

before being put into the moulds as it hardens fast at this stage. If fine sugar is desired, it should be stirred moderately while cooling. The mould should be wet with water to prevent the sugar from sticking to it. To obtain dry sugar, place it in a tub, barrel, or hopper-shaped box, with holes for draining off the molasses. The sugar may be whitened by laying a few thicknesses of flannel on the top of it while draining, the flannels to be daily washed in cold water. They will absorb and wash out the colouring matter.

Grasses Worthy of Culture.

FOREMOST among these is Timothy, or Herd's Grass. Its merits are well and widely known. As a hay-crop it is unsurpassed. It is somewhat coarse and hard if allowed to ripen its seed, but cut in the blossom or immediately after, it is greatly relished by all kinds of stock and is especially suited to horses. It contains a large amount of nutritive matter, and is altogether a most valuable forage plant. Timothy is often sown with clover, but this is hardly to be recommended because the two grasses do not blossom at the same time. Timothy is later in blossoming than clover, and hence must either be cut too green when there is considerable shrinkage, and a loss of nutritive quality, or the clover must stand too long and be thereby injured. Moist, peaty or loamy soils of medium tenacity are best adapted to Timothy. On suitable land it yields very large crops.

Red Clover is popularly ranked among the grasses, though strictly speaking, it belongs to the pulse family. This plant plays a part so important in modern agriculture, that we may well wonder how our forefathers got on without it. It is valuable for hay and pasture, but its chief utility is as a renovator of the soil. In this character it is indeed an agricultural boon. To restore worn out land, there is nothing equal to ploughing under one or two crops of it in full bloom. The effect of thus putting into the top soil the large amount of fertilizing matter clover contains in a green state, is little short of magical. The long tap roots of clover extend deeply into the soil, loosening it and admitting the air, while its luxuriant foliage imbibes a great deal of food from the atmosphere, and so completely shades the ground as to act in the double capacity of a valuable mulch, and an effectual smotherer of weeds.

There are some other grasses not so well known or so generally used as Timothy and Clover, which are nevertheless well worthy of culture. Among these may be named Red-top, Orchard-grass and Kentucky Blue-grass. Red-top, or as it is called in England, "Bent grass," when sown with Timothy, makes a better meadow or pasture than when Timothy is sown by itself. Timothy is very apt in certain seasons and situations to grow in tufts, while Red-top makes a very smooth, close sward. After three or four mowings, Timothy meadows begin to fall short, but with a mixture of Red-top they will hold out much longer. This is an important consideration in a new country like Canada, where land is seeded down after the first crop, and it is not desirable to use the plough until the stubs have rotted. On strong ground, Timothy and Red-top grown together, make a finer and better quality of hay than can be gathered of Timothy alone, which will grow up coarse and stalky when the soil is rich. Red-top is also said to shrink less than any other kind of grass after being put into the barn. To all which may be added, that it is an excellent improver of soils,—its compact sward killing out weeds and foul grasses, and protecting the soil from the hot sun and washing rains.

Orchard grass, or Cock'sfoot, so called from the supposed resemblance of its clusters to the foot of a barn yard fowl, is very highly esteemed for its rapidity of growth, the luxuriance of its after-math, and its endurance of repeated croppings by cattle. It blossoms about the same time as Red Clover, and therefore makes a good mixture with that plant. It bears shade well, and is on that account well adapted to open woods, pastures, and to orchards. As a pasture grass, it requires to be fed closely, to prevent its becoming tufty, and going to seed, when it becomes hard and wiry. Judge Buell said of it:—"It is one of the most abiding grasses we have. It grows remarkably quick when cropped by cattle. All agree that it should be closely cropped, as other-

wise it becomes coarse and harsh. Sheep will pass over every other grass to feed upon it. It is suited to all arable soils." Orchard-grass is less exhausting to the soil than Timothy.

Blue-grass is valuable for pasture lands, mainly from its tough fibre, which renders it less liable to injury from the action of frost and the trampling of the hoofs of stock in fall and spring. It is of course well to avoid turning live stock into the fields very early or very late in the season, but the fluctuations of our climate are such as to render it extremely difficult so to time things as to avoid having cattle in the fields when they would injure the tender stalks and rootlets of the grass. Hence a forage plant which makes a tight, strong sward, and is little liable to injury from frost and cattle hoofs, is a good one to cultivate. This grass may be sown to advantage in an uncultivated, open wood field, where the soil has never been loosened by the plough. It flourishes most luxuriantly in what are known as the blue grass regions of Kentucky. In more northern latitudes it becomes dwarfed and takes rank among the finer meadow grasses, valuable for their tight, compact sward.

For lawns, or private grounds where a covering of grass is wanted as soon as possible, and a close, firm, enduring sward is desirable, Red-top, White Clover, and Blue grass are said to make a good mixture.

A Visit to Mr. Snell's Farm.

To the Editor of THE CANADA FARMER.

SIR,—Having seen in the first number of THE CANADA FARMER, a sketch of Mr. John Snell's herd of Durham cattle, I was induced to pay a visit to that gentleman's premises and have a look for myself; and permit me to suggest that it might possibly prove a stimulus to some of my fellow farmers in the better management of their own stock, to go and see for themselves.

