

18 cwt. at 3 years  $3\frac{1}{2}$  months old. The oldest oxen increased only 15 lbs. per month in the Hereford breed, 17 lbs. per month in the Devon breed, 30 lbs. per month in the Short-horn breed, but 40 lbs. per month in the Sussex breed. The Sussex breed seem to have been uncommonly good throughout, for the younger class are as young, and the older classes are much younger than those of any other breed, and the rate of growth is the most rapid of them all. They are first rate beasts of labour, but huge feeders.

The weight of some of the sheep was extraordinary, viz: Mr. Close's pen of 3 Lincoln ewes weighed 1109 pounds; Mr. Jacob's Cotswolds next, but 33 lbs. less.

Mr. Morrison, as usual, beat every one in the Hampshire Down classes; his 3 wethers weighing 878 lbs., and his lambs, 9 months and 1 week old, no less than 674 lbs.

Shropshire Downs were not good; Lord Chesham's three scaling 4 lbs. less than the first prize South Downs.

It is to be noted that, in the Cross-bred cattle classes, five-sixths were Shorthorn and Scotch Polled mixed.

I have just heard that a 15 months old cross-bred Short-horn and country heifer was sold at Thornbury market, Gloucestershire, by one of my brother's tenants for £30 15—now, supposing the animal to have brought the top price of 6s. per stone of 8 lbs., she must have weighed 630 lbs. of meat, which gives a monthly rate of increase of 42 lbs. from birth; this beats even the Sussex heasts mentioned above.

ARTHUR R. JENNER FUST.

### THE CHAMPION POTATO.

There is no doubt at all that a potato has been invented which unites in itself all the desirable qualities a potato can possess. The *Champion*, as this new sort is called, seems to be an enormous cropper, first quality in flavour and appearance, and hardly suffers at all from the disease. The English Agricultural Journals are full of its praises, not purchased puffs, but honest farmers' praises. One fault, and one only, it seems to have, the haulm grows from 4 feet to 6 feet long on richly manured soils, and this indicates wide planting some even recommending 40 inches between the rows; I should like to try alternate rows, with 27 inches drills, of this kind and Early Rose.

Will not some of our seedsmen import this sort in time for spring setting. I don't believe there is any humbug about it at all, and I see they are quoted in the London markets at from 20s. to 25s. per ton higher than any other sorts. Kerr and Frothingham, Dumfries - N. B. will take orders for them, but I dare say Mr. Evans, of McGill Street, will be in the field before May. The Early Rose has been a most successful introduction and I have, though of a most sceptical turn of mind, immense faith in this new acquisition.

I append extracts from *The Scotsman* on the Scotch harvest of 1879.

Mid-Lothian—Potatoes, mostly Regents, not half an average crop, money return less than that of 1878, by £10 per acre.

Fife-shire—Potatoes (large proportion of *Champions*) small crop in quantity, but sound; money return less than that of 1879 by £4 per acre.

Dumfries, Kirkcudbright, and Wigton, produce of potatoes no larger than in 1877, except where a few *Champions* have been planted.

In Perthshire, and Forfarshire, farmers are being greatly benefited by their sales of *Champion* potatoes, the profits on which will do much to counterbalance the bad yield of the other crops, fields of this variety having in many cases sold for £25 to £35 per acre, while Regents in adjoining fields have only brought £8 to £12.—A. R. J. F.

**Potatoe Sets.**—We have, for many years, planted potatoe sets with one eye each, and always with favorable results. Now that seed is scarce we would advise all our readers to do likewise. They will save seed and obtain a more uniform crop of good sized potatoes. We plant at from 27 to 36 inches between the rows, according to length of bine: the longer the bine, the greater the distance between the rows. We plant the cut sets from 9 to 10 inches apart, putting the eye invariably downwards, in light soils pressing it down into the manure which is spread in the drills as the planting proceeds, so that it may be spread and covered in the shortest possible time. In dry land and dry weather, manure dries up in a remarkably short time, and we have known the crop to be much reduced when, by accident, the drills have remained open for a few hours only after manure had been spread.

We have found no inconvenience from the cutting of seed potatoes three or four days before planting provided the sets be covered with plaster, wood ashes, or slacked lime; but the heap of cut sets should never exceed 18 inches in height. In cutting the potatoes, the root end should be removed and thrown aside; than each eye is cut until the crown eyes are reached. Each one of these, although quite small, is sure to grow. These might be planted separately, as they grow quicker and give an earlier crop.

### HEREFORD.

Mr. Edwards' cow Leonora, whose portrait we give in this number of the Journal, has had a career of unexampled success in the showyard. At Birmingham she won £100 as the best Hereford, and, at the Smithfield Club show, the first prize for Hereford cows; besides, last year 1879, as a breeding animal, sweeping off all the prizes at the principal exhibitions. She is supposed to be the most perfect model of her race ever bred; and her triumphs will, probably extend over another year, as she shows no signs of falling off.

### AN ITALIAN BULL.

As Virgil has it;

*Optima torvi*

*Forma Bovis, cui turpe caput, cui plurima cervix,*

*Et crurum tenuis a mento palearia pendent;*

*Tum longo nullus lateri modus; omnia magna,*

*Pes etiam; et camur's hirtæ sub cornibus aures.*

Which, being interpreted, means;

The Bull

With coarse, rough neck, and shaggy, virile head;

His ample dew-lap, ponderous, sweeps the ground;

Long sided; double-jointed; feet, too, large;

His mossy ears and huge-curved horns outspring

From either side the front, and awe the herd.

From such a sire derived, the well-born race

Will dread nor winter's frost, nor summer's heat.

A. R. J. F.

### VETERINARY DEPARTMENT.

*Under the direction of D. McEachran, F. R. C. V. S., Principal of the Montreal Veterinary College, and Inspector of Stock for the Canadian Government.*

#### Feeding Cattle.

As remarked in last issue, certain knowledge of the nutritive value of different kinds of food is of great importance to the feeder of stock, to enable him economically to select and use that food which will give the most return in the form of flesh. To enable our readers to judge at a glance of the relative values, I take the liberty of transferring entire the following table from the December number of the National Live Stock Journal of Chicago, and would refer our readers to a valuable series of articles in that Journal on Feeding Cattle by "Alimentation."