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## PRIZE ESSAY.

THE TREATMENT OF MILCH COWS.

BY JOHN McClure, BRAMPTON, ONT.

In order to be successful with milch cows, it will be necessary that a person give the subject a good deal of attention. Some say, treat your cows as you do yourself. I say, study your cows, and let it be your aim to make them comfortable, because if you do not make them comfortable you need not ex pect the best results, no matter how well you feed them. In the treatment of cows, it is well to have method—set times and ways of doing things, but do not let cast-iron rules interfere with the com-fort of your cows. For instance, when the time comes for turning out, if it storms bad, do not do Again, cows often come to the stable in the fall of the year with their stomachs uncomfortably filled with tops of some kind. I have actually seen men give them their usual feed in this condition, thereby doing them injury from want of studying the comfort and need of their cows and for the sake of set rules. In order to make a cow comfortable in the stable, there are four things, apart from food, that in my experience are necessary—heat, pure air, light, and cleanliness; the last three mentioned can be had in almost any stable. In order to secure the first in cold weather you must have a good stable, but it is not my purpose here to des-cribe stables; suffice to say that in a stable used for milch cows, by all means have a drop behind the cows so that they may be clean. All these four things being complete, you are in a fair way to make the keeping of cows profitable, provided that they are well fed, and that they are of the right breed to suit the requirements of the branch of dairying which you are engaged in. Now, I am no advocate of stuffing cows so as to injure them, but in order to make lots of butter, I and I have to feed more than I often see recommended in papers; two quarts bran, the same of shorts, with hay. The way I am feeding my cows at present is this: early morning, hay; after breakfast and milking, chaff and cut straw, mixed with an equal portion bran, chopped oats and barley meal; would prefer pea or corn meal to the barley. This mix-ture I dampen with water and mix well; after this, if the day is fine, they have the run of a straw yard till noon, then they are returned to stable, and get hay and carrots; at night the same mixture as after breakfast. On this treatment my cows are doing well. They have free access to salt, and my experience is that a cow will not take more salt than is good for her, provided she has free access to it every day in the year. I find a good rule to know whether your cows are right fed or not, as all cows do not require the same amount of food; as a general rule, if what passes from them is quite hard their food is not rich enough-if it becomes very soft they are getting too much of something; this is my experience. But in order to be successful, I must treat the subjects you

1. Treatment of Cows running repeatedly. This, in my opinion, is a hard subject. There is a plan called cutting for the farley. At the entrance to the pelvis there is a lump of flesh as large as a grain of corn; cut this with a sharp knife and singe it with a hot iron. After this treatment mate her with the bull. I have known this to succeed, but not every time. A good plan is to mate them with the bull, put them in the stable, and then mate her again in from eight to twelve nours. I have known this to succeed. I have never known any benefit from changing bulls. My experience has been that if a bull is good for one cow he is good for another. Sometimes you cannot get them in calf, do what you will; but if you have a valuable cow do not be discouraged, as they will some times come in without any trouble after awhile. A good safe way is not to over-feed heifers and bring them in early, and to breed cows first time

after calving.

2. Before and after calving. There will rarely be any trouble with the process of calving if the cow is in good condition. I think about this long before the cow's time comes for calving and keep her heart up, as it is folly to begin to fatten a cow a few weeks or days before she calves; on the contrary, I feed no grain of any kind for some time before calving to avoid any trouble with their udder, known as caked bag. I always turn the

prevent their eating the cleaning, but I would much prefer them to eat their cleaning than to cruelly compel them to such an unnatural position while calving, and I think I might as well dispose of subject

3. Eating cleaning. Well, I never knew the eating of the cleaning to do a cow any harm. It seems natural to her to do it, and it seems natural to us to try to prevent her from doing it; and it can easily be prevented, if you know when the cow is going to calve, as it she has been rightly treated she will clean the first time she lies down after calving, when the cleaning can easily be

taken away.
4. That don't clean at once. Now, I think all will admit that to know how to prevent a disease is better than to know how to cure it. Well, I can give a plan that will make a cow clean every time. At intervals of two or three days give the cow a pint of wheat about four times before she calves. I never knew this to fail for more than twenty years, but if a cow has been well fed she will require no treatment; she will clean as naturally as she calves. I had a cow that got hurt, lost her calf and held the cleaning. I gave her warm drink and boiled flax seed, but all of no use; the cleaning would not come. Twenty-four hours after calving I gave the following mixture: Epsom salts, 1 lb.; powdered ginger, 1 oz.; powdered fenegreek, 1 oz.; carraway seed, ½ oz.; mixed and gave in three or four bottles warm water, sweetened with molasses. This mixture not have ing the desired effect in twelve hours, with the nand well greased, I caught hold of the after-birth and traced it down until I could go no further, and with the thumb and finger gently pressed the atter-birth where it joins to a place called cotyledons; I may say that I was quite successful with this performance; I never saw it done. By using care any person can do it. If any person should teel timid about taking it quite away, loosen it as has been described. Atterwards give a little warm water, sweetened with molasses, with hair an ounce of powdered ergot of rye, and in half an nour an additional half ounce. This will cause contraction of the womb and expulsion of the cleaning. When putrefaction of the after-birth or cleaning has taken place, which may be known by the black color, the womb should be well washed out with a weak solution of chloride of lime. Administer by the mouth one ounce twice a day of the sulphite of soda for a week, to neutralize any of the poison of putrefaction which may have been absorbed into the blood. Give the cow good and nutritious food to support her strength.

