Agricultural Department.

STEAMING FEED FOR COWS.

F. W. Terry read the following paper before the Onondaga Farmers' Club :—

Among the necessities of the farmer, there seems to be none that should awaken deeper interest than the one to-day under discussion. It is an interest that affects either the one way or the other the material prosperity of agriculture. If we wish to become acquainted with the most improved methods of wintering stock, we must bring to our aid every possible idea which is serviceable to us in that work, and from my own experience I give you practical results obtained. After purchasing several cows and a milk route in the city of Syracuse, my thoughts were then turned to making the most money from the least outlay, and as necessity afterwards required greater exertion, I resolved to adopt that system of feeding for the production of milk, which had been advocated through some of the leading agricultgral journals of the country. Experience teaches us that much of the food consumed in winter is for fuel, or to keep the stock warm, and no animal can thrive unless kept warm. Therefore, one of the most important items in wintering stock is comfortable quarters. No farmer's barns should be of a temperature so low that the droppings will freeze, if he wishes to economize in feeding. Warm stables are important requisites in the wintering of cows. If one asks how to make a stable warm, I advise him to use brick or sawdust between the outer and the inner lining of the stable.

The next consideration which follows is how to feed the cow. The most economical method may be one of several ways, but as in doing a piece of farm work, it is policy to adopt a custom that not only will bring us immediate profit, but continued profits, therefore, in the production of milk for market, I find my policy of the most profit to me. I first provided myself with all the necessary apparatus for cutting and steaming. In the beginning of the housing of my cows for winter, I find I have more or less coarse fodder, like cornstalks and straw. I begin (and continue so long as the stalks last) with two feedings of cut hay and one feeding of stalks. My herd consists of 30 cows. The morning's feed consists of one heaping bushel of cut hay, and a small scoop-shovelful of brewer's grains, moistened or dampened thoroughly with nearly a pailful of boiling water, heated by the steamer from the boiler. The hot water acts upon the hay very thoroughly, rendering it softer. I often meet with objections from farmers against feeding warm food. But it is self-evident that it must be warm before it can be converted into food and milk.

The noon feeding consists of dry cornstalks cut. It is unprofitable to starve a cow to the necessity of eating the buts of cornstalks, cut or uncut, steamed or unsteamed. It is the nutriment in the feed that yields us profit, and we might just as well feed a cow on corn cobs ground or unground. Merely filling the cow up cannot be called economy, for economy yields us returns not only to-day, but to-morrow. At night the herd receives the same feeding as in the morning.

In all the large street railway stables in our large cities this system of feeding is adopted, giving profit and health to the animals. Nine-tenths of the stock wintered throughout the country get but one drink per day, and many cattle no doubt become diseased by not being watered enough. It is also highly necessary that they should have pure water. The custom of watering cows but once a day and then with cold, freezing water. is a practice which defeats the objects sought for. I find that the water which the cows consume while devouring their usual meals should be nearly equal to the amount of nature's requirements.

COLD BARNS.

There are exceptions, undoubtedly, but most of our farm barns are too cold. It is well to provide for ventilation, but we leave too many open cracks between boards, and too many panes of glass broken, and excuse our shiftlessness on the plea of ventilation. When building a barn for cattle, we should make the walls tight, and then if there is danger of too little air inside on these cold, windy nights a window may be left open an inch or two at the top. We have seen a few stables that needed small openings for ventilation, even in the coldest weather, but the number of such is very small, for where there is one that is too close, there are fifty that are too open. Newly built stables are now usually boarded and clapboarded, or the boards are jointed and matched, but many old barns are seen in all parts of the country with the covering boards nailed on with cracks between them from an eighth to a half inch in width. Perhaps they were laid closer when they were put on, but either on account of the boards being unseasoned, or wet, when laid, the joints are extremely open now. In such stables, we have seen the animals covered by white frost, or snow, on cold mornings when the mercury was, perhaps below zero. Now there can be no profit in keeping animals, unless they are well fed and well protected from the inclemencies of the weather.

It requires a certain amount of food to maintain the present condition, to repair the wastes of the body, and to keep up the animal heat. If an animal is kept in a barn so cold that a large proportion of its food is used up in maintaining animal heat, there can be little or no profit realized on the food consumed. Every warm-blooded animal converts a portion of its food into heat, and the more we can save this animal heat by the use of boards, the less food will be required, and as boards are cheaper than hay for keeping animals warm, it will pay to use them pretty freely.

A great deal of cold may be kept out of old stables by sheathing up on the inside, from the floor to the scaffolds, with matched boards. Cheap, sappy, unplaned boards will answer a good purpose, for such inside work, if the edges are jointed and matched. Such work may be done by almost any common laborer who can use a saw, hammer and, plane, and if taken under cover, one can keep warm at such work almost any day in winter. So we say again, our barns are too cold, and it will pay to make them warmer.—*New England Farmer*

BREAKING STEERS.

