ICHTHYOCAMPUS TRYONI, sp. nov.

D. 18.? A.? P. 8. C. 8. Osseous rings 17/36.

Length of head ten and one-sixth in the total length, and three and four-fifths in the distance between the tip of the snout and the vent, which distance is two and four-fifths in the total length. Snout very short, three-eights of the length of the head, and five-sixths of the postorbital space. Body compressed, much deeper than broad. Snout turned upwards at the tip; its posterior half bearing a high sharp arcuate ridge bifurcated behind, the divergent branches meeting the supraciliary ridges, which are moderately developed: interorbital space traversed by a low median ridge, which is continuous with the rather indistinct nuchal ridge: a low curved opercular ridge: all the body ridges acute, those of the dorsal profile so much so as to cause a deep concavity along the whole length of the trunk and tail: lateral ridges straight, ceasing on the second or third caudal ring: abdominal ridge Ovisac extending over sixteen rings, and well developed. rather more than two-fifths of the length of the tail without the small caudal fin. The dorsal fin stands upon the five anterior eaudal rings. Colors—Head, back, and sides brown, faintly mottled with lighter; under surface pale yellowish-brown with the exception of the marsupial region which is black.

The unique example on which this species is founded was dredged in Moreton Bay, Queensland, in my presence early in May, 1886, and I embrace this opportunity of naming the species after my friend, Mr. Henry Tryon, in remembrance of the very pleasant collecting trip which we enjoyed together there. The specimen measures but two and three-fourths inches, but from the perfect development of the eggpouch I believe it to be fully adult. The high rostral ridge separates this species at a glance from I. cinctus, while the interrupted lateral ridge equally distinguishes it from I. carce, in which that ridge is curved downwards opposite to the vent so as to join the inferior caudal ridge.

DESCRIPTION OF A NEW AUSTRALIAN TORTOISE.

By J. Douglas Ogilby.

Chelodina rugosa, sp. nov. (Plate vii.)

CARAPACE ovate, somewhat pyriform, narrower anteriorly, slightly emarginate behind, without vertebral keel, deeply sculptured. Nuchal plate between two marginal plates: eighth

and ninth marginal plates laterally expanded, twice as broad as those above the bridge. Profile of back considerably elevated and rounded, deepest in front of the bridge on second vertebral plate. A deep curvature above and beyond the bridge from the fifth to eighth lateral plates. Nuchal plate one-seventh longer than broad, quadrilateral: margino-nuchal plates much longer on the outer than the inner edge, the latter being equal to the breadth: margino-brachial plates quadraugular, the breadth of the first pair four-sevenths of the length, with the anterior and posterior margins equal; second pair with the anterior margin nearly twice as long as the posterior: first pair of margino-lateral plates very narrow, more than three times as long as broad, and much longer but not so broad as the second margino-brachial; second and third pairs nearly rectangular; fourth pair longer externally and posteriorly; fifth pair quadrilateral and rectangular, slightly longer than broad: first pair of margino-femorals as broad as the inner edge, which is slightly less than the outer; second and third pairs quadrilateral, longer than broad, with the inner edges the shorter: supra-caudals convex on the outer edge, forming a shallow notch at the symphysis, about two-thirds as broad as long, and very distinctly arched at the suture. First vertebral plate octagonal, *larger than the others, in conjunction with the nuchal, margino-nuchal, and anterior half of the first margino-brachial; posterior edge deeply concave: second and third hexagonal: fourth + hexagonal (?) with the anterior edge twice as long as the posterior: fifth plate quadrilateral, its anterior edge but one-third of the length of the posterior, which barely touches the last margino-femoral, and is not perceptibly angulated. Posterior costal plates as high as the lower edge; anterior plates very large, the outer edge nearly one-half longer than the first vertebral plate, measured along its central line. All the plates of the carapace densely and, with the exception of the marginal plates, deeply sculptured; for the most part this sculpturation is most eccentric in character, consisting chiefly of a network of deep grooves enclosing nodules of many shapes and sizes; on the middle vertebral plates, however, it takes a more or less regular longitudinal form, while on the lower half of some of the costal plates, a tendency to a transverse ornamentation may be traced: plates of the plastron and bridge distinctly marked by a network of grooves, scarcely perceptible to the touch.

^{*} In the type specimen, which is as yet unique, there is on the left side a small plate intercalated between the first vertebral and first costal plates, and standing on the anterior margino-brachial plate, but from an examination of the opposite facies it is evident that this is accidental.

[†]This plate in our specimen is broken up into two parts, evidently by an accidental fracture, the hinder part being small and subcircular.

Plastron equally broad in front and behind, its breadth being but little less than half its length measured along the median line from the origin of the suture between the gular plates to the end of that between the anals; rounded in front and with a deep semi-ovate notch behind. Intragular plate moderate, octagonal, the hinder edges being distinctly though very obtusely angulated; posterior angle very acute: gular plates quadrilateral, the sutural edge very short, about one-third of the hinder edge, which is one-half of the length of the plate: humerals with the outer and hinder edges produced backwards, and meeting at an acute angle; hinder edge concave: pectorals large, pentagonal, the sutural edge about two-thirds of the length of the intragular plate, and rather less than the outer edge of the humeral plate: abdominal plates rectangular, one-fifth broader than long: femoral plates quadrilateral, the sutural edge half as long as the breadth, and but little less than the external edge, which is convex and laterally expanded, but not to so great an extent as the corresponding eighth and ninth marginal plates of the carapace; anal plates quadrilateral, the anterior edge straight and longer than the exterior, which with the posterior forms a very acute angle; these plates are bent strongly upwards towards the carapace, the distance between their tips being much greater than that between a tip and the nearest point of the carapace. Colors—Carapace rich dark brown with a reddish tinge on the sides; plastron, bridge, and lower surface of marginal plates pale vellow, the sutures with a light brown edging.

