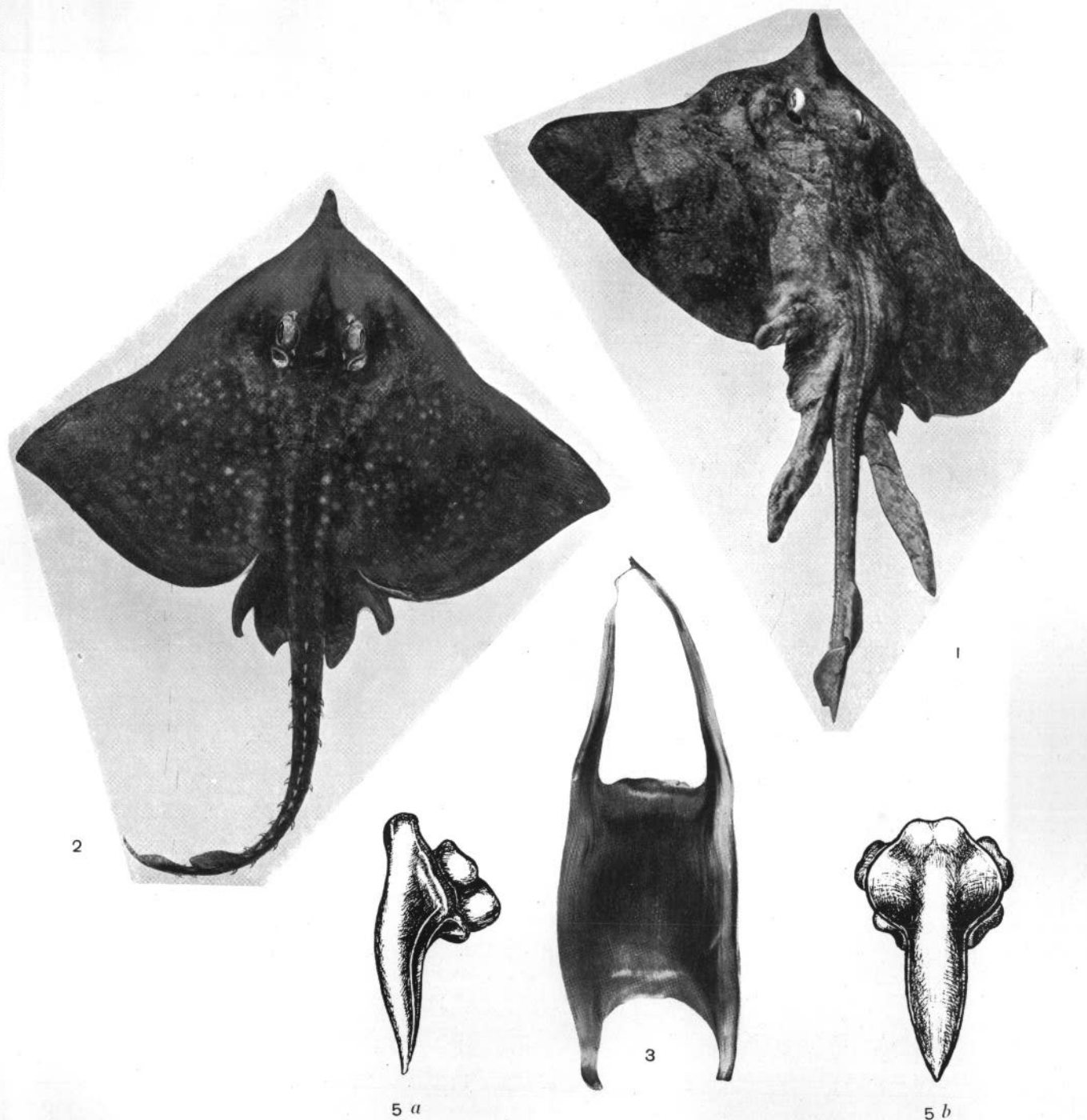


SELACHII
Hypotremata Raioidæ

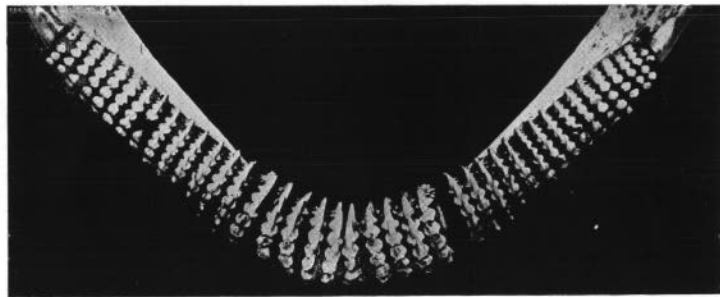
Raia marginata

LACÉPÈDE 1803



EXPLANATION OF FIGURES

1. Adult male from Plymouth. Width of disc 1350 mm.
2. Immature female from Plymouth. Width of disc 256 mm.
3. Egg capsule. Length (without horns) 176 mm. Width 131 mm.
- 5 a, b. Single tooth magnified.



4

4. Teeth of adult male.

DIAGNOSIS — Maximal observed length 2020 mm. and width 1519 mm. *Disc*: length 50 to 56 per cent. and width 69 to 75 per cent. in total length of fish; anterior margin undulated; outer angle about 90°. *Snout* prolonged and acutely pointed, its length 4 to 4.5 times in width of disc and about 3 to 3.5 times the interorbital width which is slightly less in young and a little greater in adults than the combined length of eye and spiracle. *Teeth* pointed in both sexes, middle series with long conical points: 40 (young) to 48 rows in upper jaw. *Upper surface* entirely smooth in young, except for orbital and tail spines; spinulose in adult males except for a bare patch on middle of disc. A few rostral spines in adults. Orbital spines present in young, usually absent or worn flat in adults. No shoulder spines. Median body spines absent in young but present in adults, though often worn flat or wanting anteriorly. A median series of tail spines (10 to 15 in young) and one spine between the dorsals. Lateral tail spines irregularly spaced in young or represented by a complete series in adults. Tail otherwise strongly spinulose in adults and resembling that of *R. lintea*. Colour reddish brown in young with a few or with many cream-white spots: adults grey to blue-grey with whitish spots merging