

racés, *ad infinitum*? It must not be lost sight of that perfectly natural conditions are necessarily the only ones under which the test of specific relationship is a fair one, as it is well known amongst naturalists that domestication or confinement entirely alters the reproductive abilities even of a large number of the higher animals. This is a fact quite apart from the one that most of the various forms, strains, or "breeds" of our domestic animals, birds, or plants are not "species" at all in the scientific sense, but rather variations specialised by man's careful selection. Under complete domestication specific identity soon becomes entirely lost.

In the foregoing illustration of extreme geographical or climatic varieties or local races, it has been assumed that it has been possible to trace relationship clearly through from one extreme to the other. When such relationship exists it seems to suggest that the aggregate of all these varying forms should constitute the species. Yet the extremes cannot possibly meet under natural conditions, so that that test cannot be made. Are the extremes to be considered different species?

There can be little doubt, if Darwin's theory be admitted, that it is through the formation and subsequent isolation of such local races that distinct species have been formed through courses of millions of years. Isolation, whether of climatic changes such as the glacial epoch, or by the formation of continents, inundations by sea, upheavals of mountains, etc., effectually prevented the mingling of many races ages ago. which may subsequently have become modified in different ways, and so become quite distinct species from our point of view, or non-variable species may have become so divided, and the isolated portions of them have remained similar or nearly similar to our eyes. Through countless ages they have lost their blood-relationship, and yet they look alike. Are they to be considered distinct species? These things we can only judge for ourselves from close observation and much study in each particular instance.

Not only do multitudinous forms occur, perhaps side by side so enormously variable within certain limits, or so exactly like forms of another supposed species found in one locality, and like forms of others elsewhere, that without the actual reproductive test we can merely draw deductions from close observation; but probably no two men who have given much thought to the subject have exactly the same idea as to what degrees of difference are necessary, or what exact distance of relationship must exist before two forms can have a right to be called different species. It is unquestionable that many species do exist which show no very close relationship to any others wherever they occur. But a very large number, more particularly amongst insects and