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ARACHNIDA FROM THE SOLOMON ISLANDS.

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(Figs. 1-6.)

The present paper contains notes of previously recorded forms and descriptions of a new genus and new species from the Solomon Islands.

To the Museum Collection there has been accumulating for some time material collected by missionaries stationed in the Solomon Island group, as well as by occasional visitors. Recently Mr. W. W. Proggatt paid a flying visit to this interesting archipelago, and while there collected such Arachnida as came his way, and these specimens he has been good enough to present to the Trustees. Specimens collected by Mr. Proggatt had been carefully handled, but much of the old collection in our stores had been more or less roughly treated. Species, such as Nephila hamulata, Walck., Argyopa leopardina, Poc., Gasteracantha signifera, Poc., and G. metallica, Poc., are evidently very abundant on the islands.

It is remarkable how little is known of the Arachnid fauna of the Solomons. In 1898, Pocock published a list of the “Scorpions, Pedipalpi, and Spiders of the Solomon Islands” 1 in which he recorded two Scorpions, one Pedipalp, and twenty-eight species of Araneidæ. Some of the species recorded by Pocock are not included in our collection, but most of them are, and to these I now add twenty-three additional forms. Since Pocock’s paper, just quoted (supra) the same author published another: “—Scorpions, Pedipalpi, and Spiders collected by Dr. Willey in New Britain, the Solomon Islands, Loyalty Islands, etc.” 2 and in this he includes two Scorpions recorded in his previous contribution, and one other (Arachisometres pergundus, Keys.), one Pedipalp (then new to science) and one Spider which was also new. Thus we now know of fifty-six Arachnids from the Solomons. Doubtless when the fauna of these islands shall have been more thoroughly collected the number of species recorded will be much greater. Those species marked with an asterisk are now recorded for the first time.

2 Pocock—Willey’s Zool. Results, 1898, p. 95.
Arachnida from the Solomon Islands—Rainbow.

Sub-Order SCORPIONS.

Family SCORPIONIDÆ.

Genus Hormurus, Thor.

Hormurus australasiae, Fab.


Hab.—Russell Island (Froggatt). Widely distributed over the South Sea Islands.

Sub-Order PEDIPALPI.

Family PRYNOIDÆ.

Genus Charon, Karsch.

Charon grayi, Gerv.


Hab.—Island of Howla. Previously recorded from New Georgia, Solomon Islands (Pocock). The type of this species was collected by Cuming, at Manila, Philippine Islands.

Family EPEDANOIDÆ.

Genus Mesoceras, Keys.

Mesoceras spinigerum,* Sör.


Hab.—Russell Island (Froggatt). Previously recorded from Viti Levu, Fiji.

Sub-Order OPILIONEA.

Family PHALANGIDÆ.

Sub-family PHALANGINÆ.

Genus Liobunum, C. K.

Liobunum aurum,* sp. nov.

(Fig. 1.)

♂ Body 3.5 mm. long, 3 mm. wide; Palpi 4.4 mm. long; Leg I., 42 mm.; II., 81 mm.; III., 39 mm.; IV., 53 mm.
Cephalothorax.—Dark brown; granulate, margin reflexed and grooved. **Ocular eminence** shining-black, somewhat broadest at apex, grooved down the middle, height about equal to width at its widest part.

*Maxillae.*—Pale translucent yellow, tips of claws black.

*Legs.*—Long, threadlike, tapering. **Coxae** dark brown; lateral angles closely and finely denticulated; **femora** yellowish-brown, thence to tarsi pale yellow.

*Palpi.*—Long, pale yellow.

*Sternum.*—Much the broadest at posterior extremity where it is dark brown; anterior extremity yellowish-brown.

*Abdomen.*—Arched, broad, smooth, golden-yellow, surmounted at about one-third its length from anterior extremity by a large tapering erect spine; **ventral surface** dark brown, transversely wrinkled.

♀ Body 5 mm. long, 3.5 mm. broad; **palpi** 5 mm. long; Leg I., 43 mm. long; II., 84 mm.; III., 41 mm.; IV., 55 mm.

*Obs.*—Both sexes closely resemble each other both in general appearance and colour; the posterior extremity of the abdomen is, however, darker in the ♀, and there are also present shallow, broad, interrupted transverse grooves, both before and in front of dorsal spine. The measurements recorded of legs and palpi are more or less approximate, as they vary in length in different individuals.

