STUDIES IN TASMANIAN SPIDERS.

PART III.

 $\mathbf{B}\mathbf{v}$ 

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Plates XV.-XVII., and Nine Text Figures.

(Read 12th November, 1928.)

Family AVICULARIIDÆ.

Sub-Family MIGINÆ.

Genus Migas, L. Koch.

Migas nitens, Hickman.

#### Plate XV.

In December, 1925, I found at Derwent Park near the shore of Prince of Wales Bay a small colony of trap-door spiders belonging to the genus Migas, L. Koch. The species proved to be new, and I described a female specimen under the name of Migas nitens (1). Several specimens were collected and preserved in alcohol, but one was kept alive in order that its habits might be observed. A small flower pot, filled nearly to the top with earth, served as the spider's new home. After examining its unusual surroundings the spider started to make a burrow between the earth and the side of the pot, using the powerful curved spines on the front legs to dislodge the particles of earth. In due course the burrow was fitted with a lid and lined throughout with silk.

The flower pot was placed in my study so that the spider could be kept under close observation. During the day time it never left the burrow. At night it would sometimes come to the entrance of the nest and raise the lid a little, but when disturbed would at once close the lid and hold fast to the inside to prevent my opening it. In order to feed the spider the lid had to be forcibly opened and a small fly pushed into the burrow. Migas nitens proved very moderate in its food requirements and seemed quite satisfied with one small housefly per mouth. The menu was varied occasionally by substituting a small garden spider in place of the fly. The remnants of the repast were always cleaned out of the burrow by the spider and carried some distance away from the entrance. No cover was placed on the flower pot and if the amount of food had been insufficient the spider would have left to look for a more plentiful supply elsewhere.

During two and a half years Migas nitens lived in the flower pot in my study. The soil, in which the burrow was made, was occasionally moistened with water. earth had become quite soft the spider would come to the entrance and enlarge the opening of the burrow. On the 17th June, 1928; I was surprised to notice that the lid of the burrow had been removed and carried a short distance away. Fearing that the little Avicularid had left at last, I placed a live fly in the opening of the nest and to my astonishment a fully developed male specimen of Migas nitens rushed out. When found in December, 1925, the spider was immature, and I was not sure as to whether it was a male or a female. During the two and a half years spent in the flower pot it had reached maturity and turned out to be a male specimen. I now realised that the removal of the lid from the nest signified that the spider intended to occupy the burrow no longer and was about to start on its wanderings in search of the female. Not wishing to lose the specimen I transferred it to alcohol. A description of it is given below.

Measurements in millimetres (excluding the fa	lces).
Total length	7.6
Length of Caphalothorax	3.1
Breadth of Cephalothorax	3.1
Length of Abdomen	4.2
Breadth of Abdomen	2.8

		Trochanter	Patella	Metatarsus	
Leg	Coxn	and Femur	and Tibia	and Tarsus	Total
1	1.3	4.1	4.3	3.0	12.7
2	1.2	3.8	3.8	2.8	11.6
3	1.1	2.7	2.9	2.7	9.4
4	1.3	3.6	4.1	3.6	12.6
				Tarsus	
Palpi	1.1	1.8	1.7	0.5	5.1

Cephalothorax: Brown, hairless, arched but not as much as in the female. In outline it is almost circular, the breadth being nearly equal to the length.

Pars Cephalica: Slightly arched, very gently ascending, provided with a single median row of bristles and a pair of erect bristles in front of the fovea as in the female; segmental groove distinct but not deep.

Ocular Area: More than twice as broad as long, slightly arched, the front median eyes occupy a raised, oval, dark space in the centre, while on each side of this is a black space occupied by the lateral eyes and a rear median eye. The bristles on the ocular area are arranged as in the female.

Clypeus: Wide, sloping forward, provided with a tuft of bristles in front of the median eyes.

Pars Thoracica: Lateral slope not very steep, devoid of hairs and bristles; radial grooves well marked.

Thoracic Fovea: Deep, recurved, its rear margin is indented and higher than its front margin.

Marginal Band: As in the female.

Eues: Arranged in two rows. Viewed from above the front row appears straight and the rear row recurved. The front row is slightly longer than the rear row. The front median eyes are round and are separated by a distance slightly less than half their individual diameter. The front laterals are the largest of the group, being slightly larger than the front medians, from which they are separated by a space equal to that between the front medians. The elliptical rear laterals and rear medians are about the same size, their long diameter being a little smaller than the diameter of a front median eve. They are close together but not actually contiguous. The front and rear laterals are separated by a distance equa. to one and a half times that which separates the front medians. The space between the rear medians is equal to nearly four times that between the front medians. (See Text Fig. 1 B.)

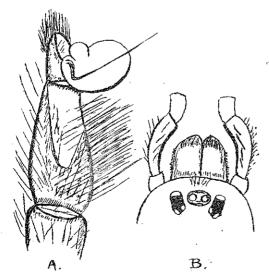


Fig. 1. Migas nitens, Hickman, 3.

