

connected with continual progress, with an increasing state of perfection in the organization. The foundation of both these laws rests, in the first place, for the most part in the physiological *Division of Labour* in organisms (Ergonomy), and in the morphological Separation or Divergence of Forms (Polymorphism) connected with it.

When the general application of these two great historical principles were first recognized, after a series of very extensive palæontological investigations, it was thought that the origin of these laws must be looked for in some definite plan of creation, or directly in some supernatural intention. It was supposed to be part of the plan of a Creator, acting for a definite purpose, in the course of time to develop the forms of animals and plants more and more variously, and to bring them more and more to a state of perfection. We shall evidently make a great advance in the knowledge of nature if we reject this teleological and anthropomorphic conception, and if we can prove the two laws of Division of Labour and Perfecting to be the *necessary* consequences of natural selection in the struggle for life.

The first great law which follows directly and of necessity from natural selection is, that of *separation* or differentiation, frequently also called *division of labour* (Ergonomy), or *separation of forms* (Polymorphism); Darwin calls this same general principle *divergence of character*. We understand by it the general tendency of all organic individuals to develop themselves more and more diversely, and to deviate from the common primary type. The cause of this general inclination towards differentiation, and the formation of heterogeneous forms from homogeneous beginnings, is, according to Darwin, to be traced simply to the circum-