

## NOTES ON ARGYNNIS FREYA, CHARICLEA AND MONTINUS.

BY H. H. LYMAN, MONTREAL.

As is well known to readers of the CANADIAN ENTOMOLOGIST, Mr. Scudder, in his sumptuous work on the Butterflies of New England recently published, stated that Mr. Edwards had confused the two northern species, *Argynnis Freya* and *Chariclea*. This was denied by Mr. Edwards in the April number of this journal and Mr. Butler's authority was invoked to prove that Mr. Scudder had himself transposed these names. Here the matter rests, but as I think that I can throw some additional light on the question I shall endeavour to do so.

In the preface to Mr. Scudder's work he states that "twenty years ago the present work was definitely planned, announced and begun and the greater part of it has been written for fifteen years," though he adds that much of it was rewritten within the past few years.

On page X. of the same preface, in speaking of the appendix in which certain butterflies not found in New England are described, he says: "It was, however, an afterthought not entering into the original plan \* \* \* it has, indeed, been written during the printing of the work." This fact that the first volume was written fifteen or more years ago and the third only last year, no doubt explains the contradictory statements in reference to the affinities of *Argynnis Montinus* which appear in these volumes.

On page 604 of the first volume Mr. Scudder, in speaking of *A. Montinus*, says: "This species is certainly distinguishable from *B. chariclea* (Schneid), or *B. chariclea boisduvalii* (Somm.), both of which forms have been found by Mr. Couper on the northern shore of the Bay of St. Lawrence. Whether it should be looked upon merely as a geographical race, or as a species, is a question about which there may be easy difference." This certainly implies a very close connection between these forms, and in the original description of *Montinus*, in Scudder's "List of the Butterflies of New England," published in the Proceedings of the Essex Institute in April, 1863, reference to which he curiously enough omits from his recent work, he began his description with "Very similar to *A. Chariclea*."

So far so good, but on turning to the appendix in the third volume, page 1807, under the heading of *Brenthis freija* Thunb., which is the same as *Freya* Hübn., he says: "This species is very closely allied to