The last *cervical* vertebra in turtles and tortoises has a similar structure. In a very young gavial in Dr. Grant's collection, the sacro-coccygeal surfaces are as flat as in the vertebræ of mammalia; while in the crocodile and alligator, of the same early period, the coccygeal vertebra is convex in front, as in the adult gavial. This mechanism confers the power of free motion without risk of dislocation or mutilation. The importance of a knowledge of this fact to the palæontologist is too obvious to require remark; the discovery in the Tilgate grit of a caudal vetebra, having both the extremities convex, would, I must confess, have been very perplexing, previously to my examination of the adult gavial.

N. Page 566.—Rev. J. B. Reade, F.R.S. &c. on Fossil Infusoria; in a letter to the Author.

My dear Sir,

You are aware that a microscopic examination of recent and fossil plants has not only enabled me to establish some important facts in vegetable physiology, but has also led me to pursue an investigation intimately connected with "the Wonders of Geology." With respect to plants, I have already shown that the solid materials which are contained *in their ashes*, must be ranked among their essential elements; and that while the carbon may be readily dissipated by heat, their solid and earthy ingredients, *whether silica or lime*, so perfectly retain the form and characters of the cells and tubes into which they enter, that the burnt and unburnt specimens have sometimes been mistaken, the one for the other (*see page* 647). I premise this remark, because it enables me to reply to your query, respecting the existence of organic structure in granite, by observing, in the first place, that much of what I have stated with regard to plants, is equally applicable to large portions of the animal kingdom also, and especially to that section of it, viz. the infusoria, which might appear, at first sight, to be wholly removed from such speculations.