# STUDIES IN TASMANTAN SPIDERS. 

## Part I.

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Plates IV. to X. and Twenty Text Figures.
(Read 11th October, 1926.)

The following paper deals with material collected in both the north and the south of Tasmania. Six new species ar described. Among the Avicularidx, two very interesting genera are represented, namely Migas and Hexathele, both of which are typical New Zealand genera.

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Family AVICULARIDE.
Sub-Family Migine.
Genus Migas (L. Koch).
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The type of this genus is Migas paradoxus (L. Koch) (1), found in New Zealand. A mutilated spider collected by the Horn Scientific Expedition to Central Australia (2), and identified by H. R. Hogg as probably Migas paradoxus, is the only specimen of this genus recorded from Australia. Owing to the imperfect condition of the specimen it could not be identified with certainty, and considerable doubt exists as to whether the genus does occur in Australia. 'Goyen (3) has described other New Zealand species belonging to this genus, and recently Berland (4) has recorded a specimen from New Caledonia. It is therefore of interest to record the occurrence of the genus Migas in Tasmania. The following description deals with a new species from this State. The name Migas nitens is suggested on account of the shiny appearance of the cephalothorax.

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Migas nitens (sp. nov.).
                        Plate IV.
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The description of the female is as follows:Measurements in millimetres (excluding the falces).
Total Length . . . . . . . . . . . . . . . . . . . . 10.0
Length of Cephalothorax . . .. .. .. .. .. .. . 4.0
Breadth of Cephalothorax (across fovea) .. 3.7
Length of Abdomen .. .. .. .. .. .. .. .. 7.1
Breadth of Abdomen . . . . . . .. .. .. .. .. 5.4

| Leg | Coxa | Trochanter <br> and Femur | Patella <br> and Tibia | Metatarsus <br> and Tarsua | Total |
| :---: | :---: | :---: | :---: | :---: | ---: |
| 1 | 1.6 | 3.4 | 3.0 | 2.1 | 10.1 |
| 2 | 1.4 | 3.0 | 2.8 | 1.8 | 9.0 |
| 3 | 1.2 | 2.8 | 2.6 | 2.3 | 8.9 |
| 4 | 1.6 | 3.9 | 4.3 | 3.0 | 12.8 |
| Palpi | 1.5 | 2.3 | 1.9 | 1.2 | 6.9 |

Cephalothorax: Shining, brown, hairless, moderately arched, slightly longer than broad.

Pars Cephalica: Gently ascending. A pair of conspicuous erect bristles stand one on each side of the centre line in front of the fovea. A row of three or four shorter bristles in single file extends from the ocular area about a third of the way along the middle line towards the fovea. The segmental groove is distinct, and near its posterior end on each side is a deep pit.

Ocular Area: Dark brown, more than twice as broad as it is long. Immediately behind each front median eye there is a long bristle curved forward over the eye, while rising from a point between these eyes is a single long erect bristle.

Clypeus: Wide, the front median eyes being removed from the margin by a distance equal to twice the diameter of one of these eyes. The surface is covered with fine transverse wrinkles, and there is a tuft of bristles before the front median eyes.

Pars Thoracica: Arched and sloping steeply down from the thoracic fovea to the posterior margin; devoid of hairs and bristles; radial grooves not well defined.

Thoracic Fovea: Deep, strongly recurved, and elevated so that its rim is not much lower than the highest point of the pars cephalica.

Marginal Band: Slightly reflexed, dark brown in colour. No distinct fringe is present, but a few isolated small hairs are visible.

Eyes: The eye space occupies more than half the width of the front of the cephalothorax. The eyes are in two rows. If viewed from above the front row appears straight, but viewed from in front it is seen to be procurved. The
rear row is recurved and shorter than the front row. The front median eyes are on a slight elevation. They are round and separated from each other by a distance equal to their individual diameter. The front laterals are poised obliquely and are the largest of the group. Each has a long diameter equal to slightly more than one and a half times the diameter of a front median eye, and the same distance separates its nearest point from its front median neighbour. The rear laterals are the smallest of the group, and each has a long diameter equal to about three-quarters that of a front median eye. The long diameter of a rear median eye is a little less than one and a half times the diameter of a front median eye. The rear median eyes are separated from each other by three and a half times the diameter of a front median eye, and each from the nearest point of its lateral neighbour by a little more than half the diameter of a front median eye. The distance separating the nearest points of the front and rear laterals of the one side is about equal to the diameter of a front median eye. The lateral eyes are on prominent black mounts, which make them appear larger and nearer to the other eyes than they actually are. (See Fig. 1.)


Fig. 1. Migas nitens (sp. nov.). Eyes in female.
Legs: Relative lengths, 4, 1, 2, 3; shining, concolorous: with the cephalothorax, no scopula present. Femoral segments 1 and 2 are bowed. Tibial and metatarsal segments 1 and 2 armed with powerful curved spines on both the inner side and the outer side. On the outer side the spines are arranged in an irregular double row. (See Fig. 2.) The number and arrangement of the spines vary in different individuals of this species. Legs 3 and 4 are not very spiny, there being only one small spine on the outer side of the patella, and one on the outer side of the metatarsus of 3 , and three small spines on the outer side of the metatarsus of 4. In the case of legs 1,2 , and 3 , the superior tarsal claws
have a single tooth, while leg 4 has two teeth on the outer superior claw and none on the inner claw. All the inferior claws are small and bare.


Palpi: Concolorous with the legs; femoral segment bowed. On the inner side of the patella there is a single large spine pointing downwards and inwards. (See Fig. 3.) The tibia usually has two short spines on the inner, and two on the outer side, while the tarsus is armed on both sides with powerful curved spines resembling those on legs 1 and 2. The single tarsal claw has one or two pectinations near the base.

Falces: Short, dark brown, shining; the horizontal suiface is almost bare, the front surface clothed with bristles but without a rastellum. Fang well curved, strong, serrated, and reinforced with ridges as in Heteromigas dovei (Hogg). There are three large teeth on inner edge of furrow and six smaller teeth on the outer edige; no intermediate teeth are present.

Maxillx: Light brown in colour; furnished with a beard of long reddish hairs along the inner margin, and with short spines extending over a somewhat central area from heel to apex.

Labium: A darker brown in colour than the maxillæ; arched, apex rounded, furnished with about 20 short spines and with long bristle-like hairs; separated from the sternum by a groove.


Fig: 3. Migas nitons (sp. nov.). Left palpus of female from above.
Sternum: Light brown, broadly pyriform, arched, thinly clothed with short black hairs.

Sigilla: Posterior pair are large and about as far from the margin as from the centre. Other sigilla are small, indistinct, and marginal.

Abdomen: Ovate; anterior portion overhangs the base of the cephalothorax; upper surface dark brown, thinly clothed with short hairs; under surface lighter in colour.