A. Left palpos viewed from below. B. Front of cephalothorax showing eyes, and stribulating organ on falces.

Leas: Relative lengths 1, 4, 2, 3, the first and fourth being almost equal in length. Concolorous with the cephalothorax upper side of femoral segments provided with a row of four or five coarse bristles. Leg 1 has a row of two straight spines on the inner side and four curved spines on the outer side of the tibial segment, also a small spine on the outer side of the patella near the apex. Leg 2 has a row of three or four spines on the outer side of the tibial segment and a small spine on the patella as in leg 1. No other spines are present on the legs of the fully developed spider, but in the immature state it is armed as in the female. Apparently the powerful armature of the female is possessed by the male until it moults its skin for the last time, after which it abandons the burrow and no longer needs the spines for digging purposes. The tarsal segments and the distal half of the metatarsal segments of legs 1 and 2 are provided All the legs are lightly clothed with a light scopula. with short hairs and fine bristles. The superior tarsal claws of legs 1 and 2 are provided with a row of six teeth, those of leg 3 with a row of three or four teeth and those of leg 4 with two large teeth. The inferior tarsal claws are bare.

Palpi: Much longer than the cephalothorax, devoid of spines but lightly clothed with short hairs. The underside of the tibial segment is furnished with long thin bristles, whilst the upper side of the femur is provided with a longitudinal row of four or five spine-like bristles resembling those on the femoral segments of the legs. The inner side of the femur is provided with a hard longitudinal ridge. The genital bulb consists of two lobes, one much larger than the other. The larger lobe gives rise to a long thin style, which is scarcely thicker than a bristle. This style projects from the inner side of the lobe and crosses it transversely. (See Text Fig. 1 A.)

Falces: Moderately strong, prominent, very dark brown, upper surface bare, a few short hairs in front, no rastellum. Fang moderately long, well curved and reinforced with ridges. Five small teeth on the outer edge of furrow and two large teeth on the inner edge.

Stridulating Organ: On the outer side of each falx there is a longitudinal row of teeth. The teeth composing the row are small, conical, and about fourteen in number. They rasp against the hard ridge on the inner side of the femoral segment of the palpus. (See Text Fig. 1 B.)

7.4

Maxillæ: Light brown, strongly diverging, furnished with a beard of reddish hair along the inner margin. The inner fore angle is produced to a subconical point. No spines present.

Labium: Brown, broader than long, rounded in front, devoid of spines but furnished with black bristles; it is separated from the sternum by a curved groove.

Sternum: Yellowish brown, broadly pyriform, thinly clothed and fringed with black bristles.

Sigilla: Posterior pair as in female; the others not visible.

Abdomen: Ovate, lightly clothed with short black hairs, upper surface dark brown, under surface yellowish brown; anal tubercle large.

Spinnerets: As in the female.

Locality: Prince of Wales Bay, Derwent Park. December, 1925.

Sub-Family DIPLURINÆ.

Genus Hexathele, Ausserer.

The Nest of Hexathele montanus, Hickman.

Plate XVI., Figs. 1 and 2.

In the Proceedings of this Society for the year 1926 I gave a brief description of the nest of Hexathele montanus (2) from the Western Tiers. Since then I have examined a large number of these nests on the Cradle Mountain and am able to make the following additional observations. The spider appears to be the most common Avicularid on the Cradle Mountain and is very plentiful in the vicinity of Daisy Dell. It makes its nest under the bark of trees, in rotten logs, in stumps and sometimes under stones on the ground. The nest is made by lining some natural cavity with silk and in most cases the opening of the nest is expanded into a thick silken network. (See Plate XVI., Fig. 1.)

During the daytime the entrance is closed with a few threads of silk woven across the opening. One nest which I examined contained a pillow-shaped egg sac hung from the top of the silk-lined cavity. (See Plate XVI., Fig. 2.)

Family DYSDERIDÆ.
Sub-Family SEGESTRIINÆ.
Genus Ariadna, Aud. in Sav.
Ariadna major, sp. nov.

		bdomen			6.0
Les	Coxa	Trochanter and Femur	Patella and Tibia	Metatarsus and Tarsus	Tota
1	2.5	5.0	6.0	4.0	17.5
2	2,2	5.0	5.7	4.5	17.4
3	1.7	4.5	4.5	4.2	14.9
	1.7	5.3	5.3	4.5	16.8

Cephalothorax: Long, slightly rounded at the sides, high in front, strongly arched from side to side, cephalic part rounded, the whole surface uniformly black in colour and lightly clothed with fine hairs which are directed forward.

2.0

3.0

Palpi

0.8

Tarsus

1.6

Clypeus: Narrow, the distance from the front lateral eyes to the base of the falces being equal to four ninths of the distance which separates these eyes.

Eyes: Six in number, oval in shape and equal in size; occupy a transverse area about one third of the breadth of the front of the cephalothorax. The median eyes are almost contiguous with each other and separated from the rear laterals by a little more than twice their individual short diameter. Viewed from above the medians appear to form a straight line with the rear laterals but viewed from the front the line is seen to be slightly procurved. The front and rear laterals of each side occupy a common prominence and are close together, but the rear eye is more to the side than the front eye. (See Text Fig. 2 C.)

