

time of writing, about 1,000 acres have been contracted for, 500 acres of which are taken by four syndicates: one contracts for 200 acres, two for 100 acres each and two 50 acres each. The balance of the contract is with farmers on areas of one-half to five acres. If the company had intended working its full capacity, 250 tons a day, there would not have been the slightest difficulty in obtaining the desired quantity of roots. But it was, for the present, considered advisable to wait for the third campaign before attempting the handling of some 30,000 tons of roots. No effort will be made by the company this year to grow beets. It is considered advisable, as far as possible, to devote its entire time to working up the roots, which, in itself, is an undertaking requiring every possible attention. It must be said, however, that in some few years hence the conditions will be changed, and the objections now justly offered will no longer prevail.

The provincial government has offered for two years a bonus of seventy-five cents per ton on beets raised by the company. The contract with the farmer specifies that \$5 a ton of 2 000 pounds be paid for roots delivered at the factory, or \$4.50 f. o. b. cars, when the contracts are small, say from one to five acres; but to syndicates who contract to raise from fifty acres and upwards, \$550 delivered at factory, or \$5 f. o. b. cars. Our readers will readily understand that by the above arrangement the neighboring farmers are induced to grow roots, as they would with but little trouble realise fifty cents more for their beets, than those who contracted with the company at distances too great for transportation by horse and wagon. On the other hand, if money can be made in growing small areas in beets, it necessarily can when on a large scale, as the facility of working, by improved agricultural implements, is very much greater. The bonus of fifty cents per ton will encourage the growing of hundreds of acres. The West Farnham Company has promised us regular information regarding its workings, and we are convinced that, when published, this will be of interest to our readers.—*From The Sugar Beet, a Philadelphia journal.*

D. Landreth & Sons, seed growers and merchants, offer \$100 for the five best essays on Celery Culture, the sum to be divided among the authors of the five best articles, in the following proportions: \$40, \$25, \$20, \$10 and \$5. All the prize essays will be printed together in pamphlet form.

D. Landreth & Sons, seed growers and merchants, offer \$125 for the six best essays on Onion Culture, the sum to be divided among the authors of the six best articles, in the following proportions: \$40, \$35, \$20, \$15, \$10 and \$5. All the prize essays will be printed together in pamphlet form.

We shall be anxious to know the names of the winners of the prizes so liberally offered by Messrs Landreth and Sons, of Philadelphia, for the best essays on the cultivation of onions and celery. Unfortunately the programme did not arrive at our office till the July number of the Journal was printed; and, thus, we were prevented from giving our readers a chance of sharing in the competition.

Mr. Watson, late of Keillor, on "the rearing of calves."

The following is a contribution by Mr. William Watson, late of Keillor, which may be taken as a supplement to the paper which we extracted from the *Dundee Advertiser* the other week on "The Supply of Lean Cattle."—

If your object is beef, the calves should be dropped during the months of December, January, and February; for winter-reared calves always thrive best. This system, of course, can only be carried out on farms where there is good shelter; and it is to farmers so situated I particularly address myself. I shall draw attention first to hand or pail feeding. Nothing is more important or conducive to the successful

rearing of calves than proper house accommodation for the purpose. Calves should either be tied up or put in loose boxes when pail-fed—in boxes that hold only one calf each, to prevent them from sucking one another, which often does them much harm, as by swallowing the hair it unites with the curd in the stomach and forms balls which are indigestible. The calf-house should be thoroughly cleaned out daily by flushing with water, if possible, and sweeping until all bad smell is removed, and the calf should always be kept on clean dry litter. By the time your winter calves are ready for weaning spring grass is ready for eating, and the calves are big and strong enough to go well through the following winter. The cow also brings another calf at the same time next year. With late spring or summer calves it is very different. They are generally weak in winter, and never come to much—at all events, never acquire early maturity. Then late calves, while worth less than early ones, will generally cost more in rearing, as the early ones have the advantage of being weaned on early grass. In a milk dairy it is incumbent to have some of the cows calving every month of the year; but where the rearing of young stock is the prime object, the calves should not arrive later than February or beginning of March. The newly born calf should get its own dam's milk as long as it retains its medicinal qualities. After the first week the albumen in the milk decreases to about one-half, so it is well that the young calf should receive Nature's medicine. I observe that they always do better when so treated. The calf should have new milk for the first four weeks, taking care that it does not get too much, but gradually increasing the quantity until it reaches ten quarts, feeding three times a day—four quarts at night, four quarts in the morning, and two quarts at midday. I have been told that this is too much, but I believe in liberal feeding, for depend on it, it is what goes in at the mouth that makes the beast. Ten quarts form the maximum quantity to be given at four weeks old.

At the end of that time something else instead of new milk may be given. The best substitute I have ever found for new milk is boiled linseed. One pound of linseed, thoroughly boiled in one quart of water, makes a nice jelly. Withhold from the calf say a quart of milk each meal, and put instead half a pint of the linseed jelly; gradually reduce the milk and increase the jelly for another week, at the end of which time the calf will be about six weeks old. At this age it ought to be castrated. Skim milk may afterwards be given, two quarts of the skim milk and a pint of the jelly three times a day. I have tried porridges made with all kinds of meal, but have never found any of them to compare with the linseed (1). The quantity mentioned need never be increased, but a little dry linseed cake should be given as the calf gets older. It should be allowed hay; at four or five weeks old the calf will be eating both cake and hay. The treatment I have described applies when the calf is in the house and fed from the pail. If it be in the season, a few roots or some grass may be given, but the calf should have very little of these the first six weeks. At about eleven weeks old the milk and linseed jelly may be reduced gradually until the calf is weaned altogether, at the age of from fourteen to sixteen weeks. By this time it will eat enough to maintain its condition. High feeding need never be resorted to, but the greatest care should be taken to keep the animal always progressing. Never lose the calf-fat.

If now put out to grass, the pasture should be clean, and afford a full bite, and the calf should always be brought in at night to lie warm and dry, all the time continuing the linseed cake as before. I am of opinion that calves should never be put out to grass, especially on cold, damp land; a

(1) All the best breeders add pease-meal. A. R. J. F.