

are first mixed with cold water and then warm water is added. Those in the form of paste or salve are first dissolved in hot water. They are all more effectual if used with water about as warm as the skin will bear safely, as the application is then more searching, and will soften any scabs or sores that may be on the skin. In about a week from the time the ewes are sheared in the spring the lambs should be dipped, as most of the ticks will then have gotten on the young things, which have more wool to hide in than the ewes have. The ewes may be dipped in the mixture which remains, or it may be poured on their backs from a dipper, and rubbed in with the hand. A dipping vat or trough made of planks about 5 feet long, 20 inches deep, and 22 inches wide, is generally used. A draining or dipping rack is placed at one end of the vat and elevated at the other end so that the water which is squeezed out of the wool is returned to the vat. In a small flock the lambs may be dipped in an ordinary coal oil barrel and stood in a tub to drain and the residue of the dip may be poured on the ewes. If there are any ticks on the sheep at the commencement of winter, the "dip" should be poured on them, about a quart to each sheep, the wool being parted every 4 or 5 inches and the solution poured from a coffee pot or other vessel having a spout. Keeping the flock clear of ticks is one of the secrets of success in sheep raising, and it requires very little outlay of money and very little time.]

REMEDY FOR HORN-FLIES.

H. McDONALD, Hants Co., N. S.:—"Would you please publish a good remedy for horn-fly in your valuable paper?"

[About the best remedy is spraying the animals every two or three days with the standard kerosene emulsion diluted with ten to fifteen parts of water, or, better still, the diluent may be tobacco decoction made by boiling one pound of tobacco in each gallon of water. It can be quickly and thoroughly applied with a knapsack sprayer and cyclone nozzle. Two men can treat the animals at the rate of one per minute. The work may be well done just after milking in the morning. Other remedies are: A mixture of one-third coal tar, two-thirds lard or other grease, smeared on the horns and other favorite places for the fly. Pine tar and grease may be used with equal success, or try fish oil and pine tar with a little sulphur or carbolic acid, or tallow and a small quantity of carbolic acid. A good sheep dip has been tried and does good for a day or so. If the skin is not broken, tobacco dust may be used on the back and at the base of the horns. One of the ointments would be better for the under parts of the animal, simply because it would stay on longer. The tobacco dust is speedily fatal to the flies. When the flies are very bad, daily applications are found necessary. There is also in use a mechanical device called the Guthrie Fly Trap for brushing off and catching the flies as the cows go into the stable.]

TO KEEP MICE FROM TREES.

B. C. SUBSCRIBER:—"Please inform me through the FARMER'S ADVOCATE of a remedy to prevent mice from eating the bark off young fruit trees under the snow during the winter, and you will greatly oblige."

[A good remedy is to lap wire screen or old split-down stovepipe around the trunk. Another good plan is to clear away before winter, from near the trunk, all vegetable matter, such as grass or weeds that would serve to harbor mice, and after the first few snowstorms tramp the snow firmly around each tree. If this were done several times during the winter there would be very little trouble from mice. Still another plan recommended through the FARMER'S ADVOCATE by Mr. M. Burrell is to clear away all rubbish, such as weeds, grass, etc., from about the root of the tree and then hank up a small mound about the foot of the trunk.]

HOLSTEIN STEERS FOR BEEF.

J. N. REID, Wellington Co., Ont.:—"I would like to ask some questions through your valuable paper with regard to the beefing qualities of Holstein cattle. 1. How do Holstein steers compare as feeders with Shorthorns? 2. Are there any reliable records of their gain per day, and also of the cost per pound? 3. Would the beef from well-finished Holstein cattle be considered first-class? 4. Would steers from milking strains of Shorthorns be likely to give better satisfaction as beefers?"

[1. Holstein cattle (we assume that our correspondent refers to pure-breds) having been selected, fed and trained for generations along the line of milk production, without any special attempt at improving their beefing qualities, we could hardly expect them to compare favorably with Shorthorns.

