

**The Corn Question.**

BY JAMES GRAHAM, PORT PERRY, ONT.

In the February number of the *ADVOCATE* I noticed two communications, one from the Province of Quebec, the other from Nova Scotia, complaining that they no longer can make beef at a profit. It is a dead industry, and as a remedy they advocate the removal of the duty on corn and other feeding stuffs to enable them to raise beef to compete with that shipped there from Chicago. Now, suppose the duty removed, would the dead meat cease to be shipped there. No, it would still find the same market, simply because the present duty does not raise a barrier sufficient to stop the exportation trade. Therefore I think it a fair statement to make that it matters not from what country we import from to convert into meat. The same country can export their dead meat to the same market and be able to under-sell the importers, for the simple reason that the imported meat is the manufactured article and carries less freight. Now, sir, when the subject of the removal of the duty off corn was disposed of in the House, we expected that the matter had received its quietus for a time. However, it appears such was not the case, for I notice in the March issue of your journal two articles on the same subject bearing on the repeal of the duty off corn. Now, sir, that duty was placed on corn by the voice of the farmers of this country; and I, as a farmer, fail to see that it would be to our interest to have it removed. I have no sympathy with the Act giving the rebate to distillers on corn. It certainly would be a suicidal act for us as farmers to advocate the repeal of the duty with the view of giving our coarse grains a less market value. Is our position as farmers to-day better on account of the present low prices? Is trade better? Then, if not, why advocate the adoption of a scheme with the view of still further reducing the market value. Now, you must admit, that apart from the price of coarse grains in the market, the price of dead meat gives the value to grains fed on the farm. Take for instance the price of beef all over this part of the country last year, and the present, with the exceptions of the months of May and June last, was less than three dollars per hundred live weight. Now what price could the feeder receive for the grain fed these cattle? Why a mere nothing. Would our position as farmers, manufacturers or business men be improved by the constant drain on the capital of the country to pay for imported corn? If not, why advocate such a measure. You say we must change our system of farming, we can no longer compete in the grain markets of the world from the productiveness of some countries, cheap labor in others, and such like. Now, in such statements, we do not agree. I am sure it is freely admitted, all things considered, we have one of the finest countries. Our climate is such that man can enjoy life to the highest degree. Our soil is of the most productive kind; and no country can raise roots for feeding purposes more cheaply than we can. Our climate and soil is equally as good for grain. The total failure of a crop here was never heard of. We can produce wheat, barley and oats at a less figure than any known country, notwithstanding statements to the contrary. Now, in reference to these cheap feeding stuffs of the West, they are all included in the one word—corn—which doubtless can be grown cheaply, and has good

