

acters. I found, even after examining many specimens, but one antenna; but this was clearly seen to be 7-jointed, not 8-jointed, as in *rugosum* and *persicæ*. I found no legs in position, but several fairly well-preserved ones broken from the bodies. These showed the long digitules, but I did not get a sight of the peculiar posterior tarsus. The following description gives the details I found:

LECANIUM FROM QUEENSTON.

♀. Antenna 7-jointed, 3 longest, 4 a little shorter, 7 a little shorter than 4, 2 shorter than 4, 5 and 6 shortest and about equal. Formula approximately 34721 (56).

Legs well-developed; trochanter and coxa each with a hair; femur rather slender, not very much longer than tibia; tibia about one-third longer than tarsus. Tarsal digitules slender, very long. Digitules of claw also long, extending considerably beyond tip of claw, with quite large knobs. Claw nearly straight. Derm with large gland-pits, often double. Anal plates with their caudolateral sides longer than the cephalolateral.

Of species with 7-jointed antennæ, there is *L. rotundum*; but this is out of the question, from its globose, nearly smooth scale. But how about *L. juglandis* (*juglandifex*), with which I have identified a species sent by Dr. Lintner from Rochester, N. Y., on plum? The antenna of this Rochester insect is just like the antenna of the Queenston species; in fact, the microscopical characters of these forms are so much alike as to strongly suggest their identity. Yet the scales seem decidedly different.

Some one may here say, How about the *Lecanium cerasifex*, Fitch., 1856? This was said to be hemispherical, nearly the size and shape of a half-pea, black, more or less mottled with pale dull yellow dots. I confess I do not know what this is, and look with some doubt on identifications of it from such a description as Fitch gave. Until some one has given us a better description from the type, I think *cerasifex* must be put in the doubtful list. There is no good reason for supposing it identical with the Queenston scale.

The solution of the question here raised must probably be left in the hands of one who can study the insect, in all its stages, on the spot. The following questions might be addressed to a suitable enquirer:—

- (1.) *L. rugosum*, hitherto known from France, closely resembles our insect in outward form. Can the diversities in microscopic details be reconciled?