

THE CRANIAL BUCKLER OF A DIPNOAN FISH,
PROBABLY *GANORHYNCHUS*, FROM THE DEVONIAN
BEDS OF THE MURRUMBIDGEE RIVER,
NEW SOUTH WALES.

By R. ETHERIDGE, Junr., Curator.

(Plate xxviii.).

Mr. C. A. Süßmilch, Lecturer on Geology, Technical College, Sydney, favoured me with the loan of a cranial buckler of a Dipnoan fish, obtained by him from the Devonian beds of the Murrumbidgee River. A reproduction of this specimen has been placed in the Museum collection.

The buckler in question so closely resembles one described by Dr. R. H. Traquair, some years ago, as *Ganorhynchus woodwardi*,¹ that I am induced to publish a description of the new specimen under the same generic name, as *G. süßmilchi*. Dr. Traquair's specimen consisted of the anterior portion of the head only, but unfortunately nothing was known, at the time of his description "regarding the geological formation, or the locality." It consisted of "the extremity of the snout of a very large fish, probably 4 or 5 feet long." Dr. Traquair's description, epitomised, is as follows, so far as it concerns the present fossil. The fragment is semilunar in form, with a superior arched ganoid surface forming part of the upper aspect of the snout, the anterior rounded margin being the front edge of the upper lip. When placed in its natural position, with the labial margin horizontal, the superior surface slopes downwards and forwards in the middle line at an angle of 45°, and is arched at the sides. The surface is smooth, glossy, finely reticulate-punctate, and exhibits no trace either of sutures or external nasal organs. Near the labial margin, the small punctures of the superior ganoid surface give place to larger ones. On viewing this snout from below it is seen to be flattened centrally and laterally, and with a shallow central emargination or indentation, set on its edge with a row of six small blunted tooth-like projections. On each side is a deep

¹ Traquair—Geol. Mag., x., 1873, p. 552, pl. xiv.