Legs: Relative lengths 1, 2, 4, 3, the first two pairs are almost equal in length. All the legs are moderately strong, the first three pairs are directed forward, the rear pair backward. The femoral segment of leg 1 is strongly bowed, the corresponding segments of legs 2, 3, and 4 are slightly bowed. Legs 1 and 2 are dark brown in colour except the patellæ which are light brown. Legs 3 and 4 are a lighter brown in colour. On the inner side of the femur of leg 1 near the apex are two small spines, while the femora of legs 2 and 3 are armed with a single spine in a similar position. The femur of leg 4 has no spines. All the patellæ are devoid of spines. The tibial segment of leg 1 is armed on the underside with a double series of powerful spines, that of leg 2 has a row of eight spines on the outer margin of the under surface

and three spines on the inner margin, that of leg 3 has a row of three spines underneath and two spines on the inner side, and that of leg 4 has a row of three slender spines on the under surface. All the metatarsi are armed with spines, those on the under surface of the metatarsi of the front three pairs of legs being particularly strong and numerous. The tarsal segments are very short and devoid of spines. The superior tarsal claws are stout and provided with a row of eight or nine teeth, the inferior claw is strong and bare. All the legs are clothed with long hairs but bare spaces are to be seen on the upper surface of the patellæ. The coxæ of the third pair of legs are separated from those of the fourth pair by a space equal to the diameter of the latter.

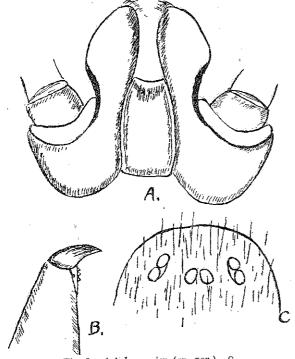


Fig. 2. Ariadna major (sp. nov.), Q.

A. Maxillae and labium. B. Falx. C. Eyes viewed from above.

Palpi: Short, dark brown, clothed with long black hairs. The inner side of the tarsal and tibial segments armed with numerous short thick spines. The tarsal claw slightly curved and not pectinated.

Falces: Conical, black, strong, sloping slightly forward. Fang very short, stout, and strong. Three minute teeth on the outer margin and one very small tooth on the inner margin of the furrow. (See Text Fig. 2. B.)

Maxillæ: Rounded at the base, broadest a little above, curved deeply inwards so that they become narrowest opposite the point where the palpi are attached; they then curve outwards again and end in a narrow rounded tip. Their colour is brown except at the tips where it is white. (See Text Fig. 2. A.)

Labium: Nearly twice as long as broad, arched, slightly narrowed in front and flat round the margin; indented in front; dark brown with a white tip; clothed with a few long black hairs.

Sternum: About twice as long as it is broad, shield shape, narrow anteriorly, convex from side to side. There are slight depressions on each side opposite the spaces between the coxe. Dark brown in colour, shining, and clothed with a few black hairs.

Abdomen: Long oval in shape, almost black in colour, no pattern in mature specimens, clothed with fine black hairs. The under surface is marked with fine transverse lines of a lighter colour, which make it appear wrinkled. Lung covers are yellow. The two pairs of stigmata are quite distinct. The anterior pair are in line with the genital aperture; the rear pair are close behind them and a little nearer the middle line. Spinnerets are short and conical.

Locality: The summit of Mt. Hobbs (2,400 ft.), Woodsdale, 13th May, 1928.

Field Notes: This spider was found guarding its egg sac in a silken tubular nest attached to the under surface of a stone. The egg sac was spherical and contained a large number of eggs.

## Ariadna muscosa, sp. nov.

The description of the male is as follows:-

Measurements in millimetres.5.2Total length5.2Length of Cephalothorax2.4Breadth of Cephalothorax1.6Length of Abdomen2.8Breadth of Abdomen1.8

Leg	Coxa	Trochanter and Femur	Patella and Tibia	Metatarsus and Tarsus	Total
1	0.75	2.32	2.40	2.25	7.72
2	0.71	2.25	2.45	2.21	7.62
3	0.53	1.75	1.82	1.75	5.85
4	0.71	2.00	2.13	1.85	6.69
				Tarsus	
Palpi	0.35	0.87	0.96	0.42	2.60

Cephalothorax: Long, slightly rounded on the sides, arched, narrow in front; cephalic part dark brown gradually shading into a lighter brown on the thoracic part; lightly clothed with a few fine black hairs.

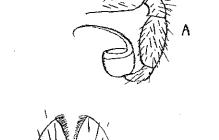
Clypeus: Narrow, the distance from the base of the falces to the front lateral eyes being equal to half the distance between these eyes; slopes forward and is clothed with a few short black bristles.

Eyes: Six in number, arranged in a fairly close group, oval in shape, about equal in size and mounted on black rims. The two median eyes are contiguous with each other and when viewed from above appear to form a slightly recurved row with the rear laterals from which they are separated by a space equal to half their own individual long diameter. The front laterals are in contact with the rear laterals and are separated from each other by a space equal to three times the long diameter of a median eye. When viewed from above the front laterals are seen to project over the clypeus. (See Text Fig. 3 C.)

