

brown, too. A very fertile queen generally has the abdomen so much extended that the yellow joints between the brown segments show and give the whole a brighter appearance. I have one queen that has the whole abdomen yellow, and another that has not even the two orange rings of the worker. Yet their progeny seem to come out all alike. Their bellies are orange in every case, and their legs and feet very dark-red. By the latter alone the queen can easily be recognized when she runs along the excluder at the entrance of a newly-hived swarm that has departed and is waiting for her to follow. The length of the queens is about $\frac{7}{8}$ ", but of course varies considerably.

The drones also vary much in color and size. Some are $\frac{3}{4}$ " in length, and some are only $\frac{5}{8}$ ". Perhaps these latter were reared in worker-cells. Head, thorax and legs are black, with less hair than the worker has. The abdomens of the drones of some colonies are so light that they are not easy to tell from the workers by color alone, and one of mine last year had drones practically quite black all over. This same colony this year has light drones like the others. They have the brush of hair at the extremity of the abdomen, like all drones in Europe. The segments of their abdomens are generally dark-brown, with a faint light ring at their base.

That my carpenters work within ten yards of my apiary, which is situated direct against the kitchen; that numbers of natives work near it, handling cargo and produce; cats, fowls, ducks and children play about without interference from the bees, is a surprise to everybody who first sees it, as it proves a sweetness of temper otherwise only associated with Carniolans. Until the hives are full they can be examined without smoker, carbolio cloth, or veil, provided the weather and time of the day is suitable, and one does not jar

them. On a cold, windy day the hives should not be opened, nor after noon, when the sun shines very hot, as then the bees seem inclined to go at sight for the face of the person who lifts their quilt.

At all times they strongly object to certain odors; oil of eucalyptus provokes a furious attack. They will sting the leather strap that carries my watch on my wrist, when they will not worry about my hand. Sweat irritates them, and natives who have partaken of native beer are much stung. Apifuge and muscatel have no pacifying effect on them. Under circumstances, in my apiary, that must be trying to the bees' tempers, I only had two colonies that would sting people, and had to be re-queened. This can be done quickly and safely in twenty-four hours, so that the breeding is hardly interrupted, by caging their queen alone from, say, 9 a.m. to 5 p.m., then replacing her by the new fertile queen in the same cage and place. The next morning, say, 9 a.m., she is released. Their activity is great, and they are splendid honey-gatherers, judging by what they do in this arid place.

The queens are fertile, but are not prone to drone-breeding, nor are they inclined to swarming if they are only given enough room and ventilation. In my hives, which take twelve or thirteen frames, I had only one swarm, and that was because I forgot to remove the division-board and give the bees the last three frames. One of my colonies, though, that built more drone-comb than the others, did not gather less honey, but *more*, and did not swarm, but filled most of the drone-comb with honey. Thus it is not certain that the building of drone-comb should be objected to.

The brood-nest is usually arranged in Europe; one or two combs of honey and pollen near the entrance, then from

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