

STUDIES IN TASMANIAN SPIDERS.

PART V.

(The Oonopidæ.)

By

V. V. HICKMAN, B.A., B.Sc.

Eleven Text-figures.

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In the present paper three species belonging to the family *Oonopidæ* are described. The first is the hitherto unknown male of *Tasmanoonops alipes*, Hickman; the second a new species belonging to the genus *Oonopinus*, Simon; and the third a new species belonging to the genus *Orchestina*, Simon. As far as I am aware this is the first record of the two last-named genera occurring in Australia, either in Tasmania or on the mainland. A closely allied genus, *Australoonops*, has been found in Western Australia and *Orchestina* occurs in New Zealand.

Family OONOPIDÆ.

Subfamily OONOPINÆ.

Genus *Tasmanoonops*, Hickman.*Tasmanoonops alipes*, Hickman.*Female*. See Proc. Roy. Soc. Tas., 1929, p. 98.*Male*. Measurements in millimetres.

Total Length	4.1
Length of Cephalothorax	1.8
Width of Cephalothorax	1.4
Length of Abdomen	2.3
Width of Abdomen	1.4

Leg	Femur	Patella	Tibia	Meta-tarsus	Tarsus	Total
1	2.0	0.8	1.8	1.8	0.7	7.1
2	2.2	0.8	1.8	1.5	0.7	7.0
3	1.9	0.7	1.4	1.4	0.6	6.0
4	2.4	0.7	1.9	1.9	0.7	7.6
Palpi	0.9	0.4	0.3	—	0.7	2.3

Cephalothorax: Yellowish brown; strongly narrowed in front, rounded at the sides and emarginate in rear. Longer than wide in ratio 9 : 7. Median furrow absent. Clothed with short recumbent hairs.

Eyes: Six. Oval in shape, mounted on black rims. The ocular area is almost as wide as the anterior part of the cephalothorax. A few long bristles are found in front and at the side of the eyes. The median eyes are contiguous and the front and rear laterals are also contiguous. The median eyes are separated from the front laterals by a space equal to about one-third of their long diameter. When viewed from above the median eyes appear to form a straight line with the front laterals. The eyes are subequal in size.

Clypeus: Narrow, the distance from the base of the chelicerae to the median eyes being about equal to half the long diameter of the eyes. It is clothed with coarse black bristles which project forward.

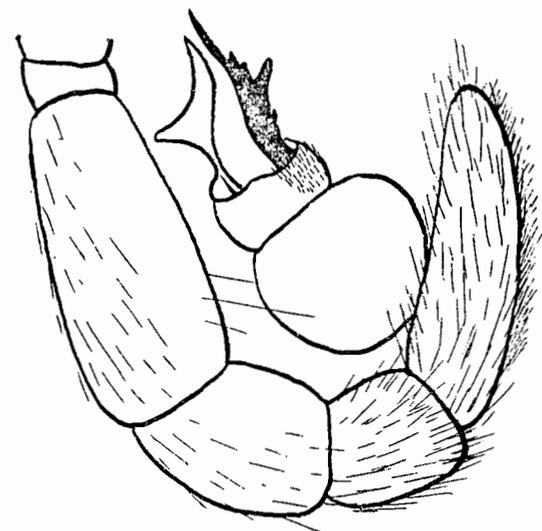


Fig. 1. *Tasmanoonops alipes*, Hickman.
Left palpus of male viewed from outer side.

Legs: 4, 1, 2, 3. Yellowish brown, clothed with short, finely barbed hairs. A single trichobothrium is present on each metatarsus near the apex and two trichobothria on each tibia, elsewhere none. The tarsal claws are carried on a well-developed onychium. The claws resemble those of

the female, but the wing-like projections on the superior claws are not as large as in the female. The onychium is furnished with spatulate hairs and with five long barbed hairs. The tarsi are short.

