

might be due to hypertrophy of the peculiar glands which he, Meinert and Lubbock had found in this portion of the thorax of our northern ants. These structures, which Janet studied and figured with great care, consist of a pair of chambers each opening to the exterior by means of a button-hole-shaped orifice on the metasternum. The glands proper open into these chambers, which contain hair-like organs apparently for the diffusion of the secretion. In a number of specimens of *C. inflata* in my collection, from Zamboangan, Philippines, two broadly elliptical or nearly circular openings are seen on each side of the epinotum (see Fig. 28a). The upper, which is somewhat smaller, is the tracheal orifice, or stigma, the lower is undoubtedly the external opening which leads directly into one of the large inflated cavities. As all of my specimens are dry and carded, I am unable to ascertain the histological structure of these organs. I am convinced, however, that they represent, as Janet supposed, an enormous development of the organs found in the corresponding portion of the epinotum of our common ants. This is also indicated by an examination of specimens of *C. difformis* from Perak and of *mucronata* from Sumatra. In these the openings of the epinotal chambers are more ventral and more slit-shaped than in *inflata*, and may therefore be described as intermediate between those of *inflata* and our northern species of *Cremastogaster*.

As the function of the metasternal glands even in our common ants is still unknown, we can hardly expect to form a satisfactory conception of the hypertrophied homologues of these organs in a few Indomalayan species that have hardly been studied in a living condition. That these organs should secrete a sweet liquid to be fed to the ants or to their young is surprising at first thought and suggests the nursing habits of the Mammalia, but when we stop to consider that ants are in the habit of feeding their young and one another with a secretion of the labial, or salivary glands, we can see no reason why, in certain species, thoracic glands might not be developed for a similar purpose. It will be very interesting, nevertheless, if future investigation proves that certain species of *Cremastogaster*, a genus whose members are so conspicuously fond of feeding on the saccharine excrement of aphids and coccids, have themselves developed a capacity for distilling a substance resembling honey dew. It should be possible, since *C. inflata* occurs in the Philippines, for some of our entomologists, who have an opportunity to visit these islands, to investigate this interesting subject which was first suggested by Frederick Smith half a century ago.