*Hab.*—Solomon Islands (Froggatt).
Sub-Order ARANEIDÆ.

Family AVICULARIDÆ.

Sub-family DIPLURINÆ.

Group ATRACEÆ.

The species hereunder described, and for the reception of which I propose a new genus, apparently belongs to Hogg's group, the Atraceæ, and which he defines as follows 3 :

"Inferior mammillæ close together, about 1 diameter apart. Tarsi of all legs thickly bristled and bespined. Two rows (besides an intermediate at lower end) of teeth on falx-sheath. Sternal sigillæ large and removed from margin. Superior mammillæ short, hardly exceeding two-fifths the length of the cephalothorax."

The group Atraceæ, up to the present, has consisted of only two genera, each of which are Australian. Hogg in his paper just quoted gives the spinneret formule of these two genera as follows 4 :

"Last joint of superior spinnerets longer than second, cylindrical and smooth. .....

Atrax, Camb."

"Last joint of superior spinnerets short and conical. .........

Hadronyxæ, L. Koch."

To this synopsis I now add :—

Last joint of superior spinnerets equally as long as first ........

Styplopus, Mibi.

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4 Hogg.—Loc. cit., p. 272.
Genus Styphlopis, *gen. nov.*

(Fig. 2.)

_Cephalothorax._—Much longer than broad, pars cephalica elevated, truncated in front, lateral constrictions and depressions profound; pars thoracica gently arched, radial groves broad, thoracic fovea deep and pro-curved.

_Falces._—Large, massive, porrected, the margins of the furrow of each falx armed with a series of closely set small teeth; groove between furrows granulated.

_Eyes._—Eight, poised upon a slightly elevated protuberance which is considerably broader than long; they are arranged in two rows of four each, of which the anterior is only very slightly recurved; the front row, owing to the median eyes being smaller than the laterals, when viewed from the side, appear to be both pro- and re-curved; laterals of both series poised obliquely.

_Legs._—Moderately long, strong, bespined, hairy and bristly; tarsi strongly bespined, not scopulated; claws, 3; superior pair armed at their base with a series of strong teeth. Relative lengths: 4, 1, 2, 3.

(Fig. 2.)

_Maxillae._—Long, cylindrical, broadest at apex, where they are each terminated by an obtusely pointed projection on the inner angle.

_Labium._—Short, broad, free, rounded at apex.

_Sternum._—Shield-shaped, apex indented, posterior extremity acuminate; sagilliæ large, removed from border, which latter is grooved all the way round.

_Abdomen._—Ovate.

_Spinae._—Four, short, closely grouped together, superior pair three-jointed; medium segment shortest; terminal segment equally as long as first, conical.

* implying a new genus. Other parts as in *Cephalothele.*
ARACHNIDA FROM THE SOLOMON ISLANDS—RAINBOW.

**Styphlopis insularis,** sp. nov.

(Fig. 3, 4.)

♀ Cephalothorax 12 mm. long, 9.1 mm. broad; abdomen 17.5 mm. long, 12.3 mm. broad.

_Cephalothorax._—Shining, reddish-brown, smooth, furnished with a few fine hairs. _Pars cephalica_ arched, ascending from base, sides rounded, normal grooves and lateral depressions strongly marked; _clypeus_ deep broad, pale coloured. _Pars thoracica_ broad, gently arched, radial grooves broad and distinct; _thoracic fovea_ pro-curved, deep; _marginal band_ broad, pale coloured, grooved.

_Eyes._—As in figure; front median pair once their individual diameter apart, ringed with black; lateral eyes broadly margined with black on their inner angles, and poised obliquely; eyes of rear row sensibly smaller than those in front (fig. 3).

_Fig. 3. Styphlopis insularis, Rainb.,_ Eyes.

_Leaves._—Strong, clothed with long hairs and course bristles; those of the first pair slightly stouter than their neighbours; concolorous with cephalothorax; each _tibia_ armed with one median spine on the underside; two lateral spines on the outer side of which one is near to the base and the other near to the apex, and two lateral ones on the inner side relatively placed; in addition to these there are three others of unequal length at the lower extremity of the segment; _metatarsi_ each armed on underside with 16 long strong spines, and the _tarsi_ each with 10. Measurements in millimeters:

<table>
<thead>
<tr>
<th>Leg</th>
<th>Coxa</th>
<th>Trochanter</th>
<th>Femur</th>
<th>Patella &amp; Tibia</th>
<th>Metatarsus &amp; Tarsus</th>
<th>Total</th>
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<tr>
<td>1</td>
<td>5</td>
<td>7</td>
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<td>6.1</td>
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<td>8</td>
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<td>8.8</td>
<td>30.4</td>
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_Palpi._—Concolorous with legs, moderately long, strong, clothed with long coarse hairs and bristles, and armed with strong spines; apical extremity terminated with a claw.
Falca. — Long, stout, porrected, rather darker than cephalothorax, densely hairy; fangs long and powerful, shining, nearly black.

