

IV.—On the Skulls of Antarctic Seals: Scottish National Antarctic Expedition.  
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Although the osteology of Antarctic seals has been very completely discussed, notably by the late Dr J. E. GRAY, Sir WILLIAM TURNER, and Professor ROBERT THOMSON, yet the literature regarding the subject is somewhat scattered. I have therefore considered that it might be important from the point of view, as it were, of an index to publish a complete series of photographs of a set of the skulls of seals taken by the naturalists of the *Scotia* during the Antarctic voyage of 1902–1904.

The species considered are :—

1. *Leptonychotes Weddelli* (Gill) : The Weddell Seal.
2. *Stenorhynchus leptonyx* (F. Cuvier) : The Sea-leopard.
3. *Lobodon carcinophaga* (Gray) : The Crab Eater, or White Antarctic Seal.
4. *Ommatophoca Rossi* (Gray) : The Ross Seal.
5. *Otaria jubata* (Forster) : The Patagonian Sea-lion.

The type collection of the seals' skulls taken by the *Scotia* naturalists are chiefly housed in the Anatomical Museum of the University of Edinburgh, and in the Scottish Oceanographical Laboratory; those housed in the Anatomical Museum of the University of Edinburgh have been duly recorded in Sir WILLIAM TURNER'S excellent descriptive catalogue entitled *Marine Mammals in the Anatomical Museum of the University of Edinburgh*; while Professor ROBERT THOMSON, of Cape Town University, has contributed a paper to the *Transactions of the Royal Society of Edinburgh* entitled "Osteology of Antarctic Seals," which also appears in the *Scientific Reports of the Voyage of S. Y. "Scotia,"* volume iv.

Beyond this it is unnecessary to say more at the present time, except to refer to the plates published herewith. It will be observed that the skulls of the species of each seal are shown from every possible aspect :—

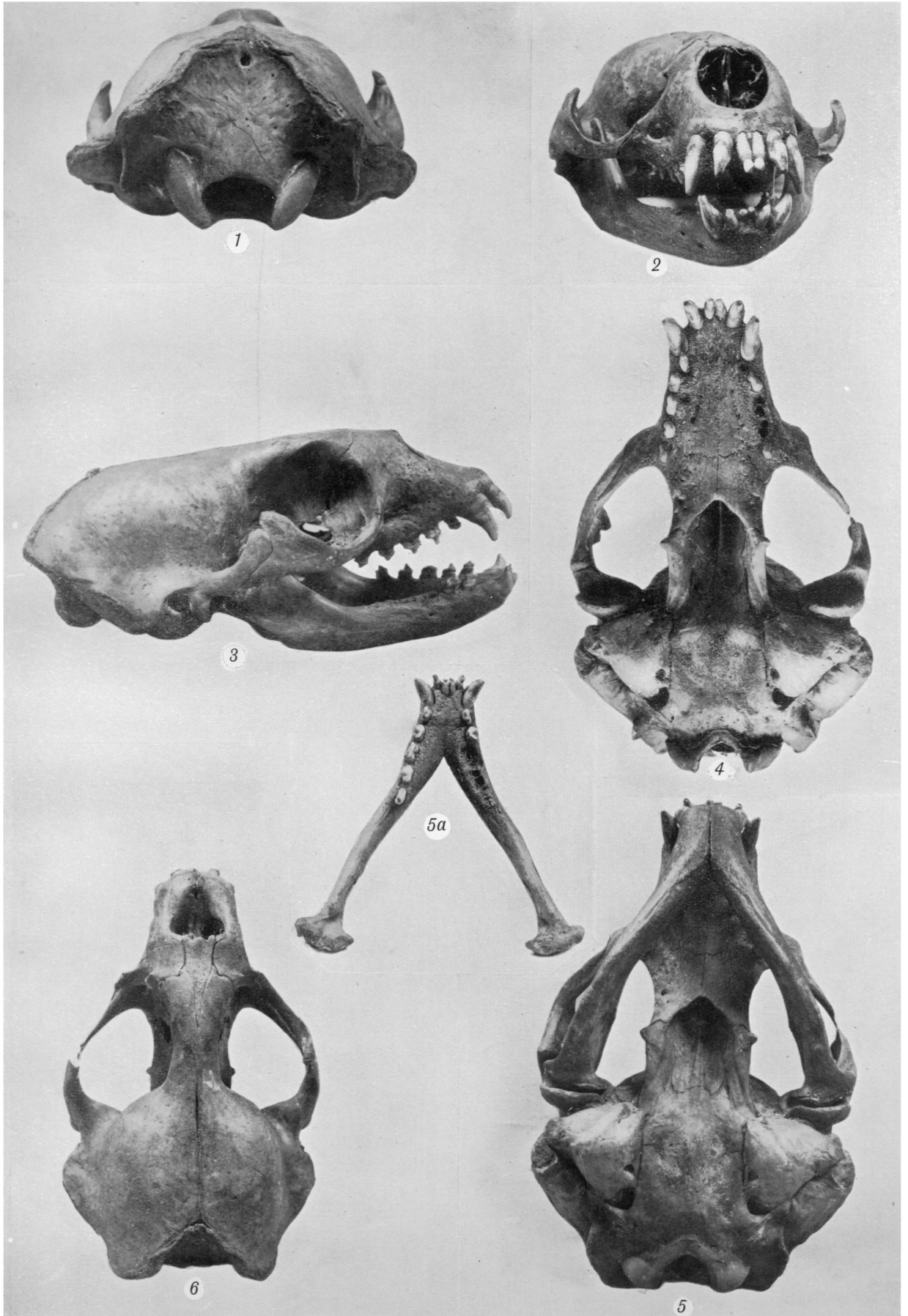
- From (1) The posterior aspect.  
(2) The anterior aspect.  
(3) The lateral aspect.  
(4) The inferior aspect without the lower jaw.  
(5) The inferior aspect with the lower jaw.  
(5a) The superior aspect of the lower jaw.  
(6) The superior aspect.

