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ARACHNIDA FROM NORTHERN QUEENSLAND.

Part I.

By W. J. RAINBOW, Entomologist

(Plates 14, 15, 16.)

The material enumerated hereunder was collected by Mr. A. A. Girault in Northern Queensland. By far the greater bulk of the species was collected in the vicinity of Gordonvale, formerly known as Nelson. The Spiders are mostly small, and of the arboreal type. This is what one would naturally expect when the methods of collecting adopted by Mr. Girault are considered, namely, "beating" and "sweeping." There are, however, as will be seen by a perusal of the contents of this paper, a few terrestrial forms.

In such a mass of material as that collected by Mr. Girault, and from a district so rich in individuals and species, it is only natural that some novelties should occur, and so we find it. These, which include new genera and new species, are in addition to already recorded forms enumerated below. The "Girault Collection," as this material may be called, include one *Isometroides*, one *Chelifera*, one *Dampetrus*, one *Trombidium* and one *Rhincolophus*, all of which are recorded in their proper place.

Order SCORPIONIDÆ.

Family ANDROCTONOIDÆ.

Genus *Isometroides*, Keys.

ISOMETROIDES VESCUS, Karsch.

Isometrus vescus, Karsch., Schrift. Ges. naturf. Freund. Berlin, 1880, p. 56.

Isometroides vescus, Keys., Die Arach. Austr., Suppl., 1884, p. 17, pl. 2, figs. 3, 3a.

Hab.—Gordonvale (Nelson), via Cairns, under bark of "Bastard" or "Poplin Gum," August 28, 1912.

Order CHELONETHIDÆ.

Family CHELIFERIDÆ.

Genus Chelifer, Geoffr.

CHELIFER BREVIDIGITATUS, Keys.

Chelifer brevidigitatus, Keys., Die Arach. Austr., Suppl., 1884,
p. 48, pl. 4. figs. 6 to 6c.

Hab.—Hughenden, July 13, 1912, on "Sword grass."

Order OPILIONIDÆ.

Family DAMPETRIDÆ.

Genus Dampetrus, Karsch.

DAMPETRUS TUBERCULATUS, Sor.

Dampetrus tuberculatus, Sor., Die Arach. Austr., Suppl., 1886,
p. 82.

Hab.—Gordonvale ; forest, under logs, May 20, 1912.

Order ARANEIDÆ.

Family AVICULARIDÆ.

Sub-family DIPLURINÆ.

Genus Chenistonia, Hogg.

CHENISTONIA GIRAULTI, Rainb.

Chenistonia giraulti, Rainb., Rec. Austr. Mus., x., No. 8, 1914,
pp. 243-7, figs. 52-57.

Hab.—Gordonvale ; forest, under logs, May 20, 1912.

Family ULOBORIDÆ.

Sub-family ULOBORINÆ.

Genus Uloborus, Latr.

ULOBORUS GENICULATUS, Oliv.

Uloborus geniculatus, Oliv., Encyl. Méthod. cet. ii., 1789, p.
214.

Uloborus zosis, Walck., Hist. Nat. Ins., Apt., ii., 1837, p. 231, Atlas, pl. 20, figs. 2A-2D; L. Koch, Die Arach. Austr., i., 1871, p. 221, pl. xix., figs. 3-3e; Thor., Studi Rag. Mal. e Pap., ii., 1878, pp. 129 and 290; *Op. cit.*, iii., 1881, p. 158; *Op. cit.*, Parte iv., 1890, p. 239.

Hab.—Cairns, November 10, 1912, in stables; May 1, 1913, in rooms of an unoccupied dwelling; August 7, 1913, in laboratory. A very common species. It occurs also in India, Burma, Malaysia, Papua and South Sea Islands.

ULOBORUS VARIABILIS, *Keys.*

Uloborus variabilis, Keys., Die Arach. Austr., Suppl., 1887, p. 231, pl. xx., figs. 9-9e.

Hab.—Specimen with four egg-sacs on bank of streamlet; forest, Gordonvale, April 27, 1913; immature specimens, jungle, Gordonvale, May 25, 1913; same locality, March 30, and April 2, 1914; Pentland, September, 1914. The cocoons are similar to those of *U. republicanus*, Sim.¹

ULOBORUS BARBIPES, *L. Koch.*

Uloborus barbipes, L. Koch, Die Arach. Austr., i., 1871, p. 229, pl. xix., figs. 9 and 9a.

Hab.—Gordonvale, May 1, 1912; Pentland, September 9, 1914.

Sub-family MIAGRAMMOPINÆ.

Genus Miagrammopes, *O. P. Cambr.*

MIAGRAMMOPES BRADLEYI, *O. P. Cambr.*

Miagrammopes bradleyi, O. P. Cambr., Ann. Mag. Nat. Hist., xiv. (4), 1874, p. 177.

Hab.—Two specimens, each from Gordonvale, taken by sweeping; one on May 25, 1913, and the other on March 2, 1914. In my "Census of Australian Araneidæ" the *habitat* is given as "Sydney, N.S. Wales"; it should read, "N. Australia."²

¹ See pl. 4, Vol. ix., Ann. Soc. Entom. France, 1891.

² Rainbow—Rec. Austr. Mus., ix., 2, 1911.

MIAGRAMMOPES FASCIATA, *sp. nov.*

(Plate xiv., fig. 1.)

♀ Cephalothorax, 1.8 mm. long, 1 mm. broad; abdomen, 3.5 mm. long, 1.3 mm. broad.

Cephalothorax.—Oblong, olive-green, almost parallel-sided. *Pars cephalica* rather flat, obtusely truncated in front, sides slightly rounded. *Pars thoracica* long, narrow, flat and somewhat uneven above, level with *pars cephalica*, sides somewhat rounded, posterior angle obtusely truncated. *Marginal band* yellowish, broad, rounded. *Eyes*.—Eight. Those constituting the rear row form a slightly recurved line; each lateral eye of this row is separated from its neighbour by a space equal to twice its individual diameter; the median eyes are, again, separated from each other by a space equal to fully four times its individual diameter; anterior eyes exceedingly minute, and difficult to detect; they are arranged in pairs; each pair is situated immediately in front of the posterior median eyes, are placed obliquely, and nearly touch each other; each lateral eye of the posterior row is removed from its minute anterior neighbours by a space equal to fully once its own individual diameter (Fig. 1.) *Legs*.—Unequal in length; first pair much the longest and strongest. Relative lengths: 1, 4, 2, 3. First pair olive-green above, sides and underneath dull yellowish; the other pairs pale yellow. *Calamistrum* prominent. *Palpi*.—Yellow, short, hairy. *Falces*.—Concolorous, short, weak, corrected. *Maxillæ*.—Dull yellow, rather long, moderately strong, almost parallel, inclining inwards; apices obliquely rounded. *Labium*.—Concolorous, somewhat coniform. *Sternum*.—Concolorous also, elongate, narrow, arched, and furnished with a few rather long hairs. *Abdomen*.—Cylindrical, not overhanging base of cephalothorax; upper surface dark olive-green, relieved by six large, yellow spots, arranged in pairs; sides concolorous, relieved by large yellow patches; inferior surface pale yellow, reticulated with a tracery of fine dark olive-green. *Spinnerets*.—Normal.

Hab.—Gordonvale jungle, "sweeping"; one specimen in June, 1913 (type) and one, immature and broken, June, 1914.

Family DICTYNIDÆ.

Genus Amaurobius, C. Koch.

AMAUROBIUS CHALYBEIUS, L. Koch.

Amaurobius chalybeius, L. Koch, Die Arach. Austr., i., 1872, p. 328, pl. xxvi., figs. 4-4b.

Hab.—Gordonvale forest, "sweeping," April 27, 1913. Ranges from North Queensland to W. Australia.

AMAUROBIUS SENILIS, L. Koch.

Amaurobius senilis, L. Koch, Die Arach. Austr., i., 1872, pl. xxvi., figs. 3, 3a.

Hab.—Hughenden, among "Sword grass," July 13, 1912.

AMAUROBIUS SCALARIS, L. Koch.

Amaurobius scalaris, L. Koch, Die Arach. Austr., i., 1872, p. 334, pl. xxvi., figs. 7, 7a; *Loc. cit.*, p. 337.

Hab.—Gordonvale, jungle, May 29, 1914.

Genus Aphyctoschæma, Simon.

APHYCTOSCHÆMA MACULATA, *sp. nov.*

(Plate xiv., figs. 2, 3, and 4.)

♀ Cephalothorax 1.5 mm. long, 1 mm. broad; abdomen, 2.4 mm. long, 1.5 mm. broad (Fig. 2).

Cephalothorax.—Ovate, shining, mahogany brown. *Pars cephalica* raised, arched, smooth; *ocular area* broader than long; *clypeus* deep, furnished with two or three short bristles. *Pars thoracica* smooth, arched, shining, normal grooves distinct; *median fovea* longitudinal; *marginal band* broad. *Eyes*.—Nearly equal in size, in two rows of four each, large; anterior row straight on its front line; rear row strongly procurved; front median eyes separated from each other by a space equal to once their individual diameter; rear median eyes separated from each other by a space equal to twice their individual diameter; lateral eyes oblique, nearly touching; each pair linked together upon a black *tuberculum*; rear median eyes separated from their anterior median neighbours

by a space equal to once their individual diameter (Fig. 3). *Legs*.—Not long, moderately strong, yellow, annulated with brown rings; all ambulatory limbs armed with long, fairly strong spines; the latter are longest and strongest upon the metatarsi—at any rate insofar as the second, third and fourth pairs are concerned; unfortunately each anterior leg has lost all joints below the *patella*. *Palpi*.—Long, yellow, not annulated; hairy, and similarly armed to legs. *Falces*.—Slightly projecting, concolorous with cephalothorax, clothed with long, coarse hairs or bristles, apices divergent; inner angle of the furrow of each falx armed with two small teeth, of which the one nearest the fang is the smaller. *Maxillæ*.—Yellow-brown, inner angles pale yellow, moderately long, arched, apices inclined inwards and obtuse; a few long, bristly hairs distributed over the surface. *Labium*.—Concolorous, rather longer than broad, parallel-sided, apex truncated, but slightly depressed at centre. *Sternum*.—Concolorous with cephalothorax, broad, smooth, shining, slightly arched, anterior angle truncated, apex acuminate, and terminated between posterior coxæ. *Abdomen*.—Large, ovate, slightly overhanging base of cephalothorax, strongly arched, pubescent, superior surface and sides cinerous, relieved by a series of slightly darker patches and markings (Fig. 2); inferior surface concolorous, with three slightly darker median, longitudinal stripes, extending from *epigastric fold* to near *cribellum*, which latter is *bipartite*. *Epigynum*.—Large, raised, arched, shining brown with an undulating lip overhanging a deep cavity (Fig. 4).

