

Bride's half-sister Bridesmaid of Bon-ton. Altogether, without reckoning the Queen's Cup, the winnings amount to £480, while the heifer has been sold for 150 gs.

However, when the beasts came to the block test, the Shorthorn turned out by far the more profitable of the two. The heifer was full of waste, much too fat, so that the tallow chandler got a good deal of her weight, while the steer cut up well and was in no part overdone. We always distrust those terribly fine bones. The only fault we can find with the Shorthorn is that his underline is not so straight as it might be, but the underline of a steer is never so perfect as that feature in a heifer.

Was it not the Hon. J. J. Ross, of Ste Anne de la Pérade, who said, at a long past meeting of the Dairyman's Association, that he could not afford to send the milk of his Jerseys to a cheesery, as it paid him much better to send it to a creamery? In those days, the Babcock test had not yet been applied to the paying for milk according to its contents in butter fat, but, even now, many people distrust—not the test, but the tester—and doubt, with reason too we fear, if the general run of cheese-makers are competent to apply the instrument satisfactorily. Hence, the vital necessity of universalising, if we may coin the word, the syndicates; and even if they really did become universal there would still remain many who would say, with *Hoard's Dairyman* accounting for. There is no reason why the milk from Jersey cows should not make the best quality of any kind of a cheese, but a more important question is whether the producer of such milk can afford to have it made into cheese of any sort. As a rule it will pay much better to use such milk for butter-making.

**Mushrooms.**—This paragraph ought properly to form part of the department "Household"; but it shall be a very short one. A writer, in *Landreth's "List of seeds, &c."* proposes to teach people how to cook that delicious comestible, the mushroom: "Wash thoroughly, remove the stems, and fill the cavities with finely chopped parsley and onions!" Conceive such a horror! Onions and mushrooms! The coarsest of all flavours added to the most delicate of all flavours! The man who wrote the above recipe deserves to be fed on half-boiled rice and underdone veal for the remainder of the term of his natural life.

**Value of roots as cattle-food.**—Some years ago, a correspondent of this periodical essayed to prove, from the analysis, that a ton of mangels could not be worth more than fifty cents! Well, we need hardly say that we did not agree with him, holding, as we did then and do now, that no chemical analysis was worth a farthing compared with the synthesis the animals of the farm made in their own proper interiors. We held then, and hold still, that a few tons of turnips grown in, say, Aberdeenshire, will, with good oat-straw, turn out a bullock fat enough for any market; whereas, a few tons of turnips grown in, say, Kent, will, with good oat-straw, only keep a flock of sheep just going; and, yet, no chemist alive can, by analysis, show any material difference between the two lots of roots.

Wherefore we then concluded and we still hold the same opinion, that, what the chemist puts down under the head of water in his analysis contains something differing from the fluid

the layman calls water; and we rejoice to see, at last, that the experience gained during the last ten years has led many of the more practical men at the experiment stations in the United States, to come to the same conclusion. The following extract, from an American paper, was a very pleasant sight to us.

**The Feeding Value of Roots.**—The experiment stations do not seem to agree on the exact value of root crops for feeding purposes, but they have a greater value than can be detected by chemical analysis.

Every farmer has straw in abundance, and this is not highly esteemed as a food for stock, and is often practically wasted so far as its use for this purpose is concerned. In many cases where a supply of roots is available, straw can be fed to great advantage in connection with them, for while it is not capable of scientific demonstration we are satisfied from actual practice that roots, add to the digestive ability of the animal to which they are fed, and if a liberal supply of roots is given them they will eat straw that has been well taken care of with a relish, and thrive nicely on them.

A crop of roots is easily raised and they are the cheapest source of succulence possible to the average farmer. It is to be hoped that they will come into great favor and be more generally known.—(*Farm and Home*.)

**Sugar beets.**—We hear, from M. des Etangs, that the Berthier beet-sugar factory will be in full vogue again next season. M. J. de L. Taché and M. E. Castel, both say that thousands of tons of beets will be sent down from St Hyacinthe; so that, altogether we may hope to see this novel industry flourishing at last.

Dr Wiley, whose article on this crop we append, though his views on political economy are heterodox in the extreme, hold very sensible ideas on the question of beet-growing, but we wonder how his countrymen like the expression of his opinion as to the "curse of American agriculture being its slovenliness."

**Dr Wiley on the sugar-beet industry.**—The culture of the sugar-beet is intensive culture. It is a kind of agriculture which can be carried on with high yields, where ordinary crops or cereals would not pay. It is already difficult in this country to grow wheat, maize or oats on land worth \$100 an acre. The fixed charges on such land are high, \$6 or \$7 an acre, and these fixed charges, together with the high taxes which are paid, eat up the profits of cereal culture. (1) Such lands, however, could be profitably cultivated in sugar beets, where the yield per acre is higher and the returns are to the farmer for intense culture and high fertilization. An instance of this is seen in China, where lands have rapidly increased in value under the stimulus of beet culture, and farmers get high returns from the growth of the sugar beet.

The establishment of sugar beet culture becomes a true object lesson in agriculture. Every field, properly cultivated in beets, becomes an agricultural experiment station. The influence of beet culture is felt upon every other crop. The yield per acre of cereals, root crops and grasses is always found higher in a community after the introduction of beet culture. It is a blessing not only to the person who engages in it, but also to his neighbors.

