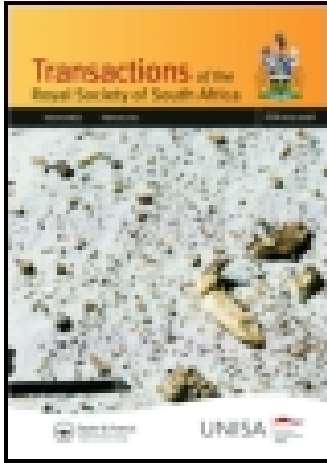


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NEW SOUTH AFRICAN TRAP-DOOR SPIDERS OF THE
FAMILY *CTENIZIDÆ* IN THE COLLECTION OF THE
SOUTH AFRICAN MUSEUM.

By W. F. PURCELL, PH.D.,

First Assistant in the Museum.

(Communicated September 4, 1901.)

The South African *Ctenizidæ* appear to be very imperfectly known, comparatively few species having been hitherto described. The present paper contains descriptions of 19 apparently new species belonging to 10 genera, of which 4 are new, but this by no means exhausts the number of new forms in the Collection as a number of new species, unfortunately represented by female specimens only, and belonging principally to the genera *Hermacha* and *Hermachastes*, have been left undescribed pending the discovery of the males.

GEN. STASIMOPUS Sim.

STASIMOPUS LEIPOLDTI n. sp.

Type: 1 ♀ (No. 2909) found by Mr. C. L. Leipoldt near the village of Clanwilliam, Cape Colony.

♀. *Colour*.—Carapace brown, yellowish posteriorly; chelicerae blackish brown, with coppery hairs anteriorly; pedipalps and 2 anterior pairs of legs brown, the coxæ of the legs brownish yellow, the 2 posterior pairs of legs lighter brown above, more or less pale yellowish at the sides and below in most of the segments; abdomen pale yellowish, the genital operculum covered with black hairs; sternum brownish yellow, the anterior and lateral borders brown, the posterior border pale yellowish.

Carapace as long as the patella and tibia together with a little over half the metatarsus of first leg, and equal to the tibia, metatarsus and about $\frac{1}{4}$ – $\frac{1}{5}$ of the tarsus of fourth leg.

Ocular area very wide, its width behind equal to the metatarsus together with $\frac{2}{3}$ of the tarsus of first leg, and almost equal to the fourth metatarsus; the anterior row, when viewed from above, with

the posterior margins in a straight line and the anterior margins in a procurved line, the eyes equidistant, the median ones distant from the anterior margin of the carapace by considerably more than their diameter, the lateral eyes very large, almost or quite circular, distant from the anterior margin by about $\frac{1}{2}$ their diameter; the posterior row very distinctly recurved, a line joining the anterior margins of the lateral eyes passing through or a little behind the centres of the median eyes, the latter almost circular, slightly larger than the lateral eyes; the outer edges of the posterior median eyes at least as wide apart as the outer edges of the anterior lateral eyes; carapace with a patch of bristles before and behind the anterior median eyes.

Pedipalps with a broad band of shortish spines on the outer sides of the tibia and tarsus; the inner side of the tarsus with 4-5 longish spines distally; the inner side of the tibia with a single longish spine near the base; the tarsus with a tiny patch of 5-7 sharp spinules at the base on the outer part of the upper surface; the tibia without distal spinules above; the patella not spined.

Legs.—Tibia of first leg slightly shorter than the metatarsus and equal in length to the width of the anterior row of eyes; anterior surface of tarsus and metatarsus with a broad band of close-set, short, stout spines in the lower part; the posterior surface of these segments and of the tibia with a corresponding band of spines, but the inferiormost spines on the tibia and metatarsus longish; anterior side of tibia with a few (7-9) short distal spines; upper surface of metatarsus with a posterior basal patch of sharp spinules occupying about $\frac{1}{4}$ of the length of the segment; upper surface of tibia with a corresponding tiny distal patch of 10-12 spinules. Second leg spined like the first, except that there are only 2-4 spinules, besides the inferior row, on the posterior surface of the tarsus, only 3-5 on the anterior surface of the tibia, and about 20 in the upper distal patch on the tibia. Third leg with a few distal anterior and 0-1 posterior spinules on the tarsus; metatarsus with a band of about 10-12 spines arranged roughly in 2 rows along the upper part of the anterior surface and with a similar band of shorter spines along the posterior surface; tibia with a few stout distal spines on each side; patella with a few spines scattered along anterior surface; upper surface of tibia with a small distal patch of red spinules occupying about $\frac{1}{3}$ of the length of the segment; the base of the metatarsus with a few similar spines above; patella without spinules at the distal edge; metatarsus without apical tuft of bristles below. Fourth leg without posterior spines, the 3 distal segments with some scattered spines on the anterior surface; anterior part of upper surface of patella with a dense patch of sharp red spinules, the length

of the patch less than $\frac{1}{2}$ that of the upper side of the segment; metatarsus with an infero-posterior apical transverse row of 6-7 equal setæ.

Measurements.—Total length 29 mm.; length of carapace 9, width 8; width of ocular area $4\frac{1}{2}$; length of tibia of first leg $3\frac{1}{2}$, of metatarsus $3\frac{3}{4}$, of fourth metatarsus 4.9.

The characters afforded by the eyes distinguish this species sharply from any other hitherto described.

GEN. GORGYRELLA nov.

Sternum with 3 pairs of sagilla, all more or less remote from the margin, the posterior pair larger, oval, slightly further from the lateral margin opposite the base of the third leg than from one another, the 2 anterior pairs small, placed midway between the median line and the lateral margin opposite the bases of the first and second legs respectively, or the anterior pair nearer the lateral margin. Posterior part of under surface of the coxæ of first and second legs and especially the infero-posterior surface of that of third leg with a large area densely studded with minute, sharp, dentiform spinules. Lateral margins of carapace lightly sinuated above the base of the third leg on each side. Chelicerae produced at the inner angles in front into a prominent lobe, which bears about 5 short, stout, conical teeth on the sides and apex, the lateral part of the anterior edge of the chelicerae armed with a row of long bristles, with or without a short conical tooth near the lobe. Other characters as in *Acanthodon*.