Mr. Snell's farm consists of four hundred acres; three hundred and forty of which are under cultivation. Some years since he cultivated a larger quantity of land than he does at present. Then his attention was chiefly devoted to raising wheat, one hundred acres being the average quantity cultivated by him annually. Although he still continues to raise pretty large crops of wheat, yet it only occupies a secondary place now, while that of breeding, feeding, and raising stock holds a primary place in his economy of farming.

One of the principal things noticeable to a person visiting Mr. Snell's farmstead, is the large quantities of turnips stored up in commodious cellars, and turnip houses close to his sheep and cattle sheds. For several years past he has cultivated over twenty-five acres of turnips, producing an average yield of from eighteen to twenty thousand bushels annually.

The time will not be thrown away by farmers living at a distance, should they visit Mr. Snell's premises and examine his stock. They will be kindly treated, and will doubtless leave with the impression, that there is such a thing as improving stock in Canada.

A FARMER.

County of Peel, Feb. 13, 1864.

More about Canada Thistles.

To the Editor of THE CANADA FARMER.

SIR, In the second number of THE CANADA FARMER, I noticed an article on Canada Thistles. Now, although agreeing with the writer on the whole, yet I think that for small patches I can show an improved method, at least it is so considered round here. It is simply to pour about a half tablespoonful of lye on each root as it is cut, and I will warrant it a cure in every root to which it is applied. All that is necessary is to look over them occasionally to see that none have been missed the first time.

HYNDEHOPE.

North Dumfries, Feb. 16, 1864.

The Potatoe.

To the Editor of THE CANADA FARMER.

SIR,—I have read with interest the remarks in your second number from Col. O'Brien on this subject. Perhaps a little more of them would have saved me the trouble of writing these lines, and the risk of exposing my ignorance on some points; but you will not have many correspondents if they will not take that risk for the sake of being set right.

1. The Colonel speaks of the cause of the disease as being "ascertained." So far as an altered state of the tissues, combined with certain atmospheric conditions, constitutes the immediate occasion of disease, the cause may be considered as ascertained; but this cause has itself a cause—and whatever it be, it should be as long and as broad as the effect—it should be such as can be shown to have a real existence—and a real existence, over all the extent of country affected, it would scarcely be possible that any cause should have that is not deeply rooted in human nature.

2. Such a cause, I think, existed in Ireland in the farmer's anxiety for as large a crop as possible. To gain quantity, he risked or even altogether neglected, quality. He relied on manure—he planted closely—and forgot that in proportion to the extra supply of manure, there was needed an extra supply of light and air. These were sacrificed—and thus an unhealthy state of the tissues was produced, which the peculiar atmospheric condition of 1817 ripened into actual and ruinous disease.

Col. O'Brien's recommendations one to five are, I have no doubt, sound and valuable; but I demur to the sixth, and beg leave to inquire,—

1. Can any Canadian farmer state his experience respecting the quality of potatoes grown in hillocks? These would have a much better allowance of light and air all round them than such as have been grown in drills. Canadian gardeners, too, may have evidence to give on this point.

2. Can any Canadian farmer state whether there has been any difference of quality between the potatoes in a field where the drills ran east and west, and in another where they ran north and south? The former, from the slope of the drill facing the south, would have for a considerable period an advantage as to sunshine.

If these questions can be answered from past experience or future observation, Col. O'Brien will not refuse to the necessary conclusions an authority somewhat more than theoretical.

ERIGENA.

Guelph, Feb. 10, 1864.

Flax-Growing in Canada.

To the Editor of THE CANADA FARMER.

SIR,—In the first number of your new and valuable journal you furnish a lengthy article on Flax Culture, a subject well worthy the attention of our Canadian farmers, as cotton is at war prices and not likely to be much cheaper for many years to come. It is fully acknowledged on all sides that in many of our front townships Wheat will not average more than 10 bushels to an acre, while from 12 to 16 bushels of flax-seed may be depended on, 4 lbs. in weight less to the bushel and half a dollar more in the price. The seed however is not to be the only consideration. Every acre of flax that produces this quantity of seed will, if properly handled, produce 300 lbs. of fibre prepared for the market worth from 8 to 10 cents per lb., making in all at the lowest calculation from \$40 to \$50 per acre in place of only \$10 or \$12 at present prices for Wheat.

One of Sandford & Maltory's Scutching Mills has been recently imported by Mr. Moody, a gentleman near Montreal. I accompanied Mr. Henry Lyman to see it at work a few days ago, and am pleased to say the brake for preparing the straw for scutching is the best that has come under my notice. The beaters or handles for scutching are the same in principle as those now in use in Ireland, and in the several mills in Canada. The price is only some \$300, duty free. An improvement has been made in the mills of Rowan's manufacture imported by the Canadian Government, that will remedy the defect pointed out by Mr. Perine, and mentioned in your editorial. The straw is introduced vertically instead of horizontally, the action of the beaters coming at once on the centre of the handful of flax, consequently the ends are not carried away as formerly. No brakes are required for this mill. Its cost is only £24 Stg., and it is duty free, so that it is within the reach of any farmer who is desirous of going into the business. No doubt, sir, other improvements will be made in machinery for flax manufacture to meet the wants of the country. It is to be regretted that our capitalists as well as our farmers do not turn their attention more in this direction where there are so many fine water privileges idle, where saw mills have been built and the timber has become exhausted. With ample buildings to put in machinery at such a trifling cost how easy it would be to multiply flax mills. I was informed by a gen-