Spinnerets: Short, stout, yellowish, hairy. In the case of the superior pair the first joint is twice the length of the second, while the third joint is very small and dome shaped. Inferior pair are twice as long as broad, and separated by once their individual diameter.

Locality: Prince of Wales Bay, Derwent Park; and Correlián Bay, New Town. 30th December, 1925.

Field Notes: At both the localities mentioned above the nest was made in an embankment near the shore. The burrow, which is only about 40 mm . deep, goes down at a


slight incline from the vertical. It is lined throughout with a thick strong layer of silk, and closed with a neatly-fitting lid. Several burrows were found to be sealed up. On opening them the spider was discovered guarding her eggs. The latter, about ten in number, are not enclosed in a sac, but simply grouped together and fastened to the side of the burrow with a few strands of silk. They are placed near the bottom of the nest. (See Plate IV., Fig. 2.)

## Sub-Family Ctenizinfe.

Genus Arbanitis, L. Koch.
Arbanitis scaurus, sp. nov.
Plate V.
The description of the male is as follows:-
Measurements in millimetres (excluding the falces).
Total Length .. .. .. .. .. .. .. .. .. .. 7.5
Length of Cephalothorax .. .. .. ... .. .. 6.5
Breadth of Cephalothorax .. .. ... .. .. .. .. 6.5
Length of Abdomen
Breadth of Abdomen

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Les | Coxa | Trochanter <br> and | Patelia <br> and <br> Tibia | Metatarsus <br> and Tarsus | Total |
| 1 | 3.5 | 8.0 | 8.0 | 10.0 | 29.5 |
| 2 | 3.0 | 8.0 | 8.0 | 9.0 | 28.0 |
| 3 | 2.5 | 6.5 | 6.0 | 8.0 | 23.0 |
| 4 | 3.0 | 8.5 | 9.5 | 11.0 | 32.0 |
|  |  |  | 5.5 | Tarsus |  |
| Palpi | 3.0 | 4.5 | 5.5 | 14.5 |  |

Cephalothorax: Obovate, dark brown, moderately clothed with long, yellowish, down-lying hair.

Pars Cephalica: Arched, gently ascending; segmental groove well marked; devoid of hair along the middle line, but provided with a row of black bristles.

- Ocular Area: About one and a half times as broad as it is long, arched, raised, and with a group of eight or nine black bristles in front.

Clypeus: Narrow, hyaline, sloping forward.
Pars Thoracica: Arched, moderately broad, gently slop-
ing to the rear; radial grooves well marked.
Thoracic Fovea: Deep and straight.
Marginal Band: Very narrow, fringed with coarse black bristles.

Eyes: In two rows; front row strongly procurved, rear row recurved. The front median eyes are round and somewhat raised. They are separated from each other by a space equal to slightly less than one-third of their own individual diameter, and from the front laterals by about twice this distance. Both the front and the rear laterals are elliptical and poised obliquely. The rear laterals are slightly smaller than the front laterals, which have a long diameter equal to about one and a third times the diameter of a front median eye. The distance which separates the lateral eyes of the same side is equal to that which separates the front laterals from the front medians. The long diameter of the rear medians is slightly less than the diameter of the front medians. They are close to the rear laterals, but do not actually touch them. (See Fig. 4.)


Fig. 4. Arbanitis scaurus (sp. nov.). Eyes in male.
Legs: Relative lengths, 4, 1, 2, 3. Concolorous with the cephalothorax, clothed with light brown hairs and coarse black bristles. Tarsi I. and II. are devoid of spines, but possess a scopula which extends half way along the metatarsus. All the metatarsi and tibiæ are bespined. Metatarsus I. is slightly bowed. Tibia I. is armed with two apophyses near the apex. The upper one is broadly bifurcated, one prong consisting of three short blunt teeth close together, while the other prong consists of a single sharp tooth bent at right angles. Between the two prongs there is a short spine. The lower apophysis is longer than the upper one and ends in a row of four blunt teeth curved inwards. (See Fig. 5.) On the upper side of each leg, particularly on the tibia, metatarsus, and tarsus, between the bristles, there is an irregular row of small tubercles. In the top of each tubercle there is a cup-like depression from the centre of which rises a thread-like hair, longer and finer than any of the other hairs on the legs. It was noticed that in a freshly killed spider these fine hairs were swayed by the slightest movement of the air, whereas the other hairs remained motionless.

The superior tarsal claws have seven teeth, five teeth being close together near the base of the claw, and two teeth on the side of the claw towards the apex. Inferior claw is bare.


Fig. 5. Arbanitis scaurus (sp. nov.). Apex of tibia I. of male from
Palpi: About half the length of leg I., hairy, concolorous with the legs; tibial segment very much inflated and furnished with an apophysis thickly covered with spines. Bulb pyriform, bilobed, shining, produced into a very short, flat. and twisted style. (See Fig. 6.) The tarsal segment is small.

Falces: Small, black, clothed with black bristles; furnished with a well formed rastellum. The fang is curved, shining, and dark reddish brown in colour. The inner margin of falx sheath is armed with teeth, the outer margin thickly fringed with long yellow hair.

Maxillæ: Dark brown, inner edge fringed with yellow hair. corner.

Labium: Submerged; slightly longer than broad, a few black bristles at the apex, but no spines are present.

Sternum: Pyriform, dark brown, clothed with short bristles.

Sigilla: Posterior pair not large and placed near the margin. The others are indistinct.


Fig. 6. Arbanitis scaurus (sp. nov.). Palpus of male.
Abdomen: Dark brown, clothed with long black slender setæ and short yellowish hairs on the upper surface. The lower surface is similarly clothed, but the seta are short. On the upper surface is an indistinct pattern resembling that on the female (see below).

Spinnerets: Short, yellowish-brown, hairy. The first joint of the superior pair is the longest and equal in length to the other two combined. Inferior pair very small, cylindrical, and separated from each other by a space equal to once their individual diameter.
'The description of the female is as follows:-
Measurements in millimetres (excluding the falces).
Total Length . . . . . . . . . . . . .. .. .. .. 21.0
Length of Cephalothorax .. .. .. .. .. .. 10.0
Breadth of Cephalothorax .. .. .. .. .. .. .. 7.5
Length of Abdomen .. .. .. .. .. .. .. .. 11.0
Breadth of Abdomen .. .. .. .. .. .. .. .. .. 7.5
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| Leg | Coxa | Trochanter <br> and Femur | Patella <br> and Tibia | Metatarsus <br> and Tarsus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4.5 | 9.0 | 8.0 | 6.5 | 28.0 |
| 2 | 4.0 | 7.5 | 7.0 | 6.0 | 24.5 |
| 3 | 3.5 | 6.0 | 6.0 | 5.0 | 20.5 |
| 4 | 4.0 | 8.0 | 10.0 | 8.0 | 30.0 |
|  |  |  |  | Tarsus |  |
| Palpi | 4.0 | 6.5 | 6.0 | 3.5 | 20.0 |

Cephalothorax: Obovate, dark brown, moderately clothed with long yellowish down-lying hair as in the male.

