

farm heavily burdened in England. It is true labour is very much higher in Canada, but then I think the imposts on land here should balance the item of expenditure on the farm. Mr. Hutton allows £3 10s. per acre as the amount necessary to "clear, fence, and seed" the land by contract. Now, if I purchased 1,000 acres of wild land at 3s. 3d. per acre, would it be safe and profitable proceeding to contract to have it thus reduced to a state of cultivation, or may I do so? Mr. Hutton names £3 per acre as the fair average clear gain to be expected the second year of cultivation under barley, rye, oats, peas, and potatoes. Now, I should like to know where is the land in England that will average such profit as this to the tenant-farmer? For £1,750, according to Mr. Hutton, a capitalist may fence and crop 500 acres of land, and this land for and after the second year may be expected to return a clear profit of £1,500 per annum. This is stated by a man "than whom no higher authority can be quoted," so I assume it is an incontrovertible fact; of course it is understood in average seasons. In your journal of the 2nd July last, I find Mr. David Buchanan, Bursar of the Toronto University, states:—"The class of farmers better adapted to this country are those generally known as small farmers, men who do their own work or part of it, whose wives are also accustomed to the work of the house and dairy."

Now, I beg to ask if this is to be understood as meaning that a superior class of educated, energetic, men of capital and skill, but who are unused to manual labour, are not suited to the soil of Canada? If such men can farm and live by farming alone in England, paying something like £5 per acre in the shape of rent, tithes, taxes, &c., cannot succeed on their own freeholds as well as a class who are nothing superior to ordinary farm labourers—if this really is so, then I want a reason for what seems to me an anomaly. Why should not skill, capital, and energy succeed on a large Canadian farm as well as in England? The only real difference I can see in the *modus operandi* in the two countries is this—in Canada seed time is very short, so the farmer must there be much more active and energetic to get in his crops, but the crops and seasons are identical.

Most books recommend the emigrant to purchase cleared land, rating at from £5 to £10 per acre; but if he has capital to clear it by contract, having it fenced and cropped for £3 10s., why should it not be better to purchase wild land at 3s. 3d.? Thus, with capital you may have it made ready for operations at £3 13s. 3d. per acre. Letters from Canada state the farmers in Canada West neglect to breed stock, and think much more of wheat growing than of dairy produce—this implied there is a good opening there for cattle breeding and the dairy. Now, small ploughing farmers can hardly be good stock breeders; so, perhaps, it may be owing to the absence of men with capital that the costly work of breeding is neglected. The same book states—"One of our most pressing wants in Upper Canada is a race of country gentlemen." I presume this means capitalist farmers, who are here known as "gentlemen farmers," and those are the very men who make more by agriculture here than any others. I have read that there is now no Government land to sell in the best locations, as private capitalists have secured it all. Assuming this to be correct, I should much like to know the terms on which, say 1,000 acres, might be purchased in one block in the peninsular portion of Canada West, or if any such land is now in the market there? I should much like some remarks on these matters from your able and experienced pen, for I only wish to know the truth about the capabilities of this fine country for a

STOCK FARMER.

(NOTE BY ED. C. F.—The above letter suggests a number of topics fruitful of discussion, and will, we trust, draw out facts and opinions from those best qualified by observation and experience to deal with them. At present we shall content ourselves with one or two brief comments. Canada is undoubtedly a good country for small farmers able to do their own work, but it also affords ample scope for enterprising capitalists. Indeed the time has come when a judicious outlay of capital and the employment of more skill in farming are loudly demanded. Whether British agriculturists with means can wisely invest in the purchase and clearing up of wild land, is a question that admits of much debate. The writer of the above letter evidently overlooks the fact that his "cleared land" will be for years encumbered with stumps—a very strong argument for preferring an improved to a bush farm. Another drawback is the want of good roads, and the difficulty of access to market. These considerations, in connection with the many inconveniences attendant on life in the backwoods, incline us to advise the English gentleman farmer to buy improved land, the cultivation of which would be more like what he has been used to in the old country.)



The Dairy.

Milking Once a Day.

SEVERAL months ago there was considerable discussion principally in Eastern agricultural papers, about the number of times a cow should be milked per day. The same subject recently came up before the Fitchburg (Mass.) Farmers' Club. The proceedings were published in the *Fitchburg Sentinel*. Mr. W. G. Wyman gave his experience as follows:

He selected a small heifer three years old, a grade Devon, whose first calf, dropped in September, was butchered in November, and milked her through December twice a day, obtaining between five and six quarts of milk daily. Through January and February she was milked only once a day; the quantity decreasing slowly at first, but constantly through all this time, until, at the end of February he obtained a little less than two quarts per day. Through March she was milked twice a day, and during the first week the quantity of milk was increased to nearly three quarts; during the second week to two and a half quarts; during the third week to four quarts daily, and on the 31st she gave a little more than four and a half quarts. The feed and care was as nearly uniform throughout as possible, and the milking faithfully and regularly performed by himself.

He intended to try the experiment with a larger and older cow giving a larger quantity of milk, but the diminution of milking only once a day was so immediately apparent, that he chose not to risk the loss of milk and the injury to the cow, and contented himself with the one named the result of which disappointed him in two respects. First, that the small quantity of milk obtained during the latter part of February was no richer, apparently, than a similar quantity from the larger flow; and, second, the quantity having been diminished in the manner described, from over five to less than two quarts daily, that it should be increased again to more than four and a half quarts.

