

OIL CAKE FOR EWES.—John Johnston writes to the *Country Gentleman* says: "You may feed oil cake meal to ewes with perfect safety, and thought nothing I ever fed made such good lambs, or so much wool. I also feed some to my ewes every spring." I answered a letter from Pennsylvania a few days ago, asking about feeding oil cake meal to breeding ewes. Now all who read it need make no further inquiry of me, as I never fed anything that gave me more satisfaction, and when it don't cost more than corn it is better to sell the corn and buy oil meal although for fattening cattle or sheep I don't know but it may be better to feed half oil meal and half corn meal; but, as I have often written, I think buckwheat a good substitute for oil meal to mix or alternate with corn. Oil meal keeps both cattle and sheep in good health. I am feeding it this year at \$49 per ton the first I fed (about 25 years ago) I paid \$9 for same quantity."

DIVIDING SHEEP FLOCKS FOR WINTER. In latitudes where sheep are fed dry feed, and are kept confined to stables and small yards in winter, even Merinos will not bear herding together in large numbers. They should be divided into separate lots before, and preparatory to going into winter quarters. It is better that these lots be made as small as convenience permits, and not exceed 100 each. The sheep in each should be as nearly uniform in size and strength as practicable, or otherwise the stronger will rob the weaker, both at the rack and trough, and drive them about whenever they come in contact. Breeding ewes, wethers and weaned lambs, should always be kept in separate parcels from each other, in well regulated flocks. Sheep which are old and feeble, late born lambs, etc., had better be sold at any price or given to a poor neighbor who has time to nurse and take care of them. But if kept by the flock-master, they should be put by themselves in a particularly sheltered and comfortable place where they can receive extra feed and attention. This is usually called "the hospital." English sheep should be divided into still smaller parcels, and with the same regard to age, condition and sex.—*Randall*.

BEST CLIMATE FOR SHEEP.—Sheep can stand cold weather without injury if it is dry. Sudden changes and cold rains are very injurious. We believe sheep require shelter quite as much in the South-west as at the North. The weather is not as cold, but is more changeable, and the sheep frequently get thoroughly soaked to the skin. In this condition, a cold, raw wind and a damp soil can not help but carry off much of the heat which is necessary to the well being of the sheep. The natural heat of the body of sheep (105°) is much higher than that of horses and cattle. This heat is kept up by the consumption of food (or burning of fuel) in the lungs, etc., of the animal. To prevent this heat from flying off, the sheep are provided with a good warm coat of wool. To be effectual, however, the coat must be kept dry. In a cold, dry climate, if the wool gets a little wet on the outside it is soon frozen, and this acts as a coat of mail, with a good warm lining of dry wool inside, so that the heat from the warm body within does not fly off. It is said that the Scotch Highlanders, in olden times, when exposed during frosty nights, wet their plaids before lying down to sleep, and by holding them a short time from their bodies they were frozen in a stiff hard board, sufficiently thick and impervious to defend them from the cold. The slight coat of frozen wool acts in the same way. But in wet weather there is no such protection, and so it is that you will find it equally important to provide shelter in the warm, but wet and changeable climate of the South-western States.—*Am. Stock Journal*.

FATTENING SHEEP IN WINTER.—The present ordinary mode of fattening sheep in winter in New York, is thus described in a letter to me from John Johnston, Esq., of Geneva, New York, who is one of the oldest and most experienced feeders, as well as grain farmers in the United States.

"I generally buy my sheep in October. Then I have good pasture to put them on, and they gain a good deal before winter sets in. I have generally had to put them in the yards about the first of December. For the last twenty-three years I have fed straw the first two or two and a half months, a pound of oil cake, meal or grak to each sheep. When I commence feeding hay, if it is good, early cut clover. I generally reduce the quantity of meal or grain one-half; but that depends on the condition of the sheep. If they are not pretty fat, I continue the full feed of meal or grain with their clover, and on both they fatten wonderfully fast. This year (1862-3) I fed buck wheat, a pound to each per day, half in the morning and half at 4 o'clock, P. M. with wheat and barley straw. I found the sheep gained a little over a pound each per week. It was never profitable for me to commence fattening lean sheep or very fat ones. Sheep should be tolerably fat when yarded

I keep their yards and sheds thoroughly littered with straw.

"Last year I only fed straw one month. The sheep were fed a pound of buckwheat each. From the 20th of October to the 1st of March, they gained nearly 15 pounds each per week. They were full-blooded Merinos—but not those with the large cravats around their necks. I have fed sheep for the eastern markets for more than 30 years, and I always made a profit on them except in 1841-2. I then fed at a loss. It was a tight squeeze in 1860-1 to get their dung for profit. Some years I have made largely. I did so this year, (1862-3,) and if I had held on two weeks longer, I should have much more. Taking altogether it has been a good business for me."

Mr. Johnson by under-draining and by the manure obtained by fattening sheep, has almost created one of the finest farms in New York. I think his land is not adapted to turnips.—*Practical Shepherd*.



The Dairy.

