

ears which would not have kept well in the crib. A repeated trial of the basket used shows that 10 baskets will shell 5½ bushels of corn.

Of the broom-corn there was one-half acre, which produced a good crop of corn, and also a moderate one of ruta bagas from seed hoe-barrowed in as with the second crop of corn.

I cannot too strongly recommend this plan of sowing turnip or ruta baga seed, and covering it with the last hoe-barrowing. Should the season be at all favourable it will produce a fair crop of roots, and in all cases a good piece of late pasture. But more of this hereafter.

Hoping that these will find an answer to all thy questions in the above, I will subscribe myself—Thos. J. Egan, in *Germantown Telegraph*.

It is said that a German chemist in Buffalo has discovered a process by which molasses can be profitably manufactured from Indian Corn.

**FEMINE FARMING.**—A Mrs. Harrington, of Dayton, Newaygo County, in this State, aged about 61 years, has raised, doing all the work with her own hands during the past season, 30 bushels of potatoes, 100 bushels of corn, 1½ bushels of peas, 10 bushels of onions, 5 bushels of beans, 4 bushels of beets, 5 bushels of carrots, 100 heads of cabbage, pickled one-half barrel of cucumbers, and earned nearly \$100 by washing, since the 1st of March last. The result of this woman's labours was quite good enough for the hardest working man.—*Western Rural*, (Detroit, Mich.)

**DITCHING WITH A PLOUGH.**—A correspondent of the *New Hampshire Journal of Agriculture* says: In the first place, I plough two furrows, and throw them out; this makes the ditch wide enough at the top. I then plough two more, and throw them out. The ditch is then twelve or fifteen inches deep, and one ox can no longer walk in it with the other on the surface. I then take a stout piece of timber, five or six inches square, (a round stick would do as well), and twelve or fifteen feet long. I lay this across the ditch, and hitch a yoke of oxen to each end, so that the timber serves as a long whiffletree, with the plough chained in the middle; and as the ditch grows deeper, the chain is let out longer. In this way, there would be no trouble in ploughing six feet deep. The only difficulty is in keeping the oxen nearly abreast, as it is new work for them. But by taking light furrows at first, they soon learn. After running the plough through two or three times, throw out the loose earth and plough again.

**SOAR SUDS.**—A writer in the *Germantown (Pa.) Telegraph* says:—The value of this article as a stimulant of vegetable life cannot be too highly appreciated. It contains the aliment of plants in a state of ready solution, and when applied, acts not only with immediate and obvious effect, but with a sustained energy which pertains to few even of the most concentrated manures. When it is not convenient to apply it in irrigation—the most economical method, perhaps, of using it—it should be absorbed by some material which may be used as an ingredient in the compost heap. Soda, muck, and other similar articles, should be deposited where the suds from the sink and laundry may find its way to them, and be absorbed, for the benefit of crops. In this way several loads of manure, suitable for the support and sustenance of any crop, may be made at comparatively small expense. The highly putrescent character of this fermentable liquid qualify it admirably for the irrigation of compost heaps of whatever material composed. Being a potent fertilizer, it must, of necessity, impart additional richness to almost any material to which it may be added. Try it, and mark the results.

**A NEW SUGGESTION IN REFERENCE TO CLOVER PASTURES.**—We have seen a statement recently put forth that cattle pastured mostly on clover breed poorly, and that luxuriant clover pastures are a fruitful source of the trouble that is often had in herds, of the cows "coming in" late. The fact—if it is a fact—is new to us; but if there is any truth in the statement, some one in this great dairy district will be able to confirm it, and we should be glad to receive communications touching the matter from any one who has reasonable grounds for suspecting any such influence from clover pastures. Clover is one of the most valuable of all our forage plants for promoting a flow of milk, and cows that run in luxuriant clover feed are likely to put on flesh. Animals in high flesh, it is well understood, are not so good breeders as those in fair condition. Apart from this, we see no reason why clover should operate differently in the matter than other grasses. The statement needs confirmation, and if there are any facts that can be brought forward that will go to show any such bad influences to be the result of feeding on rich clover pastures, we should be glad to print them for the benefit of the dairy public.

