

weight per acre of five statute acres.—Fifteen guineas (or plate of like value) for the best crop of five acres of swedes, grown with their prepared manure only, upon any farm within the counties of Hereford, Monmouth, Gloucester, Surrey, Berks, Wilts, Hants, Dorset, Devon, Somerset, Brecknock, Radnor, Glamorgan, Carmarthen, and Pembroke, to Mr. J. Gare, Wales Farm, Queen Camel, Bath; 32 tons 16 cwt. Ten guineas (or plate of like value) for the second best crop, to Mr. R. T. Griffiths, The Hill, Eyton, Locominster; 26 tons 1 cwt. 1 qr. 4 lbs. Five guineas (or plate of like value) for the third best crop, to Mr. W. Rugman, Marlwood Farm, Thornbury, Gloucester; 23 tons 17 cwt. 3 qrs. 12 lbs. Ten guineas (or plate of like value) for the best crop of five acres of swedes, grown with their prepared manure only, upon any farm in England or Wales, to Mr. W. Roberts, Ripperston, Little Avon, Haverfordwest; 39 tons.—Fifteen guineas (or plate of like value) for the best crop of two acres of mangold wurtzel, grown with their prepared manure only, upon any farm in England or Wales, to Mr. E. C. Harding, Abbey Farm, Montacute, Somerset; 51 tons 5 cwt. 3 qrs. 4 lbs. Ten guineas (or plate of like value) for the second best crop, to Mr. D. R. Brake, Houndstone, Ycovil; 46 tons 4 cwt. Five guineas (or plate of like value) for the third best crop, to Mr. T. S. Corpe, Preston, Ycovil; 45 tons 6 cwt. 3 qrs. 20 lbs.

As we generally, here, calculate our root crops by the bushel, I may state that a bushel of turnips, or rather of swedes, weighs about 42 or 43 lbs.; so, the best crops of swedes would equal about 1,700 bushels an acre; and as to mangels, a difficult root to measure, I suppose Mr. Harding's crop of 51 tons 5 cwt. 3 qrs. 4 lbs. would be equal to 2,500 bushels an acre.

Now it must be remembered that in the case of these and other artificial manures, all the labour and expense of centing and spreading bulky matter are obviated; no drilling up of the land and splitting the drills to cover in the manure are required; but, when once the land is clean and sufficiently pulverised, the half-dozen bushels of manure are sown broadcast by hand, the harrows work it in, and the seed is sown in rows by the large three-row drill, the roller finishing the job.

And what may the cost per acre be? Nay, I should ask, what may the cost per bushel of the crop be? The cost of the manure as a general thing would be, at the most, £10 or \$50 a ton and 5 cwt. an acre would be, a very large dressing. Now, taking the swede-crop of 1,700 and \$12.10 as the cost of the fertiliser per acre, it is clear that each bushel would cost for manure rather less than $\frac{7}{10}$ of a cent! The mangels would cost still less, about half-a-cent a bushel! Really, these things are worth attending to.

Linseed.—The English Agricultural Gazette is one of the most conservative of papers, and yet it is compelled to confess that:

"As a substitute for the linseed cake it might be worth while trying the linseed itself if you have the power to grind it. The seed is usually worth more in proportion to its price for feeding purposes than the cake itself at ordinary market quotations. The oil in linseed is more assimilable in fattening than any other, so that you cannot very well leave it out of a ration altogether.—P. M."

The real reasons why English farmers in general prefer oil-cake to any other form of cattle- and sheep-food are, 1. that it has been in use for about a hundred years; 2. that it is handy to carry a-field to the sheep and out-lying cattle and 3. as Sam. Jonas told me: Why, if I, with my 250 bullocks and 2,000 or 3,000 sheep, all fattening, were to use your mixture of bean-meal and crushed linseed, my shepherds and stook-men would steal half of it for their pigs!

Salt for stock.—Is salt necessary for farm-stock in general? The usual argument in favour of salting cattle is that, as men cannot do without it, neither can our domestic animals. In England, where the air is full of salt from the surrounding sea, very little is supplied to horned cattle, though a lump of rock-salt is often to be seen in a little covered hut—about 2 feet square—in the fold when sheep are feeding off rape or turnips. At any rate the human argument is worth nothing, for the Maori, of New Zealand, and the Guachi, of South-America, never touch salt. I do not quote *Friday*, as being on my side, though my readers may remember Crusoe's eloquent description of his prisoner's horror at the first taste of the condiment.

A MONTREAL contemporary comments upon "the poor, craggy three and four-year-old steers and heifers" which have lately been put on board steamers there for British ports. It is stated that a great many of the cattle recently exported have been valued at 3½c. per lb., and would not be used by the best Canadian butchers, "and (we read) consequently they must be bought for store purposes on the other side." It is alleged that the reason of these poor grades being exported, instead of the choice fat cattle shipped in former years, is that Canada had not her usual quota of fat stock this year, and in order to fill space, lean store cattle are being exported. Some of the leading Canadian butchers regard this as a sign of a scarcity of good fat cattle during the coming winter, and this appears to be the general opinion. One incentive which induced breeders to part with their store cattle last winter was the unremunerative prices of fat cattle. Some authorities, however, maintain that the losses all fell upon shippers, not upon the breeders; but, be that as it may, the fact remains that Canada is exporting to Great Britain a larger proportion of poor cattle than usual. It is stated, moreover, that "late sales in the British markets have been very unsatisfactory to shippers."

I see by the Montreal market reports of yesterday, December 6th, that many *leanish* cattle were sold at less than 1½ cents a pound, live-weight. Of course, this cheapness is owing to the want of fodder, but if any one has, like my friend Séraphin Guévremont, five or six acres of good swedes and mangels, he might make a good thing out of buying a dozen so of these low-priced beasts. I remember Mr. Warnes, from whom I learned a good deal about feeding cattle, used always to pick up as many *leanish* bullocks as he could find—he knew the value of them as well as any dealer—and he always said that, although they took longer about it, they paid him better than those originally in first rate condition. After all, it is a question of *price* and *judgment*, and I should not recommend a farmer of limited experience in fattening stock to try the experiment.

Pace of churning.—Those farmers' wives and daughters who contended for the prizes for butter-making at the Dairy-men's meeting at Islington, seem to have varied very much as to their pace in turning the churn. In the contest for the championship, the first prize was awarded to Miss Fanny Holmes, of Ashlyns Hall, Berkhamstead, with Miss Keel, Bristol, second, and Mrs. Holmes, third, the other three competitors gaining a *vhc.* Miss Holmes was able to get her supply of cream cooled down to 56 deg. Fah, and commenced churning at eighty strokes per minute and afterwards at seventy. Butter came in thirty minutes in a beautifully granulated condition, and was shown round to the onlookers. Mrs. Holmes churned at the same rate as her daughter, while Miss Keel began more slowly but afterwards increased. Mr. Walker, the winner in the first day's competition, also churned fast and had butter in twenty minutes; while Mr. Coltam