

After the cows have come in clover is fed almost exclusively. It is fresh, green and fragrant, and relished exceedingly; and the flesh and is a large milk-producer. It has a similar effect, to grass—the system responds to it as in summer. If, however, the clover has suffered in curing, or, through the rains, has been put back in harvesting, meal is added.

Now, as to the manner of feeding. There are three feeds given during the day; but each is preceded by a little food given half an hour or three-quarters before the regular feed; full time being given to eat what is offered, they eat, of course, clean. Then the main feed. In the two last, the usual amount of an ordinary single feed is given, or perhaps a little more, a full portion being the object. Mr. S. holds that this is consumed the more readily by dividing it. There is less time for breathing over the hay; and the quantity at a time being smaller, it is eaten up clean. There is just enough given to have it all eat up, so that the cow gets all she is capable of consuming. Regularity is the rule here in all things.

F. G.

Pure Water, a Desideratum:

(To the Editor of the CANADA FARMER.)

MR. EDITOR:—A friend has handed me a copy of your excellent journal, which I have perused with great interest; its date of issue was Nov. 29, 1873. I was not a little surprised, on reading two articles, one, a leader, "Water on the Farm"—the other—"Dangers of Well Water," from the "London Lancet,"—in neither of which is any mention made of my favourite mode of supplying water.

I have for many years made the supply of pure water a specialty, and I have not sunk a well during the past 13 years, though I have supplied a large number of places with water in that period.

The cistern, when properly constructed, I consider the most reliable, and the most desirable, everything considered, of all means of supply. Certain precautions are, however, as necessary to observe, in the arrangements for obtaining the water, and for preserving it in purity, and to maintain in it a proper temperature, as other precautions are in obtaining water from other sources of supply. Prominent among the former are the following.

Water should not be collected for drinking, or culinary purposes, from painted, wooden, or painted metal roofs, nor from such as are frequented by birds of any kind. I prefer first the slate roof, next the shingle. Water from a tile roof would no doubt be good, but there are none in use in my field of operation which comprises nine States.

The foliage of trees should not be allowed to collect and remain in gutters of buildings from which the water is to be collected and used.

In localities in which the roof is liable to collect much dust, from excessively travelled earth, or even McAdam roads, the spoutings should be supplied with what I call, a waste shoe, which is an adjustable section of the spouting, near the ground, which is to be set during a drought, so that the first rain-fall succeeding a dusty period, will waste and not flow into the cistern.

I have, however, some, among my numerous patrons, who may be considered rather fastidious, who will have the filter.

There are circumstances where the filter is necessary, and in such cases I supply them of my favorite kind, in fact, the only kind I build of late.

As it may interest some of the readers of the "FARMER" I will briefly describe my filter. I build up in cement mortar, a brick wall, of soft, or "salmon bricks," the width of a brick in thickness, which bisects the cistern, and is securely stayed in place. Neither face of the filter wall is plastered with cement, as the principle of the filter consists in causing all the water to flow through the brick wall which it will do, if the surface is that of a cross section of an ordinary cistern, with a rapidity, equal to the amount drawn in a given time, by an ordinary pump. A filter more perfect is not desirable.

J. W., Baltimore, Md.

THE CANADA FARMER

IS PUBLISHED

ON THE 1st AND 15th OF EACH MONTH,

AT

One Dollar and Fifty Cents Per Annum,

FREE OF POSTAGE.

It is sent to Great Britain and Ireland by mail, for six shillings sterling, per annum.

No subscription received for a less term than one year, commencing from the month of January.

THE CANADA FARMER is stereotyped, so that copies of back numbers can always be had.

A limited number of advertisements are inserted at twenty cents per line for each insertion. There are twelve lines in one inch of space. Advertisements under ten lines are charged as ten line advertisements.

All letters and money orders are addressed to

THE GLOBE PRINTING CO.,

TORONTO.

Agents wanted in every town and village in the Dominion to canvass for subscribers. Liberal commission allowed. Send for circular stating terms.

The Canada Farmer.

TORONTO, CANADA, FEBRUARY 16, 1874.

The Recuperation of Exhausted Farms.

