

Feeding Large or Small Animals.

Abundant experience, if such proof were necessary, shows that there is more profit in feeding the larger breeds than there is with the smaller breeds of animals, whether for meat or milk. Of course there are exceptions to this, as in all general rules; the small Jersey cow, for example, which is expected to produce an exceptional product of highly-colored and finely-flavored butter; but this does not affect the rule above stated. It is only necessary to consider that, when we feed two animals of 700 pounds each, we have to supply the demands of two sets of breathing, circulating and muscular apparatus, which are considerably more extensive and expensive than those of one animal of 1,400 pounds.

This is true of every animal that we feed, from the fowl and pig up to the cow and fatted steer. Ten small Merino sheep, weighing 80 pounds each, will cost much more to feed than four Cotswolds of 200 pounds each, or five of 160 pounds each. Besides the grain in feed, we have also a large advantage in the less proportionate amount of offal in the fewer large animals than in the larger number of small ones. Where flesh and milk are the objects in view, this consideration ought to have great weight in the selection of stock to be kept. The choice, of course, will be restricted by the opportunities for keeping the stock, for it will not pay to keep Shorthorn cows upon a pasture where only small, active cattle can pick up a living; but where other things are equal, this consideration should be well weighed.

Just now there is opening up a large opportunity for feeding stock for beef, which many farmers will very soon find a desirable one to seize upon. In choosing animals for feeding, then they will find it to their profit to select such large breeds as the Shorthorn or Hereford, where their locality admits of it; and where it does not, they will certainly labor under the disadvantage of preparing for market an article which can neither sell for the highest price nor can be produced at the lowest cost. Further, there is another advantage in marketing the largest amount of product in one package, so to speak, for animals of 1,500 to 2,000 pounds can be sent to market at less proportional cost than the same weight in the form of animals that are one-half of one third smaller.—*Agriculturist*.

How to Breed the Saddle Horse.

Upon the theory—and no truer one exists—that like produces like, we must first select a sound, well-formed, good-gaited saddle stallion to breed from, for, next to a thoroughbred, a well-bred saddle stallion imparts his action to his colts with more certainty than any other kind of horse; the mare should be at least half-bred, that is, she should be by a thoroughbred horse and out of a mare strongly bred for her saddle qualities, or *vice-versa*. I lean strongly to the thoroughbred for all purposes, and your trotting-horse men are beginning to find out that their best and gamest racers are those who partake most strongly of thoroughbred blood. In color, I would prefer a bay, or brown, or sorrel, 15 to 15½ hands, the size depending entirely upon the weight he has to carry; he should have an intelligent countenance, carry a moderately high head, but not too high; good, strong, but not heavy shoulders, and sloping back well; his back should be short and strong, with round, hoop-like ribs, that extend close up toward his hips; the latter should be broad with deep and strongly muscled quarter. Above all things, avoid a coarse, heavy-shouldered horse for saddle purposes. It matters not how well they may move in the morning—they will be stumbling before night; and as they grow older, this abominable and dangerous habit increases to such an extent that it is absolutely dangerous to ride one. In a draft horse a heavy shoulder may be desirable, and they may do for a trotter. I have even seen thoroughbreds that were successful racers with big, coarse shoulders; but I have never yet seen a No. 1 saddle horse with a coarse, heavy shoulder. If there is any coarseness, let it be in the hips. His legs should be clean, strong, and set well under him; don't choose a "leggy" horse for serviceable saddle purposes; his hoofs should be of medium size, rather large than otherwise, and of black horn. I think the black horn tougher than the white. In general appearance the saddle horse should look compactly built—light, smooth, sloping shoulders, deep-chested, round-bodied and strong muscular quarters.

Value of Sheep as Manure Makers.

Pasture alone is not sufficient to maintain sheep in profitable thrift, especially in the approaching breeding season; in addition, a daily ration of grain is needed. When the pasture is poor, the quantity of grain should be liberal. With good pastures, a pint of mixed corn and oats, or rye and buckwheat, is little enough; with poor pastures, half as much again would be required to keep full grown sheep or growing lambs in proper condition. In some sections cotton-seed meal is coming into great favor for feeding sheep on poor pastures, a half pint being fed to each one daily. It is a nutritious food, and makes an unexceptionably rich manure; and the quality of the dung of animals as a manure always depends on the quality of their food, for the dung is only the food, changed by the process of digestion, less the portion taken into the system as nutriment. There is a mistaken idea, which has been fostered by writers who know little about sheep, that these animals have the unusual capability of living upon weeds, briars, brush and coarse herbage, and of not only getting fat thereon, but of greatly adding to the fertility of the poor soil. A sheep, however, has no power to make something out of nothing. By reason of its fine mastication, and its vigorous digestion it can, perhaps, exhaust its food on more of its nutriment than any other animal, except the fowl; and its manure, by reason of its finely comminuted condition, rapidly decomposes, and is at once effective as a fertilizer. To make our flocks thrifty—to secure strong lambs, heavy fleeces and good mutton—we need to feed the sheep, and we must do this if we would turn our flock into vehicles for spreading manure and enriching the soil. It is a fact, that sheep supplied with a regularly given ration of one pint of grain per day, besides pasture, made in 80 days, 20 pounds each more weight than a flock on as good pasture without grain; and value of the extra flesh more than paid for the grain. In addition, the fleece made growth, a large proportion of the ewes conceived twins, and the lambs came stronger and were better supplied with milk. And, as a matter of course, the droppings of these sheep must have been richer in fertilizing value than those poorly fed sheep. The good shepherd careth for his sheep, and he has his reward in the richest return that can be made of any of our farm animals, for the food and care given. Instances of the successful use of sheep as fertilizers of the soil are given so often, but without any reference to the methods of their use, that it has become a general belief that nothing else is needed to make a poor farm rich. But if any novice is led to try it for himself, both he and his flock will come to grief.—*Agriculturist*.

