

For example, the author states that as a result of the isolation of some of these factors it seems evident that certain species differences are based on a single factor. Therefore she contends that "if such marks are used for species differentiation, then the color variations of each variety of the various breeds of pigeons might as legitimately be assigned species names." This of course brings up again the old question: What is a species? and it is quite conceivable that it is one thing from the point of view of the geneticist and another from that of the systematist. The latter, as we understand it, is dealing with forms as they occur in nature, and those which remain constantly different even though by a single factor are none the less species. The artificially produced forms due to selective breeding may differ more widely from one another but if when thrown back on nature they all revert to an original type they are not species from the systematist's point of view.

The possibility that the Domestic Pigeon is of polyphyletic origin and not descended from a single species *Columba livia*, we are quite willing to admit.

The second paper deals with the inheritance of silkiness in fowls, a plumage condition due to lack of hooks on the barbules. The author considers that the sporadic occurrence of such birds, which has been noted since the thirteenth century, is due to the chance mating of birds carrying the silky factor in heterozygous condition.—W. S.

Howell on Agencies which Govern the Distribution of Life.¹—

This is an interesting and readable discussion of an important subject which has engaged the attention of many students. Mr. Howell, while conceding that temperature is the most important factor involved, believes that too little attention has been given to other agencies, some of which he considers. His classified table of 'Agencies' contains five main heads: (I) Life Types, whether active, or sedentary, aquatic, fossinal, etc.; (II) Direct Physical Barriers, oceans, rivers, mountains, etc., forests, plains, and deserts; (III) Regulation by Temperature, zonal, faunal and associational; (IV) Food and (V) Enemies.—W. S.

Chapman on New Formicariidae and Dendrocolaptidae.—A continuance of the study of his South American collections has resulted in the discovery of twenty-two new forms of these difficult families which Dr. Chapman names in the paper before us. They belong to the genera *Thamnophilus*, *Myrmotherula*, *Microbates*, *Myrmoderus*, *Hylophylax*, *Grallaria*, *Schizoeaca*, *Synallaxis*, *Siptornis*, *Pseudocolaptes*, *Philydor*, *Xenopicus*, *Xenops*, *Sclerurus* *Glyphorhynchus* and *Lepidocolaptes*.

The descriptions are full with lists of specimens examined and comments on related forms, measurements, etc.—W. S.

¹ Agencies which Govern the Distribution of Life. American Naturalist, LVI, Sept.-Oct., 1922, pp. 428-438.