

CHAPTER VII.

Swarming.

Living creatures reproduce their kind to insure the perpetuation of the race. Generally speaking, the interest is centred in the direct descent from individual to individual, as each one in turn becomes the fountain source of a new generation. But with bees it is different, for here we have a social organism in which the factor of parentage is subordinate. There is continuity from queen to queen, but this is less important than the reproduction of colonies; that is, the fact of perpetuation is more centred in the community than in any individual. Furthermore, a queen may die and be succeeded by her daughter, without any increase in the population of the bee-world at large; whereas, when new colonies are formed, there is an increase both in communities and in the total number of bees.

The bees' method of reproduction, then, is by the formation of new colonies. When the proper season has arrived, generally in June, the hives become very strong with a superabundance of inhabitants, and some fine day thousands of them rush pell-mell out of doors, circling in the air in an ever-darkening cloud for several minutes; then, as if of one mind, they settle in a cluster on a convenient object, which is generally the branch of a near-by tree. Here they cling for quite a while, frequently hours, as if awaiting important news from somewhere; then, if unmolested, they will suddenly decamp to parts unknown, locating in a hole in the trunk of some decaying tree, and there start up the routine of the colony afresh. But in a well-conducted apiary the flight to distant regions is summarily prevented by the bee-keeper, who secures the cluster and houses it in a regular hive. Ordinarily, they accept the domicile, just as pleased as if it were of their own selection. The whole procedure is technically known as swarming.

In a hive in summer-time there are to be found bees of all ages and occupations. The very youngest are nursing the larvae, making wax, building combs, capping the honey and capping it over; the older ones are field-workers, their business being to carry in nectar, pollen, water, and propolis. An interesting point at once arises, what is the age of the bees that form the swarm? The old queen undoubtedly leaves the hive; that is beyond all dispute; and it is believed that the greater part of the swarm consists of fielders, but there is also a fair proportion of younger ones whose duty is concerned with the inside labour. This should be so, for the best welfare of the new community.

Each bee fills her honey-sac to its utmost capacity before starting out, so that the new colony is provisioned for several days ahead, should inclement weather prevent the gathering of nectar. On arrival at the new abode, part of the swarm starts at once to clean it out; another gathers into festoons and proceeds to secrete wax; while still others collect the wax and build combs. Just as fast as cells are built the queen lays eggs in them, or the workers store honey, so that in a few days the usual routine of a bee community is established.

In the hive from which the swarm emerged there has been left quite a strong force of bees, thousands of young brood in all stages, from egg to those about to hatch, and several queen-cells, from each of which there may come out a queen. If the conditions seem propitious, the workers may decide to send off several swarms, each accompanied by a virgin queen. Since the hive has been decidedly weakened by the loss of the first swarm, the second will be much smaller, the third weaker still, and so on with the others, until the last may consist of a mere handful of bees. Such weak colonies are almost certain to die of starvation during the winter, as they are rarely strong enough to build up a numerous force and lay in sufficient stores before the cold weather sets in, excepting in very highly favoured localities.