Spines: The first and second pairs of legs have no spines. *Third leg.* Femur 0. Patella 0. Tibia-dorsal 0, prolateral 1 - 1 - 1, retrolateral 0, ventral 1 near apex. Metatarsus-dorsal 0, prolateral 1 - 1 - 1, retrolateral 0, ventral 1 in the middle and 1 apical. *Fourth leg.* Femur 0. Patella 0. Tibia-dorsal 0, prolateral 1 - 1 - 1, retrolateral 1 - 1 - 1, ventral 1 - 1 and 2 apical. Metatarsus-dorsal 0, prolateral 2 - 1d - 1v - 2, retrolateral 2 - 1 - 2, ventral 1 and 2 apical. No spines are present on any of the tarsi.

Palpi: The tarsal segment is long and finger-like. Its dorsal surface is thickly clothed with short hairs. The bulb is yellow and nearly spherical. It is attached near the base of the segment and is furnished with a peculiar embolus and conductor. (See Fig. 1.) When viewed from the outer side the embolus appears as a dark coloured serrated projection rising from a chitinous cup, which on one side is produced into a twisted, subtriangular conductor. The wall of the cup is not continuous on the inner side. Near the base of the conductor is found a spine-like projection. The femur, patella, and tibia are short and stout.

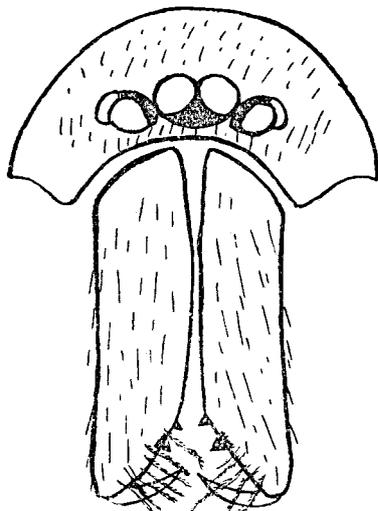


Fig. 2. *Tasmanoonops alipes*, Hickman.
Palpus and eyes of male viewed from front.

Chelicerae: Long, narrow, and parallel, clothed with a few short setae. Fang well curved. Promargin of furrow armed with a single tooth. Retromargin also armed with one tooth. Long barbed hairs on the promargin as in the female. (See Fig. 2.)

Labium, Maxillae, and Sternum as in the female.

Abdomen: Ovate, grey, marked with numerous faint spots. It is clothed with finely barbed hairs. Two pairs of spiracles are present in the same position as described for the female. One pair leads into book-lungs, the other into tracheae.

Spinnerets: Six. They resemble those of the female, but the peculiar ventral spines are replaced by short bristles.

Locality: The Great Lake (3,350 feet). 15th March, 1930.

Field Notes: Only one specimen was collected. It was found under a stone near the northern end of the lake.

Genus *Oonopinus*, Simon.

Oonopinus mollipes, sp. nov.

Female. Measurements in millimetres.

Total Length	2.24
Length of Cephalothorax	0.82
Width of Cephalothorax	0.64
Length of Abdomen	1.43
Width of Abdomen	1.00

Leg	Femur	Patella	Tibia	Meta-tarsus	Tarsus	Total
1	0.67	0.25	0.53	0.50	0.36	2.31
2	0.64	0.25	0.53	0.50	0.28	2.20
3	0.43	0.21	0.36	0.39	0.25	1.64
4	0.64	0.25	0.46	0.50	0.25	2.10
Palpi	0.35	0.11	0.14	—	0.25	0.85

Cephalothorax: Dark brown, convex, cephalic part moderately high, not marked with any pattern, but clothed with a few coarsely barbed hairs.

Eyes: Six. The eyegroup is compact and about two-thirds the width of the head. The eyes are of an irregular oval shape. The laterals are equal in size, but the central eyes are longer than and not as wide as the laterals. Front and rear laterals are contiguous. The central eyes are also contiguous with each other, and with the front edge of the

anterior lateral eyes. The space inside the eyegroup is pigmented with black. When viewed from above the central eyes form a slightly procurved row with the front laterals and a strongly recurved row with the rear laterals. (See Fig. 3.)

