

gins, and about five dark spots; on lateral margins are a series of three oblique darkish streaks, converging towards spinners; ventral shield linear-ovate; normal dark hue. Abdomen sparsely clothed with hairs. *Vulva* red-mahogany; moderately prominent; displays above, two circular foveæ, divided by a longitudinal septum, whose breadth about equals their diameter; on the tumid margin, above the rima genitalis, are two bright reddish-mahogany circular convexities, connected by a broad ligament, whose breadth equals their diameter.

Examples of this species were captured on the summit of Te Aroha; were numerous—especially males—amongst the ferns up the Wairongomai Gorge. Individually they varied both in coloration and distinctness of pattern. *A. T. U.*

ART. XIII.—On a new Species of *Gasteracantha*, from Norfolk Island.

By A. T. URQUHART.

[Read before the Auckland Institute, 22nd October, 1888.]

PLATE VII.

Fam. EPEIRIDÆ.

Genus *Gasteracantha*, Sund.

Gasteracantha ocillatum, sp. nov. Plate VII., figs. 1-3.

Female.—Ceph. th., long, 3·2; broad, 2. Abd., long, 6·5; broad, 16; to apex of posterior spines, 21·5. Legs, 4, 1-2, 3 = 10, 9, 7 mm.

Cephalothorax brown, clouded, more especially on caput and sides, with black; hairs sparse, short, yellowish; broad oval, slightly compressed forwards, pars cephalica squarely truncated, frontal contour between ocular eminence, which is low, and fore-lateral eyes perceptibly convex; caput limited by a rather deep transverse groove, which takes a procurved lunulate form on median line; base rises, somewhat abruptly, into two sub-conical prominences, divided by a longitudinal cleft nearly equal to base of prominences in width, connected with ocular eminence by two rather faint lateral striæ; pars thoracica somewhat depressed, radial striæ well defined; profile-contour of pars cephalica conical, slight slope across thorax; height of *clypeus* visibly exceeds diameter of an anterior central eye.

Four median eyes represent a trapezoid, whose anterior side is shortest; posterior pair sensibly the largest, more than twice their space from side-eyes of same row, separated from each other by rather more than twice their diameter,

scarcely that interval from anterior pair, which are visibly more than an eye's breadth and a half from one another; lateral eyes perceptibly smaller than centrals, seated obliquely, their radius apart, on a stout tubercular eminence.

Legs reddish-mahogany colour (brown-mahogany in second example); hairs black, few fine bristles; 1-2 of nearly equal length and strength; 4 exceeds 3 in length and somewhat in stoutness; superior tarsal claws—1st pair, moderately curved (apparently), 8 rather strong, open teeth; inferior claw long, bent, teeth (?); auxiliary claws.

Palpi tolerably slender, colour and armature of legs; palpal claw slightly curved, 7 open teeth, centrals longest.

Falces dull-black, lake tinge; stout, somewhat pyriform, directed moderately forwards, nearly equal in length radial and digital joints of palpus; double row of strong teeth, outer row 7.

Maxillæ stout, about as broad as long, somewhat semi-circular, base constricted, slightly inclined towards *labium*, which is about as long as broad, somewhat conical, everted, rather more than one-half length of maxillæ; base of organs chocolate-brown, margins olive tinted yellow-brown.

Sternum elongate-cordate, well-defined eminences opposite coxæ, base tapers off to a tail-like point from posterior pair; brownish-black; large, circular, brownish-yellow spot between anterior pair of eminences.

Abdomen light-yellowish stone-colour, area enclosed by sigilla, from first pair slightly suffused with a dull olive-green (less defined in second example); fore and hind margins have a pale-olive hue, sparsely clouded with streaks of lake; lateral extremities, fore-spine, and base of hind-spine, black; fore-part of latter spine red-lake, apex dark; posterior spine-like tubercles lake-black; sigilla black, tinted more or less with brown-lake; centre and extremities of ventral surface greenish-black, intermediate longitudinal bands, which equal central in breadth, have a yellowish hue, suffused with lake; irregularly-shaped yellowish-coloured spots, base of two largest partially encircle spinners, tapering off round posterior margins of branchial opercula; few short black hairs on margins and posterior tubercles; horny; rather more than twice as broad as long, aplanate, lateral wing-like projections rise to an angle of 25° , terminate with stout spines directed outwards; anterior pair 1mm. in length, inclined slightly forwards; posterior pair, 4mm., curve moderately backwards; viewed from above, profile-contour of central third represents a visibly-depressed segment of a circle projecting over base of cephalothorax; extremities of line slope perceptibly backwards to anterior spines; from apex of posterior spines to base of tubercles profile-line forms a slight and even concavity; tuber-

cles, 2mm. long, directed backwards and visibly outwards; on dorsal margins are a series of sigilla, ten in each row (in one specimen eleven are represented in anterior row, the second outer sigillum on left side having a double form, probably abnormal); anterior row—central pair circular, smallest of series; outer sigillum large, ovate; between latter and inner sigillum are intermediate forms decreasing in size; in posterior row outer pairs of sigilla are smaller and of a linear-oval form; in centre of abdomen are four small linear-oval sigilla representing a trapezoid, whose posterior side is widest; from the tumid posterior margin abdomen dips abruptly, 4mm., to spinners; this area has, including the marginal, five well-developed transverse corrugations, first connects base of posterior lateral spines, second projects backwards, and bears the spine-like tubercles; three corrugations on ventral surface; in all grooves are small sigilla, ten in first row; at extremity of each wing-like projection is a large, blackish, ovate sigillum, equal to dorsal one in size. *Vulva* black; large, somewhat conical, apex rounded; viewed from posterior end displays a membranous ridge, terminating beyond base.

This species is closely allied to *Gasteracantha westringii*, from New Holland, described and figured by Koch in "Die Arachniden Australiens." Two examples were captured by Miss Lodge at Norfolk Island. I am indebted to Mr. T. F. Cheeseman, F.L.S., for the specimens which he handed over to me for determination.

DESCRIPTION OF PLATE VII.

Gasteracantha ocillatum.

- Fig. 1. Female.
 Fig. 2. Maxillæ, lip, and sternum.
 Fig. 3. Posterior view.
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ART. XIV.—*Descriptions of New Zealand Micro-Lepidoptera.*

By E. MEYRICK, B.A., F.E.S.

Read before the Philosophical Institute of Canterbury, 1st Nov., 1888.]

THE following descriptions include all the material remaining undescribed in my hands of these groups. It is for resident collectors to obtain fresh material and information on the habits of described species, and I shall at all times welcome any communication from those who have the opportunity of doing so, and will gladly determine any species sent to me.