TRACHICHTHYS AUSTRALIS.

CHARACTER GENERICUS.

Caput antice rotundatum : Oculi magni : Os amplum, edentulum, descendens.

Membrana branchiostega radiis octo, quorum quatuor inferiores margine scabri.

Squamæ scabræ : Abdomen carinato-cataphractum,

Cernere est in tabula veram piscis miri magnitudinem. Corpus modice crassum, præcipue a parte antica. Caput permagnum. Os deorsum se recludit fere perpendiculariter, linea tamen curvata ; eoque clauso, frontis ambitus perfecte ovatus. Oculi prægrandes : videturque iris vivo fuisse argentea, qualis solet plerisque piscibus. Os caret dentibus. Lingua modica, maxillæ inferiori quasi adnata, cujus ad extremitatem fere pertingit. Branchiarum opercula partem habent superiorem spina magna, scabra, instructam, ad basin crassissima. Partem quoque inferiorem occupat spina, sed minor et brevior. Operculi utriusque circumferentia paululum sinuata est, prope medium prominentiis brevissimis, subacutis : reliquum constat e quinque vel sex lamellis in longitudinem ductis, quarum margines scabræ more corporis. Ex radiis qui quasi octo sunt in membrana branchiostega, quatuor inferiores reliquis sunt crassiores,

crassiores, lateribus scabris. Vix alius piscis, si *cataphraëtos* excipiamus, vestitu æque duro induitur; squamæ enim solidissimæ et quasi cuti adnatæ, adeo arcte sibi invicem affiguntur, ut vix possibile sit forcipe unam evellere, nisi ipsius corii aliquid simul evellatur; qua in re similitudo quædam est huic cum genere quod *Balistes* dicitur. Squamarum præterea generalis formatio respondet fere squamis *Chætodontorum*; extrinsecus enim terminantur quasi fimbria parvularum et fortium spinarum, præter alias plures in superficiem conspersas. Differunt paululum a se invicem squamæ in diversis partibus, et prope abdomen magis dilatantur. Abdomen ipsum carinatum et quasi *cataphraëtum* est serie octo squamarum scabrarum et validarum, quarum unaquaque prominet in spinam brevem, retro tendentem, et carinam subtus efficientem, lateribus sursum continuatis quasi quadrantem unciaë ab utroque latere abdominis. Squamæ quoque abdominis, (ut prius notavimus) hac in parte paulo latiores quam alibi gradatim decrescunt versus medium corporis. A cauda utrinque linea paululum affurgit similis carinata: media enim pars singulæ squamæ altius prominet quam reliqua superficies, squamaque ipsæ hoc in loco grandiores sunt quam alibi. Præter hanc vix ulla visibilis est linea lateralis. Pinna dorsalis quatuordecim habet radios quorum septem posteriores versus apices dividuntur in molliores ramulos. Pinnæ pectorales tredecim habent radios. Ventræ septem. Anales duodecim, plerisque apud apices mollius ramulosis. Caudam ore furcæ curvata constat fere e viginti quatuor radiis, quorum exteriores utrinque

utrinque validi sunt seu spinosi; reliqui quales sunt in pinna anali. Pinnarum omnium, exceptis pectoralibus, tres primores radii validissimi sunt, scabri, exterius tenuiter ferrati; præcipue vero ventralium. Novum genus constituit *Trachichtys Australis*, in piscibus *thoracicis* Linnæi numerandum, iis nempe quorum pinnæ ventrales sub pectoralibus sitæ sunt. Cum asperrimam habeat superficiem, *Trachichthyn* diximus; nomini autem triviali (donec melius physicis innotuerit) *australis* inserviat. E veteribus omnibus Linnæanis generibus, iis scilicet quæ in Systematis Naturæ editione duodecima continentur, nullum est cujus ad similitudinem magis accedit quam ad *Perca*. Litora incolit Australasiæ. Ex variis piscibus quos spiritu vini conditos collegerat Dominus White coloniæ nostræ Australiacæ chirurgus primarius, in specimen incidimus unde depicta est hæc nostra effigies. Vidimus quoque apud Dominum White iconem *Trachichthyos* non sane exquisitam, satis tamen fidam ut speciem definiat, et colorem genuinum demonstret, læte scilicet carneo-ferrugineum, qui in specimine asservato in fuscum exoleverat. Partis mediæ omnium pinnarum saturatior est color quam in reliquo corpore: margines vero flavescent.

