

FEEDING CALVES.

By A. F. Hyatt, Sheboygan, Wis.

I ought to know enough to give most excellent advice about feeding calves. Excepting the three years I helped Mr. Lincoln "put down" the rebellion, I have, since I was ten years old, fed calves about as regularly as I have milked, and have milked about as regularly as I have eaten my supper and breakfast, making about fifty-five years of experience. My average for over half of that time has been over twenty calves. I graduated as a calf breeder on the morning of my fourteenth birthday at my father's. There had come a big bull calf that would not own me as its mother; my fingers did not seem to taste as he expected they would. Bite and bunt he would, but suck my fingers he would not. I called the calf names and said "ha! ha! I'll show you, I will."—I straddled him to shove him to a corner, put my arms around his neck and surged back. We went out of an unlatched door, eight feet down into an April barnyard, I underneath. The calf thought it a part of the programme and had a nice picnic. I sneaked to the house and showed myself to mother, and she smilingly relieved me. I had gone through college, "graduated," and have been a kind step-mother to calves ever since.

If the calf is "born right" it is easy to raise it; if one has proper feed. I allow a calf to suck once, as a rule, and get a "good licking." With a good fill of colostrum—they don't get hungry as quickly as a pig or a colt. I never starve them to make them sensible. That is not sensible. When a calf will suck its mother greedily it will suck my finger greedily—if managed right. The pail must be clean, the milk clean, the hand clean and the milk warm. There is not one calf in a dozen that gets its milk as clean and warm as it should be in cold weather. Milk fed to a calf should be carefully strained. We don't enjoy sucking down hair, hayseed, chaff, etc. Neither does a calf. After a calf begins to ruminate they can stand such stuff better. Don't scare a little calf. Fright and rough usage often makes calves sick and sometimes kills them. A young calf needs feed three times a day. They should take it slowly for awhile, and if fed at morning, noon and night they take it slower than if fed but twice a day. After one begins feeding skim-milk some grain should be added. I said "some grain," and I think it should be cooked. Many calves are destroyed by putting too much grain in the milk. I raised thirty-five calves last year and I don't think one of them had scours to damage it two shillings. Don't feed oatmeal to very young calves unless you sift out the hulls. I don't hurry to get my calves to eating oats, hay, etc. I treat them somewhat as mother treated me; I was quite a big baby boy when I began to eat pork, potatoes and cabbage.

Don't fail to keep them warm and dry. For many years I have never failed to look my stock all over about bed time. No true Christian—to say nothing about a gentleman—can go to bed and sleep well if he knows any of his domestic animals are uncomfortable for lack of any care he can give them. Their quarters may be clean and warm and dry and yet lack the life giving oxygen. Our professors and editors and instructors at our Farm Institutes have been telling—and then telling it again—and then repeating, how very essential it is to give our animals a well balanced ration of feed. I have heard so much about it that I am tired of it. If they would spend half of the time telling how important it is that the ration of ills should be well balanced also they would be

sensible. It is far more difficult to know when our animals are getting about twenty-one parts of oxygen, seventy-nine parts of nitrogen and a fraction of one-twenty-five hundredths part of carbonic acid. Too little oxygen in the stable is more damaging than too little nitrogen in the stomach, but a great many calves get altogether too much oxygen, more even than an ox could appropriate.

He Never Sleeps.

A leading merchant was once asked how it was he had no representatives on the road. He replied: "I have the best representatives in the world. They always tell the value of my goods in plain language. They are always attentive to business. They are always polite. They never miss an appointment and they are at work from early in the morning till last thing at night. They take no holidays and work the whole year round. My representatives are my advertisements, and I know exactly where they are in every city and town, and I know to a cent what they cost me." At this season of the year the breeders of the country will do well to follow the example of this merchant. Their business is one that cannot be kept before the public by a commercial traveler, and the reputable journal devoted to such lines is the best medium they can employ to bring their surplus stock to the attention of possible patrons and buyers. If a breeder cannot afford to advertise he cannot afford to breed. No matter how small the card may be, so long as it is in the journal which commands the attention of the people the breeder wishes to reach, it will be a representative who never sleeps.—Spirit of the Time.

