

realize the absurdity of its action and left off. If such a substituted cell was already provisioned but not closed in, and the nest taken away was beginning to be filled with honey and pollen, the bee would continue to pour provisions into the full nest and finish by laying an egg where there was one already.

It should be explained how Fabre was able to effect these alterations of the positions of nests. In the ordinary course they are attached to rocks, and to attempt to separate them from their base would almost certainly ruin the whole structure, and would at least make it difficult and perhaps impossible to re-attach them in such a way as would not vitiate the experiment by creating suspicion or aversion. One particular species of mason-bee with which Fabre experimented builds its nests

on small boulders brought down by the Rhone in flood and scattered along its shores. Some of these were not too large to be handled, and these Fabre varied in position to suit his purpose.

Where it is possible to do so, the mason-bee selects an angle of the rock, as shown in our photographs on page 479. It is obvious that such a position gives greater security. The bee's object, no doubt, is to secure the firmer hold that the angle affords, and the consequent economy of labour and material; but there is the further advantage that the blob of cement is less obtrusive in such a situation than if attached to a plane surface from which it stands out, and is therefore less likely to be noticed by a possible enemy. We have elsewhere commented upon the wonderful industry displayed by the mud-daubers in accumulating the relatively enormous quantity of clay or mud required for one of their daubs, but it must be admitted that the industry of the mason-bee is greater. The mud-dauber selects moist



Photo by

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EGGS OF A PSOCID.

A cluster of eggs deposited upon a leafy leaf. A remarkable thing about these and other psocid eggs is that they are covered with a slight web, probably for their protection. They are shown magnified twelve times.

material which she knows will dry into a hard, stony mass. The mason-bee uses dry, gritty stuff that has to be moistened grain by grain with her own adhesive saliva before she can carry a load to the scene of her building operations.

Although the hard cement of the mason-bee suffices to protect the contained grub or chrysalis against extremes of temperature, it does not ensure immunity from the attacks of parasites, who eat up the provisions and starve the grub, or even eat the grub itself. One of these parasitical intruders is the beetle *trichodes*, which we have described in a previous article (see page 310). Both Aristotle and Pliny describe the honey-bee as taking the precaution, when having to fly home in a strong