One of the most difficult problems the majority of Canadian farmers are called upon to solve, is "How to maintain their farms in a high state of cultivation, and at the same time receive the greatest possible immediate pecuniary results!" The capitalist can afford to be lavish in his expenditure in putting into practice those principles which universally govern successful agriculture, and if he reaps no benefit from them one year, he is able to "bide his time," knowing that ultimately, he will be amply rewarded for his outlay. Not so with the farmer of limited means. Whether his harvests prove bountiful or the contrary, accounts will be presented when due, and must be paid, and consequently he is compelled, by his necessities, to raise the crops that will render him the quickest cash returns wherewith to meet his liabilities; the system of cultivation most suitable to the character and situation of his farm, and that which is best calculated to preserve its fertility and yield him satisfactory crops is treated as a matter of purely secondary importance. This has led to the wasteful system (or rather lack of system) prevailing so extensively of taking from the soil successive crops of wheat, without returning to it the manure necessary to maintain its fertility; the result being that many once splendid farms are now almost worthless, which under rational treatment would equal in productiveness the best in the country. So great and widespread is this evil, that any means calculated to mitigate it merits the earnest consideration of Canadian agriculturists.

The raising and keeping of stock will doubtless eventually prove an adequate remedy, but will require a long time and large capital to be successful. The great desideratum of the present is a root crop to alternate with grains, clover and grasses, capable of yielding a certain cash return, and at the same time, clear the land of weeds, promote good tilth, and counteract the evils resulting from overcropping. The only root which answers all these requirements is that of the beet; it is easily grown; requires only ordinary care; yields large returns; can without serious diffi-

culty be made into an article of commercial value commanding a ready sale, and what is of far greater importance, its cultivation exerts a highly beneficial influence upon the soil in which it grows. Large districts of country which are now among the best and most valuable arable lands in Europe, were 20 or 30 years ago so poor as to yield only a bare subsistence to a poverty-stricken peasantry—the cultivation of the beet being the primary cause of this marvellous change. That which has turned barren wastes into fertile lands in the old country, can perform a similar service upon the exhausted farms of Canada, and maintain in all their virgin richness the lands being yearly occupied by our enterprising backwoodsmen and settlers. Nor are these the only benefits to be derived from the culture of the beet—the refuse remaining after the saccharine matter is extracted is first-rate food for cattle, summer and winter, upon which they thrive well, and eat with relish; the solid matter being finally returned to the land as manure.

The success which has attended the introduction of the factory and co-operative systems into our rural districts, as applied to the manufacture of cheese and butter, warrants the belief that the application of similar principles and enterprise in the manufacture of a concentrated extract of beet-root, fit for the sugar refiner's use, and which would consequently command a ready and profitable sale, would prove equally successful. There is nothing in the manufacture of such an article that any person of ordinary intelligence could not successfully accomplish; but far better results would be obtained by a number of farmers uniting their means to purchase the necessary plant, which is by no means expensive, and engaging a trustworthy man to superintend the process of manufacture; such a course would ensure a more uniform, better and higher-priced article than could be generally produced by private enterprise. The advantages that would result from the general culture of the sugar beet—both agricultural and commercial—it would be difficult to over-estimate. The land would be greatly improved; farmers would be the richer, and would not be so dependent upon their grain crops as they are at present; new branches of trade and industry would be opened, and thus the whole country would be benefited.

According to the last parliamentary blue-book upon Trade and Navigation, we paid \$4,615,235 for sugar imported into the Dominion, and for the wheat and flour we exported, received the sum of \$6,679,306, so that it required more than two-thirds of the surplus of our staple crop to furnish us with this one article of domestic use. These figures tell their own story, and we will not insult the common sense of our readers by further comment upon them.

We trust our agricultural friends will give this important matter their earnest consideration. There are perhaps many difficulties of detail to be overcome before the sugar beet becomes one of our staple crops—but has there anything of moment ever been accomplished in the world without difficulties being conquered? We believe that in this instance they are not so insurmountable that the sound practical common sense and energy of our Canadian farmers cannot easily master them.

CANADA SHORT-HORN HERD BOOK.—From a prospectus recently issued by the Agricultural and Arts Association of Ontario, we learn that it is the intention of the Council to publish the Third Volume of the *Herd Book*, as early this summer as possible. Pedigrees of Short-horn bulls, cows, heifers, and their produce will be received for insertion up to the 1st of March prox. The fee for the insertion of each Pedigree, including certificate of Registry, is 50 cents, payable when the pedigree is handed in. The time during which entries can still be made is short, and it behoves those who have hitherto neglected or postponed the matter, to early bestir themselves.