days to accomplish. But eight or nine cells are constructed, built one against the others, and then the whole of them are coated with a general mass of masonry. When finished she has a dome-shaped structure the size of half an orange. The outer coating of all is composed of grains of sand coarser than those previously used. It harmonizes well with the natural stone to which it is attached; or on a closer inspection might be regarded as an accidental daub of mud. But the masonry sets so hard that it is with difficulty explored with a knife-blade.

This building work is carried out in spring, and the solidity of the entire structure has evident relation to the fact that in an exposed position it has to protect the inmates from being dried up by summer's heat, and from being frozen by winter's cold, for it is not until the following spring that the young bees emerge. Then the hardness of the masonry presents no obstacle to them: their jaws are stout enough and sharp enough to peck it to pieces and clear a way large enough to permit of their exit. Yet Fabre found that their powers in this respect were somewhat limited. If the nests were closely surrounded by paper they cut through it as though it were part of their natural enclosure; but if the paper wall was so arranged that a clear space was left between it and the nest, they cut through the latter, of course, but did not know how to deal with the paper as a separate obstacle, and perished in this outer prison. The difference is due, probably, as suggested by Pérez, to the fact that in the larger space they do not know where to begin, whilst in the confined space of the cell they are bound to concentrate their efforts upon one spot—that immediately in front of them.

Photo by H. West.

PSOCIDS.

Our closer relations of the book louse, scarcely known except to the few who make a special study of this small group. They are found upon bark, leaves, decaying wood, etc., and subsist upon dry refuse. Most of them have two pairs of wings. Those in the photograph are young individuals whose wings have not yet begun to appear. They are magnified twenty-eight times.

By marking some of these bees with paint and taking them away to a distance of four kilometres (that is over a quarter of a mile) before releasing them, Fabre found that their homing instinct was so good that they were back working on their unfinished nests next morning. But though their sense of locality was proved by this means to be very good, he found that when he transposed neighbouring nests they were unable to distinguish their own property, for a bee would unhesitatingly set to work at the substituted nest which now occupied the site of its own previous labours. If this spot was left blank by the removal of the nest only a slight distance away, the bee returned to the spot and showed great concern, but failed to recognize its nest though it had passed over it in its homeward flight.

Some of the results of Fabre's experiments were rather ridiculous, and showed that the bee does not modify its actions according to circumstances as honey-bees do. If he substituted a built and partially provisioned cell for one that had only just been commenced, the bee would proceed from that point in its operations at which it had left off, and would make the substituted cell much longer than necessary; yet when it had made the cell a third larger than the normal size it appeared to