

branch, which they surround about equally on all sides. The galls proper originate from the twig; they are woody in texture, much longer than broad, being more than 4 millim. long and only about 1 millim. broad; they stand out from either side of the twig; each is covered by a mass of white, soft, woolly hair, which may be 10 millim. long. As the galls are closely pressed together they form, from the length and thickness of the woolly covering, a large ball-like mass of white wool, which must be a conspicuous object on the twig, and from being delicately tinted with pink must be very pretty. All the specimens I have were pulled when very young, and hence it is impossible to make out any thing of the structure of the inner galls.

The gall is very like that of *Cynips seminator*, Fitch, and may, indeed, be made by that species.

#### 4. *Cynips guatemalensis*. (Tab. IV. figg. 7, 7a, gall.)

*Hab.* GUATEMALA, San Gerónimo (*Champion*).

The gall is found on the lower side of the leaves of an Ilex oak. It is placed on the mid-rib, usually towards the centre of leaf; it is flat on the lower side, but dome-shaped above, and is wider than high. The centre is hard and woody, and the fibres radiate from the centre towards the edge; the larval chambers are situated along the edge, there being none in the centre. Outside the woody central gall is a covering of woolly hairs, white internally, but reddish brown on the outer side. An average-sized gall measures for the gall proper 7 lines in breadth and 5 lines in height, while the woolly outer covering is nearly 3 lines. The galls are usually in pairs; but single specimens are also found, and in one instance there were four specimens on a single leaf; these were much smaller than usual.

Dr. Karsch\* describes three galls on oak (*Quercus benthami*, Dec.) from Mexico which are in all probability formed by species of Cynipidæ, but no names are given to them, namely:—

1. A round gall on the leaf-stalk close to leaf, dark red externally and velvet-like in texture. The thin-walled shell encloses an inner gall in the centre, and from this inner gall fibres radiate to the circumference, thus keeping it in position. It has a diameter of 26 cm. (*l. c. t. vii. f. 13*).

2. A small, smooth, shining, yellowish, roundish gall of 14 millim. diameter on the leaf.

3. A gall like the first, but larger, being 4 cm. in diameter and outwardly smooth, yellowish and warty in texture (*l. c. t. vii. f. 14 a-c*).

#### Subfam. *INQUILINÆ*.

This group consists of the species which lay their eggs in the galls raised by other Cynipidæ, and live in them at the expense of the legitimate owner. They are vegetable

\* *l. c. p. 303*.