

GERMAN HOTBEDS.—A correspondent says, "Your extract from the *Scientific American* on page 34, about hotbeds in Germany, will only disappoint those who try the plan recommended. I have done so and failed. Others have had a like experience. The seed came up well, but air the plants as much as you may, they sprindle up for want of light and become practically useless."

HOW TO RECLAIM A MARSH.—Isaac Taylor, of Colchester, asks, "can any one tell me what is the best way to work about 10 acres of marsh land, with about two feet light turf, and a sandy bottom? If any one can advise me how to work it, so that it will bear cropping, and what crop is best to put on so as to make it pay, he will greatly oblige a subscriber to the CANADA FARMER."

ENTRIES OF PEDIGREE.—"W. W. N." enquires how long the forthcoming Short-Horn Herd Book will be open for entries of pedigree, and to whom such entries must be sent?

ANS.—Pedigrees will be received up to the first of July. They should be sent to H. C. Thomson, Esq., Secretary Board of Agriculture, who wishes us to say that it is desirable entries should be forwarded with as little delay as possible. The charge for insertion of pedigree is half-a-dollar for each animal.

SALT FOR SHEEP.—"M. L. F." wishes to know whether sheep in this country require salt or saltpetre in the spring of the year?

ANS.—Salt is necessary for the health of sheep all the year round. Weekly salting is practised and recommended by the best flock-masters, because it is often enough, while it keeps the sheep tame and ready to come when called, and enables the owner or shepherd to count the flock and observe the condition of each. We are not aware of any need for saltpetre being given in the spring.

TRANSPORT OF FLAX.—"H. L." of Maidstone Cross, says:—"Being a long distance from a flax establishment, I would like to know through THE CANADA FARMER, if flax can be safely shipped by railroad a distance of from 100 to 200 miles in its raw state."

ANS.—Flax might be sent any distance by railroad safely enough, but it is so bulky in its raw state that the freight would consume all the profit of the crop. After scutching, it can be compressed into small compass and made into bales without difficulty.

WASHING SHEEP.—"J. W." of Bruce, asks, "My Leicester's shorn 9 lbs. of unwashed wool last year. How much might I expect to lose in weight by washing them?"

ANS.—The general rule on this subject is, that unwashed wools shall be subject to a deduction of one-third their weight. In actual practice, however, it is found that this rule is not invariably correct, the amount of yolk in sheep varying very much. Our correspondent could get an exact answer to his question only by actual experiment.

LIME AS A MANURE.—A correspondent in Nichol wishes to know what quantity of lime to apply per acre, and the best manner of putting it on the land?

ANS.—There is much difference of opinion among agricultural authorities as to the quantity of lime per acre that may be beneficially applied at once; the majority, however, agree in thinking that small doses of from 60 to 100 bushels per acre, frequently repeated, are better than a larger application at one time. It should be in a state of powder before it is scattered on the soil. The best way of preparing quick lime for use is to place it in a heap and carefully cover it up with earth till slaked. An excellent way of using lime is to compost it with vegetable and other matter.

HORSE PITCHFORKS.—A. B. C., of Howard, wishes to know if these answer a good purpose—whether they can be attached to a driving barn so that there is no need to drive in, the hay being pitched through a hole in the wall—and further, he wants to be told "all about them?"

ANS.—We believe the horse pitchfork or hay elevator is considered to be a decided success by practical men, but whether it would work in the position described, we do not positively know. We have doubts on that point. Never having seen the "machine" at work, however, and not being fully posted as to its peculiarities, we cannot tell our correspondent "all about it" just now, but think we may safely promise him fuller information in a future number of THE CANADA FARMER.

BREAKING IN YOUNG CATTLE.—"P. Musselman," of Concord, writes as follows.—"One reason why ox-teams are not more generally used for farming purposes, is because it is a very difficult job to break them. I have found out a method by which I can break almost any yoke of steers in a few hours, without abusing them." Our correspondent encloses a certificate from Mr. Dalziel, a former President of the Vaughan Agricultural Society, to the effect that in about two hours Mr. Musselman broke in a yoke of steers for him, so that they were quite tractable and handy. The steers were not yoked up again for three months, and even then they had not forgotten what they had learned in one short lesson so long previously.

BROOM CORN.—"Allen Bond," of Inverary, wishes to be informed through our columns whether broom corn can be profitably cultivated in Central Canada, what is the yield per acre, and the mode of culture; also, where good seed can be procured?

ANS.—We should think broom corn might be grown to advantage in Central Canada, but cannot speak from actual knowledge on the subject. Of course our correspondent does not regard Inverary as in Central Canada. The mode of culture is very similar to that of ordinary Indian corn. The ground must be rich and well pulverized, and the seed sown in rows 3 1/2 apart, and hills 1 1/2 feet apart, about 10 seeds in a hill, covered an inch deep. When the young plants appear, a top-dressing of ashes, plaster and salt, mixed in the proportion of ten bushels of ashes—one of plaster and one of salt—is considered beneficial. The crop must be cultivated and hoed thoroughly. When the seed is out of the milk, the stacks are "tabled," as it is called, by breaking two rows across each other from 1 1/2 to 2 feet from the ground. On the tables thus formed, the brush is laid to dry. Four or five days will dry it sufficiently if the weather be good. The brush is then tied up in bundles, hauled to the barn, and the seed removed, when the brush is then ready for the broom-maker. Five hundred pounds per acre is a medium crop, a thousand pounds a first-rate crop. A thousand pounds is estimated to make about 500 brooms. Broom corn seed can be had of J. Fleming & Co., of this city, at 13 cents per quart, or \$1 per bushel.

