

stir among the clods and roots, but we fear the draft is heavy. Iron ploughs of the ordinary shape were exhibited by Fletcher of Beverley, Mahaffy, of Brampton, Alexander, of Belleville, and others.

There was a very good variety of cultivators, both double and single. A. C. Bruce, of Guelph, showed an effective one for two horses. Eakin & Cash, of Markham, had one on an oscillating principle which is of very superior workmanship. J. Scott & Co., of Dundas exhibited two styles one furnished with a seat. T. & J. Morgan, of Markham, showed a combined grubber and cultivator by taking off the shovel-teeth you have a set of grubbers; this implement is admirably made and beautifully finished. J. & S. Noxon, of Ingersoll also had an excellent two-horse cultivator. So also had J. Grindley, of Fergus & Co.; we especially like the way the teeth of this implement are braced. T. Webster, of Berlin, showed a revolving cultivator, and F. J. Payne, of Southwold, a cheap cultivator that yet looks as though it might do effective service. I. Westcott had an all-iron cultivator, with rear handles like those of a plough. One-horse cultivators were pretty numerous also. J. Norrish, of Eden Mills. A. Harris & Co., of Beamsville, George Bryce, of Mohawk, Thos. Muirhead, of Paris, and T. Westcott, exhibited these. Some of them are very light, and yet effective soil-stirrers.

Rollers for rolling the land were shown by three manufacturers. We should give the preference to a double roller, one in advance of the other, made by Eakin & Cash, of Markham. It leaves no ground untouched, works well, turns easily, and is in our view an excellent style of clod-breaker and surface-smoother. There is no very varied assortment of straw-cutters, most of them being made on the wheel-knife principle. An excellent one for horse or hand-power was shown by J. Watson, of Ayr. Maxwell & Whitelaw, of Paris, showed a very excellent one to go by horse-power. McLaren, of Lowville, Sawyer, of Hamilton, and others had straw-cutters on the ground. James Bully, of Windsor, showed a combined straw and root-cutter. D. Darvill, of London, showed another—and in our view a better one. Turnip-slicers of various kinds were to be seen. The choking of cattle with uncut roots is now an offence against humanity, for which there is no excuse. Watson, of Ayr, McLaren, of Lowville, and Maxwell & Whitelaw, of Paris, competed in this article. Implements for the dairy were not lacking. J. Amor & Sons, of Hamilton, showed a curd-mill, which seems to work well. They had also two styles of cheese-presses. F. S. Clement, of Cobourg, had another style of cheese press. Two kinds of cheese-vats were on exhibition—the "Union Dairyman," made by O. Neill & Co., of Utica, N. Y., and "Ralph's Oneida Vat." These are intended for cheese-makers on a large scale. We give the preference to Ralph's vat, and think this is the general opinion among experienced dairymen. Fanning Mills were almost *non est*. Only two competitors exhibited these, Scott & Co., of Dundas, and Wilson of Richmond Hill. In the mill made by Wilson the screens work across the mill, instead of lengthwise.

A few styles of fencing were shown. W. & T. Walker, of Brampton, had some wire fence, intended for garden fence, which is very neat and pretty. The irrepressible S. Hall, of this city, was on hand as usual with his "portable straight fence," which is by no means to be despised. H. Lutz, of Saltfleet, showed another style of portable field fence, which was of simple construction. Yet another was shown by J. B. Graery, of Weston. R. Lewis, of Melbourne, had a section of ornamental fence with a pair of roller gates, which have a tasteful appearance, and work very satisfactorily. He had also commoner fencing for ordinary uses. S. Washburn, of St. George, had a model of a nice portable sheep-fence. Macfarlane Brothers, of Etobicoke, exhibited a very ingeniously contrived self-acting gate, by the help of which the waggon or carriage acts as porter, and you are saved the expense of a gate-keeper and the trouble of dismounting. If it only works on the road as well as it did on the Exhibition ground, it will prove a great convenience. Cider mills and presses were exhibited by A. Harris & Son, Beamsville, N. M. Samson, of St. Catharines, Palmer & Groat of Grimsby, and J. Scott & Co. of Dundas. The latter exhibited two, a small iron hand-mill, and a large mill of wood and iron combined. The show of churns was small. Condon Lewis, of Durham, had one which is worked by an ingenious plan of driving the common dash by means of a windlass. A. O. Dell, of Bowmanville, had one which agitates the cream with a horizontal revolving dash. Edward Lawson, of this city, had a double-dash rotary churn. Only one washing-machine and one clothes-wringer attracted our notice. If there were others we failed to see them. H. A. Coombs of Stoney Creek, and W. H. Childs & Co. of Hamilton, were the exhibitors. Isaac Moyer, of Clinton, had a very noisy but apparently effective meat chopper, consisting of three hatchets, which work with great regularity and force. They would soon make sausage-meat of an unlucky dog, cat, or

