

subsidence. For the proper estimation of the efficiency of the cause invoked, it is requisite that this should be clearly set forth. That lateral displacement by weight of accumulated sediment together with actual compression of the rocks below may take place in certain cases is extremely probable.

The assumption of the existence of a zone of molten rock at a certain distance below the surface of the earth in so sensitive a condition as to respond to the weight of accumulation by becoming solid or that of denudation by becoming liquid is rather a large one, especially when the physical part is unsupported by experiment or quantitative determination. If these were supplied, it would be a fit subject for investigation, but the suggestion fails as a general explanation of subsidence and elevation, even if the assumptions are admitted, inasmuch as it does not account for the elevation of areas of former great sedimentation, which is one of the most striking facts of geology.

T. MELLARD READE.

THE NOMENCLATURE OF AMMONITES.

SIR,—I had not much hope of converting Mr. Buckman from what, in common with Mr. Haddow, I conceive to be the error of his ways; but I wished to protest against the system of which he is an exponent.

He still assumes that *Ægoceras* and *Arietites* are *genera*, which is exactly what I ventured to question. He says I do not attempt to discuss *Lioceras*, but I should have thought he would understand that it could be treated in the same way as *Harpoceras* (if it is a group of equal value). Let us write in catalogues *Ammonites* (*Lioceras elegans*; specialists will doubtless prefer to call it *Lioceras elegans*; but most geologists will probably be content with *Ammonites elegans*, regarding *Lioceras* merely as a subgeneric name.

My chief point, which Mr. Buckman entirely fails to notice, is this, that if the specialists rank *Harpoceras*, *Lioceras*, etc., as genera, each of them may be accredited with a species having the same specific name. Fancy half a dozen different *Amm. elegans* referable to an equal number of these so-called genera.

A. J. JUKES-BROWNE.

“GEOLOGY FOR ALL.”

SIR,—While thanking you for your notice of “Geology for All,” perhaps you will permit me to say that what is called a “slip” is explained by the context, and is in accord with the spirit and intention of the book, while the high per-centage of silica in orthoclase is duly acknowledged on page 58, where the fact is wanted.

I may add that my aim was to find a new and intermediate path between the two old and well-beaten ones of Academic or Text-book geology and so-called “popular” or entertaining geology, neither of which in my humble opinion is likely to lead to the end I have in view, namely, a general knowledge of geology by all well-educated people. In the days of Buckland and Hugh Miller, fossils were

marvels, and these certainly attracted much attention to geology. Now they are no longer so, and from my experience, and it is not a small one, they and their nomenclature do much to restrict a knowledge of the great teachings of geology to the limited circle to which your reviewer so justly refers.

J. LOGAN LOBLEY.

CITY OF LONDON COLLEGE,
July 16th, 1888.

MISCELLANEOUS.

GEOLOGICAL SURVEY OF ENGLAND AND WALES.

WE are informed that Mr. H. W. Bristow, F.R.S., has retired from the Directorship of the Geological Survey of England and Wales, after a lengthened service of forty-six years. Joining the staff of the Survey in 1842, under De la Beche, he commenced field-work in the Silurian regions of Radnorshire, and subsequently surveyed large areas of the Secondary and Tertiary strata, more especially in Somerset, Dorset, Hampshire, the Isle of Wight, and Sussex. This work has formed the basis for all later and more minute observations on the strata. The history of the Survey with which Mr. Bristow has been so long associated has been told in part in the Memoirs of Edward Forbes and Murchison by the present Director-General, and also in the Letters of Jukes; and it is pleasant to read of the early labours of the small yet enthusiastic band of geologists, who numbered only 10 in 1844; but these included Ramsay, Warrington Smyth, John Phillips, Aveline, W. H. Baily, and Edward Forbes. In the genial company of Forbes, Mr. Bristow carried on much of his detailed work in the Isles of Wight and Purbeck; and we understand that a new edition of Mr. Bristow's Memoir on the Isle of Wight will shortly be published. Until 1872, when he was appointed Director, Mr. Bristow was more or less actively employed in the field, devoting especial attention in these later years to the Rhætic or Penarth Beds—the latter name being given by him on account of the prominent exposures of these strata on the Glamorganshire coast.

We learn that Mr. H. H. Howell, F.G.S., Director of the Geological Survey of Scotland, now undertakes the additional duties of Director for England and Wales, and his excellent geological work in the Midland counties, the North of England, and the South of Scotland, together with his well-known administrative capacity, will cause the appointment to be hailed with satisfaction.

We have also much pleasure in announcing that Mr. J. J. H. Teall, M.A., F.G.S., has recently joined the staff, and is specially charged with the study of the crystalline schists and the problems of regional metamorphism.
