

prizes be given more for agriculture proper, as for the best grain raised by the use of some artificial manure; or give prizes for cattle fattened on different kinds of foods, so that the farmer may see which is the best food to give to fatten his cattle.

Another thing that could well be attached to our shows, and one that would have good results, would be for the directors to get some professor of agriculture to deliver a public lecture on the evening of the exhibition, on some department of agriculture. If this were done and a good speaker were to deliver an address on some subject, as—“How best to destroy weeds,” “How to destroy insects injurious to fruit or Canadian forestry,” we believe that such an impulse would be given to agriculture in this province that our fertile Ontario would at once go far beyond all other countries and surpass even her present self as an agricultural district.

Agriculture after all is the business and the only one that this Dominion of ours is to become yet more famous for. We must have food and clothing, and that is really all any person gets, and these come from the farm.

It is the farmer that feeds the world. It is on his bounty we must rely. Then let us keep our eyes open to his value, and assist him all we can. Let the farmer keep his eyes open when he attends the exhibitions, and be on the alert for everything that will promote his cause. If he will do this and then make use of what he hears and sees, he will receive an education that will be of more value to him than silver or gold, for no one can take it away.

Salt Problems.

A letter appeared in our last issue from the pen of Mr. John Ransford, Clinton, Ont., which was undoubtedly read with concern by our farmers. He exposes the fraudulent practice of selling underweight, contending that a barrel of salt should weigh 280 lbs. net, or 300 gross, that a good deal of salt weighing from 200 lbs. upwards per barrel gross is being placed on the market, and that as salt is shipped by the 100 pounds and not by the barrel, the fraudulent dealer gets more barrels of salt for less freightage charges, and sells at the same price per barrel as the honest dealer, thereby realizing a double profit, for he also pays the maker a lower price for the light salt. The farmer, it appears, pays the same price for each barrel of salt, no matter how many pounds it contains. He calls upon the government to fix a standard, to enforce the branding of the maker's name on each barrel, and urges the farmers meanwhile to weigh their salt before loading it on their wagons.

In further elucidation of the subject, we publish in this issue a communication from Mr. Joseph Kidd, Goderich, Ont., in which he claims to expose another fraudulent practice, viz., the sale of adulterated salt manufactured from impure brine, whereby the farmer gets too much weight for his measure of salt.

If there is a little of truth in the assertions or insinuations made by any one of these correspondents, the matter ought to be thoroughly investigated, and legislative action should be taken at the earliest possible moment. Our farmers should not let the guilty parties go unwhipped of justice.

There are also other problems connected with the salt business which demand immediate solution. At present there is a boom on different brands of salt. Each dairyman has his own fancies and prejudices, and we have never been able to ascertain upon what basis they form their conclusions. Some contend that the Liverpool salt is the “purest,” while the representatives of Canadian brands contend that there is nothing superior to the home-made article, which has also the advantage of cheapness.

We emphatically protest against these hasty conclusions, and unless these so-called authorities can give some reason for the prejudices that are in them, we must look to other sources for a basis to form our judgment. It is comparatively easy to judge the physical qualities of salt, such as its grain and its soluble property, but this by no means settles the question. We must depend largely upon its chemical composition, but the number of analyses at our command is far too limited. Some agents tell us that their brands are chemically pure. Beware of them; they do not know what they are talking about. If it is possible to make salt chemically pure, that is the pure chloride of sodium, it would be so expensive that it could scarcely find a market.

It is difficult to compare the analysis of the various brands of salt made by different analysts; for the impurities are given in different forms of combination. For example, some give them in the form of insoluble matter, lime, sulphates, and sulphuric acid, while others divide them into chlorides of calcium and magnesium, and sulphate of calcium. These are the leading impurities, although there are also usually traces of other foreign matter present.

Now let us examine the physical properties of these impurities. The sulphate of calcium (land plaster), as every farmer knows, is not soluble in water, and it attracts moisture readily. This property of absorption is still more inherent in the chlorides of calcium and magnesium, so that a simple and tolerably accurate method of judging salt is by the quantity of moisture it absorbs, aided by the measure of its solubility. If a handful of salt exposed to the air absorbs much moisture, it is unfit for use.

