To Prevent Sows Devouring Young.

A Scotch farmer writes :—I noticed some time ago a method for preventing sows from devouring their young, which they will do at times, and sometimes they won't let down their milk. When this state of things is not caused by a diseased condition of the uterus, it is said that the sow can be brought to terms by pouring a mixture of ten to twenty grains of spirits of camphor with one to three of tincture of opium, into the ear. The sow will immediately lie down on the side of the ear to which the application was made, and remain quiet for several hours in this position, without interfering with her pigs; and on recovery from the stupor will have lost her irritability in regard to them. The experiment has been tried in Germany hundreds of times, according to one of the agricultural journals, without any injurious effects. It is also said that the eating of pigs by the parent sow can be readily prevented by rubbing them all over with brandy, and making the same application about the nose of the sow herself.

High Feeding Only Will Pay.

Our graziers are beginning to learn that they will soon be driven out of the field as feeders, if they continue to undertake to compete with the coarse Texas cattle of the South and the vagabond grass-fed steers of the Western plains. The best feeders in our State have already adopted the practice of buying grade Durhams, and the higher the grade the better, and if full blood, so much the better yet, and crowding into them all they can eat from the very start, and selling them at two, or between two and three years. In summer blue grass and timothy clover and standing corn; in the winter corn in the shock and corn in the ear, cornmeal and oilmeal, sheaf oats and the best hay the richest fields will yield—such is the bill of fare provided. Grade steers so pushed, make a gross weight of from 1,300 to 1,600 at the age named, and sell for 7c. to 8c. while equally heavy but scrubby raw bone, bring not more than 4c. As ordinarily fed, our prairie cattle getting ready for market, lose the fat and flesh, and everything but the mere bone and frame growth of two summers. The calf in good condition at the first of September is a skeleton at a year old. He gained flesh during the summer to be reduced again the second winter, and is finally sold, after he has gained three and lost two suits of fat and flesh. This style of feeding is about at an end; and so it is getting to be with hogs. It is recognized that in order to be profitable, they must be sold at 9 and 12 months, instead of 18 and 24. In Kentucky I understand, about the only profitable business now pursued on their high priced lands, is feeding mules and breeding fine cattle, horses, sheep and hogs. The mule colts are bought in the fall at home as largely as possible, and abroad across the river in Ohio and Indiana, from $40 to $75 being paid for fair to best mule colts. These colts are placed on the highly cultivated, high priced, rich lands, and are pushed with all the art and skill the experience of half a century has gained, until they are sold the spring they are two years old. These animals so fed are never allowed to get hungry, never wet; never athirst, and their appetite is never suffered to be cloyed. The market for them is on the cotton plantations of the South, where they bring from $400 to $600 the pair, according to the quality and the market. If we should feed cattle and hogs and mules as they ought to be fed, there would be few things better than corn and oats.—*B., Country Gentleman.*

Food for Calves.

I am fully persuaded that the milk of the mother, fresh and warm, is altogether the safest and the best food for the calf, and I am not yet fully decided but that it is the cheapest, all things considered, so long as it is not worth more than two cents per quart, to manufacture into butter and cheese. But calves fed with new milk, or with any one of the substitutes for it, such as hay-tea, sweet whey, or skim milk, require good, nice hay, or fresh grass in addition to it, and require it in increasing quantities as the calf becomes older. A purely milk diet will not distend the stomach of the calf, or develop its ruminating habits or digestive powers, which is always of great importance for a good dairy cow.