Legs: Relative lengths 1, 2, 4, 3. The three front pairs are directed forward, the fourth pair backward; light brown in colour. The femoral segments of the first pair of legs are bowed; they have no spines on the upper side but are furnished with two small spines on the inner side near the apex. The corresponding segments of legs 2 and 3 have two spines on the upper side and one near the apex on the inner side. Legs 4 have three spines on the upper side of the femoral segment. All the tibial and metatarsal segments are armed with spines but the tarsal segments are devoid of spines. The legs are lightly clothed with long hairs. The superior tarsal claws are armed with a row of seven or eight teeth, the inferior claw is small and bare.

Palpi: Short, light brown, clothed with a few short hairs. Bulb is simple and more or less spheroidal. It is provided with a long style which ends in a fine tip curved back like a hook. (See Text Fig. 3 A.)

Falces: Dark brown, 2.0 mm. long, conical, sloping forward and clothed with coarse bristles. Fang short and slightly curved. The outer margin of falx sheath is armed with a row of three minute teeth and the inner margin with one tooth.



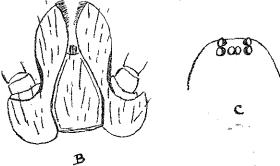


Fig. 3. Ariadna muscosà (sp. nov.), &.

A. Right palpus viewed from outer side. B. Maxillæ and labium.

C. Eyes viewed from above.

Maxillæ: Long, narrow, and leaf-like, light brown in colour except the tips which are white, clothed with a few long hairs. (See Text Fig. 3 B.)

Labium: About one and a half times as long as its greatest breadth and two thirds the length of the maxillæ, dark brown, strongly narrowed in front, broad in rear, arched, margin slightly reflexed, indented in front, clothed with a few long black hairs. (See Text Fig. 3 B.)

Sternum: Ovate in shape with the front truncated, surface strongly convex, light brown, clothed with a few black hairs.

Abdomen: Ovate, dark brown, marked with six transverse bars of light brown on the rear half of the dorsal surface. Under surface pale yellowish brown with a median longitudinal patch of dark brown. Spinnerets short and onical.

106

The	description	of	the	female	is	as	follows:-
Mea	sumements	ín :	milli	metres.			

Total length	7.6
Length of Cephalothorax	
Breadth of Cephalothorax	1.8
Length of Abdomen	5.1
Breadth of Abdomen	2.6

Leg	Coxa	Trechanter and Femur	Patella and Tibia	Metatarsus and Tarsus	Total
1	0.7	2.3	2.3	1.8	7.1
2	0.6	2.1	2.3	1.8	6.8
3	0.5	1.8	1.5	1.5	5.3
4	0.6	2.2	2.1	1.8	6.7
				Tarsus	
alpi	0.2	1.0	0.8	0.7	2.7

The female as usual is a little larger than the male, but resembles it in general appearance. The cephalothorax is of a dark brown colour and clothed with fine hairs which are thinly distributed over the surface. They appear to be arranged in longitudinal parallel rows especially on the middle of the dorsal surface. The six eyes are arranged as in the male. The legs are light brown in colour and clothed with fine hairs. The tarsi are short and without spines. The superior tarsal claws of leg 1 have a row of nine or ten long teeth. The inferior claw is small and has one tooth near the base. The metatarsi are all armed with spines, and in the case of legs 1 and 2 the armature is very strong. Tibiæ 1 and 2 are also strongly armed with spines, and the corresponding segments of legs 3 and 4 are lightly armed with one or two spines. The femoral segments have no spines above, but are armed on the inner side as in the male, The palpi are dark brown and furnished with numerous strong spines on the inner side of the tarsal and tibial segments. The falces are long and strong, project forwards, and are provided with a short curved fang. The outer margin of the falx sheath is armed with three small teeth and the inner margin with one. The maxillæ, labium, and sternum have the same features as in the male, but the labium is not quite so narrow in front. The abdomen is darker than in the male and the transverse bars are not so distinct.

Locality: The Punch Bowl Reserve, Launceston. 17th May, 1928.

Field Notes: This spider makes a long tubular nest of silk among the moss and lichens covering the surface of rocks and stones in damp shady situations.

## Family MIMETIDÆ.

## Genus Mimetus, Hentz.

This family of spiders is a very small one and includes only about thirty-five species from the whole of the world. The first recorded specimen from Australia was found in New South Wales and described by W. J. Rainbow in 1904 under the name of *Mimetus maculosus* (3). I can find no further reference to Mimetids from Australia until 1924, when Dr. R. Pulleine (4) recorded a specimen, which he collected from the web of *Singotypa wagneri* in the vicinity of Marion Bay, Tasmania.

The following account deals with three species collected near Launceston. Two belong to the genus *Mimetus*, one to *Ero*.

# Mimetus audax, sp. nov.

### Plate XVII.

The description of the female is as follows:— Measurements in millimetres.

