

before the leaves appeared. The white, thin-walled larval cells are imbedded in woody tissue from which it is almost impossible to detach them. The galls formed around the lateral buds are from one-half to three-fourths of an inch in diameter, but those around the cluster of terminal buds are often an inch in diameter, and instead of a single branch, several are often found growing out of a single gall. They do not seem to affect the growth of the branches the first year, but must seriously injure the tree the following year when the perforated galls begin to decay. This species was very common last year in a thicket which I have searched for galls every season for the last fifteen years without discovering it. The flies are of both sexes and they leave the galls in July.

The flies, of which I have many thousands, may be described as follows :

Female : Head clear yellowish brown ; the vertex when highly magnified shows a finely crackled surface. Eyes and ocelli black, the latter very near together. Face rounded and full, with a few short hairs scattered over it, and a brush of long bristly hairs on the mentum. Tips of the mandibles show a faint duskiness. Antennæ 13-jointed, 1st joint club-shaped, abruptly truncate ; 2nd small, regularly ovate ; 3rd and 4th slender, 3rd a trifle shorter than the two preceding taken together, 4th equals the 1st in length. The first four joints are of a uniform clear yellowish brown, while the remaining ones are of a dull dusky brown ; the transition from one shade to the other is abrupt, and not gradual as in most species. The remaining joints are also considerably larger than the third and fourth, and are short and sub-equal, except the last, which is one and a half times the length of the preceding. Thorax dark brown, semi-translucent, the scutellum and post-scutellum almost black. Mesothorax smooth and shining, but highly magnified it appears very finely rugose. Parapsidal grooves absent, scutellum darker and more strongly rugose than the mesothorax. Fovæ wanting. Two anterior pair of legs pale yellowish brown, posterior pair much darker. Wings hyaline. The 1st and 2nd transverse and the subcostal veins rather heavy, and a dark smoky brown. The cubitus disappears about midway between the two transverse veins. Abdomen smooth and shining and apparently black. The first segment one-third longer than the very long second segment, remaining segments short.

Length, body .09, wing .09, antennæ .06.

Male : Entire body a few shades darker than the female. The legs a