

as philosophical naturalists exist, be Charles Darwin's greatest title to glory." ¹

Recently the work of de Vries, "The Mutation Theory," has at length set forth a number of trustworthy observations of the origin of species in plants with which natural selection, in the restricted original sense at least, can have nothing to do. The origin of species by mutation consists in a sudden discontinuous variation, and selection, therefore, has no opportunity to operate upon a series of numerous minute variations which themselves display no tendency of any sort whatever, in the manner demanded by the Darwinian hypothesis.² Hence it appears certain that natural selection cannot be regarded as completely master of the situation; apart from the origin of life there remains a lacuna in biology which for the present no existing mechanistic hypothesis can fill.

Moreover, among other things, the ordinary processes of regeneration and repair have frequently been brought forward with some success as purposeful activities inexplicable

¹ Du Bois-Reymond, "Darwin *versus* Galvani," "Reden," Vol. I, p. 211. Quoted from Merz, "History of European Thought in the Nineteenth Century," Vol. II, p. 435. To the same source I am indebted for several other quotations.

² Hugo de Vries, "The Mutation Theory." Chicago, 2 vols., 1909, 1910 (trans. Farmer and Darbishire).