ERASMUS DARWIN. By Ernst Krause. Translated from the German by W. S. Dallas. With a preliminary notice by Charles Darwin. 12mo. New York: D. Appleton & Co. 1880.

This work purports to be a translation of an article published in the German scientific journal Kosmos, on Erasmus Darwin, grandfather of Charles Darwin, and author of the Zoonomia, Botanic Garden, and other works. The "preliminary notice," however, constitutes the major portion of the work. It alone gives the history of Dr. Darwin's life, while Dr. Krause's brief essay is entirely concerned with the analysis of his works, and the vindication of his claim to be the true founder, in great part at least, of that system of evolution through natural selection of which his grandson is the exponent in our own day. To Mr. Charles Darwin the preparation of this sketch has evidently been a labor of love, and we, of course, should be the last to carp at his filial piety. At the same time it must be said that there was little either in the character or pursuits of Erasmus Darwin which is calculated to arouse any very general interest in the details of his life. An eminent member of the medical profession, a keen observer and bold speculator in natural history, he undoubtedly was; but even these qualities will hardly suffice to fascinate the general public with the humdrum life of an English provincial doctor of the last century.

Dr. Darwin was a poet also, of sufficient ability to draw from Byron the epithet of "mighty master of unmeaning rhyme." In his long didactic poems, as well as in his prose writings, he indulged in those speculations on the development of living creatures which caused his contemporaries to use the term *Darwinizing* "nearly as the antithesis of sober biological investigation." Dr. Krause shows that in these works are found the doctrines of evolution, reversion to primitive types, rudimentary organs, the struggle for existence, sexual selection, and in fact nearly all of those ideas which Charles Darwin and Alfred R. Wal-

lace have elaborated into the modern theory of evolution. A fact which seems to have escaped Krause's notice is that in another question also, the government of the universe, Charles Darwin apparently holds the same position which was held by his grandfather. "That there exists a superior Ens Entium," says the latter, "which formed these wonderful creatures, is a mathematical demonstration. That he influences things by a particular providence is not so evident. The probability, according to my notion, is against it, since general laws seem sufficient for that end." This, if we are not mistaken, is precisely the view expressed of late years by Mr. Darwin in several places. "The birth, both of the species and of the individual, are equally parts of that grand sequence of events which our minds refuse to accept as the result of blind chance. The understanding revolts at such a conclusion, whether or not we are able to believe that every slight variation of structure, the union of each pair in marriage, the dissemination of each seed, and other such events, have all been ordained for some special purpose" (Descent of Man, vol. ii., p. 378).

The same view is maintained much more expressly in the Origin of Species. Its fallacy has been ably pointed out by St. George Mivart in his Genesis of Species, and we draw attention to it here only to suggest that ancestral prejudice may perhaps have more to do with at least one of Mr. Darwin's scientific opinions than he, in his philosophic deliberations moved by dispersed to investigate.

tions, would be disposed to imagine.