## Sheep Husbandry.

### Expedients in Sheep-feeding.

THE flockmasters of Great Britain are racking their brains for expedients to make up for the failure of the root crops the present season. A *Practical Farmer* writes the following communication to the *Farmers' Magazine*, and some of the suggestions in it may not come amiss to our sheep-keeping readers.—

The winter management of sheep is a subject of high importance for any time, and for any winter; but how much more so for the winter now so near at hand—the winter of 1865—a winter which we have to face and struggle through without the usual supply of succulent ("green food") for our flocks! We are not particularly apprehensive for our herds and horses. We have plenty of good, well-got straw, and a small quantity of hay; these, with the usual artificial and ordinary foods, will suffice to bring them safely through, if not to greatly improve them. It is the all-important question, How are the sheep to be wintered without their natural food? with which we have to do. I am by no means wiser than my brethren, nor can I offer, I fear, any positive or valuable suggestions; but the recurrence to the subject in the *Mark Lane Express* cannot fail to do good.

Solomon said, "In the multitude of counsellors there is wisdom." In looking over the columns of the *M. L. E.*, and that of a contemporary, the other day, I was greatly interested, and I think instructed, by the hints and suggestions of the various correspondents relative to the best modes of carrying the sheep flock through the ensuing winter. Some of them are quite unique, others somewhat fanciful; but the bulk of them are of a decidedly useful and business-like character. I am old enough to remember the exceedingly dry summer of 1818, but not with sufficient accuracy to adduce anything from it beyond this, that we were then almost without a knowledge of artificial foods, and their use and management. We grew but small quantities of Swedes, not many turnips, and no mangolds; consequently, in these respects the present season would be comparable to it. One thing, however, should be named—we now produce a far larger number of animals to be provided for. How, then, is this to be done in the forthcoming season, being in the like predicament of our forefathers of 1818? Now for some of the modern suggestions, which I may be excused for quoting, and that briefly. One who may be depended upon says: "We always kept the ewes, until lambing, on pea-straw and a little corn; this year they must have a double portion of the latter instead of Swedes." Another writing from a district where folding is practised, says: "They must walk over the field, stopping a night in each fold, and eat a small quantity of clover hay there cut into half and mixed with corn and linseed-cake." Another says: "We have one great advantage over 1818—the pulper and chaff-cutter must be brought into extensive use.... Steaming straw makes it more palatable; but watering the chaff and allowing it to stand a few hours will answer the same purpose.... I have been giving my lambs a pint of crushed oats daily.... I am making enquiries as to the price of low quality of sugar.... Brewers' grains, malt dust, bran, and pollards, I shall have to mix with cut chaff." Another says: "Linseed-cake, at £12 per ton, is an extravagant food. Bran, at 5 gs. a ton, is far more economical. Lentils and Indian corn, both at present to be bought at 3s. to 3½s. per qr., are cheap food. Wheat, again, is a cheap article to mix with Indian corn.... Twelve pounds of Swedes, thoroughly mixed with chaff, will be found sufficient for a sheep.... We use only the best green rape-cake, subjected to solution at a temperature not less than 212° (boiling heat)." Another says: "I have used a considerable quantity of wheat these last three years, mixed with peas or beans, barley or oats, ground together, with a very little linseed-cake.... The thing is not to give too much of one thing." Another says: "Beans in the straw are good for foddering on grass; the lambs will pick up every bean leaf and pod." Our old friend, Samuel Jonas, says: "I use straw-chaff largely. I have seven barns which used to be filled with corn, which I now use entirely for straw-chaff; they now contain at least the straw produce of 200 acres of wheat and oats cut into chaff last spring. I mix with the chaff, when cut, some green tares or rye cut into chaff, and salt also; and have a gang of six boys treading the chaff into the barn as it is carried in, so as to fill it as solid as possible; this causes a fermentation, and the chaff so expands from the heat that we are obliged to strengthen the outer walls by bars and iron rods across the buildings, and the chaff is as sweet as hay.... It is astonishing the value of old chaff so made

as compared with new fresh cut." (We know our friend loves a joke; surely his barns are safe?) "Molasses (treacle)," says another, "has been strongly recommended to me." Another advises mixing up the chaff with cold water, and let it be twenty-four hours before using;" another, "of cutting a mixture of straw and hay with chaff, damping it with boiled linseed," afterwards adding meal, &c. Another says: "We put our lambs on colesed till the end of the year, and then into yards to eat mangolds." Our old friend and useful pioneer Mechi, says: "For our ewes, malt combs, bran, a little cake, and pea straw will carry them through the winter, especially with a pint or half a pint of Indian corn."

