

Truth's Contributors.

THE AGRICULTURE OF CANADA.

BY HENRY LYK.

As a student of the social problems of Canada, it has been my good fortune to have had access to sources of information which I have had pleasure and satisfaction in utilizing for the benefit of the country at large, through the financial press of Canada, as well as by private and special correspondence.

One of the branches of study of a most interesting and important character, is that of the continuously changing conditions of the cultivation of the land.

We see in Great Britain immense estates ceasing to be profitably cultivated, whilst the people of the towns and cities find it impossible to procure fruits or vegetables at reasonable prices, so that, in fact, the working classes scarcely know the taste of fruit and seldom obtain such vegetables as are necessary to health of body and mind.

In the Eastern United States we see a similar state of affairs gradually increasing in intensity, yet in both Great Britain and in the United States there is a rapid increase in general wealth, with a gradual widening of the dividing line between rich and poor, between those who have every comfort at their command and those whose lot is constantly becoming more cheerless and hopeless. The cities and towns are increasing in extent, in population and in riches, whilst the country and the villages are being depleted and impoverished; mortgages are being renewed, increased or foreclosed, although the rates of interest, by their decrease, show that there is not profitable use for the borrowed money.

It is my intention, if possible, at some time in the near future, to write upon the causes of the mistakes and hindrances in connection with the mining industries of Canada, but my present subject is that of the cultivation of the land in Ontario and the Bourbonism of those who should have the interests of the cultivator as their chief study and care. I am not ignorant of the work done at the Government farms and colleges; in fact, I write in the hope that their present comparative uselessness, may by an occasional glance outside of their boundaries on the part of those who have the control of them, lead to such breadth of statesmanship as will cause them to minister to the wealth, comfort and happiness of the agricultural classes en masse.

I do not wish to see any material change in the "National Policy," but I do regret the general feeling that everything should be sacrificed to the interests of the manufacturers, so that it should be imagined that the welfare of Canada depends altogether upon their success, whilst our forests are being depleted, our mines are unworked, our lumbered forests of iron are not utilized, and our lands are being exhausted, although it is obvious to every careful observer that the sources of income may grow to be exhausted, we should be utilizing our own resources.

It is my intention, if possible, at some time in the near future, to write upon the causes of the mistakes and hindrances in connection with the mining industries of Canada, but my present subject is that of the cultivation of the land in Ontario and the Bourbonism of those who should have the interests of the cultivator as their chief study and care. I am not ignorant of the work done at the Government farms and colleges; in fact, I write in the hope that their present comparative uselessness, may by an occasional glance outside of their boundaries on the part of those who have the control of them, lead to such breadth of statesmanship as will cause them to minister to the wealth, comfort and happiness of the agricultural classes en masse.

It is my intention, if possible, at some time in the near future, to write upon the causes of the mistakes and hindrances in connection with the mining industries of Canada, but my present subject is that of the cultivation of the land in Ontario and the Bourbonism of those who should have the interests of the cultivator as their chief study and care. I am not ignorant of the work done at the Government farms and colleges; in fact, I write in the hope that their present comparative uselessness, may by an occasional glance outside of their boundaries on the part of those who have the control of them, lead to such breadth of statesmanship as will cause them to minister to the wealth, comfort and happiness of the agricultural classes en masse.

It is my intention, if possible, at some time in the near future, to write upon the causes of the mistakes and hindrances in connection with the mining industries of Canada, but my present subject is that of the cultivation of the land in Ontario and the Bourbonism of those who should have the interests of the cultivator as their chief study and care. I am not ignorant of the work done at the Government farms and colleges; in fact, I write in the hope that their present comparative uselessness, may by an occasional glance outside of their boundaries on the part of those who have the control of them, lead to such breadth of statesmanship as will cause them to minister to the wealth, comfort and happiness of the agricultural classes en masse.

to the habits and circumstances of the people, consequently, just as certainly foredoomed to loss and failure, as would the erection of a monster cheese factory to be dependent upon milk to be carried from far distant points without any provision for either the purity or the quantity or the regularity of the supply—for the protection of the material from decay or for the utilization of the waste.