Our government took a step in the right direction when it had several brands analyzed at the Ontario Agricultural College, but it classified all the brands, ten in number, as Canadian and Liverpool salts, just as if it was afraid to expose any of the fraudulent manufacturers. The name of the maker should be attached to each brand analyzed. We give the analyses herewith as made by Professor James:

ANALYSES OF BRANDS OF SALT.

Number.	Brand.	Order as to purity.	Sodium chloride.	Water.	Calcium and magnesium chloride.	Calcium sulphate.	Residue.	Total impurity.
1	Canadian	2nd.	97.66	0.49	0.13	1.63	0.09	1.55
2	Canadian	4th.	97.11	0.71	0.23	1.87	0.08	2.18
3	Canadian	8th.	94.26	3.29	0.47	1.93	0.05	2.45
4	Canadian	5th.	97.18	0.58	0.24	1.95	0.05	2.24
5	Canadian	6th.	96.61	1.11	0.27	1.86	0.15	2.28
6	Liverpool	1st.	97.12	1.09	0.26	1.45	0.08	1.79
7	Liverpool	3rd.	97.20	0.75	0.25	1.72	0.08	2.05
8	Liverpool	7th.	96.93	0.69	0.31	1.88	0.19	2.38
9	Liverpool	9th.	96.47	0.94	0.23	2.26	0.10	2.59
10	Unknown.	10th.	93.00	1.79	0.55	3.70	0.96	5.21

Here we find that there is a close relation between the percentage of water and the per-

centage of impurities, although the condition of the salt with reference to exposure to moisture before analysis is not stated. We find, moreover, that the difference, if any, between the Canadian and Liverpool salts is very trifling. The figures in the “Residue” column indicate the insoluble or difficultly soluble percentages. The average impurity of the five Canadian brands is 2.220, against 2.203 of the Liverpool, these figures being slightly in favor of the Canadian, but the Liverpool brands have been found to be a little ahead in fineness and uniformity of texture. The Professor also states that the Liverpool salts dissolve a little more rapidly, owing to the shape and size of the grains, which gives them a slight advantage for some purposes—such as butter for immediate consumption.

We do not contend that these few analyses settle the matter, but they should be continued, and no time should be wasted in analyzing brands the manufacturers of which are omitted from consideration. If the government officials had got their hands upon one or more of those “slimy adulterated stuffs” mentioned by our correspondent, the desired end would have been accomplished at once. Will the government be so good as to investigate the name and address of the manufacturer of No. 10 brand? If so we will give the gentleman a free advertisement.

Harvesting Corn and Corn Fodder.

The securing of the corn crop in the Southern States, where corn and corn fodder are the mainstay of the farmer, has been reduced to a science, and a few hints as to Southern methods will be of great service to farmers in Canada.

The corn is planted in rows about three feet apart, and cultivated during the season in the ordinary way. Just before the seed begins to ripen, and while it is yet in the milky state, the tops are cut off a short distance above the first joint over the ear, leaving the leaf which is attached to the ear untouched. A man walks between two rows cutting the tops off each row as he goes along, using a large, thin-bladed knife, and throwing each handful, consisting of five or six tops, crosswise between adjacent rows. If the rows, for example, lie north and south, he throws two rows towards the east and two towards the west of the rows which he is cutting, thereby making a swarth of four rows.

At this stage of growth the tops, both leaves and stalks, are very tender and juicy, and when properly dried make excellent food for all classes of farm stock. The swarths are allowed to remain on the ground for a day or two, according to the state of the weather, until they are thoroughly dried, and then the farmer goes to work at four o'clock in the morning and binds them into sheaves. If the binding is done while the dew is on the fodder, bands can be made from the loose leaves which may be found lying on the ground, but when the dew begins to dry off, the binding may be continued, though less effectually, by using the tops for bands. The sheaves are then carried by hand to roads made through the field, where they are put into the wagon and conveyed to the stacks. Sometimes the whole family go to work early in the morning, and it is astonishing what a large quantity of sheaves can be bound before the dew is off.