The figures speak for themselves, and, as already stated, are intended to be an index for the use of museums and for the use of naturalists exploring in Antarctic and Subantarctic Regions.

I have considered the measurements and weights of Antarctic seals in the flesh in a separate paper; the anatomy of the Weddell Seals taken by the *Scotia* has been fully considered by Professor DAVID HEPBURN and Dr HAROLD AXEL HAIG; while Dr R. N. RUDMOSE BROWN has dealt with "The Habits and Distribution of the Seals of the Weddell Sea." \*

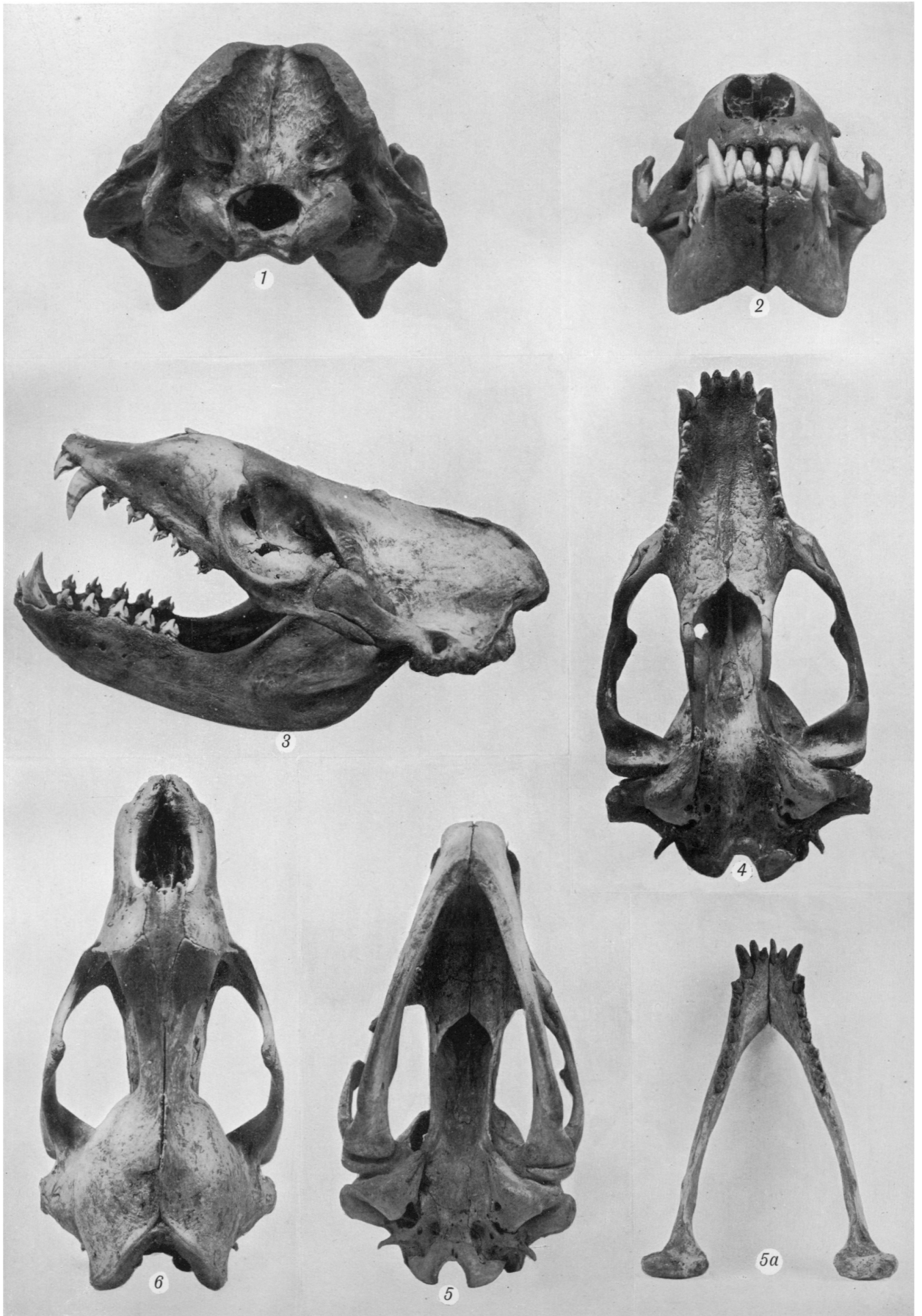
\* Vide *Scientific Reports of the Voyage of S.Y. "Scotia,"* vol. iv., parts ii., iii., v., vi., ix., x., xi., xii., and xiii.

