

The meeting of the O. B. K. A. Board held last spring to appoint an inspector of foul brood, I believe cost the Association about \$100.00. I hope the inspector for 1891 will be appointed at the meeting at St. Catharines and this expense saved.

A hundred bees are killed by paris green on potato vines for one that perishes from spraying fruit trees. The glistening dew drops on the vine leaf tempt the bees to indulge in a morning draft of death.

What kind of beings are "closed-end or partially close-framed friends?" Will Prof. Cook please classify them. See *Gleanings*, page 891.

Dr. Miller wants to know "just how much a pound of wax costs." In Detroit it is reported to be worth 27c.; in Cincinnati it may be bought for 26c.; in Boston the market is bare; while in Beeton (its a dear hamlet anyway) it will cost him 32c. According to Mr. Dayton beeswax is worth about one-and-a-half times as much as honey. He tells us "that by experimenting I got one pound of finished comb from 1 3/5 pounds of honey from several colonies, and at one time fifty pounds were produced from 72 pounds of feed." I wonder if 50 pounds of butter can be produced from feeding 70 pounds of cornmeal to a cow. It is doubtful if it will ever be known how much honey must be consumed to enable bees to secrete a pound of wax. Wax is the product of the bee, honey is not. Honey to be converted into wax must be taken into the stomach of the bee, digested and assimilated, before the transformation is completed. The proportion of bee food available for wax making is to most people an unknown quantity. But I am poking my nose in among the "scientific daddies." Already I see the ghostly shadow of Old Aristotle looming up, which is sufficient to frighten away

#### NUMBER TWO.

#### Sectional Hives—Contraction.

**M**R. Heddon is laboring under a misapprehension on page 354 of the *JOURNAL* in supposing that I made any reference to him or his reversible and interchangeable hive in my late communication on page 348. No reference to any one of the "special features" of his invention was made that did not belong to the sectional hives that were invented and patented long before he was born. A great part of his misapprehension, and particularly that of the beekeeping public,

is due to his application of a few new terms to old time features of sectional hives, such as the terms "horizontally divisible, interchangeable, etc," as applied to the parts of the sectional hive. As regards these features his invention is one of *terms* rather than of *principles* in mechanical construction. Mr. H. is referred to "Quinby's Mysteries of Bee Keeping Explained," page 25, edition of 1853. The sectional patented hives are here described as consisting generally of three parts one above the other, the top part for surplus and the lower parts for brood. Here we have the horizontally divisible brood chamber made so as to be interchangeable with nothing to hinder the practice advised on page 348 but a want of knowledge and a queen excluder. Because the functions of these hives were not known in 1853 it does not follow that the principles were not there. So much for the "special features" claimed by Mr. Heddon to be secured to him by letters patent.

However, the design of his communication is to lay claim to my new system of management, for he well knows that he has no claim on the Langstroth hive that I am now using and recommending above all others. It has no "special features" that does not belong to the Simplicity hive, which may be used as a story-fying sectional hive in two or more stories. In many parts of France, according to Mr. Cowan in the B. B. J., the two storey Simplicity hive would be considered quite too small! My brood chamber may be used the same, in one storey, two storeys or more, and differs from it in no essential particular except as to size. In its construction I am pleased to acknowledge that I have copied after Father Langstroth's great invention adding the "special features" of the Simplicity and Cowan bee hives that have long been in popular use. Furthermore I did not patent this copied invention as did Mr. Heddon his. See remarks to follow:—

It would be wise for him to narrow his claims down to those granted in his U. S. patent that he was unable to enlarge by re-issue. The claims sought by re-issue are those made in his book and circulars from which he quotes, and to the extent that these claims are unauthorized by his patent, they are an imposition on the beekeeping public. Mr. Heddon also claims to be the author of the 'contraction system,' and to have invented the wood-zinc queen excluder, as well as the "greatest hive on earth." To establish the latter, he in some way prevailed upon Father Langstroth, feeble with old age, to practically repudiate his own great invention and endorse the new reversible hive as superior