(1) Why so much latin? *Grain-growing* is pure English.—Ed.

Slovenly agriculture is impossible with the sugar beet, and the curse of American agriculture is its slovenliness. If there is one thing our farmers need to learn more than another, it is how to farm. Another great argument in favor of an indigenous industry is the stimulus which it will give to American agriculture. The markets for our farm products are now overstocked and the prices of our farm products are phenomenally low. As I have often pointed out, the nation which exports its agricultural products as a source of revenue must eventually become pauperized. It sends out of its boundaries blood and marrow. The only agricultural products which can safely be exported are sugar, oil and cotton. The establishment of an indigenous sugar industry would render it unnecessary to send agricultural products away from home in order to get money to buy our sugar. We would have a larger home market, a larger home consumption and less necessity for going outside to purchase. The mere fact that over \$100,000,000 in gold would be kept at home annually, in the price of sugar alone, is a matter of no mean importance. When you add to this the stimulus to agriculture and other industries which the establishment of an indigenous sugar industry would give, we see an advantage to American agriculture which is almost incalculable.

Does the good Doctor really believe that \$100,000,000 in gold are sent out of the country in payment for sugar? A short course of Adam Smith and Mill would teach him better.

**Timothy.**—We have often expressed our surprise at the persistence that is shown by the farmers of this province in places far removed from markets in seeding down with timothy. And that we are not alone in this feeling of surprise, is shown by the following letter from an extensive farmer in the State of Massachusetts. If any thing is needed by farmers here, it is permanent pastures, and it must be clear by this time that the most unpermanent of grasses is timothy. Not that we should feel inclined, as the writer of the quotation seems to be, to omit timothy entirely from the list of a combination of seeds for permanent pasture, for it fills up the sward for a couple of years at any rate, at the end of which time some of the natural grasses of the country will be at hand, ready to fill up its vacated place.

**No Timothy Wanted.**—Occasions where a reader of the *Country Gentleman* feels justified in thinking that he knows as much about an agricultural topic as the editor of that paper are so rare that when one does occur it is worth making a note of. Hence this communication, which is suggested by your advice to Mr. Bond, to make timothy the predominating grass for a permanent pasture. I consider timothy one of the poorest to sow for pasture. It is short-lived at best. It is slow to start after having been cut, or eaten off. Its bulbous root at the surface of the ground is easily destroyed by close cropping, or by the tread of cattle or horses, especially the latter. Alone, it can never be made to form a good turf—in fact, when growing with the better grasses, its presence among them seems to prevent the formation of that fine, close, compact sod without which no land can be rated as first class pasture. In a combination of seeds for a permanent pasture, I should omit timothy.

## THE ADVANTAGES of a VARIETY OF CROPS.

(By the Editor.)

As was remarked, some years ago, by the Hon. J. J. Ross, at one of the Annual Meetings of the Dairyman's Association of the province, it is not judicious to put all one's eggs into the same basket. Growing wheat, year after year, on the same land, has not proved a lasting source of wealth to the people of Manitoba and the North-West; the production of consecutive crops of tobacco on the same land has ruined many a prosperous farmer in the South; and we fear greatly that, unless a very great change takes place in the mercantile economy of the world, the entire devotion of our own people to the production of dairy-goods will not, in the long run, conduce to their welfare. Dairying is good, and has in the past stood us in good stead; but the time has come, it seems to us, that our farmers should look about them a little, and see what others are doing. New Zealand, Australia, Denmark, France, all these countries are entering into competition with us for a share, nay for a preponderating share, of the English market: and who are we against so many? Look at price-list:

Brockville cheese 9½ cts. a pound,  
Creamery-fall-butter 20 cts. a pound.  
Yesterday, in St-Catherine Street, Montreal, we saw in one of the leading grocers' window the following: roll butter—18 cts. a pound. The butter must have been pretty good or Mr. Walter Paul would not have had it for sale.

All these things must bring consideration in their trail. It seems clear that we can no longer depend upon one line of goods for a living, and the point now is to ponder deeply the present state of the world's commerce and see if it would not be wiser to diversify our production of farm-wares, and supply the markets both at home and abroad, with more articles than we at present have to offer.

There are many things our farms are calculated to yield that are at present scarce. For instance: good short wool mutton; long, leanish hogs for conversion into hams and bacon; flaxseed; tomatoes for canning; cucumbers or gherkins for pickling; onions for cooking and for pickling; green peas for the table and for canning, and string-beans, or as we call them in England, French-beans, both for canning and the table: these last two vegetables can never be found, even in Montreal, fit to eat; the reason why, we will state further on. Who ever ate a good white-turnip, here? Far superior to any yellow-turnip or swede, the white-turnip, a most delicious vegetable, is utterly unknown in this country until too old to be worth eating.

And first of good short-wool mutton. You cannot jump into a good flock of sheep at a shot. To begin with, very few of you keep a sufficient number of ewes to make it worth your while to lay out money in the purchase of a first-rate ram. The average flock here, we suppose, runs to about 15 ewes. A good Shropshire ram will cost at last \$50.00, which would make each ewe's service come to between three and four dollars, and as it is not much the habit of the ewes to twin, each lamb will cost some two and a half dollars, which will make the flock a long time before it pays.

A good Hampshire-down lamb-ram can be bought of Mr. James Wood, Mount-Risco, New-York, for \$25.00,