Horse, Colt or Filly, dropped in 1851.—1st prize, William Cherry, Markham; 2d, John Cox, Markham, 3d, Ashton Fletcher, Whitchurch.

HORNED CATTLE.

Prize for best aged Bull, Jacob Smith, of Vaughan; Ist prize for Bull under three years old, Nathaniel Davis, of York; 2d, Nathaniel Davis.

Milch Cows.—1st prize, Nathaniel Davis, of York; 2d, George Priest, of Vaughan.

Heifers, 2 years old and under.—1st prize, George Preist, Vaughan; 2d, Nathaniel Davis, York.

Prize for best pair of Fat Cattle.-George Ratcliff, of York.

SWINE.

1st prize for best Boar, George P. Dickson; 2d, Jacob Kirts, of York.

Brood Sow.—1st prize, Christopher Smith, of Whitchurch; 2d, Amos Wright.

DAIRY PRODUCE.

1st prize, best 10 lbs. butter, Robert McNair, of Vaughan; 2d, R. C. Gapper, Markham.

FARMING IMPLEMENTS.

Prize for best Fanning Mill, Lewis Hooke, Markham; prize for best Iron-headed Plough, Edmund Bennets, Chinguacousy; prize for 1st best Wooden Plough, William Matthewson, Vaughan; prize for best Ribbing Plough, W. G. Hingston, Markham; prize for best Washing Machine, Thomas Shaw, Vaughan."-Colonist.

HORTICULTURE.

THE SCIENCE AND PRINCIPLES OF GAR-DENING.

NO. VI.

PRINCIPLES OF CULTIVATION.

It is of little use to know of what plants consist, and how they live, and to what influences they are subjected, if the means by which this knowledge is to be generally acted upon and applied be not also understood. The former may be the basis, the latter must be the superstructure. And although sundry processes may already have been incidentallynoticed or explained, they either require fuller elucidation or putting in different lights.

1.—DRAINING.

This may almost be called a modern practice, for it is but lately that it has come at all conspicuously into vogue. It is, however, one of the most decided advances which recent art has made, and its advantages will be incalculable. It will not be every garden that requires draining. Some may be composed of soil that is very light and dry, and others may have a sufficient slope to carry off all surplus water. But where the ground is flattisin, and has the slightest tendency to stiffness, draining will produce an immense improvement to the crops, and to the comfort of working and walking in the garden.

The first point to be attended to is to drain stir the ground well, pretty deeply. Shallow drains are never satisfactory, and often come in the way of the spade. Three feet, or even three feet six inches will be about the right depth, with the main drain three der it hard and close.

The drains should follow the inches lower. natural fall of the land, and have a tolerably good fall, which can be obtained by cutting them a little deeper at one end where there is no slope in the land. They ought to be three inches wide at the bottom, and fourteen or fifteen inches at the top, the main drain (which may discharge itself into the house drain or any other outfall that can be had) being made a little wider.-Where tiles can be procured, those with a flat bottom are the best, otherwise they will require a slate sole to rest upon. Tiles of two inches diameter, and three inches for the main drain, will be sufficient. In the absence of tiles, each drain may be filled to within fifteen inches of the surface with old brick rubbish that is not too small, rough stones, broken earthen ware, cinders, strong gravel, or broken rock or rubble in a rocky district. A few branches may then be laid over each, and the same materials should be placed over tile drains to within a like distance of the The drains may be four or five yards surface. apart, in parallel lines, and the main drain along one boundary.

Plants in pots require special attention as to draining, for they are in a more attificial state, and are liable to be much injured by superfluous water. In addition to putting plenty of drainage in the bottom of the pots, a few small pieces of broken stone or brick, with lumpy fragments of decayed turf or peat, may be mixed sparingly with the soil, to perfect the drainage.

2.—OPERATING ON SOIL.

Trenching should always follow draining, or the latter will act but partially. Unless the ground be stirred pretty deeply, half the effect of draining will be lost. Both must be done in the autumn or early part of the winter, and the ground will then be in a good state for cropping in spring. These and all other operations on ground should always be done when it is in a moderately dry state. If it be worked and trampled while wet, especially when it is of a stiff nature, it will coaleace into a kind of crust which will greatly spoil its texture.

Manuring may be done in early winter when the ground is somewhat frozen; as the material can then be wheeled on with greater ease, and the ground and paths will be less cut up. But the manure should be dug in directly the frost is sufficiently gone, or it will lose much of its virtue by the exposure. Digging should always be deep and thorough, since it changes and incorporates the soil better, and allows the air to pass among it more freely. Whatever ground falls vacant in autumn, ought always to be dug up in ridges, unless it be very light and shallow, that it may derive all the benefit of the winter frost and snow. The difference in the ease of working in the spring, soil that has been thus exposed and such as has been left untouched, is most most marked and striking. Hoeing, at least among growing vegetables, should be deep, and stir the ground well, this being quite as important as killing the weeds. Raking is always bad, unless where wholly unavoidable, for it tends to encrust over the sorface of the ground, and ren-