Feeding Bran with Meal.

For winter feeding, where cattle are kept in stalls and heavily fed, there is no better divisor for corn meal than wheat bran. It is also cheap, and furnishes what the corn meal lacks. When cattle are fed on corn meal as the principal food for feeding, it is apt to cloy if fed in too large quantities, hence our best feeders are in the habit of using bran as the cheapest and best means for rendering the meal fed more digestible. In this each feeder must use discretion as to the proper quantity to be used. One-quarter of the bulk of feed in bran to three-quarters of corn meal may be taken as a good general rule, to be varied according to circumstances. For working-horses fed on cut-feed, this proportion will also be found to be nearly right. For horses doing fast work, oats fed whole are of course the best possible feed. In winter, for driving horses, about one-quarter the weight of the feed may be good sound corn, mixed with the oats. Where bran is cheap, and it usually is so in the West, it will be found a valuable adjunct for dairy cows in the winter, in connection with corn meal. These will be found as among the most valuable of any used, in proportion to the cost, for making milk in winter.

KEEPING SHEEP.—In a pasture of not more than twelve acres on the farm, I keep an average of five head of cattle, four head of horses, and sixty to seventy head of sheep. The reason for keeping sheep in cattle and horse pastures is that a great many weeds grow which only sheep will eat. Any patches of weeds or briars may be eradicated in a short time by introducing sheep. In dry seasons, if pastures are short, sheep will clean out corn fields, doing very little damage; and the corn the sheep may eat will not hurt them any.

Maize as Food for Horses.

The official report has been published on the results of the experiments undertaken by the Austro-Hungarian government for the purpose of determining the advisability of the partial or total substitution of maize for oats in feeding horses. The general conclusions arrived at are almost identical with those drawn from a similar series of experiments in the French cavalry, which we mentioned a few weeks ago.

By desire of the Minister for War, the experiments were made upon an extensive scale, and continued for a considerable time, no less than 4,000 horses in the cavalry, and 1,200 in the artillery having been subjected to them under different climatic conditions in different parts of the monarchy for a period of six months. The report, which was drawn up by Professor Bruckmüller, of Vienna, states that in the majority of cases the horses readily accustomed themselves to the new food, whether it was given whole and dry, or wetted or softened. The increase in weight and bulk, and the brilliancy of the coat, bore witness to the nutritive properties of the maize, but the power of resisting fatigue was less than on ordinary food.

A large proportion of the individual reports sent in by the veterinary surgeons and officers under whose supervision the trials were made, maintain that the animals fed on oats were distinguished for their liveliness and spirit, were less readily tired, and sweated far less, and that they lost a great part of their energy as soon as they were put upon maize. Generally speaking the introduction of maize in the rations gave better results in the southern than in the northern provinces of the monarchy—an observation completely in accord with established facts, for in the Banat, and in the south of Hungary, heavy draught horses have long been fed upon maize without any inconvenience being experienced.

It is added that the Vienna Tramway Company made a similar endeavor to introduce maize-feeding in the stables, with the result of finding that the saving in the cost of food was more than compensated by the loss of energy and pace in their cattle. From these facts Professor Bruckmüller arrives at the conclusion that maize may do fairly well for horses of whom slow, continuous work is demanded, but that it is not to be depended on where anything like a quick pace is required of them.—*London (Eng.) Farmer*.

Prices in Fancy Shorthorns.

The recent sale of the Duke of Devonshire's Shorthorns, it would appear from the *North British Agriculturist*, furnished matter for one of the most sensational chapters in Shorthorn history. The top figures both for a cow and for a bull were considerably higher than hitherto paid for representatives of the Oxford tribe.

"The average, £664 1s. 9d. a head for thirty, is the highest on record, except the Dunmore sale in 1875, when thirty-nine averaged £672 each. The average for females, however, at Holker is the highest. The pair of Duchess bulls at Dunmore sold respectively at 3,000 and 4,500 guineas, greatly helping the general average.

"Last week's was the fifth sale that has taken place of animals from His Grace's herd, and the advance in price during the last quarter of a century has been all but incredible. The first sale was held in 1856, when the average was only £25 2s. 6d. In 1864 thirty animals were sold at the average price of £66 3s. In 1871 there was a great advance, viz., £240 13s. 10d. for forty-three head; while at the last sale, in 1874, the same number reached the then remarkable average of £383 13s. 5d. These figures should encourage breeders to persevere on straight lines and generally recognized sound principles."

The Toronto Cattle Exporting Company have shipped to Liverpool during the past fortnight three cargoes of cattle and sheep; and latest advices state that purchasers from the various commercial cities of Great Britain awaited the arrival of the Canadian vessel with great interest. There appears to be an unlimited demand in Great Britain for the best Canadian cattle and sheep at good prices. Negotiations are now pending between a large firm in London, Eng., and Toronto exporters, for 20,000 head of cattle and 50,000 sheep, of first class quality and grade, to be delivered by the end of June, 1879.