

HEMP AND FLAX CULTURE.

The cultivation of hemp and flax, has been frequently recommended to the Canadian farmers through the medium of our Journal, and we would fain hope that some action will be taken in the matter the coming season.

We feel very anxious, that the business of growing the above plants, both as an article for domestic manufacture and exportation, might be engaged in, simultaneously throughout the entire fertile regions of British America, on a scale sufficiently extensive to attract the attention of the British Government at once, by which means not only a profitable market for the articles would be opened and established, but a sure channel for investing a portion of the unemployed capital and skill which abounds in Britain, would thus be brought into favourable notice.

The great difficulty in inducing the farmers in British America, to engage in the cultivation of any particular crop, with which they have not been familiar with from infancy, is that they fancy the country is too new, or that the undertaking would not pay costs. No one would depreciate the principle of engaging in visionary schemes more than ourselves, but in the matter before us there is a moral certainty of the business of growing and preparing these crops for market, not only paying actual costs, but also paying from 40 to 50 per cent. for the money invested in the transaction, providing that a reasonable amount of skill be brought into requisition in the management of the crop.

All who are familiar with this subject, will not doubt the truth of the statement we have just made; but the question with us is, how shall the business be engaged in, on a scale sufficiently extensive to attract the attention of the powers that be, both in the Colony and Mother Country? As a reply to this question, we would suggest the propriety of establishing in each District or County of the Provinces, a joint stock institution, consisting of shares of one Pound each, the half of which to be paid down, and the other half in 3 or 6 months. The company should sow in a proper manner a certain number of acres of each of these plants, and procure machinery to be propelled by water or horse power, for the preparation of the fibre for market. The crop of seed and lint should be sold in the best market, and after all expenses were paid, an equitable dividend should be made to the stockholders, and the original investment, together with all the new stock that could be procured by the Board of Directors, should be again expended in the sowing of a still greater number of acres, from year to year. All the information on the subject that could be collected by the Managing Committee or Directors, should be published on behalf of the institution for the general benefit—and thus not only the business would be practically established, but a vast amount of information, on a subject now but little understood, would find its way to the fireside of the poorest settlers in the Colonies.

All this kind of reasoning may sound very well on paper, but the question again rises, how shall it be carried into practice? we would say, simply by engaging the honest, patriotic, and wealthy portion of the community in the cause, and trusting only those who have been long proved for their honesty, sound judgment and purity of purpose, with the keeping or controul of the funds and its mode of appropriation.

We shall not be satisfied, until the profits of the business before us, be fairly tested. It is our fixed opinion that no branch of agriculture would pay equal to it, and besides if these plants were grown extensively in this country, it would be a great saving in a national point of view. At present there are about £40 000 worth of cordage imported into Canada yearly, which might be manufactured at home with handsome profits—there are about a like quantity of bagging and canvass imported, which might be spun and wove

here by machinery if gentlemen with sufficient capital and a proper knowledge of that department of business could be induced to engage in the enterprise; and there is a vast amount of oil used, the manufactory of which has in all countries been a most profitable source of investment, which might be manufactured in these Colonies, so as to enable the manufacturer to compete successfully with those who now supply the market.

If hemp and flax be grown largely in the British American Colonies, and if the manufactory of cordages, bagging and oils, should be carried on to an extent equivalent to the home demand, of course the importation of those articles would thus cease. It does not follow from this, that we are to be any the worse customers to Britain.

We maintain that we are bad customers to the British manufacturers if we purchase more than for which we are able to pay. If the farmers grow hemp and flax, and the manufacturers convert the raw material into the articles above named, and all those departments of trade are carried on with wholesome profits, the results would most certainly be that both farmer and manufacturer would feel a pleasure in purchasing luxuries for their families, of British manufactory, which at present are denied them, in consequence of the extreme scarcity of capital in the country, caused from the great difference in the balance of trade, being against the Colonies. As soon as the growing of these plants become a regular business, and the farmers sow them in rotation through their farms in the same manner as is practised in Russia and in Flanders, the Canadian market will then, not only be stocked with the manufactured articles above enumerated, but immense quantities of the raw material will be shipped to Britain in exchange for manufactured goods. Tens of thousands of acres of the richest lands in the world, which are now unemployed in British America, could be cultivated with good profits with these plants, and in our humble opinion it only requires public opinion to be aroused to the importance of the enterprise, to secure a very general co-operation in the business.

The organization of hemp and flax societies should be entered into with spirit, and every encouragement should be given to the growth of these plants, by the Agricultural Societies now established; and in such localities where the cultivators are sufficiently spirited, a Joint Stock Company might be formed, by which means a practical example would be set the surrounding farmers, and the description of machinery used, and the mode of using the same, would be seen by all who would take the trouble to examine them, and the expenditures and receipts of the business, together with every branch of the management of the crops, would be published for the general benefit.