Maxillae.—Reddish-brown, inner angles densely fringed with long, fine, reddish hairs, granulated.

Labium.—Somewhat darker than maxillae; clothed with long, reddish hairs; apical half closely granulated.

Sternum.—Shield-shaped, reddish-brown, gently arched, clothed with fine hairs.

Abdomen.—Ovate, strongly arched, overhanging base of cephalothorax, finely pilose, yellowish-brown, mottled with small, pale yellowish spots; a broad dark band runs down the middle on the upper side from base to spinnerets; inferior side yellowish-brown, hairy (fig. 4).

Spinnerets.—Bunched together; inferior mammillae very small, hairy; superior mammillae hairy; basal joint stout; terminal joint tapering, conical, obtusely pointed.

Hab.—Solomon Islands (Froggatt).

Family PSECHRIDÆ.

Genus Fecenia, E. Sim.

Fecenia oblonga, * sp. nov.

(Fig. 5.)

♀ Cephalothorax 4·3 mm. long, 3·2 mm. broad; abdomen 9·7 mm. long, 5·3 mm. broad.

Cephalothorax.—Ovate, yellowish-red, pilose. Pars cephalica strongly defined, arched. Pars thoracica arched; segmental groove strongly defined; radial grooves distinct, but less strongly defined than the preceding; median depression deep; marginal band narrow.
Eyes.—Eight; disposition, arrangement, and relative size normal.

Legs.—Concolorus with cephalothorax. In the two specimens before me these limbs are imperfect; some have been completely broken off, whilst the others, with the exception of one, have lost their tarsi. There is sufficient, however, to show that they are, when in perfect condition, long.

Palpi.—Long, yellowish, pubescent.

Fulces.—Long, yellowish above, piceus beneath, thickly clothed with long hairs or bristles and strongly arched in front, not divergent, robust; the superior margin of the furrow of each falx armed with three teeth, which are contiguous, and of which the median one is the strongest; the inferior margin is armed with four teeth, which are strong and nearly equal in size; fangs strong, piceus at base, wine-red at tips.

Maxillu and labium.—Normal, clothed with long hairs; the former dark brown, the latter dark brown at base, yellowish at apex.

Sterum.—Yellowish, hairy, shield-shaped, posterior extremity acuminate.

Abdomen.—Long, oval, arched, yellowish, pubescent, slightly overhanging base of cephalothorax; cribellum, normal; epigyne raised so as to form a slight tubercular eminence, large, prominent, reddish-brown (fig. 5).

Hab.—Island of Howla.

Family THERIDIIDÆ.

Genus Argyrodes, E. Sim.

Argyrodes walkeri, * Rainb.


Hab.—Russell Island (Froggatt). Previously recorded from Torres Island, between New Hebrides and Santa Cruz Groups.
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**Family ARGIOPIIDAE.**

**Genus Tetragnatha, Latr.**

*Tetragnatha mandibulata,* Walck. ?


I have not much doubt, but that the specimen before me, badly damaged as it is, is any other than the species indicated above.

_Hab._—Island of Howla. Previously recorded from New Granada, Viti, Upolu and Tonga.

**Genus Leucange, White.**

*Leucange celebesiana,* * Walck.


_Hab._—Russell Island (Froggatt). Widely distributed over Malaisia, New Guinea, Australia and S. Sea Islands.

*Leucange grata,* Guér.


_Hab._—Russell Island (Froggatt), Ugi and Howla. Widely distributed over the Austro-Malaisian area.

**Genus Nephila, Leach.**

*Nephila maculata,* Fab.


_Hab._—Russell Island (Froggatt), also Ugi and Gaualcanar. Numerous specimens of this typical species occur in all collections from the S. Sea Islands.
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Genus Argiope, Aud., in Sau.

Argiope picta, L. K.

Argyope picta, L. K., Die Arach. Austr., i., 1871, p. 33, pl. iii., fig. 3.

