

## CHIONOBAS BORE.

*Sir*,—We have in Colorado a butterfly identical, according to the determination of Dr. Staudinger (see C. E. XVIII., 15), with *Chionobas Bore* Lehn. and Hübner, and by the aid of Mr. David Bruce I have been able the past season to rear the larvæ from egg to adult stage, soon after reaching which hibernation took place. This has led me to inquire into Sandberg's history of *Bore* of Lapland, referred to by Mr. Scudder (Butt. N. E., p. 126), and on writing Dr. Holland on the subject, he very kindly looked up Sandberg's paper, and has sent me a translation of it. So far as I know no translation into English has been published, and I suggest that you print it in full, so that when the history of the American form is published—as it will be after pupation is reached—the habits on the two continents can be compared. It is already clear that our form does not hibernate through two winters. The larval stages began on 16th July, and the fourth (and last) moult was reached 9th September, so that their duration to last moult was but about nine weeks. I hope to see pupæ soon after the winter passes, and shall then fully illustrate the species in "Butterflies of North America."

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Sandberg's article is contained in the Berliner Entomologische Zeitschrift, Vol. XXIX., 1885, Part II., pp. 245–265. It is entitled "Beobachtungen ueber Metamorphosen der Arktischen Falter."—*Anglice*. Observations upon the Metamorphoses of Arctic Lepidoptera. I gather from the preliminary pages that the author was for twelve years an official residing in Norwegian Finmark, and that he there made the observations which he records in his paper.

I send you a translation hurriedly made of what he has to say concerning *Oeneis Bore* at p. 247 *et seq* as follows :

1. *Oeneis Bore* Schn.

Egg cylindrical, marble-white, longitudinally ribbed.

Caterpillar clothed with fine hairs, bright brownish-yellow, ornamented by a narrow dark dorsal line, which terminates abruptly, and two broader dark lines, one upon either side. The head is globular, small in proportion to the body, greenish-yellow, with six dark lateral stripes, and black