Type: *G. namaquensis* n. sp.

GORGYRELLA NAMAQUENSIS n. sp.

(a) *Type*: 1 ♀ (No. 8469) found by Mr. A. W. Rogers and Mr. E. H. L. Schwarz near the foot of the western slope of the Giftberg, south of Van Rhyns Dorp, Cape Colony, during one of their expeditions in connection with the Geological Survey. The spider was found in a subterranean nest closed by a trap-door.

♀. *Colour.*—Carapace and limbs pale ochraceous, the chelicerae yellowish brown; abdomen dirty pale yellowish, without spots; coxæ of pedipalps and the labium reddish brown.

Carapace (measured laterally to the ocular area) as long as the tibia, metatarsus and $\frac{1}{2}$ the tarsus of fourth leg, and equal to the patella, tibia and $\frac{2}{3}$ of the metatarsus of first leg.

Ocular area wider than long, its length almost equal to the distance

between the posterior lateral eyes, its width only very slightly less than the length of the metatarsus of first leg. The area formed by the anterior lateral and anterior median eyes slightly wider behind than in front, and about $1\frac{3}{4}$ times as long as wide behind; the median eyes slightly over an eye's diameter apart; the lateral eyes slightly larger, less than an eye's diameter apart, each situated on the anterior side of a low tubercle with the visual axis directed obliquely upwards at an angle of about 30° to the horizontal. The posterior row of eyes lightly procurved; the median ones the smallest of the 8, their distance apart slightly greater than their distance from the lateral eyes, their outer margins slightly further apart than those of the anterior median eyes; the lateral eyes much nearer to the anterior edge of the carapace than to one another.

Pedipalps with a band of long and short stout spines on the lower part of both the inner and outer surfaces of the tarsus and tibia; patella with a single internal spine; femur with a pair of stout, long, distal, internal spines, in addition to numerous, stout, spiniform setæ along the inner inferior edge.

Legs.—First leg with the tibia as long as the metatarsus and $\frac{1}{3}$ the tarsus; outer and inner surfaces of the tarsus, metatarsus, and tibia with a band of spines similar to those on the pedipalps, but the anterior band on the tibia abbreviated proximally, the tibia and metatarsus also often with a spine below; patella not spined, but with a few, stout, distal, spiniform setæ below. Second leg spined like the first, except that the proximal posterior spines of the tibia are long and setiform. Tarsus of third leg with a few distal spinules below; the metatarsus with a band of short spinules along both anterior and posterior upper edges and 0-1 distal setiform spine below; the tibia with a pair of similar but broader bands of spinules; the patella with the anterior band only, of which the distal 5-6 spines form a transverse row overhanging the distal edge of the segment, the posterior upper edge also with a pair of apical spinules. Fourth leg with a group of infero-anterior spinules distally on the tarsus, and with several pairs of similarly situated spines and spiniform setæ on the metatarsus; tibia with 0-1 external spine at the base; patella with a broad band of short spinules along the anterior upper edge.

Genital operculum with the posterior striæ on its surface near to the lightly convex posterior margin.

Measurements.—Total length 30; length of carapace $9\frac{1}{2}$, width $8\frac{1}{4}$; length of tibia of first leg 3.6; width of ocular area $2\frac{3}{4}$.

(b) 1 ♀, an old specimen labelled "Ookiep," Namaqualand Div., Cape Colony. (C. Warden.) Closely resembling the type, but the metatarsus of third leg with a distal inferior spine instead of a

setiform spine, and the patella with 4 apical spinules at the upper posterior edge.

GEN. ACANTHODON Guérin.

1. ACANTHODON CREGOEI n. sp.

Type: 1 ♂ (No. 981) found at Durban, Natal, by Mr. J. P. Cregoe, in October, 1896.

♂. *Colour*.—Brown, the distal segments of second leg and the 2 posterior pairs of legs more yellowish in parts; sternum pale yellowish; coxæ of legs pale yellowish, those of pedipalps brownish; abdomen black, the under side pale yellowish, the genital operculum brownish behind.

Carapace with a broad band of setiferous granules on each side on the cephalic portion, the thoracic portion sparsely granular; its length equalling that of the metatarsus together with $\frac{1}{4}$ of the tarsus of fourth leg, and that of the metatarsus together with $\frac{1}{2}$ the tarsus of first leg.

Ocular area very distinctly longer than wide. The area formed by the anterior median and anterior lateral eyes only very slightly wider in front than behind and almost twice as long as its posterior width; the median eyes about $\frac{1}{2}$ an eye's diameter apart; the lateral eyes slightly larger than the median eyes, much less than $\frac{1}{2}$ an eye's diameter apart, each situated on the anterior side of a very prominent tubercle with the visual axis quite horizontal. The posterior row of eyes procurved, the median ones small, a little nearer to the lateral eyes than to one another, their outer margins the same distance apart as those of the anterior median eyes.

Pedipalps.—Tibia turgid, about twice as long as the patella or tarsus and less than twice as long as high, its upper edge strongly convex, its lower edge also convex, the distal part of the infero-external surface deeply excavated in the form of a large concave notch, the proximal and outer margins of which are furnished with a broad semicircular band of short close-set spinules; tarsus provided with a group of spines on the apical dorsal prominence; the process of the bulb broad and strongly flattened at the base but rapidly narrowing to the middle, the distal half narrow, flattened, with slight spiral twist, dilated again at the apex, which is very obliquely truncated.

