2. *On some REMAINS of BOTHRIOLEPIS from the UPPER DEVONIAN SANDSTONES of ELGIN.* By GEORGE E. ROBERTS, Esq.

[Communicated by Prof. J. Morris, F.G.S.]

[The publication of this paper is unavoidably deferred.]

[Abstract.]

REMAINS of a large Dendrodoid Cœlacanth, obtained by the author in Elgin, were referred by him to the genus *Bothriolepis*. These consisted of two large casts of a central head-plate, with portions of the test; a natural cast considered by him to represent the parietal, squamosal, scapular, and coracoid bones; casts of the nasal bones, and teeth of the upper jaw; together with tooth-like bodies, which were suggested to be teeth originally situated in the posterior region of the mouth.

The ornament borne upon the head-plate was next described by the author; and, in conclusion, the affinities between the genera *Bothriolepis*, *Asterolepis*, *Pteraspis*, and *Cephalaspis* were discussed.

3. *On MISSING SEDIMENTARY FORMATIONS, from SUSPENSION or REMOVAL of DEPOSITS.* By J. J. BIGSBY, M.D., F.G.S., formerly British Secretary to the Canadian Boundary Commission.

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I. INTRODUCTION.

ALTHOUGH it has been long known that formations or parts of formations are frequently absent from their places* in the vertical series of sedimentary rocks, little notice has been hitherto taken of this absence, except in single unconnected cases; and that little consists almost entirely of a few remarks in Mr. Jukes's excellent 'Manual' and an allusion or two in the writings of Sir R. I. Murchison, Mr. Darwin, and Prof. J. Hall, of New York.

As circumstances, relations, processes, and purposes well worthy of our attention are here concerned, it is proposed now to open out and examine this subject as well as it can be done in a first attempt.

The progress of geological knowledge, as of all science, is usually

* As Lias from between Oolite and Trias; Upper Silurian from between Devonian and Lower Silurian: the roof being the upper, and the floor the lower side of the place which the missing rock should have occupied; thus occasioning a blank.