

language, as denotive of *species* too definite to admit of mistake, are actually rendered *generic*, and extended to whole groups, comprising objects agreeing in nothing but the arbitrary heads of a classification from which the most important natural relations are professedly and purposely rejected.*

(134.) The classifications by which science is advanced, however, are widely different from those which serve as bases for artificial systems of nomenclature. They cross and intersect one another, as it were, in every possible way, and have for their very aim to interweave all the objects of nature in a close and compact web of mutual relations and dependence. As soon, then, as any resemblance or analogy, any point of agreement whatever, is perceived between any two or more things,—be they what they will, whether objects, or phenomena, or laws,—they immediately and *ipso facto* constitute themselves into a group or class, which may become enlarged to any extent by the accession of such new objects, phenomena or laws, agreeing in the same point, as may come to be subsequently ascertained. It is thus that the materials of the world become grouped in natural families, such as chemistry furnishes examples of, in its various groups of acids, alkalies, sulphurets, &c., or botany, in its euphorbiacæ, umbelliferæ, &c. It is thus, too, that phenomena assume their places under general points of resemblance; as, in optics, those which refer themselves to the class of periodic colors, double refraction, &c.; and that resemblances themselves become traced, which it is the business of induction to generalize and include in abstract propositions.

(135.) But every class formed on a positive resemblance of characters, or on a distinct analogy, draws with it the consideration of a negative class, in which that resemblance either does not subsist at all, or the contrary takes place; and again, there are classes in

* In the system alluded to, the name of quartz is assigned to iolite and obsidian; that of mica to plumbago, chlorite and uranite; sulphur, to orpiment and realgar, &c. See Mohs's System of Mineralogy, translated by Haidinger.