

of marks being deducted from compositions for the best cultivated farms, because the farmers do not plough in all their dung.

Clay-farms.—According to a very learned article in a U. S. agricultural paper, it is not judicious to plough clays when they are wet! In S. E. England, we went further than that; we would rather turn the men out to play at skittles than allow them to let a horse set his foot on clay land until the exact point between wet and dry had arrived. As we currently say, in that country: a man, to farm clays properly, ought to have been born and bred on a clay-farm. But a clay-soil in England, or a carse-farm in Scotland, is a very different thing to our mild Canada clays. One or two points, however, may be considered established beyond dispute: roll after the plough before harrowing; and a good, heavy storm of rain will do more towards mouldering down clods than twenty strokes of the harrows. The finest crop of white turnips we ever grew were after tares; the land, a heavy, nasty clay on the outlying beds of the London-clay, broke up in clods as big as the horses' heads—it took 4 large horses and a *turn-rice* plough to work it—the clods lay till quite dried through—they rang, when struck, like bricks—a heavy rain followed, and the clods melted away after the harrows till the whole piece was like a bed of ashes.

FARM-WORK FOR APRIL.

As we write, March 4th, a beautiful East wind is blowing, carrying with it a heavy burden of fine snow flakes, and yet we know that within three weeks, or so, of the present date, April 1st, the fields will probably be, in this district, free from their wintry mantle, and the harrows at work covering in the seed of cereals and pulse. But, we must not forget that the work of spring seeding needs some provision, some foresight. (1) If the fine weather overtakes us with our implements all in disorder, our harrow-tines unsharpened, our plough-irons foul, with the rust of the past season of idleness unremoved, it is not unlikely that a day's work at the forge, when the work of the fields is awaiting us, may be the precursor of a week's forced inactivity at this the most momentous season of the year. For, how often have we seen, in this changeable climate, the first fine day or two succeeded by a week or ten days' rain. In 1874 or 1875, May opened brilliantly; we remember well the worrying delays caused by the rain during the following three weeks, during which no sowing could be done. At Chambly, in 1865, my good friend, Monsieur Breux, was at work in the early morning, sowing pease, on the 28th April; at 10 A. M. the rain began to pour down as from a water-cart, and not another bushel did he sow till the 1st June. So look out in time, and get everything ready.

Do not be afraid of burying your seed a little deeper than is usual here. Pease from 3 to 4 inches; wheat, barley, and oats from 2 to 3 inches. And if you stint anything on your farm do not let it be the seed. We must not forget that the worse the condition of the land, the more seed is required; and the same rule obtains as to the season of sowing: if 3 bushels of oats are thick seeding enough for an acre of land in good fettle in the month of April, 4 bushels will be none too much on poor land in the last week of May.

Tautology against—Ba.

Whether you sow by drill or by broad-cast machine, harrow well before sowing. Never scamp your harrowing.

Roots.—Though it is yet early days to talk about the root-crop, there may be a chance, before the end of April, to get a piece of land cross-ploughed, or grubbed, for sugar-beets or mangels. If so, do not forget to draw-out the water-furrows, lest a sharp fall of rain should come, which might lie and soak the land for ten days or more, putting back the season more than if the land had not been touched at all.

Your *ditches* you will of course have looked to as soon as the snow has melted, and see that all culverts, etc., are clear of obstruction from straw, chips, and other floating matters.

Horses are now to be prepared for their long campaign; better food, and moderate road-work, until the land will bear them, should be given, for nothing is more injudicious, as well as more cruel, than to plunge an idle, straw-fed horse into a rush of work. A horse thus treated rarely recovers himself all the season. Do not over-work your in-foal mares.

If you still have *cows calving* at this season, as, probably most of you have, remove the calves from their dams at once: they will do all the better and the cows will not blame after them as they do when, after a day or two together, the final separation takes place.

Scouring, in calves, generally arises from giving too much milk at once, or giving it too cool. A calf, at first, should be fed 4 times a day, and with new milk for the first ten days; then crushed linseed, steeped in boiling water, and skim-milk will do very well for rearing calves; but for veal, though linseed and oat-meal with skim milk may fat them, nothing but the cow's full milk will turn out the best butcher's meat.

Ewes and lambs.—If you have a few early lambs, there are in Montreal enough wealthy Englishmen who would gladly pay a fair price for a fore-quarter of good, firm lamb for their dinner on Easter Sunday—April 14th.

—When we say *firm* lamb, we mean lamb at least 8 weeks old, and 10 weeks would be better. White pease and a little oske—linseed or cottonseed—would push them along, and the ewes, too, must not be stinted of food. The importation of lettuce from the States begins so early nowadays, that there will be no lack of salad to eat with the early lamb. In England, at all events in the London market, lamb used, 40 or 50 years ago, to sell better when Easter fell about the 20th of April, than when it fell in the last week in March. In the latter case there was no salad, at least it was very dear, and imports of lettuce were unknown.

The young *pigs* need attention in the early part of this month to keep them from chills. A chilled pig never fills up as it ought to do, and the sooner it is slaughtered the less money will it lose. Keep the weanlings well from the first, if you mean them to be good bacon-hogs for England. Remember what Monsieur Gigault found to be required in that market: *long, leanish, young hogs*. It would be well to give them firm food all along, with clover, vetches, &c.; but, at all events, *finish them off on pease for the last month*.

