

phates. Many of the experimental crops yielded from 2240 lbs. to 2464 lbs. an acre, but the quality lay with the hops that had received heavy dressings of superphosphates.

Early lambs.—No doubt some ewes, here and there in the province, are on the point of lambing. Generally speaking, the lambs one sees hanging up in the Montreal butchers' shops in early March are too young and too soft. No lamb less than ten weeks old is fit for the best tables, and unless they get poase for the last 3 weeks or so, in a trough huddled off from the ewe-shed, their flesh is sure to be "pappy," like the flesh of the young fawn and the Canada hare. The prices paid for early lambs here are so liberal that the growers could afford to take a little trouble to bring them to perfection.

Mangels are good food for suckling ewes, but care should be taken not to give too many to rams and wethers, as they are apt to produce inflammation of the urinary passage. Our Farm-tutor, Wm. Rigdon, lost three or four of his best Southdown show rams while we were with him. A curious crystal like substance formed in the passage, and the poor things died from obstruction of the urine. Rigdon always attributed this to his shepherd having given the rams too many mangels, a food of which he had a very high opinion of for summer-feeding, and for which he used to pay high prices when his own stock of this root was exhausted, though, at the same time, his farm was overflowing with clover, tares, crimson-clover, &c.

Mangels, too, we have heard from a large farmer in England, are apt to cause sows to abort. The farmer in question, John Cottingham, of Chesterford, Essex, was a man possessed of no small scientific acquirements, in addition to being a thoroughly practical man.

Sheep in New-England.—Mr. Scarff, of Vermont, stated lately at a meeting of farmers in that State, that he was keeping a flock of 200 sheep in connection with his dairy. "He thought that keeping sheep on the run down or abandoned farms in Vermont would be profitable." Yes, we should think so, too. In some places, there are really good farms to be bought for from \$500 to \$1000, with decent buildings, and we cannot conceive an easier way of making money than by buying half a dozen of these, laying them together, and stocking them with sheep.

Sales of Suffolk-downs.—Lord Ellesmere has been for some time engaged in improving his flock of Suffolk-down sheep, and with very great success, as will be apparent by the prices his stock sold for this Christmas-tide.

The Suffolks, like the Shropshire, are not of pure origin, but spring from a hardy breed, originally found on the heaths between Suffolk and Norfolk, from which, after a cross with the true Downs, came the present Suffolks. They are rather long in the leg, with black faces, and their mutton is of excellent quality, so good, in fact, that Allen a butcher in Mount Street, Grosvenor Square, London, owed his reputation to his always having a lot of these sheep hanging—with their black heads and legs on—outside his shop, whence we have eaten many a saddle of their mutton.

Lord Ellesmere, who is President this year of the Smithfield Club, was expected to win the championship of

the short-wooled classes, as his pen of 3 wethers weighed 949 lbs. = 316 lbs. each; but unfortunately, the restrictions upon the removal of stock under the orders of the Board of Agriculture prevented their exhibition, at the show, and he was obliged to sell them at home by private sale.

Well, they sold at pretty fair prices: thirteen shearing wethers, averaged \$22.00 each. Eleven wether lambs, \$16.00, each. Eight ewes, \$20.00, each, and thirty wether lambs, from the grass, \$11.00 each.

Grass-land.—It seems to be now settled, in England, though not in the States, that it is best to cut meadows just before the grasses come into full bloom, as the hay produced thereby is much more nutritive, and, further, the pasture or hay in the following seasons will be much stronger. As to manures for grass, we have long known, from Lawes' experiments, that nitrate of soda greatly encourages the growth of the grasses but that the clovers do not benefit much by its application, the luxuriance of the grasses overpowering them. Superphosphates and potash, on ordinary soils, produce good results, as does basic-slag on lowlying pastures. Young stock and dairy-cows where the whole milk is sold or cheese made, injure grazing land, but fattening stock cause hardly any deterioration to it, especially if cake or grain, or both, be given to the cattle while grazing.

Drills and grubbers.—Being asked to enquire of the best informed English authorities as to the steerage drills and pair-horse grubbers most in favour in that country, we received the following from the Editor of *Agricultural Gazette*:

Questions and Answers.—GENERAL.—**Drill.**—Some forty years ago there used to be a very handy drill made called the "Woburn." It was light work for a pair of horses; the steerage was simple, and, the skates being removed, hoes could take their place; it served the double purpose of drill and horse-hoe beautifully. People cannot afford expensive implements here, this, if I recollect, cost £20. Can you tell me if any such implement is to be had now; and, if it is still made, where I can write for one? Another tool, much wanted here, is a really good pair-horse grubber. Coleman's drag was my favourite when farming in England. Is it still made? If you will kindly answer these questions, you will oblige.—A. R. J. F., (Montreal).—[Perhaps Dening and Co. s, Chard, Somerset, 13-row drill might suit, quoted £27, Adams and Co. s, Cattle Market Road, Northampton, two-horse drill, with steerage behind, quoted £29; Hornsby's, Grantham, "Hoosier" drill, light and strong, 13-coulter, quoted £23, Gower and Son's, Market Drayton, Salop, 17-rows "Anglo-Canadian," quoted £32. Wm. Elder's, Tweedside Implement Works, Berwick-on-Tweed, two-horse grubber, five tines, quoted £3 and £3 10s. We are under the impression that American and Canadian drills are lighter and cover more ground than English drills.]