In the latter part of the preceding paragraph I have indicated the matter to be considered when providing for the introduction of any industry which has previously been foreign to the country, because no one could design more beautiful machinery; appliances better adapted for the purpose for which they were intended, have never been seen in Canada than was placed in these eastern beet sugar factories. There is no doubt of the practical patriotism of their promoters, nor that they had assurances of success from parties whom they deemed to be competent, so that the fact that these factories either remain idle or are diverted from their proper use, is a matter greatly to be regretted by all Canadians, the more especially as whether for the production of the raw material or for the disposal of the finished product, no country can excel Canada.

With these facts in mind, and enlightened by our experiences, let us consider the necessary concomitants of the production of sugar from beet roots with profit to all concerned. These are:

1. The proper cultivation of the beet in order that it may produce the maximum of saccharine with a minimum of saline matter.
2. An assured supply of properly cultivated roots in order that the factories may not be idle for want of material.
3. A method of manufacture which will dispense with the expensive land carriage of the beets to distant points.
4. A market or use for the refuse of the crushed beets.
5. A well organized system of cultivation and of gradual manufacture with a view to such economy as will not prevent efficiency in any state of the operations.
6. The co-operation of all the interests for the general benefit.

There is no doubt but that the system which prevails on the continent of Europe could be established here, but as it would confer only local benefits and those of doubtful character, it is not wise to contemplate its introduction, yet we should learn what we can from it and find how far they may be adopted, or with advantage combined with industries which are already established in Canada. We do not want colonies of serfs in this country, but more freemen breathing pure air and living pure lives.

1. The proper cultivation of beet roots must be provided for when the guarantee for market and payment is given, because negligence or carelessness in their cultivation will result in such excess of saline matter as will cause loss, not only in respect to the particular crops which are improperly grown, but to all that they may be mixed with, thus embarrassing all the stages of the operations; consequently the cultivation must be under the direction and supervision of competent district inspectors.

2. The assurance of a profitable market would cause the cultivation of the roots in such quantities as would meet the demand yet failure of market would not necessarily cause loss to the grower of the crop, because of its great value for feeding purposes in the winter with chaff or grain offal, still there is no doubt that for other failure of the market, the cultivation of the roots would be a loss.

3. A method of manufacture which will dispense with the expensive land carriage of the beets to distant points. The sugar beet reaches perfection at the time of the year when the ordinary use of the cheese factories has ceased. At this time of the year certain cows are dried, some for fattening and others for breeding purposes. The leaves of the beet are excellent food for cattle, either for milk-producing, or fattening for ordinary feeding purposes, or for combination with other contents of silos.

and bulk of the product to be conveyed, and to secure the profitable disposition of the refuse by causing it to be consumed on the farms upon which the beets are grown. This can only be done by widening the sphere of usefulness and of interest, but cannot be done so long as the one uncombined idea of making sugar from beets restricts the scope of the enterprise. Let us then consider the facilities now in existence and all the inducements which require to be offered.

First, we have in various parts of the country, buildings and appliances for the manufacture of cheese which have been the means of distributing immense amounts of ready money in the districts in which they are situated. The active operation of these cheese factories is generally continued from the beginning of June to the end of December; they are idle during the remainder of the year. If they could be put to profitable use from the first of October every year to the end of May every succeeding year their returns, in proportion to the capital invested in them, would be doubled.

These cheese factories have enabled the profitable breeding and feeding of cattle and the conservation of the productions of the soil because of the return to it of the elements of fertility; they necessitate the use of large tin cans which could be used for the conveyance of other liquids when not required for milk; they contain steam boilers and pipes and pans which could be used for the purpose of evaporation. The sugar beet reaches perfection at the time of the year when the ordinary use of the cheese factories has ceased. At this time of the year certain cows are dried, some for fattening and others for breeding purposes. The leaves of the beet are excellent food for cattle, either for milk-producing, or fattening for ordinary feeding purposes, or for combination with other contents of silos.

That which is required is a process of evaporation and a treatment of the cheese factories or slight additions thereto, so as to advance the syrup to such a stage as will enable it to be conveyed to the central or sugar-producing factory to be finished into refined sugar.

