

a curve showing the relationship existing between the rise and fall of the tide and that of the water in the well. From the position of the well in question and its surroundings, possibly the ebbing and flowing of the tide may produce the ebb and flow of water in the well, but there are other ebbing and flowing wells so situate that tidal variation can have on them no influence. Some few years back I was staying at Buxton, and frequently walked to Castleton. By the side of the road I noticed an ebbing and flowing well, but the variations of condition did not assert themselves at stated or defined times; on the contrary, the changes were erratic. One thing is certain, tides could here have no effect, since, as the crow flies, the distance from the estuary of the Mersey, the nearest point to the sea, is upwards of forty miles. How, then, can these variable conditions be explained? On the spot I could collect no information. The theory I propounded was this. The district is Lower Carboniferous Limestone, and, taking into account the results of the chemical action of underground water, the internal composition of the rocks become altered, large quantities are carried away, with the result that subterranean tunnels and cavities are formed, and if in the upper parts of this mountain limestone a spring or springs exist, the overflow would find its way by tunnels into the eroded cavities, from which it might be syphoned to the well below, producing the changes which perplex the traveller.

Caverns are abundant in the Carboniferous limestones. There is the peak cavern at Castleton. The Victoria Cavern, at Settle, Yorkshire, contains forms which favour my theory, since it has deep shafts and caverns inclining inwards. There is also recorded a fissure communicating with a basin in the limestone at Windy Knoll, near Castleton.

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106, CANNON STREET, E.C.
May 19th, 1898.

SACCAMMINA CARTERI AND *NODOSARIA FUSULINIFORMIS*.

SIR,—In consequence of the paper by Mr. F. Chapman, in the *Annals and Magazine of Natural History* for March, 1898, in which he so properly connects *Saccammina Carteri* with *Nodosaria fusuliniformis* of M'Coy, I have sought for the second type-specimen referred to by M'Coy. It has now been placed in the wall-case containing fossil Foraminifera in the Museum of Science and Art, Dublin. It fully justifies Mr. Chapman's published conclusions, which were based upon the Cambridge specimen. There seems no doubt that we must now accept *Saccammina fusuliniformis* as the name of this well-known species. GRENVILLE A. J. COLE.

SCIENCE AND ART MUSEUM, KILDARE STREET, DUBLIN.
May 21st, 1898.

BOULDERS OF SPILSBY SANDSTONE.

SIR,—In his interesting note on a boulder of Spilsby Sandstone, at Wimpole, in Cambridgeshire (*GEOL. MAG.*, June, 1898, p. 267), Mr. Cowper Reed rightly observes that no block so large, and bearing such a definite proof of its origin, has previously been