

ground of the much greater probability of a directly *mineral origin* of such limestones, as the necessary result of chemical reactions, which a common-sense application of known laws of thermal and general chemistry tells us must have taken place in the earlier ("pre-oceanic") stage of the history of our earth. This was put plainly enough before the geological world in my "Metamorphism of Rocks" (Longmans, 1889), pages 6-16; and it is needless that I should do more now than refer the reader to that work, so far as concerns the theoretical bearings of the facts here narrated.

MALVERN.
13th April, 1892.

A. IRVING.

REPLY TO PROF. J. F. BLAKE.

SIR,—There is only one point in Prof. Blake's reply in your April Number that I intend to notice. Prof. Blake writes:—"General McMahon says he was considering capillary flow under heat and *pressure*, but in his paper he really only discusses the action of heat, and the present discussion on the effect of pressure is a new one." This statement is really a very extraordinary one. In my paper in the *GEOLOGICAL MAGAZINE* (February, 1892, pp. 74, 75). I simply refer to statements regarding pressure made in my original paper (*Proc. Geol. Assoc.* vol. xi. pp. 431, 432). In this last paper I showed that pressure was a very important factor, and I gave very interesting statistics at pp. 438, 439 (then published for the first time) supplied to me by an eminent engineer showing that in the case stated, the actual measured pressure at 190 feet below the surface, was equal to the calculated pressure, and was no less than 80 lbs. on the square inch.

I do hope for the future success of "The Annals of British Geology," that Prof. Blake will devote a little more attention to the mastery of the papers he attempts to boil down. Unless he does so, I am afraid that his geological *Bovril* will not prove a very stimulating or nourishing article.

20, NEVERN SQUARE,
10th April, 1892.

C. A. McMAHON, Major-General.

CONE-IN-CONE STRUCTURE.

SIR,—If Mr. Young's statement¹ is meant to be of universal application, it is certainly not borne out by observation. A radial arrangement of the cones about a large nodule is, I believe, not an uncommon thing. Good examples occur in the Lingula Flags of Borth near Portmadoc, which contain flattened nodules, extending along the bedding, sometimes several feet long. Each is surrounded by a layer of well-characterized "cone-in-cone," and the apices of the cones are directed inwards towards the nodule, so that they point downward on the upper side, upward on the lower side, and horizontally on the edges of the nodule. I have noticed the same thing on a smaller scale in the shales of the Yorkshire Lias.

ST. JOHN'S COLL. CAMB.

ALFRED HARKER.

** The Editor regrets that, through inadvertence, this letter has been delayed in publication.—*EDIT. GEOL. MAG.*

¹ See *GEOL. MAG.* for March last, p. 138.