Pars Cephalica: Arched, gently ascending, segmental groove distinct. Along the middle line from eye space to fovea there is a row of black bristles standing out from a band of yellow hair, on each side of which there is a bare strip.

Ocular Area: One and two-third times as broad as it is long, raised, arched, and provided with a few short bristles in front.

Clypeus: Wide, hyaline, sloping forward, transversely wrinkled.

Pars Thoracica: Arched, moderately broad, sloping to the rear, radial grooves distinct.

Thoracic Fovea: Large, deep, and straight.
Marginal Band: Wide, hyaline, undulating, fringed with black bristles.

Eyes: In two rows. Front row strongly procurved, rear row recurved. The round front median eyes are somewhat raised. They are separated from each other by a space equal to a little more than two-thirds of their individual diameter, and from their lateral neighbours by a space nearly equal to their individual diameter. The front and rear laterals are elliptical, poised obliquely, and separated from each other by a space equal to the long diameter of a rear lateral. The front laterals are the largest of the group, their long diameter being equal to twice the space separating the front median eyes. The rear medians are the smallest of the group, being slightly smaller than the front medians. They are separated by a space equal to three times that which separates the front median eyes. They are close to but do not touch their lateral neighbours. (See Fig. 7.)

Legs: Relative lengths, 4, 1,2,3; light brown in colour. Tarsus I. and three-quarters of metatarsus I. thickly scopulated. Tarsus II. and half metatarsus II. also thickly scopulat-
ed. The other tarsal and metatarsal segments not scopulat-
ed. Tarsus I. is devoid of spines, tarsus II. has two small
spines on the outer side. The other tarsi and all metatarsi and tibiz are well armed with spines. Patella III. 'has three short spines on the outer side. All other segments are


Fig. 7. Arbanitis scaurus (sp. nov.). Eyes in female.
devoid of spines. The legs are lightly clothed with coarse black bristles and a little hair similar to that ou the cephalothorax. The fine thread-like hairs noticed in the male are also present in the female. The superior tarsal claws have four teeth, a large tooth and a minute tooth being near the base of the claw, and two teeth on the side of the claw towards the apex. The inferior claw is bare.

Palpi: Long, being almost equal in length to the third pair of legs. Similar in colour and clothing to the legs. Tarsus is thickly scopulated. The single tarsal claw has a minute tooth near the base, and close to it a large tooth separated by a space from two medium-sized teeth.

Falces: Black, strong, clothed with black bristles in front and provided with a rastellum. The fang is well curved, long, shining, and black. Inner edge of falx sheath armed with a row of eight large teeth, outer edge provided with a thick fringe of long yellowish hair. There is an intermediate row of six minute teeth near the base. The number and arrangement of the teeth vary in different individuals.

Maxillæ: Dark brown, hairy, inner edge fringed with long reddish brown hair. A few small spines are placed at the lower inner angle.

Labium: Submerged, hairy, rounded in front, devoid of spines.

Sternum: Pyriform, dark brown, clothed with black bristles, curved in front round the base of the labium.

Sigilla: Posterior pair are not very large. They are placed near the margin. The others are indistinct.

Abdomen: Obovate, yellowish brown underneath, dark brown above. Clothed with short hairs interspersed with
isolated long hairs. On the sides are a few scattered dark brown spots; from the centre of each spot projects a long hair. Or. the upper surface a faint pattern is visible (more distinct in alcohol). It consists of a light brown central spot near the anterior end, with a smaller spot on each side. Behind these are ten faint bars arranged five on each side.

Spinnerets: Short, yellowish brown, hairy. First joint of the superior pair slightly longer than the second and third joints combined. The second joint is twice the length of the third joint, which has a rounded tip. The inferior pair are very small and separated by a space equal to once their individual diameter.

Locality: Westmoreland Falls, Mole Creek. 5th April, 1926.

Observations: Rainbow and Pulleine (5) have given a table in elucidation of the known Australian species of the genus Arbanitis (L. Koch). The table includes one Tasmanian form, namely Arbanitis maculipes (Hogg) (6), and eleven other species.

Field Notes: The male of Arbanitis scaurus was found under a log. The female makes a burrow in the ground, in rotten logs, or in fern stumps. The burrow is lined with silk and is not provided with a lid.

Sub-Family Diplurine.
Genus Atrax (O. P. Cambr.)
Atrax venenatus, sp. nov.

## Plate VI.

The description of the male is as follows:-
Measurements in millimetres (excluding falces).
Total Length .. .. .. .. .. .. .. .. .. .. 16.0
Length of Cephalothorax .. . . . . .. .. .. $\quad 8.0$
Breadth of Cephalothorax .. .. .. .. .. .. 9.0
Length of Abdomen .. .. .. .. .. .. .. ..
Breadth of Abdomen .. $\quad . \quad . \quad \cdots \quad \cdots \quad . . \quad . \quad . \quad$.

| Leg | Coxa | Trochanter <br> and Femur | Patella <br> and Tibia | Metatarsus <br> and Tarsus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.6 | 7.0 | 7.0 | 7.0 | 24.6 |
| 2 | 2.9 | 6.5 | 6.5 | 6.5 | 22.4 |
| 3 | 2.5 | 5.9 | 5.5 | 6.9 | 20.8 |
| 4 | 3.0 | 6.7 | 6.7 | 8.0 | 24.4 |
|  |  |  |  | Tarsus |  |
| Palpi | 3.2 | 4.0 | 4.0 | 1.3 | 12.5 |

Cephalothorax: Very dark chocolate brown in colour, arched, shiny, longer than broad.

Pars Cephalica: Moderately high, sloping gently to the thoracic fovea, lightly clothed with a few scattered black hairs. A median row of bristles extends from the eye space to the fovea, and on each side of this is a shorter parallel row. Segmental groove is distinct.

Ocular Area: Black, raised, twice as broad as long.
Clypeus: Moderately wide, transversely wrinkled, hyaline, furnished with a tuft of short bristles below the front median eyes.

Pars Thoracica: Arched, sloping gently to the rear; radial grooves deep and well defined.

Thoracic Fovea: Deep and strongly procurved.
Marginal Band: Broad, reflexed, brown, fringed with a few isolated hairs.

Eyes: Arranged in two rows. The front row is procurved and the rear row is recurved. The front median eyes are the smallest of the group, and are separated by a space equal to one and one-third times their individual diameter. The long diameter of a front lateral eye is equal to twice the diameter of a front median eye. A space equal to half the diameter of a front median eye separates each front lateral from its median neighbour. Each rear median eye has a long diameter slightly greater than the diameter of a front median eye. The long diameter of a rear lateral is equal to one and one-third times the diameter of a front median eye. The rear median eyes are separated from each other by a space slightly more than three times the diameter of $s$ front median eye. A space equal to the long diameter of a rear median eye separates the front and rear laterals. (See Fig. 8.)


