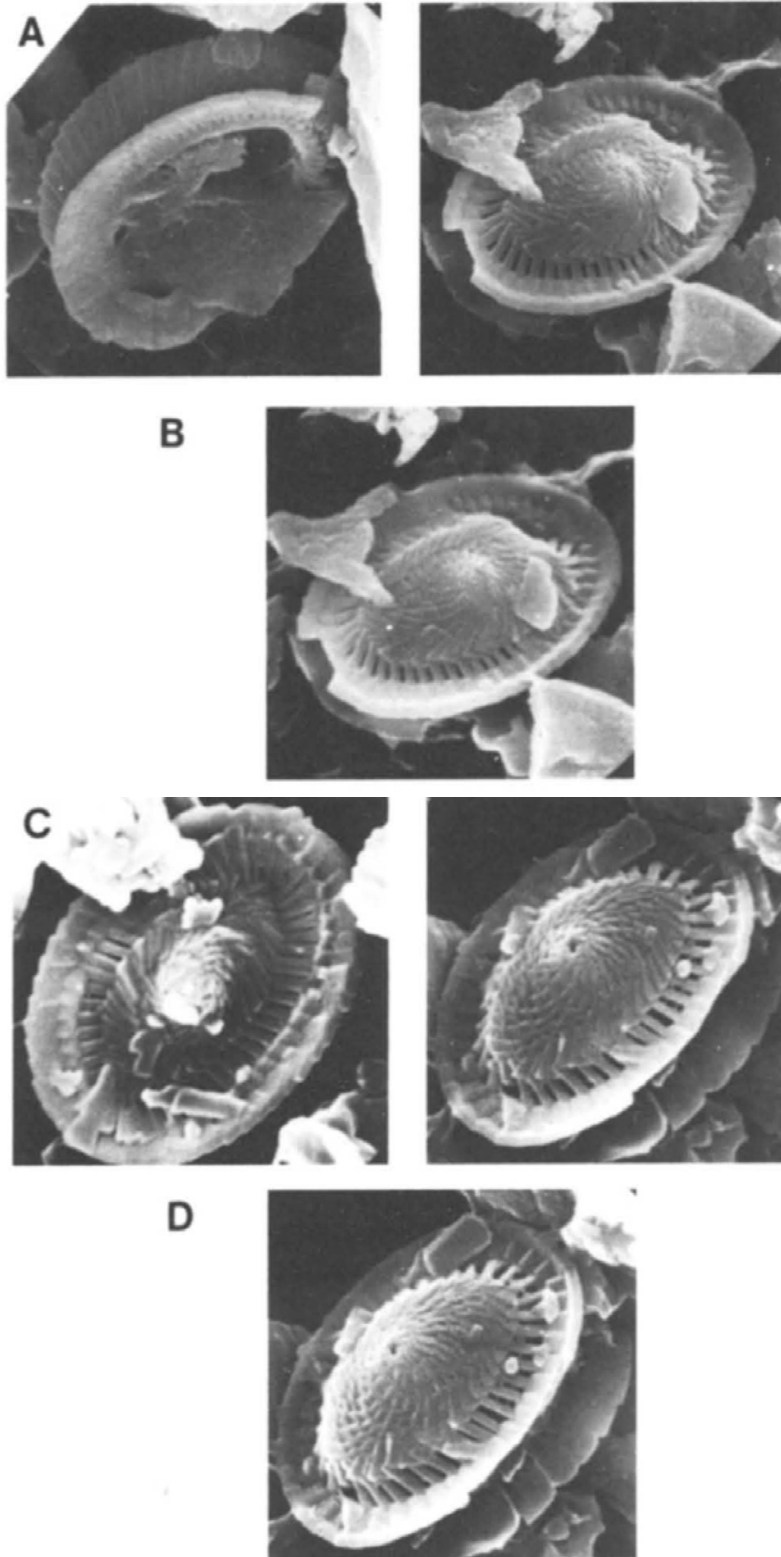


158. *Ommatolithus australiensis* Shafik (1989)



