when they rise. *Ch. viridifasciata*, *E. so. didus*, and *C. pellucida* are exceptions to this and may generally be readily obtained by the usual method of sweeping, only an occasional specimen of the other species being secured in this manner. The larger part of the specimens in my collection, about 2000 in number, have been taken personally, and I have met in the field all of the species treated with the exception of *Hippiscus rugosus*.

Correlated with their active aerial habits is the uniformly well-developed condition of the flight-organs; not a solitary example with abortive wings is known to me of the New England species of this subfamily,—a peculiarity in which it presents a marked contrast to the others. Consequently, as being of but relatively slight interest I have omitted from the measurements here given the extent of the tegmina beyond the hind femora.

DESCRIPTION OF THE BOT-FLY OF THE COTTON-TAIL RABBIT IN NEW MEXICO, CUTEREBRA LEPUSCULI N. SP.

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Upon examination of Mr. E. E. Austen's two papers on *Cuterebra*, in the May and August, 1895, numbers of the *Annals and Magazine of Natural History*, and a re-examination of my material from cotton-tails and jack-rabbits, two points become very evident. One is that the species, which I have so far referred to *C. fontinella* Clark, is a new species; and the other is that the bots taken from jack-rabbits, which I referred to *Dermatobia*, belong to the new genus *Bogeria* of Austen. For my previous papers, the reader is referred to *Psyche*, vol 6, pp. 298-300; and *Insect Life*, vol. 5, pp. 317-320. My certainty in determining my specimens as *C. fontinella* rested on the general agreement of Clark's description, the similar host habit, the not too greatly removed locality of Clark's species, and the fact that but little reliance can be placed in many cases

on the measurements of the old authors when given in lines. But since Mr. Austen, with the necessary material and plates at his command, has determined *C. fontinella* Clark beyond doubt to be a much smaller and very different species from my own, it becomes evident that my conclusion was wrong. The following description is that drawn from my two bred specimens described in *Insect Life*. These specimens are now in the collection of the University of Kansas.

Cuterebra lepusculi n. sp.

Cut. fontinella Towns. *Ins. Life*, v. 319 (nec. Clark and Austen.)

♀. Length of body, 20.5 mm. to 21 mm.; width of abdomen, 9 mm. to 9.5 mm.; width of thorax, 9 mm. or a little more; width of head, 8 mm. to 8.25 mm.; length of wing, 16 mm. to 16.25 mm. Front about seven-sixteenths width of head at vertex, grayish-black, scantily grayish-hairy, with two

whitish triangular markings on anterior eye-margin, the lower one elongate and extended in a line nearly to base of antennae; these leave two larger transverse glabrous shining black areas. Antennae and arista grayish. Facial depression silvery, base with blackish lower border, the black of the latter descending in one specimen in a median line on the closely approximated and soldered facial ridges. Whole of sides of face, cheeks, oral region, in fact all of head below antennae, covered with a yellowish-white bloom and clothed with whitish hairs, the oral region especially hairy; two small black spots on cheeks, one next lower margin of eye, and the other well removed therefrom toward oral slit. Dorsum of thorax and scutellum grayish-black, short and finely black-hairy. Whole under surface of thorax, with sides of thorax, both above, below, and anterior to wing bases, and continued completely around edge of scutellum, thickly yellowish-white-hairy; three black spots on side of thorax, the upper one hairy. Abdomen black, with a bluish or purplish luster, rather thickly clothed with short and fine black hairs; inferior lateral edges with regions of grayish bloom containing blackish spots, in one specimen continued faintly on sides of abdomen in places. Restoring the color of the abdomen with chloroform shows this grayish bloom, with the circular black spots, to extend in both specimens upon sides of abdomen and dorsum of last two segments, and even in places on dorsum of second segment. Legs blackish, inferior surface with more or less of a grayish bloom, especially on femora and tibiae. Wings, tegulae, and alulets fuscous or smoky, the alulets very prominently approximated to sides of scutellum when wings are closed over abdomen.

Described from two specimens bred from larvae taken, Oct. 15, from *Lepus artemisia* Bach., near Doña Ana, New Mexico, the adults having appeared about the first of May following.

My description of the larva in *Psyche* should be slightly changed. The so-called "short horny spurs" are better characterized as "spur-like plates," as I later described them in *Ins. Life* (l. c., 320). Mr. Austen is quite correct in calling them "imbricated scales." The length of the fully grown larva is greater than given in *Psyche*. Alive they measure as long as 30 mm., by 14 mm. wide; dead and contracted in alcohol, they measure as long as 26 mm., by 16½ mm. wide.

The larva I described in *Psyche* as a *Dermatobia* is doubtless to be referred to *Bogeria*. The spines are arranged in zones, as described by Austen, though my specimens are little more than half grown and show the spines much less conspicuously. They are directed backward, are hardly curved, and are confined to a little less than anterior half of segment. I can see no smaller spines on posterior margin of segment, but the small bluntly-conical tubercles of rest of surface show indistinctly in places. The latter are what caused me to fall into the error of describing the segments as sparsely covered with short spines, since I mistook the indistinct tubercles for very small spines just appearing. This mistake is easily made in young or half grown larvae.

Mr. Austen's species, *Bogeria princeps*, I have little doubt infests the jack-rabbit (*Lepus callotis* Wagler) in Sonora. It is very likely the same as the New Mexico species.