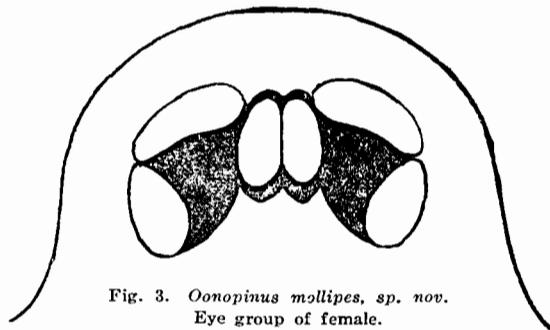


Fig. 3. *Oonopinus mollipes*, sp. nov.
Eye group of female.

Clypeus: Narrow, the distance from the base of the chelicerae to the front edge of the central eyes being about equal to the long diameter of these eyes.

Legs: 1, 2, 4, 3. Brown, clothed with coarsely barbed hairs. Two trichobothria on each tibia and one near the apex of each metatarsus. The tarsi end in an onychium which carries two claws. Each claw has a double row of short, blunt teeth, there being about eight teeth on each side of the claw. The tip of the claw is finely serrated. The hairs on the onychium are not spatulate, but are barbed and different from the hairs covering the other parts of the legs. (See Fig. 4.)

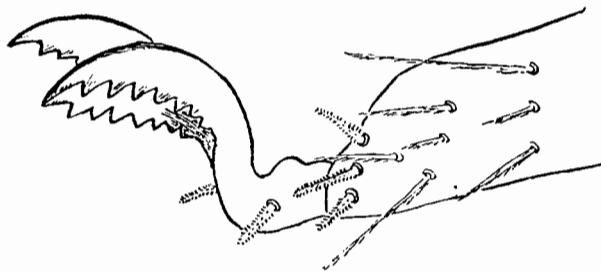


Fig. 4. *Oonopinus mollipes*, sp. nov.
Tarsal claws of female.

Palpi: Colour and clothing like that of the legs; the tarsal segment is very thickly clothed with barbed hairs. Claw absent.

Spines: No spines are present on either legs or palpi.

Chelicerae: Brown, conical, clothed with a few hairs like those on the legs. Fang curved and slender. No teeth on margins of furrow.

Maxillae: Brown, narrow, long, and converging; clothed with a few coarsely barbed hairs. (See Fig. 5.)

Labium: Brown, triangular, its width at the base being equal to its length. (See Fig. 5.)

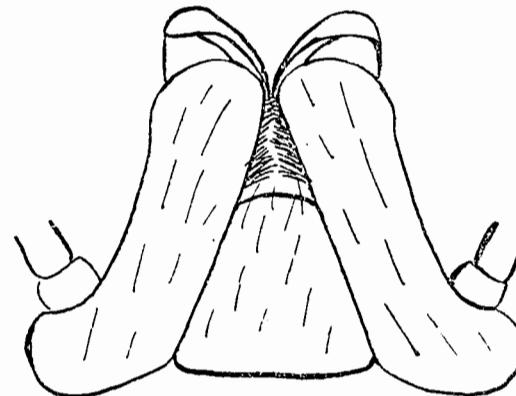


Fig. 5. *Oonopinus mollipes*, sp. nov.
Maxillae and labium of female.

Sternum: Brown, shiny, convex, as long as wide; produced between rear coxae, which are separated by little more than their diameter. The middle area of sternum is smooth and devoid of hairs, but round the margin it is clothed with coarsely barbed hairs. First coxae wide apart. In outline the sternum is cordiform.

Abdomen: Ovate, brownish grey above, the rear half being marked with a longitudinal patch of lighter colour. The ventral surface light fawn. Two pairs of spiracles. The anterior pair are placed one on each side of the body in front of the epigastric furrow and open into book-lungs. The posterior pair are immediately in rear of the furrow and somewhat nearer the central line. They open into tracheae.

Spinnerets: Six. The anterior pair larger than the others.

Locality: Trevallyn, Launceston. 27th May, 1930.

Field Notes: Collected in grass tussocks. Three female specimens were found.

