

Breeding Cows.

A loss is often the result of using an inferior or common animal to breed from when a thoroughbred could be used at a moderate expense. Ordinary cows are too frequently kept with small returns, when by a judicious selection from milking strains the profits might be doubled. A loss is often met with by not feeding cows one or two quarts of meal each day, when the pasture gets short and dry. The profits would in general prove greater if farmers would raise their own cows, as the value of a cow depends largely upon the good care and good feed it receives when young. A loss is sustained by not putting in an acre of sowed corn to use in case of drought, as one acre then will produce a much greater profit than ten of dry pasture.

A loss is the result where twice the yield might have been secured by the application of more manure to the crop. By not providing suitable feeding arrangements, boxes, racks, etc., a great waste and loss occurs by the trampling of good food into the dirt.

A serious loss is often incurred by letting grass stand and get too ripe before being cut; and in this case the damage is twofold—first, as regards the stock that eat it; and second, the greater exhaustion of the soil.—*Chatham Courier.*

The Best Stock.

The extra price received for a superior article is nearly all profit. And this is especially the case with the farm. It costs no more to raise a good horse than a poor scrub. No more feed, care or time is required. And if the plug horse can be raised so as to pay expenses, there is a fine profit in rearing first class horses.

The same is the case with neat cattle. In fact it costs more per pound to raise such a steer as would sell for three cents per pound than one which sells for six cents per pound. In this case there are nearly double the number of pounds, and double the price per pound; and yet the choice steer takes no more food and care than the other. So that not only the extra price is the profit, but the extra weight also.

Profits of Sheep Raising.

The following, from a Pennsylvania farmer, shows that sheep raising is profitable:—"I learn by the agricultural report of 1870 that there were nearly seven acres of unimproved land in Pennsylvania to each sheep, and that each produced a little more than three and a half pounds of wool. This, at 40 cents per pound, amounts to \$2,500,000. My object in giving these figures is to show the profit of this branch of agriculture. I am now keeping, on an average farm, one sheep to every two acres improved land. The wool of each sheep averages four pounds, but these sheep do not consume one-half the hay and grass raised, and do not receive any roots. Last year I raised my first crop of sugar beets and find that thirty or forty tons may be raised per acre. I think these will enable me to keep at least one sheep to every improved acre, and still have one-half the hay, grain and roots left to feed the team and necessary cattle. If these conclusions be correct, and one-half my sheep raise twin lambs, making a total of one and one-half lambs to each sheep, worth \$4 each, we have a total of \$6 for lambs and \$1.60 for wool per acre, or \$18,500,000 for lambs and \$69,000,000 for wool in Pennsylvania. I cannot give the value of lambs for 1870, and cannot compare the difference. The wool produced was 6,500,000 pounds, but at my estimate there would be 46,000,000 pounds, making a difference of \$16,000,000 at 40 cents per pound. This result is, of course, not attainable in one or two years; it must be brought about by degrees. I find sheep are liable to disease if kept in large flocks, unless the very best breeding ewes are selected and the rams changed each year.—*Massachusetts Plowman.*

The pigs require a warm shelter as much as any animals. Do not imagine, because they can endure cold, that it is of any benefit to them. Keeping swine in a piggery open to the cold, perchance with no bed but the cold wet earth, is like throwing food into a river; for it requires food to keep up the animal heat, and the food fed first goes to this work, second to increasing the flesh. A warm, clean house is cheaper than grain.

E. J., in *Rural World*, says:—Timothy hay is poor stuff for milch cows; corn meal gives more fat than milk; clover hay, cut when partly in blossom, and well cut, is the best hay.

Dairy.**Creamery Butter.**

When we expressed our regret in August that Canadian operators had not shipped or sold their summer stock, we hoped to be able to write ere this of a good clearing-up of stocks in order to be in readiness for the fall make. It is unfortunately true that heavy summer stocks are still held, with but slender present hope of escape from loss. We find, however, that the better situation has changed its front and new elements have been introduced, which may alter the "wind-up" of this season's Canadian butter business materially. First, there has not been the usual make of choice fall butter, either in Canada or the United States. September was hot and the butter trade was no better than, if as good as, August make, so that there is not the large stock of fall-made butter that was expected.

In the Brockville district, the make is no better than before, if as good, for the reason that the best makers have, in preference, devoted themselves to cheese. The Eastern Townships butter has been better than last, because the people there had been disappointed in cheese, and gave the more attention to butter. Upon the whole, this year's butter is probably an improvement over what was made last year, and is certainly better in quality than the average product of five or ten years ago; but is still below the average of American.

The Americans have stopped sending their choice butter to England; indeed the bulk shipped from New York this year has been of a lower grade, shipped in refrigerators. They are occasionally asking a sly question about prices of finest in Canada; and deceived by the low figures lately quoted in Montreal, we understand that several New York buyers lately visited that city with the intention of picking up any choice lots of 18c or 20c butter that were causing the owners sleepless nights, but the visit did not result in much business. Again the English market is reported very dull with heavy stock. Those who have taken pains to ascertain assure us that the bulk of these heavy stocks in England consist of American ordinary butter, oleo-margarine, cheap manufactured stuff which will not keep. From the continent of Europe there is also an excess of imitation butter, which has been pressed on the market unsuccessfully.