Hab.—Gordonvale, forest, May 9, 1913.

Family SICARIIDÆ.

Sub-family SCYTODINÆ.

Genus *Scytodes*, Latr.

SCYTODES PENICILLATA, *sp. nov.*

(Plate xiv., figs. 5, 6 and 7).

♀ Cephalothorax, 4.2 mm. long, 3.5 mm. broad; abdomen, 5.7 mm. long, 3.5 mm. broad.

Cephalothorax.—Yellow, with dark pencillings, subglobose, narrowest in front. *Pars cephalica* strongly arched, smooth, sloping forward precipitately to near region of anterior eyes, from whence it gradually ascends towards *clypeus*, which latter

is truncated, steep and indented in front; *ocular area* broader than long. *Pars thoracica* high, strongly arched, sloping abruptly at rear; *marginal band* broad, yellow, mottled with dark brown (Fig. 5). *Eyes*.—Six, arranged in pairs; each lateral pair prominent, raised upon a tubercle and widely removed from the other; the eyes of each pair closely in contact with each other. *Legs*.—Long, slender, pale yellow, spotted with dark brown and sparingly clothed with short hairs; patellæ broadly ringed with dark brown; each tibia has also a ring of dark brown near to junction of metatarsus. *Palpi*.—Short, yellow, hairy. *Fulces*.—Weak, short, slightly projecting, pale yellow with dark brown pencilling; *fang* very short, weak. *Maxillæ*.—Short, yellow, outer angles dark brown; broad at base, tapering rapidly towards apices which are bluntly acuminate, and incline inwards; inner angles straight. *Labium*.—Dark brown, coniform. *Sternum*.—Shield-shaped, truncated in front, and acuminate at posterior extremity, which latter terminates between fourth pair of coxæ; surface dark brown with a broad yellow patch in front, and another of a somewhat leaf-like design at the centre; these patches are connected by a narrow yellow line which suggests the stalk of the leaf; there are also six moderately large and prominent *sigilla*, and these are marginal. *Abdomen*.—Ovate, strongly arched, slightly abutting on to base of cephalothorax, dull yellow, with dark brown pencillings upon superior surface and sides; under side dull yellow also with a few scattered, dark spots (Fig. 6). *Epigynum*.—Large, dark brown, and forming two elongate plaques, each of which are surrounded with long, fine hairs (Fig. 7).

Hab.—Goondi, taken from window of residence, July 25, 1912. Eggs in small ball carried by fangs.

Family DYSDERIDÆ.

Sub-family SEGESTRINÆ.

Genus *Ariadna*, Aud. in Sav.

ARIADNA ? OCTOSPINATA, Lamb.

Ariadna ? octospinata, Lamb, Ann. Queensl. Mus., 10, 1911, p. 169, fig. 1.

Hab.—Pentland. An immature specimen of what I take to be the above species, was collected by Mr. Girault, in September, 1914.

Family DRASSIDÆ.

Sub-family DRASSODINÆ.

For the reception of the species described hereunder, I venture to propose a new genus, *Epicharitus*, and this should, I think, be included in Simon's group *Echemecæ*. It agrees with the group indicated in a number of important details. This group includes several genera that are represented in Australia, but to none of these does it wholly conform. However, the student by comparing the description of *Epicharitus* herein given, with those of genera enumerated and defined by Simon in his great classic, "Histoire Naturelle des Araignées," will easily detect in what manner the genus now defined for the first time differs from those already established, and the reasons for incorporating it in the section named.

Genus *Epicharitus*³ *gen. nov.*

(Plate xiv., fig. 8.)

Cephalothorax.—Oblong-ovate, narrow, arched. *Pars cephalica* not higher than thoracic segment, obtuse in front; *ocular area* broader than long; *clypeus* narrow, deep. *Pars thoracica* arched; *median fovea* absent. *Eyes*.—Eight, large, arranged in two rows of four each; front row slightly procurved, the eyes grouped closely together; rear row strongly procurved, the individuals widely separated (Fig. 8). *Legs*.—Moderately long, robust, hairy, spined; metatarsi and tarsi of anterior pair, and tarsi of fourth pair, scopulated; tarsi armed with two claws, and finished with tenent hairs. Relative lengths: 4, 1, 2, 3. *Palpi*.—Moderately long, similar in clothing and armature to legs. *Falces*.—Short, weak; inferior margin of furrow armed with three small teeth, and superior with two; *fang*, short, weak. *Maxilla*.—Long, broad, strongly arched, obtuse, apices inclining inwards; in general appearance somewhat like *Sergiolus*, Sim., but stouter. *Labium*.—Long, narrow, almost straight, apex obtuse; also somewhat like *Sergiolus*, being relatively as long, but broader. *Sternum*.—Elongate,

³ ἐπιχαριτος = pleasing.

arched, obtusely attenuated in front and at rear. *Abdomen*.—Elongate, cylindrical. *Spinnerets*.—Elongate, cylindrical, apices truncated, and encircled with well-developed spinnerules.

EPICHRITUS LEUCOSEMUS,⁴ *sp. nov.*

(Plate xiv., figs. 9 and 10).

♀ Cephalothorax, 2.3 mm. long, 1.3 mm. broad; abdomen, 2.6 mm. long, 1.3 mm. broad.

Cephalothorax.—Oblong-ovate, smooth, dark-brown (almost black), shining, and when viewed with strong light, displaying coppery reflections; there is a number of short, stiff hairs scattered over the surface; junction of cephalic and thoracic segment, strongly arched, gently sloping forward, obtuse in front; *ocular area* broader than long; *clypeus* narrow, deep, and fringed with long black bristles. *Pars thoracica* strongly arched, sloping gently to posterior angle which is slightly indented; *marginal band* narrow. *Eyes*.—Arranged in two rows of four each; anterior row slightly procurved, and posterior row strongly so. The eyes constituting the anterior row, are grouped together compactly; the median pair are round, and separated from each other by a space equal to half the individual diameter of a median eye; lateral eyes elliptical, placed obliquely, and each close to its median neighbour; rear eyes sensibly smaller than the median front eyes; of this series the outer eyes are slightly smaller than their inner neighbours, from which each lateral eye is removed by a space equal to once its own individual diameter; inner eyes separated from each other by a space equal to four times their own individual diameter; each anterior median eye separated from the posterior median in an oblique line by a space equal to twice its individual diameter (Fig. 8). *Legs*.—Moderately long, robust, concolorous with cephalothorax, clothed with long hairs, and bespined. *Palpi*.—Moderately long, similar in colour and armature to legs. *Falces*.—Short, very weak; inferior margin of furrow armed with three small teeth, and the superior with two; *fang* short, very weak. *Maxillæ*.—Long, stout, concolorous with cephalothorax, arched, sparingly hairy, apices

⁴ λευκοσημος = white marked.

obtuse, inclining inwards, and with the inner angles fringed and oblique. *Labium*.—Concolorous also, arched, much longer than broad, coniform, surface sparingly hairy, apex fringed with rather long bristles. *Sternum*.—Concolorous with cephalothorax, and displaying similar metallic reflections, elongate, arched, smooth, anterior and posterior extremities obtuse. *Abdomen*.—Cylindrical, arched, densely clothed with long black and white hair (Fig. 9). At anterior extremity the abdomen is grey, then black; near the centre there is a broad white band which almost completely encircles the animal at that part; the white band is succeeded by a broad patch of black, and this again by a terminal band of white. *Epigynum*.—A transversely oval plaque faintly indicated with two circular, dark-brown, shining depressions (Fig. 10).

Hab.—Gordonvale, sweeping in jungle, May 11, 1913.

Group SYMPHANODEÆ.

The graceful spider described hereunder presents some features that will be of much interest to students, and these seem to suggest that a new group in the sub-family Drassodinae is essential for its reception and so I propose the name *Symphanodeæ*. Simon has divided this sub-family into nine well-defined groups, into none of which the form now demanding attention appears to fall. By its spinnerets it somewhat resembles *Megamyrceon*, Reuss., in respect to their truncature, and the well-developed spinnerules; but there the immediate affinity with that genus ends. One of the most striking features of this spider, for which I propose the name *Symphanodes dianiphus* (*gen. et sp. nov.*), is the leg formula, which is 4, 3, 1, 2, whilst in other genera, it is 4, 1, 2, 3. Another exception is that all the metatarsi and tarsi are scopulated, instead of only those of legs i. and iv. as in several genera, or of only that of the first pair in others; and to this must be added the eye formula and the form of maxillæ and labium.

Genus *Symphanodes*,⁵ *gen. nov.*

(Plate xiv., figs. 11, 12, and 13.)

Cephalothorax.—Oblong-ovate, obtuse in front. *Pars cephalica* moderately raised, arched, sloping to the rear, normal

⁵ *συμφανωδης*, = harmonious.

grooves defining junction of cephalic and thoracic segments distinct; *ocular area* broader than long; *clypeus* narrow. *Pars thoracica* arched, normal grooves faintly indicated; *median fovea* absent. *Eyes*.—Eight; in two rows of four each; rows slightly procurved (Fig. 11). *Legs*.—Short, robust, bespined; metatarsi and tarsi scopulated. *Claws*, 2. Relative lengths: 4, 3, 1, 2. *Palpi*.—Short, moderately robust, similar in clothing and armature to legs. *Falces*.—Moderately long, not strong; superior margin has three minute teeth, and the inferior margin two, but they are very difficult to detect; *fang* rather long, well curved and exceedingly fine. *Maxillae*.—Long, narrow, arched; each rounded at base and obtusely pointed at apex; apices inclining inwards (Fig. 12). *Labium*.—Coniform, very long, arched (Fig. 12). *Sternum*.—Elongate, oval, anterior extremity rounded, posterior extremity obtusely acuminate. *Abdomen*.—Oblong. *Spinnerets*.—Long, cylindrical; apices truncated, and surrounded with well-developed spinnerules (Fig. 13).