Moasarchients in minimetres.	
Total Length	5.40
Length of Cephalothorax	2.32
Breadth of Cephalothorax	1.62
Length of Abdomen	3.21
Breadth of Abdomen	2.71

Leg	Соха	Trochanter and Femur	Patella and Tibia	Metatarsus and Tarsus	Total	
1.	0.60	2.53	2.85	2.80	8.78	
2	0.47	2.06	2.12	2.15	6.80	
3	0.44	1.68	1.64	1.64	5.40	
4	0.53	2.37	2.37	2.23	7.50	
Palpi	0.10	0.34	0.50	Tarsus 0.63	1.57	

Cephalothorax: Obovate, arched, narrow in front, dull yellow with a median longitudinal patch of brown and a few spots of the same colour on the sides.

Pars Cephalica: Mottled with dark brown spots and furnished with a few short bristles which point towards the front, the anterior margin is truncate and slightly overhangs the clypeus. Cephalic groove distinct.

Pars Thoracica: Broad, smooth, arched, furnished with a few short bristles on dark brown patches, medium depression deep.

Clypeus: Narrow, brown, provided with two or three bristles.

Eyes: Eight in number; the anterior median eyes are the largest of the group. They are mounted on a rounded eminence which projects over the clypeus, and are separated from each other by a space which is equal to one and a third times their individual diameter. The rear medians are pearly white, nearly as large as the front medians and much closer together, being separated by a space scarcely equal to their individual diameter. The front medians are separated from the rear medians by a space equal to the diameter of a front median eye. The laterals are mounted on small tubercles and are contiguous; the rear laterals are separated from the rear medians by a space equal to that which separates the rear medians from the front medians, and the latter are separated from the front medians, and the latter are separated from the front laterals by slightly less than this distance.

Legs: Relative lengths 1, 4, 2, 3; yellowish, marked with brown spots and bands, lightly clothed with bristle-like hairs. All the legs are furnished with spines. Near the proximal end on the outer side of femur (1) is a straight longitudinal row of minute dentiform spines, which seem to engage a similar row of spines on the inner side of femur (2). They may serve a stridulating function since their size and position preclude their use as a means of defence. The distal half of the tibiæ and the whole length of the metatarsi of the first and second pairs of legs are furnished on the inner side with the armature of curved spines which is characteristic of the The number and arrangement of the spines are shown in Text Fig. 4 A and B. The superior tarsal claws are large and well curved. They are provided with four or five teeth. The inferior claw is also large and furnished with one tooth. (See Text. Fig. 4 D.)

Palpi: Yellow with a brown band on femoral, tibial, and tarsal segments respectively; clothed with a few short hairs and bristles. The single tarsal claw is provided with two teeth and is not very strongly curved. (See Text Fig. 4 C.)

Falces: Length 1.2 mm., dark brown, shining fang short but well curved; furrow armed with about nine long spine-like teeth. (See Text Fig. 4 E.)

Maxillæ: Moderately long, brown, tips white; provided with a grey scopula, and clothed with a few long black bristles.

Labium: Dark brown with a white tip, short, arched, rounded at the tip and very broad at the base.

Sternum: Heart shape, arched, brown except the margin and a small patch in rear of the labium which are yellow; clothed with a few black bristles.

Abdomen: Obovate, broad and rounded in front, narrow in rear. The posterior half of the dorsal surface is marked with a triangular patch of a dirty cream colour. The apex of the triangle reaches to the spinnerets, while the base extends from side to side across the centre of the back and on each side ends in a slight hump. The sides of the triangle are undulating and the base is also irregular. The anterior half of the dorsal surface is marked with dark brown spots on each side of a median longitudinal brown patch. The sides of the abdomen are dark brown and the under surface spotted with brown. The whole surface of the abdomen is clothed with short thick curved bristles.

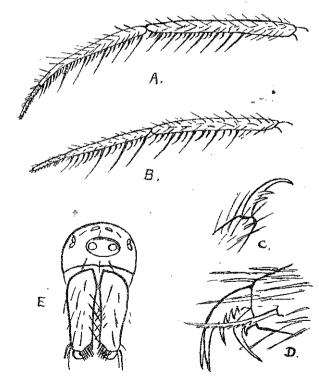


Fig. 4. Mimetus audax (sp. nov), Q.

A. Tibia and metatarsus of leg (1). B. Tibia and metatarsus of leg (2). C. Tarsal claw of palpus. D. Tarsal claw of leg (4). E. Falces and eyes; front view.

Epigynum: Mounted on a dark brown tubercle, which is clothed with short hairs. It has the form shown in Text Fig. 5.



Fig. 5. Mimetus audax (sp. nov.). Epigynum.

Spinnerets: The fore pair large, dark brown, and conical; the middle and hind pairs much smaller and pale yellow; all are clothed with fine hairs.

Locality: Brougham Street, Launceston. 25th April, 1928.

Field Notes: Only three specimens were found. These were taken from the webs of Latrodectus hasseltii, Thor. In one case the rightful owner of the web had been either ousted or devoured; in the other cases both owner and intruder were living together in the same web. The young spiderlings of Latrodectus hasseltii were numerous in the webs and probably Mimetus audax fed chiefly on these. To enter the nest of the dreaded Latrodectus and feed on its young is an exploit which merits the specific name "audax."

