On an Appendage of the male Leucarctia acraea.

Having occasion recently to examine the male genitalia of this species, I was surprised, on forcing the abdomen forcibly to show the parts, to see project from between the lower part of the horny base of the claspers and the flap of skin which in most species is closely adherent to it, two long, singular organs, which I believe have not before been noticed.

They spring from the base of a pouch which is concealed between the last segments of the body, and formed by the continuation of the external skin. When fully distended they are symmetrical, and curve gently downward and outward in the shape of a horn. They are each about 20 millim. in length, and at the base 2 millim. in diameter, gradually diminishing in thickness to the apex, which is obtuse.

The color of these organs and of the pouch is pale yellow, and the former are clothed with long (3 millim.) fine, sparsely scattered hair. Their distention is accomplished by the muscular contraction of the walls of an internal sac with which they communicate, and which forces into them a yellow, strongly scented fluid. They have no external outlet, nor is this fluid secreted through the pores of the pouch; its only function in connection with them seems to be to fill and expand them.

Although I have examined a large number of living specimens, only one gave me the opportunity of watching the voluntary protrusion of this appendage. The operation was interesting. The abdomen was slightly contracted, opening the orifice of the pouch, from which projected two tufts of black fine hair; as the fluid forced its way out, the hairs, commencing at the base, separated and stood erect; the empty skin, bearing the constantly diminishing tuft, was quickly
pushed on. The latter soon became a mere pencil, and when
the skin was entirely filled it had disappeared. It remained
distended a few seconds, and was then withdrawn; this was re-
peated several times in rapid succession.

After discovering these organs in acraea, I examined every
species of Lepidoptera captured, in the hope of finding ana-
logous ones in them. I was successful in the following three
species: *Danais erippus* Cr., *Agrotis plecta* Linn., and *Euplexia
lucipara* Linn. In the former the organs, though much smaller
than in acraea, were similar in form, and also clothed with scat-
tered fine hair. But their position was very different; they
were situated above, and one on each side of the anal parts,
instead of beneath them. In plecta and lucipara they were in
precisely the same position as in acraea, but entirely dissimilar
in form. In plecta they consisted, when distended, of a single,
short (1.5 millim.) protuberance, thickly clothed and concealed
by a dense bush of fine radiating hair; it returned into the
abdomen in the same manner as in acraea.

This structure is peculiar to the male sex, and is presumably
connected in some way with the act of generation. As all the
species which possess it are common, it is to be hoped that next
season observations will be made upon it, which will help to

List of Coleoptera collected in the vicinity of Clif-
tondale, Mass., June 12, 1873.

(Continued from page 18.)

   quite abundantly this season. 4726. *Thanasimus nigrifrons* Say.

4457. " angulatus Lec. Rare in this vicinity.
4533. " frazini Say. 5135. *Neoelytus erythroccephalus* F.
Morrison, H K. 1874. "On an Appendage of the Male Leucarctia Acraea."

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