

that we can produce our corn here, all the farm needs, at a cost not exceeding a half a dollar per bushel and buy the fertilizer. That is, at the prices that are paid at the present time. The stover also we can produce at a cost not exceeding \$9 a ton. From the experiments I am making, I can say that I can get the stover and the corn for fodder cheaper than hay. As Mr. Moore told you in a former meeting, he cannot afford to make milk or butter by growing hay. Corn is an article that will produce beef, butter, and milk and leave something handsome in the way of profit. Corn can be produced for half a dollar a bushel and stover for \$9 per ton, and leave the farm a good margin compared with its present cost of production. From my own experiments I am satisfied I can make that statement and verify it. That answers the question at present for me. I can continue to farm at the present prices and so diminish the cost of production as to make a good profit."

REMARKS ON MILK INSPECTION.

Dr. Davenport, Boston's milk inspector, said: "It may be a matter of interest to know that the records of the Produce Exchange of Boston show that there were sold in the last year 9,200,000 pounds of butter, a half million pounds of oleomargarine, 8,900,000 pounds of cheese, about half a million dollars worth of vinegar, and, according to the wholesalers of milk, there were sold an average of 36,000 cans of milk a day in Boston. The most of the trouble in milk I have found has been more or less skimming. The next has been the addition of water. According to the statements of the various milk contractors, they tell me it takes more than a thousand cans of milk a day more to supply their customers than it did a short time ago. The number of customers is about the same. There has been a misunderstanding as to the requirements of the law with regard to milk. It has been formerly supposed that the law allowed any milk to be sold that can be produced from a cow. But that is not so, for it says the milk to be sold shall be of a fair quality. The standard is a good cow's milk from a healthy animal. The law forbids the sale of milk with less than thirteen parts of solid matter. A common native cow, on fair food, will average 13½ per cent. I have yet to find a dairy of a dozen cows, with fair feed, which will fall below that standard. I will give an illustration of this. I am examining all the milk that comes into the market, from all the contractors. I have in all some 600 dairies with milk from 5,000 cows. Going through them for the first time I found one dairy in ten that fell below the standard. They were simply notified of the fact and of the requirements of the law. On my second examination only one dairy in ten of those previously deficient fell below the standard. The cows did not have much difficulty in conforming to the law. That makes only one dairy in a hundred below the standard. The law has had rather a surprising effect. The contractors' supplies which I have examined show a great improvement in quality even of those not yet officially reached.

"If there is any particular question which I can answer I shall be pleased to do so or to have any of you come to the Milk Office on Washington street, just above Dover, and see the method by which the milk is being examined. I have examined milk, butter and cheese to the value of over \$15,000,000, and have been supplied by the city with an appropriation of \$400. I have carried the examination on for six months, expending more than \$2,000, and made a statement to the city telling what I have done. If I were supplied with proper means I say that we are sure of pure food within a reasonable time. We cannot

stop all adulteration, but we can come within a small limit.'

BUILD A BASEMENT UNDER YOUR OLD BARN.

From the National Live Stock Journal.

We have known farmers to go without a warm stable for many years, because they had the impression that they must build a new barn to get a good stable. This is a great error, and we will try and show them how easily they can get a good stable without building a new barn.

All the farmer need do is to raise the barn he has and build a basement under it. If the barn is large enough he may have as good a stable as could be made under a new barn. It will be seen that when the barn is raised the whole space under it is available for just such a stable as the farmer wants. It should be raised high enough to make a stable at least 7½ feet high in the clear. It should not be sunk in the earth any deeper than can be well drained, for the stable should be dry. There is no necessity of sinking it more than is required to make earth sufficient to build the drive-ways into the barn above. Eighteen inches is enough for this. This earth scraped around on two sides of the barn will make an easy drive-way on both sides of the barn.