## Mimetus aurioculatus, sp. nov.

The description of the male is as follows:— Measurements in millimetres.

THE COMPANY OF THE CO	
Total length	2.6
Length of Cephalothorax	1.3
Breadth of Cephalothorax	1.1
Length of Abdomen	1.3
Breadth of Abdomen	1.1

Leg 1	Сожа.	Trochanter and Femur 3.2	Patella and Tibia 3.8	Metatarsus and Tarsus 4.0	Total
2	0.3	2.1	2.3	2.4	7.1
3	0.2	1.3	1.2	1.4	4.1
4	0.3	1.8	1.6	1.7	5.4
				Tarsus	
Palpi	0.1	0.9	0.6	0.4	2.0

Cephalothorax: Arched, pyriform, narrow in front; vellow in colour with faint brown markings at the sides.

Pars Cephalica: Yellow with faint brown markings, sloping gently forward, provided with a median row of four stiff bristles and also a row of five similar bristles on each side parallel with and near to the cervical groove.

Pars Thoracica: Broad, smooth, arched, provided with a few short hairs; medium depression well marked.

Clypeus: Narrow, the space from the front median eyes to the margin being about equal to the diameter of one of a front median eye; yellow in colour, furnished with two or three bristles.

Eyes: Eight in number, mounted on beautiful golden tubercles which have quite a metallic lustre and suggested the specific name "aurioculatus." The front median eyes occupy a common tubercle and project slightly over the anterior margin. They are slightly larger than the other eyes and are separated from each other by a space equal to once their individual diameter and from the front laterals by half this distance. The front and rear laterals of each side occupy a common tubercle and are contiguous. The rear medians are pearly white and separated by a space which is slightly less than that between the front medians. The rear laterals are separated from the rear medians by a space equal to that which separates the latter from the front medians.

Legs: Long, slender, and tapering; yellow in colour marked with brown bands especially at the joints. All the legs are furnished with long slender spines and bristles. On the outer side of the femur of leg (1) and on the inner side of the femur of leg (2) near the base is a longitudinal row of minute dentiform spines as noted in the preceding species. The characteristic armature on the metatarsi and tibiæ of the first two pairs of legs is more pronounced in the female than in the male. In the latter the intermediate spines, arranged in ascending order of size between the larger ones, are slender and not strongly curved at the tips. (See Text Fig. 6 A.) It is therefore difficult to distinguish them among the other similar spines on the legs. In the female, however, the characteristic structure is well developed.

Palpi: Pale yellow, lightly clothed with short hair. A strong bristle projects near the apex of the femur, two on the patella and several thinner ones on the tibia. The genital bulb is complex; its chief features are shown in Text Fig. 6 B.

The tarsal segment is sparingly clothed with fine short hairs, and along its outer edge is a conspicuous row of four thick bristles which do not taper to a point. Falces: Yellow, long, cylindrical, clothed with a few short bristles. Fang short, but well curved. Furrow armed with the usual long spine-like teeth. (See Text Fig. 6 C.)

Maxillæ: Long, yellow, clothed with a few short hairs, and furnished with a short dark coloured scopula at the inner angle.

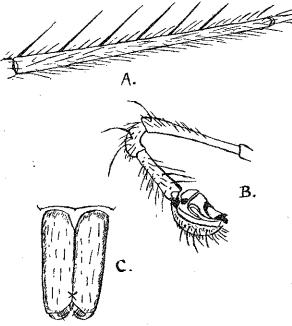


Fig. 6. Mimetus aurioculatus (sp. nov.), A.

A. Metatarsus of leg (1). B. Left palpus viewed from outer side. C. Falces viewed from in front.

Labium: About half the length of the maxilla, moderately broad, arched, yellow, tip well rounded, clothed with a few short hairs.

Sternum: Yellow, cordate, arched from side to side and from front to rear, furnished with a few short hairs.

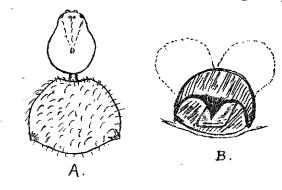
Abdomen: Broadly evate, clothed with short curved bristles and marked with yellow, red, brown, and silver spots, the yellow predominating.

Spinnerets: Brownish yellow, clothed with fine hairs; the fore pair largest.

The description of the female is as follows:-	
Measurements in millimetres.	
Total Length Length of Cephalothorax	15
Breadth of Cephalothorax Length of Abdomen	11
Breadth of Abdomen	1.8 1.9

Leg 1 2 3 4	Coxa 0.40 0.40 0.30 0.35	Trochanter and Femur 3.00 2.00 1.40 1.90	Patella and Tibia 3.40 2.30 1.30 1.70	Metatarsus and Tareus 3.40 2.40 1.50 1.70	Total 10.20 7.10 4.50 5.65
Palpi	0.16	0.44	0.55	Tarsus 0.66	1.81

The female is a little larger than the male but closely resembles it in general appearance, colouration, and markings. The abdomen, however, is broader than long and has the shape shown in Text Fig. 7 A. The eyes are mounted on golden tubercles as in the male. All the legs are armed with spines and bristles. The armature on the metatarsal and tibial segments of the first two pairs of legs has the arrangement characteristic of the genus. (See Text Fig. 7 C.)



