

belonging to different sub-groups. *Brucei* as a species was pronounced by Dr. Staudinger originally to be a form of *Bore*. Turning to the plate, it appears that the claspers of *Norna* and what is called "*Semidea*, Colorado form," (and which is *Aeno*, Bdv.) are sufficiently alike to be one species, though widely separated by the facies, and *Semidea* of the White Mts. is farther from *Aeno* than from *Norna*, though the first two are of one sub-group. The truth is that claspers, or the whole body of abdominal appendages, are unreliable for determining what are species. Mr. Scudder unwittingly gave the *coup de grace* to that fad, when he said, p. 329, Butt., N. E., of *Grapta Interrogationis*, that "the two forms of this species, *Fabricii* and *Umbrosa*, differ so greatly and so constantly from each other, not only in the colouring, but in the form of the wings, and even in the abdominal appendages, that they have been considered as distinct species." That is, if they had not by breeding from the egg been proved to be one species, they would be considered as two! But in Mr. Scudder's plates, which are a marvel of drawing, and are of undoubted accuracy, several species of *Argynnis* have one style of organs; so several *Graptas*; several *Phyciodes*, several *Theclas*, several *Limentitis*, several *Colias*, etc.; differing between themselves in each case not more than the individuals of any one species would doubtless differ. We read even in this Revision under view that in *Norna* and in *Jutta* there is an unusual amount of individual variation in the claspers. Of course there is such variation everywhere. In every part of the organization of every species there is individual variation. I have before gone into this subject pretty fully, in the CAN. ENT., XXIII., p. 55, and need not say more here. Though I may as well add that by Mr. Scudder's plates the allied groups do not always show the same style of organs, thus: *Grapta Progne* cannot be distinguished from *Grapta Comma*, though they belong to different sub-groups, while *Grapta Faunus* differs conspicuously from *Comma*, though these two belong to one and the same sub-group. Twenty years ago, before the larvæ of these species had been reared, Dr. Staudinger and others, judging by the facies, insisted that *Faunus* and *Comma* and *Grapta Satyrus* were nothing but one species. See Butt. N. A., Vol. I., Note to *G. Comma* text. And this, by the way, is a good illustration of the unreliability of facies alone for determining species which are closely allied. In my opinion, after reading what has been published by Mr. Scudder on the genitalia, and carefully going over his beautiful plates, I deny that claspers and all the organs together are valuable for the pur-