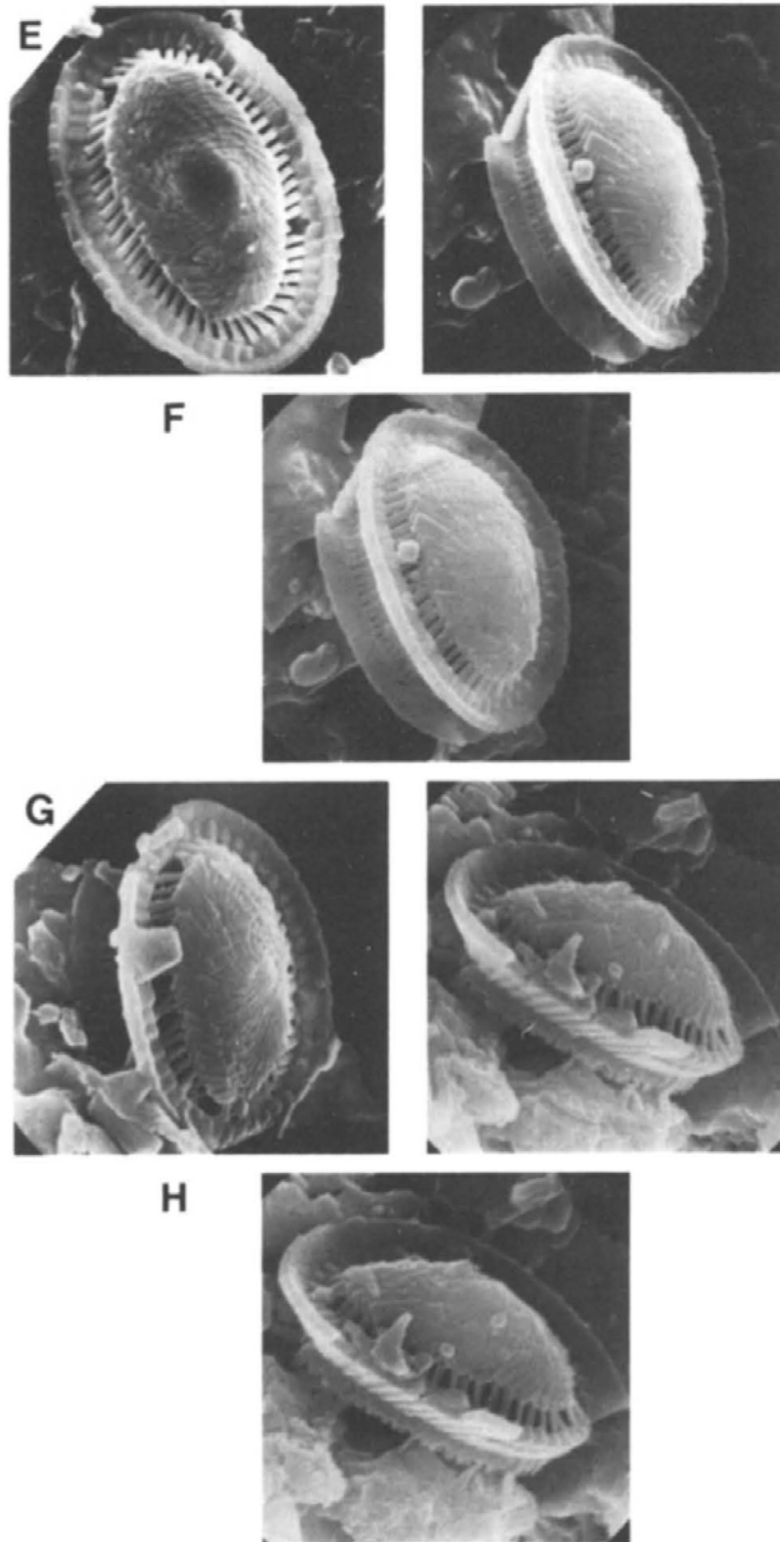


Fig. 6

Diagnosis: As for the genus, but with the following specific characteristics. Elements forming the sides and top of the cupola are arranged in the same counter-clockwise direction. Those in the sides make an angle between 45° and 90° with the basal shield.

The cupola usually has narrow curved perforations at the base of a nipple-like structure at its centre.

Description: In a slightly oblique distal view, three concentric cycles are discernible in the basal shield. The inner cycle (S3) is composed of 38-45 laminae, strongly imbricate in the plane of the shield. Sutures separating these laminae are inclined in clockwise direction. The outer margin of this cycle is distinctly serrated. The intermediate cycle (S2) is constructed of 45-65 laths which are arranged almost radially. Narrow slits are present between these laths in some specimens. The outer cycle (S1) consists of 28-43 subtrapezoidal plates which are non-imbricate or slightly imbricate. Sutures separating these plates are usually straight and almost radial.

The base of the cupola is in direct contact with the basal shield. The angle between the sides of the cupola and the basal shield ranges usually between 45° and 90°. The sides of the cupola are usually straight, flaring distally, so that the diameter of the arched top of the cupola is usually greater than its base. Elements forming both the sides and top of the cupola are spiralled in the same direction. Those forming the top are arranged in a distinct whirl pattern, usually with a nipple-like structure at the centre. The cupola is essentially imperforate except for a few narrow curved openings at the base of the nipple-like structure.

Damaged specimens are invariably without the outer cycle (S1) of the basal shield, and often without that part of the cupola where the curved perforations and the nipple-like structure occur.

Material: Holotype CPC21527 (Fig. 6B) is from the Browns Creek Clays, sample MFN-1838. Paratypes CPC21526, CPC21529 and CPC21531 are from the Lacedpede Formation, sample MFN-1810 in the SADM Observation Bore No.2. CPC21528 and CPC21530 are from the Browns Creek Clays, sample 1838. CPC21532 and CPC21533 are from the Browns Creek Clays, sample MFN-2062 and MFN-1832 respectively.

Shafik, S. 1989. Some new calcareous nannofossils from Upper Eocene and Lower Oligocene sediments in the Otway Basin, southeastern Australia. *Alcheringa*, **13(1)**: 69-83.