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Fig. 7. Mimetus aurioculatus (sp. nov.), Q.
A. Cephalothorax and abdomen. B. Epügymum. C. Metatarsus of ieg (1).

Epigynum: Mounted on a slightly elevated brownish tubercle; the opening faces to the rear and just inside is a flat rectangular plate. The ventral margin of the opening is produced into a point directed towards the rear. (See Text Fig. 7 B.) Two brown patches extend on each side and in front of the epigynum.

Locality: The Punch Bowl, Launceston. 5th May, 1928.

Field Notes: One male and two female specimens, which were mature, together with several immature specimens were collected. They were taken from shrubs of common gorse (Ulex europeus) near a creek, which runs through the reserve.

# Genus Ero, C. Koch.

This genus is closely allied to *Mimetus*. In the latter, however, the front pair of legs are much longer than the rear pair, whilst in *Ero* the front and rear pairs are about equal in length. The clypeus in *Ero* is much wider than it is in *Mimetus*, and in the definition of the genus given by Simon (5) it is said to be wider than the ocular area. The Tasmanian spider which I propose to call *Ero tasmaniensis* agrees very closely both in form and habits with other species of this genus, but its clypeus is not as wide as the ocular area, and in this respect it resembles *Mimetus*. I do not feel justified in erecting a new genus based on this distinction alone, and therefore place the spider in the genus *Ero*.

# Ero tasmaniensis, sp. nov.

The description of the male is as follows:-

<del> </del>	
Measurements in millimetres.	9.0
Total Length	2.3
Tonoth of Conhalothorax	7.4
Proodth of Cenhalothorax	1.2
Longth of Abdomen	1. 1
Breadth of Abdomen	1.1
Pleaning of Appointment	

Leg 1 2 3	Coxa 0.5 0.4 0.3	Trochanter and Femur 1.8 1.4 1.3 1.8	Patella and Tibia 2.2 1.6 1.3 2.2	Metatarsus and Tarsus 2.5 1.8 1.5 2.5	Total 7.0 5.2 4.4 6.9
4 Palpi	0.2	0.8	0.5	Tarsus 0.6	2.1

Cephalothorax: Pyriform, strongly narrowed in front, arched, broadest between the second pair of legs.

Pars Cephalica: Brown, sloping gently forward, clothed with a few black bristles.

Pars Thoracica: Light brown shading into a darker brown on the margin; smooth with only a very few short hairs scattered over the surface. The medium depression is long and deep, it is situated at a distance from the front of the cephalothorax equal to three-quarters of the length of the cephalothorax.

Clypeus: Inclined slightly backwards; wide, the distance from the front median eyes to the base of the falces being equal to half the breadth of the ocular area and about three times the diameter of a front median eye; a few short bristles below the eyes.

Eyes: Eight in number. The front row is shorter than the rear row. The front medians occupy a black tubercle and project slightly over the clypeus. They are separated from each other by a space equal to slightly less than once their individual diameter, from the rear medians by the same distance and from the front laterals by half this distance. The rear medians are separated from each other by a space equal to slightly less than that which separates the front medians, and from their lateral neighbours by one and three-quarter times this distance. The front and rear laterals are contiguous and mounted on a black tubercle. The rear medians are pearly white, not quite circular in shape and mounted on black rims.

Legs: Relative lengths 1, 4, 2, 3, the front pair being practically equal in length to the rear pair; concolorous with the cephalothorax and marked with bands of a darker shade of brown. The tarsal segments are devoid of spines but the metatarsal, tibial, and femoral segments are all armed with spines. As in the preceding species of Mimetus there is a longitudinal row of minute spines on the outer side of the basal half of femur 1 and another row in a similar position on the inner side of femur 2. The armature on the metatarsal and tibial segments of the first two pairs of legs consists of the usual arrangement of short curved spines placed between long straight ones. (See Text Fig. 8 D.) The superior tarsal claws are not strongly curved. Those of leg 4 are armed with four teeth. The inferior claw is large, hook-shaped, and armed with a single tooth. (See Text Fig. 8 B.)

Palpi: Yellowish brown, lightly clothed with short hairs; a prominent bristle projects from the patella; the tarsal segment is large and has near its base a strong curved apophysis with a smaller one next to it. The genital bulb is large, shining, brown, and complicated. Its chief features are shown in Text Fig. 8 C.

Falces: Brown, moderately long, conical, clothed with a few bristles and short hairs. Fang short, strong, and well curved. Sheath armed with seven long spine-like teeth on the outer margin.