Argyope principalis, L. K., loc. cit., p. 207, pl. xvii., fig. 5.

Hab.—Russell Island (Froggatt); also the islands of Howla and Ugi; other localities are New Guinea, Queensland, N.S. Wales, and Fiji.

Argiope Leopoldina, Poc.


Hab.—Russell (Froggatt) and Howla Islands. Pocock gives the locality for the type “Probably Shortland Island.”

Argiope ætheraea,* Walck.


Epeira ætheraea, Keys., Verhandl. der k. k. Zool. bot. Ges. in Wien, 1865, p. 503, pl. x., figs. 1 and 2.

Hab.—Russell (Froggatt) and Howla Islands; also recorded from New Guinea, Queensland and N. S. Wales.

Genus Cyrtophora, E. Sim.

Cyrtophora cylindroides, Walck.


Epeira nephilina, L. K., Die Arach. Austr., i., 1871, p. 90, pl. vii., figs. 6, 6a.


Hab.—Island of Ugi; Pocock’s specimens came “probably from Shortland Island,” and others from New Georgia. This species is also recorded from Cochin China, Amboina, Yule Island, Queensland, &c.
**ARACHNIDA FROM THE SOLOMON ISLANDS—RAINBOW.**

*Genus Araneus, Clerck.*

**Araneus theis,* Walck.**


*Epeira mangareva,* L. K., Die Arach. Austr., i., 1871, p. 85, pl. vii., figs. 4, 4a, 5, 5a.

*Hab.—Russell Island (Froggatt).* Common throughout Polynesia; occurs also in Queensland.

**Araneus lugubris,* Walck.**

*Epeira lugabris,* Walck., Hist. Nat. des Ins., ii., 1837, p. 34.

*Epeira indigatia,* L. K., Die Arach. Austr., i., 1871, p. 66, pl. v., figs. 8, 8a, 9a.

*Hab.—Russell Island (Froggatt).* Other localities are Isle of France, and North Queensland.

**Araneus acuminatus,* L. K.?**

(Fig. 6.)

*Epeira acuminata,* L. K., Die Arach. Austr., i., 1871, p. 109, pl. ix., figs. 2, 2a, 2b.

The form described and figured by Koch was a male; the specimen before me is a female, but the latter agrees closely with the description and figure of the former, that in the absence of specimens of both sexes, I hesitate to describe it as *sp. nov.* The female of *acuminatus* has not yet been recorded, and notwithstanding the fact that Koch’s locality was Port Mackay, North Queensland, and the locality from whence the specimen under discussion was obtained was the Island of Howla, it is not at all unreasonable to assume that the two forms are conspecific, especially when we bear in mind that the fauna of the Solomon Island Archipelago, to quote Pocock, closely resembles, so far as genera, and also so far as species are concerned, that of Papua and the neighbouring islands of the Austro-Malayan seas.6

In order to assist students I give, herewith, a description and figure of the *epigyne*:

**Epigyne.**—A short broad, tongue-like process, proceeding from a small tubercular eminence; the edges of the process slightly reflexed, and the terminal extremity strongly so (fig. 6).

*Hab.—? Island of Howla; Port Mackay, N. Queensland.*

![Figure 6. Araneus acuminatus, L. R. 7. Epigyne.](image)

**Genus Gasteracantha (sensu stricto), Sund.**

**Gasteracantha scintillans, Butl.**


*Hab.—Russell (Froggatt) and Howla Islands.*

**Gasteracantha scintillans, var. concolor,** *Rainb., var. nov.*

This form I cannot regard as other than a colour variety of Butler's *G. scintillans*. It agrees with the latter in size, distribution and length of abdominal spines, and in the form of the *epigyne*. It will be readily distinguished from the typical form by the absence of the central brick-red area (abdominal) and by its uniformly brilliant green colour.

*Hab.—Gaudalcanar (Froggatt).*

**Gasteracantha metallica, Poc.**


*Hab.—Bouganville and Howla Islands.*

**Gasteracantha signifer, Poc.**


*Hab.—Russell (Froggatt), Ugi and Howla Islands.*
Family CLUBIONIDÆ.

Genus Heteropoda, Latr.

Heteropoda venatoria, Linn.


Aranea regia, Fab., Ent. Syst., ii., 1793, p. 408.

Heteropoda regia, E. Sim., Hist. Nat. des Ar., ii., 1897, p. 54.