Genus *Orchestina*, Simon.*Orchestina launcestoniensis*, sp. nov.*Male*: Measurements in millimetres.

Total Length	1.22
Length of Cephalothorax	0.58
Width of Cephalothorax	0.43
Length of Abdomen	0.73
Width of Abdomen	0.58

Leg	Femur	Patella	Tibia	Meta-tarsus	Tarsus	Total
1	0.51	0.15	0.47	0.36	0.24	1.73
2	0.51	0.15	0.48	0.44	0.24	1.82
3	0.35	0.14	0.28	0.32	0.21	1.30
4	0.53	0.15	0.37	0.44	0.24	1.73
Palpi	0.17	0.07	0.22	—	0.17	0.63

Cephalothorax: Yellowish brown, marked with regular dark brown lines as in the female. (See Fig. 6.) Convex, the highest point being between the third coxæ. From here it slopes gradually to the front and somewhat more steeply to the rear. Sides rounded and margined with dark brown. A few long erect hairs are scattered over the surface.

Eyes: Six. The lateral eyes are equal in size and contiguous. The median eyes are oval in shape, contiguous, and larger than the lateral eyes in ratio 5 : 4. They are separated from the anterior lateral eyes by a space equal to one-fifth of their own long diameter. When viewed from above the median eyes and the anterior laterals form a slightly recurved row. All the eyes are pearly white and mounted on black rims. (See Fig. 6.)

Clypeus: Height slightly less than the long diameter of a median eye. Clothed with a few long coarse hairs.

Legs: 2, 1, 4, 3. Yellowish brown, clothed with long finely barbed hairs. A single trichobothrium at the apex of each metatarsus and two trichobothria on each tibia. Rear femora very much dilated. Tarsi provided with an onychium which carries two claws. In microscopic preparations each claw is seen to be provided with two rows of teeth. The outer row consisting of five or six teeth, which increase in size towards the base of the claw and the inner row consisting of two or three small teeth.

Palpi: Bulb large and pyriform. Tibial segment strongly dilated. The long sperm duct may be clearly seen inside

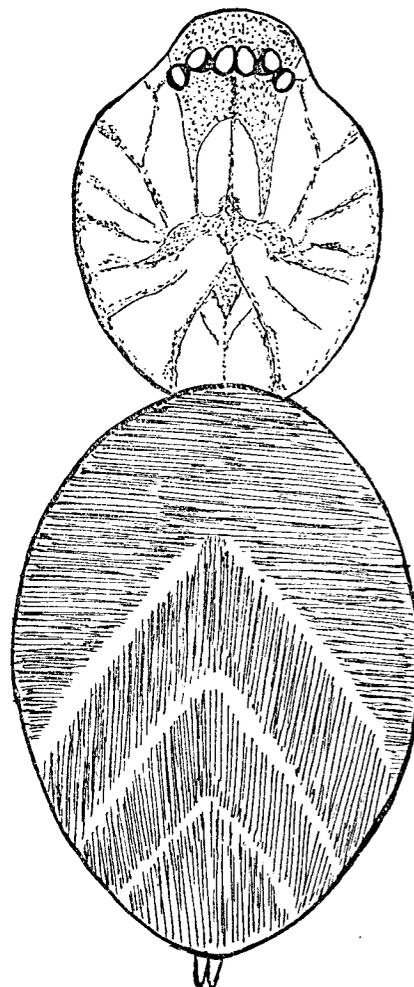


Fig. 6. *Orchestina launcestoniensis*, sp. nov.
Cephalothorax and abdomen of female.

the bulb. It forms a spiral consisting of two complete turns and two half turns near the base of the bulb. The embolus is short, curved, and black. The tarsal segment is spoon-shaped. Its length is shorter than the width of the bulb in ratio 4 : 5. (See Fig. 7.)

Spines: There are three spines at the apex of the fourth metatarsi. Elsewhere none.