Every farmer knows that a handy pair of oxen—a pair that can back nearly as much as they can draw, that are quick to mind the word, that can be driven as well at the plow handles as by their side, that will not run away every time they are left alone, that will not crowd or pull apart in the yoke—such a yoke of cattle is worth the highest price. Now this value is made in properly breaking them when steers. The most excitable, willful, and bad-tempered young cattle may be so handled as to make them safe and handy as oxen. So the dullest, cosset-like calf may be spoiled for an ox in breaking him to the yoke and service. The common method is to have a little yoke for the calves and the boys fool them around all the winter, or wait until they are two-past and put them, in all their wildness, in a team between two strong yoke of oxen. Now, says the "Golden Rule," we advise a better way: Take the steers in the winter after they are a year old, and for several days tie them together with a rope, not more than twenty inches apart, and let them run in the yard, that they may get accustomed to being fastened to each other. Then put a single yoke, not like a work-yoke, but made of two crooked-pieces, one to go under the other above the neck, with two pins each side; with this they will not learn the bad habit of turning the yoke, and will in a short time get so accustomed to it that when you yoke them together they will receive the restraint with out pulling apart, crowding, or turning the yoke. Use a light sled at first, increasing slowly and gradually the weight of the load to teach them to pull. After they have learned this part, teach them to back in the same way, —nothing but the sled at first, where it will run easy, and load as they increase in knowledge and ability. Do not leave them until they get thoroughly handy alone, headed towards the barn, or home; never start them forward nor back in an awkward position. Guide with the motion of the whip rather than by whipping them up. If these points are observed, the steers when old enough to work, will be perfectly tractable.—*Christian Union.*

BLEEDING CALVES.

A butcher, to whom we had written in regard to bleeding calves before slaughtering, says, in reply: "I am not aware that I am using any unnecessary cruelty in my business of butchering calves. In fact, I am using the same method which *all* butchers pursue, and have used for the last fifty years. *The demands of the trade require that all calves should be bled before butchering.*"

That's it; because housekeepers *will* buy white veal, therefore the poor calves must be bled till they are sick and faint and exhausted. Their sufferings are of no account compared with the "demands of the trade!" We have notified this butcher that we shall prosecute him if we can detect him in the practice. He practises it because others do, and because it has always been done; and, probably, until we wrote him, it had not occurred to him that the animal suffered almost the pangs of death for days before he was killed.

The faintness occasioned by repeated bleedings, is hard to bear, and injures the meat.

A distinguished physiologist says: "An exhaustive bleeding must render the meat less valuable, by removing a portion of its nutritive substances; and if the only object of the butcher is to give the veal a little additional whiteness, the practice cannot be too strongly condemned."

A well-known physician writes us: "The practice seems to me a wanton and worse than useless piece of cruelty. Even if there be no acute pain, the poor creatures are put into a state of feebleness and exhaustion, which it would seem, is not only a needless infliction, but deteriorates the nourishing qualities of the meat. Why should not the vendors of meats extract, by some process, all the blood they possibly can from *all other meats?* The revolting practice is kept up merely to gratify the public demand for white, blanched veal, the meat of an anæmic, exhausted animal! A most mistaken view and a most perverted taste."

When will housekeepers learn to demand red veal for their tables? If the people would do this, "the demands of the trade" would stop all calf-bleeding and prevent a vast amount of suffering, a part of which each purchaser of white veal is indirectly responsible for.—*Our Dumb Animals.*

A TWO-COW DAIRY.

A correspondent of the Cincinnati *Gazette* commenting on butter-making and what her cows have done, says:

"I will give the figures, as far as possible, of the proceeds of our little dairy of two cows. Owing to our surroundings, these cows have no pasture, but are fed solely on shipstuffs and hay, sometimes corn-fodder and a little oil-meal. One is a one-half-blood Jersey (or Alderney), four years old, with her third calf. The other is a thoroughbred Jersey, three years old, with her second calf. Both were fresh about the 1st of last April. I began to save the milk from the grade the 10th of April. A test made in May gave ten pounds four ounces of butter from seven days' milk. Having only a rather warm cellar in which to keep my milk during the very hot summer, it yielded not more than two-thirds as much butter as it would have done in a cool dairy-room.

"We bought the Jersey cow the 1st day of June last. She was exceedingly timid, and became so frightened in bringing her to her place that she became unmanageable, and was so terribly abused that we feared she would die and for a long time gave but little milk. Indeed, she will not be herself until she is fresh again, 1st of next March.

"To this day, December 30th, we have made 387 pounds of butter, besides furnishing our family of four persons (and the usual amount of company) with cream and milk and giving away some. We raised a valuable Jersey calf upon the skimmed milk. The milk and butter used in the family we regard as an off-set for the keep of one cow, if not both. We have sold butter to the amount of $81. 41, and also sold milk and buttermilk to the amount of $10 more—in all, $91.41. This is not guess-work, but the actual account kept from week to week, since the 10th of April last.

"Our butter now averages a little over ten pounds per week, and seven quarts of milk yield a pound of butter. By actual measurement this week the grade cow gave seven quarts per day, and the Jersey four making eleven quarts per day. Not less than one quart per day must be deducted from this for family use. This has not varied much since the first of the month: and during the four weeks ending this day we have made forty-two pounds nine ounces of butter. Can the scrub cows equal this? I will report the entire year's results at the end of the year—April 9th, 1877. If these cows had had good pasture in connection with their feed, I have no doubt the yield of butter would have been from 50 to 100 pounds greater.