SYMPHODES DIANIPHUS,⁶ *sp. nov.*

(Plate xiv., figs. 14, and 15).

♀ Cephalothorax, 1.6 mm. long, 12 mm. broad; abdomen, 2.5 mm. long, 1.2 mm. broad (Fig. 14).

Cephalothorax.—Oblong - ovate, arched, smooth, shining, yellow, with dusty patches on cephalic segment and at posterior angle. *Pars cephalica* arched, obtusely attenuated in front, sloping gently rearwards to junction of thoracic segment; *ocular area* broader than long; *clypeus* narrow, fringed with a few long coarse black hairs. *Pars thoracica* arched, radial grooves not deep, but distinct, a few short black bristles distributed over surface; *marginal band*, narrow. *Eyes*.—Large, distributed over two rows, each of which is slightly procurved; the front median eyes are separated from each other by a space equal to rather more than once their individual diameter; front lateral eyes are near to, but do not touch their median neighbours; lateral eyes of rear row separated from their inner neighbours by a space equal to once their individual diameter; rear median eyes twice their

⁶ *διανιφος* = marked with snow-white.

individual diameter apart (Fig. 11). *Legs*.—Short, robust; legs i. and ii. considerably the shortest and the most robust; of these two pairs the femora are very short and very stout; the tibia of each of these legs is short and stout, but very slightly longer than the patella; metatarsi and tarsi short and stout, and together equal in length to tibia; legs iii. and iv. are strong, though not so stout as the anterior pairs. In each leg the femur is dusky and the succeeding joints yellow. All are hairy and bespined. *Palpi*.—Moderately long, strong, similar in colour, clothing and armature to legs. *Falces*.—Moderately long, not very strong, hairy, dusky yellow. *Maxillæ*.—Dusky, moderately hairy, convex, long, apices inclining inwards (Fig. 12). *Labium*.—Concolorous and similarly clothed, coniform, apex fringed (Fig. 12). *Sternum*.—Elongate, yellow, smooth, shining, broadest between coxæ ii. and iii., truncated in front, posterior extremity obtusely acuminate, surface flattened and furnished with short, stiff, scattered hairs, edges rounded. *Abdomen*.—Oblong, obovate, not overhanging base of cephalothorax, arched, clothed with long, coarse hairs, dark-brown. With two large white lateral patches at anterior extremity, two at the middle, and a small transverse white patch at posterior extremity. On the underside, the abdomen is of a dull whitish colour in front of the *rima epigasteris*, otherwise dark-brown with a large, median oblong grey patch extending from the *rima epigasteris* to just beyond the centre; from thence dark-brown until just in front of spinnerets where there is an interrupted transverse bar of light grey. *Epigynum*.—Large, longer than broad, with two large circular pits at posterior extremity (Fig. 15). *Spinnerets*.—Long, cylindrical and whitish, clothed with long coarse hairs, apices truncated and encircled with spinnerules.

Hab.—Cape River, January 7, 1913, sweeping grass.

Family ZODARIIDÆ.

Sub-family ZODARIINÆ.

Genus *Storena*, Walck.

STORENA ? ALBOMACULATA, Rainb.

Storena ? albomaculata, Rainb., Proc. Linn. Soc. N.S. Wales, xxvii., 1902, p. 485, pl. xviii., figs. 1, 1a.

Hab.—Bowen, forest, November 1, 1912. I think there can be little doubt but that this specimen is the ♂ of my *S. albomaculata*, as in colour, ornamentation, and eye formula it agrees with that species. The species was originally recorded from Burwood and afterwards Belmore, and I have since received another example from the Tweed River, New South Wales.

STORENA AURIPES, *sp. nov.*

(Plate xiv., figs. 16, 17, and 18).

♂ Cephalothorax, 2.7 mm. long, 2.1 mm. broad; abdomen, 3.2 mm. long, 2.1 mm. broad.

Cephalothorax.—Dark-brown, shining. *Pars cephalica* broad, strongly arched, obtuse in front, junction of cephalic and thoracic segments distinct, a few strong, black bristles distributed over the surface; *ocular area* longer than broad, black; *clypeus* deep, narrow, fringed with long, black bristles. *Pars thoracica* arched, radial grooves indistinct, surface furnished with scattered, stiff black hairs, and ornamented with a band of fine hoary hairs running down the middle, and patches of concolorous hairs at the side; *marginal band* narrow. *Eyes.*—Eight; arranged in two procurved rows of four each; anterior row only slightly procurved, but the rear row strongly so; anterior median eyes as large as those constituting the posterior row, and separated from each other by a space equal to fully once their individual diameter; front lateral eyes smallest of the group, and each removed from its median neighbour by a space equal to half its own diameter; rear median eyes separated from each other by a space equal to once their individual diameter, and each from its lateral neighbour by a space equal to rather more than one diameter (Fig. 16). *Legs.*—Robust, long, hairy and armed with long, fine spines; anterior pairs dark-brown at base of femur, thence bright yellow; rear pairs yellow also, but darker than their anterior neighbours. Relative lengths, 4, 1, 2, 3. *Palpi.*—Short, hairy, armed with long, stout spines, yellow; femur longer than patella and tibia combined; *genital bulb* longer than all other joints combined; complicated (Fig. 17). *Falces.*—Concolorous with cephalothorax, arched, slightly produced, clothed with long, coarse hairs or bristles. *Maxillae.*—Reddish-brown, shining, inner angles pale yellow, apices obtusely

truncated, inner angles fringed with long pale yellowish hairs, surface furnished with a few short, black bristles. *Labium*.—Reddish-brown also, apex yellow and rounded; arched; a few coarse black bristles spread over surface. *Sternum*.—Also reddish-brown, shield-shaped, strongly arched, fairly well clothed with hoary hairs, amongst which are scattered a few black bristles. *Abdomen*.—Ovate, arched, not overhanging base of cephalothorax, hairy. Upper surface dark-brown—nearly black, ornamented dorsally and laterally with white markings and patches; inferior surface, dull-yellow (Fig. 18).

Hab.—Pentland, September, 1914.

STORENA INORNATA, *sp. nov.*

(Plate xiv., figs. 19 and 20).

♀ Cephalothorax, 2.5 mm. long, 1.5 mm. broad; abdomen, 2.8 mm. long, 1.5 mm. broad.

Cephalothorax.—Obovate, reddish-brown, shining. *Pars cephalica* arched, moderately clothed with very short, fine hairs, obtuse in front, junction of cephalic and thoracic segments distinct; *ocular area* dark-brown, rather broader than long; *clypeus* moderately broad, deep. *Pars thoracica* strongly arched, radial grooves not defined; *median fovea* rather long, distinct; *marginal band* narrow. *Eyes*.—Eight, equal in size, distributed over two rows of four each; both rows procurved, the rear extremely so; front median eyes separated from each other by a space equal to once their individual diameter, and each from its lateral neighbour by about one-half its diameter; rear median eyes separated from each other by a space equal to about one-and-a-half their individual diameter, and each from its lateral neighbour by a space equal to that of one diameter (Fig. 19). *Legs*.—Long, moderately strong, tapering, clothed with short, fine hairs, and armed with long, fine spines; each femur of first, second, and third pairs dark-brown from base to near junction with patella, where it is pale yellow; all other joints of legs referred to, pale yellow; the fourth pair has the femur pale yellow at base, then dark-brown, and pale yellow at apex; patella and tibia are each dark-brown with

yellow apices; metatarsus dark-brown at base and apex, with a broad, dusky yellow band in between; tarsus yellow. Relative lengths: 4, 1, 2, 3. *Palpi*.—Long, yellow, tapering, similar in colour and armature to legs. *Falces*.—Concolorous with cephalothorax, slightly projecting, strongly arched, hairy. *Maxillæ*.—Strong, broad, arched, dark-brown, apices and inner angles yellow; surface furnished with a few black bristles, inner angles fringed with fine, pale hairs. *Labium*.—Long, broad, rounded at apex, which latter is fringed with long, black hairs, arched, dark-brown, apex yellow. *Sternum*.—Shield-shaped, reddish-brown, arched, surface moderately clothed with fine, hoary hairs. *Abdomen*.—Ovate, not overhanging base of cephalothorax, arched; superior surface yellow-brown, spotted with pale yellow, moderately hairy; inferior surface reddish-brown in front of *rima epigasteris*, and below that yellowish-grey. *Epigynum*.—Large, arched, bilobed, and having two deep, circular lateral pits (Fig. 20).

Hab.—Gordonvale, August 30, 1912. A very distinct species, and remarkable from the fact that it is in no way ornamented.

Genus HETÆRICA,⁷ gen. nov.

(Plate xiv., fig. 21, and Plate xv., fig. 22).

For the reception of the next species herein described, I propose a new genus—*Heterica*. This spider conforms closely to those we have just been studying, the *Storena*, in the form of the cephalothorax, the two rows of eyes, the presence of only one tooth on the lower ridge of the falx, and in the possession of three tarsal claws, but differs therefrom principally in the number of spinnerets. In *Storena* there are six, and of these the fore spinnerets are long, and the hind ones short; *Heterica*, on the other hand is only provided with four; the front pair are very short—almost aborted, while the hind pair are long. Indeed, the fore pair have to be carefully sought for, as they are so diminutive, and so obscured by long abdominal hairs, that they are not easily seen. The species for which I propose the specific name *aresca* is an exceedingly beautiful one. The description of the genus is as follows:—

⁷ ἑταίρικός = comrade-like.