To those dairymen who regard new milk as of too much value to use for raising calves, I would say that sweet whey or skim milk, with oil-meal, or oat-meal, or both, will make a good substitute, and that very good calves can be raised upon it at a less cost in dollars and cents, not counting the extra labor in preparing it. The change, however, from new milk to skim milk and the oil, or oat-meal, or to whey and the meal, should be very gradual, and may be made by increasing the quantity of skim milk, or whey, and diminishing the quantity of new milk from feeding to feeding until the change is affected. My practice (which I do not claim to be the best) has been as follows: As soon as I commence making cheese every day, I dip off sufficient whey for the night's feed, as soon as it separates from the curd, and heat it boiling hot; then having wet with a small quantity of whey or water, the amount of oil or oat-meal I wish to feed at night, put it into a cask and turn on the boiling whey. This will cook the meal sufficiently, and at the same time prevent the whey from souring, even during the most unfavorable weather, and if covered up will be warm enough to feed at night when the weather is cool, and, uncovered, will be about right temperature when the weather is warm. For the morning's feed I use whey alone, taken from the cheese-vat as soon as the whey gets up to about 90°, which it soon does, in the process of cooking the cheese. If oil or oat-meal is used with skim milk to feed calves, it should be cooked by turning upon it sufficient boiling water to cook it thoroughly, but in either case it is necessary to first wet the meal to prevent its lumping.

Oil-meal is the best substitute for the fatty matter taken from the milk, in the manufacture of butter and cheese, that I have found, and oat-meal will furnish the calf with all the necessary food for building up and keeping in a healthy condition the muscular tissues. Whenever skim milk, or sweet whey is substituted for new milk, I would suggest feeding oat-meal and oil-meal in about equal proportions, thoroughly cooked.

Early calves, that have had good care, and made a good start, will sometimes do well if turned out to grass early in spring. But when this plan is adopted, the calves require the very best kind of pasture, good shelter from the hot sun and cold rains, complete exemption from annoyance by other animals, and an abundant supply of good water. Other dairymen feed their calves until they have good fresh after-feed to turn into, which is about the last of August.

In whatever manner calves are raised one thing is essential to their health and prosperity, and that is, good ventilation and perfect cleanliness, as well as good food, and plenty of it. This one thing includes all these things, and more too.—*Harris Lewis in New York Times.*

Bran as Food for Stock.

The nutritive value of all food depends much upon the amount of gluten which it contains, as this is the substance which goes to form muscle The proportions of gluten in whole grain, bran, and fine flour are as follows: Whole grain, 12 per cent; bran, 14 per cent; fine flour, 10 per cent. By sifting out the bran we, therefore, render the flour less nutritious as well as less wholesome. As bran constitutes from one-eighth to one-fourth of the whole weight of wheat, on the average one-sixth, there is a great waste of muscle-forming material by bolting. True, it may go for the nourishment of inferior animals, but it sells for less price, does less good, and thus used is a drawback on the just profits of the farmer

As compensation for this loss in the sale of his wheat and flour, the farmer should use all his bran in feeding his stock, and if he purchases the bran of his neighbors, both his stock and his farm will be benefited. Wheat bran may not put as much fat on cattle as does corn-meal, as it does not contain so much starch and oil, but it will produce more muscle and more bone. It contains more muscle material than fine flour, and if we burn any given weight of bran and fine meal, we shall find that the amount of ash (bone material) is at least six times as much in the former as in the latter. As it is this inorganic matter which is so much needed on our old soils, farmers can in no more economical way renovate their old lands than by feeding bran heavily to their stock. We know some farmers in Massachusetts who feed to their cows, both summer and winter, from four to eight quarts of bran daily, and get great returns not only in the increased flow of milk, but in improved pastures and meadows. We have looked over the pastures of some of these bran-feeding farmers, and are satisfied that there is no better mode of renovating them. Bran furnishes just the compensation that the pastures need, for the phosphates and sulphates of lime, potash, and soda, which have been removed from them in the form of milk and bones. By feeding it during the summer to cows, they scatter it in their excrements over the pasture without any expense to the farmer.

