rudimentary to more perfect structures. That there has been no such progression is very decisively shown by Mr. Hugh Miller in his ' Footprints of the Creator.' Others have incontrovertibly established the same position. Professor Phillips, as quoted in the 8th number of the North British Review, says :--- ' The bivalve mollusca of the oldest Snowdonian rocks* were certainly as complicated, nay, more highly organised, than the greater number of conchifera of the present ocean, since they belong to the brachiopoda. The crustacea of the Silurian system were at least as curiously organised as the limuli of the North The goniatites of the moun-American coasts. tain limestone. are far more curiously constructed than the nautili, which lie with them, and also The belemnites and inhabit western oceans. ammonites, turrilites, and other extinct genera of the oolite and chalk, reveal to us an extinct order of cephalopoda larger, more powerful, and more curiously organised, than existing loligines and sepize. It is evident, therefore, that the whole notion of a gradual amelioration or enrichment of the animal organisation may be dismissed as a mere

* The lowest fossiliferous rocks.