Fig. 8. Aitax venewaius (sp. nodi). Eyes in male.


Legs: Relative lengths, 1, 4, 2, 3; concolorous with the cephalothorax, tapering, moderately strong. No true scopula is present. All the tarsal, metatarsal, and tibial segments are armed with spines. In the case of tibia $I$. the whole length of the under surface is heavily spine, likewise the basal half of the under surface of tibia II. (See Fig. 9.)


Fig. 9. Atrax venenatus (sp. nov.). Tibia II. of male from underneath
One or two spines are present on femoral segments $I$. and II., also on patellæ I. and II. The superior tarsal claws are provided with a row of about 13 teeth running diagonally across the claw. The inferior claw is small and bare.

Palpi: Concolorous with the legs, rather short and hairy. The femoral segment is bowed and possesses one or two spines at the apex on the upper side. Patella is also armed
with one or two curved spines. The tibia is furnished with about nine spines, five of which are near the apex. The tarsus is deeply cleft. The genital bulb is pyriform, and is produced into a long, thin, somewhat flattened style, which is slightly twisted and ends in a spatulate point. (See Fig. 10.)


Fig. 10. Atrax venenatus (sp. nov.). Palpus of maie.
Muxille: Brown, hairy, most of the surface covered with small spines, inner fore angle ends in an obtuse point.

Labium: Free, concolorous with the maxille, arched, as broad as long, densely covered with small spines, provided in front with long hairs and bristles.

BY Y. v. HICEMAN, R.Se. (TAS.).
Sternum: Shield-shaped, slightly darker in colour than the maxillæ, clothed with black bristles.

Sigilla: Large and distinct. The anterior pair marginal, the other two pairs removed from the margin.

Abdomen: Ovate, brownish black in colour, clothed with long black bristles and short black hairs. The anteri.rr portion slightly overhangs the base of the cephalothorax.

Spinnerets: Brownish yellow, short and hairy. The superior pair tapering, first and third segments equal in length and twice as long as the second segment. Inferior spinners small, cylindrical, and about once their individual transverse diameter apart. Anal tubercle is conspicuous.

The description of the female is as follows:-
Measurements in millimetres (excluding the falces).
Total Length . . . . . . . .. . . . . . . . .. .. 18.0
Length of Cephalothorax .. .. .. .. .. .. 7.5
Breadth of Cephalothorax . . . . . . . .. .. 6.5
Length of Abdomen . . . . . . . . . . . . . . 11.5
Breadth of Abdomen .. .. .. .. .. .. .. 9.5

| Leg | Coxa | Trcchanter <br> and Femur | Patella <br> and Tibia | Metatarsus <br> and Tarsus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.0 | 6.0 | 6.0 | 6.0 | 21.0 |
| 2 | 2.7 | 5.5 | 5.5 | 4.5 | 18.2 |
| 3 | 2.5 | 4.5 | 4.5 | 4.5 | 16.0 |
| 4 | 2.5 | 6.0 | 5.0 | 6.0 | 19.5 |
|  |  |  |  | Tarsus |  |
| Palpi | 3.0 | 4.5 | 3.0 | 3.0 | 13.5 |

Cephalothorax: Very dark brown, almost black in colour, shining, slightly longer than broad, clothed with a few black hairs scattered over the surface.

Pars Cephalica: Raised, arched, sloping towards the thoracic fovea; furnished with a median row of long thin erect bristles extending from the eye space to the fovea, and on each side of this median row there is a shorter parallel row, as in the male.

Ocular Area: Twice as bread as long, slightly raised, and gently arched. A group of bristles, which slope forward, occupies the space between the rear median eyes.

Clypeus: Narrow, of a vitreous greyish tint, furnishod with a tuft of black bristles below the eyes; one long bristle stands out conspicuously from a point in front of and between the front median eyes.

Pars Thoracica: Broad, indented on its rear margin, radial grooves distinct and deep.

Thoracic Fovea: Deep and strongly procurved.
Marginal Band: Narrow, slightly reflexed, yellowish brown, lightly fringed with fine hairs.

Eyes: Front row slightly procurved, rear row recurved. The round front median eyes are the smallest of the group. They are separated by a space equal to nine-eignths of their individual diameter. The elliptical front laterals are poised obliquely. They are the largest of the group. Each has a long diameter almost twice-the diameter of a front median eye, and each is separated from its median neighbour by a space equal to the diameter of the latter and from the corresponding rear lateral by three-quarters of that distance. The long diameter of each rear median is equal to nineeighths of the diameter of a front median eye. The distance between the rear median eyes is equal to three and a half times that between the front median eyes. Each rear median eye is separated by a space equal to one-third of its own long diameter from its lateral neighbour. The long diameter of a rear lateral is slightly greater than that of a rear median eye. (See Fig. 11.)


Fig. 11. Atrax venenatus ( $s p$ nov.). Eyes in femsle.
Legs: Very dark brown, moderately strong, tapering, clothed with long black bristles and hairs. Relative lengths, 1, 4, 2, 3. All the tarsi and metatarsi are bespined. Tibia I., II., and IV. have each a single spine on the under side near the distal end. Tibia III, has five spines on the outer side, two on the inner. There are four spines on the outer side of patella III., near the apex. The femoral segments are devoid of spines. Superior tarsal claws have a row of eight pectinations running diagonally across the claw. The inferior claw has two minute teeth near its base.

Palpi: Short, concolorous with legs, clothed with black bristles and hairs. Tarsal segment has five spines on the
inner side, and three on the outer side. Tibia has two spines on the under side near the apex. The other segments ase devoid of spines. No true scopula is present. The single tarsal claw has a diagonal row of eight pectinations.

Falces: Concolorous with cephalothorax, strong, clothed with black bristles and hairs. There is no rastellum. Fang is well curved and reddish brown in colour. Outer margin of falx sheath furnished with a row of ten teeth, inner margin with nine, while there is also an intermediate row of thirteen running the whole length of the furrow.

Maxillæ: Brown, arched, divergent, hairy, the inner apical angle ends in an obtuse point. The full length of the inner surface is studded with small spines, which are especially numerous at the base.

Labium: Truncate in front, as broad as long, thick!y studded with small spines and clothed with long brown hairs.

Sternum: Shield shaped, brown, clothed with black bristles, excavated in front round the base of the labium.

Sigilla: Large and distinct, the anterior pair marginal, the others removed from the margin.

Abdomen: Ovate, brownish black, clothed with long black bristles ard short black hairs. The base of the abdomen slightly overhangs the cephalothorax. In alcohol a faint pattern is seen. This takes the form of three very fine diagonal stripes on each side.

Spinnerets: Short, clothed with yellowish brown hairs. The superior pair have the first joint the longest, the second joint the shortest, while the third joint is slightly shorter than the first joint. The inferior pair are short, cylindrical, with rounded apices and separated from each other by a space equal to once their individual diameter.

