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FEBRUARY 1, 1890

THE FARMER'S ADVOCATE.

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RINGWORM ON CATTLE.

J. B. R., Simcoe Co., Ont.:—"Could you or some of your numerous readers inform me what will cure ringworm on cattle; what is the cause, and prevention, if any?"

[Ringworm is the effects of the growth of a fungus in the skin and hair, usually on a calf, but sometimes on older animals. A careful experiment has proved that the spores are active eighteen months after their removal from the skin of a diseased animal, even if exposed to severe frosts for a period during that time. These facts clearly point to the importance of disinfecting quarters where the disease has had a chance of distributing its spores. The disease would be greatly circumscribed in its ravages were all such seats of its infection thoroughly cleansed and disinfected with hot lime wash after a thorough application of one or other of the disinfecting fluids now on the market.

When an animal is affected the most successful treatment is to cause active inflammation by the application of a mild irritant, and in our own experience we have found perfect satisfaction from the use of carbolic acid mixed with four times its bulk of sweet or linseed oil, applied three times at intervals of four days, after thoroughly cleansing the part of scurf with warm water and soap by vigorous rubbing. The scurf that is removed should be burned. It is also effective to apply iodine ointment thoroughly to the part, or tincture of iodine with a camel's hair brush, first, all around the ring a quarter of an inch outside, then over the entire surface of the ringworm.]

STERILITY IN COW.

H. H., Muskoka, Ont.:—"I have a thoroughbred Ayrshire cow, purchased last July, nine years old, which I understand has bred regularly until this season, but I cannot get her to hold. She comes in season every ten or twelve days, and has done so ever since I bought her. I am quite disappointed in her, as I am starting to form a herd. From the symptoms given do you think anything can be done to bring her around again?"

[Successful fecundation is not always constant, even in cows, and one of the disappointments of a breeder is sterility, temporary or permanent. It is at times difficult to account for this peculiar state of the organization, and unfortunately in this case we have not sufficient symptoms to indicate any specific cause—they are numerous. Change of climate has in many cases a marked influence on fecundity. It may likewise be due to change of sire. Various diseased conditions of the generative organs, as well as general derangement of the digestive system, may prove antagonistic to fecundity. In some localities these cows are known as "bullers," because they are nearly always disposed to take the bull, but they do not conceive. It may also be that the cow is suffering from the disease known as leucorrhoea, due to a chronic inflammation of the womb, vagina, or both. This may be the result of an injury sustained in calving or retention of the placental membrane. For a remedy follow the instruction laid down in our January 2nd number in answer to W. J. T. DR. WM. MOLE.]

SUBSCRIBER, Lambton Co., Ont.:—"We have about a dozen young pigs that seem to be growing well, but some of them when fed will start to eat and stagger back and roll over on their backs as if in a fit. We feed them shorts and milk twice a day, and mangels and corn once a day."

[We have known similar cases, and it is difficult to determine what is the cause and why these spells come on only when the pigs take the first mouthful of their food. As we have never known pigs affected in this way in summer when they have access to the ground, we suspect they need a substitute such as charcoal or ashes, which should be placed in a low box in the pen, and we would advise letting the pigs run out for an hour, more or less, on fine days, where they can get at the earth, if possible. The next best thing is to carry earth to them from the root-house or wherever it can be got. We would also advise warming their milk or swill, either by placing it on the stove or by adding hot water. We would advise mixing a little cut clover with their rations, and if this was steamed by pouring hot water on it and allowing to stand in a covered bucket for an hour, it would be all the better. It is well to feed lightly and change the conditions till the youngsters get balanced and going on again.]

CURE FOR SCOUR IN CALVES.

SUBSCRIBER, York Co., Ont.:—"Some three or four years ago there appeared in the FARMER'S ADVOCATE a remedy for scour in calves. I found the remedy a good one, but have lost the recipe. Will you kindly repeat the treatment?"

[We presume the remedy referred to was that published in April 1st, 1895, issue, page 139. The cause of scouring is there shown to be due to its getting improper feed when quite young. A newly-born calf should get a moderate quantity of the first milk of its dam, as it has a laxative action which is necessary to its proper commencement of life. If the calf is deprived of this, constipation is frequently the first indication of a disordered stomach and bowels. This can be prevented by allowing the newly-born calf to partake of the first three days' milk of its mother. If after that time it shows indications of the trouble, the food must be looked to, and it usually answers well to give a dose of castor oil, say two ounces, and reduce the quantity of milk to two quarts given warm, three times a day, and add about a pint of linseed gruel and a wineglass of lime water. To restore the

natural secretions of the intestines an antacid and carminative should be given. Carbonate of potash, one dram; powdered rhubarb, one dram; give in a little peppermint water daily.]

