brambles (Rubus), etc. It is possible that many wild species have originated in this way, as even Linnæus assumed. This supposition appears especially justifiable as regards many of the lower sea-plants and sea-animals, whose rich sexual products are simply emptied into the water. Their commingling and fructification is left to chance; and the active agility of most of these freely swimming seed-cells must specially be taken into consideration. Now, we know by many observations and experiments that the fructification of the egg-cells is often more easily accomplished by the crossing of two closely related species, than in the case of individuals of the same species. Hence it is very probable that the chance meetings of innumerable seed-cells and egg-cells of closely related marine creatures give rise to more hybrids than to products of pure in-breeding; and as the former, moreover, are frequently more prolific than the latter, they may easily push the others aside in the struggle for existence, and form new species. Of late years Weismann, above all others, has emphasized the high importance of sexual commingling for the transformation of species. At all events, these hybrid species, which can maintain and propagate themselves as well as pure species, prove that hybridism cannot serve in any way to give an absolute definition to the idea of species.

I have already mentioned (p. 141) that the many vain attempts to define the idea of species theoretically have nothing whatever to do with the practical distinction of species. The extensive practical application of the idea of species, as it is carried out in systematic zoology and botany, is very instructive as furnishing an example of human folly. Hitherto, by far the majority of zoologists and botanists, in