

and slender as a heckle-pin, which contains from thirty to thirty-two diameters. My rule of classification must of course be regarded as merely a subsidiary one. There are species which it does not distinguish : it does not distinguish, for instance, the *Belemnite sulcatus* of our Scotch Lias, whose average length is six inches, from the *Belemnite elongatus*, whose average length is eight. Both agree in containing from nine to ten diameters, though in form and appearance they are strikingly different,—the *adjuncatus* being much more pointed at the apex than the other, much more finely polished on the surface, and furnished with a deeper groove. As a subsidiary rule, however, I have found the rule of the diameters a useful one. It has enabled me to form a numerous and discordant assemblage of specimens into distinct groups, the specific identity of which, when thus collected, is at once verified by the eye.

But the reader, unless very thoroughly a geological one, must be of opinion that I have said quite enough about the Belemnite. I may, however, venture to add further, that its place in the geological scale is not without its interest. The periods of the more ancient formations, from the older Silurian to the older New Red Sandstone inclusive, had all passed away ere the order was called into existence. It then sprang into being nearly contemporaneously with the bird and the reptile ; and, after existing by myriads during the Oolitic and Cretaceous periods, passed into extinction when the ocean of the Chalk had ceased to exist, and just as quadrupeds of the higher order were on the eve of appearing on the stage, but had not yet appeared. Since the period in which it lived, though geologically modern, the surface of the earth must have witnessed many strange revolutions. There have been Belemnites dug out of the sides of the Himalaya mountains, seventeen thousand feet above the level of the sea.