The care of milk and the manufacture of butter and cheese, constitute an important part of indoor farm management. These products differ greatly in quality and are so affected in value by the modes in which they are prepared for market, that it becomes highly necessary for all engaged in their production to ascertain, if possible, and to put in constant practice, the best methods of doing dairy work. The extreme sensitiveness of milk to all external influences, renders it needful to secure thorough cleanliness and sweetness in the room, pails, pans, and strainers, while the delicacy of the processes by which it is transformed into butter and cheese, renders the most vigilant attention indispensable. On large farms where a dairy house furnished with every convenience can be had, the task is much easier of accomplishment, and there is little excuse for not turning out a good article; but the mass of our farmers are straitened in building accommodation of all sorts, and dairying, like the other operations carried on, must be performed under difficulties. Still, despite this very general drawback, there is a possibility of no little improvement being effected. With that improvement, would come an advance of price for dairy products, which would greatly increase the profits of many a farm. Quality is everything in such articles as butter and cheese. We forbear farther enlargement on this subject at present, in order to save space for some selections which will amply repay careful perusal.

Dairy Farming.

We urge upon dairy farmers the importance of their bestowing more attention upon the feeding and general comfort of the cows and of the stock reared upon the farm, as by improved management of the dairy stock the farm may be rendered a source of profit, and not of loss, and from those farms from which a small profit was realized, a larger profit may be secured.

The yield of rich milk being chiefly dependent upon the quality and amount of food eaten by the cows, the dairy farmer should calmly consider the best methods whereby an increased amount of nutritious food is to be secured, and at an outlay which will leave a profit after the money expended has been returned.

Pastures can be improved by the application of lime, lime compost, marl, shell sand, earth and dung compost, farm-yard manure, bone-dust, fermented bones, phosphatic guano and superphosphate. The

most suitable time for applying any of these fertilizers is in autumn. The manure can be put on the field previous to commencing harvest operations. The cows should be changed to another field for not less than two weeks. Fertilizers, such as Peruvian guano, sulphate of ammonia, and nitrate of soda, should be applied to the pasture early in spring, but not until the grass has commenced to grow. April will generally prove a suitable period. Of the fertilizers, the most permanent in its effects is bone-dust; next to it are phosphatic guanos, and as these are generally to be had at lower rates than bone-dust, they are to be preferred. The quantities of any one of the enumerated fertilizers to apply, must be regulated by circumstances. A mixture composed of more than one manure should be preferred. Cheshire, bones have generally produced such decided changes in the growth of pastures that bone-dust has acquired a high position as a fertilizer for dairy farms. The phosphoric acid removed in the milk, and in the bones of the animals reared upon the lands, is thus restored to the soil. It is now considered essential in the best dairy districts to manure with bones or with fertilizers prepared from bones. It will generally prove a satisfactory method of top-dressing to apply bones or phosphatic guano in autumn, and afterwards to supplement this with a small quantity of nitrate of soda or Peruvian guano in spring.

Good pastures should not be ploughed except there are imperative reasons for breaking them up for a course of cropping; but bad pastures can be broken up with advantage, provided means are adopted to improve the condition of the soil by draining, deeper cultivation and liberal manuring during the period the land is under corn and root crops. The re-seeding with superior grasses can be best effected by sowing out without a grain crop.

Pastures should not be overstocked. Sometimes this mistake may be made. To meet such a contingency, provision should be made to supplement the pastures with green forage, such as rye, clover, [and Indian corn.] Nothing is more common than to stock up to the utmost limit the pastures will furnish full keep for. If the season proves a good grazing one, the cows continue in fair condition, and yield an abundant supply of milk. When the season proves somewhat adverse to the growth of grass, owing to an excess of moisture with a low temperature, the consequence is the cows are half starved, they lose condition, and while the flow of milk is diminished it contains less butter or casein. Nothing is to be gained by overstocking, except by the experience a sounder practice is resolved upon. Not frequently, however, the practice continues from some vague impression that the ensuing year will prove a more favourable one for grass.

Were the sound principle more generally acted upon—the largest return of produce from each cow—dairy farming would prove much more profitable than it is at present.—*North British Agriculturist*.

Cheese Making.

At the meeting of the Massachusetts Board of Agriculture held at Springfield lately, S. L. Goodale, the Secretary, read a valuable paper on cheese-making, the following brief notes of which we take from an exchange:—

"He said that a milk cow furnished the best and cheapest method of getting human food. The feed necessary to make a pound of meat will make at least 25 pounds of milk. Eight and a half pounds of milk on an average make a pound of cheese. In Herkimer county, N. Y., the cows average 600 pounds of cheese per annum. A cow that will make less than her dressed weight of cheese in Scotland is sent to the butcher. England is our great cheese market, for the English eat more cheese than we; 200,000 cows are kept in the single county of Cheshire. Herkimer county, N. Y., first taught the English to use American cheese, and now we ship there more than forty million pounds a-year. Cheese factories are modern but labor-saving inventions. They require the milk of at least 500 cows to make them profitable, and a force of five or six persons to do the work. There are more than thirty such factories in Oneida county, N. Y., and the cheese commands a higher price than that made in families. Carrying milk from one to five miles in a wagon improves it for cheese as much as it hurts it for butter. There is little difference in the labor for a pound of cheese or a pound of butter, and the milk necessary for a pound of the latter will make two and a half pounds of the former. Hay cheese is less valuable than that made from grass."