Then the farmer will wash and crush his beets at home day by day in such quantities as will enable him to feed his cattle the refuse of the beets whilst it is fresh and palatable. He will fill the cans, erstwhile used for containing milk, with the expressed juice of the beets; these cans will be promptly collected just as they now are, conveyed to the new syrup factory and their contents immediately operated upon; the saccharometer will take the place of the lactometer; the patrons of the factory will be protected from fraud in the same way they now are in reference to milk; the buildings and appliances of the cheese factory will be in use for at least three months longer every year than they now are, and another source of income will be open to every agriculturalist. But we go further, because the gain to the farmer will be so great as to encourage him to an extension of the principles of co-operation which have proved so advantageous to him in the matter of cheese factories.

In order to use his daily supply of crushed beets, the farmer will require to feed a large quantity of hay or chopped straw and of crushed grain, thus using on his own land with profit what he now sells without any. But his great advantage will be in the increased means of preserving the fertility of the soil which will enable him to cultivate crops which are now impossible because of their exhausting nature. So, therefore, the growing of flax would become more general, which would add another month to the season for profitable labor, because there is no reason why the separation of the seed and the preparation of the fibre should not be done by the farmer at his own home.

In Ontario and Quebec the growth of grain for export has ceased to be profitable; it is not likely that it will ever again be a profit-

able pursuit in either province, so that it is necessary for some other means of profitable farming to be found. The breeding and fattening of cattle; the breeding and training of horses; the production of cheese, eggs and poultry, and the growth of fruit are now the only profit yielding branches of agriculture. If we can only add to these such other cash producing products as sugar, flax, flax-seed, linseed oil and oil cake, without the requirements of extraordinary outlay of capital, and with the preservation of the fertility of the soil as well as with a prolongation of the season for profitable labour upon our farms we shall have made as desirable an advance as was the case when the cheese factory system was adopted. Not only will this be done, but the fertility of the soil will be increased by the consumption upon the farm of much that now leaves it for want of combination, and by reason of the better cultivation requisite for the production of sugar beets and of flax.

So much for the farms; now for the beet sugar factories. By this system they would receive a regular supply of material, little of which would be waste, concerning none of which there would be doubt of danger; in connection with which there would be neither unnecessary freights nor unavailable product.

They would require less capital than the ordinary factory, their output would keep pace with their outlay, they would at the end of each month pay for the syrup received during the month, and would have returns from most of the month's product of their own factory before the time of payment for the syrup would arrive.

As to the country in general, no one can estimate the benefits which would accrue from this system. A rough calculation shows an increase in the cash receipts of the farmers of about twenty five per cent. not from the growth of sugar beet alone as that would be an absurd computation, but from the increased productions of beef, pork, flax eggs and poultry, all of which bring cash to the farmer, and because the fact of the profit would stimulate the better cultivation of the soil. The country store-keeper, the mechanic, the machinist, the wholesaler merchant, indeed all classes of society would be benefitted by the regular flow of money into the hands of the farmers; whilst the non-necessity for the importation of raw material for our sugar factories would keep in the country an immense amount of money which now goes out of it.

The missing link is the mode of treatment of the expressed juice from the beets. I think this is not a very formidable difficulty if properly faced, and I think it is worth the while of our sugar refiners, the owners of the now idle beet sugar factories, our ministers of agriculture, the managers of our experimental farm and agricultural colleges, our agricultural societies, our chemists and our machinery manufacturers to cope with this difficulty at once.

I cannot see why we should not produce beet sugar just as successfully as the French or Germans do, or iron as good as the Russians or Swedes, nor yet why we should be obliged to follow the methods of France, Germany, Sweden or Russia, when we can reach the same end by means better calculated to promote the health, comfort, morality and prosperity of our people. The solution of the problems as to the best methods of transplanting old world industries into a new country in which the conditions of climate, land tenure, habits of life, and many other considerations are involved, is worthy of the study of our most enlightened citizens, not only from a patriotic point of view, but because of the material benefit which would accrue to every interest in which we are concerned, not the least of which is preservation of that independence of character which can only be found