Hab.—The Archipelago generally; all tropical and subtropical regions.

Genus Pandercetes, L. K.

Pandercetes, sp.*

Pandercetes, sp., one specimen, but too immature for determination or description.

Hab.—Solomon Islands (Froggatt).

Genus Ptychia, L. K.

Ptychia gracilis, L. K.

Ptychia gracilis, L. K., Die Arach. des Austr., ii., 1875, p. 654, pl. liii., fig. 1.


Hab.—Solomon Islands (Froggatt).

Genus Palystes, L. K.

Palystes speciosus, Poc.


Hab.—Russell (Froggatt) and Howla Islands.
Family AGELENIDÆ.
Genus Desis, Walck.

Desis vorax, L. K., Die Arach. Austr., i., 1871, p. 345, pl. xxix., figs. 1, 1a, 1b, 1c, 1d, 1e, 1f.

Hab.—Russell Island (Froggatt); previously recorded from Upolu.

Family OXYOPIDÆ.
Genus Oxyopes, Latr.

Oxyopes macilentus,* L. K.

Oxyopes macilentus, L. K., Die Arach. Austr., ii., 1878, p. 1000, pl. lxxxvii., figs. 4, 4a, 5, 5a, 5b.

Hab.—Russell Island (Froggatt); previously known from Cape York, N. Queensland, and New Guinea.

Family SALTICIDÆ.
Genus Linus, G. and E. Peckh.

Linus alticeps, Poc.

Linus alticeps, Poc., Willey’s Zool. Results, 1898, p. 117, pl. xi., fig. 14.

Hab.—Russell Island (Froggatt) and Rubiana, New Georgia.

Genus Cosmophasis, E. Sim.

Cosmophasis micarioides,* L. K.

Amygen micarioides, L. K., Die Arach., ii., 1880, p. 1178, pl. cii., figs. 3, 3a, 3b, 3c.

Hab.—Russell Island (Froggatt); previously known from Cape York and British New Guinea.
Genus Zenodorus, G. and E. Peckh.

Zenodorus variatus, *Poc.*


*Hab.*—Russell Island; previously recorded from New Britain.

Genus Carrhotus, Thor.

Carrhotus oscillans, *Poc.*


*Hab.*—Solomon Islands (Froggatt).

Genus Plexipus, C. K.

Plexipus stridulator, *Poc.*

*Plexipus stridulator,* *Poc.*, Willey's Zool. Results, 1898, p. 119, pl. xi., figs. 16, 16a, 16b, 16c.

*Hab.*—Russell Island (Froggatt); previously recorded from New Britain.

Genus Bathippus, Thor.

Bathippus macroprotopus, *Poc.* (?)


*Hab.*—Russell Island (Froggatt); Pocock gives his locality as "probably in Shortland Island."

Genus Athamus, O. P. Cambr.

Athamus whitmei, *O. P. Cambr.*

*Athamus whitmei,* O. P. Cambr., Proc. Zool. Soc., 1877, p. 576, pl. lv., fig. 11; L. Koch, Die Arach. Austr., ii., 1879, p. 1076, pl. xcvii., figs. 1, 5a, 5b, 5c, 6, 6a, 6b.

*Hab.*—Russell Island (Froggatt); previously recorded from Tahiti and Upolu.
Genus Sigytus, E. Sim.

Sigytus diloris,* L. K., ?

Hasarius diloris, L. K., Die Arach. Austr., ii., 1881, p. 1302, pl. exi., figs. 3, 3d, 3b, 3e, 3d, 3e.

Hab.—Russell Island (Froggatt); previously recorded from Port Mackay, N. Queensland, and from Viti.

Genus Hasarius, E. Sim.

Hasarius garetti,* L. K.

Hasarius garetti, L. K., Die Arach. Austr. ii., 1881, p. 1289, pl. ex., figs. 4, 4b, 4b.

Hab.—Russell Island (Froggatt); previously recorded from Ragatea.

Genus Euryattus, Thor.

Euryattus nigricrinitis,* L. K. (?)

Hasarius nigricrinitis, L. K., Die Arach. des Austr., ii., 1881, p. 1293, pl. ex., figs. 6, 6a, 6b, 6c.

Hab.—Russell Island (Froggatt); originally recorded from Rockhampton, N. Queensland.
Rainbow, W. J.—Arachnida from the Solomon Islands.

Rec. Austr. Mus. x., 1, 1913.