

should. When a two-year-old heifer begins to "spring," then is the time for you to get in some good work and help her along. The time to assist nature is when she is trying to help herself. At this time begin and push them along on bran, slops, etc., much as if you were feeding to produce a milk test. No danger of milk fever with first calf, and you may win a prize, besides doing just what you ought to do anyway. In a word, feed your cows to their fullest capacity, and don't go beyond it. Bring her gradually up to and just short of reaching her bloom of perfection. I cannot tell you how you will know this; you can only learn by practice, and some men if they live a thousand years would still die too young to ever acquire that knowledge. There are several men I could mention in Canada, especially among the Ayrshire breeders in Lower Canada, who as fitters of show cattle know their business. You have all through Canada better feeders, as a rule, than we have in the States, while in England and Scotland they are better than in either country. In England a herdsman or shepherd follows that as a trade or profession, and his son follows after him, so he has a certain amount of knowledge bred in his bones to begin with.

[TO BE CONTINUED.]

Raising Calves on Oil-Cake Gruel.

To the Editor FARMER'S ADVOCATE:

SIR.—In response to "J. W. B.," Middlesex Co., Ont., would say that one useful plan of preparing oil-cake meal for young calves is to moisten the quantity required (a small cupful to begin with, for each animal) in cold water, then stir in boiling water sufficient to make a gallon for each animal, and let it stand from morning till evening for the evening meal, and from night till morning for the morning meal, using only the jelly for the youngest. This, with as much milk as can be spared for the young ones, gradually decreasing the quantity of milk and increasing the quantity of oil meal, will be found to be a very useful method of feeding young calves. We raised seven as nice calves as you could wish for on this last season—altogether without milk after the first few weeks.

ROBT. HAMILTON.

Grenville Co., Ont.

Sheep Pasturing and Feeding.

I am awaiting with interest and considerable speculation the arrival of a booklet or primer, for which I have sent, on the subject which forms the title of this paper, by Prof. Shaw, of Minnesota. No doubt it will be a revelation to many. The chief obstacles in the way of sheep-husbandry are and have been the difficulty in pasturing them where other stock is kept, the depredations of dogs, and the want of proper fences; but, "Eureka!" these are to be things of the past, and the halcyon days of the sheep are yet to come. I have often thought that there might be improvement in this regard by using artificial pastures, such as rye, rape, white mustard; but I will not anticipate, lest I should be infringing on the Professor's patent. Suffice it to say that many of our old orchards could be pastured for sheep by sowing rye, crimson clover, etc., at times, and our steep hills and hillsides seeded with lucerne clover, and in our corn fields at the last cultivation rye and rape might be sown together and pastured fall and spring. We should avail ourselves of all the possible agencies for enriching and cleaning our lands. The sheep are an important factor in this regard, with "golden foot," so says the proverb.

In England the hurdle system of feeding sheep is possible, but we cannot do it so well here. We know what it has made of England. An animal that suckles her young to maturity, thus retaining important elements of fertility on the farm, must certainly tend to enrich. In this part of the Province very few sheep are kept, due to the causes above mentioned. A few should be kept on every farm; we would have fewer weeds, richer land, and an income derived from this source, which would prove quite an adjunct to the income of the farmer as well as the pleasure of caring for and seeing so useful and innocent an animal on the homestead.

J. S. B.

The Foal.

The foaling season is now general or just past in most horse-breeding sections. When the dam and offspring can be safely left out in the pasture there is seldom need of much attention, except to prevent the foal under a month old being left out in soaking rain. A foal may come through such an experience and be no worse, but young foals are frequently lost in that way.

It is not uncommon for young foals to have bowel trouble, and may be either constipation or diarrhoea. For the former, castor oil in milk is a safe and soothing remedy, followed with a little bicarbonate of soda and a few drops of tincture of iron. Where there is a too laxative condition, a small dose of laudanum may be given in boiled rice gruel. A simple preventive of navel ill is to keep the foal in clean quarters sprayed with some such antiseptic as West's fluid or other dip, and wash the navel with a weak solution of permanganate of potash. Foals at all indisposed should be kept in warm, clean quarters, which may be a grass plot in bright, temperate days.

Ask your neighbor if he reads the "Farmer's Advocate." If he does not, get him to.

Blucher Won the Prize.