Cephalothorax.—Obovate, arched. *Pars cephalica* obtuse in front, segmental grooves distinct; *ocular area* rather broader than long; *clypeus* not broad, deep. *Pars thoracica* broad; radial grooves and median fovea distinct. *Eyes*.—Eight, in two rows of four each; each row procurved (Fig. 21). *Legs*.—Rather long, tapering, moderately strong, armed with long and moderately strong spines; superior claws long, and each furnished with a comb of long teeth. Relative lengths: 4, 1, 2, 3. *Pulpi*.—Short, strong, spined, tarsal claw furnished with a comb of long teeth. *Falces*.—Not projecting, strong, arched, lower margin of the furrow of each falx armed with one tooth. *Maxillæ*.—Moderately long, apices obtuse and inclining inwards (Fig. 22). *Labium*.—Longer than broad, somewhat coniform (Fig. 22). *Sternum*.—Broad, shield-shaped, truncated in front, obtusely acuminate at rear. *Abdomen*.—Ovate. *Spinnerets*.—Four. The two in front minute; rear pair long cylindrical.

HETÆRICA ARESCA,⁸ *sp. nov.*

(Plate xv., fig. 23).

♀ Cephalothorax, 2 mm. long, 1.4 mm. broad; abdomen, 2.5 mm. long, 1.4 mm. broad.

Cephalothorax.—Obovate, yellow, smooth, shining, arched. *Pars cephalica* obtuse in front, segmental grooves distinct; *ocular area* rather broader than long; *clypeus* not broad, deep. *Pars thoracica* broad, radial grooves and median fovea distinct; *marginal band* narrow, and of a rather darker tint than the surface. *Eyes*.—Eight, distributed over two strongly procurved rows of four each; front median eyes smallest of the series and separated from each other by a space equal to once their own individual diameter; front lateral eyes separated from each other by a space equal to nearly twice their individual diameter; rear median eyes near together, and each separated from its lateral neighbour by fully once its individual diameter (Fig. 21). *Legs*.—Long, moderately strong, tapering; coxæ concolorous with cephalothorax; other joints, with exception of tarsi, smoky yellow; the legs moderately

⁸ ἄρεος = pleasing.

hairy and armed with long, fairly strong spines; superior tarsal claws long, well curved, and each furnished with twelve long teeth. Relative lengths: 4, 1, 2, 3. *Palpi*.—Short, strong, yellow, similar in clothing and armature to legs; tarsal claw long, and furnished with a number of long, fine teeth. *Falces*.—Not projecting, strong, moderately long, arched, hairy, concolorous with cephalothorax. *Maxillæ*.—Concolorous with falces, moderately long, arched, apices obtusely acuminate, slightly fringed and inclined inwards, surface furnished with a few long, strong, black bristles (Fig. 22). *Labium*.—Longer than broad, concolorous, somewhat coniform, arched, surface furnished with a few short, stiff black bristles (Fig. 22). *Sternum*.—Concolorous also, shield-shaped, arched, truncated in front, acuminate at rear, surface furnished with rather long, strong bristles. *Abdomen*.—Ovate, arched, not overhanging base of cephalothorax; superior surface hairy, black, ornamented with reticulated silvery markings (Fig. 23); inferior surface dark-brown, hairy, relieved by three longitudinal, parallel whitish stripes, of which the central one is the strongest. *Epigynum*.—Small, with two circular pits.

Hab.—Pentland, sweeping foliage in forest, January 9, 1913.

Family PHOLCIDÆ.

Sub-family PHOLCINÆ.

Genus *Pholcus*, *Walck.*

PHOLCUS LITORALIS, *L. Koch.*

Pholcus litoralis, *L. Koch*, Verh. K.K. zool.-bot. Ges. Wien, 1867, p. 193; *Die Arach. Austr.*, i., 1872, p. 285, pl. xxiv., figs. 1, 1a.-1g.

Hab.—Gordonvale, numerous in dwellings, May, 1912.

Genus *Trichocyclus*, *Simon.*

TRICHOCYCLUS ? NIGROPUNCTATUS, *Simon.*

Trichocylus nigropunctatus, *Simon*, *Die Fauna Süd west Austr.*, i., 1908, p. 407.

Hab.—Hughenden, May 13, 1912.

Genus Psilochorus, Simon.

PSILOCHORUS SPHAEROIDES, L. Koch.

Pholcus sphaeroides, L. Koch, Die Arach. Austr., i., 1872, p. 283, pl. xxiii., fig. 6, 6a-6d.

Hab.—Hughenden, July 14, 1913; Townsville, July 15, 1912; Cape River, January 7, 1913; from interior of buildings.

*Family THERIDIIDÆ.**Genus Ariamnes, Thor.*

ARIAMNES COLUBRINUS, Keys.

Ariamnes colubrinus, Keys, Die Arach. Austr., Suppl., 1890, p. 237, pl. xxi., figs. 5, 5a-5c.

Hab.—Aloomba, forest, sweeping grass, July 7, 1912; Gordonvale, forest, sweeping grass, August 10, 1912.

Genus Argyrodes, Sim.

ARGYRODES ANTIPODIANA, O. P. Camb.

Argyrodes antipodiana, O. P. Camb., Proc. Zool. Soc., 1880, p. 327.

Hab.—Gordonvale, August 28, 1912, August 31, 1912, May 14, 1913, March 5, 1914; Aloomba, July 7, 1912; sweeping jungle growth and grass.

ARGYRODES INCISIFRONS, Keys.

Argyrodes incisifrons, Keys., Die Arach. Austr., Suppl., 1890, p. 246, pl. xxii., figs. 5, 5a, 5b.

Hab.—Gordonvale, January, 1914, jungle, sweeping.

ARGYRODES ARGENTATA, *sp. nov.*

(Plate xv., fig. 24.)

♀ Cephalothorax, 1 mm. long, 0.5 mm. broad; abdomen, 1.2 mm. long, 1.2 mm. broad, 2.6 mm. from ventral surface to apex.

Cephalothorax. — Smooth, ovate, yellow - brown. *Pars cephalica* sloping rearward, normal grooves distinct; *ocular area* broader than long; *clypeus* moderately deep, projecting, and slightly cleft beneath median eyes. *Pars thoracica* broad in front, retreating to posterior angle where it is very narrow, radial grooves distinct; *marginal band* narrow. *Eyes*.—Eight; nearly equal in size; the four median eyes form a trapezium; the front median pair are the widest apart, and slightly the largest; lateral eyes contiguous. *Legs*.—Long, not strong, yellowish; anterior pair much the longest. Relative lengths: 1, 4, 2, 3. *Palpi*.—Short, concolorous, hairy. *Falces*.—Concolorous with cephalothorax, hairy. *Maxillæ*.—Concolorous also, arched, long, and parallel. *Labium*.—Also concolorous, normal. *Sternum*.—Elongate, triangular, brown, shining, arched, moderately hairy, acuminate posteriorly, and terminating between the fourth pair of coxæ. *Abdomen*.—Gibbous, yellow-brown, with dark-brown longitudinal and transverse striations; apex obtuse, white at summit; sides ornamented with bright silvery bands and spots (Fig. 24).

Hab.—Gordonvale, sweeping forest at top of coastal range 1,500ft., May 29, 1913.

ARGYRODES ARGENTIOPUNCTATA, *sp. nov.*

(Plate xv., figs. 25, 26, and 27.)

♂ Cephalothorax, 1.1 mm. long; 0.8 mm. broad; abdomen, 1.4 mm. long, 1 mm. broad.

Cephalothorax.—Ovate, straw-yellow, smooth. *Pars cephalica* arched, ascending, sides declivous; *ocular area* broader than long; *clypeus* somewhat produced, but not cleft. *Pars thoracica* arched, normal grooves distinct; *marginal band* narrow. *Eyes*.—Of equal size, distribution normal. *Legs*.—Long, slender, tapering, apices of tibiæ of first and fourth pairs orange-yellow; each leg has a few fine hairs and a few moderately long, weak spines. Relative lengths: 1=4, 2, 3. *Palpi*.—Long, straw-yellow; genital bulb large, somewhat complicated, furnished with a few short, strong spines, and clothed with long, fine hairs (Fig. 25). *Falces*.—Straw-yellow, arched, hairy. *Maxillæ*.—Long, arched, straw-yellow,

parallel, apices inclining inwards. *Labium*.—Concolorous, normal. *Sternum*.—Concolorous also, elongate, triangular. *Abdomen*.—Somewhat gibbous, very slightly overhanging base of cephalothorax, yellow, upper surface and sides ornamented with irregularly formed bright silvery pits (Fig. 26).

♀ Cephalothorax, 1.4 mm. long, 1 mm. broad; abdomen, 2 mm. long, 1.5 mm. broad.

In every particular, except size and sexual characters, both sexes agree, hence a detailed description of the ♀ is unnecessary. *Epigynum*.—As in figure (Fig. 27).

Hab.—Gordonvale, sweeping jungle, on the following dates:—January, 1913, and 1914, March 5, 1914, May 25, 1913, May 29, 1913, June 3, 1912, June 4, 1913.

ARGYRODES MUSGRAVEI,⁹ *sp. nov.*

(Plate xv., fig. 28.)

♀ Cephalothorax, 1.3 mm. long, 0.8 mm. broad; abdomen, 1.7 mm. long, 1.2 mm. broad, and 1.7 mm. from apex to tips of spinnerets.

Cephalothorax.—Yellow, smooth, shining, ovate. *Pars cephalica* arched, high, retreating rearwards, sides declivous; *ocular area* broader than long; *clypeus* produced, but not cleft. *Pars thoracica* arched, normal grooves distinct; *marginal band* narrow. *Eyes*.—Equal in size; distribution normal. *Legs*.—Long, slender, tapering, dark-brown (nearly black), except *coxae* and *tarsi* which are concolorous with cephalothorax, armed with a few short, fine spines, and clothed with exceedingly fine and short pubescence. Relative lengths: 1, 2, 4, 3. *Palpi*.—Concolorous with cephalothorax, and similar in clothing and armature to legs. *Falces*.—Concolorous also, arched, pubescent. *Maxillæ and Labium*.—Also concolorous; normal. *Sternum*.—Also concolorous, elongate, triangular, arched. *Abdomen*.—Gibbous, slightly overhanging base of cephalothorax, arched, pale yellow, not shining, apex dark brown, each side ornamented with two bright, silver spots (Fig. 28), pubescent.

Hab.—Gordonvale, sweeping, September 5, 1912.

⁹ Named in honour of my Assistant, Mr. A. Musgrave.

ARGYRODES FLAVIPES, *sp. nov.*

(Plate xv., figs. 29 and 30.)