A concrete wall under the barn makes the driest as well as the warmest basement stable; and is generally also the cheapest wall. Raise the barn, with screws, to the proper height, and level it well on blockings. The earth can now be thrown out to the proper depth. Set shores of 3x4 scantling around under the centre of the sill near enough together to be a sufficient support for the barn. A flat stone or small piece of plank is put under each shore to keep it from settling. These shores should not be placed where there is to be a door or window. When the shores are all placed and the barn braced with long shores to keep it in position, take out the blockings, and it is ready for the wall. Set standards plumb, 1½ inches beyond outside of the sill, and the boxing plank, 1½ inches thick, will bring the concrete wall just even with the sill. The inside row of standards will be set just 13 inches from the outside standards, then there will be just 10 inches between the boxing plank, which will be the thickness of the wall. This concrete wall may be built with water lime, sand, gravel, and stone. Mix 3 parts fine sand to 1 of cement or water lime, when dry, and if you have coarse gravel mix in three parts gravel after the sand and cement are mixed with water. Put a layer of this in the boxes, and then bed in any rough stone, filling all the spaces between them with mortar. When you have put in layers enough to fill the box, which is usually 14 inches high, you can then go to the place where you began and raise the boxing plank 12 inches, so as to leave 2 inches on the wall below. Now fill the boxing again, and raise again, so putting on layer after layer till the wall is up to the sill. The window frames and door frames are made as wide as the wall is thick, and are set into the boxing and the concrete built around them. Be sure and make your stable light enough to be cheerful. The cost of this is very small. A 30x40-foot barn can be raised and wall put under for from \$50 to \$75, depending upon the convenience of sand and stone.

THE CANADIAN BREEDER AND AGRICULTURAL REVIEW circulates through the entire Dominion, and has a large and increasing circulation in the United States and Great Britain.

TREAT BULLS KINDLY.

From an Exchange.

"Do not trust a bull," is a very wise maxim, but it is equally wise to treat him kindly. All animals (like all men) have variable dispositions except when they are uniformly bad, which fortunately is a rare case. The best of animals will occasionally act sulkily or resent coercion, and a bull's horns and his great strength naturally make him ugly to handle when in a bad mood. When we say it is wise not to trust a bull, we mean that prudence should be exercised in dealing with him, and then, by being well prepared in case of any bad behavior, his attendant will be able to control him without having recourse to pitchforks and clubs, shouting and swearing. Never take any chances with a bull; handle him with such precautions that you always feel yourself reasonably safe from harm, even if he should have an ugly streak. This will give you confidence without foolhardiness. Then treat him with kindness. Never use the whip or fret him unnecessarily. Do not mistake playfulness for wickedness. When about a year old, bulls are very apt to be playful and mischievous, but watchfulness on the part of the attendant and the ring may be depended on to avoid trouble. The ring is an indispensable feature in the management of a bull, and its use should not be postponed too long. Another point not to be omitted is to accustom them from early calthood to contact and intercourse with other animals and with mankind. If confined in a barn, let their stall not be isolated, but so placed that they can see the other beasts and hear the voices of the attendants, and come in for a few kind words occasionally. A bull is a very valuable part of the herd. If a good getter, himself well bred, it is a most difficult thing to replace him, and if forced to dispose of him, it is a difficult thing to get any price for a bull known to have an ugly disposition. Firmness and kindness, with proper food and care, will in most cases succeed in making bulls tractable as well as most other animals. Once get them accustomed, however, to rough language and rough treatment, and you are pretty certain to have an ugly dispositioned beast to handle.

PROFITABLE COLTS.

From the Maine Farmer.

An item has been running through the newspapers, recording the sale of two sucking colts, by an Oxford county man, one for \$200 and the other for \$125. Now these are low prices rather than high, but they tell a story of profit which all should heed. We know the mares and have seen the colts, and can bear witness to their good qualities. They were purchased by neighbors of the breeder, and sold on their merits alone. Now no one can deny but that it paid to raise those two colts, and that the margin of profit was large, but any man who has a sound, large, well-built, good travelling mare and breeds her to one of the many excellent stock horses in our State can realize as much.

We have in mind another case where a fine, six-year-old mare, worth in the market at least \$250, was offered in exchange for a six months old colt. These are not isolated cases, but could be multiplied many times. What do they prove? Only this, that some of our breeders are making judicious matings, and securing the legitimate results. No one stock horse is by nature, size, style, and temperament adapted to every mare, and there is necessary knowledge of the fitness of things in making selections. Some horses are strong in certain qualities, and transmit such to their