

positive evidence of such a thing in nature, I do not remember to have heard or read of it.\*

It would not seem very likely that a colony of hybrids, so numerous as to allow of catching three individuals in one district, would be discovered. Now, I have a female *Papilio*, taken in Arizona years ago by one of the Wheeler expeditions, that must be of the same species as these males from Colorado. The hindwings are wholly wanting, but the forewings are good and agree with *Bairdii*; while the body is exactly like these males, allowing for the difference of sex. This specimen had always been a puzzle to me, and I looked for light on its peculiarities to come some day. I do myself a pleasure in naming this *Papilio* after my distinguished friend, Dr. Holland. Mr. Bruce will probably get eggs from the female of this species next summer.

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\*Under the heading of "Hybrids" in index to Butt. N. E., I find five pages referred to. On p. 283, we read "that hybrids occur between this species (*Astyanax*) (i.e. *Ursula*) "and *Archippus*" (i.e. *Disippus*) "is rendered probable by the remark of Mr. Mead, who found an *Astyanax* on whose upper surface the blue was supplanted by fulvous," etc.; and also of Grey, who says, CAN. ENT., XI., 17, he possesses "a melanitic form of *Disippus* with all the markings of *Ursula* on the under surface." Now these may be cases of hybridity, and may not. The American species of *Limenitis* are so closely allied that they would seem to be but one remove from a common parent, and as probably as not one of the black species is nearest that parent. These variations in occasional individuals of one species in the direction of another species may be cases of reversion or mere sports. Hybridity is conjectured, not proven.

On p. 289 et seq., is a discussion of the supposed hybridity by wholesale of *Limenitis Posepina* (between males of *Arthemis* and females of *Ursula*, and *vice versa*). I have shown the improbability of this mixing up in CAN. ENT., XXIII., p. 49, et seq., and that all the phenomena may be accounted for in a different way, with no violation of probabilities.

On p. 445, we read: "Mr. H. Edwards describes a hybrid between *Pyrameis Atalanta* and *Carye*." "The under side is that of *Atalanta*." Mr. Scudder adds here: "Hybrids among butterflies are of extreme rarity." Cases of copulation between butterflies of different species of the same genus have several times been observed and recorded, even of different genera. I reported one in C. E. recently between two of different families, viz., a *Melitæa* and *Chrysophanus*. But I do not know of instances (though such there may be) where such copulation has led to eggs from which the larvæ were bred to pupæ and butterflies produced. In only this way could we be sure of hybridity.

On p. 1212, we read that a *Pieris Rapæ* paired with a *Pieris Protodice* (these at least belong to different subgenera) and the female laid eggs which hatched. But the larvæ all died, and so nothing came of this conjunction.

On p. 1363, under *Papilio Asterias (Polyxenes)*, we are told: "No hybrids are known"; after which it is related that "Mr. Edwards possesses an hermaphrodite" specimen, etc. I conclude, knowing Mr. Scudder's habit of thorough research, that no other instances of possible or probable hybridity have been reported among American butterflies.