♂ Cephalothorax, 0.9 mm. long, 0.7 mm. broad; abdomen, 1.5 mm. long, 1.2 mm broad.

Cephalothorax.—Ovate, dark-brown, smooth, arched. *Pars cephalica* narrow, ascending; *ocular area* broader than long; *clypeus* excavated, upper portion projecting further than the lower. *Pars thoracica* furnished with a few fine ciliate hairs; lateral grooves present, but very indistinct; *marginal band* narrow. *Eyes*.—Normal. *Legs*.—Long, tapering, straw-yellow, clothed with fine yellow hairs, and armed with short weak spines; each femur and tibia, except of leg iii., has a dark-brown annulation at apex; all metatarsi similarly annulated at apex. Relative lengths: 1, 2, 4, 3. *Palpi*.—Short, straw-yellow, with exception of genital bulb, which latter is dark-brown, short, broad, and clothed with long hairs. *Falces*.—Short, concolorous with cephalothorax. *Maxilla and Labium*.—Normal, concolorous also. *Sternum*.—Normal; also concolorous. *Abdomen*.—Elongate, triangular, arched, slightly overhanging base of cephalothorax; near the front there are two large humeral humps; apex acuminate (Fig. 29); upper surface dark-brown, streaked with yellow; sides and inferior surface concolorous.

♀ Cephalothorax 1.1 mm. long, 0.9 mm. broad; abdomen, 2.5 mm. long, 2.5 mm. broad.

Except that the ♀ is larger and darker than the ♂, and that the abdomen (Fig. 30) is broadly triangular, and as long as it is broad, both sexes are remarkably similar in appearance.

Hab.—Gordonvale, jungle, May and June.

*Genus Theridion, Walck.*THERIDION PYRAMIDALE, *L. Koch.*

Theridium pyramidale, *L. Koch*, Verh. K.K. Zool.-bot. Ges. Wien, 1867, p. 190; Die Arach. Austr., i., 1872, p. 266, pl. xxii., fig. 5.

Hab.—Aloomba, July 7, 1912; Quingilli, sweeping grass in forest, September 13, 1912; Gordonvale, July 7, 1912, sweeping in forest, August 20, 1912, from nest of dead leaves, egg-sac chocolate colour, September 9, 1912, forest, egg-sac pale chocolate, October 24, 1912, sweeping grass in forest. Some specimens immature. Common in Queensland and New South Wales.

Theridion decoratum, L. Koch.

(Plate xv., figs. 31 and 32.)

Theridium decoratum, L. Koch, Verh. K.K. zool.-bot. Ges. Wien, 1867, p. 183; Die Arach. Austr., i., 1872, p. 265, pl. xxii., figs. 3, 3a.

♂ Cephalothorax, 1.2 mm. long, 1 mm. broad; abdomen, 1.3 mm. long, 1.3 mm. broad, and 1.9 mm. from apex to spinnerets.

Cephalothorax.—Ovate, arched, smooth, yellow. *Pars cephalica* ascending, attenuated in front; *ocular area* broader than long; *clypeus* narrow. *Pars thoracica* furnished with a few short, scattered hairs; radial grooves indistinct; *median fovea* distinct, recurved; *marginal band* narrow, dark. *Eyes*.—Normal. *Legs*.—Of a lighter yellow tint than cephalothorax, with dark annulations at junction of joints, long, tapering, clothed with fine hairs, and armed with moderately long spines. Relative lengths: 1, 2, 4, 3. *Pulpi*.—Short, femoral and tibial joints concolorous with legs, and the genital bulb, which is large and complicated, concolorous with cephalothorax (Figs. 31, 32). *Falces*.—Short, not strong, arched, concolorous with cephalothorax; fangs weak. *Maxilla, Labium and Sternum*.—Normal; concolorous also with cephalothorax. *Abdomen*.—Ovate, arched, pubescent, slightly overhanging base of cephalothorax, much deeper than long; colour pattern similar to ♀.—see Koch's figure in "Die Arachinden des Australiens," quoted above.

Obs.—L. Koch (*supra*) describes and figures the ♀ only, but Mr. Girault succeeded in obtaining a fully developed ♂ which is herewith described. The ♀ varies considerably in colour, some forms being much darker than others.

Hab.—Gordonvale, by sweeping, taken during the months of April, August and September. Occurs in Queensland, New South Wales and Victoria.

THERIDION MUNDULUM, *L. Koch.*

Theridium mundulum, *L. Koch*, *Die Arach. Austr.*, i., 1872, p. 263, pl. xxii., figs. 3, 3a.

Hab.—Gordonvale, forest, during months of June, August, September, and November. Egg-sacs, white and lilac. Occurs in Queensland, New South Wales and Victoria.

THERIDION TEPIDARIORUM, *C. Koch.*

Theridium tepidariorum, *C. Koch*, *Die Arach.*, viii., 1841, p. 75, pl. cclxiv., fig. 646; pl. cclxiv., figs. 644 and 645.

Hab.—Gordonvale, interior of building, September 9. World wide range.

THERIDION LIMITATUM, *L. Koch.*

Theridium limitatum, *L. Koch*, *Die Arach. Austr.*, i. 1872, p. 256, tab. xxi., figs. 8, 8a, 8b.

Hab.—Gordonvale, October. Occurs also in New South Wales.

THERIDION FUSCOMACULATUM, *sp. nov.*

(Plate xv., figs. 33 and 34.)

♀ Cephalothorax, 2.1 mm. long, 1.8 mm. broad; abdomen, 3.2 mm. long, 2.8 mm. broad (Fig. 33).

Cephalothorax.—Ovate, arched, yellow-brown, hairy. *Pars cephalica* ascending, sides declivous, rather darkly clouded down the median line, segmental groove distinct: *ocular area* broader than long; *clypeus* deep, strongly bowed. *Pars cephalica* broad, radial groove and *median fovea* distinct, clouded with dark-brown; *marginal band*, dark brown. *Eyes.*—Normal. *Legs.*—Long, tapering, hairy, armed with a few short, weak spines, yellow, with yellow-brown annulations. Relative lengths: 1, 4, 2, 3. *Palpi.*—Short, hairy, yellow, tarsus annulated with yellow-brown, similar in clothing and armature to legs. *Falces.*—Moderately long, not strong, arched, tapering, inner angles clothed with a few short hairs. *Maxillæ.*—Yellow, arched, apices inclining inwards, surface furnished with a few rather long, stiff hairs; inner angles almost straight. *Labium.*—Similar in colour and clothing to the foregoing, short,

broad, arched. *Sternum*.—Yellow, suffused with dark-brown arched, shield-shaped, terminating obtusely between fourth pair of coxæ, surface furnished with a few short, dark hairs. *Abdomen*.—Ovate, strongly arched, slightly overhanging base of cephalothorax, hairy, yellow, spotted and mottled with dark-brown (almost black) markings; inferior surface yellow, with dark-brown (almost black) markings; there are also two large and broad patches of chalky-white, mottled with yellow; and these patches, of which the posterior one is much the largest and brightest, is bisected by an irregularly-shaped dark-brown band or patch. *Epigynum*.—A large dark-brown plaque, broadest in front, where it is deeply excavated; lateral angles somewhat wavy, inclining inwards; posterior extremity raised, and furnished with two large, deep pits (Fig. 34).

Hab.—Gordonvale, forest, November. Two examples of this species, one rather darker and somewhat smaller than the other.

THERIDION ALBODECORATUM, *sp. nov.*

(Plate xv., figs. 35 and 36.)

♀ Cephalothorax, 2.1 mm. long, 1.8 mm. broad; abdomen, 3.2 mm. long, 2.7 mm. broad (fig. 35).

Cephalothorax.—Yellow-brown, smooth, shining, arched, ovate. *Par cephalica* ascending, obtuse in front, segmental groove distinct; *ocular area* broader than long; *clypeus* narrow, deep. *Pars thoracica* broad, radial grooves present, but not distinct; *median fovea* deep; *marginal band* narrow. *Eyes*.—Normal. *Legs*.—Long, tapering, yellow with dark-brown annulations, hairy, and armed with short, fine spines. Relative lengths: 1, 4, 2, 3. *Palpi*.—Short, similar in colour and armature to legs. *Falces*.—Moderately long, tapering, arched, inner angles fringed with short, stiff, dark hairs; base and sides dark-brown, yellow in front, and at apices. *Maxillæ*.—Dark-brown, apices and inner angles pale, surface arched and furnished with a few stiff black hairs or bristles; apices truncated and inclining inwards. *Labium*.—Short, broad, arched, similar to maxillæ in colour and clothing. *Sternum*.—Shield-shaped, arched, dark-brown, terminating obtusely between fourth pair of coxæ, surface sparingly clothed with short, stiff hairs. *Abdomen*.—Ovate, strongly arched, hairy, dark-brown

generally, but somewhat lighter in the median area of superior surface; posterior extremity, sides and inferior surface ornamented with white streaks and yellowish patches. *Epigynum*.—A transverse plaque with two circular pits, which latter are separated from each other by a space equal to twice their individual diameter (Fig. 36).

Hab.—Gordonvale, forest, September 12, 1912.

Theridion niphocosmum,¹⁰ sp. nov.

(Plate xv., fig. 37.)

♀ Cephalothorax, 1 mm. long, 0.7 mm. broad; abdomen, 2 mm. long, 1.5 mm broad.

Cephalothorax.—Ovate, arched, smooth, shining, yellow. *Pars cephalica* ascending, rounded in front, sides steep, segmental groove distinct; *ocular area* broader than long; *clypeus* narrow, deep. *Pars thoracica* strongly arched, radial grooves present, but not distinct; *thoracic fovea*, deep; *marginal band*, narrow, dark-brown. *Eyes*.—Normal. *Legs*.—Long, slender, tapering, straw-yellow with brownish annulations, clothed with fine hairs, and armed with short, weak spines. Relative lengths: 1, 4, 2, 3. *Palpi*.—Short, straw-yellow, similar in clothing and armature to legs. *Falces*.—Concolorous with cephalothorax, arched, tapering, sparingly hairy. *Maxillæ*.—Also concolorous, arched, apices inclining inwards, sparingly hairy. *Labium*.—This is also concolorous, short, broad, arched, sparingly hairy. *Sternum*.—Shield-shaped, concolorous, smooth, shining, terminating obtusely between fourth pair of coxæ; surface furnished with a few short, stiff hairs. *Abdomen*.—Ovate. Slightly overhanging base of cephalothorax, strongly arched, faintly pubescent, yellow, ornamented with extensive patches of snowy white (Fig. 37); on the superior surface the snowy white patch is relieved by a median and somewhat conventional design and delicate tracing; laterally the patches are reticulated, and are again further relieved by dark-brown markings; inferior surface, dull yellow. *Epigynum*.—A short, oval, dark-brown, transverse plaque, with two deep circular pits situated closely together.

