

Sandhurst; gentlemen who have proved that they are qualified to give accurate descriptions of the topography and geology of the country.

R. BROUGH SMYTH.

MELBOURNE, 18th May, 1871.

CONCRETIONARY STRUCTURE IN PLASTER.

SIR,—The concretionary structure in plaster noticed by your correspondent Benwyman has been frequently noticed by me, as it must have been by many. I do not think that the explanation given by him, that it results from segregation or crystallization, can be the true one; for if that were so, the nuclei of the concretions should be *inside* the plaster; whereas I think they will be observed to be external. The concretions resemble saucers nested, rather than spherical shells nested. I have been used to attribute the appearance to the habit that plasterers have of casting the mortar on with a dash, so that it spreads from a central spot in concentric waves around. Thus the particles of the mortar are arranged in shallow saucer-shaped layers. And possibly, owing to some mechanical law in the distribution of the pressure from the central spot towards the periphery of the lump thrown on, the density of the mortar may alternately be greater and less in successive layers; and it is even possible that an arrangement of the particles analogous to cleavage may be produced. The subsequent passage of the smoothing tool over the whole obliterates the structure superficially, but time reveals it again by the process of weathering.

O. FISHER.

DENUDATON OF THE SHROPSHIRE COAL-FIELD.

We are favoured by Mr. John Randall, F.G.S., of Madeley, Salop, with a lengthened criticism upon a paper by Mr. Daniel Jones, F.G.S., "On the Denudation of the Coalbrook-dale Coal-field," published at p. 200 of our May number.¹ Mr. Randall states that the conclusions arrived at by Mr. Jones are identical with those of Mr. Scott, Sir R. Murchison, and himself as unmistakably shown by the sections published by Mr. Scott (Quart. Journ. Geol. Soc., 1861, vol. 17, p. 457), and that Mr. Purton has since figured the same thing (see GEOLOGICAL MAGAZINE, 1865, Vol. II., p. 515).

Mr. Randall always held the opinion "that denudation took place prior to the general elevation of the Coal-field and the great faults by which it is intersected." The quotation from Mr. Randall's letter to the *Mining Journal*, given by Mr. Jones, refers to "one particular case on the eastern boundary of the Shropshire Coal-field, showing evidence of denudation and disturbance combined."

"The case refers exclusively to the Coals in the Halesfield and Kemberton pits, and not to the general question."

¹ Its earlier appearance has been delayed from want of space, and, indeed, we cannot now give Mr. Randall's criticism in full.