



A Family Journal, devoted to Agriculture, Internal Improvements, Literature, Science, and General Intelligence.

REMARKS

Of Mr. Brondeau (of Hamilton) on the articles which we should produce for exportation.

We continue the observations of the President of the Hamilton Board of Trade upon the important subject of our Agricultural productions. Mr. B. says, "that it does seem strange, that in a country where flax can be raised so easily and hemp grows spontaneously, we should import both our sail cloth and cordage." We differ, however, as to the reason given for the "strangeness." It may be, in accordance with a principle of political economy we have often alluded to, that we could import "sail cloth and cordage" cheaper than we can make it. We may add that it also seems strange, that after so much has been said on the superior quality of the oil which the Sunflower yields so abundantly, and the variety of uses to which both the seed and the plant can be applied, we hear of no attempt to raise it in quantity. And yet every one is aware that it also may be said to grow spontaneously! The way in which Mr. B. speaks of Rape cake might lead the reader to suppose it of no value, but while it brings from £5 to £6 per ton, as it does in England, it is not to be overlooked. It is probable, however, from the labour of transplanting, exposure to the fly, and precarious nature of the crop in general, that it will not be worth much attention in this country for some time. When sown as food for sheep, it is a valuable substitute for turnips on land too wet for the latter, and after being fed off, may be ploughed under with great advantage as a manure.

"When freights are reduced, it is probable that other grain beside wheat may become worthy of attention. Peas have been shipped for years past, but it has been difficult to get them of proper quality; they should be all white, and good boilers. Rich land, especially if manured with plaster, causes them to be the reverse. When split, most difficulties are got over; and as there is very good demand in England, it would be well if more attention were given to the subject. Peas should be shipped in barrels of four bushels.

Indian Corn was required last year to some extent, but it is of so perishable a nature, that it should always be kiln-dried, whether shipped as grain or made into meal. The greater part of that shipped to Britain last season, was more or less injured, which should act as a caution against similar errors.

Barley will probably be an article of export after the freights on shipping ports are reduced. To avoid heating, it should be always shipped in barrels. These might be made to hold a quarter or eight bushels, being lighter than wheat. Barley must not be kiln-dried, otherwise it will not malt.

Pot and Pearl Barley are much consumed in Britain, but have never been an article of export to any amount. It is only a year or two since they were imported. It is to be hoped they will have a fair trial. The more articles we have for export the better.

An extract of Malt and Hops is made in Britain, and sold so as to enable individuals to brew their own beer. Such could be made far more economically in Canada and would reduce the barley and hops in a very small bulk. It is worthy of attention, whether it might not be advantageously prepared.

Oats are too bulky for shipment, unless of the very finest kinds—such are not much raised in Canada. They require to

be put up in barrels, a quarter in each, as they are liable to heat. If at all damp, they must be kiln-dried like corn.

But, in the form of Oatmeal, there is every probability of a continuous demand. Great care should be taken to encourage this trade, by preparing the meal to suit the taste of the British consumer, and by raising the Potato Oat—the best kind for making meal. Oats are too often raised upon land unsuited for anything else. This is a great error; they repay manure and tillage as well as any crop, provided they are of a good kind.

White Beans have been too much neglected. The crop is as good as of wheat, the demand constant, and the price amply remunerating. They require only moderate soil—are in request in Lower Canada and generally over the country. They would pay to export to the Lower Ports and the West Indies, and even to Great Britain.

The Horse Bean only suits very heavy soil, but would have a good local demand if produced in quantity. These would answer also for shipment to Britain, being used there for horse food, and by Millers, in bad seasons, to give strength to inferior wheat, in manufacturing flour.

Rye is so little in request in Britain as not to be worthy of notice. It only serves for local use in distilling or for bread; it only answers for sandy soils, as good soils produce wheat in as great abundance, and at as little injury to the soil.

Millet is much used in Britain for puddings; it would be desirable to raise some in Canada for export, and for home use, instead of rice, for which it is a most excellent substitute.

Flax Seed is raised in Lower Canada to some extent, the fibre of the plant being employed in domestic manufacture. By the old processes of Water or Dew-rotting, the fibre of flax plants that had perfected their seeds, produced a very coarse thread; but, as by the new process, to be hereafter described, ripe plants give as good flax as green. The raising of seed may be carried on at the same time the fibre is saved. It has generally been supposed that the raising of flax or linseed, is scourging to the ground. If cattle are fed on oil cake, and their manure spread on the ground from which a crop of Linseed has been taken, it will be found that the land is enriched instead of impoverished! Be that, however, as it may, the greater part of the soil of Western Canada is well suited to flax and hemp, and these crops are not more scourging than wheat or corn.

To have, however, the full advantage, the oil should be pressed in the country, and the cake employed in feeding;—thus giving a fair price for the seed on the spot, and giving the farmer an opportunity to buy oil cake; not only giving fine manure, but rich manure.

Hempseed produces an excellent Oil for burning—also used in some parts of the world as food. The cake is not as valuable as linseed cake.

Rape seed gives a good burning oil, but the cake is worthless except for manure. Owing to the young plants being subject to be destroyed by the fly, this plant is difficult to raise.

Sunflowers give a large quantity of most excellent oil—equal to Salad for food—and for painting, very far superior to linseed, being colourless as spring water; thus, not giving, like linseed oil, a yellow shade to colours it is mixed with—growing darker by age—but, on the contrary, preserving the first clear tint for an indefinite period. The cake is more valuable

than that of linseed for feeding; and the quantity, both of seed and oil, is three times as great as linseed, with less injury to the succeeding crop.

