

of Drift clay covers these stone-beds, and fills up the interstices of their openings, so that the land-surface shows no indication, by inequalities, of any of these faults or fissures. The distance from the Med-



Fig. 6. *a*, Drift clay filling up fissures in Ragstone beds, *c c*; *b*, Bed of the Medway.

way is about a quarter of a mile, and the floor of the quarry is about 160 feet above the level of that river; the land gradually sloping towards it.

(To be continued.)

## CORRESPONDENCE.

### *Professor King's Synoptical Table.*

DEAR SIR,—No doubt there is much that is incorrect in my "Synoptical Table," which you have done me the honour to insert in your valuable periodical (Vol. V. pp. 193-7); but unfortunately, your correspondent "W. W.," who charges it with "many imperfections," and who fancies that he has pointed out certain of its errors in his letter, published in your last number, seems to have entirely overlooked the qualifications and spirit necessary for such a task.

The three instances which "W. W." parades as "striking mistakes," I may be pardoned for saying are nothing of the kind, but simply intentional omissions. Any one referring to the Table itself will see that I purposely avoided, as much as possible, giving the subdivisions of the "Formations." I merely inserted what appeared to me to be the most characteristic "*Types*" of the different Formations, "*Marine*," or "*Fresh-water*;" believing that such were sufficient for students in general.

I shall be most happy to avail myself of any suggestions or corrections offered through the medium of your pages; but I regret I cannot adopt the Eocene classification, given by "W. W." As will presently be seen, "it is not as useful as might be to a student in the south-east of England;" nor is it in accordance with the views of one of the highest authorities in Tertiary Geology.

The classification of the Eocene "Formation," as given in my Table, is fully borne out by the following remarks, extracted from the new edition of Jukes's admirable Manual:—"Sir C. Lyell, however, in his Supplement, thinks that it would be more convenient to retain a nomenclature common on the Continent, and to class the *Hempstead* series, and its contemporaneous beds as *Lower Miocene*, making the beds from the *Barton Clay* to the *Bembridge* series inclusive *Upper Eocene*, and taking the *Bracklesham* and *Lower Bagshot* beds only as *Middle Eocene*"—(pp. 651-2). Further, the latest investigations, such as may "be said to be up to the present time," are all strongly confirmatory of the view maintained by many geologists, that the *Hempstead* beds are of the "*Lower Miocene*" age, and not Eocene.—(See Abstract of Heer's paper, and of another by Sandberger, in the same number of the 'Geologist' containing the letter of "W. W.!") I entertain a strong suspicion that even the *Bembridge Marls*, etc., are *Miocene*.

True, the "*Upper and Lower Bagshot Beds* are not noticed" in my Table; for the simple reason, that they cannot be regarded as good "*Marine Types*," like the Barton and Bracklesham Clays: one contains only a few vegetable (Terrestrial) remains; and the other rarely any fossils, except in one place, where, however, they are "in too friable a condition to bear transport or examination." (See Jukes's Manual, 1st ed. pp. 527 and 531; also Phillips's Manual, p. 387.)

In placing certain "*marine and fresh-water types*" on "*the same line*," the object was to show that they may be *approximately* "*of the same age*."

When "*W. W.*" takes on himself again

"To spy into abuses, and shape faults  
That are not,"

or to "*point out*" the "*many other mistakes*" which he fancies I have committed, I would feel obliged by his showing the relation between the Lower Green Sand and the Atherfield Clay. At the friendly suggestion of the Editor of the '*Geologist*,' I have inserted, in a new edition of the Table, now printing as a separate sheet, the Lower Green Sand, placing it at the bottom of the Cretaceous System.

Permit me to embrace the present opportunity of making a few corrections before closing this letter. The name *Rhynchopora* in my Table (proposed for a genus or sub-genus, typified by De Verneuil's *Terebratula Geinitziana*, the peculiar characters of which were described in my "*Notes on Permian Fossils*," published in the '*Annals and Magazine of Natural History*' for April, 1856) should have been spelled *Rhynchopora*. "*Somerset Teleosaurus Upper Lias*," suggested by my friend Mr. C. Moore, of Bath, was by some mistake placed in the Jurassic instead of the Liasic System.

In my paper "*On the Origin of Species*," contained in the last number of the '*Geologist*,' a slight mistake has occurred. The first line of the sixth paragraph ought to have been—"There is no difficulty in referring to instances," etc.

I am, dear Sir, yours very faithfully,  
WILLIAM KING.

*Belmont, near Galway, July 4, 1862.*

#### *Tertiary Mammalian Remains at Dulwich.*

SIR,—It may be interesting to your readers to know that I have lately found a front tooth (incisor or small canine) of a mammalian animal from the Woolwich Beds, near Dulwich, exposed some time since by the works for the southern high-level sewer. Mr. Rickman has found some bones he calls mammalian, but there is a doubt as to their being such.

Yours, etc.,

A. BOTT.

*5, Hanover Terrace, Peckham, 11th July, 1862.*

#### *Sicilian Bone-Caves.*

SIR,—I hasten to give that explanation of the error or rather confusion in my Table which Dr. Falconer, as the original describer of the Grotta di Maccagnone, has a right to demand.