The Canada Farmer.

TORONTO, UPPER CANADA, MAY 2, 1864.

Linseed Oil and Oil Cake.

THE impulse given of late to the cultivation of flax, is very naturally drawing attention to the manufacture of oil and cake. A very large quantity of linseed oil is consumed in Canada, and at present the demand is chiefly supplied from Great Britain and the United States. There are, indeed, manufacturing at Quebec and Montreal, in Lower Canada, and at Bridgeport, in Upper Canada, but they only supply an insignificant proportion of what is required. In the Trade Returns, oils are not classified, but out of \$235,621 sent out of the Province for this item of imports in 1862, a very large share was doubtless for linseed oil. In the same year we paid for oil cake \$8,705 to the United States. In addition to freight, linseed oil is subject to a duty of twenty per cent., all which is in favour of the Canadian manufacturer. With a large and increasing demand, there is everything to encourage the direction of capital and enterprise into this channel. Not only is there a ready market for the oil, but the cake manufactured from the refuse may be expected to sell readily, at a remunerative price, from its well known fattening properties, and its adaptation especially for milch cows, there being no doubt that it increases the quantity and improves the quality of both butter and milk. Heretofore the limited cultivation of flax in this country, and the uncertainty of being able to procure a sufficient supply of the seed, have operated against the multiplication of oil mills, but now that there is a better prospect in connection with this too much-neglected crop, we may expect to hear of mills being projected and got into operation in various parts of the Province. A company is now in process of formation in Toronto, for the purpose of establishing an

oil mill in that city. A better point could not be wished, and we have little doubt the enterprise will shortly go into effect, and be quickly followed by others of a like character elsewhere. In the prospectus which has been issued, the business is spoken of as highly remunerative, and confidence is expressed that, "allowing liberally for all contingencies, twenty-five per cent may be confidently expected." The *Journal of the Board of Arts and Manufactures for U. C.*, referring to this subject, gives the following estimate of the first cost, working expenses, capacity and profits of an oil mill:—

"The cost of machinery for an oil mill, with one double hydraulic press, steam engine, bed-stones, tanks, weighing machines, and all other machinery and fittings necessary to complete such an establishment, is estimated to be under \$5,000. Such a press and machinery would work 400 bushels of flax seed per week, which, estimated at \$1.50 per bushel, and with wages of the various hands necessary to work it, cost of fuel, casks, rent, freight and sundries, would amount to a total weekly outlay of about \$760. The return for this expenditure is estimated at 400 gallons of boiled oil, 300 gallons of raw oil, and 168 cwt. of linseed cake, which, at present market rates, would realize the sum of \$1,007; or a profit of \$247 on the week's operations, towards wear and tear of machinery and dividends to stockholders.

"The quantity of oil produced by this machinery could be largely increased, if necessary, by working night and day, as is usual in English oil mills; but on the lowest estimate as here given, there would be a consumption of at least 20,800 bushels of seed per annum, at a total cost of \$31,200; producing 36,400 gallons of boiled and raw oils, and 8,736 cwt. of cake, representing at present prices a total value of \$52,361; or a saving to the country of upwards of \$21,000 per annum on the working of a single one-press mill, by manufacturing the seed at home instead of sending it to a foreign country, and importing the oil therefrom for our own consumption."

In view of the immense advantage that must accrue to the Province from such manufactures, it is earnestly to be hoped that every means by which they can be encouraged may be used by private individuals, Agricultural Associations and the Government. Our farmers especially should be induced by every movement of this kind to turn their attention to the growth of flax. It is a more reliable and remunerative crop than wheat, while the market is quite as accessible and certain.

Discussion of the Anti-Canada Thistle Bill.

To the Editor of THE CANADA FARMER:

SIR,—Mr. Stirton's Bill is perhaps a move in the right direction to rid the country of the Canada Thistle, but I am inclined to think if it is not found to be difficult of administration, or the means of creating many feuds between neighbours, it may prove a great hardship to very many owners of poor land, as well as many tenants who make their arrangements before this bill comes into force. I would suggest that the different Township and County Agricultural Societies should call special meetings of their members and discuss the subject. At all events, I think it would be better that it should not take effect for some time after its passage into law, say one or two years.

Wolford, April, 1864.

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TORONTO GARDENERS IMPROVEMENT SOCIETY.—This Society held its monthly meeting at the rooms of the Board of Agriculture, on the 21st March, at which there was a good attendance of members, and an exhibition of some choice flowers.

An interesting paper was read by Mr. Geo. Vair, in which he spoke of the great room for improvement in the appearance of our village, town and city residences, of the pleasure to be derived by a person, of even the most limited means, from a little attention to the garden, and of the improved and cheerful appearance a more general diffusion of horticultural taste would give to the whole Province.

A paper on the Strawberry was read by Mr. A. Pontry, an extract from which we give in another column.