Pastures and meadows.—Bush-harrow and roll both pastures and meadows. The chain-harrow is a better implement than the bush harrow, but the latter does pretty well.

A good mixture for pastures is the following:

Perennial clover.....	2 lbs.
Common red clover.....	4 "
Alsike clover.....	3 "
White clover.....	2 "
Trefoil clover.....	2 "
Lucerne.....	4 "
Timothy.....	3 "
Orchard-grass.....	6 "
Pacey's perennial rye-grass.....	10 "
	36 lbs.
	to the acre.

When the above begins to wear out, as all sown grasses will inevitably do here, the natural grasses of the country will be found taking their place. Of course, if you start by mowing for hay, the sown grasses will disappear all the sooner.

We extract the following from Dr Hoskins' paper: "The Vermont Farmer's Advocate:"

"It may be mentioned in passing that the average produce of wheat per acre in Great Britain is between 27 and 28 bushels, which is more than that of any other country in Europe, more than twice as much as the average of the United States, and about as much as twice the average of the whole of the wheat lands of the world."

We fancy the English average here given is nearly correct; at all events, it is not more than one bushel or so too low. This last harvest, according to "The Times," the yield was 31.80 bushels, imperial measure, which is equal to about 33.30 bushels United-States measure; but the quality of the crop of 1874 is very inferior; at least, so much of it as has been threshed up to date. What has still to be marketed will be better, as the frosts of February, and the winds to be hoped for this month of March, will permeate the stacks and greatly improve the quality of the grain. First-rate samples of white wheats, such as Talavera, Chidham, &c. are still worth 28s a quarter = 84 cents a bushel.

PEASE.

(A lecture by Arthur R. Jenner Esq.)

I was very much surprised, one day, as I was travelling on the north side of the St. Lawrence, at the sight of some very superior farmhouses, all built of squared stone, many of them three storeys high, with neatly kept yards, brightly painted *jalousies*, and with a general air of comfort and well-doing pervading the whole surroundings. These, succeeding a district occupied by poor log-houses, miserable cattle, and poverty-stricken people, naturally led me to the conclusion that the soil of the former farms was much superior to the soil of the other farms. However, to make sure, as the snow was too deep on the ground to allow me to judge for myself, I asked the driver of the mail-cart, in which I was sitting, if he could account for the wonderful difference, which I pointed out to him, between the appearance of the two lots of farms. "Easily enough," quoth he; where you see those fine stone houses, the land will grow pease; "where the log-cabins stand, it won't." And, no doubt, according to the then (1869)

prevalent ideas, he was right: in those days, it was supposed that to sow pease on light land was a mere waste of seed, time, and labour. A most erroneous conclusion, according to our present notions; for a closer study of the nature of things has led us to the conclusion that the pea is as emphatically a light land plant, as the bean is a heavy land plant. "The pea," says the correct Mr. Stephen, in his Book of the Farm, "thrives best on light land." In clay, it produces a large bulk of straw, and the production of grain depends upon the season. On light land, the straw is not superabundant, but the yield of grain is plentiful. I wonder the Scotch ever sow pease; for the constant moisture of their climate, together with the very moderate amount of sunshine they enjoy, must render the pea a very uncertain crop. In fact, I hear that, even on the borders, where *pease-bannocks*, a very hearty, though to me a most nauseous food, were commonly eaten by the peasants, a field of pease is now rarely seen.

Astonishment is often expressed by Canadians that the English labourers don't eat pease-soup. This is easily accounted for: the English pea won't melt in boiling. In Leicestershire, I believe, and near Tamworth, a few boiling pease are grown, but, as a general rule, they come out of the pot just as hard as they went in; and I know from my own observation, that the Mark Lane corn-factors buy no English white pease without previously sending a sample out to be boiled.

The use of the pea for feeding hogs is common enough everywhere; it is indispensable in the treatment of young stock of all kinds; by far the best addition to skim-milk in rearing calves is a jelly formed by boiling pease-meal with about 20% of linseed. In producing early lamb for such a market as Montreal, nothing is to be compared with the pea, as it gives consistency and firmness (tautology, I fear) to the otherwise too sappy meat.

As a rule, I think a great mistake is made in feeding hogs entirely on pease. My theory is: rear pigs on green stuff, roots, and pease until they are put up to fat; fatten them on corn-meal or barley meal, and finish them off for, say, three weeks, on pease alone. The farmer's pork, in this province, is economical but decidedly too hard for pleasant eating. I should think that hogs 18 months old would have formed all their lean meat and be firm enough without so many bushels of pease as they get here. Anyhow, there is not the least doubt, that barley or corn-meal will fatten much better than pease. Lawes proved that by most careful experiments, as long ago as 1852—v. Journal R. A. S. of England's magazine, vol. 14, part 11. I quote his conclusions:

When pigs are fed freely upon highly succulent food, such as cooked roots, the refuse of starch works, and the like, they are frequently found to give a very rapid increase. But pork, so fed, is found to sink rapidly in the salting process, and to waste considerably in boiling. And although the first batch of pigs so fed may fetch a good price, their character is at once detected, and the market closed against a second sale. On the other hand, when pigs are fattened on the highly nitrogenized leguminous seeds (1)—pease being, however, if not an exception, at any rate much less objectionable than some others—the lean is

(1) By "other leguminous seeds," Lawes means horse-beans, lentils, &c.