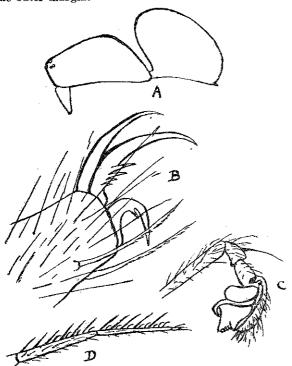
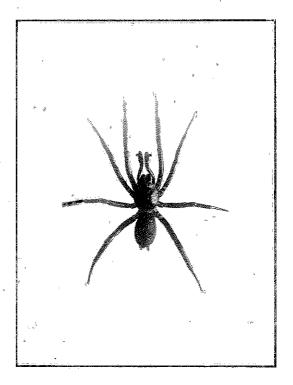


Fig. 8. Ero tasmaniensis (sp. nov.), A.

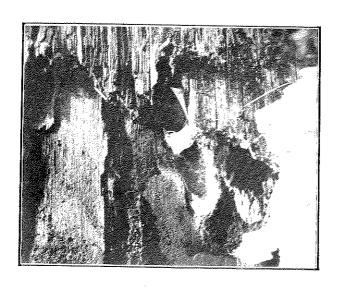
A. Cephallothorax and abdomen in profile. B. Tarsal claws of leg (4). C. Rhight palpus from outer side. D. Tibia and metatarsus of leg (1).

Maxillæ: Yellow, slightly converging, clothed with a few black bristles and furnished with a grey scopula along the inner margin.

Labium: Yellow, triangular with a broad base and well-rounded tip, about half the length of the maxillæ, and clothed with a few short hairs.



Migas nitens, Hickman, 3.





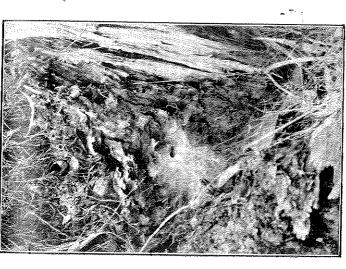


Fig. 2. Hexatholv montanus, Hickman. Nest in side of a log, and showing pillow-shaped egg sac.



Mimetus audax (sp. nov.), Q.

Sternum: Ovate, convex, curved in front round the base of the labium, yellow in colour, clothed with a few short bristles which point towards the centre, ends in a blunt point between the coxæ of the fourth pair of legs. This point carries a pair of conspicuous curved bristles.

Abdomen: Ovate, overhangs the rear of the cephalothorax, brownish in colour with silver white flecks and markings, a longitudinal white patch on the rear half. The under surface is pale yellow. Coarse erect bristles are distributed over the whole surface.

Spinnerets: Pale yellow, fore pair largest.

Total Length	4.1
Length of Cephalothorax	1.5
Breadth of Cephalothorax	1.1
Length of Abdomen	2.6
Breadth of Abdomen	1.9

Leg	Coxa	Trochanter and Femur	Patella and Tibia	Metatarsus and Tarsus	Total
1	0.4	1.5	1.6	1.5	5.0
12	0.4	1.2	1.4	-1.4	4.4
В	0.3	1.1	1.1	1.2	3.7
4	0.4	1.6	1.6	1.8	5.4
		•		Tarsus	
Palpi	0.1	0.4	0.4	0.5	1.4

Cephalothorax and abdomen have the same colouration and clothing as in the male. The legs are shorter than those of the male and the fourth pair are longer than the first pair. All the legs are clothed with stiff bristles and hairs, but are not armed with as many spines as in the male. The femoral and tarsal segments are without spines; the tibial and metatarsal segments of legs 3 and 4 each possesses a single spine, whilst the corresponding segments of legs 1 and 2 have the characteristic armature of long spines with short curved spines between them. (See Text Fig. 9 B.) The palpi are yellow, moderately long, and end in a single claw which has three or four teeth. The falces, maxillæ, labium, and sternum are as in the male.

Epigynum: Brown, somewhat raised, and has the form shown in Text Fig. 9 A.

Locality: Trevallyn, Launceston.

Field Notes: Three male specimens were collected in April, 1928. They were found resting on the under surface of stones in a rather damp situation. A single female specimen was found at the same locality in August of the same year and was also taken from the under surface of a stone.



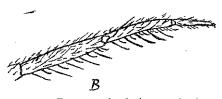


Fig. 6. Ero tasmaniensis (sp. nov.), Q.
A. Epolgynum. (B. Tibia and metatarsus of leg (1).

Types: The type specimens of spiders described in this paper will be placed in the Queen Victoria Museum, Launceston.

## REFERENCES TO LITERATURE.

- (1) V. V. Hickman, Proc. Roy. Soc. Tas., 1926, p. 52.
- (2) V. V. Hickman, Proc. Roy. Soc. Tas., 1926, p. 78.
- (3) W. J. Rainbow, Rec. Aust. Museum, Vol. V., No. 5, 1904, p. 330.
- (4) R. Pulleine, Tas. Field Nats.' Club, Easter Camp, 1924. p. 16.
- (5) E. Simon, "Hist. Nat. des Araignées," T.I., p. 946.

# EXPLANATION OF PLATES. PLATE XV.

Migas nitens 3.

## PLATE XVI.

- Fig. 1.—Hexathele montanus. Entrance to nest showing network of silk.
- Fig. 2.—H. montanus. Nest in the side of a log and showing pillow-shaped egg sac.

## PLATE XVII.

Mimetus audax, sp. nov. 9.