

insects, the nature of which was fully explained in my lectures on the nervous system. It will be sufficient to state, that the eyes of these creatures are immoveable, and that this apparent deficiency is compensated by a visual organ of a most extraordinary kind. The eye is composed of a vast number of elongated cones, each having a crystalline lens, pupil, and cornea, and terminating on the extremity of the optic nerve.* Each organ of sight is, therefore, a compound instrument, made up of a series of optical tubes, or telescopes, the number of which in some insects is quite marvellous. Thus each eye of the common house-fly is composed of eight thousand distinct visual tubes; that of the dragon-fly, of nearly thirteen thousand; and of a butterfly, of seventeen thousand. That any traces should remain of the visual organs of an animal, which must have perished at so remote a period, seems at first incredible; but there are no limits to the wonders which geology unfolds to us.† The trilobite, like the limulus, was fur-

* See Dr. Roget's illustration of this subject; Bridgewater Essay, vol. ii.

† This structure of the eye of the trilobite was, I believe, first noticed by that accurate observer, Mr. Martin, the author of *Pretif. Derbiensia*. In the work of my friend, M. Brongniart (*Histoire Naturelle des Crustacés Fossiles, par A. Brongniart et G. A. Desmarest, 1 vol. 4to. with Eleven Plates, Paris, 1822*), the eye of the trilobite is beautifully represented. In Dr. Buckland's *Bridgewater Essay*, this subject, like every other which that eminent geologist investigates, is ably elucidated, and placed before the reader in a striking point of view.