exceedingly scarce in the area bounded on the east by Lakes Onega and Ladoga, an area where the Boulder-drift prevails." That floods of considerable magnitude may have taken place, again and again during the Glacial period, is more than likely; but the stratigraphical and physical evidence in support of the Great Flood, as pictured by Mr. Howorth, has yet to be made known.

Mr. Howorth has given lists of the Pleistocene Mammalia from various parts of the world, a task which we can readily admit has given him a great deal of patient labour. Nor was his task at all lightened by the uncouth names so profusely applied to the genera and species. On this subject he seeks to comfort his troubled mind by remarking, "Surely we are nearing a time when the man who coins a new species without abundant excuse will be deemed a scientific criminal, and when the ambition to flood text-books with lists of names of one's own invention will cease to be called science, and be treated as mere child's play."

In addition to the Mammalia, other organic remains, including the Plants of Pleistocene times, are more or less fully recorded.

The author loses no opportunities of entering and repeating his protests against "the creed of English Uniformitarians." In this respect he is not alone, we think, in somewhat needlessly spending a good deal of energy; his views, after all, as he points out, coincide with those advanced by Prof. Huxley more than eighteen years ago in an address to the Geological Society of London. Moreover, the elementary facts to which Mr. Howorth alludes (p. xv), such as the sudden creation and rapid disappearance of the submarine island near Santorin, are clearly not opposed to the teachings enunciated by Lyell, and they do not "strain the theory of Uniformity to the breaking point." Geologists do not argue "that the present forces which are busy with the Earth's crust are the measure of what they have always been," but they do hesitate to introduce "abnormal" causes, or tools that are not known to exist in Nature's workshop, to explain phenomena that can be accounted for by known agents.

Notwithstanding our objections to the very sweeping conclusions drawn by Mr. Howorth, his work will be of great value as a storehouse of facts on the fauna and flora of Pleistocene times. The book is well printed on thick paper and neatly bound. Its value, however, as a work of reference is seriously damaged by the lack of an index: but perhaps the author can remedy this when he brings out his second volume.

CORRESPONDENCE.

NAMES OF BONES REVISED.

Sir,—In "The Ornithosauria," 1870, pl. xii. figs. 12, 13, I gave two views of a fragment of bone, which is described as follows: "Undetermined [? pterygoid end of palatine bone]." This fragment I now know to be the radial crest of an Ornithosaurian humerus.

In the Quarterly Journal of the Geological Society, 1877, vol. xxxii. p. 716, is an account of *Pliosaurus Evansi*. A bone in that

paper, which is described and figured as a left ischium (pp. 721–3, figs. 7–9) is the left coracoid.

In the GEOLOGICAL MAGAZINE, February, 1887, p. 84, the humerus of *Pelorosaurus* is referred to *Cetiosaurus*. I had previously, in the Quarterly Journal of the Geological Society, 1882, vol. xxxviii. p. 371, regarded the same bone as referable to *Ornithopsis*, and to that determination I adhere. *Cetiosaurus* is well known to be allied to *Ornithopsis*, but I am aware of no evidence of the presence of *Cetiosaurus* in the Wealden deposits, in which the type is represented by species of *Ornithopsis*. H. G. SEELEY.

24*th August*, 1887.

PARALLEL STRUCTURE IN IGNEOUS ROCKS.

SIR,—I am obliged to Mr. Harker for the information given in his letter in your August Number. I do not see the American Journal of Science, and was not aware that Prof. Dana had partially modified his views, or that Mr. G. H. Williams had by observations on the ground come to the conclusion that the igneous rocks of Cortland were sharply separable from the adjacent crystalline schists. It need hardly be pointed out that this coincidence of opinion between Mr. Williams and myself is of considerable evidential value. CH. CALLAWAY.

WELLINGTON, SHROPSHIRE, *September* 17*th*, 1887.

OBITUARY.

EDWIN WITCHELL, F.G.S.,

TREASURER OF THE COTTESWOLD NATURALISTS' FIELD CLUB.

IT is with deep regret that we have to announce the sudden death, on the 20th August last, of Mr. Edwin Witchell, solicitor, of Stroud, at the age of sixty-four. Mr. Witchell was a son of Mr. Edward Witchell, of Nymphsfield, a well-known and highly-respected yeoman, and was born in June, 1823. His tastes from early boyhood led him more to the study of books than to the cultivation of the soil; at the early age of thirteen years he was placed in the office of Mr. Paris, of Stroud, the chief local solicitor of those days. Later on he was articled to that gentleman, and ultimately succeeded to his practice in 1847. He was at one time very fond of hunting, and used frequently to accompany the late Mr. Paul Hawkins Fisher in some of the most memorable runs of the adjacent packs of foxhounds. This exhilarating sport doubtless contributed to his then robust health; but as years crept on, Mr. Witchell gave up his hunter and applied himself assiduously to rambles in pursuit of his favourite science of Geology. About five years ago, when climbing in a dangerous part of the cliffs at Lyme Regis, heart trouble set in, and for three or four years he has suffered from angina pectoris, but had not been incapacitated from business, nor deterred from carrying on his geological work. And it was while engaged in collecting fossils from the Inferior Oolite at Swift's Hill, near Stroud, that Mr. Witchell overtaxed his strength, and fell amidst the rocks to which he had devoted so much study. In the neigh-