Locality: New Town Creek, Hobart. 22nd December, 1925.

Field Notes: This spider is widely distributed in Tasmania. In the south I have taken specimens at the Cascades, at Lenah Valley, across the Derwent at East Risdon, and at New Town; while in the north I have found it at Trevallyn. Mr. A. L. Meston, M.A., was good enough to give me a male specimen, which he took on Ben Lomond, at an altitude of 4,300 feet. The spider is generally found in shady sitaations, where it constructs a silken tube under stones, among fallen leaves, twigs, or moss. The tube is frequently branched, and at the opening it is sometimes expanded into a network
of threads. Like other members of the genus Atrax, the female is of a pugnacious disposition, and strikes viciously when a collecting tube is brought near, while glistening drops of a clear liquid exude from the pore at the tip of the fang. This habit suggested the specific name venenatus. Adult specimens show considerable variations in size, some being larger and some smaller than the type specimen described above.

Atrax pulvinator, sp. nov.
Plate VII.
The description of the female is as follows:Measurements in millimetres (excluding the falces). Total Length
Length of Cephalothorax .. .. .. .. .. .. 7.0
Breadth of Cephalothorax . . . . . .. .. .. 6.0
Length of Abdomen . . .. . . . . . . . .. .. 11.0
Breadth of Abdomen9.0

| Leg | Coxa | Trchanter <br> and Femur | Patella <br> and Tibia | Metatarsus <br> and Tarsus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.0 | 5.5 | 4.5 | 3.7 | 16.7 |
| 2 | 2.5 | 4.5 | 4.0 | 3.3 | 14.3 |
| 3 | 2.5 | 4.5 | 3.5 | 3.0 | 13.5 |
| 4 | 2.8 | 5.5 | 5.0 | 4.5 | 17.8 |
|  |  |  |  | Tarsus |  |
| Palpi | 3.0 | 4.0 | 3.0 | 2.0 | 12.0 |

Cephalothorax: Brown, shining, slightly longer than broad.

Pars Cephalica: Arched, well elevated, and sloping steeply to the thoracic fovea; smooth except for a few isolated hairs and a median row of fine bristles running from the eye space to the fovea. Segmental groove well defined.

Ocular Area: Two and a half times as broad as it is long, slightly raised, furnished in front with a tuft of stiff bristles. A long conspicuous bristle stands between the front median eyes and a few shorter ones behind the eye space.

Clypeus: Hyaline, transversely wrinkled, indented at the middle, moderately brcad.

Pars Thoracica: Broad, somewhat depressed, indented at its rear margin, radial grooves distinct.

BY V. V. IUCKMAN, B.Sc. (TAS.).
Thoracic Fovea: Deep and strongly procurved.
Marginal Band: Broad, slightly reflexed, fringed with a few long hairs.

Eyes: In two rows; rear row recurved and a little longer than the front row, which is slightly procurved. The round front median eyes are on a slight elevation, and separated from each other by one and a quarter times their individual diameter. The front laterals are the largest of the group, and have a long diameter equal to one and two-thirds the diameter of a front median eye. They are poised obliquely, and each is separated from its front median neighbour by a space equal to half its own long diameter and from its rear lateral neighbour by slightly more than this space. The long diameter of a rear lateral eye is equal to the diameter of a front median eye. The rear median eyes are separated from each other by arate front medians from each two-thirds that which other. (See Fig. 12.)


12 Atrax pulvinator (sp. nov.). Eyes in female.
Legs: Relative lengths, 4, 1, 2, 3. Concolorous with cephalothorax, clothed with long black bristles and brown hairs. No scopula is present on any of the legs. All the tarsi and metatarsi are lightly armed with spines. Tibiæ I. and II. possess no spines, but III. and IV. are lightly bespined. On the outer side of patella III. there is a group of ten short spines and one or two on the outer side of patelia IV. The superior tarsal claws of legs I. and II. have five teeth in a diagonal row across the claw, and the inferior claw has two teeth. While for legs III. and IV. the superior tarsal claws have one large tooth and three minute teeth, and the inferior claw is bare. Considerable variations in the pectination of the tarsal claws were found to exist in different individuals.

Palpi: Brown, moderately long, the tarsal segment is armed with four spines. The single claw has three teeth close together near the base.

Falces: Large, strong, dark-brown, clothed with stiff bristles. There is no rastellum. Fang is well curved. Inner margin of falx sheath armed with five teeth, outer margin with six. Three small intermediate teeth are also present near the base.

Maxillx: Light brown, arched, heel rounded; the whole length of the inner area is lightly covered with spines, and coarse hairs. The inner edge is fringed with light brown hairs.

Labium: Light brown, arched, as broad as long, trumcated in front and furnished with numerous short spines and long hairs.

Sternum: Brownish yellow, broad, somewhat shieldshaped, clothed with bristle-like hairs. In front it is curved round the base of the labium and terminates on each side in a point.

Sigilla: First and second pairs are sub-marginal, the third pair are large and placed midway between the margin and the centre line.

Abdomen: Obovate, dark brown, hairy.
Spinnerets: Yellowish brown, hairy. The superior pair are tapering, and about one quarter the length of the cephalothorax; the second and third joints are equal in length, the first joint is the longest, being equal in length to the other two combined. The inferior pair are small, cylindrical, with rounded apices and separated by about once their individual transverse diameter. Anal tubercle prominent.

Locality: Cascades, Hobart. 25th December, 1925.
Field Notes: The burrow of this spider was found in soft soil near the bank of a creek. It was about 180 mm . deep and 15 mm . in diameter, and went down almost vertically. It was lined inside with a fairly strong silken tube. This was not attached very firmly to the side of the burrow, and was easily removed. At the surface the silken tube ran along the ground for about 50 mm . underneath a bed of moss. When found the silken tube was closed up, but there was no sign of any lid. Two burrows were found; one contained a beautiful pillow-shaped egg sac, 25 mm . long and 15 mm . broad. This was attached by its four corners to the side of the silk tube just below the surface. (See Plate VII., Fig. 8.)



Genus Hexathele (Ausserer).

## Hexathele montanus, sp. nov.

Plates VIII. and IX.
The description of the male is as follows:-
Measurements in millimetres (excluding the falces).
Total Length
Length of Cephalothorax .. .. .. ... .. .. 8.5
Breadth of Cephalothorax .. .. .. .. .. .. 7.5
Length of Abdomen .. .. .. .. .. .. .. .. 8.5
Breadth of Abdomen .. . . . .. .. . . .. .. 6.0

| Leg | Coxa | Trochanter <br> and <br> Femur | Patella <br> and <br> Tibia | Metatarsus <br> and Tarsu | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4.0 | 8.5 | 9.0 | 11.0 | 32.5 |
| 2 | 3.5 | 8.0 | 9.0 | 11.5 | 32.0 |
| 3 | 3.3 | 7.0 | 8.5 | 12.0 | 30.8 |
| 4 | 3.3 | 9.0 | 10.0 | 14.0 | 36.3 |
|  |  |  |  | Tarsus |  |
| Palpi | 3.0 | 5.0 | 5.0 | 1.0 | 14.0 |

Cephalothorax: Black, slightly arched, nearly as broad as it is long; almost devoid of hairs.