Legs.—First leg with the tibia equal to the metatarsus in length, slightly wider in the middle than the femur, slightly incrassated distally on the inner side and furnished here with 2 stout black processes, of which the distal and lower one is very broad and

obtuse and bears a short spiniform process at its upper angle, the other process turgid, sharply conical at the apex; patella armed with a couple of subsetiform spines at the apex below; tibia armed below with 4 external but no internal spines; metatarsus very distinctly curved proximally (when seen from the side), concave also internally at the base and slightly incrassated internally at the end of the basal fourth, the eminence bearing one short spine and 3-4 stout spiniform setæ; distal part of metatarsus with 1-2 internal and 3 infero-external spines; tarsus with 1 internal and 1-2 external spines. Second leg with 2-3 slender spines at the apex of the patella below; the tibia with about 6 outer and 3 inner long slender spines below; metatarsus curved, with 1 internal and 2 external spines at the apex below and 3 others along the lower outer edge; tarsus with 1 inner and 3 outer short spines. Third leg with a band of short spinules along upper anterior edge of patella, only 1 or 2 of the distal stout spinules overhanging the distal edge, the posterior upper distal edge with 2-3 stout spinules; tibia with 7-9 short spinules along anterior upper edge, 1 on posterior surface and several slender spines or spiniform setæ on inferior surface; metatarsus slightly curved, with a number of spines below and several at the sides; tarsus with several spinules in front and behind. Fourth leg with a band of spinules along anterior upper edge of patella from the base to a little beyond the middle; tibia with setiform spines below; metatarsus slightly curved, with setiform spines below, including 3 at the apex; tarsus with 2 posterior and several anterior spines. All the tarsi scopulate below. Metatarsi not scopulate.

Sternum with 2 pairs of small sagilla opposite the bases of the legs of the first and second pairs.

Measurements.—Total length 11; length of carapace $4\frac{2}{3}$, width 4; length of tibia of first leg 3.6.

Related to *A. thorelli* (Cambr.), but in the latter the area formed by the anterior median and lateral eyes is wider behind than in front.

2. ACANTHODON KOLBEI n. sp.

Types: 2 ♀ from the Kentani District in the Transkei, Cape Colony (No. 4543, *Dr. F. C. Kolbe*).

♀. *Colour*.—Carapace yellowish brown; chelicerae dark brown; pedipalps and the 2 anterior pairs of legs brown, the 2 posterior pairs yellowish brown to brownish yellow; sternum brownish yellow, darker at the lateral and posterior margins; the labium and the coxæ of the pedipalps brown, the coxæ of posterior legs pale yellowish, those of anterior legs brownish yellow; abdomen pale yellowish, with black

hairs, the upper surface more or less provided with infuscate reticulation along the median region, the setiferous tubercles also infuscated, the genital operculum brown.

Carapace (measured on the outer side of the frontal eye tubercles) as long as the tibia, metatarsus and about $\frac{4}{5}$ of the tarsus of fourth leg, and as the patella, tibia and about $\frac{4}{5}$ of the metatarsus of first leg.

Ocular area as long as or very slightly longer than wide, its width from slightly over $\frac{1}{2}$ to nearly $\frac{2}{3}$ of the length of the metatarsus of first leg. The area formed by the anterior lateral and anterior median eyes very distinctly wider in front than behind and about twice as long as its posterior width; the median eyes less than an eye's diameter apart; the lateral eyes a little larger, about an eye's diameter apart, each situated on the anterior side of a very prominent tubercle with the visual axis quite horizontal, the upper margin of the eye a little lower than the summit of the tubercle but the lower margin scarcely raised above the level of the carapace. The posterior row of eyes rather strongly procurved, the median eyes very small, very distinctly nearer to the lateral eyes than to one another, their outer margins very distinctly wider apart than those of the anterior median eyes; the lateral eyes much nearer to the anterior edge of the carapace than to one another.

Pedipalps spined as in *Gorgyrella namaquensis* (p. 351), the femur with 2-3 stout distal spines and with slender setæ.

Legs spined much as in *Gorgyrella namaquensis*. First leg with the tibia as long as the metatarsus and $\frac{1}{2}$ the tarsus, the anterior band of spines on the tibia reaching to the base; the under side not spined mesially. Second leg also spined to the base on the anterior side of the tibia. Metatarsus of third leg with the lateral spines of moderate length, the under side with a couple of spiniform setæ and 1-2 long apical spines; tibia with a narrow band of short spinules along anterior upper edge, the posterior upper edge with only a couple of spinules; the anterior band of short spinules on the patella abbreviated proximally, with none or only 1-2 of the distal spinules overhanging the distal edge of the segment, and with only 1 posterior distal spinule above. Fourth leg with a band of several, long, stout spines on lower surface of the metatarsus; the tibia with a long, slender, apical spine below; the patella with a small band of about a dozen short spinules at the base along upper anterior edge, the band not reaching to the middle of the segment.

Sternal sagilla very small but distinct, quite marginal, 1 opposite the base of each of the legs of the first 2 pairs. *Labium* with 2-3 apical teeth in a single row.

Abdomen sparsely tuberculate above.

Measurements.—Total length 20; length of carapace $8\frac{1}{2}$, width 6.6; length of tibia of first leg 3.4; width of ocular area 1.8.

This species may possibly be the ♀ of *cregoei*, in which, however, the outer margins of the anterior median eyes are as far apart as those of the posterior median eyes and almost as far apart as those of the anterior lateral eyes.

The nest, which was also obtained by Dr. Kolbe, is tubular, about 10 mm. in diameter throughout its greater part, but at about 10 mm. from the opening it commences to widen gradually and reaches 15 mm. at the opening. The edges of the tube expand horizontally at the opening and form a broad rim about 4 mm. wide round two-thirds of the circumference. The lid is flat and not thickened, merely closing against the rim. The hinge is very broad, being nearly as broad as the greatest diameter between the outer edges of the rim. Greatest width of lid (taken parallel to hinge) 24 mm., least width (at right angles to hinge) 17 mm., width of hinge 20 mm.

GEN. CYRTAUCHENIUS Thor.

1. CYRTAUCHENIUS O'NEILI n. sp.

Type: 1 ♀ (No. 8506) found by the Rev. J. A. O'Neil at Dunbrody on the Sundays River, Uitenhage Div., Cape Colony.

