainage, which, because of its liberal circulation, revived the prosperity of almost every business, and rendered the land exceedingly productive. Manufacturing interests, too, which suffered under the corn laws, got relief and now became prosperous.

About this time a pamphlet was issued broadcast, advocating high farming as a substitute for protection. The advice was liberally acted upon by farmers who owned large holdings. This necessitated a tremendous outlay, which was met by prosperity caused by the Crimean war. The value of landed property advanced 250 millions sterling in twenty years, when the times took a turn, by a number of adverse seasons and by the extending of agriculture in the States of America and the success attending gold finding in California and Australia.

Advanced methods of cultivation and harvesting on the unlimited supply of virgin soil, together with cheap transit, brought the British farmer face to face with the effects of foreign competition. This brings Mr. Rintoul to what he considers the principal cause of the depression—overproduction of grain abroad and underproduction at home. A condition arose which involved an inability to produce grain upon much of the English land, so that large tracts were obliged to go out of cultivation, and laborers were driven off the soil into the towns. Statistics show that in the county of Essex, embracing a radius of a little over twenty miles of London, some 28,000 acres of good wheat land has become derelict. This year we find there is upwards of half a million acres less wheat grown than in the previous year, and there is one and three-quarters millions acres more permanent pasture in England alone than there was in 1880. The population of