

McCook effectively dispels the notion that the repletes manufacture the honey, by showing how they obtain and store it. *M. horti-deorum* is decidedly nocturnal, unlike the different subspecies and varieties of *melliger*, which are diurnal. Indeed, the etiolated appearance and pale yellow color of the northern forms of *mexicanus* at once suggest a fondness for darkness, just as the deeper tints of the typical form of the species suggest diurnal or crepuscular habits. During the day, therefore, the workers of *M. horti-deorum* are never seen outside of the nest, but frequently a guard of workers

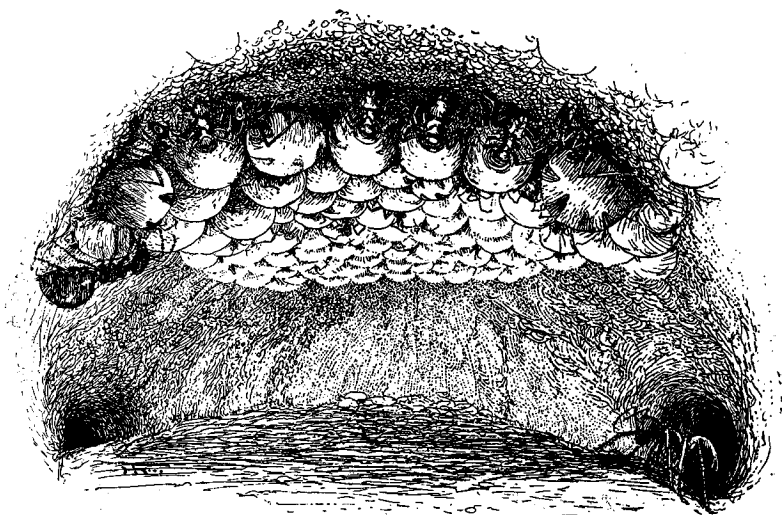


Fig. 21. Repletes of *Myrmecocystus horti-deorum* hanging from roof of honey chamber. (After McCook.)

is stationed just within the large opening, apparently for the purpose of preventing other ants, spiders, etc. from entering the nest. McCook found that during July the workers leave the nest in a file at about 7.30 P. M. and visit the shin oaks (*Quercus undulata*) which grow abundantly along the rocky ridges in the Garden of the Gods and the surrounding country (Fig. 17.) The twigs of these oaks are often covered with small woody galls about the size of a pea and of a more or less conical or spheroidal shape, the work of the Cynipid *Holcaspis perniciosus* Bassett.<sup>1</sup> At night these

<sup>1</sup> Riley in 1880 briefly described these galls under the name of *Cynips quercus-mellaria*, but he did not breed the insect that produces them. This was described by Bassett in 1890 as *Holcaspis perniciosus* and was taken from galls collected in Utah. I have not seen Bassett's types, but a lot of galls labelled "*H. perniciosus*, Garden of the Gods" in the Bassett collection of the American Museum of Natural History are unquestionably the same as those described and figured by McCook in 1882 as Riley's *C. quercus-mellaria*. I should be inclined to accept this as the specific name of the insect, for there can be no doubt concerning the identity of the galls, were it not that there seems to be a growing unwillingness on the part of cecidologists to recognize names based merely on the plant deformations.