

For many years I have sought after a rotation completely suitable to this country. I have carefully considered all the plans suggested in the CANADA FARMER. I have read of all the different systems practised in the British Islands, and other European countries. I have in theory tried the working of a number of them in this country, and feel satisfied that none of the old country plans will fully answer Canada. By taking part of one rotation and part of another, I have grown into a system which promises to preserve the fertility of the soil, and produce a proportion of what our market demands. For example, we shall take a farm of ninety-six acres, or eight twelve-acre fields, and commence with turnips. The fall preparation of the land for this crop, ploughing, manuring, together with the repeated scuffling, hoeing, and thoroughly cleaning of weeds, answers the part of a fallow in the rotation. Every other row of turnips is to be taken home and stored for winter food, the remainder to be eaten by the sheep and cattle, intended to be fattened and sold, I mean fed off, in so far as the season will permit. The field would be ploughed in the spring and sown with barley and spring wheat, and at the same time seeded with clover, then hay, then two years pasture, peas after the hay, fall wheat after the peas, and oats after the fall wheat, which completes the rotation. This system gives first, twelve acres of turnips; second, twelve acres of barley or spring wheat; third, twelve acres of clover hay; fourth, twelve acres pasture; fifth, twelve acres pasture; sixth, twelve acres peas; seventh, twelve acres fall wheat; eighth, twelve acres oats. By only mowing the clover field once there would be thirty-six acres of prime pasture during the end of summer, capable of maintaining a large stock of cattle and sheep. Twelve acres of good clover hay, wheat chaff, pea-straw, oat-straw, and six acres of turnips, will keep a large stock in good condition through the winter.

The fears entertained by your Guelph correspondent in regard to the wheat being lodged and ruined by rust are altogether premature. It is time enough to complain of such when actual experiment has proved it to be a fact. In the meantime I see no danger of enriching the land too much.

CANADIAN FARMER.

GLADSTONE, Jan. 22, 1868.

### Farm Notes.

To the Editor of THE CANADA FARMER:

SIR,—Your readers are indebted to your correspondent "Vectis" for many new ideas relating to the enriching of soils by the growth of green crops, in his exhaustive and highly original article on a "New use for Turnip Crop," published in your paper for 2nd Dec. His reasoning shows clearly the advantage and value of green crops as an agent for bringing up the fertility of worn-out lands, and adding to the soil the elements exhausted by the growth of successive crops of the cereals. He has argued fully as to the merits of the turnip crop for rotting on the land, or ploughing into the soil to restore the elements required; but may not the clover or other plants be equally adapted for the purpose? That crop will be the most valuable, other things being equal, which will contain the greatest amount of those elements which added to soils go to enhance their fertility, that can be produced at the least cost of labor, of artificial fertilizers, and the elements extracted from the soil during its growth. Now, given the gross weight of the produce of an acre of turnips and that of a like area of clover, or of some other plant, both grown upon like soil and having equal quantities of manure and labor applied to each crop, your readers can easily guess (by calculating with the aid of the different tables of analysis given in works relating to agricultural chemistry, the amount and value of the elements that different plants contain) the comparative values of the various plants for green manuring.

But a few simple experiments, upon different soils and farms, would throw more light upon the subject and satisfy cultivators more fully than mere theory, and the evidence given by your correspondent will go far to prove the value of his theory. Two things have been demonstrated by practice to be correct, viz: the value of green crops for manuring lands by ploughing them in or allowing them to decay upon the surface; and the superior value of experiments,

properly conducted, over theory, for ascertaining the comparative value of the different means and materials for manuring lands.

### FARM GATES.

An error seems to have crept into the closing paragraph of my communication in your number for 15th Dec., relating to farm gates, which I would like corrected in your next issue. If your readers that keep files of the paper will turn back, and insert Fig. 1 between the words "gate" and "which is," &c., in the last line but one of the article, it will give the impression I meant to have conveyed.

The gate represented in Fig. 4 is a combination of different parts of other plans which have come under my notice at various times. The truss principle as used in bridge-building was first applied, I believe, to the construction of gates by Geo. E. Woodward, Architect, New York, and is now extensively used in the erection of these fixtures, from the simplest farm-gate to those required for the finished park, and made on this principle, they are unsurpassed in beauty, strength and economy.

J. F. C.

L'Original, Ont., Jan. 4th, 1868.

### New Seedling Potato.

We have received from Major Bruce, of London, a sample of a new seedling potato which he has now been raising for several years, and which, therefore, he considers established as a distinct variety. The specimens sent to us are of uniform medium size, with a general oval form, and a slightly rough skin, resembling somewhat the Carter potato. A portion of the sample was cooked and brought to table, that we might have an opportunity of reporting on their quality and flavour. We can, without any hesitation or reservation, speak in very high terms of their merit in this respect; in which, indeed, they left nothing to be desired. So highly do we esteem them after this first trial, that we shall reserve the remainder of the sample sent us for seed, and if we are successful in raising as good tubers as those we have received, we shall consider we have gained a valuable acquisition to our kitchen garden. Major Bruce considers the soil best adapted for the growth of these potatoes is light fertile land, as they are apt to grow too large in very rich heavy land. The yield, we understand, is very abundant, being, under favourable circumstances, about 250 bushels to the acre. Major Bruce has deposited about thirty pecks of this new potato in Mr. Griffin's seed store, Richmond Street, London, where parties wishing for seed may apply; but, as it is thought desirable that the seed should be distributed as widely as possible, no larger quantity than one peck will be supplied to any one purchaser. The name bestowed on this variety is "Bruce's Ruby Seedling." We cordially commend it to the notice of Canadian farmers.