♀. *Colour*.—Carapace chestnut-brown, the lateral borders narrowly white for some distance behind, the white border produced on its medial side just opposite the space between the third and fourth legs; chelicerae reddish black; femora of pedipalps and of first 2 pairs of legs strongly infuscated, the patellæ, tibiæ and part of the metatarsi ochraceous above and below but infuscated at the sides, the tarsi and distal part of the metatarsi blackish brown to nearly black; the 2 posterior pairs of legs pale ochraceous to brownish yellow, lightly infuscated in parts, especially at the sides, the femora infuscated above; abdomen pale yellowish, the sides and upper surface dark violet-brown anteriorly; sternum pale yellow, broadly infuscated at the sides; coxæ of pedipalps brownish red, those of the legs pale yellowish below, the anterior ones lightly infuscated in places.

Carapace $\frac{1}{4}$ longer than wide, as long as the tibia and metatarsus of fourth leg and as the tibia, metatarsus and tarsus of first leg.

Ocular area scarcely more than twice as wide as long; the anterior row only slightly narrower, lightly procurved, the eyes equidistant, the laterals much larger than the small medians, which are situated

on a tubercle; the posterior row transverse, the laterals subreniform, larger than the medians but slightly shorter than the anterior laterals; the posterior laterals $\frac{1}{2}$ their long diameter from the anterior laterals and much less than this distance from the posterior medians; the posterior median eyes elongate, much further from the anterior median eyes than from the posterior lateral eyes, their distance from the latter being only $\frac{1}{2}$ their lesser diameter.

Pedipalps with 1 external and 0-1 internal basal spines below on the tarsus and with 4 apical spines below on the tibia.

Legs.—Tarsi and metatarsi of first and second pairs of legs thickly scopulate to the base (basal half of second metatarsus on inner side only). Tarsus I with a couple of short distal spinules externally, almost hidden in the scopula, II with 3-4 short outer spines, III and IV strongly aculeate externally and with a few distal spinules below, III also with a posterior dorsal series. Metatarsus I with 3 apical, 2 middle and 2 basal spines below, II with 2-3 apical, 3 middle and 2 basal spines below, III numerous spined on both outer and inner surfaces above and with several pairs of long spines below, IV numerous spined along inferior outer surface and with 2 inner spines above. Tibia I and II each with a single strong apical spine below, III and IV with a pair of long apical spines below, III also with 3-6 anterior, 3 posterior dorsal, and 2 distal posterior short spines, IV also with 2 spines on the inner surface and with a row of paired spiniform setæ on the under surface. Patella III covered with short spines on the anterior surface, the dorsal surface with 1-2 stout posterior spines, IV with short sharp spinules at the base externally. Femur IV with a dense group of strong short spines at the apex above and externally. Claws of anterior legs with 5-6 teeth in each row, those of posterior legs muticous.

Posterior sternal sagilla very large, pear-shaped, near to the median line, their distance apart about $\frac{1}{2}$ their length and less than their distance from the lateral margin, the sagilla opposite the bases of the second pair of legs of moderate size, quite near the margin, the anterior sagilla marginal and small.

Coxæ of pedipalps with 4-6 inconspicuous very minute granules along the basal edge anteriorly. Coxæ of fourth leg with the median basal naked area short, occupying only about $\frac{1}{6}$ of the length of the segment; the similar area on the under side of the third coxa long oval, reaching to the middle of the segment.

Apical segment of *posterior spinners* $\frac{1}{2}$ longer than the penultimate segment and much longer than the ocular area.

Measurements.—Total length 24; length of carapace 8, width $6\frac{1}{4}$.

2. *CRYTAUCHENIUS LATERALIS* n. sp.

Type: 1 ♀ (No. 4232) from Dunbrody on the Sundays River, Uitenhage Div. (*Rev. J. A. O'Neil*).

♀. *Colour*.—Carapace dark chestnut-brown, the lateral borders white behind for some distance, the white part widened angularly on its median side between the bases of the third and fourth legs, the cephalic portion darker at the lateral margins and provided with a broad median dark band; chelicerae dark brown; legs pale ochraceous, the femora and the sides of the more distal segments more or less infuscated; abdomen pale yellowish below, tinged with violet-brown at the sides and above, especially at the base; sternum pale yellowish, broadly infuscated at the sides; coxae pale yellowish, lightly infuscated.

Carapace at least $\frac{1}{3}$ longer than wide.

Ocular area slightly more than twice as wide as long and very slightly wider behind than in front, the hind margins of the anterior eyes in a straight line, the anterior margins of the posterior eyes also in a straight line, but the posterior margins forming a strongly recurved line; posterior lateral eyes much larger than the anterior median eyes and scarcely smaller than the anterior lateral eyes, scarcely further from the latter than from the posterior median eyes, which are round and only slightly smaller than the small anterior median eyes and twice as far from the latter as from the posterior lateral eyes; lateral eyes only $\frac{1}{3}$ of their long diameter apart, the posterior ones not or scarcely reniform.

Pedipalps spined below on the tarsus and tibia, the coxae muticous.

Legs.—Tarsi I and II with a short distal inferior spine, III with several anterior and inferior spines and a posterior dorsal row of 4 spines, IV with numerous short external spines and a number of longer distal ones below. Metatarsi I and II with 3 apical, 2 middle and 2 basal spines below, most of them, particularly the apical ones, powerful; III with a number of spines along the upper part of anterior surface, a uni- or bi-seriate series along the postero-dorsal edge, and a number of long spines below, especially at the apex; IV with numerous, long, stout spines below, and a row of 2-3 along the inner upper edge. Tibiae I and II each with a single, stout, apical, outer spine and several other long setiform spines below; III and IV with a pair of long apical spines below, III also with 8-9 upper anterior, 2 postero-dorsal, 1-2 dorsal, and 2 distal posterior spines, IV also with 2 internal spines above and a double series of long spiniform setae below. Patella III covered with short spines on the anterior surface, and with 2 stout spines along the postero-

dorsal margin, IV with a few, short, dark spinules at the base externally. Femur IV with a dense group of short, stout, apical spines above and externally. Claws of anterior legs with about 6 teeth in each row; inner claw of posterior legs with a row of 4 short teeth at the base and a row of 3 teeth at the middle, the outer claw with 1 short basal tooth. Tarsus of first and second legs rather thickly scopulate, the metatarsus of first leg with the scopula absent from the proximal half, metatarsus of second leg slightly scopulate at the apex only.