Well, after all, there appears to be no sufficient substitute for a lost root-crop, and the question recurs as strongly as ever, What is to be done? The great facts are still the same. Sheep cannot thrive upon less than from 10 lbs. to 11 lbs. of succulent food daily, and we can scarcely believe that they can be wintered in this country on dry fodder of any kind. The latter hypothesis we have yet to prove. The recommendations for the winter's management must of course be very general. We have been blessed with fine harvest weather, and every crop of hay and straw has been got in most satisfactorily. These will of course form our chief dependence. We have also a good potato crop, which may be made useful for cattle food, and set more of the little stocks of mangolds, turnips, &c., at liberty for the flock; and they may also, upon a very pressing emergency, be given to sheep with good results.

One of the hints I would give is in relation to cost. Every farmer has his chaff-cutter, nearly all have their turnip-cutters, many have pulpers, some have steaming apparatus, and a few have mills and crushers, &c. I want farmers to use, as far as compatible with economy, the means they have. It is the easiest thing in the world to spend money upon inadequate machinery and apparatus. It is equally easy to spend or throw away money upon artificial foods. The arable produce of a farm, as a main feature, should this year be sold to the stock. What is cheaper than wheat at £8 or £9 per ton, or beans, peas, barley, or oats at proportionate cost? taking care to administer all properly. The chaff-cutters must for this season be continually at work. Every particle of hay or straw designed for food should be cut into chaff, and if given out sparingly, and without waste, will form the chief dependence of the winter. If damped a little, and meal is strewn or scattered over it, the food is excellent for any stock. Those who have steaming apparatus would do well to steam a portion, and then to mix. Dry chaff, however, is very palatable, and in wet seasons soon gets damp enough in our field troughs. Unless great care is observed in steaming or damping chaff, it is as well to be used dry; but for the retention of the scattered meal, it is better to be damped. The meal may be made from any of our cereals, also Indian corn; but wheat-meal should not be given alone to any extent. A slight sprinkling of salt on the chaff would, however, correct any deleterious effects of the astringent wheat-meal. The flock should never be supplied with stale food, and the troughs must be kept clean and sweet. If the farmer is fortunate enough to possess a stock of mangolds, turnips, &c., however small, he should eke it out daily to his sheep, but more particularly to his lambs. All should pass through the pulper, but, failing that, use the turnip-cutter. I of course assume that the lamb flock at least must this winter be fed wholly with what is termed here *rough meal*. The aim, then, must be to make it as wholesome and nutritive as possible. The various additions of linseed-cake, cotton-cake, locust-beans, lentils, &c., and also coarse sugar, treacle, salt, &c., will all aid greatly in promoting safe progress in the sheep; the chief care being in their administration. And here, as in all other cases, the best judgment of the farmer must be his guide. The separation of the lamb flock should be adopted. The weaker lambs should be separated from the stronger ones, and placed upon advantageous ground. Great attention should also be given to ascertain that each animal should freely eat; if not, it must be removed, and by some means or other be tempted to take the food provided. Warmth will be a great desideratum this season. There are so few turnip fields to stock, that each flockmaster may choose the layer for his flock. It would, therefore, be folly to oblige them to lay on cold unhealthy lairage, particularly whilst living on scanty rations.

**WILLOW LEAVES AMONG FODDER.**—A distinguished agriculturist, of England, recommends the mixture of willow leaves in all kinds of fodder. Osier peelings may also be added with advantage. The mixture of the leaves and peelings above mentioned will be particularly useful in preventing the rot, a disease so prevalent among sheep in winter, from making its appearance.