

THE ILLUSTRATED JOURNAL OF AGRICULTURE

PUBLISHED BY THE DEPARTMENT OF AGRICULTURE FOR THE PROVINCE OF QUEBEC.

Vol. II.

MONTREAL, MARCH 1881.

No. 11.

Table of Contents.

Tobacco, its cultivation, &c.	161
Apiculture	163
VETERINARY DEPARTMENT.—	
The foot of the horse and its management.....	171
On the Etiology of the Caruncular disease.....	172
POULTRY DEPARTMENT.—	
Duck-Breeding.....	174
Treatment of canker.....	174
The Leghorn fowl.....	174
Mistaken ideas.....	175
The "Coming Sheep".....	176

TOBACCO.

Two things are principally required for the growth of tobacco in perfection: plenty of room and a well pulverised soil: unless the two points are attended to, no amount of manure will produce a full crop of well-flavoured leaves. I will take this opportunity of stating that I am a practical hand at the work, having grown the plant for four years, and having done all the labour with my own hands, except the hanging. My belief is that, with the present moderate tax of 4s. a pound, the harvest ought to be a profitable one. A fair yield should not be less than 1750 lbs. an acre, and when well turned out, it ought to bring 14s. a pound, or \$245 an acre (1). We will first consider the cultivation of the land, starting from the last crop of the course, the grain stubble.

Ploughing in October as deep as possible for this crop is a correct practice, because the frost, the wind, and the rain, will do their winter's work on the soil, and the manure to be added in spring will correct the "crudities," as our ancestors termed them.

Now there is one thing certain: principles are principles; and the principle of deep ploughing before winter for a manured crop is correct, whether here or in the North of France. We are all going to grow sugar-beets, I believe. Do we intend to cultivate them according to our own fashion, or according to the fashion of those who have been growing them for years? Surely, after the latter mode, or else I fear we shall have but a poor return for our labour. I think this new crop will be of one very great use to us: it will show us that the farming of the country parts of the province is, yes, even in the Townships, in a very backward state, loath to believe it as we are; and in order to improve, we must, in spite of our prejudices, stoop to learn from the older countries. If any body doubts this, I can only say that the system of cultivation practised by the best farmers on the Island of Montreal, such as Messrs. Drummond, Logan, Dodds, Somerville, and others, is *exactly* the same as may be seen any day in the most advanced districts of England and Scotland; the crops are the same, and they are treated in the same way; there is positively no difference, except that they cannot feed off turnips with sheep in winter.

As to this question of deep ploughing, I would ask: don't you, in your gardens, dig 10 inches deep? If so, why not do

(1) I had, upon inquiry, that from 15 cts. to 20 cts a pound, may be had—*duty-paid* of course.

it in your fields? always provided, as I said before, it is done before winter, and the following crop is to be manured.

As potash is a necessary manure for tobacco, and demands to be mixed with the earth some time before it is fit for plant-food, I should be inclined to sow the ashes on the ploughed land the moment the land will bear the tread in spring. Quantities I will speak of later.

SPRING WORK.—When the land is quite dry, harrow two or three times and then cross-plough. If the land is foul, it may require grubbing, but if not, after a good harrowing, it should now be ready for drilling up to receive the manure. How wide shall we make the drills? That depends upon the sort of tobacco we mean to plant. My own idea is, that the room necessary for the free access of sun and air is about twice as much as is necessary for food-hunting. The great Connecticut sort, leaves of which I have had measuring $41\frac{1}{2} \times 26$ inches, requires 4 feet between the plants, but it cannot eat all the plant-food on that space, travellers as the roots are. Would it be possible to plant every alternate drill at 27 inches with turnips or cabbage.—I have done it, and it paid well—cabbage (St. Denis) and tobacco will be ready to set at the same time, i. e. about June 10th. This makes the distance between the rows of tobacco 54 inches; plenty of air and sun room, and plenty of space to top and disbud in. I can strongly recommend the plan, and it is not so troublesome a business after all.

Manure is the next point. I cannot say that I should expect much of a crop without a fair dressing of farm or stable dung. Artificial I should use as a help, not as standby: thus, say ten loads of good dung, aided by 20 bushels of fresh wood-ashes, 6 bushels of bone-dust, and 150 lbs. of Sulphate of Ammonia, or 100 lbs. of Nitrate of Soda. The potash I believe to be indispensable, for I am sure that the reason why there is so little smoke to be got out of the best Montreal tobacco is, that the potash is nearly exhausted in the American tobacco-regions.

An expensive manuring, if you like, but the crop is a high-priced one to sell. Take half the quantities of the Sulph. Am. or Ni. So. and double the bones; that will lower the cost; but the dung you must have. I would rather grow two acres with this dressing than play at manuring four. The heaviest and best crop I ever grew was with 12 loads of dung and 3 loads of tanner's refuse, per acre. Superphosphate will help to thicken the leaf, but to use it alone, or with lirkivated wood ashes, would be mere waste of time and labour. I confess I do not see how, with our very limited ideas of cattle feeding in winter, we are going to find manure enough for 7 or 8 acres of land planted with tobacco.

Whatever manure we use, the dung must be spread between the drills, the mixed artificials sown broadcast over them, and the dung and all covered up by splitting the drills; a roller passed along them prepares them for planting.

The most profitable is the "Connecticut Seedleaf." When tobacco-growers convince the manufacturers that they can