in the ground colour. *Lower surface*: young stages with body and tail smooth, praeoral area strongly spinulose, spinulae extending along the anterior margin of disc halfway to the outer angle. Adults more or less spinulose, but usually with large bare patches on the pectorals. Colour: young with a broad border of black round the angle and posterior margins of disc and pelvics, tail brownish-black with a narrow white margin: adults uniformly white, posterior margins of disc greyish. *Egg capsule* large and honey-combed, one side almost flat, the other strongly convex. Long horns ribbon shaped: short horns hooked. Range in length (without horns) 166 to 193 mm. and in width 131 to 147 mm. Ripe females observed at Plymouth from April to June. Period of incubation of embryo 15 months.

DISTRIBUTION — Coastal to moderately deep water. S. and W. African coasts to the English Channel and S. coast of Ireland. Enters the Mediterranean.

COMMON NAMES — British, Bordered Skate, Burton Skate and Bottle-nose Skate; Portuguese, Raya blanca.

SYNONYMY — *R. alba* Lacép 1803. Burton Skate Couch 1862. *R. bramante* Sassi 1846 (Rey).

LITERATURE

1803. — LACÉPÈDE. Histoire naturelle des Poissons. Tome V.
 1881. — MOREAU, E. Poissons de la France. Tome I.
 1893. — HOLT, E.W.L. — The Bottle-nose Ray and its egg purse. *Journ. Mar. Biol. Assoc.* Vol. V.
 1922. — CLARK, R. S. Rays and Skates. Egg capsules and young. *Journ. Mar. Biol. Assoc.*, Vol. XII, No. 4.
 1926. — CLARK, R. S. Rays and Skates. A revision of the European Species. *Fisheries, Scotland, Sci. Invest.*, 1926, I.
 1928. — REY, L. Lozano. Fauna Iberica. Peces. Tomo primero. *Museo Nacional de Ciencias Natural, Madrid.*

R. S. CLARK 1930.