2. Experiments have been conducted with a view to ascertain the relative merits of Holstein cattle as economical beef producers as compared with beef breeds at Michigan Agricultural College in 1890, and at the Ontario Agricultural College in 1892. The report of the former is given in Bulletin No. 69 of the Michigan Station. The animals tested were pure-bred Galloways, Devons, Herefords, Holsteins, and Shorthorns. The steers were as nearly typical and as nearly the same age (two years old) as could well be got. The result was that one Holstein stood as the greatest consumer of food to gain, while his companion Holstein stood third in this respect, a Hereford coming between them. The test made at the Ontario Agricultural College was with seven animals secured from leading breeders. Each individual was the offspring of a pure

registered sire, except in the case of a native or scrub. The dams of all, except the scrub, were common grade cows. They were secured as calves nearly the same age and wisely fed and kept account of until sold at about two years. The animals were grades, one each of the following breeds: Galloway, Shorthorn, Aberdeen-Angus, Hereford, Devon, Holstein, and scrub. In order of profit the animals ranged as follows: Galloway, Devon, Shorthorn, Aberdeen-Angus, Hereford, Holstein, and scrub. The Galloway was fed at a gain of \$10.17 the Holstein at a loss of \$20.79, and the scrub at a loss of \$34.27. The Galloway made an average daily gain during the two years of 1.84 lbs., the Holstein 1.79 lbs., and the scrub 1.67 lbs. The difference in profit resulted from the difference in the quantity of food consumed. The total cost of the Galloway was \$82.19, the Holstein \$104.32, and the scrub \$92.14. The Galloway weighed, when sold, 1,345 lbs., the Holstein 1,303 lbs., and the scrub 1,215 lbs.

3. Buyers are said to discriminate against Holstein beef on the score of its being less marbled and juicy than beef from beefing breeds.

4. The nearer a cow approaches the dairy type in breeding and conformation the less satisfaction will she give as a beef, and vice versa. Many hold to the "golden mean" between the two extremes. There are, of course, remarkable cases of individual variation within breeds. Interesting observations on this subject appear in "Cloughbane's" letter elsewhere. We once saw a bunch of fat grade steers from a Holstein sire which at three years old weighed 1,525 lbs. each and sold for five cents per pound, but the feeder had made no estimate as to the cost of production.]

CARE OF YOUNG BULL.

A subscriber whose letter has been mislaid asks how to feed and care for a young bull. His feed should be such as to promote growth of bone and muscle rather than fat. In addition to good clover hay and roots or ensilage in winter, a moderate feed of ground oats and bran fills the bill of fare. In summer, until grass or other green feed is fit to cut, continue the above rations, and when green fodder is available the ration of oats and bran in less quantity should be kept up. A roomy, loose box with a yard or paddock to exercise in is the best quarters for him; and in hot weather when flies are troublesome he should be closed in his box in daytime with the windows darkened, and allowed to run in his yard at night. If he must be tied up he should be led out every day for exercise or turned in a yard for an hour or two in the cool of the evening. Some breeders have an arrangement for exercising their bulls made by planting a post in the yard, with a sweep pole or beam on the top of it to swing round after the manner of a merry-go-round or revolving clothes drier. One or two bulls can be exercised at a time by simply fastening them by the nose-ring to a strap on the end of the arm. They will soon get used to it and travel round in a circle. This device was illustrated in our issue of Feb. 1st, 1897, page 59.

DOG POWER FOR CHURNING.

A correspondent asked for plan and description of dog power for churning. Two illustrations of such powers, with full descriptions, were given in the FARMER'S ADVOCATE of May 1st, 1896, page 189. If our correspondent has not a file of the paper, and will write again, giving his address, his letter having been lost, we will supply description.

HAY FORK OR SLINGS.

The above writer also enquires how slings compare with the horse fork for handling hay. We have not used the slings for hay and cannot speak from experience; they are very satisfactory for sheaves, but our impression is that for hay or peas the hay fork is preferable, it is certainly very satisfactory.

We believe the same writer made enquiry as to the working of the hay loader. Our own experience with this machine has been entirely satisfactory, and we would not be without it, but as to whether it would pay to buy one for the handling of 50 tons of hay we are not prepared to say. It will depend very much upon the help one has on the farm, and what the necessary help would cost. We have noticed that some farmers who have the machine have laid it aside, and do not use it, though for what reason we are not aware.

