

individuals". But one fails to find as yet sufficient warrant for this supposition that numerous similar, fortuitous, indefinite, indeterminate variations should occur. For Lamarckians, or for believers in progressive variation along definite lines, the supposition is natural, but not for Darwinians.

Another answer to the difficulty—applicable to certain cases—might perhaps be found in the fact, which breeders allege, that certain strongly marked (germinal and racial) variations are by no means readily swamped, even in the absence of isolation. We might perhaps venture to speak of a struggle for existence within the fertilized ovum, wherein the physical basis, corresponding, let us say, to a strongly marked paternal characteristic, asserts itself even without co-operation from the maternal substance.

But the answer which has been within recent years suggested by Romanes, Gulick, and others is an elaborate theory of "Isolation". Under this title they include a variety of ways in which free intercrossing is prevented between members of a species, *e.g.* by geographical barriers, by change of habit, by a reproductive variation causing mutual sterility between two sections of a species living on a common area, and so on.

According to Romanes: "Without isolation, or the prevention of free intercrossing, organic evolution is in no case possible. Isolation has been the universal condition of modification. Heredity and variability being given, the whole theory of organic evolution becomes a theory of the causes and conditions which lead to isolation."

There is still, however, a lack of sufficiently precise evidence in regard to the supposed swamping without isolation, and in regard to the supposed general prevention of free intercrossing.

(e) *So-called "Organic Selection"*.—Prof. Weismann suggested in one of his essays that individual modifications, though not transmissible, might co-operate with progressive congenital variations in effecting adaptations of importance, and this hint has been developed by Prof. C. Lloyd Morgan, Prof. Mark Baldwin, and