comparisons, the characters of Besseria being taken from the figures and descriptions given by the authors above mentioned. For the sake of uniformity, it will be assumed that the sex having the process on the second ventral segment is the female, to which sex the above authors assign it, although in the genus Celatoria this form undoubtedly represents the male:—

Besseria.	Celatoria.
Front of male destitute of orbital bristles.	Front of male bearing two pairs of orbital bristles.
Face perpendicular, in profile strongly concave; epistoma projecting.	Face retreating, in profile strongly convex; epistoma retreating.
Facial ridges bare.	Facial ridges bristly to or beyond the middle.
Third joint of antennae less than twice as long as the second.	Third joint of antennae at least four times as long as the second.
Genitalia of female nearly as broad as the abdomen, incapable of being concealed within the latter.	Genitalia horny, not broader than the tibia, capable of concealment in a groove on the venter.

From this it will be seen that not only are these two genera *not* identical, but their differences are so great that it becomes a matter of much surprise that the authors above mentioned, who have not hesitated to establish new genera on very trivial characters, should have arrived at the conclusion that these two forms are one and the same.

THE LARVA OF BUTALIS BASILARIS ZELL.: THE RELATIONS OF ITS SETAE.

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In *Butalis basilaris* Zeller (determined by Prof. C. H. Fernald) we have a Tineid larva which lives an exposed life. Its superficial resemblance to a Pterophorid is extremely close and it lives in the same situations. The larvae were found eating into the young leaves and buds at the ends of the growing shoots of the blackberry in June and again in August, at Keene Valley, N. Y.

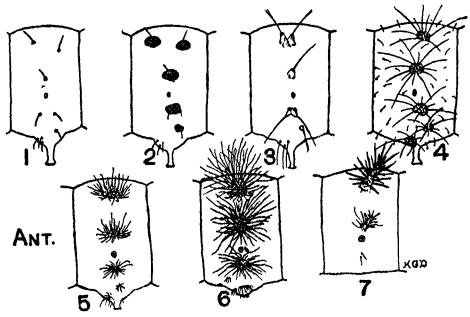
Larva. Cylindrical, the abdominal feet slender, the circular planta with a ring of six crochets regularly distributed. No secondary hairs; setae long, with flattened or winged-furcate ends, arising from cylindrical produced tubercles; i and ii approximate, their bases fused; iii lateral, iv and v united, vi subventral posteriorly, vii of three setae on the anterior side of the base of the foot; viii very small, next mid-ventral line. Color of the body shining green, closely adapted to the color of the young leaves; setae and tubercles white, adding a mossy appearance to the larva and causing it to still further resemble the leaves. Head slightly testaceous; width .6 mm., length of larva 5 mm.

When mature the larva spins a cocoon of a coarse open network of silk at the ground

and transforms to a pupa therein. The pupa is of the "incomplete" type (Chapman) and emerges from the cocoon at the time of exit of the moth.

The arrangement of the setae of the larva is very interesting, as it affords an example from the Tineidae of the arrangement characteristic of the Anthrocerid section of the Microlepidoptera, in which I have previously included only a part of the Pterophoridae, the Anthroceridae, Pryomorphidae, Megalopygidae and Eucleidae. Thus different genera throughout the Microlepidoptera exhibit an ascending series, increasing in complexity and differentiation of structure, culminating in the Eucleidae. This differentiation follows certain definite lines and can be distinguished by a number of important characters from the parallel series of the Noctuina. The more important of these are: (1) The conversion of tubercle vii into a leg-plate in the Noctuina. (2) The approximation of the subdorsal and substigmatal tubercles in the Microlepidoptera. (3) The cutting off of secondary warts from the edge of the cervical shield on the prothoracic segment in the Noctuina. (4) The formation of a true wart by tubercle iii on the meso- and posthoracic segments in the Microlepidoptera. Each of these contrasts with the opposite condition in the other superfamily. I have made some diagrams to illustrate the series leading up to the Eucleidae, in which *Butalis basilaris* forms a link. In this I have not intended to trace certain side lines of development which occur.

Fig. 1 (*Plutella porrectella*) shows the primitive arrangement, found in certain lowly Tineidae. Fig. 2 (*Simaethis pariana*) represents the usual microlepidopterous type, in which tubercles iv and v are united. Fig. 3 shows the present insect, in which i and ii are also united. The next step is the conversion of the single setae into warts by reduplication. It is illustrated in fig. 4 (*Oxyptilus periscelidactylus*) where, however, there are also secondary hairs present. In fig. 5 (*Ino pruni*) the warts have become more consolidated and the



unequal development of the subventral ones is seen. Here the soft hairs begin to be transformed into sharp spines. In fig. 6 (*Megalopyge crispata*) the subventral tubercles are still further reduced, and finally in fig. 7 (*Sibine stimulea*) we reach the Eucleid form, in which the subventrals are absent, the substigmatal wart has been reduced to two very obscure setae; representing iv and v, while the other warts are prolonged and their hairs nearly completely converted into spines.