porker. Lawn-mowers, from the manufactory of A. Shanks & Son, Arbroath, Scotland, were shown, we presume, by J. Fleming & Co. J. Norrish, of Eden Mills, exhibited some nice ox-yokes. Grain cradles, both common and muley, were to be seen. The chief makers are Baker, of Waterdown, Smale & Brock, of Lynden, and Howell, of Ancaster. But alas! "Othello's occupation's gone." The reaping machines have rendered grain-cradling obsolete. Thos. Bryson, Jr., of London, exhibited some well-made half-muley cradles, and a splendid lot of smaller implements, such as straw forks, hay rakes, scythe snathes, and thistle extractor. He had also a machine for harvesting pease, but of this we do not think much, believing a common scythe to be far better. A splendid assortment of scythes, hoes, and forks came from the manufactory of A. S. Whiting & Co., of Osnawa, which we visited not long since, and after seeing the establishment, we are not surprised at the excellent work it has sent forth. We must not omit to mention a model of a potato-digger shown by W. W. Kitchen, of Grimsby. Success to it, for potato digging by hand is weary work! An assortment of drain tiles and tile bordering for gardens, was shown by E. Brown, of Nelson. W. Lindsay, of Newcastle, had a tile-making machine, which will make tiles of all sizes from two to eight inches in bore. It is driven by hand, requires two men to work it, and is capable, if properly managed, of turning out 10,000 tiles per day. Of course the clay must be previously ground. J. A. Lafler, of Albion, N. Y., showed a working model of a brick-making machine, which combines a clay-mill and a brick-mould, and will make either common or pressed brick, by changing the clod-crusher and moulds, which can be done in fifteen minutes. It will turn out 12,000 pressed brick, or 30,000 common brick, per day. C. Jones, of Bronte, had a clothes-drier on a new and simple principle, for which the ladies ought to be, and doubtless, will be, grateful: i. e. if they can coax their husbands and fathers to buy it for them. G. Huntington, of Norwich, showed a machine for "upsetting" iron, especially waggon-tire—which obviates the necessity of cutting and welding. Mair, Inglis & Co., of Guelph, had a shingle-maker, and machines for cutting and planing flour barrel-heads, which work almost magically.

Strange to say, bee-hives were not included in the prize list! This was undoubtedly an oversight, and is not likely to occur again. Happily, much interest is being awakened all over the country in bee-keeping, and we were glad to see Messrs. Thomas, of Brooklyn, and Scott, of Yorkville, on hand with their hives. Both are made on a similar principle, that of the "moveable-comb observing hive." These hives attracted a great deal of attention, especially those of Messrs. Thomas, from the fact that one of them was inhabited, and from time to time the proprietor showed the conveniences of the hive and the quietness of the bees, by opening and exposing the comb, frames, and busy workers. There would be a general rush into bee-keeping if people were not afraid of being stung. By taking certain little precautions this danger may be completely obviated, and the most absolute control maintained over the "little busy bee." The Messrs. Thomas demonstrated this to the satisfaction of all who witnessed their exhibition of hives and bees.

FLAX.

THE number of samples of flax exhibited was not so great as we should have liked to have seen, or as might have been reasonably anticipated, considering the increased attention which has been given to the subject of flax culture during the past year. The samples shown, however, are much superior to those at any previous Exhibition, and were examined with a great deal of interest, and with many enquiries as to the best modes of culture. Col. Mitchell, of Norval, carried the Canada Company's prize of \$24 for the best 112 lbs. of flax, scutched, and of Canadian growth. Mr. John Rea, of Yarmouth, county of Elgin, received the second prize of \$16, given by the Association. The samples shown by Messrs. Black & Forrester, St. Mary's, fell short of the required quantity, (412 lbs.) but were very meritorious, exhibiting the flax in its different stages—the raw state, steeped, and scutched, and had an extra prize awarded for them. Messrs. Black & Forrester have started a flax mill, and have made arrangements with farmers in their neighbourhood for having 800 acres put under this crop next season. Messrs. Perine & Co., of Waterloo, had no less than 2,000 acres under flax this year, and it is matter for regret that they did not bring samples to the Exhibition. The flax shown by Col. Mitchell was very fine, much better than that sent to the Provincial Fair last year. Mr. Rea's was also of excellent quality, and would have stood a fair chance of taking the first prize against the Norval sample, had it been as well handled after being pulled.

