

—The concluding paper was by Mr. Kotinsky, and entitled :

THE FIRST NORTH AMERICAN LEAF-GALL DIASPINE.

By JACOB KOTINSKY.

While out collecting in the woods of the District on October 12, 1902, I was attracted to an undersized tree, several leaves of which were literally covered with small galls. The underside of these leaves was dotted with white specks corresponding to the galls above, and under a magnifying lens the former proved to be the scales of a Diaspine. This brought to mind similar specimens sent by Mr. W. M. Scott, of Atlanta, Ga., the preceding July to the Department of Agriculture, which I had the privilege of examining. Subsequent search and study revealed the following facts: That the insects as well as the food-plant are identical with those of Professor Scott; that the latter is the common sweet-gum tree, or bilsted (*Liquidambar styraciflua*); that scarcely a tree was inspected but was more or less infested with the insect, and that the insect is referable to *Cryptophyllaspis*, Ckll. (Bull. 6, Tech. Ser., Div. Ent., U. S. Dept. Agr., 1897, p. 14), and is a species new to science. I therefore describe it herewith :

Cryptophyllaspis liquidambaris, n. sp.

♀ gall.—Mostly on upper side of leaf, .5 to 2 mm. high, bluntly conical.

♀ scale.—Mostly on under side of leaf; waxy, central portion within the gall cavity a little beneath the level of the leaf surface; exuvium proportionately large, lemon yellow, subovate, about .4 mm. in diameter, wax rim about .2 mm. wide.

♀—Subcircular, about .3 mm. wide and .4 mm. long; anterior $\frac{2}{3}$ of body, and the lobes smoky yellow and heavily chitinized; caudal end transparent, no circumgenital glands; dorsal pores few; a group of three in line with and cephalad of first incision, and three parallel to these from a point cephalad of second incision; anal orifice 90μ from base of lobes, 45μ in diameter; one pair of median lobes $12-13 \mu$ wide at base and $5-7.5 \mu$ intervening space, notched on each side, lateral notches lower than interior; two incisions each side of the lobes, the caudal larger, wall thickenings subequal in all. The plates are shaped like those characteristic of *Chrysomphalus* spp., and are distributed as follows: two of the ordinary type between the median lobes; two of the *Chrysomphalus* type between each lobe and the first incision, and three between the first and second incisions; then there are also several dagger-shaped, beyond the second incision; the spines are slightly longer than the lobes, and a pair is to be found just cephalad of each lobe and incision. This description is from several specimens mounted in Canada balsam.

♂ scale.—White, waxy, oval; yellow exubrium nearer the anterior end. These are usually found grouped about the glands that the leaf bears at each end of its veins.

Habitat.—On leaves of sweet-gum tree, or bilsted (*Liquidambar styraciflua*). Mr. Bridwell tells me that Professor Scott found it also on twigs.

Atlanta, Ga., W. M. Scott, coll., July, 1902.

Washington, D. C., Jacob Kotinsky, coll., Oct. 12, 1902.

At first glance the mounted ♀ looks very much like *Aspidiotus rapax* Comst., but its smaller size (about $\frac{1}{2}$) immediately separates it from that species. Careful study of the plates will also show marked differences. I placed it in this genus owing to its gall-producing propensities, a characteristic of *C. occultus* Green, from Ceylon, on *Gruvia orientalis*, upon which Prof. Cockerell based this subgenus of *Aspidiotus*, later raised to the rank of a genus. This genus, besides the species above described and the generic type, now includes in addition *C. rübsaameni* Ckll., upon *Codiaeum* from Bismarck Archipelago, and, as Prof. Cockerell kindly informs me *in litt.*, "*C. bornmülleri* Rübs. from Madeira, on *Globularia salicina* (Marcillia, I, 1902, p. 62)."

Prof. Cockerell's remarks *in litt.* with reference to my species are too interesting to be omitted. He says: "*Cryptophyllaspis* is a gall-making derivative of the type of *Aspidiotus cyanophylli*, or, more broadly speaking, of *Diaspidiotus*. Your description does not seem to contradict this view, except that the anal orifice is perhaps too large, and the single pair of lobes is peculiar. These last characters suggest *Hemiberlesia*, and I suspect that you have in reality a gall-making *Hemiberlesia*. In that case, your species cannot be a *Cryptophyllaspis*, however much it resembles one. * * * (See my remarks in *Ann. Mag. Nat. Hist.*, July, 1902, pp. 40-41)."

I am sorry not to have seen the description of Rübsaamen's species in order to see what relation it bears to the above. I may add in this connection that the species herein described is parasitized, though I have not bred the parasite as yet.

NOVEMBER 6, 1902.

The 172d regular meeting of the Entomological Society of Washington was held at the residence of Mr. O. Heidemann, 700 Newark street, Petworth. Dr. Dyar presided, and Messrs. Sherman, Hopkins, Busck, Gill, Kotinsky, Barber, Ashmead, Heidemann and Currie, members, and Mr. J. L. Webb, visitor, were