Mr. W. stated as the result of his study and experience, that in his opinion, in order to obtain a reasonable quantity of pure, wholesome milk, of best quality, in winter, cows should be regularly fed with the best fodder of the barn, embracing a variety, as of clover and finer hay, corn-fodder and oat-straw, with a little rowen if possible, a small quantity of meal once a day, and a few roots occasionally, and that the cow, not the milk-can, should have access to pure, cold water twice every day, should be constantly well bedded, and milked with the utmost regularity at least twice each day.

A. F. Adams remarked that many good farmers in New York milked only once a day. He milked twice a day, and at a regular time. His cows were allowed to go out in the yard in the middle of the day, but most of the time during cold weather he kept them in the barn. It was important that they should have good pure water and be fed regularly.

Abel Marshall said when he wanted to dry his cows he only milked them once a day.

Mistakes in Cheese Making.

There are three classes of mistakes in cheese making, which may be enumerated as follows: first cheese may be spoiled by bad or careless treatment of the milk; second it may be spoiled by bad management after the curd is separated; and third it may be spoiled by bad keeping after being made.

Improper treatment of milk consists principally in want of thorough cleanness of the vessels into which it is necessary to place it. Ordinary cleanliness is not sufficient. Milk so rapidly changes when exposed to the air, that the least particle left in any pail or vessel, becomes altered into a ferment similar to yeast, which the moment it comes in contact with new milk, communicates to it the property of corruption, and hence milk though seemingly pure, may be really

unfit to manufacture the best quality of cheese. All vessels used in the manufacture of cheese or the handling of milk, should pass through a thorough immersion in water, that is at the boiling degree of heat, as this only can be relied on to render such vessels perfectly sweet.

The second mistake arises from a want of proper use of the thermometer in ascertaining the right degree of temperature at which the rennet should be applied, and to which the curd should be raised, when it is desired to separate it thoroughly from the whey; and next the want of sufficient manipulation to reduce the curd to a complete crumbled mass, of the right dryness before being subjected to the press.

The third mistake is in the want of proper attention to keeping cheese in well ventilated rooms, and in turning it from time to time as its curing requires. It is found that if the temperature of the cheese room is over 75° that fermentation in new cheese is carried on too rapidly, and causes a tendency to heave; while if the temperature be below 60°, it checks the ripening of the cheese, and tends to destroy its flavour.—*Michigan Farmer*.

Good Milkers.

It is an easy matter to distinguish a good milker. The farthest removed from the bull the better. As the male has no milking properties, and the female is devoted to them; and none so much as the cow: so we are to judge from this principle.

No person of ordinary intelligence would select a cow with a thick neck, heavy bones and a bull-like disposition. On the other hand, the true cow, the good milker, is easily known by its thin neck, sometimes almost amounting to deformity (the case with one of ours), small bones; thin sensitive hide; thin tail; and (most of all) a mild, placid disposition, showing absence of animal heat, which consumes or prevents milk from forming. A quiet, motherly face, denoting intelligence and domesticity, is what is wanted. The reservoir of milk, of course, must be large, or there cannot be stored a large quantity. A large, well-formed bag, therefore, is a necessity. A small udder is an invariable sign of a poor milker. The form and size of a cow are not always to be depended upon. The disposition is perhaps as much, if not more, than any other one point; some say than all other points. We remember a heavy-headed, coarse bodied cow, but with the mildest of dispositions, as one of the best butter makers we know. A good eater, always healthy. She made during the month of June, 15 lbs. of the best butter a week; and gave a good flow of milk nearly the year round. Avoid the bull, and seek the farthest opposite qualities for the best milker.

PRECOCITY OF ALDERNEY HEIFERS.—We observe in recent agricultural papers, accounts of the early development of Alderneys, which are truly astonishing. A heifer in the herd of John Giles, of Woodstock, Conn., dropped a calf on the 27th April, 1863, being then only 13 months and 2 days old. From 1st to 6th July, five pounds of butter were made from her milk. A heifer owned by A. J. Sands, of Bainbridge, N. Y., a cross between the Alderney and Ayrshire, dropped a nice calf May 6, 1863, when she was only a year and two days old.—Another calved on the 27th July, at the age of a year and 17 days. The yield of milk in these cases is described as quite large. These miniature mothers are said to be very docile, and though it is admitted that early precocity somewhat dwarfs them as to size, yet it is thought the early excitement of the mammary gland, tends to a fuller development of milking qualities. If this view be correct, it would seem that for dairy purposes, this early maturity is a decided advantage, since it is yield of milk and not size of animal which is desiderated.

TEST YOUR COWS.—May and June are excellent months in which to test the milking qualities of cows. Most new milch cows that do not give a good yield of milk in these months are not worth keeping; the exception is such as to give only a moderate amount but keep up about the same quantity till very late in the season. It is positive loss to keep poor milkers, for the cost is the same as that of keeping and caring for good ones. Make some estimate of the returns that are coming in, and at the same time cast up the cost of keeping through the summer and winter, and it will be readily seen which are the unprofitable animals.—*Prairie Farmer*.