Pars Cephalica: Not very high, sloping gently to the thoracic fovea. Segmental groove distinct.

Ocular Area: A little more than twice as broad as it is long, slightly arched.

Clypeus: Narrow, black, and provided with a tuft of a few short bristles in front of the median eyes.

Pars Thoracica: Broad, radial grooves well marked, rear margin slightly indented.

Thoracic Fovea: Small, deep, and straight.
Marginal Band: Narrow, fringed with long black bristles.

Eyes: In two rows. Viewed from above the front row is straight, and the rear row recurved. The round front median eyes are separated from each other by a space equal to one-third of their individual diameter, and from their lateral neighbours by the same distance. The front and rear laterals are poised obliquely and separated by a space equal to that which separates the front median eyes. The front laterals are the largest of the group and have a long diameter equal to one and a sixth times that of a front median eye. The long diameter of the rear laterals is equal to the diameter of a front median eye, while that of a rear median eye is
three-quarters of that length. The space separating the rear medians is equal to one and three-quarter times the diameter of a front median eye. (See Fig. 13.)


Fig. 13. Hexathele montanus (sp. nov.). Eyes in male.
Legs: Relative lengths, 4, 1, 2, 3 . Long, slender, and tapering; nearly black in colour, except the patellæ, which are brown. The tarsal segment of each leg has a divided scopula, which is not very dense. The division is occupied by a row of short setæ. The legs are well armed with spines on all the segments, except the coxæ, trochanters, and the under side of the femurs. Metatarsus I. is slightly thickened in the centre. Tibia I. is provided with a prominent curved spine rising from a small apophysis on the under side at the apex. (See Fig. 14.) The superior tarsal claws


Fig. 14. Hexathele montanus (sp. nov.). Tibia I. of male.
have a diagonal row of eleven pectinations and the inferior claw has two pectinations.

Palpi: Concolorous with legs, clothed with long black bristles, but devoid of spines, excent for a few on the upper
side of the femoral segment. The bulb is pyriform and is produced into a finely pointed style. The tibial segment is somewhat inflated in its basal half. (See Fig. 15.)


Fig. 15. Hexathele montanus (sp. nov.). Palpus of male.

Falces: Black, shining, clothed with bristles but without a rastellum. Inner edge of falx sheath armed with a row of about thirteen teeth; the outer edge provided with a fringe of reddish brown hair. Fang black, moderately long, and curved.

Maxillx: Dark brown, with a reddish brown beard along the inner edge. The inner fore corner terminates in a blunt prominence The heel is well rounded and furnished with spines.

Labium: Slightly longer than broad; dark brown at the apex, black near the base; sides nearly parallel, concave from apex to base, convex from side to side, apex rounded and furnished with $\AA$ few small spines and long black bristles. Several well marked creases across the base.

Sternum: Black, ovate, broadest between the second pair of coxæ, excavated in front round the base of the labium, clothed with black bristles and hairs.

Sigilla: Moderately large, about equal in size, and placed near the margin.

Abdomen: Obovate, black, with five pairs of faint yellow spots on the dorsal surface. (These spots are more distinct
in young specimens.) Clothed with long black bristles, each rising from a small tubercle. Lung covers yellowish. The front of the abdomen slightly overhangs the base of the cephalothorax.

Spinnerets: Six in number, dark brown in colour. The superior pair are 5 mm . long, and tapering. The third joint is the longest, being twice the length of the second joint and slightly longer than the first joint, which is divided at the rear, and has the appearance of being built up of two segments, but the dividing line is not continued right round the joint. The second pair are short, cylindrical, and rounded at the tip, equal in length to the second joint of the superior pair, and separated from each other by three times their own individual diameter. The third pair are about equal in length to the second pair, short, cylindrical, and concave at the tip. The concavity contains a sunken dome. They are situated outside the second pair, but close to them and a little nearer the front. Anal tubercle prominent.

> The description of the female is as follows:-
> Measurements in millimetres (excluding the falces).
> Total Length .. .. .. .. . . . .. .. .. .. 20.0
> Length of Cephalothorax .. .. .. .. .. .. .. 10.0
> Breadth of Cephalothorax .. .. .. .. .. .. 8.5
> Length of Abdomen . . . .. . . .. .. .. .. 11.0
> Breadth of Abdomen .. .. .. .. .. .. .. 8.5

| Leg | Coxa | Trochanter <br> and Femur | Patella <br> and Tibia | Metatarsus <br> and Tarsus | Total |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 1 | 4.5 | 8.5 | 9.25 | 9.5 | 31.75 |
| 2 | 4.0 | 8.0 | 8.50 | 8.0 | 28.50 |
| 3 | 3.5 | 7.0 | 8.00 | 8.5 | 27.00 |
| 4 | 4.0 | 9.0 | 9.50 | 11.0 | 33.50 |
|  |  |  |  | Tarsus |  |
| Palpi | 4.0 | 6.5 | 6.50 | 4.0 | 21.00 |

Cephalothorax: Black, moderately arched, longer than broad, almost hairless.

Pars Cephalica: Moderately high, much more elevated than in the male; segmental groove distinct. There is a row of four or five black bristles in a central line behind the eyes.

Ocular Area. About two and a third times as broad as it is long. Slightly arched.

Clypeus: Dark coloured, narrow, furnished with a few short bristles in front of median eyes.

Pars Thoracica: Broad, radial grooves distinct, indented on rear margin.

Thoracic Fovea: Small, deep, and straight.
Marginal Band: Narrow and lightly fringed with black bristles.

Eyes: In two rows. When viewed from above the front row is straight and the rear row recurved. The round front median eyes are separated from each other by a space equal to about two-thirds of their individual diameter and from their lateral neighbours by the same distance. The front and rear laterals are equal in size and have a long diameter about one and a third times the diameter of a front median eye. They are poised obliquely and separated by a distance equal to one-third of their long diameter. The rear median eyes are slightly larger in long diameter than the front median eyes; they are separated from each other by a space equal to four times that which separates the front median eyes and from the rear laterals by a space equal to slightly less than half that between the front median eyes. (See Fig.
16.)


Fig. 16. Hexathele montanus (sp. nov.). Eyes in female.
Legs: Relative lengths, 4, 1, 2, 3. Black, moderately long and tapering. The tarsi are all without a scopula. All the segments of the legs are bespined, except the coxæ, trochanters, and the under side of the femurs. The superior tarsal claws are armed with a diagonal row of about eleven pectinations. The inferior claw has two pectinations. The legs are clothed with black hairs and bristles.

Palpi: Concolorous with the legs and similarly armed and clothed. The single tarsal claw has about nine pectinations.