We have a very high opinion of the Canadian drills, but we have never yet seen one with a steerage, either fore or aft. Is there such a thing made here? If sugar-beets are to continue to be grown, as we firmly believe they are, it is absolutely necessary that a steerage-drill be employed to sow the seed at narrower intervals than can

be secured by the old raised drills—28 inches apart—and a horse-hoe of the same width as the drill, to take three rows at a time, is also peremptorily demanded; for, no matter how carefully a man may drive, the horses will swerve from the straight line occasionally; whereas with a steerage drill and a horse-hoe of the same width, we ourselves have hoed acres upon acres of wheat, barley, and oats, without the slightest injury to the crop. The Woburn drill, mentioned above, was the implement used.

Judges and judging.—We often, when we see the cool acceptance of the office of Judge of a class of exhibits with which the acceptor has but a very shallow acquaintance, think of our dear old farm tutor, Wm. Rigdon, who, at the Norwich Exhibition of 1852, refused to judge the long-wooled classes of sheep, because, as he said, "I know a Southdown from its ears to its hoofs; but I never bred Leicesters or Down-Leicester crosses." The following article from the "Nor' West Farmer" on this subject is worthy of attention. We remember some 15 years ago being one of a trio of Judges of cattle, Jerseys included, one of us had never seen a Jersey, and the other had seen one!

As there is to be an Exhibition at Mile-End this summer, (Sept. 13th to 21st) we do hope that there will be a real expert employed to judge the Guernseys and another for the Jerseys; for the type of the two breeds is quite distinct.

Judges and judging.—The Scottish Farmer has the following excellent article on this subject, which *The Nor' West Farmer* heartily endorses: "Among the many factors necessary to the successful carrying out of any agricultural show, the most important is the procuring of thoroughly competent men to act as judges. There are probably hundreds who consider themselves such in the different classes of stock which they favor; but, in reality, the number of really competent men is but small. Many a man is fairly good and reliable judge, provided he has plenty of time to arrive at his decision, and the number of animals before him is not too large; but such an one may become absolutely bewildered with a large class, and when a decision must be arrived at in the limited time at the disposal of the judges at any of our important shows. It is comparatively easy to award positions when animals of outstanding merit are paraded; but when the animals are of nearly equal merit, and yet each possessing different excellences, it requires great thought and judgment to arrive at a just decision; and but few are really trustworthy under such a crucial test. Many a man would be trustworthy if he could just have the animals quietly placed before him in his own yard; but having to act in the presence of hundreds, and sometimes thousands, of intelligent on lookers and keen partisans, he becomes nervous, and fails often from that cause alone.

"Our object in drawing attention to this subject is to bespeak a little more kindly and patient treatment on the part of exhibitors and their friends for the gentlemen who, without payment and at the cost of great anxiety, consent to act on such occasions. We venture to assert that there are no more anxious persons on the ground than the judges, and if occasionally they do seem to err a little in their awards, it is well to think as charitably as possible, and attribute

the decisions to their taste rather than a wilful perversion and abuse of power. It is well to bear in mind that there can never be a rigid standard of excellencies for any class of animals, as witness the great battle of the Bates and Booth types of Shorthorns, and still later of the Scottish type of the same breed. Further, exhibitors as a rule are not in a favourable position to allow them to judge calmly and justly. Bearing in mind the very great care now exercised in the selection of judges for all the principal shows, it is but rarely that an incompetent man is called to act, and more rarely still do such give a palpably dishonest decision from sinister motives. Honest, candid criticism is quite allowable—nay, desirable—but we have occasionally heard bitter remarks made which, we plead, might well have been spared. Our sympathies are wholly with the system of single judges, and we trust the time is not far distant when no other system will be allowed in any showyard."

Clover-seed.—It appears from a recent account in an English paper that among the seeds of clover sent to England the seeds of weeds are so largely present that the American Consul at Newcastle-on-Tyne has called the attention of the State Department at Washington to the fact.

The article referred to, which is headed "Seeds and Weeds," declares that as very large quantities of American clover seed find their way to Europe attention ought to be very forcibly directed to the results of a very exhaustive investigation made recently by the Ontario Agricultural station, which confirms those of several other experiments in the United States. To say nothing of Canadian exports, the United States exported in the first nine months of 1894 over thirteen million pounds of clover seed, at a value of about ten cents per pounds. This, and also much of what is sold generally in North America, is described as "one of the most impure seeds now on the market." The examination shows that in cleaned alsike there were more than nine per cent of weed seeds, chiefly sorrel, while in red clover there were six percent. In the case of alsike this means that in one ounce of seeds and in the six pounds used for an acre of land no less than 180 weed seeds and the six pounds used for an acre of land no less than 700,000 weed seeds. This is not the whole exposure, for it was found that some of the more unscrupulous seedmen make a practice of grinding up quartz, drying, sifting, and dyeing it, and then mixing it with clover seed. Nearly all examiners that have looked into the matter join in warning American and Canadian farmers to beware of low-priced seeds, to deal with none but responsible and respectable merchants and to have samples of their seeds tested and examined at an experiment station before sowing. With the exports from America, indicated above, the farmers of the United Kingdom are warned that they ought to be equally careful in their purchases of clover or any other seeds from America.

The yield of Cereals.—Last week we printed the preliminary Agricultural Produce Statistics of Great Britain for 1894, issued by the Board of Agriculture, somewhat earlier than usual. The yield of wheat is put at 30.69 bushels an acre, which is less than the estimates made in some quarters just after harvest, but very close to our own early reckoning. The yield