

able to attain to. Even the human mind, according to the law of unlimited adaptation, enjoys an infinite perspective of becoming ever more and more perfect. It is this consideration which proves the worthlessness of the much-talked-of "*Ignorabimus Speech*," which Du Bois Reymond, the Berlin physiologist, in 1873, most unjustifiably directed against the advance of science in his discourse "On the Limits to our Knowledge of Nature" ("Über die Grenzen des Naturkennens"). I have entered my protest against this infamous "*Ignorabimus Speech*"—which clerical obscurantism has made its watchword—in the preface to my "*Anthropogeny*" (1874), and again in my treatise on "*Freedom in Science and Teaching*" ("*Freie Wissenschaft und freie Lehre*").

These remarks are sufficient to show the extent of the phenomena of Adaptation, and the great importance to be attached to them. The laws of Adaptation, or the facts of Variation, are just as important as the laws of Inheritance. All phenomena of Adaptation can, in the end, be traced to conditions of nutrition of the organism, in the same way as the phenomena of Inheritance are referable to conditions of reproduction; but the latter, as well as the former, may further be traced to chemical and physical, that is, to mechanical causes. According to Darwin's Theory of Selection, the new forms of organisms, the transformations which artificial selection produces in the state of cultivation, and which natural selection produces in the state of nature, arise solely by the interaction of such causes.