If the cows are found to loose flesh under a bran diet, mix with the bran one-third, or on one-half corn-meal. In the winter we should recommend mixing meal with the bran for a regular diet, as the highly carbonaceous character of meal tends to furnish warmth to the animal. Fed alone, and in a large quantity, meal produces too inflammatory a condition, tends to garget and other inflammatory diseases, and runs the cow through life too fast. Bran acts as an antidote to this inflammatory tendency in meal, and and while stimulating a great flow of milk, keeps the animal in good health, and prolongs her usefulness to a good old age. If oil-cake or cotton-seed meal is fed to young cattle or milch cows, there is still greater necessity for mixing some bran with their feed, as these substances furnish carbon in a more concentrated form than does meal, and consequently act on the animal much as abundance of coal and a strong draft do on a furnace—they burn it up quickly. A cow driven to the top of her speed, with oil-cake, cotton-seed meal, or even corn-meal, cannot be expected to last many years. Roots or bran must temper such high feeding.—*Alexander Hyde.*

Weight and Value of Live Stock.

For the benefit of young beginners in agriculture, I make the following observations:—If you are wrong in the buying, selling, or managing of live stock, you may bid adieu to comfortable profits. How to buy and sell well are two axioms of the utmost importance to successful farming, therefore if you cannot trust your own judgment, get the unbiassed opinion, if you can, of some competent friend. It is even worth paying for if you have it not. But in the absence of both, let me commend to you the weighing machine which will put you on a par with some of the best judges and give you confidence in your selling and reprove you if in buying you pay too dear. The weighing machine clears up many doubts. You should remember that in selling to the buyers (butchers or dealers) you have to do with experienced hands, who as a rule, thoroughly understand their business, and can judge closely of animal weights, so that the odds are sadly against you unless you know the weight, and can therefore insist on a fair market price, which you are sure always to get either from one or another. I have known of many a rare picking got out of farmers who did not know what proper price to ask; and that reminds me that it is very false economy not to have a knowledge of the metropolitan and other markets. The daily papers convey this information. I quote the following extract from the late Mr. Horsfall's most valuable paper on cattle breeding and dairy management. I have weighed my fattening cattle for a number of years, and my milk cows for more than two years This practice enables me at once to detect any deficiency in the performance of the animals, it gives also a stimulus to the feeders, who attend at the weighings, and who are desirous that the cattle entrusted to their care should bear comparison with their rivals. Another obvious advantage is in avoiding all cavils respecting the weight by my purchasers, who having satisfied themselves as to the quality of the animal, ask and obtain the most recent weighing. The usual computation for a well-fed but not over fat beast is—live to dead weight as 21 to 12, or 100 to 59 1-7th, with such modifications as suggest themselves by appearances. I recommend also in this matter a reference to those valuable investigations and tables by Messrs Lawes & Gilbert, in the Royal Agricultural Society's Journal, vol. 13, p. 193, and in vol. 21, p. 484.

They say well bred and moderately fattened oxen should yield 58 to 60 per cent. carcass in fasted live weight; excessively fat oxen may yield from 65 to 70 per cent. Moderately fattened sheep (shorn) should yield about 58 per cent. carcass in fasted live weight; excessively fat sheep may yield 64 per cent. or more. Moderately fat pigs, killed for fresh pork, should yield (including the head and feet) about 80 to 82 per cent. carcass in fasted live weight; large, well fattened pigs, fed for curing, will yield a considerably higher proportion. In each of the three descriptions of animal the proportion will however, vary much, according to breed, age and condition.

It is a painful truth that an agricultural library rarely forms a part of a farmer's investment; but the schoolmaster is abroad now, so that we may reasonably hope for better things; and I never met with a farmer who was educated at our Royal Agricultural College at Cirencester, who did not show the good effects of theory combined with practice—the why and the wherefore. Out of a million farmers, great and small, in the United Kindom, there are not twenty thousand who belong to the three great agricultural societies of England, Ireland and Scotland, and who benefit by their publications. This is sad evidence of the lack of literature in agriculture. I hope the time will come when no British farmer can be found, who will say: "None of your theory or book-farming for me—I am a practical man;" for as that great man Baron Liebig truly says:—"Theory is not opposed to successful practice, but is an explanation of the cause of its being successful."—*J. J. Mechi.*