Posterior sternal sagilla very slightly more than their own length apart and about $\frac{1}{2}$ their length from the lateral margin.

Posterior spinners with the apical segment about $\frac{1}{2}$ longer than the penultimate segment (measured along under side).

Measurements.—Total length 18; length of carapace 5·8, width 4·2.

3. CYRTAUCHENIUS NIGRICEPS n. sp.

Type.—1 ♂ (No. 4204) from Johannesburg, found by Mr. J. P. Cregoe.

♂. *Colour.*—Carapace reddish yellow, the cephalic portion blackish red; chelicerae black; legs and pedipalps, including the coxæ, and the sternum pale ochraceous; abdomen pale yellowish below and at the sides, blackish brown above.

Carapace a little more than $\frac{1}{4}$ longer than wide, with a row of stout, curved, marginal spines on each side above the bases of the 2 posterior pairs of legs, the upper surface also with a group of setæ and sigmoid spines posteriorly.

Ocular area about $2\frac{1}{3}$ times as wide as long, the sides subparallel; the anterior row of eyes very slightly procurved, the lateral eyes only about $\frac{1}{3}$ longer than the medians, the latter rather large, slightly further from one another than from the lateral eyes; the posterior row of eyes transverse, their anterior margins forming a slightly procurved, their posterior margins a slightly recurved line, the laterals as far or slightly further from the anterior lateral eyes than from the posterior median eyes, shorter than the former but much larger than the latter and about as long as the anterior medians, which are much larger than the posterior median eyes.

Pedipalps unspined; the tibia long, lightly convex along the under side; the tarsus short, truncated; the bulb subglobular, its process slender, about as long as the bulb, with short spiral curve, the distal portion very fine and filiform, ending in a fine point.

Legs.—All the tarsi scopulate to the base. Metatarsus of first leg much slenderer than the tibia, lightly concave internally, equal

in length to the tibia and a little longer than the distance from the centre of the fovea to the anterior margin of the carapace but not quite twice as long as the tarsus. Metatarsi I and II scopulate distally for about $\frac{1}{3}$ of their length. Tarsus I unspined, II with 4 small outer spines, III with several internal and a number of external spinés, some of the latter stouter, IV with a distal group of small spines internally and a double series of longer spines externally. Metatarsus I with 1 inner and 2 outer apical spines and an outer row of 2 other spines below, the inner surface also with a stout spine near the base; II with 2-3 apical and 3 other stout spines at or near the outer inferior margin, 1 apical inner spine and with or without another inferior and a superior inner spine; III numerous spined on all sides; IV numerous spined below, with a row of 3 spines along the inner upper edge. Tibia I with 9-10 strong spines along the inner surface, including a distal pair, and a row of 6-8 similar spines along the outer inferior edge, II with long spines below and 3 spines along the inner upper edge, III spined on all the surfaces, the anterior surface with a broad band of about a dozen short spines, IV with 3 apical spines and several pairs of long setiform spines below, the inner surface with about 4 spines above. Patellæ I and II with an apical spine below, I also with 3 and II with 2 spines along upper inner edge, III with numerous short spines on the anterior surface and a row of 3 stout spines on the dorsal surface, IV with a stout apical spine below. Femora with several rows of spines above, IV with a distal group of short stout spines at upper outer edge. All the claws with a double series of teeth below, the anterior claws with about 6-8 teeth in a row, those of fourth leg with 4-6 teeth in each row.

Abdomen spined near the base above.

Posterior spinners with the apical segment apparently a little longer, or at least not shorter, than the penultimate segment (seen from below).

Posterior sternal sagilla moderately large, their distance apart scarcely exceeding their length but distinctly exceeding their distance from the lateral margin.

Measurements.—Total length 14; length of carapace $5\frac{3}{4}$, width $4\frac{1}{2}$; length of metatarsus of first leg 3.8.

GEN. HOMOSTOLA Sim.

HOMOSTOLA ZEBRINA n. sp.

(a) *Types*: 3 ♀ (No. 8445) from Pietermaritzburg, collected by Mr. Claude Fuller, Government Entomologist of Natal.

♀. *Colour* (in spirits).—Carapace pale yellow (or testaceous yellow, with the sides of the thoracic portion pale yellow), the cephalic portion with a broad, faintly infuscate, median stripe in the middle and a narrow, darker, median line behind, the lateral borders of the cephalic portion dark brown, the fovea broadly infuscated, with some short infuscate lines radiating from it; legs and pedipalps pale yellow to ochraceous; chelicerae reddish black to blackish brown; sternum pale yellow, the sagitta and the anterior part often yellowish brown; the coxæ, including those of the pedipalps, either all pale yellowish, or the anterior ones yellowish brown; abdomen pale yellowish, the upper surface with numerous dark brown spots and stripes, amongst which an interrupted median stripe and several pairs of transverse stripes may be distinguished, the under surface with a dark spot on each side behind.

Eyes all placed on the ocular tubercle, the eyes of the anterior row equally distant from one another or the medians slightly nearer to each other than to the lateral eyes, the hind margins of the eyes in a straight line or almost so, the laterals large, less than their smaller diameter from the margin of the carapace, much larger than the median eyes. The posterior row as wide as the anterior row, the anterior margins of the eyes in a straight line or almost so, the lateral eyes larger than the anterior medians but smaller than the anterior laterals, their distance from the latter and from the posterior medians about $\frac{1}{3}$ of their long diameter.

