same time, as they sometimes do, they fight each other until one of them is killed. . . . The workers and queens each have stings in the back of the body. The sting of a bee is effected by making a wound with a sheath, into which poison is injected, and a dart is thrust in to deepen the wound. . . . When the sting is lost the bee dies.

"The health of bees is remarkable and their diseases are few. The greatest cause of harm is want of good sanitation, too close confinement, dampness, and want of ventilation. New swarms should be fed with syrup. Many bee-keepers feed their bees with syrup more or less the entire year, thereby maintaining the swarm and utilizing practically all the honey production. A fair-sized community includes one queen, from five to eight hundred drones, and from fifteen to twenty-two thousand workers.

"The sweet juices of flowers are taken up by the trunk. The trunk is made up of several divisions, so it can be turned easily, bent, shortened, or lengthened, to fit the flower cup, which enables them easily to gather the sweets. The front legs and trunk serve to gather juices and pollen from flowers not full blown. . . . The workers make the wax by a process of growth on the back part of the body, where a pouch is located filled with wax sticks, from which it is taken by the bees and used in making honey comb. . . . The cells in which honey is deposited are slightly larger than those intended for hatching. When the cells are filled with honey they are carefully sealed up with wax to prevent it from escaping. It is obtained from pollen of flowers..

"Age of Workers—Spring bees, two to three months; fall bees, six to eight months. Queen bee lives from five to fifteen years."

"Should a queen die and leave no eggs in the cell the colony will perish. Under these conditions sometimes a worker will become fertilized and lay eggs, but the product is a hybrid and will do nothing but eat. Such a worker is called 'a drone-laying queen.'

"About two weeks after bees swarm, if you place your ear against the outside of the old hive you can hear the queen or queens calling. This is the time to look for the second swarm. After the second swarm . . . the third swarm will come off, but not later than the third day. The fourth swarm comes out about two days after the third. One queen, in the struggle for supremacy, drives another from the hive, and some of the bees follow. This is the cause of swarming, the number of swarms depending on the queens that are driven out. It is said bees will go five miles to gather honey. Pollen mixed with honey and water is stored in quantities for winter use and known as bee-bread. The nurse bees' work is . . . to enlarge cells for queen and feed them 'royal food,' or bee jelly, and to make bee jelly for larvæ.

Size of egg, 1/12 inch long, and in another part gives twenty-one days for either queens, workers or drones to mature.

Under "Cattle" it says:

"For many years feeders of cattle have practised dehorning, whereby the horns are removed by means of a saw, or the germs of the horn are clipped out of the head of the calf when it is a few days old."

We pity the poor calf, and those who are misled to buy, and pay for, such a work, and I include my pity also for those who in this enlightened and productive age should resort to such modes of making a living, and charge $22.50 for such trash.

Other Journals please copy and expose this fraud.

Brussels, Ont.

LATE SWARMING

BY JACOB HABERER.

Coming across the articles of H. Selwyn (C.B.J., p. 335) and George Wood (p. 371) on "Late Swarming," I wish to inform them that they have not alone been blessed with swarming in August and September. It seems to me they have a fall honey-flow similar to what I have. Near my home-yard is about 1,000 acres covered with goldenrod and wild aster. It usually gives me a fair surplus, but this year there was only about one or two days in a week with fine weather, and these only for a few hours. Honey then came in in abundance and kept brood-rearing in full swing. The honey was consumed so fast during the rainy days that the brood had to be fed again during an hour of sunshine. The bees would work as if crazy—yes, crazy they were—nectar everywhere in the field. But rain again. Our busy bees, with lots of empty cells in the brood-chamber, hoped for more sunny days. The queen was kept laying in full swing; the brood-chamber was blocked with brood. Another fine day follows, and queen-cells have been started everywhere! Wherever superseding was going on they came to the swarming point. I am sure if the flow had been more continuous there would not have been one-tenth of the swarming. I have not seen the