feeding qualities. I see it is from repeated tests, fairly established, that a bushel of corn fed under favorable circumstances will make nine pounds of pork live weight. This, at four cents per pound, gives corn a market value of thirty-six cents. Now it is only certain seasons that pork is worth four cents live weight, therefore it would be a risky business to take corn at thirty-six cents per bushel and get paid for trouble of handling. I confess we cannot do without corn for green feed. We have nothing equal to it. But from reports given I fail to see any who can grow cheaper feeding stuffs than we can. We are not confined to one article of diet to feed. Now, as to the value of growing corn, I will give you a report which I am sure you will willingly accept. It is that of John D. Gillett, Ill. The farm contains 12,000 acres. He had about 4,000 acres of corn grown annually under this system:—He had about 20 tenant houses on the place. Has the corn grown for him, he taking it, delivered in the crib, at 15 cents a bushel, if the grower furnishes everything but the land. If Mr. Gillett furnishes the seed, teams, implements, everything but the human labor, the price paid for the corn is 10 cents per bushel. Now this to some would appear to be very cheap feed, and I believe would pay when fed on the farm. Now allow me to place peas here as an offset to corn. I will submit the whole operation to you, so that you will be left without a doubt on your mind that we are able to stand the pressure against the outside world. Our mode is, we use the double-riding sulky plow. Any old man will plow four acres per day, and will do it equal to or better than can be done by any walking plow. The other work will be all done by single teams, and will increase the cost of the human labor the same as the corn, and to save figures will take a 20-acre field:—To plow and cross-plow, ten days, at 75c. per day, \$7.50; one and a-half days' drilling, and one day to smooth the ground with the harrows, and one rolling, 3½ days. Now, to harvest, we take the Tolton pea harvester, manufactured by Tolton Bros., Guelph. Two boys will cut seven acres per day. They change, ride and throw back six days, at one dollar per day. To draw in we will send out two teams and six men. We will give them three days, say eighteen days' work. We now find the 20 acres of peas in the barn at a cost of \$33.62. We will base our calculation on 28 bushels to the acre—560 bushels. If 560 bushels cost \$33.62, what will be the cost of one bushel? Ans. Six cents. Before closing, I ask to direct your attention to a few remarks taken from Professor Wallace's reports on Indian crops and exports. He refers to the unsuccessful efforts to improve agriculture in India, and that there is no reason to expect the growth and export of India to increase at anything like an alarming rate. With the extension of railways, he admits, new wheat-growing districts will be tapped; but, he goes on to observe, the supply of easily available land is by no means unlimited, and the drawbacks and disadvantages are far more numerous than most people suppose. There is the imminent danger of ruin from drought, where irrigation is not practiced, and where it is great damage is often done by rust. Early frosts frequently reduce the yield and injure the quality of the grain if they fail to destroy the crops. Frogs, rats, locusts and weavel are also mentioned as sources of loss to the Indian wheat grower. Then, in the cultivator's efforts to extend the area of the wheat crop, he is hampered by many difficulties. New districts are often unhealthy, or deemed so by the superstitious and easily frightened natives, whose clannish desire to be at home renders any excuse good enough for them when they want to run away from a new settlement. Now, when we take into consideration the many drawbacks that the farmers of other countries have to contend with, I fail to see why the Canadian farmer could be driven from competing in the grain markets of the world with all the advantages we possess, too numerous to mention here.

**Application of Chemistry and Geology to Agriculture.**

BY JAMES MILLER, MEAFORD.

As it is my intention to write a moderately long synopsis of the above subject, it will not be out of place here to give a few preliminary remarks, which will be appropriate at the outstart. As the breast is to the child, so is agriculture to the fifteen hundred millions of men depending upon it for their very substance—in the prosecution of which nine-tenths of the fixed capital of all civilized nations is invested, and upon which, perhaps, three hundred millions of men expend their daily toil. Is it any wonder, then, that the investigation of the principles, on which the rational practice of this art is founded, ought to have commended the principal attention of the greatest minds? To what other object could they have been more beneficially directed?

But, at certain periods in the history of the country, the study of agriculture becomes more urgent. When a tract of land is thinly settled, like Canada, a very inferior system of culture will produce not only enough of food for the population but for the partial supply of other countries as well. But, when the population becomes more dense, or the land becomes exhausted, the same imperfect or sluggish system will no longer suffice, considering, too, the increased supply over the demand, as well as the cheapness and facility of production on unexhausted lands. It is well for us to make the best of our situation and resources. The land must be better tilled; its special qualities and defects must be studied, and means must be adopted for making the best returns from every part susceptible of cultivation. Canada is now in this condition. Better agriculture is now of vastly more importance to us than it was during the Russian or American wars, when prices were high and the land was virgin soil, and therefore yielded more abundantly. The invention of improved agricultural machinery, as well as the better and more economical mode of using them, have all tended not only to the raising of crops at a less cost, but on a greater scale. Where would we be if we had again to resort to the sickle at current prices, and the present yield of grain per acre? Can it be doubted but that, by a better system of drainage, deeper ploughing, and more abundant supply of fertilizers, the present yield of our Canadian land can be doubled, when that of Great Britain, after centuries of tillage, was made to yield double its value by such means? There is something in the saying that we, as Canadians, are too well off, when we feed a cow on five acres, when we could, by a little forethought, make one do the work. Let the example of the Chinese teach us a lesson, not that I should wish to see the Canadians live as do the Chinese.

In China we see a people, whom we call semi-barbarians, multiplying within their limits till their numbers are almost incredible, practicing in the most skilful manner various arts, which the practice of modern science has but recently introduced into civilized Europe and America. Cultivating thin soil and stimulating its fertility by means, which we have hitherto neglected, despised, or been wholly ignorant of, thereby making their soil yield an increase in proportion with their population.

Experience and example, therefore, encourage