

BEDROCK

they developed by a series of stages or suddenly arose in their present form. In the course of this discussion, Professor Punnett triumphantly pointed to the admitted fact that they do so arise! It was this mode of argument that I ventured to parody in a travesty taken too seriously by Professor Punnett.

I stated in October, 1913, that I had always recognised that the first variation which initiates mimicry must be something appreciable, and proceeded to prove it by quoting a striking example from my article in *BEDROCK* for April, 1912. I even complained, and justly, that Professor Punnett had altogether misrepresented me. The only reply that he now makes is triumphantly to assert that the views expressed and illustrated in April, 1912, were "elicited" by his article in July of the following year. I suppose he will now claim that the earliest statement of the kind I remember to have made *—in 1890—was elicited by him!

There is nothing inconsistent between these views upon the origin of mimicry and the passage quoted from *Darwin and the Origin*, by Professor Punnett. I do not regard the "first colour change" which started mimicry as a large variation, or one that differs from the steps of evolution as Darwin postulated them.

I am reminded, by Professor Punnett's particoloured rabbits, of the hooded rats figured by Professor W. E. Castle (*Heredity and Eugenics*, Chicago, 1912, p. 58). Here is a Mendelian investigator who has been led by his experiments to believe that "Mendelizing characters can be modified by selection," and I bring this article to a close by quoting part of the concluding paragraph of his lecture:—

"Accordingly we conclude that unit-characters are not unchangeable. They can be modified, and these modifications come about in more than a single way. Occasionally a unit-character is lost altogether or profoundly modified at a single step. This is mutation. But more frequent and more important, probably, are slight, scarcely noticeable modifications of unit-characters that afford a basis for a slow alteration of the race by selection. . . ."

* *Nature*, October 2nd, 1890. Reprinted in *Essays on Evolution*, 1908, p. 376.

