

these, first and foremost came the Queen bee, the presiding goddess of the temple—the worshipped mother of the whole family—the Queen mother who had actually given birth to every individual bee, whether male or female in the commonwealth; for they must bear in mind that was always the case, when a stock of bees lives to be a year old. The Queen bee was easily distinguished from all other bees, and might be known by certain peculiarities, not principally by its size and form; so that a practised bee-keeper had no difficulty in picking her out from any quantity of bees. The lecturer then described those peculiarities, and said next in order to the Queen came the most numerous tenants of the hive—the workers or working-bees—which, by some writers had been called neuters or mules, as being neither males nor females; by others, female non-breeders; and from what he should show them by and bye, he thought they would consider the latter as the more appropriate title. These bees are the most numerous class in the hive, there being from 12,000 to 20,000 in a single hive, and when swarming was intentionally prevented, even 50,000 or 60,000. The workers were the smallest numbers of the bee community, and were furnished with a long flexible proboscis or tongue; they have a peculiar structure of the legs and thighs, on the latter of which were small hollows or baskets, and they were armed with a straight sting. Upon these bees devolved the whole labour of the colony; they nursed and reared the young; they guarded the entrances of the hive; collected and stored the provisions, and built the cells in which it was warehoused, as well as those which contained the brood. Now, when it was considered the labour which fell to this portion of the family, he thought his hearers would readily allow that they deserved the title of the workers.

The third kind of bee in the family were the drones, or male-bees, and these would be found to the number of 1,500 or 2,000, according to the strength of the family. They made their appearance about the end of April, or beginning of May, and were never to be seen after the middle of August, except under very peculiar circumstances. After giving a full description of the drone, the lecturer proceeded to notice the Queen bee as the parent of every individual in the stock, and therefore able to produce queens, workers, and drones. This office of multiplying the species she performed by laying eggs in cells constructed for their reception by the working bees. The cells varied from one another in size, form, and direction, according as they were intended to be the depositaries of eggs that are to become queens, workers, or drones. The eggs of the mother bee were then described, as well as the mode in which the various kinds of bees were propagated, after which the lecturer made some observations on swarming, which he looked upon as the most interesting feature in the bee economy. He pointed out the best mode to be adopted in those matters, and then noticed the length of time bees were supposed to live—a question, he said, which was, perhaps, very difficult to decide with any degree of accuracy. From all the recorded observations and experiments which had been made with a view to such discovery, the general conclusion was, that the queen bee lived from three to four or even five years; the workers only from three to five months,—this variation depending in a measure upon the time of year when they were hatched, and the work they had to do. Of the drones, as he had before said, their lives extended from April to August, unless, for special reasons, they were permitted to remain in the hive for a longer period: in fact, those unfortunates may be said, from their very birth, to live only by sufferance, and to be merely tenants at the will of others.

After some further remarks on the first part of his subject, the lecturer spoke of the productions of the honey-bee, and in doing so observed that they were at once reminded that not only did that insect afford matter of interest to the philosopher and naturalist; but the consideration, if not the study of it, also merited the attention of the community at large, for it was a profitable, as well as a pleasurable subject. The honey-bee could boast of some importance, both in a social and commercial point of view. Very few people were to be found who were proof against the attractions of the full honey-comb; and the large quantities of honey and wax annually imported into this country, prove that those articles contribute greatly either to their necessities or their luxuries; perhaps he might say, to both, for the medicinal properties of honey were too well known to admit of any doubt, and the elegancies of life, which wax was made to supply, did not need discussion. First in importance among the productions of the busy-bee was that of honey, and from which it therefore derived its specific name the honey-bee. This delicious liquid the insect collected from the flowers and leaves of trees and plants. The other productions of the honey-bee, wax, propolis, and bee-head, or brood-head, were then noticed, the reverend gentleman concluded this part of his