

and a rider coal (sulphur), about 9 inches thick; then more clunch, etc., and at about 88 yards a stratum of sulphur coal, of very good quality of its kind, and more than a yard thick. We then had many different measures of clunch clay, etc., etc., and several rocks, and then the measures were:

	FT.	IN.		FT.	IN.
Rider of Smut Coal	0	4	Brown Clod, with light-coloured		
Brown Fireclay... ..	2	0	balls of Ironstone	5	0
Grey Rock	24	0	Smut Coal	2	0
Strong Blue Binds	12	0	Black Clod, with dark-coloured		
Dark Fireclay	5	0	balls of Ironstone	5	0
Bat.	1	6	Smut Coal (good)	3	4
Batty Coal... ..	1	0	Dark Clod	2	0
Smut Coal (very good)	4	0	Smut Coal (good)	3	6

Some of the above measurements (he says), may not be exactly correct, but they are given as near as I at present know them." Any one looking at this section will see the importance of the deposits and their total dissimilarity from the younger Coal-measures.

ALBRIGHTON, WOLVERHAMPTON,
Feb. 5th, 1873.

DANIEL JONES, F.G.S.

CYCLAS CLAY.

SIR,—In describing the Post-glacial deposits of West Lancashire, Mr. C. E. De Rance repeats in your last Number the statement that the peat of the lower plain or that below the 25 feet contour line rests on "Cyclas and Scrobicularia Clays." As the whole of the deposit—which is of considerable thickness—had been previously described by him as "Cyclas Clay," I am at a loss to know whether the Scrobicularia Clay alluded to is that intercalated in the peats; or whether he has changed his views on the subject, and considers the deposit to be of a mixed fresh-water and marine character. If he has changed his views, it is due to the public that such should be stated, otherwise they may be misled by his previous papers and by the geological sheets of the district, in which the peat of the lower plain is stated to rest on "Cyclas Clay."

Having searched in vain for Mr. De Rance's "Cyclas Clay" ever since I read his interesting paper in the Journal of the Geological Society (1870, p. 665), I consider myself entitled to speak on the subject. For the details of my investigations I must refer those interested to my paper on "The Post-glacial Geology of the Mersey Estuary" in the GEOLOGICAL MAGAZINE of March, 1872, and to the more detailed description, with map and sections, in the Transactions of the Liverpool Geological Society, 1872. In these communications I have proved by the most ample evidence that the whole of the beds in question are of *marine origin*, and have named them the "Formby and Leasowe marine-beds." Until the facts brought forward by me are disproved, it is vain to go on repeating that the peat is underlain by "Cyclas Clay"; and unless this is done, the mis-description in the Geological Map 90° S.E. ought to be at once corrected.

T. MELLARD READE, C.E., F.G.S.

HEATH HOUSE, BLUNDELLSANDS, LIVERPOOL,
6th February, 1873.