Nearly all these remarks apply to the raising of poppies, the seed gives a considerable quantity of the finest oil, both for food and painting, also limpid and colourless; and the cake is very good for feeding cattle, the seed not possessing the slightest narcotic quality; on the other hand, being sweet and nutritious. Opium might be prepared from the growing plant, if labour could be got at a sufficiently low rate. Children answer for the purpose of gathering the gum of the plant; but the process is tedious.

These Oils, if produced in quantity, would answer for the purpose of export, both to the United States and to Great Britain.

The production of flax for the sake of the fibre, is now rendered comparatively easy, from the new process of preparation allowing the fibre of plants that have ripened their seed, to be used instead of the fibres of unripened plants. It consists in pulling and drying the flax, like preparing hay; then, when convenient, steeping it in vats kept to the temperature of 100 degrees of Fahrenheit's thermometer; a fermentation takes place, and in two or three days the fibre separates from the vegetable matter, leaving the latter fit for food for animals.

This plan is a modification of many others.

The first was water-rotting—putting the flax in cold water until the vegetable matter decayed; this was a nuisance to the senses, injurious to the health, destroyed the vegetable matter as food, produced a stain very difficult to be removed by bleaching, and if left too long, weakened the fibre. An attempt was then made to hackle the flax dry; then bleach it in soap and water. This broke the fibre too much, and was very laborious.

Dew rotting was then tried, and is still practised. This rots the fibre, from the impossibility of taking away the unprepared from the prepared; the one getting far too much rotting before the other portions are ready.

Steam was then tried, but this caused the fibre to be exceedingly weak.

The fermenting process is open to none of these objections; while its colour is unimpaired, and very moderate bleaching produces a perfectly white linen, if made from flax so prepared.

It need hardly be pointed out the great utility of flax. It furnishes an excellent material for domestic manufacture. There is no comparison between linen and cotton for most articles of clothing: it possesses far greater strength and durability, and is much more elegant in appearance.

The demand in Britain being very great, and daily increasing, flax would afford an excellent article for export, subject to few fluctuations in price; indeed, with the new modes, flax will come into competition with cotton, and its consumption will be extremely great.

Hemp can be prepared in just the same way—the same remarks apply precisely. It brings a smaller price, but the production is proportionably greater; the demand is considerable in Canada for manufacturing; and in Britain a market is open for hemp, to a value equal to a million pounds a year. It may here be noted that hemp, when properly prepared, makes a domestic shirting, as cheap as cotton, and more durable than linen itself.

It really does seem strange, that in a country where flax can be raised so easily,

and hemp grows spontaneously, that we should import both our sail cloth and cordage. In a year or two our Mines will provide our ships with Copper. Let the farmers be equally prepared to furnish the sails and rigging.

Were not the local demand so considerable, Wool would be one of the best articles for export the country could afford. The quality, however, must be improved; it should be either fine wool, or long combing wool, the one paying from the good price obtainable for it, the other from its abundant yield. The half way sheep answer neither end. The fleece, also, when sheared, should be so folded that the wool staplers may separate the back from the belly, and both from other coarser parts. For want of this system, the wool is valued as all coarse. It is to be hoped that very shortly the home demand will be supplied with merino and long combing wool, and a large surplus on hand for shipment.

Were labour sufficiently abundant, silk could be raised as easily as in France or Italy. The cold of winter being of not the least consequence, as no silk worms are raised there in winter.

LAYING HENS.

To promote fecundity—To have eggs in cold weather—method adopted by the ancients—Reaumur's experiments—some hens lay more eggs than others

The question is often asked "why hens cannot be made to lay as well in the winter as in the summer?" They can, to a certain extent; but they require, as a condition, that they be well provided with warm and comfortable lodging, clean apartments, plenty of food, in all its variety, consisting of grain, vegetable and animal food, pure water, and gravel lime, and sand, to roll and bask in.

A writer in the Southern Agriculturist says: "To make hens lay in winter, they should be shut up in a warm place. Boiled potatoes, turnips, carrots, and parsnips, are cheap and good food," &c.

"The reason why hens do not lay in winter," observes a writer in the New England Farmer, "is because the earth is covered with snow so that they can find no ground or other calcareous matter to form the shells. If the bones of meat or poultry be pounded and given to them, either mixed with their food, or by itself, they will eat greedily, and lay eggs as well as in warm weather. When hens are fed on oats, they lay better than when fed on any other grain."

There seem naturally to be seasons of the year when hens lay; early in the spring, and afterwards in summer; indicating that if fowls were left to themselves, they would, like wild birds, produce two broods in the year.

Spring-hatched birds, if kept in a warm place and fed plentifully and attended to, will generally commence laying about Christmas, or even somewhat earlier. In cold and damp this is not to be expected, and much may, in different seasons, depend on the state of the weather and the condition of the bird.

It is a well known fact, that from November to February (the very time we are in want of eggs the most,) they are to many a bill of expense, without any profit. To promote fecundity and great laying in the hen, it is necessary that they be well fed on grain, boiled potatoes given to them warm, and occasionally animal food. In the summer, they get their supply of animal food, in the form of worms and insects, when suffered to run at large; unless their number is so great as to consume beyond the supply in their