

slightly curved, with an upward tendency. The eye is full, yet of a passive expression, denoting the quietness of disposition and temper characteristic of the Hereford, and which is of paramount importance to insure the profitable feeding of all ruminating animals. The cheek is fine, the head small in proportion to the carcass, which is long, level, and cylindrical. The hide is thick yet mellow, and well covered with moderately long soft hair, having a tendency to curl. The brisket is prominent, the chest well expanded, and the breed is eminently distinguished for neatness of shoulder, the bone being thin and flat, the kernel full up, the outside shoulder well covered with mellow flesh, the chine good, the loin broad, the hips wide and level, the whole back displaying a straight line, well covered with flesh from the neck to the tail. The twist flank and fore flank are good; the outside thigh is perhaps the most defective part. The whole body is well covered with rich mellow flesh, yielding with pleasant elasticity to the touch. The legs are short and the bone small, and the whole contour displays great constitution, and exhibits, perhaps, a larger proportion of flesh in proportion to bone, than any other breed."

Spring Care of Sheep.

Sheep are tender animals, and require gentle and generous treatment to produce a liberal return. Before yeaning time, they should be well fed with something better than straw or poor hay. The ewe has not only herself to support, but the growing foetus. This requires an abundance of nutritious food. The sheep seeks every opportunity to get to the ground for green food, but when fed turnips or carrots during the winter, they manifest much less desire to get to the earth. Roots possess the qualities of grass, and thus keep the digestive organs in a healthy condition. But oil meal and bran are the best substitutes to be given where turnips cannot be had. A quart of corn to six sheep, mixed with one pound of oil meal and one pound of bran, will have a wonderful effect upon the condition and health of the ewe at lambing time; and the cost of this feed, in most localities, would not exceed four cents, or two-thirds of a cent for each sheep per day, and nowhere would it cost more than one cent per head.

Gentleness cannot be too strongly urged upon the shepherd in handling ewes. If often, in feeding, they are kicked out of the way, or caught by the wool and jerked about, thus lacerating the skin and producing more or less congestion, frequently the incipient cause of death of the sheep. This will show the impropriety of catching sheep by the wool, they should be caught with the arm around the neck, so as not to pull the wool. The good shepherd will treat his sheep so kindly and gently that they will not fear him, but will like to be handled by him. At yeaning time, care should be taken that the ewes are well protected from all storms, and housed at night. In fact, the best shepherds regard the stables as the only proper place for yeaning, even in pleasant weather, at the ordinary yeaning season, which is usually from the first of April to the middle of May. The stable or close shed, well ventilated, is the best place for the health of the ewe and safety of the lamb. But in this case, it is understood that the sheep have been handled and so kindly treated that they are tame and will permit the attendant to pass around among them without rushing against each other and trampling on the lambs. The ewes, after a few days, should be so generously fed as to produce a liberal supply of milk for the lambs.

If the lambs are intended for the butcher, everything depends upon their getting an early start in the spring. Whilst one, who studies all the wants of the sheep and supplies them, will raise Cotswold lambs which will bring eight dollars per head, and more than an average of one lamb per ewe, another, who allows the sheep to take care of themselves and feeds in a slovenly way but once or twice per day, will raise only about one-half the number of lambs and get less than half as much per head. There is no animal that gives a better return for good care and generous feeding than the sheep.

Healthy ewes seldom need assistance in yeaning, but they should be closely watched, and help given if needed, and there should be no violence or hurry. "The natural presentation of the lamb is with the nose first and the fore feet on each side of it," and the assistance given, if needed, should be very gentle. Sometimes the womb is inverted and appears externally. In this case, Randall, in his excellent work, says: "It should be very carefully cleansed of any dirt with tepid water, washed with strong alum water, or a decoction of oak bark, and then returned. If again protruded, its return should be followed by taking a stitch (rather deep, to prevent tearing out,)

with small twine, through the lips of the vagina, by means of a curved needle, and tying the lips loosely enough to permit the passage of the urine. The parts should be washed often with alum water or a decoction of oak bark, and some of the fluid injected into the vagina. If this fails to effect a cure, and the protrusion of the womb becomes habitual, it should be strongly corded close to the body of the sheep and allowed to slough off. The ewe will not, of course, breed after this, but will fatten for the butcher."—*Farmer's Union*.

Age of Cattle for Market.

Daniel Webster, who was certainly a connoisseur in such matters, insisted that a fully matured animal made better beef or mutton than an immature one—that the flesh in the one case would be found of a deep red color, rich in juices, while in the other it would be pale, and comparatively insipid to the taste. Our own experience leads us to think there is a good deal of truth in this, though the great statesman put the proposition in a pretty positive, and rather too general a form.

If the animal is fine in bone, with flesh of delicate structure, full maturity will, we have no doubt, increase its excellence; it will be richer and more juicy, and age will not render it tough. But if the animal is naturally hard-fleshed, we should prefer a heifer or steer at two to two and a half years old to one of this tough variety at full maturity. But the quality of the flesh is not the only question the feeder has to consider; the question of profit is to him even of more importance than the excellence of the meat. Indeed, the poor encouragement the producer of good beef or mutton usually receives in our markets, tends to make feeders comparatively indifferent in regard to the quality. Even the breeders of blooded stock are giving to this point far less attention than formerly. The effect of this peculiarity in modern fashions in breeding, must be seriously injurious to the high character of the flesh of some of our most popular breeds.