To the Editor FARMER'S ADVOCATE:

SIR.—On perusal of your report of the Toronto Horse Show, I find you have made a mistake in the class for high-steppers sired by Hackney stallion. You make it appear that the first prize went to G. A. Case's four-year-old brown mare, whereas that prize came to me by my gelding Blucher, and I will thank you to have that mistake rectified in your next number. I like your illustration of Blucher very well. I am very well pleased with your paper, and feel certain it has done much good in the past and will continue to do so in the future.

Toronto, May 19, 1898

THOS. A. CROW.

Barley and Why the "Secret" of Wiltshire Bacon.

During the past year we have heard a great deal in Canada about the superlative merits or demerits of this or that food for porkmaking; but those who understand the situation best, know that the high position attained by Canadian bacon in the British market is due to a long and intelligent system of breeding the proper type of hog, judicious feeding and management, and subsequent skill on the part of our packers. It is this strong combination that has put our pork products in first place. As far as rations go, the great bulk of Canadian hogs are fattened on a variety of foods, such as barley, shorts, corn, oats, peas, wheat, roots, etc., as they may be available, usually fed in mixtures along with by-products of the dairy—whey and skim milk—where the latter are not available, pure water as the liquid portion. Speaking generally, barley is one of the commonest foods, being so generally and so successfully grown. On this point the *Witness*, of Belfast, Ireland, which devotes considerable space to agricultural matters, says:

"For making the best quality pork, it is extremely doubtful whether any diet for fattening pigs can beat whey and barley meal; and to a very great extent the wonderfully fine quality of English Wiltshire bacon is to be traced to the fact that this is the food of the hogs in that district. An excellent and economical food for pigs of all ages is rye meal, but the pigkeeper must be watchful of ergot (a fungoid growth, and is to be avoided by frequently turning the rye, and storing it in a dry place) in the rye, as it is very apt to cause abortion in sows. When potatoes are to be had cheap, a little of the best Indian meal will go very well with them, provided that a small portion of 'broad' bran be used also. At all times Indian meal is rather a costive food, and when used without bran is very apt to lead to constipation; this eventually will cause the animal to sicken, and in the end very often cause death. Indian meal, again, requires rather more cooking than most of the other foods in order to thoroughly soften and swell the otherwise hard grain. In all cases it cannot be too strongly urged upon pigkeepers the advisability of using the finer—that is to say, the more finely ground—quality, although it is a trifle dearer in cost; but it is more easily digested, consequently less food is lost by being passed through the animal undigested. Therefore, on the whole, there is a saving by purchasing the higher-priced food. Whole peas are also very good, a handful or two thrown into the straw in the sty now and again, when the pigs are about five or six weeks old, will be eagerly foraged for by them, and will cause them to cut their teeth, learn to masticate, and help their thriving generally in a considerable manner. Peas, again, are wonderfully milky in their nature, being probably the most milky of all cereals. Getting a few of these to chew is almost as good for the youngsters as if they received their equivalent value in milk."

Stone Walls for Piggery.

To the Editor FARMER'S ADVOCATE:

SIR.—I notice in your issue of April 1st an article against stone walls for piggeries, in which Mr. Snell very strongly opposes the stone hog pen. I am one of those so-called "unfortunate" men who built one of these pens, and I do not consider myself unfortunate in the least, but, on the contrary, I maintain that a stone hog pen is all right if properly built. Of course, I have a personal knowledge of some who have tried to keep hogs in stone basements, and they have made a complete failure of it; but the failure is not in the stone walls, but rather in the filth and dirt that exists therein. There are some who think that a pig will thrive and grow if he is fed heavily, but such is not the case. More depends on cleanliness of the hog pen, and if you want to obtain the best results you will have to keep the pen clean and dry. Previous to last summer I noticed a large number of articles in the different papers condemning the stone pens, but I had the opinion they were all right and I had one erected last summer. My pen is 30 x 40 feet, with half up the center and pens on either side. The wall is 22 inches thick, with a dry or hollow center, and with as few stones as possible being the full width of the wall, thus lessening the danger of frost penetrating through it. It is well plastered on the inside, which, I think, every stone wall should be. The main thing is to have an abundant supply of light and ventilation, which can be had by placing tile in the wall when building. I have a large spout proceeding from ceiling of hog pen through the roof of my implement house. The floor of pen is made of Portland cement, with plank sleeping places, or nests, in every pen. These nests have a light shelving round

