

Again, does not a fallacy lurk under the inference that the crust of the earth is stronger than the shell of an egg because it is proportionally somewhat thicker, the former being the 158th and the latter the 200th part of the diameter. This seems to involve the assumption that the strength of a structure increases with its size, whereas, on the contrary, size is an element of weakness. The model is always stronger in proportion than the machine or the building, because the weight increases so much faster than the power to support it. The conclusion seems unavoidable, that while an egg-shell will bear its own weight, and even a large additional load, without giving way, the crust of the earth could not maintain itself in position unless its pieces rested everywhere, or nearly everywhere, on the liquid central mass, and, as it were, partially floated upon it.

E. W. C., B.A., B.Sc.

OBITUARY.

SIR J. F. W. HERSCHEL, BART.—This great philosopher died on the 11th ult., at the advanced age of 79, in the full possession of all his mental faculties. Though he devoted most of his time to astronomy, natural philosophy, chemistry, meteorology, physical geography, etc., geology did not altogether escape his attention. Among his suggestive contributions to this science may be mentioned the following:—1. On Changes of Climate arising from the varying excentricity of the earth's orbit (*Geol. Trans.*, 2nd series, vol. iii., referred to in *Lyell's Principles* as early as 1837). 2. On the effect of the Removal of Matter from above to below the Sea, producing "a mechanical subversion of the equilibrium of pressure and temperature;" On Subsidence and Elevation; The Influence of Subterranean Steam; The results of the Expansion of Rocks by Heat; The Fusion and Metamorphism of Sedimentary Rocks, etc. (letters written in 1836, and published in 1838, at the close of *Babbage's Ninth Bridgewater Treatise*). In one of these letters the following remarkable passage occurs:—"We are led by analogy to suppose that He (the Creator) operates through a series of intermediate causes, and that in consequence the origination of fresh species, could it ever come under our cognizance, would be found to be a natural, in contradistinction to a miraculous, process." 3. Remarks on Denudation, etc., in his article on Physical Geography in the *Encyclopædia Britannica*, since published separately. 4. Various important allusions to geology in articles lately published in *Good Words*, etc. In private life Sir John was characterized by a rare combination of candour and unaffected humility, and he was never known to write discourteously in his replies to the most discourteous opponents. His remains were interred in Westminster Abbey on Friday, May 19th, beside those of Sir Isaac Newton. A more appropriate place could not have been selected; for, though the fame of Herschel will not rival that of Newton, he was as industrious, skilful, and devoted a labourer in the same field, and contributed to extend the boundaries of that science which was alike dear to both.