MR. FISHER'S REJOINDER TO MR. T. MELLARD READE.

SIR,—In my letter, at p. 431, on "The Permanence of Ocean Basins," I said that South Georgia might fairly be excluded from the category of Oceanic Islands, as having been perhaps formerly joined to South America. The bearing of this upon the question seems to me to be that, if it had not been formerly connected with some still existing continent, it might be argued that it had belonged to a submerged one. But if it formed once part of one now existing, that conclusion would not be necessary. Moreover, it stands a witness to the antiquity of South America, because of the length of time which must have been occupied in the destruction of the connecting land.

Those who believe in the doctrine of permanence do not assert that the continents have always had their present size or shapes, but only that, on the whole, they have not changed places with the oceans.

O. FISHER.

HARLTON, CAMBRIDGE, *6th Oct.*

THE CLASSIFICATION OF THE JURASSIC SYSTEM.

SIR,—The GEOLOGICAL MAGAZINE for July contained a short paper by Mr. Blanford on the Classification of Sedimentary Strata, with a Table, which aimed at the simplification of our present stratigraphical nomenclature. None of our geological systems stand more in need of revision and simplification than the Jurassic, and I think many will welcome the suggestion that this system should be divided into three sections or stages, and three only,—an Upper, Middle, and Lower, as Mr. Blanford proposes.

An Oolitic system, as separate from the Lias, is quite unnecessary, and it would be desirable that the term Oolite should be used only as a lithological appellation for a particular kind of rock, though there can be no objection to the retention of such compound names as Inferior Oolite and Great Oolite for groups which are chiefly composed of oolitic limestones. But let the name "Lower Oolites" be banished from our text-books. I can recollect the time when it was a trouble to remember that Inferior Oolite was not the same as Lower Oolite, and I cannot but think that the abolition of this possible source of confusion would be a benefit to young students of geology.

I feel confident that the divisions or stages of Upper, Middle, and Lower Jurassic will be ultimately accepted, but I venture to differ from Mr. Blanford in the manner of grouping the minor subdivisions under these heads.

The Lower Jurassic is of course synonymous with the Lias. The Middle stage should, in my view, comprise the overlying beds up to and no farther than the Cornbrash, and should certainly not include the Oxford Clay. The Cornbrash is a well-marked and nearly continuous horizon in England, and forms the natural summit to a group which is essentially composed of oolitic limestones. With the Oxford Clay, which includes the Kelloway rock near its base, begins a series which is essentially argillaceous or

pelolithic, except in its upper portion, if the Portland and Purbeck beds are comprehended in the same stage. The Coral Rag is only an episode in the pelolithic series; it is absent throughout a distance of nearly 120 miles, and over this tract there is a complete passage from the Oxford into the Kimmeridge Clay, and a commingling of their respective faunas. No arrangement therefore will be natural which separates these two clays.

Lastly, if alternative names are required for the three stages of the Jurassic system, such as are suggested by Mr. Blanford for the similar stages of the other systems, I would propose the name *Clavinian* (from Clavinium, the ancient name of Weymouth) for the upper stage, the type of which is found in Dorsetshire and within easy access from Weymouth. For the middle stage or Gloucestershire Oolites, as they have been called, what more appropriate name can be found than one derived from the city which gives its name to the county, namely, *Glevonian*. For the lower stage the term *Liassian* already adopted on the Continent may perhaps suffice.

I append a tabular view of this classification, in which it will be seen that the Upper Jurassic simply combines what are now called the Middle and Upper Oolites. This arrangement has also the advantage of being in complete accord with that adopted by Credner for Germany.

JURASSIC.	Upper or *Clavinian*.	Purbeck group. Portland group. Kimmeridge Clay. Coral Rag. Oxford Clay.
	Middle or *Glevonian*.	Great Oolite and Cornbrash. Inferior Oolite. Midford Sands or Dogger.
	Lower or *Liassian*.	Upper Lias. Middle Lias. Lower Lias.

TRING, *Oct.* 2, 1884. A. J. JUKES-BROWNE.

OBITUARY.

DR. FERDINAND VON HOCHSTETTER.

For. Corr. Geol. Soc. Lond., Director of the Imperial Mineralogical Museum, Vienna.

BORN 30TH APRIL, 1829: DIED 18TH JULY, 1884.

AT the close of last year we recorded the death of the illustrious geologist Barrande (see GEOL. MAG. Dec. 1883, pp. 529-533). In Dr. Ferdinand von Hochstetter, Austria has again suffered a severe loss, and the world of science mourns the death of one of its most distinguished members. The subject of our memoir was born at Esslingen, Wurtemberg, on 30th April, 1829. His father was an Evangelical clergyman and Professor at Brünn, and published several Botanical works and a Handbook of Mineralogy. To his father was doubtless due his first impulses towards the study of Natural Science: for although he commenced his education