

## THE UNITY OF NATURE

But immediately after Müller's death such important discoveries and advances were made in these two branches that the uneasy "phantom of vital force" was driven from its last refuge. By a very remarkable coincidence Johannes Müller died in the year 1858, which saw the publication of Darwin's first communication concerning his famous theory. The theory of selection solved the great problem that had mastered Müller—the question of the origin of orderly arrangements from purely mechanical causes.

Darwin, as we have often said, had a twofold immortal merit in the field of philosophy—firstly, the reform of Lamarck's theory of descent, and its establishment on the mass of facts accumulated in the course of the half-century; secondly, the conception of the theory of selection, which first revealed to us the true causes of the gradual formation of species. Darwin was the first to point out that the "struggle for life" is the unconscious regulator which controls the reciprocal action of heredity and adaptation in the gradual transformation of species; it is the great "selective divinity" which, by a purely "natural choice," without preconceived design, creates new forms, just as selective man creates new types by an "artificial choice" with a definite design. That gave us the solution of the great philosophic problem: "How can purposive contrivances be produced by purely mechanical processes without design?" Kant held the problem to be insoluble, although Empedocles had pointed out the direction of the solution two thousand years before. His principle of "teleological mechanism" has become more and more accepted of late years, and has furnished a mechanical explanation even of the finest and most recondite processes of organic life by "the func-