

may not be quite so white, but the quality is greatly improved. Then, too, the bees can take care of the honey much better than we can.

When honey is removed too soon, before all the cells are capped, it soon becomes leaky, the honey souring in the uncapped cells, and the appearance is greatly damaged. This is especially so in damp weather, but if left on the hives till the usually dry weather of the middle of July, it is all right.

Then there is the moth, always present, even in our snow-white honey, especially if it contains a few cells of pollen. Now if the honey is left with the bees, they will remove the moths as they hatch out, and when it is taken off, at the end of the white honey season, there are no more moth-eggs to hatch.

Bee-keepers should remember that we have had almost no crops for two years, hardly honey enough to sell for the sugar we have had to buy to keep the bees alive. If we have a good crop this year, the next may again be a failure. Now why should we be in a hurry to get rid of the finest honey the world produces? Judging from an experience of over twenty years, I know that the best honey cannot profitably be produced for less than 15 cents in the comb, or 10 cents for extracted. The late and dark honey, of course, must be sold for less. Keep up a reasonable price, that is the only thing that will make bee-keeping worth following. It is hard work, all know, and requires ceaseless watching and care, and why should we not be paid for all this?—C. H. DIBERN, in *Western Ploughman*.

The Honey Bee.

G. B. JONES' SECOND LECTURE OF THE SEASON AT GRIMSBY PARK.

G RIMSBY PARK, July 19th.—Yesterday evening Mr. G. B. Jones delivered his second illustrated lecture on the honey bee. Treating the life and work of his subject from the egg, he described most minutely every stage of the wonderful metamorphosis of the bee and explained its various duties during life.

The family of the honey bee consists of three distinct varieties of individuals: queen, drones and workers. The egg, although so small that only a practised eye can see it in the cell, has its yolk, its white and its shell, besides which, it is enclosed in a beautiful net work of fine air vessels. The egg hatches in three days, and for five days the young bee, now a small white grub, is fed by the nurses. It is then capped over, spins its cocoon and goes through the marvellous change from grub to perfect bee,

emerging from its cell 21 days after the egg was laid. The worker's first duty is that of nurse—it feeds and cares for the young grub for about a week; it then becomes a wax producer, and while serving in this capacity it comes out to play in front of the hive for two hours every fine afternoon. During the third week of its life its duties are more varied, being those of comb-builder, queen's bodyguardsman, housekeeper, ventilator, undertaker, and sentry. The description of the duties was most interesting and amusing, especially that of the treatment stranger bees, whether robbers or lost ones, receive at the hands of the sentries; and of the way the bees feed and care for the queen. At the age of sixteen or twenty days the worker is ready for the fields. It first gathers pollen only from which the housekeepers make bread; in a few days it gathers honey also and later on it gathers honey only. It usually dies after two weeks active service, killing itself in most cases with hard work, which so wears out its wings that it is sooner or later beaten down by strong winds when it is coming home heavily loaded.

The drones are the male bees, are large and clumsy, take 23 days to mature, eat enormously do no labor, buzz very loudly and have no sting. From the 15th August to 1st September those of them which remain are killed by the workers.

The queen is the only perfect female. She lays all the eggs and exercises much authority, but not so much as her name implies; for the bees is a republican government. The queen matures in sixteen days; commences laying when about 7 days old, and lays during the height of the season from 3,000 to 4,000 (or four times her own weight) of eggs in twenty-four hours. The workers regulate the number of eggs by the way they feed the queen, the amount of feeding depending upon the supply of honey in the fields. The queen lives from three to five years. When too old to lay, if she does not conveniently die, the workers supersede her by a young one, not always killing her.

The lecturer next dwelt for a long time upon swarming, it causes, methods and effects, and then proceeded to explain the bees work in nature, which, he said is no more the gathering of honey than is the accumulation of wealth the end for which man was placed upon the earth. The bee's life work is the fertilization of flowers its honey being only its food while thus performing its real duty.

It is one of nature's laws that flowers shall not fertilize themselves, and many plants would produce no seed but for the visits of the bees which carry the pollen, with which their bodies