Falces: Black, large, and strong; clothed with bristles but without a rastellum. Fang well curved and long. Inner margin of falx sheath has a row of eleven teeth. The outer margin is thickly fringed with hair.

Maxillx: Dark brown with a thick fringe of reddish brown hairs along the inner margin. The inner fore corner is produced into a well marked prominence, but not to the same extent as in the male. Inner surface concave. Heel is rounded and furnished with a group of spines.

Labium: Slightly longer than broad, truncated in front, clothed with bristles and short spines, separated from the sternum by a well marked groove.

Sternum: Black, ovate, clothed with black bristles and hairs, excavated in front round the labium.

Sigilla: Moderately large, about equal in size and situated near the margin.

Abdomen: Obovate, black, clothed with long black bristles and faintly marked with five pairs of yellowish spots as in the male. Anterior portion overhangs the base of the cephalothorax. Lung covers yellow.

Spinnerets: Six in number. The superior pair 5.6 mm . long, tapering; the third joint is the longest, being slightly more than twice the length of the second joint, and one and a half times the length of the first joint, which is divided at the rear as in the male. The second pair of spinnerets are short, cylindrical, and equal in length to the second joint of the superior pair. They are separated by about four times their individual diameter. The third pair are slightly longer than the second pair, cylindrical, and end in a concave tip in which there is a sunken dome. They are situated outside the second pair, but close to them, and a little more th the front. Anal tubercle prominent. (Sce Plate IX., Fig. 11.)

Locality: Higgs' Track, Western Tiers, Chudleigh. 2nd April, 1926.

Observations: The genus Hexathele has not been recorded from Australia previously. It is a typical New Zealand genus (7).

Field Notes: Both the male and the female were found in burrows in a moss-covered, rotten log. One or two immature specimens were taken under stones. The burrows in the log seemed to have been made in cracks and crevices, which already existed. These the spider had lined with a thin layer of white silk. The opening to the burrow was not provided with a lid. The specimens were taken at an altitude of about 2,500 feet.

Family THERIDIIDE.
Genus Ariamnes, Thor.

## Ariainnes patersoniensis, sp. nov.

## Plate X .

The description of a single female specimen is as fol-lows:--

Measurements in m:llimetres.
Total Length .. .. .. . . . . .. . . . . . . . 16.7
Length of Cephalothorax .. .. .. .. . . 2.2
Breadth of Cephalothorax . . . . . . 1.0
Length of Abdomen .. .. . . . . . . . . 14.5
Breadth of Abdomen . . . . . . . . . . . . . 0.9

| Leg | Coxa | Tro- <br> chanter | Fcmar | Patelia | Tibia | Meta- <br> tarsu8 | Tarsus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| 1 | 0.4 | 0.4 | 5.9 | 0.6 | 2.1 | 5.2 | 1.4 | 16.0 |
| 2 | 0.4 | 0.2 | 3.2 | 0.5 | 2.0 | 2.1 | 1.1 | 9.4 |
| 3 | 0.2 | 0.2 | 1.8 | 0.4 | 0.9 | 1.0 | 0.8 | 5.3 |
| 4 | 0.3 | 0.3 | 5.3 | 0.6 | 3.6 | 4.3 | 1.7 | 16.1 |

Cephalothorax: Yellowish brown, arched, more than twice as long as broad, very narrow in front, broadest above the coxæ of legs II., and does not become appreciably narrower towards the rear, clothed with a few short isolated hairs.

Pars Cephalica: Raised, narrow, and only two-fifths of the total length of the cephalothorax. The segmental groove is distinct.

Ocular Area: Broader than long; the four median eyes occupy the corners of a raised area which is almost square in outline.

Clypeus: Yellow, deep, the distance from the front median eyes to the edge of the clypeus is equal to twice the space which separates the front median eyes. A few scattered hairs are visible.

Pars Thoracica: Arched, radial grooves distinct, but not deep, rear margin slightly indented.

Thoracic Fovea: Very indistinct.
Marginal Band: Narrow, yellow, not fringed with hairs.
Eyes: Front row strongly recurved and longer than the rear row, which is strongly procurved. The eyes of the front row are slightly larger than the corresponding eyes of the rear row. All the eyes except the front laterals are mounted on black rings. The space between the front medians is
equal to once their individual diameter, and is slightly greater than the space between the rear medians. The front and rear laterals of the same side just touch each other. The space which separates the rear medians from the rear laterals is equal to about half the diameter of a front median eye, and the same distance separates the front medians from the front laterals.

Legs: Relative lengths, 4, 1, 2, 3; slender, lightly clothed with stiff, straight bristles. The legs are yellow in colour except the tips of all the tarsi and the femur, patella, and tibia of leg. I., which are brown, and metatarsus I., which is very pale yellow, almost white. The comb on tarsus IV. consists of a row of twenty seta, the eight nearest the claws have two teeth each, the eight nearest the metatarsus are bare, while the middle four have a single tooth each.

Palpi: Short, yelow, clothed with short bristle-like hairs, which are more numerous on the tarsus than on the cther segments. The single claw is long, fine, and provided with two pectinations.

Falces: Vertical, strong, reddish yellow, clothed with a few short dark brown bristles.

Maxillæ: Yellow, long, narrow, furnished with a welldeveloped serrula and clothed with a few scattered hairs.

Labium: Yellowish, semi-circular, appears to be continuous with the sternum being separated therefrom by a shallow indistinct groove.

Sternum: Yellow, covered with brown tubercles, each of which is provided with a hair. It is twice as long as broad, its greatest breadth being between the coxæ of legs II.; ends in a point between the fourth coxa.

Abdomen: Long and vermiform, being nearly seven times the length of the cephalothorax. The upper surface is dark fawn mottled with brown, whilst the under surface is fawis. The whole surface is thinly covered with short yellow hairs and with brown tubercles like those on the sternum. The anterior margin of the upper surface is fringed with long dark brown hairs which project forward over the base of the cephalothorax. The abdomen terminates in a blunt rounded extremity.

Epigynum: Takes the form of a rounded elevation about 0.5 mm . from the base of the abdomen.

Spinnerets: Situated 2.3 mm . fram the base of abdomen.


Fig. 11. Hexathele montanus (sp. nov.) $¢$ showing the six spinnerets.


Fig. 12. Ariamnes patersoniensis (sp. nov.) $\uparrow$.


Fig, 13. Ariamnes paterboniensis (sp. nov.) $q$. Egg sac.

Observations: The species described above, although closely allied with Ariamnes colubrinus (Keys.) (8), differs from it in the following points:-
(1) The rear row of eyes is strongly procurved instead of "ein wenig procurva."
(2) The thoracic fovea is indistinct instead of "sehr tief."
(3) The end of the abdomen is rounded instead of "spitz."
Locality: Patersonia, near the Launceston Water Purification Plant. 29th January, 1926.

