

COAL UNDER NEW RED SANDSTONE.

SIR,—Allow me to express my regret that I should have overlooked the paper read by Mr. De Rance before the Geological Society of Manchester, in which he gives a detailed section of the Winwick Borehole, one of those which I described in my paper on Coal under New Red Sandstone, and identifies the limestone met with in this borehole as the probable equivalent of the Ardwick Limestone.

I was first made aware of this paper by Mr. De Rance's letter in your last Number.

A. STRAHAN.

CHESTER, 24th November, 1881.

COLOURING OF GEOLOGICAL MAPS.

SIR,—I should be glad if some member of the English Committee for reporting upon the colours, etc., to be employed on geological maps, would kindly explain to me one or two difficulties which the following passage in their report (see pp. 560-61, of this MAGAZINE for December, 1881) has caused me:—"Igneous Rocks.—Four colours would suffice. . . .

Basalt and Greenstone	.....	.....	.....	Dark Carmine.
Trachyte, Felstone, etc.	.....	.....	.....	Permanent Scarlet.
Granite.....	.....	.....	.....	Vermilion.
Modern Volcanic Rock	.....	.....	.....	Light Orange."

I believe there are three coarse crystalline rocks called syenite, diorite, and gabbro, which can often be recognized by the eye with tolerable certainty. How are they to be coloured? Do any of these alleviate the loneliness of granite, or are the arms of greenstone wide enough to embrace them all? Again, we are told that modern volcanic rocks are to be coloured "light orange." But I thought basalt and trachyte (for which separate colours are provided) were frequent products of modern volcanos? Further, many authors in rough grouping put the leucite-basalts and the nepheline-basalts with the ordinary or felspar-basalt; if so, what are the modern volcanic rocks? if not, on what grounds are felspar-basalt and trachyte considered so much more ancient than the others? The olivine rocks and serpentine are, I suppose, omitted on the ground *De minimis non curat lex*.

I should be really thankful to have my perplexities enlightened; for I feel quite hopeless of solving them without external help; and if any member of my class asked me for an explanation I should not know what to say, unless I modified a well-known formula for silencing doubters, and replied: *Bononia locuta est, causa finita est*.

T. G. BONNEY.

NORWICH GEOLOGICAL SOCIETY.—At the Annual Meeting of this Society, held at the Royal Hotel, Norwich, on November 8, 1881, Mr. W. Whitaker, B.A., F.G.S., was elected President in the room of Mr. J. H. Blake. The retiring President gave an elaborate address on Conservancy of Rivers, Prevention of Floods, Drainage, and Water Supply. Mr. Whitaker, who is engaged on the Geological Survey of the neighbourhood of Lynn, announced at the ensuing meeting, held on December 6, his discovery of Totternhoe Stone near Roydon Church, not far from Grimston Road Station, on the Lynn and Fakenham Railway.