IT PAYS TO KEEP POSTED.

As an illustration of the disadvantages that come to farmers remaining in ignorance of modern methods, some remarks made by ex-Gov. Hoard before the New Jersey state board of agriculture last month were very much to the point. He was speaking of the necessity there was for dairymen to keep posted in order to get the greatest profit possible out of their business and brought out the point forcibly by giving the following instance coming under his observation:

"You can see the importance of this when I tell you that 800 farmers who bring milk to the Hoard creameries, there is a difference of over 100 per cent in the cash returns per cow in different herds, and over 600 per cent in the net profit per cow—for instance, one man getting \$65 to \$73 per cow annual cash return, besides the skim-milk, the other getting \$35, the one a profit of \$30, the other \$5. The first is a student and a reader, has learned how to produce a profitable cow and how to manage her. The other doesn't read, and continually sneers at book farming, and what his neighbors tell him they saw in their dairy paper. The butter from the two herds sold for one year at the same price. There are thousands who get even less than \$35 per cow.

Just as there are thousands who fail to conduct the dairy business economically because they do not spend a little money and time judiciously in acquiring a familiarity with the best dairy methods, so there are thousands in every other department of agriculture who are not as well off as they might be for the very same reason, says the Milwaukee Sentinel. The Farmers' Institute is one agency that is doing useful work on behalf of the farmers and those have themselves to blame if they do not prosper. The great requisite for success in farming

is industry, but even industry will fail if it is not supplemented with a proper knowledge of the best farming methods. There is no better advice for the farmer than that given by ex-Gov. Hoard to the dairymen—to keep themselves posted.

SALTING AND WORKING BUTTER.

The proprietor of one of the most successful creameries in Michigan writes to Hoard's Dairyman a description of the method employed there in salting and working butter:

We are frequently in receipt of letters of inquiry regarding methods of butter making as practiced in our dairy. Several have, of late, asked our opinion concerning salting, whether we liked best to salt in the churn, or to partially work before salting; also if we have ever tried brine salting. Ever since the process of making granular butter was introduced into our dairy, which is something over ten years, we have practiced salting in the churn, and, although several other methods have been given a trial, we still see no occasion to make a change.

Briefly described the process is as follows: When the butter is in granules the size of wheat kernels, the butter milk is drawn off, and a pailful of water, of the same temperature, put into the churn. This is then drawn off, after revolving the barrel churn a few times, and water at a temperature of 55 degrees to 58 degrees in summer and 60 degrees to 62 degrees in winter introduced. We rinse the butter, usually in two waters, which removes most of the butter milk. If washed too much the flavor is impaired. Water should never be left standing upon the butter, but drained off as soon as possible. When the water has drained off until it runs only in drops, the salt is sprinkled evenly over the surface of the butter, about one-fourth the whole amount at first, then the churn tipped so as to expose fresh butter, and more salt sprinkled, on tipping from side to side until add has been used. This starts the brine, which will begin to flow freely from the opening in the bottom of the churn. Then cork up and place the cover on the churn, and revolve slowly for several minutes, allowing the butter to fall squarely from end to end so as to thoroughly incorporate the salt. Then hook the churn, remove the cover, take out the cork and allow the butter to drain. Now, if taken out upon a butter bowl, a few minutes work with ladle or level will finish the process, and leave the butter in excellent condition to pack.

It should present the peculiar, pebbly appearance, when broken apart, which is seen in broken steel, thus showing that the working has not been too excessive. Butter treated in this way will not be mottled or streaked if the working has been sufficient. Such a condition is a sign that the salt has not been evenly incorporated.

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