

ON AN AMMONITE WITH ITS OPERCULUM IN SITU.

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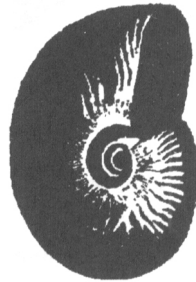
OPERCULA of Ammonites are common in many localities, especially in banks and sections of the Kimmeridge Clay; but they usually occur in broken fragments, and very rarely with their valves paired, unless sheltered within the last whirl of the shell to which they belonged. Even when thus protected the valves are generally displaced, as might be expected if we consider how slight is their union along the suture, and how great were the chances of being shifted by the contraction of the animal after death, by the pressure of external mud.

The British Museum contains several examples of *Ammonites Jason*, *A. Brightii*, *A. fluctuosus*, *A. lingulatus*, and other species with their opercula more or less shifted; and Mr. Charles Moore, of Bath, has several small shells of *Ammonites planorbis* from the Lower Lias, with the opercula remaining in their true position; the smallest individual is only one quarter of an inch in diameter.

I have recently obtained a specimen of *Ammonites subradiatus* (J. Sby.) from Mr. Joseph Wood, an experienced collector (formerly of Bath, but now living at 23, New Union-street, Moorfields), who discovered it in the Inferior Oolite, of Dundry, near Bristol, with the operculum remaining in its natural position as represented in the accompanying figure.

The shell measures sixteen lines by twelve and a half, with a maximum thickness of four and a half lines. It agrees with the ordinary run of specimens from Dundry, and differs from the example figured by Sowerby in being less compressed, and more widely umbilicated; the umbilicus measures four lines across, and is bordered by a steep margin.

The operculum is flat in the middle, with a slight furrow along the suture, and is much bent down at the hinder corners where it abuts against the inner whirl of the shell. It is six lines long and four wide, and is sculptured externally with about twelve angular concentric furrows; the inner surface is smooth, as shewn by the fracture and removal of a portion. It closely resembles the opercula of *Ammonites Brightii* and *A. lingulatus*, to which *A. subradiatus* is nearly related.



Ammonites subradiatus,
with the operculum
in situ.

British Museum, August, 1860.