s and experiments made have been attended with a most encouraging degree of success. were three steam engines on the grounds ed to agricultural purposes, from Messrs. Land, Port Hope; Beckett & Co., Toronto and Ganson & Co., Dundas. The latter a six inch cylinder with an eleven inch e. The boiler is so constructed that a heating surface is secured, and a saving of thereby effected. The weight of the machine nearly two tons, and its price $650. engines appear to be strongly made, and adapted to put into operation thrashing ines, chaff and root cutters, and other implements or machines. The plough and cultivator have not, as yet, been propelled by steam Canada, but will probably be so ere long on larger and better cleared farms in the more cleared districts. The number of fanning was large, several of them evincing much and ingenuity in their construction. A the makers may be mentioned Mr Stephens of Port Hope; whose machines have special contrivances for the more effectual ing of the seed of all impurities. Mr. ris's (Beamsville) machine for cleaning does its work expeditiously and effectually root cutters, Mr. Doner's of Cashel, is of simple construction, and the turnip is crushed being forced through a narrow passage, In winter when the roots are hard ches fall into pieces small enough for feeding sheep Mr. Leigh, of Aurora, has a similar machine, but in order to cut the turnip into slices it has a number of little upright knives the cylinder, which divide the pieces just cut the larger knife. Messrs. Maxwell and Shaw, of Paris, showed a machine that cut either coarse or fine by turning different ways, so as to reduce the roots for the consumption of sheep or cattle. The same firm exhibited a very effective straw cutter adapted to hand, horse or steam power.

It may mention that the churns were numerous and several of them evinced much ingenuity of construction. In these articles too, much improvement has been made of late years. Among the exhibiters were Mr. Kinney, of Brantford; Mr. Hummill, of Cornwall, who had a self-acting churn; Mr. E. Lawson, Toronto; Mr. McLean, Scotland, C. W.; Dun & Jones, do; Mr. Thomas Head, Copetown.

There were several excellent thrashing machines on exhibition, some of them of very elaborate workmanship. Mr. J. Hall, of Oshawa, had a clover thrashing machine which thrashes the seed directly from the straw by once through. He also exhibited a grain cleaning machine and fanning mill combined, very elaboratety got up. Mr. Jas. Milne, of Scarboro', showed an ingeniously contrived machine, combining, it is claimed, several improvements, price $190, four horses can work it and thrash 300 bushels a day. The competition in reapers and mowers was not great, but the specimens shown were good. Messrs. Patterson, of Belleville, had a combined machine of superior workmanship and construction. The driver without changing his seat, can elevate the cutting bar a distance of five inches, so as to mow at that or any intermediate distance from the surface. In case of stones or inequalities the cutting apparatus can be readily elevated, price $155. Messrs. Savage, of Hamilton, exhibited a machine showing much ingenuity and some novelty, and is well thought of by practical men. Mr. Lawrence, of Palermo, has affixed to his very excellent machine a spring lever, by which he lets the finger board readily down after it has been raised. These indespensible machines are now made in the Province of equal excellence, including efficiency of action, durability and cost, with any produced by American manufacturers. Among the novelties connected with agricultural machinery may be mentioned the exhibition of a drain tile machine manufactured by Hamilton & Sons of Toronto. This is the first specimen we have seen of Canada manufacture, and judging from its appearance it promises to be an efficient production, adapted by a series of dies to tiles and pipes of different sizes. As draining is so essential to every plan of agricultural improvement on most soils it is devoutly to be hoped that this Canadian machine will in practice meet the wants of the farmers.

THE FOREST CULTIVATOR.

This is a new Implement exhibited for the first time at the late Provincial Agricultural Exhibition. Its object is the better and more easily cultivating newly cleared land, while it is still encumbered with stumps and roots. All who have had to do with clearing land, (and which of our readers has not?) know the difficulty of getting a sufficient tilth of loose earth on the surface of the forest (when newly cleared) so as safely and evenly to bury the seed. The only implement to be depended on is the drag; this does well enough provided rain follows immediately after the grain is sown; but if a long spell of dry weather intervenes, as was the case in this Spring of 1862, the crop comes up unevenly, and at harvest there appear on the ground two crops intermingled one ripe and the other green. Again, all farmers are well aware of the all but impossibility of getting in a second crop of grain, after the first crop. The land being virgin soil, and very rich, would of course bear several grain crops following with comparatively little injury; but the drags will not at all times pull up the old stubble, and the weeds of the previous year, and to plough with an ordinary plough is impossible. The farmer is, therefore, obliged to seed down with his first crop, and allow the land to remain in pasture until the roots are sufficiently rotten to admit the plough, and even then constant difficulties occur.

It is to meet all these cases that the Forest