

can make intelligible by merely verbal description, an enumeration of those truths which are necessary to be known for the purpose of our present investigation. I call them *Truths*, because they appear so to myself, after having taken, I shall be pardoned for saying, no inconsiderable pains, and during not a few years, in examining the evidence of these positions. To detail that evidence would be altogether impracticable, except we could devote many days to it: but my friends will give me credit, that I would not utter what I do not believe to rest upon good grounds of certainty or high probability.

I. Concerning the Structure of the Earth, we are acquainted, by sensible evidence, with about the four hundredth part of the distance from the surface upon which we dwell, taken at the sea-level, to the centre. This portion may be called ten miles. But every one must be aware that no such distance can be reached by direct descent. To the bottom of *the deepest* seas, from the water-surface, may be seven miles: the average depth of the sea is pretty well ascertained to be three miles: the highest of the European mountains, Montblanc, is not quite three miles: the highest peak of the Himalaya mountains falls short of five miles: each of the two deepest mines in Great Britain, one in Cornwall, the other at Monk Wearmouth in the county of Durham, is stated upon the authority of the Treasurer of the Geological Society,* at a little more than three tenths of a mile: and the deepest mine of which we have any correct measurement, and which may fairly be regarded as the deepest in the world,

late Memoir on Devonshire; Mantell's two works on Sussex, and the S. E. of England, and his Wonders of Geology, two volumes; Fitton's Geology of Hastings; Murchison's small treatise on the Geology of Cheltenham, and his splendid work on the Silurian Region. There are many other books written with sound knowledge and accurate judgment.

* John Taylor, Esq. in Report III. of the British Association for the Advancement of Science, 1833, page 427.