MEASUREMENTS.

					Inches.
Length of	earapaee				10.00
Greatest w	ridth at last	margino-	lateral pl	ate	$7 \cdot 25$
Depth belo	w middle of	second ve	rtebral pl	ate	3.80
Length of	nuchal plat	e			0.7.5
Width of	same in fron	ıt			0.58
Length of	outer edge	of 1st ma	rginal pl	ate	1.15
,,	"	2nd	,,		1.35
,,	,,	$3\mathrm{rd}$	"		1.15
,,	,,	$4\mathrm{th}$	"		1.33
,,	,,	5 h	,,		1.05
,,	,,	$6 \mathrm{th}$,,		0.95
"	,,	$7 \mathrm{th}$	"	• • •	1.10
"	,,	8th	"		1.00
,,	,,	9th	,,	• • • •	1.05
"	,,	10th	"		1.10
"	,,	11th	""	• • •	1.05
,,	,,	each car	adal plate	9 ***	1.10

Length of first vertebral plate along median 2.25 Greatest width of same in front, about* 2.85 Width of same behind 1.20 Length of second vertebral plate 2.25 Greatest width of same 2.00 Length of third vertebral plate 1.50 Greatest width of same 1.90 Length of fourth vertebral plate† 1.75 Greatest width of same 1.40 Length of fifth vertebral plate 1.65 Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 " humeral plate 1.60 " pectoral plate 1.80 " pectoral plate 1.45
Greatest width of same in front, about* 2.85 Width of same behind 1.20 Length of second vertebral plate 2.25 Greatest width of same 2.00 Length of third vertebral plate 1.50 Greatest width of same 1.90 Length of fourth vertebral plate† 1.75 Greatest width of same 1.40 Length of fifth vertebral plate 1.65 Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 " humeral plate 1.60 " pectoral plate 1.80
Length of second vertebral plate 2 25 Greatest width of same 2.00 Length of third vertebral plate 1.50 Greatest width of same 1.90 Length of fourth vertebral plate† 1.75 Greatest width of same 1.40 Length of fifth vertebral plate 1.65 Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 " humeral plate 1.60 " pectoral plate 1.80
Greatest width of same 2.00 Length of third vertebral plate 1.50 Greatest width of same 1.90 Length of fourth vertebral plate† 1.75 Greatest width of same 1.40 Length of fifth vertebral plate 1.65 Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 " humeral plate 1.60 " pectoral plate 1.80
Greatest width of same 2.00 Length of third vertebral plate 1.50 Greatest width of same 1.90 Length of fourth vertebral plate† 1.75 Greatest width of same 1.40 Length of fifth vertebral plate 1.65 Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 " humeral plate 1.60 " pectoral plate 1.80
Greatest width of same 1.90 Length of fourth vertebral plate† 1.75 Greatest width of same 1.40 Length of fifth vertebral plate 1.65 Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 ", humeral plate 1.60 ", pectoral plate 1.80
Greatest width of same 1.90 Length of fourth vertebral plate† 1.75 Greatest width of same 1.40 Length of fifth vertebral plate 1.65 Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 ", humeral plate 1.60 ", pectoral plate 1.80
Length of fourth vertebral plate† 1.75 Greatest width of same 1.40 Length of fifth vertebral plate 1.65 Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 " humeral plate 1.60 " pectoral plate 1.80
Greatest width of same 1.40 Length of fifth vertebral plate 1.65 Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 """ """ humeral plate 1.60 """ """ pectoral plate 1.80
Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 " " humeral plate 1.60 " " pectoral plate 1.80
Width of same in front 0.55 Greatest width of same behind 1.90 Length of intragular plate 2.25 Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 " " humeral plate 1.60 " " pectoral plate 1.80
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Greatest width of same 1.25 Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 """ """>humeral plate 1.60 """ """>pectoral plate 1.80
Length of interpectoral suture 1.55 Length of outer edge of each gular plate 1.20 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Length of outer edge of each gular plate 1·20 ", humeral plate 1·60 ", pectoral plate 1·80
Length of outer edge of each gular plate 1·20 ", humeral plate 1·60 ", pectoral plate 1·80
,, humeral plate 1.60 ,, pectoral plate 1.80
" pectoral plate 1.80
,, abdominal plate 149
" femoral plate 2.00
" anal plate 1·35
Width of plastron across ends of posterior
outer angles of humeral plates 3.50
Width of plastron across posterior fifth of
pectoral plates 3.70
Width of plastron across middle of femoral
plates 3.70
Width of plastron across tips of caudal plates 1.40
Distance between tip of caudal plate and
nearest point of carapace 1·10

The description is taken from a single example—of which the shields alone have been preserved—in the collection of the Australian Museum, Sydney, collected in the year 1869 at Cape York, Q., by Mr. J. A. Thorpe.

^{*}Owing to the fracture mentioned in a preceding note (p. 57), it is impossible to give this measurement with perfect accuracy, but by measuring the length of the suture with the normal anterior margino-brachial, and then measuring the same distance along the fractured plates from the inner posterior angle of the margino-nuchal, the distance between the two points thus obtained should be the greatest width, or closely approximate thereto.

[†] In measuring the length of the fourth vertebral plate we have included the small posterior intercalated plate (see note p. 57), believing it to be an accidental fracture from this rather than from the succeeding plate.

EXPLANATION OF PLATE VII.

Chelodina rugosa, Ogilby.

Fig. 1. Carapace.

" 2. Plastron.

One-third natural size.