5. Udder before and after calving .- If the cow has been treated as I have described, there will be no difficulty with the udder either before or after calving. About two weeks before calving and one after will be about right to keep meal from them, in order to keep the udder all right. The ounce of prevention is better than the pound of cure. 1 think it is injudicious treatment of some sort that causes either milk tever or caked bag. Keep the cow quiet; treat her kindly; keep her from cold, and milk her out clean. It any hardness is felt in the udder, rub well with the hand. Goose grease and whiskey or brandy, or any heating liniment, is excellent; also allow the call to suck.

6. Calves if weaned.—My plan is to wean the calves in all cases, except when I want to veal the calf. If I want a calf that I intend to raise to get new milk, I milk it and feed it to them, and thus save any trouble afterwards from cows sucking one another. I allow the calf to suck forty-eight hours and then take them off, and not, as some direct, take them away where they can neither hear nor see each other; but take them quite close to each other, so that they can both hear, see and smell. This, in my opinion, is the best plan, as the cow is kept quiet, which is important. We generally give the call new milk about from one to two weeks, according to price of butter; then gradually wean them to skim milk, given perfectly sweet and warm. Make it warmer than milk drawn from the cow, as in cold weather it cools before the calf gets it. A little ground oil cake or flax seed, boiled to a jelly, may be given to take the place of the cream that has been taken off, it it agrees with the calf. Care should be taken not to give too much of either milk or flax, as thereby the calf is greatly injured. Give some fine hay or clover, and as the calf grows older, roots cut fine, and as it seems to agree with the call, some meal may be added. Have something green convenient to their house that can be cut and carried to them. udder, known as caked bag. I always turn the cow loose into a roomy box stall, dry and well enough. A good plan is to have a pasture lot join-such littered. Some tie their cows up before calving to

"change of pasture is good for calves." I find it is very bad for them, as they fret for two or three days, sometimes even refuse to drink their milk. A good plan is to divide the pasture lot; first keep them in one side, then in the other; by this plan they have the benefit of change, and still come into their house to where they get their milk and cold water at noon all summer. Continue some meal every day all summer and all the next winter, with hay, cut oat sheaves and some roots, and if you have not tried this plan you will be surprised at the result. You will have calves that will be a pleasure for you to look at, and will be ready to milk any where from 20 to 30 months old, and which, if you want to sell, you need not go begging for a buyer. I have calves now one year old which I would not be ashamed to show to the best breeders in Canada.

## Value of Ewe Lambs.

The tempting prices obtainable for really choice early lambs has yearly proved a greater temptation than many owners could resist, and the result has been that quite a number of ewe lambs are sacrificed at the shambles, to the serious detriment of flock-improvement, as well as ultimate loss to owners of the country. As in a majority of in-stances the sires of these lambs are better bred animals than are the dams, their preservation would prove a long stride in the direction of flock improvement, and if the owner feels compelled to restrict the number of animals handled, a rigid cuiling from the older ewes and filling their places from the choicest ewe lambs, should be a policy from which no temporary demand for "lamb and spring peas" tempts him to deviate. So king as the ewe lamb is a superior bred animal to its mother (and the breeder who does not have it so has mistaken his calling), it will prove the nore profitable to retain in the flock. Not only does such retention insure the commingling of fre h and that the blood but it reduces the evenue and better blood, but it reduces the expense and dangers of management by the omission of animals which have passed their prime, and filling their places with those that in the nature of things will grow better instead of worse, for at least several succeeding years. Those who have not carefully compared results fail to appreciate how materially the loss from "natural causes" may be reduced by a careful observance of the policy of retainingeither for increase in numbers or maintaining any desired number—young and growing animals, and rigidly excluding such as have passed the meridian of life and vigorous improvement. The advantage in this respect alone is sufficient to offset any temporary top price for ewe lambs, and when to it is added the tide of improved blood that comes on through young animals, every prudent flock-manager will find warrant for steeling his face against the most tempting offers for young females.

## Parsnips for Cows.

Those farmers who have not yet adopted the ensilage system of preserving green food for winter use, and who use roots instead, should bear in mind the claims of parsnips as a cattle feed. It is one of the most nutrition grown without more trouble than carrots. have never had milch cows increase in milk or butter productions much faster upon any extra feed than when a peck of parsnips was added daily to their rations of hay and grain. Parsnips may be sown any time in June, if the ground is fitted, as it always should be for root crops, by being deeply plowed, well manured and finely pulverized. They should be sown in drills about fourteen to eighteen inches apart, and the seed covered about half an inch deep. When two or three inches high thin to six inches apart and keep well hoed, Do not harvest in the fall, but allow them to remain in the ground until spring, and when the beets, mangels, turnips, small potatoes and the like are all consumed, and the "spring appetite" of the animal begins to crave the green grass which has not started, then dig your parsnips and feed them out. One great advantage of the parsnip is that it will winter perfectly well in the ground, and will be in its best condition at a season of the year when the animal most needs roots, and when other varieties have either decayed or lost much of their value as feed, if indeed you have been able to keep

It is a matter of economy to give early clipped sheep some protection against late wintry blasts such as are experienced about this season of the