Miscellaneous.

FEED VALUES—EFFECT OF OATS ON MILK YIELD—OAT CHOP AND ROOTS FOR YOUNG PIGS—VENTILATING STABLES, ETC.

SUBSCRIBER, Simcoe Co., Ont.:—"Please tell me the feeding value of all the different grains, also wheat and oat bran. I see by a report of G. E. Day's in the ADVOCATE some months ago that corn is very rich in fat. I always thought peas were ahead of corn in that respect. 2. Can you tell me what would be the best balanced grain ration for fattening steers that I would wish to feed till May? I have plenty of oats, bran, and corn, with coarse feed, which consists of roots and chaff and a few peas for finishing. 3. Does bran not form nearly a balanced ration for growing stock? 4. I have been feeding my fall calves turnips, clover hay, and oat chop, along with skim milk; they do not seem to be doing very well. Is this not a good ration for growing calves? 5. What would be the best feed for calves just weaning? I want the skim milk for young pigs. 6. Have oats any tendency to stop the milk flow in cows or any other animal, or will they cause sheep to lose their wool early? 7. I have been feeding my young pigs oat chop and roots, but they do not seem to thrive well. Are they not a good feed for pigs. Would bran be better? 8. What is the value of pig manure as compared with other kinds? Is it worth saving, and would it not enrich it use to plenty of straw? 9. Would whitewashing the sleepers above root house prevent the dampness of roots from destroying them? 10. I see an article in the ADVOCATE of June 15th, 1898, on ventilating stables, strongly condemns low roof. What is the idea of having the ventilator divided into two parts? My cow stable is 55 x 36 ft. x 6 ft. 6 in., and is calculated to hold 25 head. What height should the ceiling be in order to ventilate properly? 11. How many crosses does it take from an ordinary grade cow till her offspring will become thoroughbred? 12. What is the value of black barley compared with white barley? Is it better feed? Has there ever been any feeding tests made with it?"

[It is quite impossible to give the feeding values of various foods. The nearest approach to it is to give the average digestible protein, carbohydrates, and fats, etc., which the foods contain. We would refer "Subscriber" to a summary of Prof. Jordan's address on this subject, given at the convention of the Cheese and Butter Association of Western Ontario, as reported in this issue. Peas contain 1.7 per cent. of digestible fat, and corn 4.8 per cent. It might be remarked here that the digestive apparatus of an animal has power to convert carbohydrates and protein into animal fat. 2. We presume the steers are already in medium flesh and thriving well, so that even a moderately narrow ration, say 1 of protein to 6 of carbohydrates, would not suffer any material loss. The chaff, if of wheat and oat straw, is low in protein, about 1 to 23 of carbohydrates, and if of peas, 1 to 9, or clover, 1 to 4. Oats have a nutritive ratio of 1 to 6; corn, 1 to 8.6, and bran, 1 to 5.6, according to Prof. Stewart in his "Feeding Animals." These foods contain practically the same proportions of digestible to non-digestible nutrients, so that equal parts by weight would form practically a well-balanced ration. The chaff, however, which would supply, if of wheat or oats, an extra proportion of carbohydrates, which could well be met by increasing the proportion of oats and bran, or, better still, by adding a few peas or oil cake to the ration. The feeding value of the roots is not so much dependent upon the dry matter contained as upon the value of the succulence it gives to the whole ration, so that their composition need not be considered in formulating a ration. We would say give a bushel and a half of roots to each beast per day, and if they were pulped and mixed with the chaff twelve hours before feeding, all the better. From the fact that well-finished beef commands the highest price per pound, liberal feeding up to a certain point is advisable. To go beyond that the animals would waste food. We would, therefore, give them all the mixed roots and chaff they would consume in about two hours three times a day. If they showed an inclination to scour, reduce the proportion of roots, because a scouring animal is wasting food. In addition to this, commence with 4 lbs. per day of mixed grain as mentioned above, increased to 6 lbs. in one month, and to 8 lbs. by the end of March. The last month the daily grain ration may go to 9 or 10 lbs. per day, and consist of from one-third to a half of pea meal. It is impossible to lay down fixed rules for others in feeding stock of any kind. A feeder has to exercise judgment in dealing with his stock, and to give each animal the peculiar care and attention he sees it demands. 3. While bran contains somewhat nearly the correct proportions of nutrients required for growing, fattening or milking stock, no one would think of feeding it alone, and whatever was fed with it would have an influence upon the value of the ration. Circumstances modify the value of all foods. 4. If the calves are getting their skim milk warm, and the clover and other foods mentioned are of good quality, they should thrive well. It may be advisable to add a little corn meal to the oat chop. 5. The age of the calves to be weaned from milk is not mentioned. If six months old they should do well with the

