Lastly, I found in the raised beach at Brighton, a little piece which I think I showed to you, in comparison with a pebble of dark red sandstone you had obtained from the same deposit, and I mentioned that the one was too light and the other too dark to be the Grés de May, or Caradoc Hartshill, or Lickey Quartzite, or Sandstone.

Instead of returning home from Brighton, I went on to Selsea, and there on the shore I saw several large blocks of the same stone, so this proves that they lay above the London Clay.

This is quite different from the Chalk conglomerate which caps some of our Chalk hills here, and is evidently still in process of formation, by the agglutinating power of the oxide of iron so abundant above the Chalk.

I have never been at Fontainebleau, but I should consider, from its position above the Calcaire grossier, that the St. Germains stone is the same; but though I found the block of pudding-stone lying in the quarry, I never could learn whether it formed a continuous bed, though I asked Mons. Mortillet about it. The French querns are formed from a pudding-stone with small flints, just like the English querns, and are of the same size.

The bit of stone inclosed is from one of the small blocks. The smaller piece is from a Selsea block without fossils.

24, Hyde Gardens, Eastbourne. T. Ogier Ward.

## *PENTACRINUS PRISCUS*, GOLDF., IN THE LOWER DEVONIAN, MEADFOOT SANDS, NEAR TORQUAY.

Sir,—A high authority in the geological world has said, with respect to the Crinoidea, "It is perfectly useless to do anything without the cups," and, probably, this ought to have deterred me from sending you the inclosed rough sketch of a fossil which is found, though somewhat rarely, in the Lower Devonian shales and grits of Meadfoot Sands, near Torquay. The sketch is magnified three diameters, and though only known to us hitherto in the shape of impressions, yet the characters are so very well marked, notwithstanding imperfect specimens hitherto found, that I am tempted to send you a notice of its occurrence, as it has, I believe, been hitherto undescribed from the English Devonian. It is apparently the *Pentacrinites priscus* of Goldfuss, plate liii. fig. 7 *a b*, and the specific characters he gives are very nearly the same as those of our specimens.

Column subpentagonal; joints either all of equal size, or alternately larger and smaller. The joint faces rather hollow, with a rosette of five oval leaves, rather pointed at the extremities (in the impression this rosette slightly projects). The radiating lines somewhat large, but few in number; those *between* the leaves meeting each other in angles, three or four between each pair of leaves; those towards the ends of the leaves going direct to the circumference of the joint.

These fossils have been found hitherto almost exclusively in sandy grit, *not* in limestone; and in nearly every case in the same beds with the *Pleurodictyum problematicum*. As they are only casts or impressions, it is difficult to say whether the joints alternate in size

or not; but from an examination of several casts the former is probably the case.

Some other species of *Pentacrinus* have the joint faces ornamented with lines placed somewhat in a similar manner; as, for instance, the *Pentacrinus lævigatus* of the St. Cassian beds (Laube, tab. viii. *a*, fig. 21), and joints are found in the greensand of Chute Farm, with ornamentation of the same kind; but in neither of these cases do the lines meet at such a decided angle between the leaves as in the Devonian specimens.

It will be seen that in the fossil sketched one of the leaves is imperfect.—I remain, &c.,

JOHN EDWARD LEE.

VILLA SYRACUSA, TORQUAY,
1*st August*, 1873.

## ABSTRACTS OF GEOLOGICAL PAPERS.

SIR,—Any one who has occasion to follow the progress of Chemical Science will readily admit that his labour has been much lightened since the Chemical Society has introduced the plan of publishing monthly abstracts of the more important papers selected from both British and Foreign Journals. It occurs to me that this example, set by the Chemists, might be followed, with great advantage, by the Geologists. The Journal of the Geological Society, it is true, publishes the titles of a great number of papers bearing upon our Science; but a bald list of titles, even if it extend to a complete bibliography, can have but very limited value, and in many cases must be well-nigh useless. Nor would it suffice to follow each title by a notice limited to a few lines, as is done, for example, in the 'Verzeichniss der Anthropologischen Literatur,' which forms an excellent feature in the *Archiv für Anthropologie*. Such short notices have, of course, their measure of value, but would be scarcely full enough to fairly represent the progress of an important science like Geology. Even the publication of an annual volume, similar to *The Zoological Record*, to Delesse and De Lapparent's *Révue de Géologie*, or to Kenngott's *Uebersicht der Resultate Mineralogischer Forschungen*, would be far from satisfactory when compared with the admirable system adopted by the Chemical Society. By means of that system, the English chemist learns, as early as possible, what is going on in each department of his science, and is furnished with abstracts sufficiently full in most cases to put him in possession of the main points in each paper. This, or something akin to this, is just what the geologist needs. Perhaps the student who confines his attention to British Geology may not fully realize the want of such a work as that now advocated; but its value will assuredly be recognized by those who have occasion to spend much time in frequent reference to the Transactions of Foreign Societies. As the British Association deems the publication of the Zoological Record and of the Chemical Society's Abstracts sufficiently important to aid both these works by grants of money, it may be worth while considering—now that we are on the eve of the Bradford Meeting—whether Geology has not equal claims on the funds of the Association.

JERMYN STREET,
*August* 18, 1873.

F. W. RUDLER.