BROOD SOW ON SHARES.

A SUBSCRIBER enquires:—"On what terms may a brood sow be put out on shares to be fair and just to owner and feeder?"

[We have had no experience in this line, and have not met any one who has. We should think that for grade sows a fair arrangement would be an equal division of the litter at weaning time, say eight weeks old; the owner of the sow paying for service of boar. If the pigs are kept longer it might be agreed that the owner of the sow should pay for his share of the pigs the market price per pound, live weight, at the time he claims them. We understand it is not unusual for breeders of pedigree pigs to furnish farmers with sows in pig, retaining full control of the sows as to time of breeding and the boar they are bred to, with the privilege of buying as many of the choice pigs as are up to standard for breeding purpose at a fixed price at weaning time, the balance of the pigs to be bought by either party at the market price per pound, live weight, at a time agreed upon. A modification of these terms to fit the circumstances may be adopted.]

MARKETS.

Toronto Markets.

There has not been so many cattle on this market for a long time and so little disposition on the part of buyers to do business. Cattle have been accumulating in the market for the past two weeks, sellers and drovers hanging on for better prices rather than come down in price. Exporters are in no hurry to buy until navigation is open for the big boats at Montreal; the early arrival of the boats may have the effect of relieving the present glut in the market. Under these circumstances the new covered sheds which have been recently erected have proved useful, and are highly appreciated by the owners of cattle who have been compelled to keep them on their hands.

A proposition is made in Melbourne, Australia, to send over 20,000 sheep and 5,000 head of cattle to England in connection with the dinner which H. R. H. Prince of Wales is promoting for the poor of the slums of London upon the occasion of the celebration of the Queen's Diamond Jubilee, June 22nd of this year.

Export Cattle.—Best shipping cattle are quoted at \$4.50. Farmers who have cattle would do well to keep them for a couple of weeks longer, until the market gets into better shape; only the choicest cattle fetched top prices, 4½c. per lb.; prices range from 3½c. to 4½c. per lb.

Butchers' Cattle.—There was a large quantity of inferior butchers' cattle on sale; as a result the prices were inclined to be easier. Picked lots brought about 3½c. per lb. A bunch of 14 sold at \$33 per head; the general run was from 3c. to 3½c. per lb. Good to medium sold at 2½c. to 3c. per lb. Common sold as low as 2½c. per lb. A price that was often paid was 3c. per lb. There was really no life in the market; very little buying for Montreal or Buffalo.

Bulls.—The market for export bulls was easy. Choice brought from 3c. to 3½c. per lb.; top price for the day was 4c.; stock bulls are quiet at 2½c. to 3c. per lb.

Feeders.—A very fair supply of the best kinds were on offer; all sold; the market practically unchanged at from 3c. to 3½c. per lb.

Stockers.—About eight loads of stockers were taken for the Northwest; markets steady and unchanged. Good stockers sell for 2½c. to 3c. per lb.; a few are wanted.

Sheep.—The market was fair, about 150 sheep on offer and sold at 3c. per lb., and from 5c. to 5½c. for yearlings; there was very little demand.

Lambs.—Some very fine spring lambs were on offer and sold at from \$2 to \$4 per head; for the general run sales are quoted at 5c. to 5½c. per lb.; good lambs wanted.

Yearling Lambs.—Good grain-fed yearlings are wanted; they fetch from 35 to \$5.50 per cwt. for really choice lambs averaging 100 to 110 lbs. each.

Calves.—There is better supply; the quality improved; prices, 4½c. to 5½c. per head.

Milk Cows.—A very fair supply, at \$20 to \$35 per head; good cows wanted at once.

Hogs.—Still maintain their value; good inquiry from outside points; short supply keeps the price steady; only 2,000 on offer. Best selections of singlers, \$5.12½ per cwt.; just a trifle over last week's price. Thick fat hogs, \$4.75; sows at \$3 and staggers at \$2.

Wheat.—The offerings are small; there is a good steady demand from the home millers, and the market is steady to firm. Red quoted at 76c. and white at 77c. per bushel; goose at 68½c.