¹⁰ νιφοκοσμος = ornamented with snowy white.

Hab.—Gordonvale district, top of coastal range at 1,500ft., sweeping, forest, May 29, 1913.

Theridion dianiphum,¹¹ *sp. nov.*

(Plate xvi., figs. 38 and 39.)

♀ Cephalothorax, 0.8 mm. long, 0.6 mm. broad; abdomen, 1 mm. long, 0.8 mm. broad (Fig. 38).

Cephalothorax.—Ovate, arched, yellow, smooth, shining. *Pars cephalica* obtuse in front, sides declivous, segmental grooves distinct; *ocular area* broader than long; *clypeus* rounded, deep. *Pars thoracica* strongly arched, radial grooves present, but not sharply defined; *median fovea* profound; *marginal band*, narrow. *Eyes.*—Normal. *Legs.*—Long, slender, tapering, yellow, pubescent, and armed with short, fine spines. Relative lengths: 1, 4, 2, 3. *Palpi.*—Short, concolorous, similar in clothing and armature to legs. *Maxillæ and Labium.*—Concolorous also, and normal in form. *Sternum.*—Shield-shaped, yellow, furnished with a few fine hairs, arched, shining; posterior extremity terminating obtusely between fourth pair of coxæ. *Abdomen.*—Ovate, strongly arched, slightly overhanging base of cephalothorax, pubescent, yellow, ornamented with two large, reticulated patches and several small spots of snowy white. *Epigynum.*—A transversely oval plaque, with two large circular pits, which latter are separated from each other by a distinct ridge (Fig. 39).

Hab.—Gordonvale district, top of coastal range at 1,500ft., sweeping, forest, May 29, 1913.

Theridion ventricosum, *sp. nov.*

(Plate xvi., figs. 40, 41, and 42.)

♀ Cephalothorax, 1.5 mm. long, 1.1 mm. broad; abdomen, 2.5 mm. long, 2.3 mm. broad (Fig. 40).

Cephalothorax.—Ovate, smooth, shining, dark-brown. *Pars cephalica* ascending, segmental grooves distinct, sides somewhat declivous, obtusely rounded in front; *ocular area* broader than

¹¹ *διανιφος* = marked with snow-white.

long; *clypeus* deep. *Pars thoracica* broad, radial grooves indistinct; *median fovea* profound; *marginal band*, narrow. *Eyes*.—Normal. *Legs*.—Moderately long, rather strong, yellow with golden-brown annulations, hairy, armed with short weak spines. Relative lengths: 1, 4, 2, 3. *Palpi*.—Short, not strong, similar in colour, clothing and armature to legs. *Falces*.—Short, yellow, tapering, arched. *Maxillæ*.—Normal, yellow, arched, apices inclining inwards, moderately hairy. *Labium*.—Concolorous, short, broad, arched. *Sternum*.—Shield-shaped, arched, surface yellow, margins dark-brown, sparingly hairy, posterior extremity obtuse, and terminating between fourth pair of coxæ. *Abdomen*.—Globose, slightly overhanging base of cephalothorax, pilose; superior surface yellow with dark-brown markings and reticulated snow-white patches (Fig. 41); inferior surface yellow with dark-brown markings. *Epigynum*.—A transverse, oval plaque, with two deep, circular pits (Fig. 42).

Obs.—There are two adult specimens and one immature one in the collection, and of these the former show that the species is variable (Fig. 41).

Hab.—Gordonvale, jungle, April 2, 1914.

Theridion crinitum, L. Koch.

Theridium crinitum, L. Koch, Die Arach. Austr., i., 1872, p. 271. pl. xxii., figs. 8, 8a.

Obs.—This specimen is apparently none other than the above species, although it differs from Koch's figure; firstly, the legs are longer, and secondly, the abdomen is more ovate. The epigynum, however, agrees with figure and description.

Hab.—Gordonvale, May 10, 1912. One specimen.

Theridion gibbum, sp. nov.

(Plate xvi., figs. 43, 44, and 45.)

Cephalothorax, 1.2 mm. long, 0.9 mm. broad; abdomen, 1.8 mm. long, 1.4 mm. broad (Fig. 43).

♀ *Cephalothorax*.—Ovate, straw-yellow. *Pars cephalica* raised, arched, smooth, furnished with a few rather long hairs, narrow in front, segmental grooves distinct; *ocular area* broader than long; *clypeus* moderately deep. *Pars thoracica* smooth, arched, radial grooves distinct, *median fovea* moderately deep; *marginal band* moderately broad, fringed with fine hairs. *Eyes*.—Normal. *Legs*.—Long, fine, tapering, pilose, armed with fine and rather long spines, straw-yellow generally, but having the lower extremity of each joint much darker. Relative lengths: 1, 2, 4, 3. *Palpi*.—Rather long, fine, similar in colour and armature to legs. *Falces*.—Moderately long, tapering, arched, concolorous with cephalothorax, pilose; fangs weak. *Maxille and Labium*.—Normal; concolorous with falces. *Sternum*.—Shield-shaped, arched, terminating obtusely between fourth pair of coxæ; surface furnished with a few rather long hairs. *Abdomen*.—Gibbous, slightly overhanging base of cephalothorax; upper surface creamy-white, reticulated, and ornamented with a broad, irregular, median smoky-yellow bar which is narrowest at the anterior and posterior extremities, and from which are directed oblique and irregular lateral stripes; at posterior extremity of posterior surface there is a prominent tubercular eminence suffused at base with orange-red, whilst the apex is dark-brown (Fig. 43); posterior angle similar in colour and scheme of ornamentation to superior surface; the sides have the upper portion creamy-white, reticulated, and marked with lateral stripes while the lower portion is dull-yellow (Fig. 44); inferior surface dull-yellow also and relieved by a few white spots. *Epigynum*.—A small, dark, shining, channelled, tubercular eminence with widely removed lateral, circular pits (Fig. 45).

Hab.—Gordonvale, jungle, May 9, 1913.

ThERIDIION ThERIDIoidES, *Keys*.

Tobesoa theridioides, *Keys*, *Die Arach. Austr.*, Suppl., 1890, p. 240, tab. xxi., figs. 6, 6a, 6b.

Hab.—Gordonvale, sweeping, forest, August 23, 1912; Pyramid Mt., sweeping grass, November 21, 1912.

ThERIDIION GIRaultI, *sp. nov.*

(Plate xvi., figs. 46 and 47.)

♀ *Cephalothorax*, 1.3 mm. long, 1 mm. broad; abdomen, 2.8 mm. long, 2.4 mm. broad (Fig. 46).

Cephalothorax.—Yellow-brown, shining, ovate. *Pars cephalica* slightly raised, arched, smooth, segmental groove distinct, narrow in front; *ocular area* broader than long; *clypeus* moderately deep, fringed with fine hairs. *Pars thoracica* arched, radial grooves and median fovea distinct; *marginal band* narrow. *Eyes*.—Normal. *Legs*.—Moderately long, tapering, yellow, tibial and metatarsal joints annulated with dark-brown at apex, clothed with fine hairs and armed with short, fine spines. Relative lengths: 1, 4, 2, 3. *Palpi*.—Short, yellow, similar in clothing and armature to legs. *Fulces*.—Short, not strong, arched, yellow, pilose. *Maxillæ and Labium*.—Yellow, normal. *Sternum*.—Shield-shaped, yellow, narrowly margined with dark-brown, moderately arched, furnished with a few very short and fine hairs, and terminating in an obtuse point between fourth pair of coxæ. *Abdomen*.—Nearly globose, strongly arched, boldly projecting over base of cephalothorax; upper surface yellowish-grey, ornamented with irregularly formed, reticulated chalky-white patches; at posterior extremity there are a couple of small, black spots and a delicate scheme of tracery; sides yellowish-grey, ornamented with irregular and reticulated chalky-white patches, and dark-brown (almost black) markings; inferior surface yellowish-grey also, and relieved by dark-brown markings. *Epigynum*.—An arched, sparingly hairy, and transversely oval eminence, in the front of which are two widely removed transverse pits (Fig. 47).

Hab.—Gordonvale, sweeping jungle, April 27, 1913 (adult); same locality, sweeping jungle, June, 1914 (immature).

Theridion thorelli, L. Koch.

Theridium thorelli, L. Koch, Verh. K. K. zool.-bot. Ges. Wien, 1865, p. 857, Die Arach. Austr., i., 1872, p. 258.

Hab.—Gordonvale, forest, May 24, 1912. Originally recorded from Sydney, New South Wales.

Theridion ? albostriatum, L. Koch.

Theridium albostriatum, L. Koch, Verh. K. K. zool.-bot. Ges. Wien, 1867, p. 187; Die Arach. Austr., i., 1872, p. 270, pl. xxii., fig. 7.

Hab.—Gordonvale forest, August 31, 1912. An immature ♀ specimen, varying somewhat from the abdominal markings as described and figured by Koch. Although not fully developed, I feel sure there can be but little doubt as to the correctness of the above determination, even though it be qualified with a note of interrogation.

THERIDION NIVOSUM, *sp. nov.*

(Plate xvi., figs. 48, 49 and 50.)

♀ Cephalothorax 1 mm. long, 0.7 mm. broad; abdomen, 1.9 mm. long, 1.4 mm. broad (Fig. 48).