### Alsike Clover a Profitable Crop.

To the Editor of THE CANADA FARMER:

SIR,—In the CANADA FARMER of August 15th you gave a short account of a small field of three and a half acres of Alsike clover that I was then cutting and securing. I had twenty loads, and from three-quarters of an acre adjoining it, I cut four more, making in all twenty-four loads from four and a quarter acres, all of which I saved for seed. Last week I thrashed it, and I had thirty-three and a half bushels of beautiful seed. Enclosed you will find a sample of it. I find ready sale for the seed here at 30cts. per pound, nearly half of it being already engaged. When it is all sold, it will amount to the snug little sum of 603 dollars, or about 142 dollars per acre. I am now seeding the hay to my horses and cattle; it is cut up quite fine by thrashing, but still I think it nearly as good as red clover hay. My stock eat it up clean, and seem very fond of it. I

think there is no danger of its winter-killing or heaving out of the ground in the spring, as our red clover does, for the roots are fine, like the common white clover root. If it does not, it will soon take the place of red clover through this section of country, and then we shall have a land flowing with milk and honey, (provided every farmer keeps as many hives of bees as cows,) for it makes plenty of good pasture for cows, and also for the bees. Parties purchasing the seed should be sure and get the right kind, as I am informed that there is a small inferior kind that grows short and brings a light crop.

BROOKLIN, Jan. 15, 1868.

H. M. THOMAS.

PROTECTION FOR WHEAT FIELDS.—The Country Gentleman recommends a thin covering of straw upon winter wheat as a safeguard against winter-killing, and states that part of a field so treated yielded twenty bushels per acre, while the rest was so completely destroyed as not to be worth harvesting. Knolls and other spots particularly liable to be left bare of snow through high winds, may be protected in this way, even if the entire field be not so treated.

BARBERRY HEDGE.—A correspondent of the Prairie Farmer says that he has tried a barberry hedge on a moderate scale, with much success. He has bushes ten years old, that for four years past have been strong enough to "turn all kinds of stock." Among the good qualities of the barberry, he very properly mentions its not proving troublesome, by sending out suckers, but that it merely tillers like a stool of wheat—that it is perfectly hardy, and that the fruit is both ornamental and useful. It may be proper to state to our readers that probably a greater number of years than six would be required to make a good barberry hedge at the West, although on the rich soils of the West that time has proved amply sufficient.

TURNIPS FOR MANURE.—"H.K." writes: "In the CANADA FARMER, for Nov. 1 and Dec. 2, there are some original ideas with regard to the growth of turnips, on which both the author and the editor invite the comments of any who feel interested in the subject. While agreeing with most of what is said on the matter, I would ask two questions: First, Is there any need to insist so strongly on their being fed upon the field in which they grow? It is usually a very wet time of the year, and (for such of us as have clay soil) the working or treading of the land in wet weather is usually considered a great disadvantage. One of the objections to taking the turnips to the barn is that 'if other land wants the manure worse than the turnip land, it will get it.' If it really does want it worse, it is surely an advantage instead of a disadvantage to make the change. Second, Could not a turnip crop be killed by ploughing under, without going to the expense of digging and cutting them?"

TURNIP CROP IN QUEBEC.—Mr. G. Thorburn, of Montreal, sends us the following additional communication respecting his crop of turnips:—"I was pleased to see by 'Dominie's' letter, dated Pilkington, and your quotations from the same, that large crops of turnips can be grown in Ontario—apparently larger than mine. I should perhaps say absolutely, rather than apparently—although when all things are considered, I rather think the balance, if any, will show in my favor. No mention is made of the weight of tops left on the ground in the case of No. 4, whilst I considered the fact of so very great a weight in my crop a most important element indeed in the case. I should have said in my letter that, owing to the rapidity of their growth and the pressure of haying work, my turnips never had a hoe in them but at 'singling.' Not that I mention this as a boast, far from it, still, I have no doubt whatever that it detracted somewhat from the bulk of the crop. The only 'hoe' I ever use after 'singling' is the 'Horse-hoe.' I see No. 4 crop had two 'hand-hoes.' It would have been a satisfaction, too, to have known the kind of turnips constituting this crop and the date of measurement. I fancy you have nearly a month longer in 'Ontario,' at least in Pilkington neighborhood, for turnips to grow than down here. Mine were measured at the time they were lifted, (23d Oct.) You must grow 'stunning' potato crops to have passed 402 bushels to the acre without comment. My crop, I should have informed you, was planted 'whole,' and 24 inches between each 'set,' drills 30 inches apart.—A somewhat novel experiment. I do not find that you have reported a prize list this year (1867) for roots. Would it not be well to do so regularly?"