Oats.—Are very dull and easy, at 19c. for mixed; on the street market two loads selling at 25c. to 26c. per bushel.

Hay.—Only five loads per day; selling at \$13 to \$14.

Straw.—One or two loads only, at \$7.50 per ton to \$8.

Butter.—The offerings are fairly free, and mostly of large rolls; dairy pounds, 11c. to 13c. per lb.; creamery, 17c. to 18c.

Eggs.—Offerings have fallen off; prices firm at 9½c. per dozen; for strictly new laid, 10c. to 11c. per dozen.

Cheese.—Prices on the local market are firm at 10½c. to 11c. per lb. The public cable quotes 54c. 6d. per cwt., for both white and colored, at Liverpool. Mr. Weir, buyer for Messrs. Warrington, of Montreal, said that fadder cheese made in Dundas County this year was the best he had seen.

Hides.—Are unchanged, with cured quoted at 8c. to 8½c. per lb. Dealers pay 7½c. for No. 1, 6½c. for No. 2, and 5½c. for No. 3.

Calveskins.—Market dull, at 7c. to 8c. for No. 1 and 5c. to 6c. for No. 2. Sheepskins, \$1.25 to \$1.50 each. Lambs skins, 20c.

Wool.—The market is quiet and prices unchanged. Combining fleece nominal, at 21c. to 22c., and rejections, 17c. Pulled supers at 22½c., and extras at 22½c. to 23½c.

Montreal Markets.

There was not a great deal of movement in our local market during the week past, drovers evidently thinking the opening of navigation would cause a better feeling in good beef cattle, consequently though the offerings were fairly heavy values were fairly well maintained.

Export Cattle.—With the sailing of the SS. Montezuma on Friday morning, May 17th, the season has once more started in briskly, and from now on there will be more or less demand for cattle suitable for export. A few lots that have been so far sold for export purposes have ranged all the way from 4½c. to 4½c. per lb., the last being an outside figure for something very choice. At these prices quite a few were picked up to-day (Monday, 10th), and as the shipments for the remainder of the week will be heavy, there will doubtless be a good demand for good export steers and heifers.

Butchers' Cattle.—The demand for butchers' stuff has been only fair, and no high prices have been paid, the greater quantity ranging in price from 3½c. for a medium 900 to 950 lb. beast to 3½c. to 4c. for a nice straight steer or heifer scaling 1,050 to 1,100 lb. In the absence of better quality most of the latter weights are taken by exporters.

Sheep and Lambs.—Not many are being offered, and the former meet with little enquiry, most of the demand being for good lambs from 85 to 100 lbs., not too fat, for which good prices are being obtained, tops making up to 5½c. to 5½c. per lb. live weight.

Hogs.—The run of hogs just about meets requirements, choice bacon lots making \$5.25 to \$5.30 per cwt.; heavy fats and mixed packers from \$5 to \$5.10 per cwt.

Calves.—The offerings have been exceptionally heavy of late, and the consequence poor prices. The latter have been further stimulated by the poor quality of the stock brought in. This is evident by the actual figures here given per pound between good calves and poor ones, namely, 3c. to 6c. per lb., the difference being entirely that between a well finished and a poorly finished one of the same weight. Prices have ranged from 50c. to \$7 for good calves, very few making anything higher.

Hides and Skins.—There has been no change in the market since the decline of one cent per pound noted in our last report in beef hides, and they still remain steady at 9c. per lb. for No. 1 green hides, salted, to the butcher, dealers turning them over at one-half and one cent advance on these figures to tanners. Sheep and calf skins steady and unchanged.

Space.—There is no space to be had on the market for the month of May, unless it is given as a concession by present holders, and most of it has been taken at outside figures—42s. 6d. to 46s., at the last some one or two of the lines asking five shillings advance on the above to Liverpool, but I am not aware of any being let at this price.

The British Markets.

Unless the markets improve considerably between this and the landing of the first batch of Montreal steamers, shippers stand to lose quite a bit of money, as in the present state of the markets, with the freight being paid and the price the cattle cost, there does not seem to be much chance of a margin.