other foods mentioned above. If much younger we would hesitate to take away all the milk, except we substitute oil-cake meal porridge or commercial calf-meal porridge. 6. No. 7. Oats contain too much indigestible fiber for pigs, especially young ones, and if used should be ground very fine, so as to pulverize the shells. Bran is also too coarse and tough for young pigs. Bran mixed with pea chop or corn chop will answer better. 8. Pig manure contains about ten per cent. less nitrogen, and about the same per cent. of ash, as is found in the excreta of fattening cattle or fattening sheep. Adding straw reduces the relative manurial value of any animal manure, but serves an excellent purpose in absorbing the liquid manure. 9. If the roots are not allowed to heat unduly and proper ventilation is provided, there should be very little moisture on the ceiling of the root house. If grease were incorporated with the whitewash, it would tend to preserve the sleepers and floor above. 10. A double ventilator is claimed to have the advantage of producing an up and down draft, according to the direction of the wind. It is generally considered that the ceiling of a cattle stable should be not less than eight feet high. 11. No number of crosses will render an animal pure-bred. A cow is not eligible for registration unless she traces on the side of both sire and dam to imported registered ancestry. 12. We are not aware of any feeding tests having been conducted with black hull-less barley as compared with ordinary malting barley. Pound for pound, we do not presume there is much difference.]

REGISTRATION OF SHORTHORNS.

SUBSCRIBER.—"Would you oblige by publishing in next issue the cost of recording pure-bred Shorthorns in the Dominion Herd Book, and the membership fee in the Association?"

[Members pay an entrance fee of two dollars, and subsequently an annual subscription of two dollars, which annual subscription shall be due and payable on the first of January of each year. All calves dropped after January 1st, 1899, shall be registered within twenty-four months of birth, and if not so registered, enlarged fees shall be charged for their registration. The charges for registration are as follows:

To members, registration and certificate, 75 cents for each animal; non-members, registration and certificate, \$1.25; over age, to members (in all cases a certificate goes with registration), \$1.00; over age, to non-members, \$1.75; change of ownership, 25 cents; duplicate certificate, 25 cents; back volumes Herd Books, \$2.00 each. To entitle an animal to registry the sire and dam must first be registered. HENRY WADE, Secretary.

Parliament Buildings, Toronto.]

REMEDY FOR LONG CHURNING.

To the Editor FARMER'S ADVOCATE:

SIR,—I notice in the January 2nd number of your paper that Messrs. Black and McDonald have had "Long Churning and No Butter," and wish to know the cause of it. I think the difficulty lies in the treatment of the cream rather than in the rations of the cows, or the length of time in milk. Two years ago I had the same trouble. I found by careful observation and experience that in winter the cream should be ripened quickly. My method is to keep the cream in a tin can, submerged in water at a temperature of 42° Fahr. Twenty-four hours before churning it is brought to a temperature of 80° Fahr. by being placed in a vessel of hot water. In the meantime I add about 12 per cent. of a starter in the form of sour buttermilk, saved from the previous churning, and stir while heating. It is kept at this temperature for a short time, and then set in a warm place. When ready to churn it is brought up to 68°, not higher than 70°, and the butter comes in from 20 to 30 minutes. I churn but once a week. E. C. BLIGH.

King's County.

CHURN AT A HIGH TEMPERATURE.

To the Editor FARMER'S ADVOCATE:

SIR,—I will give you a little experience on churning, which might be of use to someone. We are making quite a lot of butter, and it got so we could not get butter at all. One night we churned for four hours, and I guess we might have churned for twenty-four hours and not got it. We let it stand and got some stuff. We warmed it up to 74°, and the stuff we got was not good butter, so we warmed it up to 80°, and have had no more trouble; it came in about 20 minutes. We have churned three times since we heated up to 80°, and no more trouble and good butter. If this will be of use to anybody let them know it. We should all be free to let others have the benefit of our experience. JAMES MILLAR.

Brockville Co., Ont.

CALVES EATING MANGERS.

GEO. HENDERSON, Wellington Co., Ont.:—"My calves, which were in the stable all summer, quit eating and started at the manglers. They have stopped now, but do not eat well yet and are not thriving well. What was wrong with them? What should I give them?"

[It is not uncommon for cattle, especially if confined indoors for a length of time, to acquire an abnormal appetite or desire for mineral matter. Sometimes it shows itself in cows chewing bones. It is possible that it is salt the calves need, but if they have had sufficient of that it would be well to mix hardwood ashes with the salt to the extent of about one-quarter of the bulk.]