We earnestly recommend the influential farmers in the several Districts of the Provinces, to adopt some well concocted plan for engaging in the culture of these plants. If only five acres of each were sown in each county in the Provinces, and the results of the several experiments published, a beginning would thus be made which would ultimately tend to the general cultivation of these crops. We would however, rather prefer sowing 50 acres than 10, providing the Company were abundantly able; by having a large Capital, a proportionably large crop could be sowed in a proper manner, and on suitable ground, and also the most efficient machinery could be purchased for dressing and preparing the flax for market.

We have solicited Messrs. Hewson & Love, proprietors of an extensive rope walk in this city, to purchase 100 bushels of hemp seed, which will be sold in the Toronto market, at barely cost price, to any individuals who will engage in the culture of this plant. A quantity of flax seed will most likely be imported, by some of the seed merchants for a like purpose, and independent of this encouragement we are authorised to say that the Home District Agricultural Society, will award very liberal premiums for the best samples of the fibres from these plants. With a certainty of a profitable market for the produce, and the foregoing extra inducements, we would beg to urge upon our friends, to engage in the business though it be even on a very small scale,—the results will unquestionably be satisfactory if justice be done to the experiment.

In growing flax and hemp, the richest vegetable

grounds should be selected, and the soil should be ploughed deep so as to lessen the liability from injury from drouth—hemp requires richer ground than flax, and at the same time is a less exhausting crop. This is caused from the fact, that all broad leaf plants receive a considerable portion of their food from the atmosphere. A bushel and a half of flax, and two bushels of hemp seed may be considered a liberal seeding,—a less quantity per acre will suffice, when the crop is cultivated principally for the seed, but when the seed and fibre are of equal importance, the quantity of seed per acre should be equal, if not even more, than that recommended. The richest and best cultivated lands in Canada would average in flax, about 20 bushels of seed and 4 cwt weight of fibre per acre; and in hemp about 25 bushels of seed and 8 cwt weight of fibre per acre; this quantity however, would in many cases be doubled.

The best features connected with the growing of these crops are, that they will be a means of giving profitable employment to our labouring population during the long winter months, and will be an important item among the sum total of the farmers profits, and will also save some £50,000 or £100,000 to these Provinces annually, which would otherwise be sent out of the country for articles that could be produced at home with great profits.

A few words more on this subject, in the way of giving practical directions, may be found acceptable to many of our readers. The soil to which flax may be most appropriately sown is a rich alluvial or sandy loam, or a loose marl. Poor clays and gravelly soils are very unsuitable, and the flax on such soils will seldom cover the costs of cultivation or even come to maturity.

The best possible preparation for a flax crop is a newly broken up maiden sod or old pasture. If it were ploughed in the autumn, so much the better, but whether ploughed in the autumn or spring, it should be thoroughly harrowed before sowing, and the seed should be very lightly covered with finely pulverised earth. Another plan equally as good as the foregoing, is to sow a crop of oats on the inverted sod, and the following autumn, directly after seed time, plough deep and well for flax, and the following spring the ground should be thoroughly harrowed, and the seed sown without any further preparation. About 5 bushels of house ashes per acre, would strengthen the fibre, and very considerably increase the amount of crop. A good average crop might be expected from an inverted clover lay, which is better for the purpose, if it has lain two years. A friend of ours tried an experiment last spring on clover lay, although on a small scale fully tested the merits of the plan. He ploughed exactly one rood, with as much precision and care as though he were ploughing for a prize, after allowing the inverted sod to settle a few days, he harrowed thoroughly, then sowed two pecks of seed broadcast and harrowed it in lightly, and immediately rolled the ground, which gave it the appearance of garden culture. The produce in seed equaled $\frac{3}{4}$ bushels, and the fibre was superior to any thing of the kind grown in that part of the country. It was upwards of 3 feet in length, and of the brightest colour and strongest texture. The period of sowings, in this country, as soon as possible after the first week in May. The season will of course influence the time of sowing, but early is decidedly preferable to late, as it not only lessens the risk from drouth, but is considered advantageous to the quality of the fibre.

The seed to be of good quality, should be smooth, slippery to the feel, bright, plump and so heavy as to sink in water; it should taste sweet, and being broken, should appear of a green colour and oily.

The after management of this crop will be subject matter for some future number.

The difference in the management of the ground for flax and hemp is so very trifling, that they scarcely require to be treated separately. It should however be observed, that ground for hemp cannot be made too rich with vegetable manure, and that the produce will always be in ratio to the fertility of the ground upon which it has been sown. From 15 to 20 cwt of fibre have been frequently grown per acre, upon alluvial soils, such as is generally found bordering rivers. If this crop be sown upon up land, it must be borne in mind, that it delights in a rich soil.