

and cross-bred classes, ten, two Jerseys, three Guernseys, total nineteen. The Ayrshire yielded 25 lbs. 2 oz. of milk, being excelled in quantity by some of the others; but in respect to pure butter fat the Ayrshire, with 6.82, had only one more successful among the South of England's breeds, namely, a Jersey with 7.78, which, however, yielded for the day only 16 lbs. of milk.

The Dutch class were behind the leading breeds in quantity and quality of yield. Indeed, much of the milk from this class was liable to be mistaken for adulterated milk.

Despite the poor turn out of Ayrshires at this fair, it must be allowed that as regards quality this breed has been able to sustain its reputation. For purely dairy purposes it has long received preference in the southwest of Scotland, and not without good reason.—[British Farmer's Dairy Show, Seventh Exhibition, at Islington.

The same paper remarks: "It is much to be regretted that one of the most useful breeds of dairy cattle, the Ayrshires, should be so sparingly exhibited at our shows. If they were to be more extensively tried, especially on small farms, it is probable that they would be found to serve a very useful purpose."

Stock.

Lambing.

On the approach of the lambing season, a few hints will not be amiss. If you carefully culled your flock when they were lambs, you will have little trouble now with your breeding ewes. Note that the period of gestation is about 152 days. It is to be hoped that you did not feed high during the winter; but if you commenced to feed liberally four weeks before the lambing season, you did just what was right. Let your ewes have all the liberty they want—going in and coming out just as they please. Cut away the wool and dirt from their thighs and tails. Let no dampness in their beds exist. Specially observe that there is no odor of ammonia escaping from the manure. If they have a sloping, sunny aspect, much is gained. If you hear a thunder storm, look out for lambs a week before their time. When the critical time arrives the good flockmaster always gains by the loss of a few hours sleep at nights. If you observe restlessness on the part of a ewe, the very best thing to be done is to leave her alone. If, however, she is weak and unable to get up, especially if accompanied by a protrusion of the tongue, run to the rescue. Helping her labors will only be effective when she is helping herself, and in such cases a stimulating cordial may be administered. See that the mother takes to the lamb, and that it is successful in procuring nourishment. Penning the ewes before lambing is not necessary if the premises be large and the flock little disturbed. But afterwards she should be put into a small pen with the lamb. If she is very fat, protrusion of the uterus may occur, for which there is no safe remedy. If now you have a small pasture commencing to look green, turn them out during the sunniest part of the day; and if you see the lambs dancing, regard it as a harmless sport.

Feeding Calves.

Let the calf run with the cow two or three days, or until the milk is good; then take the calf from the cow and feed it new milk, from fourteen to twenty pounds per day, for the first month, or 480 pounds of milk for the month. The milk should be worth two-thirds of a cent per pound, making \$3 20. Second month, feed twenty pounds of skimmed milk per day, warmed to blood heat, making 600 pounds for the month; estimate one-fourth of a cent per pound, \$1 50; add from two to six ounces oil cake per day, say eight pounds for the month (made into a thin porridge by mixing with water and boiling,) at one and a half cents per pound, 12 cents for the month, \$1 62. Third month, milk same as last and double the oil cake; cost, \$1 74. Fourth month, milk the same, oil cake three-fourths of a pound per day; cost, 34 cents; mix with the oil cake one half pound middlings per day, cost, 15 cents; cost for the month, \$1 99. Fifth month, 16 pounds of milk per day, 480 pounds, at \$1 20; oil cake, one pound per day, 45 cents; middlings one pound per day, 30 cents; two pounds of good finely cut hay wet, and the oil cake and middlings mixed with it; cost, 30 cents; for the month, \$2 25. Sixth month, ten pounds of milk per day, 300 pounds for the month, 75 cents; oil cake, one pound per day, 45 cents; middlings, one pound per day, 30 cents; oats and corn, two bushels of oats to one of corn, ground together, one pound per day, at one and a quarter cents per pound, 38 cents; mixed with four pounds of cut hay per day, 60 cents; cost for the month, \$2 48. First month, \$3 20; 2nd, \$1 62; 3rd, \$1 74; 4th, \$1 99; 5th, \$2 25; 6th, \$2 48; pasture and hay, \$2; total for six months, \$15 28.

The best ration, of course, is the one which comes nearest to the composition of the milk of the dam, and if the analyses of the foods be known, rations may be compounded in an endless variety of ways, according to the object sought; but if the prices of the different foods compounded are greater than the price of the milk, the feeding will be conducted at a loss. Even in case of thoroughbred calves, it is not necessary to feed new milk longer than a month or two, skim-milk and linseed or flax-seed gruel being a good substitute, and will produce as good a prize animal as fresh milk.

Early Matured Beef.

All intelligent feeders know, from actual experiment, that the younger an animal is, the less food it takes to produce a pound growth in live weight; and they know that the amount of food increases regularly with the age of the animal. When the animal is full fed, it requires less food to put on a pound live weight the first six months than for the second six months, and less the second than the third, and so on; and the reason is, that the food of support constantly increases with age.

Our fat stock shows in this city have now proved, most conclusively, under cost of production, that the animal eighteen months old costs less than half as much per pound as the one thirty-six months old.

Early matured beef is becoming more and more popular every year. Three and four-year-old

cattle will seldom be seen in market ten years from now, unless from the unfenced range. The lessons of the fat stock show will be heeded, and very soon the old-style feeders will be compelled to change their system of alternate feeding and starving, or they will be obliged to quit the business of feeding. Feeding is now becoming an art, requiring expert knowledge of foods and their combination, and this knowledge cannot be disregarded without certain loss.—[National Live-Stock Journal, Chicago.

Ensilage.

At a late meeting of the Ensilage Congress held in New York, several important points on this subject were discussed. Prof. Manly Miles experimented with regard to the causes of fermentation, which he attributed to the presence of bacteria. These low, minute forms of life could be destroyed by raising the temperature of the silo to about 120°. This could be effected by filling the silo gradually without tramping. The New York Condensed Milk Co. claimed that ensilage milk would not keep, but otherwise the consumers were quite satisfied with it.

With regard to ensilage for horses, Dr. Baxter, of Virginia, said that it had resulted fatally in his State, due to the presence of stomach-worms in the throat, causing suffocation. This was caused by the acidity of the food driving the worms from the stomach. He cited similar cases in other States—one instance in which, out of ten horses fed on ensilage for a week, eight had died. But this statement must be accepted with caution, as any sudden change of food often proves fatal. A number of farmers present at the meeting were enthusiastic in the praise of ensilage as a producer of milk.

England wants to know what arrangement could be made with the United States and Canada for the supply of store steers for their market. The question is worthy of the fullest consideration by Canadian stock-raisers.

In Scotland the demand for polled cattle last year was greater than in the previous year, but so many sales were not effected. The average price realized was \$234, while Short-horns did not average more than \$144.

Polled cattle (Angus and Galloways) are the rage in the Western and Southern States, both for speculation and for improving the native stock. They are said to stand climatic extremes best, and are insensible to the irritating effects of flies. Prices range from \$300 to \$500.

CARROTS FOR HORSES.—At this season a small quantity of green food is very helpful to horses. When shedding their coats the bowels should be kept rather loose, and a feed of carrots and oats in equal quantities is better than the grain alone. Carrots are probably the most nutritious root grown, and in proportion to their value can be produced as cheaply as any.

THE UDDERS OF COWS.—A large udder is commonly regarded as a sign of a good milker, but excessive size indicates a deposit of flesh which is of no advantage, but rather a burden for the overweighted animal to carry. If the milk veins are well developed the cow will be a good milker, and the udder will be as large as is of any advantage.