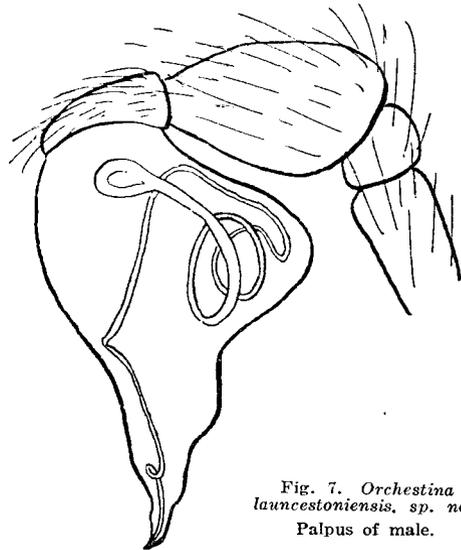


Fig. 7. *Orchestina launcestoniensis*, sp. nov.
Palpus of male.

Chelicerae: Slender and conical. Fang strong and well curved. Margins of furrow not armed with teeth, but the inner surface of the paturon is studded with minute conical spines. A light scopula of barbed hairs on promargin of furrow. (See Fig. 8.)

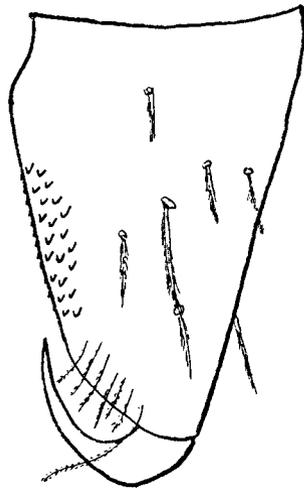


Fig. 8. *Orchestina launcestoniensis*, sp. nov. ♀
Chelicera showing minute teeth on inner surface of paturon.

Maxillae: Inclined over labium. The apical quarter is divided into two lobes. When the mouth parts are carefully dissected it is found that one lobe is pale yellow and carries a light scopula of finely barbed hairs. The other lobe is ventral to the former and has the shape of a narrow, dark brown projection, which points forward. It carries a well-developed serrula and ends in a slightly curved tip. (See Fig. 9.)

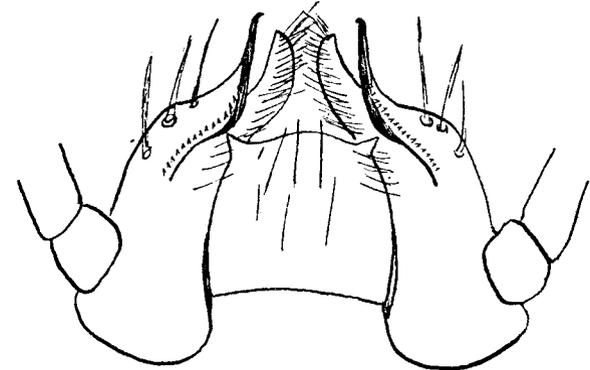


Fig. 9. *Orchestina launcestoniensis*, sp. nov.
Labium and maxillae of male.

Labium: Rounded in front and at the sides. The front margin produced into a point on each side. This point appears to fit between the two apical lobes of the maxilla. (See Fig. 9.)

Sternum: Yellowish, moderately convex, cordiform; separated by a deep groove from the labium and produced between the rear coxae.

Abdomen: Ovate. Dark brown above, fawn underneath. Dorsal surface is marked with three chevrons as in the female. (See Fig. 6.) The area in front of the anterior chevron is finely striated with dark transverse lines. The area in rear is marked with fine longitudinal lines. The clothing consists of long hairs mingled with short hairs. Two pairs of spiracles as in female.

Spinnerets: Six. Anterior pair larger than the others. Middle pair very slender.

Female. Measurements in millimetres.

