

ON THE OCCURRENCE OF A LITUITEAN IN THE UPPER  
SILURIAN ROCKS OF BOWNING, NEW SOUTH  
WALES.

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(Plate viii.)

Mr. John Mitchell, Resident Teacher of the Technical College, Newcastle, brought under my notice two specimens of a Cephalopod, from the Upper Silurian of Bowning, that appear to possess characters relegating them to the Lituitidæ. One of these is more or less wholly compressed, the other is partly so and partly still preserved in the round, the latter portion being about one half the youngest remaining whorl. The wholly compressed example Mr. Mitchell has been good enough to present to the Trustees of the Australian Museum.

The late Prof. A. Hyatt included<sup>1</sup> in the Lituitidæ the following genera:—*Cyclolituities*, Remelé; *Lituities*, Breynius; *Angelinoceras*, Hyatt; *Ancistroceras*, Boll; *Rhyncorthoceras*<sup>2</sup>, Remelé; and *Holmiceras*, Hyatt.

As Hyatt's paper is not readily accessible, and with a view of showing how these genera differ from one another, the following abbreviated characters, taken from his descriptions, are appended:—

1. *Cyclolituities*, Remelé.—Whorls touching until a late ephebic stage; living chamber free only in part; section round or a compressed oval ellipse; hyponomic sinus deep and narrow; abdominal crests blunt; lateral sinuses present; dorsum occupied by a crest (?), and with an impressed zone.

2. *Lituities*, Breynius.—Whorls in contact for between three and four volutions; living chamber more or less straight; hyponomic sinus deep; lateral sinuses two, shallow; dorsum with a deep sinus; crests and sinuses well pronounced; coiled whorls costate.

3. *Angelinoceras*, Hyatt<sup>3</sup>.—Whorls open and coiled for about three volutions, attenuated and compressed; outstretched free

<sup>1</sup> Hyatt—Proc. Amer. Phil. Soc., xxxii., 143, 3 L, 1894, p. 505.

<sup>2</sup> Hyatt spelt this name in two ways—*Rhyncorthoceras* and *Rhynchorthoceras*, (*loc. cit.*, p.p. 511 and 512.)

<sup>3</sup> Hyatt—Proc. Amer. Phil. Soc., xxxii., 143, 3 L., 1894, p. 508.