

we will break the gluing between the frames. Since it is May it is probable the colony is strong enough to cover six frames, so that this one may have thousands of bees on both sides, while the weight suggests that the cells contain something. They do, for the centre of the comb is filled with young bees in all stages—eggs, larvae, and sealed brood; these surrounded by a band about an inch or two wide of pollen, while outside of that, especially at the top and ends, is honey. Quite a neat arrangement, you see, so as to have everything handy; nursery in the centre with the food all round about. But stop a minute; all the other frames are arranged exactly the same way; so think a little and you will realize that the brood-nest is a hall, with, of course, the most brood in the centre frame, the least at the sides. Now you will understand why you should not disturb the order of the frames when you examine a hive, as changing the arrangement will upset the brood-nest. This is why you are advised never to set more than the first frame outside of the hive, just to prevent yourself getting mixed up as to their order. The bee-keeper's business is to help the bees, never to hinder them.



Drone-cells.

Fig. 14.

Worker-cells.

SHAKING BEES OFF THE COMBS.

Maybe the comb is so thickly covered with bees that careful inspection is impossible, in which case hold the frame above the hive, raise it slowly about a foot, then lower it quickly, finishing up with a sudden jerk, when practically every insect will drop on the frames.

Fig. 15 shows the position of the frame at the end of the operation. It is not considered wise to shake the queen off the combs at the season when she is laying heavily. Another way, which the writer prefers, is to hold the frame perpendicularly by the end of the top bar with the left hand, then with the right hand clenched hit the left a smart blow from above (Fig. 16). The comb being free from bees, turn your back to the sun so that its rays shine into the cells. Along the upper part of the frame and at the ends the cells will probably be all sealed, the cappings, as the coverings of the cells are called, being flat, often sunk and wrinkled. Such sealing indicates the presence of honey. On the edge of this region there will likely be a narrow belt of unsealed cells showing the honey, indicating that the bees are using up their stores to feed the young. When we reach the bottom board in our investigations we shall find lying there a brownish-looking deposit, like coarse dust, but which is really the fragments of comb-capping torn from the cells.

POLLEN STORES.

Next to the open cells with honey comes a narrow band of cells, filled with a brilliant-coloured solid substance. This is pollen, the bee-bread of our forefathers, which is the male principle of plants, and forms part of the food of the young of the bee while in the larva or maggot stage.