them to hold bedding, and it makes an Al floor for any hog pen. The floor is graded so as to run all soakage in the rear end of each pen, where it is securely held, and then everything goes to the manure pile instead of the liquid all soaking away and being lost. During the winter months I cleaned my pen out three and four times a week, thus changing bedding at the same time. I will give you a description of the way I have of getting the manure out. I had a rod erected close to the ceiling of pen and projecting through a swing door to a post ten feet outside of pen. To this rod is attached a bucket, with rollers which run along the rod. This bucket is balanced so that all you have to do is to knock a hook out of steeple when you get it outside of pen and the bucket turns over. I have no hesitancy in recommending the stone walls for piggeries, if built on the above principle, as mine gives me the best of satisfaction.

Dufferin Co.

WM. HAND.

FARM.

Farm Work for June.

CUTTING AND CURING CLOVER.

There is probably a larger acreage of promising clover in all the eastern provinces of the Dominion than in many years past, and this fact augurs well for the future fertility of the farms as well as for the supply of one of the very best foods for farm stock of all kinds. Early-cut, well-cured clover is undoubtedly the best all-round fodder for either horses, cattle or sheep, and even hogs and hens are kept in a healthy and thriving condition by the use of clover as a part of their winter rations, in which case it is best utilized by passing it through a straw cutter and steaming it or mixing it with pulped roots or damped meal or middlings. It is wise to commence cutting clover early if the weather is at all suitable. The advantages are: (1) That where there is much of it to be cut the later cutting will be too far advanced in ripeness before all is harvested to make high-class hay; (2) That if noxious weeds are present in the meadows it is better to cut them before their seeds ripen and are liable to be carried to other fields in the manure from the stables or to be scattered on the field on which they have grown; (3) That the aftermath from early-cut clover is sure to be much better than from later cutting, thus securing a large supply of fall pasture or a good crop of seed if it is decided to use it in that way. Again, if it is intended to prepare the land for fall wheat, advantage may be taken of wet weather, should it come, to keep the teams at work plowing the clover sod down for that purpose, and there are few better or more profitable preparations for wheat than this if the surface is kept worked with harrow and cultivator after each shower to retain the moisture and solidify the land and thus secure a model seed-bed, even if the later summer months prove excessively dry, as was the case last year. Some of the most promising fields of wheat we have seen this year were prepared in this way. In order to properly cure early-cut clover it is almost an absolute necessity that it be allowed to stand in medium sized cocks for from two to four days, after being well shaken up in the swath either with a tedder or by hand, if the weather will allow it. Clover put in the mow before it is well dried, or else sweated in cocks, is liable to must and lose much of its sweetness and quality. On the other hand, if allowed to lie in the hot sunshine too long the leaves break off in handling and are wasted and the quality of the whole crop is impaired. It is well, therefore, as a rule, to cut no more each day than can be handled and got into cocks on that or the following day. It is well to cut in comparatively narrow strips to avoid crossing furrows so much, and the tedder, or the men and boys with forks, should be started to shake it up in a few hours so as to get it wilted and raked up and cocked the same day if there is enough wind and sun to make it fit for this; if not, it may be raked into windrows, thus reducing the surface exposed to dew, and, if necessary, shook up in the row next day to complete the drying process. If the weather is at all uncertain the surest way to secure the crop from damage and to make hay excellent in quality is to cock it even before it is considered dry enough, placing each successive forkful directly on top of the others, the sides being raked down by the inverted fork, leaving the outside stems pointing downwards. Avoid its getting wet, if possible, if all hands have to drop other work in order to secure it in this way or by getting it under cover if fit. The impression, we believe, prevails that clover hay is not suitable feed for horses, that it is liable to produce heaves and other ailments. We are persuaded that this is a mistaken idea, and has arisen from the use of late-cut or improperly cured hay, and feeding excessive quantities of it if properly cured. There is no more completely balanced food ration in all the list of fodders than well-cured clover, and few that are cheaper. Indeed, for farm horses, with the little work that is required of them in winter in these times, it is sufficient to carry them through in good condition without any grain; and it should be fed in moderation, since, if well saved, it is so palatable that horses will overload their stomachs with it; and it is hard driving, when in this condition, or the feeding of musty clover, the result of careless handling, that in nine cases out of ten produces heaves if it is from this cause it originates. It is well, therefore, to avoid storing damaged or ill-cured clover