The feeder looks first of all to profit; and here, we suppose, the question in regard to the proper age for turning cattle off to the butcher ought to be no longer a question for discussion. A well-bred steer can be made to weigh from 1,300 to 1,500 lbs. at—say 30 months old, with only such feed and management as any good farmer may profitably provide. The gain per month up to this period will be much greater than can be made afterwards; and we believe it is generally conceded that the gain made by the young animal is also greater in proportion to the amount of food consumed. With a breed of cattle that matures early, the flesh, at the age indicated, while it may possibly be somewhat inferior in richness to the flesh of the same animal a year later, will nevertheless be of a really excellent quality. It is, therefore, all things considered, the approved practice to turn off steers of good blood that have been properly fed and grazed, the fall or early winter after they are two years of age. If at this age they are ripe, it would not pay to feed them through the winter for the spring market, unless beef should be greatly advanced in price. If cattle of this age are kept through the winter, they should be grazed until the latter part of June; and should the market then be too low, they may be allowed to remain at grass until October or November. In giving two and a half years as the proper age to turn off cattle for slaughter, it will be understood that we are stating what in our judgment should be the rule for the grazier and feeder who has bred his own cattle, and has kept them rapidly thriving on good food and pasture from calf-hood. If a man wishes to handle a lot of steers for only six or eight months, he may find it equally profitable to buy them at three years old, in February or March, if he can get them at fair prices, in only moderate stock condition, as to purchase two-year-olds. Indeed, cattle of the common sort at three years are no further advanced than good grade Short-horns are at a year younger. Nor will they weigh more; neither can they usually be made to weigh as much by from one to three hundred pounds the next fall; so that if the choice were to be made between well-bred two-year-olds and cattle of the common sort a year older, the former should be preferred, even if the price were 20 to 30 per cent. higher per 100.

Sometimes it happens that a fair profit is made in feeding and grazing common and inferior cattle; but it is only when they are purchased at very low figures, and the market is brisk when selling-time comes. As a general thing, there is no money in them; if the market is good, they sell low as compared with better classes; and if they strike a hard market, they are docked in price and docked in weight, and the result is disastrous to the man who handles them.—*National Live Stock Journal*.

Uses of Salt for Cattle.

A correspondent of the *Mark Lane Express* calls attention to the great improvement in the health and general condition of animals that would result from a more liberal use of salt in their food. He says:—

"The presence of salt in sufficient quantity protects the animal economy against abnormal changes in its chemical constituents; its deficiency subjects the beast to the attack of disease germs. Dr. Carpenter declares: 'chloride of sodium is needed for the conservation of the organic components of the blood in their normal condition;' and Liebig states that, 'the other (3 out of 6) oxen, which daily had salt added to their fodder, remained healthy, even in the mode of life to which they were confined, which corresponded but little to the nature; and with excess of food and deficient exercise, their blood remained pure, and well fitted for all the purposes of nutrition. In the salt they had a powerful means of resistance to external causes of disturbance to health, which in the actual circumstances, was indispensable to them.'" "The body of the others" (which had no salt added to their food) "was, in regard to disease like a fire-place heaped with the most inflammable fuel, which only requires a spark in order to burst into flame and to be consumed."

Although common salt is added to the food of cattle and sheep, it is questionable whether it is given in the required quantity to compensate for the loss incurred by the daily excretions; since, as Dr. Carpenter states: "this salt is itself required as a component, not only of the solid tissues generally, but also of all the secreted fluids;" and "the excretion of urea, the ultimate product of organic change of matter, by the kidneys has a closer relation with the presence of common salt in the blood, than is generally supposed." On this point the same eminent savant further says: "In the oxen which only had as much salt as was contained in their fodder, the quantity was insufficient for the secretory process. There was wanting the means of transport for a number of substances which, out of the body excite disgust; their whole frame, the blood, flesh and all the juices were loaded with them, &c. &c." Allow me to repeat: for want of sufficient chloride of sodium to determine their expulsion from the system. It is however, not the mere administration of common salt, but especially the manner in which it is to be given to the cattle, to which I beg to draw the attention of farmers and cattle-owners. The salt should be dissolved in water (about two ounces to the gallon), and the cattle should have no other but salted water to drink. So taken, the salt will be absorbed into the system much quicker than when mixed with food; and it will not produce abnormal thirst.

Southdown Sheep.

Hon. John Wentworth, of Chicago, a large stock breeder, as well as a politician, in a recent circular, says:

"After trying all kinds of sheep, we have given the preference for general utility to the Southdowns. Upon fair grounds they are ranked as middle-wooled. They are half way in quality and quantity of wool between the common sheep and the best of Merinos. But their mutton is the best in the world, and their wethers grow the largest and command the highest prices in all the markets. The day is not far distant when all our beef and pork will be demanded for Eastern and foreign markets. The West must live upon mutton, and that of the fine woolled sheep is far from being palatable. Hence it is desirable that our farmers at once lay the foundation of a Southdown herd. Besides being the best of all food, there is no other that can be raised so cheap as Southdown mutton, as they are the hardiest, and can be kept in large flocks better than any others. The wool will pay for the keeping, thus leaving the carcass clear profit. For crossing upon the larger breeds of sheep, there are no superiors to the Southdowns."

I have fed corn ground in the ear for the last fifteen years, feeding from five to twenty head every winter, giving from one to six quarts at a feed, generally feeding twice a day. For the last ten years, it has been very extensively fed in this part of the country, and I have not heard of a single animal being injured, though I watched closely to see if I could detect anything of the kind, but came to the conclusion it was a false alarm. I do not claim there is any great nutriment in the cob; but when rough feed is scarce (as is the case here this winter,) there is a value in the cob for food; besides there is a great saving of labor in grinding corn in the ear instead of shelling and then grinding.—*Cor. Rural New Yorker*.