

crops are so favorable to weeds, that if continued long upon the same ground, the labor of cultivating them is much increased, while if raised but once in a place, and followed by a cleaning crop, the weeds are easily kept under. Again, many crops planted continually in the same soil, are more liable to be attacked by the insects which are the peculiar enemies of those plants; and different plants derive their principal nourishment from different depths of soil. Hence, deep-rooted plants, such as beets, carrots, parsnips, salsify, turnips, etc., should be followed by those whose roots extend but little below the surface, such as onions, lettuce, cabbages, cauliflower, spinach, etc. However plentiful manure may be, a succession of exhausting crops should not be grown upon the same ground. In these rotations, it is not necessary to apply manure to every crop; but for bulbous roots, as the onion, and plants cultivated for their leaves, as spinach and asparagus, the ground can scarcely be too rich, and the bulk of the manure may be applied to them.

UNDERDRAINING.

There are but few gardens in our country that would not be materially benefitted by being thoroughly underdrained with round, brick tile, two or three inches in diameter, laid say three feet deep, (we should rather say four. Ed) and from one to two rods apart, and inclined so as to carry off the surface water from the subsoil. The result would be that the ground could be worked earlier in the spring, the plants would resist drouth better, would not be injured so much by a wet season, and, as a rule, would double production. We have over 50 miles of tile laid on our seed farm, and think thorough underdraining one of the best investments a gardener or farmer can make.—From D. M. Ferry & Co's Seed Catalogue.

Bee Keeping.

Bee culture is now admitted, both in this country and in Europe, to be one of the most profitable of rural pursuits. Having practiced apiculture with success for many years in the most northern points of this Province, and watching as we have done for several years our brother bee-keepers of the States, who are far ahead of those in any country, we hope to be useful to our Canadian readers. In these articles, which will appear from time to time, we mean to be strictly impartial and to recommend nothing but reliable practices which are sure to interest bee-keepers, and we shall endeavor to be always as practical as possible, striving at being thoroughly understood by even the very beginners in apiculture.

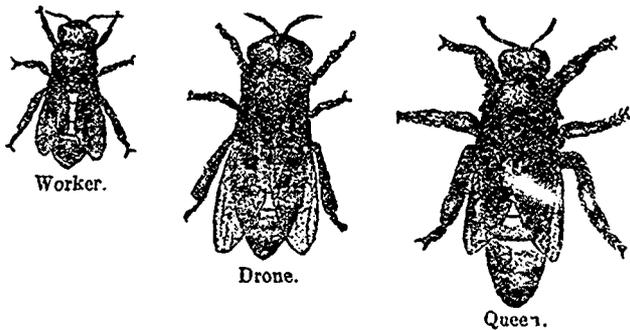


FIG. 1. (Magnified.)

The inmates of a hive are of three kinds. The Queen which deposits all the eggs, the working bees, and the drones or male bees. The working bees are imperfectly developed females. About six days after birth the queen leaves the hive for fertilization by the drone, which dies after the act of copulation. One impregnation of the Queen suffices to operate through life, which averages three years. She will sometimes lay from 2,000 to 3,000 eggs in 24 hours.

The workers being the most numerous.—averaging from 15,000 to 30,000, and in the swarming season sometimes 40,000—have but a brief existence, six weeks in the height of the season, and 7 or 8 months in winter. They perform the whole work: they cleanse the hive, feed the young bees, defend their home, and gather all the stores.

The drones are consumers only. They have no sting and may be taken in the fingers with impunity. They only help to insure the fertilization of the queen.

An egg is deposited by the queen in a cell; in three days it hatches into a small worm, is fed until about the ninth day, when the larva becomes a nymph and is sealed up in its cell, to emerge a perfect bee. The drones mature in 24 days, the workers, in 21, and the queen in 17 days from the laying of the egg.

Hives.

We shall in the forthcoming numbers illustrate the different hives in use in the States and in Canada, and especially those that seem to be the most fitted for our climate.

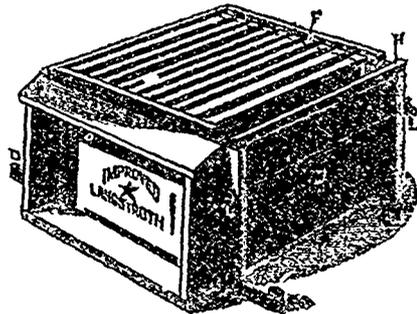


FIG. 3. Langstroth hive.

The time has gone by when a bee-keeper could succeed in making his stock profitable in hollow logs or in boxes, as they afford too many hiding places for the moth and its progeny of worms. A great revolution has been effected in bee culture since it has been found possible to so construct hives

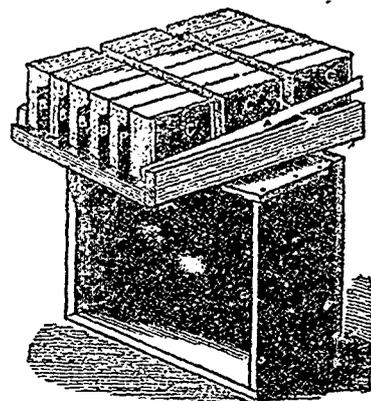


FIG. 3. Honey rack and 2 lbs. sections.

that every comb will be built and secured by the bees to a movable frame, so that each one or all can be taken out and examined, without danger of stings to the owner, or detriment to the bees.