Total Length	1.33
Length of Cephalothorax	0.64
Width of Cephalothorax	0.46
Length of Abdomen	0.75
Width of Abdomen	0.64

Leg	Femur	Patella	Tibia	Meta-tarsus	Tarsus	Total
1	0.49	0.17	0.43	0.40	0.22	1.71
2	0.49	0.17	0.43	0.43	0.22	1.74
3	0.37	0.15	0.28	0.30	0.18	1.28
4	0.56	0.18	0.29	0.44	0.19	1.66
Palpi	0.17	0.08	0.12	—	0.17	0.54

Cephalothorax: Ovate, convex, highest point between the third coxæ. Marked with a regular pattern of dark lines on a yellowish brown ground. Margin with a brown edge. Surface clothed with a few long erect hairs. (See Fig. 6.)

Eyes: Six. Mounted on black rims. Oval in shape. Median eyes separated from the front laterals by one-third of their own diameter. The lateral eyes are equal in size and contiguous. The median eyes are also contiguous and slightly larger than the laterals in ratio 6 : 5. The front laterals and the median eyes form a slightly recurved row, when viewed from above.

Clypeus: Clothed with a few long hairs. Its height is equal to two-thirds of the long diameter of a median eye.

Legs: 2, 1, 4, 3. Yellowish brown, clothed with finely barbed hairs. A single trichobothrium near the apex of each metatarsus and two on each tibia; elsewhere, none. Rear femora dilated. Tarsi end in an onychium. Two tarsal claws are present. Each claw has a double row of teeth, three small teeth on the inner side and seven larger teeth, which increase in size towards the base, on the outer side. (See Fig. 10.)

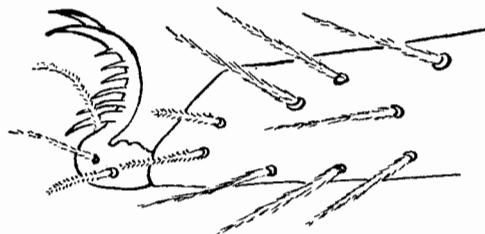


Fig. 10. *Orchestina launcestoniensis*, sp. nov. ♀
Tarsal claws, showing teeth on outer side.

Spines: Absent from all the legs.

Chelicerae: Conical and slightly stronger than those of the male. Fang well curved. Margins of furrow without

teeth. The inner surface of the paturon armed with minute conical spines. A light scopula of barbed hairs on pro-margin of furrow. (See Fig. 8.)

Maxillæ: Narrow, converging over labium. Apical portion normal and not divided into two lobes as in the male. Provided with a light scopula of barbed hairs on inner side. Serrula present on outer side. (See Fig. 11.)

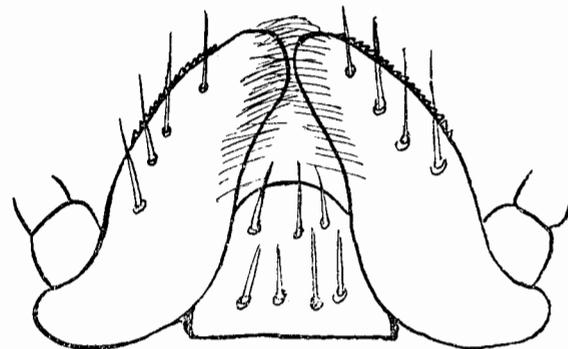


Fig. 11. *Orchestina launcestoniensis*, sp. nov.
Labium and maxillae of female.

Labium: Rounded in front and at the sides. Not produced into a conical point on each side of front margin. Its sides are slightly overlapped by the maxillæ, making it difficult to see without dissecting the mouth parts.

Sternum: As in the male.

Abdomen: Ovate, brownish above, fawn underneath. The dorsal surface is marked with three chevrons and striated as in the male. (See Fig. 6.) Two pairs of spiracles are present. The anterior pair are placed one on each side immediately in front of the ends of the epigastric furrow. The posterior pair are close behind the furrow and a little nearer the middle line.

Spinnerets: As in the male.

Locality: Punch Bowl, Launceston. 24th May, 1930.

Field Notes: This little spider is very common in grass tussocks. When touched, it jumps backward. This habit is no doubt correlated with the strong development of the femora of the fourth pair of legs.

Types: In the Queen Victoria Museum, Launceston.