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John, by J. P. Keadler April 1899.

THE SOUTHERN TRACHICHTHYS.

GENERIC CHARACTER.

Head rounded in front: Eyes large: Mouth wide, toothless, descending.

Branchiostegous Membrane furnished with eight rays, of which the four lowermost are rough on the edges.

Scales rough: Abdomen cataphracted with large carinated scales.

This remarkable fish is represented on the plate in its natural size. The body is moderately thick, more especially on the fore part: the head is very large; the mouth opening downwards in an almost perpendicular direction, but in a curved line; and, when closed, the outline of the head or front is completely oval. The eyes are extremely large, and the iris appears to have been of a silvery hue, or as in generality of fishes. The mouth is destitute of teeth, and the tongue, which is moderately large, is adnate, or fixed to the lower jaw, to the extremity of which it almost reaches. The *Opercula* or *gill-covers* are furnished on the upper part with a large, strong, and rough spine, which is very thick at its base: a smaller and shorter spine also occurs at the lower part:

part: the outline of each operculum is somewhat sinuated by two very short and subacute processes towards the middle; and the remainder is composed of five or six longitudinal rough-edged lamellæ resembling the surface of the body. The *membrana branchiostega* has about eight rays, of which the four lowermost are rough-edged, and thicker than the rest. Perhaps no fish yet known, if we except what are called mailed or cataphracted fish, is so strongly coated as the present; the scales forming a kind of processes, which are so strongly and closely inserted, that it is not possible by means of a forceps to detach one from the rest, without bringing away with it a small portion of the corium or general integument itself; the skin in this respect resembling in some degree that of the genus *Balistes*. These scales or processes, as to their general structure, are analogous to those of the *Chætodons*; terminating outwardly in a fringe of small, strong spines, besides several scattered ones on the surface. They differ somewhat in shape on different parts of the animal, and, as they approach the abdomen, become more dilated. The abdomen itself is carinated and cataphracted by a row of eight strong, rough incisures or scales, each of which projects into a shortish spine, pointing backwards, and forming a sharp keel beneath, while the sides are continued upwards near a quarter of an inch on each side the abdomen. The scales of the abdomen, as before observed, are also somewhat broader in this part, and gradually lessen towards the middle of the body. On each side the tail is a slightly-prominent line, or an approach to a carinated appearance,

appearance, owing to the middle of each scale on that part rising up a little above the level of the rest: the scales also along this part are rather larger than elsewhere: otherwise the appearance of a lateral line is scarce distinct. The *dorsal fin* has fourteen rays, of which the seven hindmost subdivide towards their tips into softer ramifications. The *pectoral fins* have thirteen rays: the *ventral fins* seven: and the *anal fin* twelve rays, most of which subdivide into softer ramifications at the tip. The *tail* is strongly furcated, and consists of about twenty-four rays, of which the external or shorter ones are strong or spiny; the rest of a similar appearance to those of the anal fin. The three first rays of all the fins, except the pectoral ones, are very strong, rough, and finely serrated outwards, but more particularly those of the ventral fins.

This fish, which constitutes a new genus, belongs to the Linnæan division of *Thoracici*, or such as have the ventral fins situated beneath the pectoral ones. From its uncommonly rough surface I have given it the generic name of *Trachichthys*, and as a trivial name, at least till we are better acquainted with its natural history, it may be sufficient to distinguish it by the title of *Australis*. Of all the old Linnæan genera, or those contained in the twelfth edition of the *Systema Naturæ*, it seems to approach the nearest to that of *Perca*. The *Trachichthys Australis* is a native of the coasts of New Holland, and the specimen from which the present engraving was taken occurred amongst several other fishes preserved in spirits in the collection of Mr. White, chief Surgeon to the
English

English settlement in those regions. Among some drawings in Mr. White's possession I have also observed a representation of this fish, which though not executed with minute precision as to some particulars, serves at least to identify the animal, as well as to shew the natural color, which is a bright pink-ferruginous or fair reddish-brown; whereas in the preserved specimen the color is faded into a dull brown. The middle part of all the fins is of a deeper color than the rest of the animal, and the edges are lighter, or of a yellowish tinge.

Shaw, George. 1799. "The Southern Trachichthys, *Trachichthys australis* [Pl. 378]." *The Naturalist's Miscellany* 10(CXVI), <https://doi.org/10.5962/p.304560>.

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