BRUCE: "Skulls of Antarctic Seals."—PLATE I.



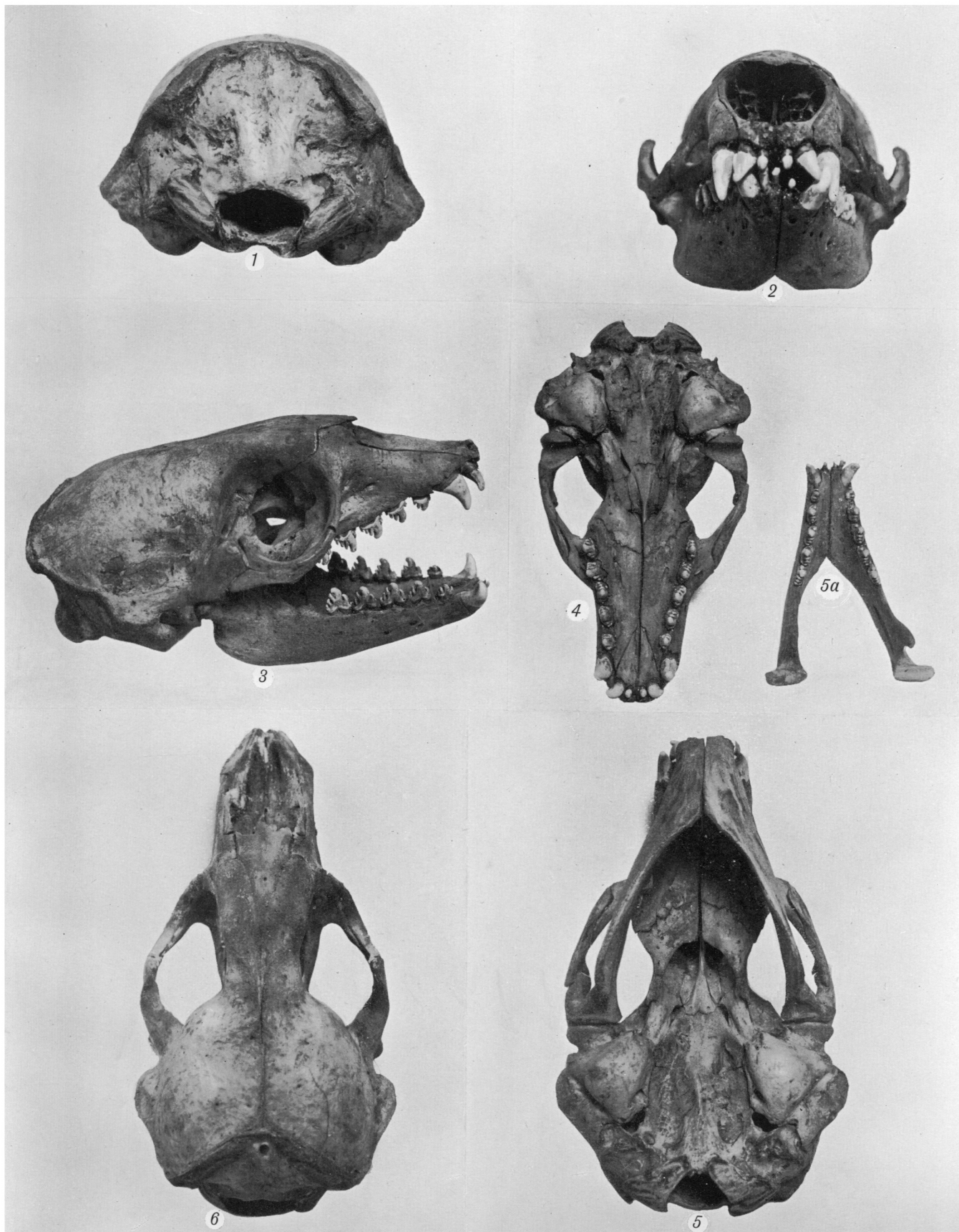
LEPTONYCHOTES WEDDELLI.