Legs.—Tibia of first leg as long as the metatarsus and $\frac{1}{3}$ of the tarsus. All the tarsi without spines. Metatarsi I and II with 2 apical and 1–2 other outer spines below, II often with a small inner spine below in addition; III and IV with paired spines below and with strong spines along both the outer dorsal and inner dorsal edge. Tibia I without spines, II with several stout setiform spines below, III with a pair of long apical spines, followed by a couple of long setiform spines below, the posterior surface with 1 apical and 1 superior basal spine, the anterior surface with 2 superior spines near the middle, IV with a pair of apical spines followed by several stout spiniform setæ below, the inner surface with 2–3 stout spines in a row. Patella III with a row of 2–3 very stout spines on anterior surface and a broad band of short setiform spinules along antero-dorsal surface, IV with a short band of similar spinules at the base. Femur III with a transverse apical row of short setiform spines at the outer dorsal edge, IV with a group of short spines and short setiform spines at the apex above. Tarsi and metatarsi of first and second legs thickly scopulate to the base. Claws of first leg biserially dentated below, the basal row composed

of 4-5 teeth, of which the distal one is longest, the row nearest the axis of the leg composed of a single small tooth or tubercle nearer the middle of the claw; claws of fourth leg with 3 unequal teeth at the base, the inner claw with an additional tooth near the middle, nearer the axis of the leg.

Coxa of *pedipalps* with a large group of teeth at the base in front; the *labium* with an apical row of 5-6 and a second row of 2-4 teeth.

Apical segment of *posterior spinners* a little over $\frac{1}{2}$ as long as the penultimate segment.

Measurements.—Total length of largest ♀ 23; length of carapace $8\frac{1}{2}$; length of tibia of first leg $3\frac{1}{2}$.

Closely allied to *H. vulpecula* Sim. from Zululand, but the latter is said to have the legs and abdomen dark fulvous and 6-7 teeth on the claws of the posterior legs.

(b) In the Museum is also an old dried ♀ specimen without abdomen from Durban, Natal, collected by Colonel J. H. Bowker.

GEN. STICTOGASTER nov.

Carapace almost glabrous, slightly more than $\frac{1}{4}$ longer than wide; the cephalic portion in the ♀ strongly convex; the thoracic portion depressed, the fovea deep and wide, procurved. Ocular area parallel-sided, a little over twice as wide as long, all the eyes situated on the tubercle, the anterior row lightly procurved, the posterior row slightly or more strongly recurved, the posterior lateral eyes very close to the posterior medians and much further from the anterior lateral eyes, the lateral eyes equal or the posterior ones somewhat smaller than the anterior ones; the eyes of the anterior row equidistant from one another, the laterals scarcely twice as large as the median eyes. Posterior sternal sagilla moderately large, oval, about their own length from the lateral margin and slightly over to $1\frac{1}{2}$ times that distance apart, the 2 anterior pairs small, those opposite the second pair of legs nearly twice their own length from the lateral margin; the 3 sagilla of each side almost in a straight line. Labium about $1\frac{1}{2}$ times as wide as long, its anterior part thickly covered with numerous teeth. Maxillæ wide, with a group of teeth at the base in front. Chelicerae with 2 rows of 7-10 teeth each below and a few additional teeth between these posteriorly, the anterior teeth of the outer row strong, commencing far forwards; the anterior edge armed on the inner part with a row of about 4 large, broad, subequal spines, and in the outer part with a row of long setiform spines intermixed with some short sharp ones. Tarsus of pedipalp with several short spines below, those of the legs unspined. Tarsus and distal part of

metatarsus of first leg and the tarsus of second leg with a thin scopula of short hairs, tarsi of third and fourth legs thickly covered below with fine bristles. All the metatarsi and tibiæ with strong spines or spiniform setæ. Claws of anterior legs biserially dentate, with several teeth in each row; claws of fourth leg with a basal row of teeth. Metatarsi of anterior legs much longer than the tarsi. Coxæ as in *Homostola* Sim., the coxæ of the third and fourth legs having the inferior medio-basal naked area quite short but that at the anterior lower edge long, reaching beyond the basal third of the segment. Posterior spinners with the apical segment short and hemispherical.

Type: *S. reticulatus* n. sp.

This genus falls into Simon's group *Cyrtuchenicæ*, and appears to be related to *Aptostichus* Sim. or *Homostola* Sim. and especially to *Bessia* Poc.

STICTOGASTER RETICULATUS n. sp.

Types: 2 ♀ from Bonnie Vale Farm at Bushmans Drift on the Breede River, Swellendam Div. (near Ashton), found by Mr. Charles Groom.

♀. *Colour* (in spirits).—Carapace pale greenish yellow (the cephalic portion and the region round the fovea brownish yellow in one specimen), faintly infuscated, the cephalic portion with brown lateral borders and with or without an infuscate median line; chelicerae yellowish brown; legs pale greenish yellow, the upper surface of the patellæ and tibiæ and often also the greater portion of the distal segments pale ochraceous; abdomen pale yellowish, the upper surface thickly covered with an irregular network of purplish black, in which an irregular median stripe may be made out, the under surface with some scattered black marks on its posterior half and a few also on the medial side of the posterior lung-books.

Eyes of the anterior row with their hind margins forming a slightly procurved line, their distance apart equalling or a little exceeding the diameter of the median eyes, the lateral eyes not very large, scarcely twice as long as the median eyes, their distance from the margin of the carapace less than their shorter diameter; the eyes of the posterior row with their anterior margins forming a slightly or considerably recurved line, the median eyes subequal to or only slightly smaller than the anterior median eyes, the posterior lateral eyes as long as or a little shorter than the anterior lateral eyes and separated from them by $\frac{1}{2}$ or more than $\frac{1}{2}$ their long diameter but much nearer to the posterior median eyes.