Much interest was taken in the samples of flax brought from Europe, by Mr. John A. Donaldson, a gentleman to whom, as our readers are aware, a great deal of credit is due for his zealous efforts to impress on the mind of the agricultural community the adaptability of this plant for culture in Canada. The object of exhibiting these samples was to show to what an extent the value of the article can be increased, when proper care is taken in its preparation. The value of European flax, properly prepared according to the most approved methods, runs as high as £175 a ton, while a specimen of flax, grown and scutched in Canada, and recently sent to Ireland by Mr. Donaldson, sold there for only £75 per ton. The difference in the modes of handling the product after it is grown, makes all this difference in value—a fact of which all interested would do well to make a note.

The first prize for the best bushel of flax-seed was awarded to Mr. John Clark, Chingacousy. Several farmers present at the Exhibition, who have been growing flax, stated that they had got as much as 16 bushels to the acre—a large yield. There is little doubt of a good market being found for all the flax-seed that can be produced. We are glad to learn that Messrs. Gooderham & Worts, of this city, have their mill for the manufacture of oil-cake and linseed oil almost ready to go into operation. Messrs. Elliot, Hunt & Co. are also opening an oil mill at Preston, as well as a flax-mill, and a manufactory for spinning and weaving the products of the mill. It is worthy of mention, also, that Mr. Walter Arnold, of St. Catharines, has now a factory in operation for cottonizing flax, using in this process not only the flax itself, but the tow separated from it in course of preparation. Capital to the amount of \$20,000 is already invested in this factory, and we hear with pleasure that a ready sale is being found for its products. No specimen of this cottonized flax is exhibited at the present Fair. Of hemp there were only two entries, and the samples shown were not sufficiently up to the mark to obtain prizes. Mr. H. Girouard, of Hamilton, got the first prize for the best bushel of hemp seed.

FRUIT.

The display of fruit this year was good, equalling, if not excelling, the show of any year since the Exhibition of 1860. The season of 1860 was remarkably good for fruit, the peaches especially were magnificent, and the show of fruit generally was very fine. This year the peaches in almost every section of Canada have been a total failure, and, with the exception of a few plates of very ordinary looking specimens, we missed them entirely from the present Exhibition. For other fruits the season has not been favourable. Winter's cold and summer's drouth have both been against them. Still, as we have said, the display was at least as good as any we have had since 1860. A display of apples and pears was made, which, considering the unfavourable circumstances under which they were grown, proves conclusively that crops of these fruits may be expected with tolerable certainty from year to year. The show of grapes was the largest we have ever had at any Provincial Fair, and of a quality which afforded very gratifying evidence that increasing attention is being paid to the culture of the vine, for which we are now finding out that the climate and soil of Canada are well adapted. The experience of our vine cultivators fully bears out the conclusion arrived at by a Committee of the House of Assembly last session, that, by proper open-air culture, a most abundant grape-harvest, of the best quality, could be gathered in Canada, and we trust that year by year the natural advantages of our country in this respect will be turned to increasing account. A more full and particular account of the fruit may be expected in our next issue.

FLOWERS.

The display of flowers was fair, although the season for holding the Show is too late to allow the horticulturist a fair opportunity of exhibiting the triumphs of his taste and skill. The fine collection of green-house plants, occupying a large portion of the central stand, and exhibited by Mr. Thomas Buchanan, Hamilton, who received the first prize for them, was much admired. The collection shown by Mr. Hirschfelder, of Toronto, which carried the 2nd prize, embraced also a number of very handsome plants.

GARDEN VEGETABLES, FIELD ROOTS, ETC.

The show of garden vegetables was rather small, but embraced very many superior samples. The show of field roots, with the exception of potatoes—of which there was a very large and creditable display—was limited in amount, and the samples were for the most part particularly remarkable for their excellence. We are loath to attribute the smallness of the display of roots to neglect of these important crops, and would rather account for it by the nature