diating from two nuclei on either side of an elevated medial line. The stone in which they are embedded is unquestionably the Stonesfield slate; it contains the characteristic *Trigonia angulata*, *Rhynchonella*, *Ostrea*, and *Modiola Sowerbyana*, D'Orb. (= *plicata*, Sowerby). The enigmatical bodies to which I now allude are stained of a deep red-ferruginous colour, the matrix retaining the grey tint and crystalline texture of the Stonesfield slate. On comparison between these remains and those of the specimens of *Geomyda spinosa*, from Singapore, in the British Museum, presented by Sir A. Smith, a comparison which was suggested to me by Mr. Davies, whose accurate discrimination first threw light upon the nature of the present evidence, I have been led to consider that the specimens in the Fossil Gallery represent the second, third, and fourth median scutes of a tortoise allied to the recent African species. The fossils and their corresponding impressions from the Stonesfield slate afford, according to my interpretation, evidence of the texture of the horny scutes which were developed outside the bony carapace of the old Oolitic tortoise. A particular interest is attached to these specimens, as they were considered by the late Edward Forbes as Trigonellites, or opercula of Ammonites.

Since the above was written, I learn that Dr. J. E. Gray, several years ago, considered the present evidences to be Chelonian. I am indebted to my friend Mr. S. P. Woodward, F.G.S., for this information, and am now aware that the true signification and interpretation of these remains has been known to him for a long period.

CORRESPONDENCE.

Holoptychius v. *Glyptolepis.*

Dear Sir,—My notice of the Dura Den Glyptolepis, in your number for March last, was merely intended to correct an impression which Mr. Mitchell's paper in your February number seemed calculated to convey, namely, that it was he who first pointed out the propriety of transferring *Holoptychius Flemingi* from the genus Holoptychius to Glyptolepis. In doing so I seem to have expressed myself so loosely as to make it appear that I claimed for myself and others the merit of first noticing the crescent of points on the scales of that fish. This I by no means intended to do, as I was well aware that these had been long before observed; indeed a glance at the figure given by Agassiz in his 'Vieux Grès Rouge,' pl. 22, fig. 1, will show that this peculiarity had not been overlooked by him. I was also aware that Professor Pander had expressed his belief that the scales of *Holoptychius Flemingi* and *Glyptolepis leptopterus* were the same; these I consider specifically distinct. But lest I might seem to claim too much, I forwarded to you a note to be added to my letter, which seems to have arrived too late for insertion, and which, by some strange mistake, has been printed in your number for this month (April) as the first paragraph of a communication from the Rev. W. S. Symonds. I may add that Mr. Page, of Edinburgh, was the first to point out, in my hearing, the existence of Glyptolepis scales in the Dura Den Sandstones.

Mr. Davies, in his communication in your April number, refers to the greater imbrication of the scales "mentioned by Mr. Mitchell" (no new discovery), and also to the general character of the ridges on the scales, as being differently and distinctly marked in the two genera. Undoubtedly, retaining the old nomenclature, the scales in *H. giganteus, H. nobilissimus*, etc., are less imbricated, and have the ridges more wavy and boldly marked than in *H. Flemingi*, but on examining a large collection of the Dura Den fishes, a pretty regular gradation from the less to the more imbricated and from the bold wavy ridges of the larger species to the almost parallel and delicately marked lines found on the scales of some of the others, may be traced. Mr. Davies's remark as to the position of the scales showing the crescent of points scarcely corresponds with my experience, but this may very probably be occasioned by our observations being principally confined to different species. In *H. Flemingi* many scales on every part of the body sufficiently preserved and exposed, which I have yet examined, show the crescent of points, while in other species these are only to be found on the scales along the flanks.

I am very glad to learn from Mr. Davies that the characteristic specimen of *Holoptychius Andersoni* in the British Museum shows, what I have been unable to detect in that species, the crescent of points,—as this is a considerable step towards clearing up the dispute Holoptychius *v.* Glyptolepis. Professor Huxley states in his introductory Essay to the X Decade of Plates published in connection with the Geological Survey (p. 9), "The clear recognition of the fact that this elegant structure really characterizes Glyptolepis is of great importance, for . . . it enables one to discriminate between Holoptychius (*whose scales have no semilunar area of backwardly-directed points*) and Glyptolepis."

I have to express my gratification at the notice Mr. Davies takes of these communications; to local geologists situated at a long distance from collections affording facilities for comparing the many species of such genera, and ever comparing nearly allied genera with one another, such hints as he gives are very valuable indeed. I am, dear Sir, yours truly,

JAMES POWRIE.

Reswallie, April 10th, 1863.

Bones at Macclesfield.

DEAR SIR,—You obligingly inserted a paper from me in Vol. IV. of the 'Geologist,' and the following communication may perhaps interest some of your readers:—

A few days ago, in levelling a piece of ground as a site for an infirmary, a few bones and a molar tooth were discovered by the workmen. Thirty feet below, there is a small brook, which runs into the river, distant about a quarter of a mile, at a further decline of about 70 feet. The bones were embedded a little apart from each other, in a layer of fine sand about 18 inches in thickness; above that there was a deposit, about 2 yards in depth, of coarse sand and gravel, thickly studded with large waterworn pebbles of the Primary, with a few of the Secondary sandstone rocks. About 18 inches of soil (alluvium) surmounted the whole. The excavation was continued about 2 yards below the bed of sand in which the bones were found, and it consisted of thin layers of gravel with marl and fine sand at irregular intervals, interspersed with carbonaceous markings and thin seams of drifted coal or shale. I have resided here many years, and the osseous remains I have sent for your inspection are the first I have seen or heard of; and, with the object of affording assistance to a solution of this disco-