Legs.—Tibia of first leg equal to the metatarsus and $\frac{1}{6}$ or less of

the tarsus. Metatarsi I and II with 2-4 apical, 0-1 inner, and 2 outer strong spines below, II with 1-2 strong spines along the upper inner edge as well, III with 3 apical, 0-1 outer, and 2 inner spines or spiniform setæ below, and with 2 outer and 3 inner spines at or near the upper margin, IV with several pairs of spines below and a row of 2 along the upper inner edge. Tibiæ I and II with a couple of long setiform spines below, II with or without an upper inner spine in addition, III with 1-2 outer apical spines or spiniform setæ below, 1-2 dorsal spines and 1 short apical internal spine, IV with a number of long spines and setiform spines below and with or without 2-3 spines or spiniform setæ along the inner surface. Patella III with a row of about 6 short stout spines along anterior surface, accompanied by short stout setiform spines, IV with numerous stout spiniform setæ along upper outer surface. Femora as in *Homostola zebrina* (p. 360). Claws of first leg with 3, sometimes 4, teeth in the basal row, of which the distal tooth is longest, the row nearest the axis of the leg more distal, composed of 2-3 small teeth; claws of fourth leg with 2-3 basal teeth.

Labium with about 25 teeth in 4-5 rows.

Apical segment of *posterior spinners* $\frac{1}{2}$ as long as the penultimate segment.

Measurements.—Total length 20; length of carapace 7, width $5\frac{1}{2}$; length of tibia of first leg $3\frac{1}{2}$.

GEN. HERMACHASTES Poc.*

1. HERMACHASTES LIGHTFOOTI n. sp.

Types: 8 ♂ (Nos. 657, 8543, 8550) and 2 ♀, all from the Cape Town side of Signal Hill, found under stones.

♂. *Colour*.—Carapace pale ochraceous, the cephalic portion often faintly infuscated, more darkly so along the median line and towards the lateral borders; chelicerae, pedipalps, and legs pale ochraceous; sternum and under side of the coxæ of legs pale yellowish; under surface of abdomen and the greater part of the lateral surface (also in the posterior part) pale yellowish, with a large spot above and a small one in front of each of the posterior spinners; the upper surface of the abdomen with an irregular black pattern, showing

* In all the species of this genus the inferior claw of the legs is large and very distinct, and the ocular area is at least twice as wide as long. In the ♀ and young the claws of the legs are biserially dentate below, one of the rows being more distal than the other although both generally overlap for a portion of their length; in the ad. ♂ the two are united to a single, long, spirally curving, numerously toothed row.

numerous small and some large, pale yellowish spots (the latter sometimes arranged in a double series) but without the well-defined, obliquely transverse stripes found in *H. collinus* Poc., &c.

Carapace as long as the metatarsus and $\frac{1}{3}$ – $\frac{2}{5}$ of the tarsus of fourth leg, and subequal to or a little shorter than the tibia and metatarsus but longer than the metatarsus and tarsus of first leg; bottom of fovea transverse.

Chelicerae longish, with 10–11 large teeth in the inner row below; the under side (measured along the middle of the groove) almost as long as the sternum or longer.

Labium and coxæ of pedipalps muticous.

Posterior spinners with the distal segment subequal to or even exceeding the penultimate in length; anterior spinners $1\frac{1}{2}$ to twice their diameter apart.

Pedipalps.—Process shorter than the bulb, curved and moderately slender.

Legs.—Tarsi muticous. Metatarsus I straight, the under surface without spines, excepting 2 (sometimes 1 or 3) along the inner and also along the outer edge, the inner surface besides with 2 large curved spines near the middle and a smaller spine near the apex (the latter sometimes absent), the outer surface also with a couple of spines in addition to those along the lower edge; II spined much as I, but the middle of the segment generally with only 1 spine on the inner surface and none at the inner inferior edge; III and IV numerous spined. Tibia I with 2 stout, spur-like, distal spines, each raised on a low tubercle, the apical spur broad, simply curved, situated on the inner inferior edge, the other spur longer and slenderer, with sigmoid curvature, situated in the middle line of the inner surface at a little distance ($\frac{1}{4}$ – $\frac{1}{3}$ of the length of the segment) from the apex; under surface of tibia with 1 slender, inner, apical spine and 3 spines along the outer edge, the outer surface with 0–1 and the inner surface with 1–3 other spines in addition; tibia II with several spines below, a couple on the inner surface, and 0–1 on the outer surface; III and IV with a number of spines. Patella III with a row of 3 spines on the outer surface and often also an apical spine at the inferior outer edge. Femora spined above. Tarsi I and II scopulate to the base, metatarsi I and II broadly scopulate below almost to the base, the row of setæ dividing all these scopulæ composed of small fine bristles; tarsus III with a mesial band of longer setæ and a narrow band of scopular hairs on each side of it below; metatarsus III with a thin scopula, excepting in the basal part.

♀. *Colour* as in ♂, or the whole carapace faintly infuscated and most of the leg segments more or less tinged with olive-greenish.

Carapace as long as the tibia and metatarsus of fourth leg but slightly exceeding the tibia, metatarsus, and tarsus of first leg; bottom of the fovea very distinctly or only slightly procurved.

Chelicerae as in the ♂, but the under side longer than the sternum.

Posterior spinners with the apical segment shorter than the penultimate segment but exceeding half its length; anterior spinners separated by about twice their diameter or more.

Labium with 2-4 apical teeth in a single row. Coxæ of pedipalps with 2-4 teeth at the base.

Pedipalps with some spines on the tarsus and tibia below.

