shown,* and my statement has been copied by later Entomologists, that in some specimens of our species the band shows blue scales on the edges, evidently a trace of a former greater resemblance between the two, on the under surface yet very similar species.

The second element in our Moth fauna is that which is South American or intertropical in its character. In the Hawk Moths such genera as *Aellopos*, *Enyo*, *Cautethia*, *Philampelus*, must be reckoned as such, while in this category we must distinguish between those forms of recent and partial or more ancient and entire acclimatization in the United States and Canada. As coming under the latter head we may reckon the genera *Citheronia* and *Eacles* among our larger Moths which enjoy a much greater representation in species in Mexico and South America.

The final element of peculiarly North American genera is a large one and in every family of Moths has abundant representation. In the Hawk Moths *Arctonotus*, *Lepisesia*, *Deidamia*, *Everyx* and *Cressonia* are instances; both the Spinners and the Owlet Moths have numerous examples of this category.

(To be Continued.)

A NEW PHYTOPTOCERIDIUM FROM NORTH AMERICA, ON ACHILLEA.

BY DR. H. A. HAGEN, CAMBRIDGE, MASS.

In the middle of September, 1886, Prof. W. G. Farlow sent to me several specimens of the heads of Achillea (probably *A. millefolium* L.) collected on Mt. Washington. They correspond well with the deformity described by Dr. Fr. Thomas in Giebel's Zeitschr., 1872, vol. 39, p. 464, on *A. moschata* Wulf. The flowers are to a large part changed in white hairy sacs or galls, containing a number of living Phytoptas. As far as

* In the CANADIAN ENTOMOLOGIST, vol. vii., p. 186; also *Ann. Lyc. Nat. Hist. N. Y.*, xi., p. 301, 1876, where I show that certain writers are at fault in considering the variation in the color of primaries in this prominent species as sexual, the whitest examples being given as the males; consult also an article in the CANADIAN ENTOMOLOGIST entitled: "On Species of *Catocala*," pp. 229-232.

known to me, this gall is not yet described from the U. S., and is very similar to those of *A. millefolium* described by Mr. Fr. Loew, Verhdl. Wien. Z. B. Ges., 1878, vol. 28, p. 130, which is to be found in Baron Thuemen Herbar. mycolog. oeconom. Suppl., I., No. 60. Our collection possesses a specimen by Prof. Thomas with the indication of *Tylenchus* (*Anguillula*) *millefolii* Loew. At first I believed to see also in Prof. Farlow's specimens, besides the Phytoptas, some *Anguillula*. But the polarised light showed directly that I had mistaken some fragments of the fine white hairs for *Anguillula*; the polarised light would have shown directly the muscular apparatus in the *Anguillula*. It is nevertheless probable that other plants of *Achillea* may contain the *Tylenchus*. I believe that the galls before me may have contained before a Cecidomyia, though the European species is not yet recorded from the U. S. As *Achillea millefolium* is common in the north of the U. S., I desire to draw the attention of Entomologists to this plant. The European literature on the parasites of *A. millefolium* is somewhat large.

ENTOMOLOGICAL CLUB, A. A. A. S.

The Club met at Buffalo, N. Y., on August 17, 1886, at the rooms of the Buffalo Society of Natural History, 14 members being present.

The session continued at intervals during the meeting of the A. A. A. S. The following persons were in attendance during the meeting: J. A. Lintner, Albany, N. Y.; J. H. Comstock, Ithaca, N. Y.; S. A. Forbes, Champagne, Ill.; L. M. Underwood, Syracuse, N. Y.; T. B. Stowell, Courtland, Ill.; Rev. R. Benjamin, Cincinnati, O.; E. W. Claypole, Akron, O.; Dr. J. B. Tweedale, St. Thomas, Ont.; D. S. Kellicott, E. M. Chamot, O. Reinecke, C. D. Zimmerman, Ph. Fischer, E. P. Van Duzee, Buffalo.

The Entomological Society of Ontario was duly represented by Mr. Wm. Saunders, Rev. C. J. S. Bethune, Mr. J. Alston Moffat, and Mr. E. Baynes Reed.

The President, Prof. J. A. Lintner, took the chair, and Mr. E. B. Reed acted as Secretary in the absence of Mr. J. B. Smith, of Washington.