BRUCE: "Skulls of Antarctic Seals."—PLATE II.



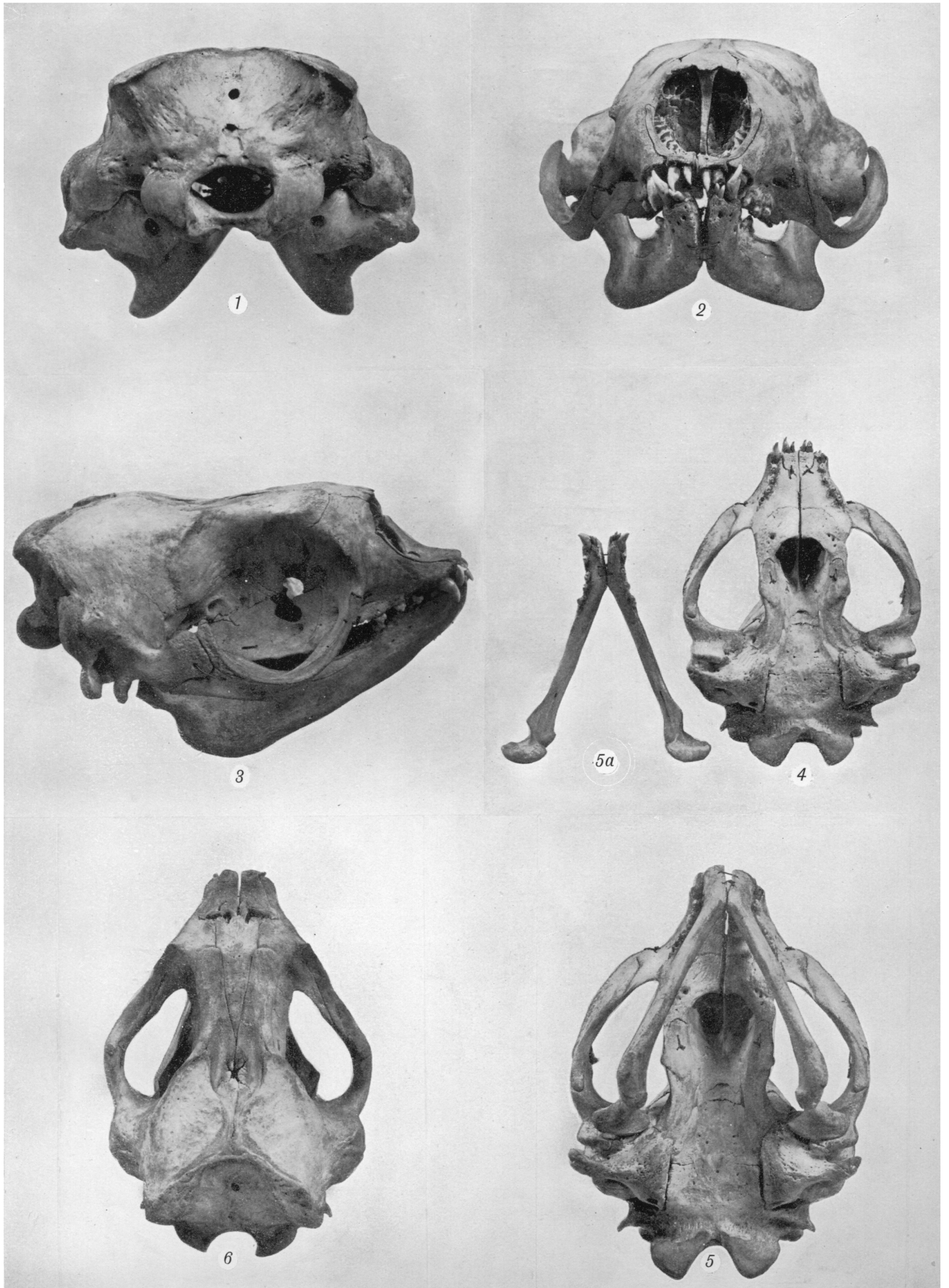
STENORHYNCHUS LEPTONYX.