Field Notes: The web of this spider consists of an irregular net work of threads, and is similar to the usual Theridion type of snare. It is hung about five feet from the ground in fairly thick scrub, near the bank of a creek. The egg sac is made of white silk mottled with brown patches. It is shaped like a miniature Chinese lantern (see Plate X., Fig. 13), and suspended by a thick thread in the centre of the web. The spider rests upside down in a horizontal position near the egg sac. In this position.the fourth pair of legs are directed to the rear and pressed close to the body; the other legs are directed forward and close together. Whilo resting in this manner the spider resembles a bit of dry stick. such as might have fallen into the web. When moving, however, it carries the long vermiform abdomen bent in an $S$ shaped curve over the cephalothorax.

> Family CLUBIONIDAE.
> Sub-Family Micariine.
> Genus Myandra, Simon.
> Myandra bicincta, Simon.

This spider was first recorded from Boyanup, Western Australia, and described by Simon (9). His description, however, is based on an immature female. The following notes deal with adult specimens of both the male and the female, which were found at Launceston.
The description of the male is as follows:-
Measurements in millimetres.
Total Length . . . . . . . . . . . . . . . . . . 2.5
Length of Cephalothorax . . . . . . . . . .. 1.1
Breadth of Cephalothorax .. .. .. . . .. .. 0.9
Length of Abdomen .. .. .. .. .. .. .. .. 1.4
Breadth of Ahdomen . . . . . . . . . . . . . . . 0.8

| $\dot{\text { Leg }}$ | Coxa | Trochanter <br> and Femur | Patella <br> and Tibia | Metatarsus <br> and Tarsus | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.24 | 0.90 | 0.97 | 1.18 | 3.29 |
| 2 | 0.22 | 0.83 | 0.85 | 1.15 | 3.05 |
| 3 | 0.22 | 0.77 | 0.82 | 1.12 | 2.93 |
| 4 | 0.29 | 1.12 | 1.18 | 1.55 | 4.14 |
|  |  |  |  | Tarsus |  |
| Palpi | 0.17 | 0.42 | 0.28 | 0.42 | 1.29 |

The male closely resembles the female, differing only in size and in the following features:-

- Legs: Each of the two tarsal chlawis has a single blunt pectination and the tip of the claw is finely serrated.

Palpi: Short, clothed with plumose hairs, no spines present. The tibial segment is produced into an apophysis which ends in a bifid point. The genital balb is large. Thè style is long, and in the unexpanded bulb it curves back towards the base of the alveolus and then forward towards the apex, where its tip is bent under a hook-like conductor. (See Fig. 17.)

(a)

(G)

Fig. 17. Myandra bicincta (bimon), Pabpus of male-(a) from below,
In other respects the male resembles the female (see

The description of the female is as follows:-
Measurements in millimetres.
Total Length .. .. .. .. .. .. .. .. .. .. 2.8
Length of Cephalothorax . . . . . . . . . . .. 1.1
Breadth of Cephalothorax .. .. .. .. .. .. 0.9
Length of Abdomen .. .. .. .. .. .. .. .. 1.7
Breadth of Abdomen .. .. .. .. .. .. .. .. 1.0

| Leg | Coxa | Trochanter <br> and Femur | Patella <br> aud Tibia | Metatarsus <br> and Tarsus | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.33 | 1.23 | 1.31 | 1.36 | 4.23 |
| 2 | 0.31 | 1.13 | 1.18 | 1.60 | 4.22 |
| 3 | 0.28 | 1.04 | 1.04 | 1.47 | 3.83 |
| 4 | 0.45 | 1.60 | 1.60 | 2.08 | 5.73 |
|  |  |  |  | Tarsus |  |
| Palpi | 0.18 | 0.55 | 0.48 | 0.44 | 1.65 |

Cephalothorax: Ovate, narrow and rounded in front, shining, black; clothed with long and with short, silverywhite, plumose hairs.

Pars Cephalica: Narrow, arched, sloping gently forward; cervical groove not well marked.

Ocular Area: Slightly arched, broader than long.
Clypeus: Very steep, not as broad as the ocular area.
Pars Thoracica: Slopes steeply down towards the rear, indented at its rear margin, radial grooves not distinct.

Thoracic Fovea: Not present.
Marginal Band: Narrow, slightly reflexed, no fringe present.

Eyes: Anterior row procurved, posterior row strongly procurved. The eyes of the front row are equal in size, spaced evenly and moderately close. Rear median eyes oblong, with their long diameter transverse; they are slightly farther away from each other than from their lateral neighbours. The four median eyes occupy an area about equal in length and breadth, but narrower in front than in rear. Lateral eyes of the same side almost touching each other, the front slightly larger than the rear eye. (See Fig. 18.)

Legs: Relative lengths, 4, 1, 2, 3; legs I. and II. being almost equal in length. All the legs are clothed with plumose hairs. No scopula is present, but the ends of the tarsi are provided with bundles of tenent hairs. Coxæ are light brown in colour; femurs very dark brown; tibiæ I. and II. dark
brown above, light brown underneath; tibiæ III. and IV. nearly black. The two tarsal claws have no pectination. No spines present on the legs.


Fig. 18. Myandra bicincta (Simon). Eyes in female.
Palpi: Concolorous with the legs and of similar clothing. One or two spines are present on the tibial and tarsal seg. ments.

Falces: Dark brown; fang is short, curved, and finely serrated. There are two teeth on the inner margin of falx sheath, three on the outer margin. Standing out from among the hairs near the base of the fang is a long conspicuous plumose hair. (See Fig. 19.)


Fig. 19. Myandra bieincta (Simon) ㅇ. Falx.
Maxills: Dark brown, broad, inner margin fringed with a thick beard, a well-developed serrula at the apex.

Labium: Small, conical, truncated in front, and provided with long hairs at the apex; separated from the sternum by a well-marked groove.

Sternum: Broadly ovate, shining black, arched, produced into a sharp point between the fourth coxæ.

Abdomen: Long, narrow, rounded in front and in rear, black, decorated above with two transverse bands of white plumose hairs and a white spot near the apex. Under surface clothed with white plumose hairs.

Epigynum: A somewhat raised triangular opening, dark brown in colour. (See Fig. 20.)


Fig. 20. Myandra bicincta (Simon). Abdomen of female from below.
Spinnerets: Inferior pair stout and long rising from the middle of the ventral surface of the abdomen and reaching to its apex. They are yellowish near the base, becoming gradually dark brown towards the tip. The other spinnerets are small and situated at the apex of the abdomen. (Sce Fig. 20.)

Locality: Lawrence Vale, Launceston. January, 1926.
Field Notes: Myandra bicincta is often found in company with the small black ants (Camponotus nigriceps, Smith), and to these it bears a superficial resemblance, when running quickly here and there in the sunshine on a garden path.

Types: The type specimens of spiders described in the above paper and also of those described in my previous paper (10) will be placed in the Queen Victoria Museum, Launceston.

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