Cephalothorax.—Ovate, pilose, yellow. *Pars cephalica* raised, arched, thoracic segment distinctly marked, and ornamented with two distinct, broad, dark sub-median bands; *ocular area* broader than long; *clypeus* narrow, moderately deep, and fringed with fine hairs. *Pars cephalica* broad, arched, normal grooves and *median fovea* distinct; *marginal band* moderately broad, creamy-yellow. *Eyes.*—Normal. *Legs.*—Moderately long, yellow, tapering, clothed with fine hairs and armed with short, fine spines. Relative lengths: 1, 4, 2, 3. *Palpi.*—Moderately long, similar in colour and armature to legs. *Falces.*—Yellow, arched, pilose, tapering, fangs dark-brown. *Maxillæ and Labium.*—Concolorous with foregoing. Normal. *Sternum.*—Concolorous also, arched, shield-shaped, pilose, terminating obtusely between fourth pair of coxæ. *Abdomen.*—Ovate, pilose, overhanging base of cephalothorax, strongly arched; superior surface yellow, ornamented with a broad yellow, tapering, elongate median bar, which is uneven in outline; in addition to this there is a delicate concolorous tracery and snow-white patches; sides yellow, and ornamented with snow-white spots (Fig. 49); inferior surface yellow also, with two rather large snow-white spots in front of spinnerets, and a few smaller ones scattered promiscuously. *Epigynum.*—A large dark-brown, arched, transversely wrinkled, overhanging lip, the margin of which is reflexed (Fig. 50).

Hab.—Townsville, sweeping grass, July 11, 1912.

THERIDION SPINIGERUM, *sp. nov.*

(Plate xvi., fig. 51.)

♂ Cephalothorax, 1 mm. long, 0.7 mm. broad; abdomen, 1.4 mm. long, 0.7 mm. broad (Fig. 51).

Cephalothorax.—Pale-yellow, ovate, smooth, shining, and having a thin dark line running from near the eyes almost to posterior angle. *Pars cephalica* raised, arched, segmental groove faintly distinct; *ocular area* broader than long; *clypeus* narrow, moderately deep. *Pars thoracica* arched; *median fovea* indistinct; *marginal band* narrow. *Eyes*.—Normal. *Legs*.—Long, tapering, concolorous with cephalothorax, moderately clothed with short and very fine hairs and armed with short, fine spines. Relative lengths: 1, 4, 2, 3. *Palpi*.—Short, concolorous with legs, and similar to them in clothing and armature; *genital bulb* reddish-yellow, large, somewhat pear-shaped and complicated in structure. *Falces*.—Concolorous with cephalothorax, short, arched, weak, tapering, smooth, fangs short, weak, reddish. *Maxillæ and Labium*.—Concolorous with cephalothorax; normal. *Sternum*.—Concolorous with foregoing, arched, smooth, shield-shaped, and terminating obtusely between fourth pair of coxæ. *Abdomen*.—Ovate, arched, very slightly overhanging base of cephalothorax, pale-yellow; on the superior surface there are four black, transverse bars, the first of which is entire, and the others broken; near posterior extremity there are four long black spines (one of the inner ones missing in the type) at the sides and below the spines there are several small but distinct black markings; sides and inferior surface pale-yellow.

Hab.—Gordonvale, jungle, June, 1914.

THERIDION FUSCODECORATUM, *sp. nov.*

(Plate xvi., figs. 52 and 53.)

♀ Cephalothorax, 1 mm. long, 0.7 mm. broad; abdomen, 1.5 mm. long, 1.1 mm. broad (Fig. 52).

Cephalothorax.—Ovate, smooth, yellow, with a broad, median, longitudinal fuscous band. *Pars cephalica* raised, strongly arched, segmental groove distinct; *ocular area* broader than long; *clypeus* narrow, moderately deep, fringed with fine hairs. *Pars thoracica* broad, arched, radial grooves and *median fovea* distinct; *marginal band* narrow, pale-yellow. *Eyes*.—Normal. *Legs*.—Long, tapering, yellow, clothed with silky pubescence, and armed with short, fine spines; first and second

femoral and tibial joints each fuscous at apex. Relative lengths: 1, 4, 2, 3. *Palpi*.—Moderately long, tapering, yellow, similar in colour and armature to legs. *Falces*.—Yellow, tapering, arched, pilose, weak; *fangs* short and weak. *Maxilla and Labium*.—Yellow; normal. *Sternum*.—Shield-shaped, terminating obtusely between fourth pair of coxæ, arched, pilose, yellow, lateral margins narrowly fuscous. *Abdomen*.—Ovate, overhanging base of cephalothorax, arched, pilose; superior surface pale-yellow, clouded with fuscous, and ornamented with a broad, median, elongate, somewhat leaf-like design, which latter extends from anterior to posterior extremity; it is broader towards the middle, and varies in parts in intensity of colour; sides yellow, clouded with fuscous; inferior surface yellow, with a broad, median fuscous band, irregular in outline, and broadest at the middle. *Epigynum*.—Two large, somewhat rounded discs placed closely together, and above each of which there is a dark, circular patch (Fig. 53).

Hab.—Gordonvale, jungle, June, 1914.

Genus Latrodectus, Walck.

LATRODECTUS HASSELLTII, *Thor.*

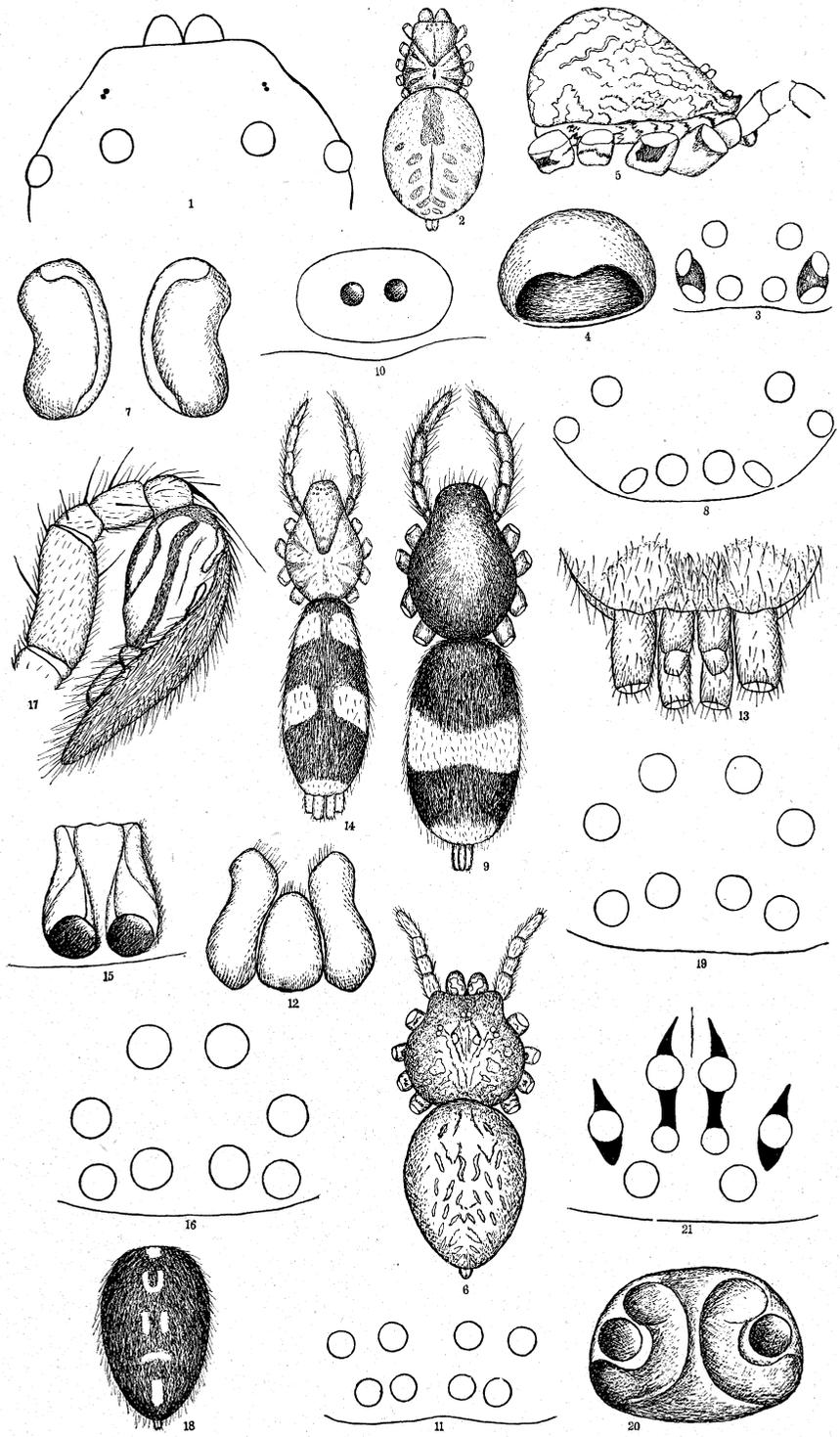
Latrodectus hasseltii, *Thor.*, Oefv. Kongl. Vetensk. Akad. Forh., 1870, p. 369; L. Koch, *Die Arach. Austr.*, i., 1872, p. 276, pl. xxiii., figs. 2, 3, 3a.

Latrodectus scelio., L. Koch, *Die Arach. Austr.*, i., 1872, p. 279, pl. xxiii., fig. 4.

Hab.—Gordonvale, January 23, 1913, May 24, 1912, November, 1911; Roma, October 5, 1914.

EXPLANATION OF PLATE XIV.

