

in which the subject has been treated in the "Vestiges." Whether we consider it in its nature, in its history, or in the character of the intellects with whom it originated, or by whom it has been received and supported, Mr. Miller has shown that it has nothing to recommend it. It existed as a wild dream before Geology had any being as a science. It was broached more than a century ago by De Maillet, who knew nothing of the geology even of his day. In a translation of his *Tellamed*, published in 1750, Mr. Miller finds very nearly the same account given of the origin of plants and animals, as that in the "Vestiges," and in which the sea is described as that "great and fruitful womb of nature, in which organization and life first begin." Lamarck, though a skilful botanist and conchologist, was unacquainted with geology; and as he first published his development hypothesis in 1802, (an hypothesis identical with that of the "Vestiges,") it is probable that he was not then a very skilful zoologist. Nor has Professor Oken any higher claims to geological acquirements. He confesses that he wrote the first edition of his work in *a kind of inspiration!* and it is not difficult to estimate the intelligence of the inspiring idol that announced to the German sage that the globe was a vast crystal, a little flawed in the facets, and that quartz, feldspar, and mica, the three constituents of granite, were the hail-drops of heavy showers of stone that fell into the original ocean, and accumulated into rocks at the bottom!

Such is the unscientific parentage of the theories promulgated in the "Vestiges." But the author of this work appeals in the first instance to science. Astronomy, Geology, Botany, and Zoology are called upon to give evidence in his favor; but the astronomer, geologist, botanist, and the zoologist, all refuse him their testimony, deny his premises, and reject his results. "It is not," as Mr. Miller happily observes, "the illiberal religionist that casts him off. It is the inductive philosopher." Science addresses him in the language of the possessed: "The astronomer I know, and the geologist I know; but who are ye?" Thus left alone in a cloud of star-dust, or in brackish water between the marine and terrestrial flora, he "appeals from science to the want of it," casts a stone at our Scientific Institutions, and demands a jury of "ordinary readers," as the only "tribunal" by which "the new philosophy is to be truly and righteously judged."

The last and *fifteenth* chapter of Mr. Miller's work, "On the Bearing of Final Causes on Geologic History," if read with care and thought, will prove at once delightful and instructive. The principle