BRUCE: "Skulls of Antarctic Seals."—PLATE III.

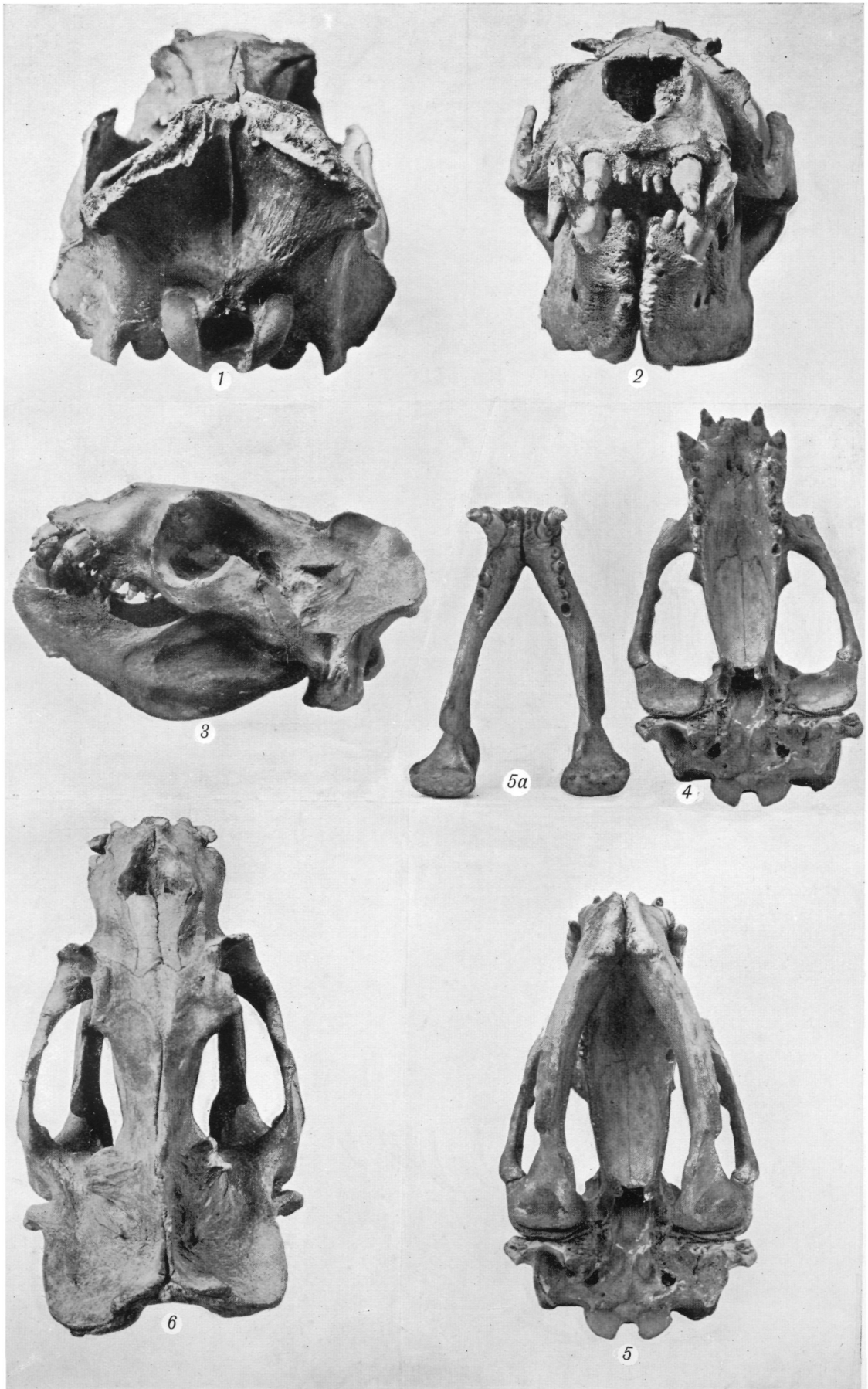


LOBODON CARCINOPHAGA.

BRUCE: "Skulls of Antarctic Seals."—PLATE IV.



BRUCE: "Skulls of Antarctic Seals."—PLATE V.



OTARIA JUBATA.