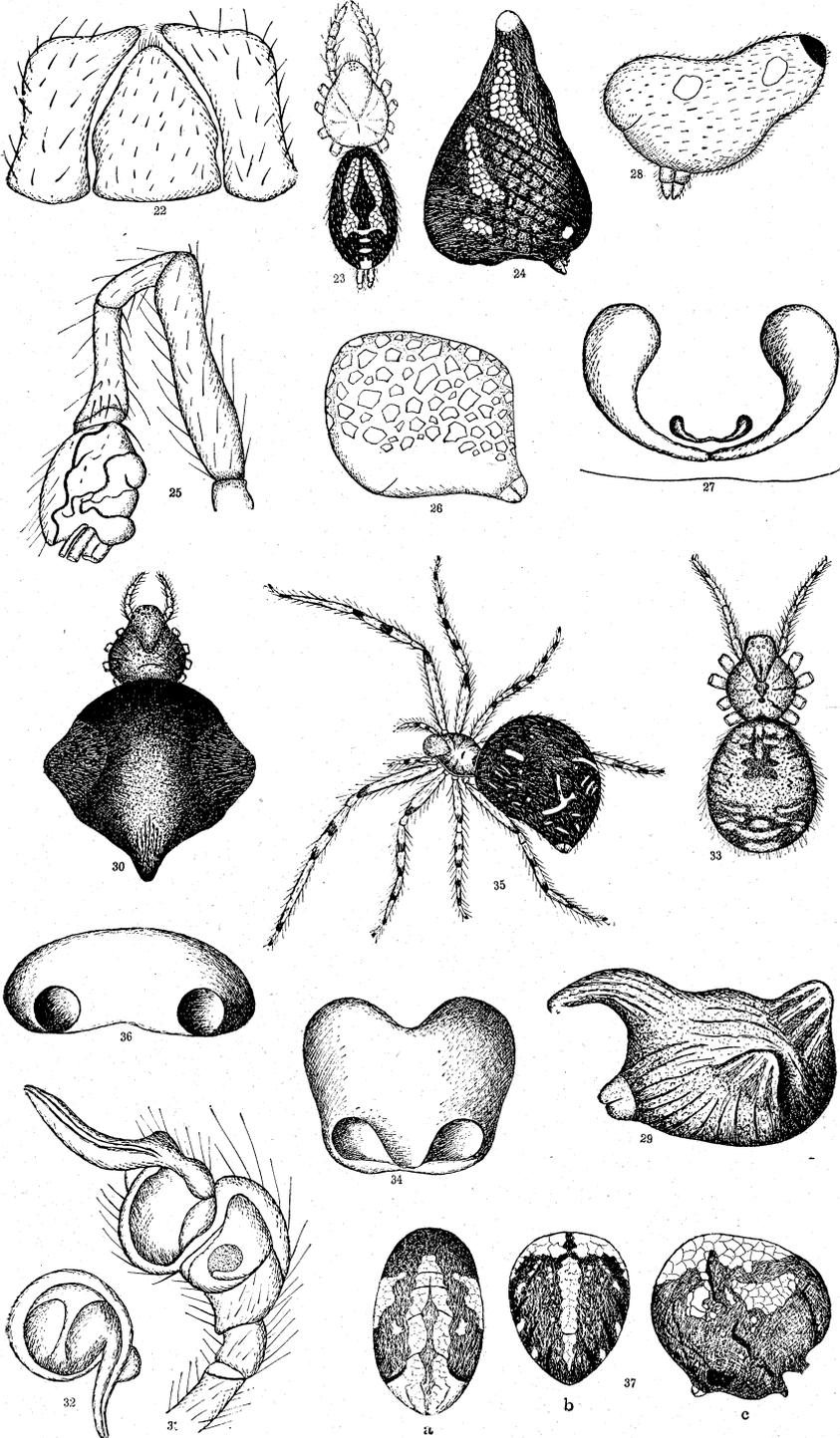
- Fig. 1. *Miagrammopes fasciata*, Rainb., eyes.
 „ 2. *Aphytochæma maculata*, Rainb., ♀
 „ 3. „ „ „ „ eyes.
 „ 4. „ „ „ „ epigynum.
 „ 5. *Scytodes penicillatus*, Rainb., cephalothorax (profile)
 „ 6. „ „ „ „ ♀
 „ 7. „ „ „ „ epigynum.
 „ 8. *Epicharitus leucosemus*, Rainb., eyes.
 „ 9. „ „ „ „ ♀
 „ 10. „ „ „ „ epigynum.
 „ 11. *Symphanodes dianaphus*, Rainb., eyes.
 „ 12. „ „ „ „ maxillæ and labium.
 „ 13. „ „ „ „ spinnerets.
 „ 14. „ „ „ „ ♀
 „ 15. „ „ „ „ epigynum.
 „ 16. *Storena auripes*, Rainb., eyes.
 „ 17. „ „ „ „ palpus ♂
 „ 18. „ „ „ „ abdomen.
 „ 19. „ *inornata*, „ „ eyes.
 „ 20. „ „ „ „ epigynum.
 „ 21. *Hetærica aresca*, Rainb., eyes.



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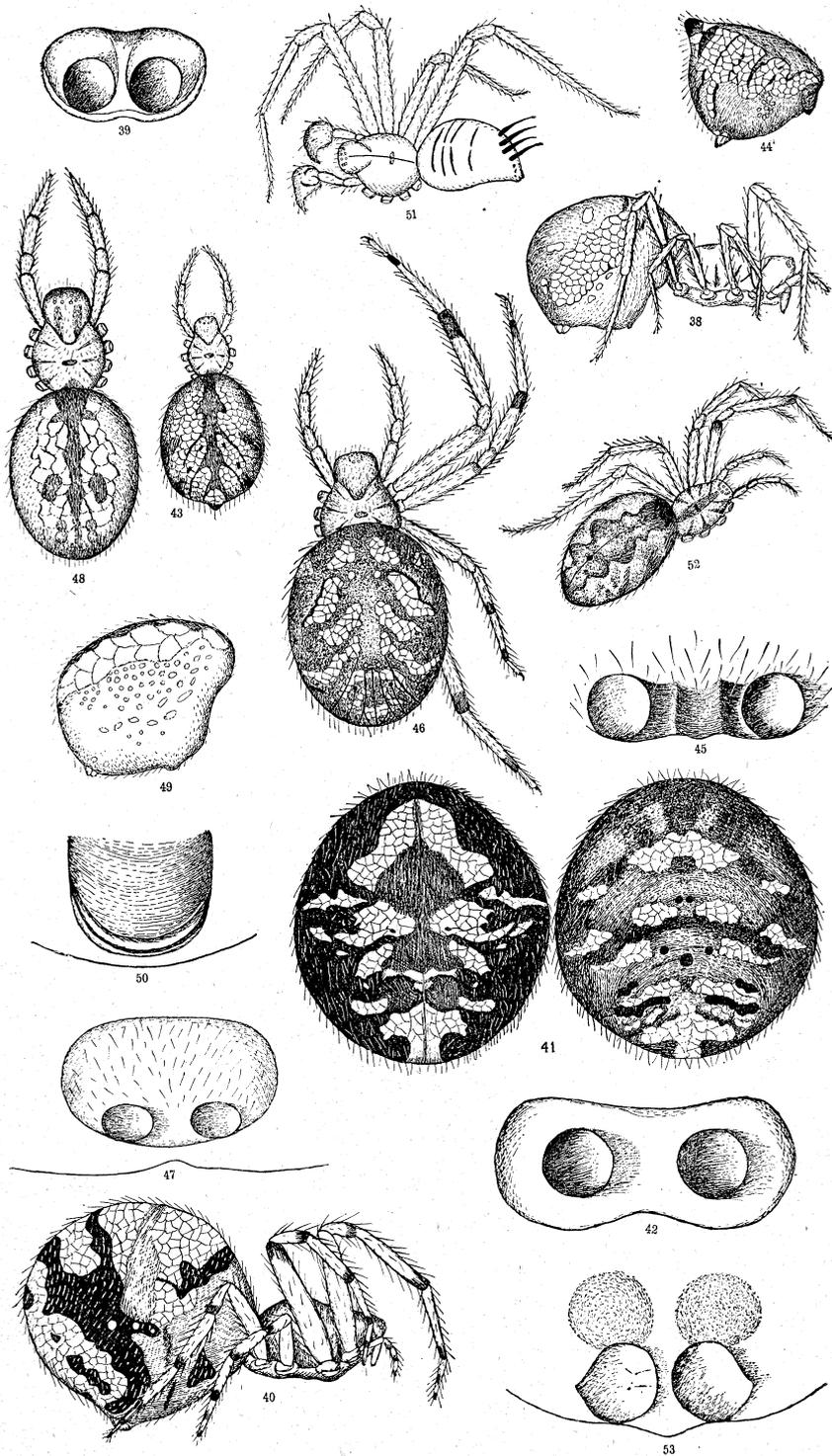
EXPLANATION OF PLATE XV.

- Fig. 22. *Heterica aresca*, Rainb., maxillæ and labium.
 „ 23. „ „ „ ♀
 „ 24. *Argyrodus argentata*, Rainb., abdomen.
 „ 25. „ *argentiopunctata*, Rainb., palpus ♂
 „ 26. „ „ „ „ abdomen.
 „ 27. „ „ „ „ epigynum.
 „ 28. „ *musgravei*, Rainb., abdomen.
 „ 29. „ *flavipes*, Rainb., abdomen ♂
 „ 30. „ „ „ ♀
 „ 31. *Theridion decoratum*, L. Koch, palpus ♂
 „ 32. „ „ „ „ apex
 „ 33. „ *fuscomaculatum*, Rainb., ♀
 „ 34. „ „ „ „ epigynum.
 „ 35. „ *albodecoratum*, Rainb., ♀
 „ 36. „ „ „ „ epigynum.
 „ 37. „ *niphocosmum*, Rainb., abdomen (a, viewed
 from above ; b, posterior extremity ; c, side view)



EXPLANATION OF PLATE XVI.

- Fig. 38. *Theridion dianaphum*, Rainb., ♀
 „ 39. „ „ „ epigynum.
 „ 40. „ *ventricosum*, Rainb., ♀
 „ 41. „ „ „ abdomen; two
 figures showing variation.
 „ 42. *Theridion ventricosum*, Rainb., epigynum.
 „ 43. „ *gibbum*, Rainb., ♀
 „ 44. „ „ „ abdomen in profile.
 „ 45. „ „ „ epigynum.
 „ 46. „ *giraulti*, „ ♀
 „ 47. „ „ „ epigynum.
 „ 48. „ *nivosum*, „ ♀
 „ 49. „ „ „ abdomen in profile.
 „ 50. „ „ „ epigynum.
 „ 51. „ *spinigerum*, Rainb., ♂
 „ 52. „ *fuscodecoratum*, Rainb., ♀
 „ 53. „ „ „ epigynum.



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ERRATUM.

Page 43—For SYMPHODES DIANIPHUS read SYMPHANODES DIANIPHUS