As the season goes on, the question will be asked in Britain, Where can we get good, genuine butter? and our impression is that, though the quality may not be as fine as could be desired, it will be difficult this winter to point to a country where there is as little bosch, oleo-margarine, and otherwise manufactured butter, as in Canada. Taking the season into account, we may claim the stock in Canada, as a whole, to be better and purer butter than can be found anywhere.

The wisest plan for our farmers and butter-makers to pursue would, in our opinion, be the erection of creameries, to perform the same function for our butter that cheese factories have done for our cheese. A similar improvement in the quality would follow, and an increase in the quantity of choice would not fail to be induced. The ten years to come might witness as magnificent a growth of Canadian butter as the past ten has done in cheese.

There are already some creameries in Canada; one at Teeswater, capable of using the milk of 200 cows, built after the New York State model. In Brockville district we believe there are two, one near that town and one at Mallorytown, which produce butter, and skim cheese as well. Of course the farmer cannot eat his cake and have it too; he cannot make good butter, and out of the identical material make good cheese. One or two small factories in Hemmingford direction, which are erroneously called creameries, make butter on a small scale. The farmers thereabout use a patent pan, and these produce, some think, a better article, but it is not creamery butter.

So far as we know, there have been, with the exception of the one at Teeswater, no factories erected after the plan of the American creameries at Orange county, N. Y., in Elgin, Ill., and at other places in the West. It is a fact deserving wide mention, that the butter produced this year by the Teeswater creamery brought 25 cents gold for 500 pkgs. f.o.b. there, and it sold in a smaller way in Toronto as high as 28c this fall. Creamery butter sold at Illinois at the close of October at 30c on the spot, we are told, while in New York the average price for choice was 28c to 32c.

These creameries are so arranged as to make butter one day and cheese the next, and so not only economise, but take advantage of the demand or of any favorable change in the market for either. Our dairymen should try the experiment of erecting their cheese factories in such a way that they might be changed to butter factories if required.

The great object to be kept in view is the improvement of the quality of the bulk of our butter. We have numbers who make choice, it is true; but the proportion of really choice obtainable for export has been painfully small.—*Monetary Times.*

Churning.

The following advice on the subject of churning is furnished by Mr. J. T. Ellsworth to the *Scientific Farmer*:—

Churning cream to make good butter is not so simple a process as some may think. It must be churned at the proper time and at the proper temperature, and the churn should be stopped as soon as the cream is broken, but before the butter has gathered into balls. In warm weather it is of great importance to watch the process closely, and to notice just when the change is to take place. At this time add enough cold water (notice) to reduce the temperature of the mass to about fifty-six or fifty-eight degrees, and then complete the churning, which will be as soon as the butter is in a granulated form, with particles about the size of peas. Then draw off the buttermilk and dash in cold water, repeating the washing until the water drawn off appears clear. Now take out a layer of butter into the tray, and sprinkle on finely sifted salt, at the rate of about an ounce of salt to the pound (more or less, as customers may wish). Then take out another layer and salt as before.

After the butter is salted, set it away for about three hours for it to take the salt and harden the grain. Now work it a little with a wooden ladle and set it away again until next day, when it will need but little working before preparing it for market. If the butter is soft and white, it is from lack of proper cooling before churning, and it may be hardened by putting in about three times the usual amount of salt and working it a little for two or three mornings.

A Cheese Fair at a Royal Palace.

In order to promote the manufacture of cheese in Italy, five hundred groups of cheeses were recently displayed in the Royal Palace at Portici, near Naples. The importance of the exhibition was increased by the fact that the Italians rarely drink milk, or consume it in any other form than that of cheese. Every peasant has his cow, and makes his own cheese; and the better he makes it the higher is his reputation as a farmer and dairyman. Prizes of gold, silver and bronze will be awarded the successful exhibitors. The cheese fair, writes a Naples correspondent of the *London Times*, is likely to give a considerable impulse to agricultural industry in Italy, as unusual importance will thenceforward attach to the manufacture of an article of domestic consumption.

Mr. Lewis' Dairy.

The *American Dairymen* lately gave an account of the dairy farm of Hon. Harris Lewis, of Frankfort, Herkimer county, from which we make the following extract:—

Mr. Lewis' theory is, that the easier he makes everything for his cows the less power to overcome obstacle will he have to supply in extra feed; and the more comfortable and contented they are the better return will they make through the milk pail.

He has a herd of twenty-seven cows, but is now getting milk from only twenty. They are mostly full-blooded shorthorns, and are as quiet and contented as so many well-fed and well-cared for pets might be supposed to be. They exhibit not the least shadow of fear or nervousness, even when strangers are present. Among the herd were five or six beautiful full-blood shorthorn heifers, just as gentle and docile as the oldest cows that are used to daily handling.

The cows are generally driven to the barn each night and morning if they do not, as is usually the case, come of their own accord, when they take up their places in the stable, each in its own particular stallion, with mathematical precision. No dog, no fright or worry is permitted, and the milking is done quietly and orderly, with no loud talking,