his crystals, by Galton with his finger-prints, by Geddes with his flowering plant, by the palæontologists (Cope, Hyatt, &c.) with their shells and teeth, and so on.

But, apart from the question of definiteness or indefiniteness, the general view is that of *a continuous series of minimal variations*, from which Darwinians believe that natural selection has brought about the observable discontinuity of species.

Now one of the results of Bateson's work is to create a presumption in favour of a belief in *discontinuity of variation*. "The discontinuity of which species is an expression has its origin, not in the environment, nor in any phenomenon of adaptation, but in the intrinsic nature of organisms themselves, manifested in the original discontinuity of variation." "The existence of new forms, having from their first beginning more or less of the kind of perfection that we associate with normality, is a fact that disposes, once and for all, of the attempt to explain all perfection and definiteness of form as the work of selection." It should here be noted that Mr. Galton also has repeatedly expressed his belief in the occurrence of what he calls "transilient" variations, and has adduced some evidence in support of his position.

Mr. Bateson's main induction is that variation is frequently discontinuous and large in amount, and his suggestion, like that of Geoffroy St. Hilaire, is that the variations which have been important in the origin of new species may have been *discontinuous* in their nature. Thus he does not believe that natural selection has played such an important rôle as the Darwinians suppose, and require to suppose. In short, discontinuity of species results from the discontinuity of variation, and does not primarily depend upon selection.

Furthermore, his induction discloses a greater definiteness of variation than is suggested by the words "fortuitous", "indefinite", "in every part of the organism" used by the Darwinians to describe the variations which they assume. Mr. Bateson suggests that this definiteness is an expression of the physical limitations put upon variation by the conditions of organic stability.