"For small farms I am convinced the Jersey is the most profitable cow, either grade or thoroughbred.'

BEST KIND OF POULTRY TO KEEP FOR PROFIT.

BY GEORGE H. FALL, JR.

Those who are intending to keep a few fowls for producing eggs for the family are often puzzled to know which of the many varieties —each having a special claim to be acknowledged—are the best for all household purposes.

It is admitted by all naturalists that crossed blood has more vitality than any other; and, since a large egg-producing power is unquestionably the result of increased vitality, we have only to introduce the cause and then we may expect the effect. I have pursued a plan of crossing for several years which I am well convinced is the only plan by which a large supply of eggs can be expected, My plan has been as follows: In the spring purchase a bright, healthy young cockerel of pure blood and of one of the small breeds—such as Leghorn, Hamburgh, Game, or Dorking. Put him with from twelve to twenty common or pure-blooded hens of the large breeds—Cochin, Brahma, &c.—and with due care and attention you will have chickens which will not be excelled by any, either for eating or laying.

I am acquainted with a large number of eminent poulterers in Massachusetts who have tried this plan, and every one of them pronounces it to be superior to any they have ever tried for producing eggs. Fanciers, of course, would not sacrifice their pure bloods for more eggs, but those to whom a plentiful supply is an object will not regret it, if they try this plan.

If care is taken in the selection of the stock, great beauty may be obtained in the progeny.

For example, brown Leghorn cockerel with buff Cochin hens, or white Dorking cockerel with white Cochin hens. My own choice is brown Leghorn cock with black Cochin hens. The progeny from these will have black bodies, from the hens, and necks and combs from the male bird; but either of these crosses are equally good if the distinctions which I have noted are observed.—*N. Y. Independent.*

DOMESTIC

—Lamps are liable to explode when trimming is neglected. The wick being charred low down in the tube, the flame obtains access to the oil below.

—For hominy muffins take two cups fine hominy, boiled and cold; beat smooth; stir in three cups sour milk, half cup butter, two teaspoonfuls salt and two tablespoonfuls white sugar; add three eggs well beaten, one teaspoonful soda dissolved, and one cup of flour; bake quickly.

—For orange cake take three eggs, yolks and whites, one cup of flour, three tablespoons milk, and teaspoon baking powder, a little salt; grate the peel and chop the pulp of one orange together; squeeze the juice out and mix with soft frosting, and put between the layers of cake when cold.

Sago Jelly.—Take a teacup of sago, and boil in three pints and a half of water; when cold, add half a pint of raspberry syrup; pour the whole into a shape which has been rinsed in cold water, and let it stand until sufficiently set to turn out well. When dished, pour a little cream around it if preferred.

Puff Omelet.—Take the yolks of six eggs and the white of three, beat very light. Take a teacup of cream (milk will answer), and mix with it very smoothly one tablespoonful of flour, salt and pepper to suit the taste; pour this into the beaten eggs. Melt a great spoonful of butter in a pan, and when hot pour in the mixture and set the pan in a hot oven. When it thickens up, pour over it the other three whites that were saved out, which you must have all ready, beaten very light. Return to the oven just long enough for a delicate brown, then slip out on a dish so that the top part shall remain uppermost.

Toffee.—Melt three ounces of fresh butter in a small brass saucepan over a clear, bright fire. As soon as it is dissolved, stir into it one pound of good brown sugar, and keep stirring until it is done enough. In order to ascertain when this point is reached, let a cup of cold water be placed close at hand, and keep dropping a little of the toffee into it. When the toffee thus dropped hardens immediately, and breaks between the teeth without sticking to them, it is done, and must be poured out at once, or it will burn. The flavor of this toffee may be pleasantly varied by stirring into it a teaspoonful of slightly moistened powdered ginger, or the grated rind of a small lemon. Pour the toffee upon a buttered dish, and put it in a cool place to set. Time to boil, fifteen to twenty-five minutes.—*From "Cassel's Dictionary of Cookery."*

New Bread.—Many persons very foolisbly suppose that the objection against the use of new bread is on no account of its temperature, and of course are willing to cool it in *hot* tea, for the sake of indulging in an article so palatable to depraved appetite. But this forms no part of the evil of its use, since no intelligent physician objects to the use of toasted or steamed bread though taken pleasantly warm. In this way it may be made as palatable—at least to a taste not vitiated by bad habits—as the new bread, and yet in no sense objectionable, even desirable in preference to very cold bread, especially for those of weak stomachs.

The real objection is based on the age, the not having had time to undergo a certain needful chemical change—not being "ripe," as a good author would say. In its solidity it resists the action of the gastric juice, and hence is as "solid as a bullet in the stomach." This is easily illustrated by taking similar pieces of the old and new-made taken from a new and an old biscuit—putting both into water. The one will remain a solid mass, while the other will crumble and settle on a level just as they do in the stomach. The solid mass cannot digest in any reasonable time, but is certain to cause bad dreams if taken at night.—*Watchman.*