

"The Most General Laws of Nature in All Development," he shows, in the clearest way, that only in a very childish view of nature could organic species be regarded as permanent and unchangeable types, and that in fact they can be only passing series of generations, which have developed by transformation from a common original form. The same conception again received firm support from Baer, in 1859, through a consideration of the laws of the geographical distribution of organisms.

J. M. Schleiden, who founded, fifty years ago, in Jena, a new epoch in Botany by his strictly empirico-philosophical and truly scientific method, illustrated the philosophical significance of the conception of organic species in his incisive "Outlines of Scientific Botany,"<sup>7</sup> and showed that it had only a subjective origin in the general *law of specification*. The different species of plants are only the specified productions of the formative tendencies of plants, which arise from the various combinations of the fundamental forces of organic matter.

The eminent botanist, F. Unger, of Vienna, was led by his profound and comprehensive investigations on extinct vegetable species, to a palæontological history of the development of the vegetable kingdom, which distinctly asserts the principle of the Theory of Descent. In his "Attempt at a History of the World of Plants" (1852), he maintains the derivation of all different species of plants from a few primary forms, and perhaps from a single original plant, a simple vegetable cell. He shows that this view is founded on the genetic connection of all vegetable forms, and is necessary, not merely for philosophical reasons, but for those of experience and observation.<sup>8</sup>