Legs.—Tibia of first leg equal in length to the metatarsus. Tarsi without spines, the anterior ones furnished below with numerous longish hairs and fine bristles but not distinctly scopulate, the posterior ones with stouter bristles. Metatarsi I and II with one apical inner and 1-2 outer spines below, III and IV with 3 strong apical spines below, 3 spines along the posterior upper edge, and 2 along or near the anterior upper edge, IV also with 2-4 other spines below in 2 rows. Tibiæ I and II without spines, II with some stout spiniform setæ below, III and IV with 1-2 apical spines and some paired spiniform setæ below, III also with 1 distal spine and 1 superior basal (often setiform) spine on the posterior surface, 1 posterior basal spine on the dorsal surface, and 1 stout submesial spine on the anterior surface, IV with a stout distal spine and a couple of more proximal and slenderer spines or spiniform setæ on the inner surface. Patella III with a row of 3 stout spines on anterior surface. Femur IV with an apical transverse row of stout setæ and setiform spines on the outer and upper edges. Claws of anterior legs with 2-4 teeth in the basal row and 2-4 small teeth in the row nearest the axis of the leg, the latter row wholly distal to the former; claws of fourth leg with 2 teeth in the basal row, the inner claw also with a more distal row of 2-3 teeth, the outer claw with or without a small, more distal tooth nearer the axis of the leg.

Measurements.—Total length ♂ $9\frac{3}{4}$ – $12\frac{1}{4}$, ♀ $14\frac{1}{3}$; length of carapace ♂ $4\frac{1}{2}$ – $4\frac{3}{4}$, ♀ 5.

This species has relatively short legs and long chelicerae.

2. HERMACHASTES SAGITTARIUS n. sp.

(a) *Type*: 1 ♂ (No. 7814) found under a stone at Brandvlei, Worcester Div., by myself.

♂. *Colour*.—Pale ochraceous; the cephalic portion of the carapace with a median and 2 lateral, well-marked, fusco-olivaceous bands; the under side of the sternum, coxæ, and especially of the posterior

femora very pale, almost white; the abdomen coloured as in *H. lightfooti*, except that the black of the upper surface forms a series of well-marked, obliquely transverse stripes, separated by broader parallel bands of pale yellow and united along the median line.

Carapace equal in length to the metatarsus and $\frac{1}{2}$ of the tarsus of fourth leg, and to the metatarsus and $\frac{3}{4}$ of the tarsus or the tibia and $\frac{2}{3}$ of the metatarsus of first leg; fovea slightly recurved.

Chelicerae slender, with 8–10 teeth in the inner series, the under side (measured along the groove) distinctly less than the sternum in length.

Labium and *coxae* of pedipalps muticous.

Posterior spinners with the apical segment subequal to the penultimate segment.

Pedipalps.—Process shorter than the bulb, strongly curved and rather stout, but not so stout as in *H. collinus*, the apex bluntish.

Legs.—Tarsi muticous. Metatarsus I straight, except quite at the base, where it is concave below, the under surface without spines, excepting an apical one at the inner and 3 along the outer edge, the inner surface besides with 4 large curved spines in a row, the 2 proximal ones with slight sigmoid curvature, the outer surface also with 1–2 spines in addition to those along the inferior edge; II spined as in I, excepting that there are only 2 slender spines on the inner surface instead of the 4 spines; III and IV numerously spined. Tibia I as in *H. lightfooti*, except that the more proximal spur is almost or quite as broad as, and only a little longer than the apical spur and without well-marked sigmoid curvature, while there are 2 spines along the inferior inner edge, of which the distal one is stoutish, spur-like, and situated on the base of the tubercle which bears the large apical spur; tibiae II–IV as in *H. lightfooti*. Patellæ all with 1–2 spines, III also with an anterior row of 3 spines. Femora, claws, and scopulæ as in *H. lightfooti*.

(b) 2 large and 2 smaller ♀ and 3 nearly mature ♂ (No. 3313) from round the village of Worcester, found by Mr. R. M. Lightfoot. As the young males do not appear to differ from the females except in the shape of the apical segment of the pedipalps, the following description applies to them as well.

♀. *Colour* as in the ♂, but the carapace faintly infuscated, excepting on the pale ochraceous band on each side of the dark median stripe of the cephalic portion; the chelicerae also for the most part weakly infuscated; under side pale ochraceous; the femora of the legs often faintly tinged with greenish.

Carapace as long as the metatarsus and tarsus of fourth leg

and almost as long as the tibia and metatarsus of the first leg in the large ♀; fovea transverse, sometimes very slightly procurved.

Chelicera stouter, with 8-9 teeth in the inner series, the under side almost equalling the sternum in length.

Posterior spinners with the apical segment only about $\frac{1}{2}$ as long as the penultimate segment.

Labium with 2-4 apical teeth. *Coxæ* of pedipalps with 15-30 teeth at the base.

Tibia of first leg equal to the metatarsus in length. Anterior tarsi scopulate below. Metatarsi I and II with 2 (sometimes 3) inner and 3 outer spines below, II often also with an inner dorsal spine, III and IV also spined. Tibiæ I and II with 1-3 apical spines and several setiform spines below, and often also with 1-2 spines or setiform spines at the upper inner edge; III and IV with 2-3 apical spines and some paired spiniform setæ below, III also with 1 distal, 0-1 middle and 1 superior basal spine on posterior surface, 1 posterior basal spine on dorsal surface, and 1-2 spines along the middle of the anterior surface, IV with a row of (generally 3) spines and setiform spines along the inner surface. Patella III, with 3 stout spines along the anterior surface. Femur IV with a group of stout spiniform setæ along the anterior and upper apical edges. Claws with about 5 long teeth in the basal row furthest from the axis of the leg; the row nearest this axis more distal but still opposite to the other row for a considerable portion of its length and composed of 7-9 teeth in the anterior legs, but almost entirely distal to the other row and composed of only 5-6 (sometimes only 4) teeth in the fourth pair of legs.

Measurements.—Total length ♂ $10\frac{1}{2}$, ♀ $19\frac{1}{2}$; length of carapace ♂ $4\frac{1}{4}$, ♀ $6\frac{1}{3}$, width ♂ 3.4, ♀ 4.9.

The specimens from Worcester and the ♂ from Brandvlei all evidently belong to the same species, the localities being only half a dozen miles apart.

3. HERMACHASTES VALIDUS n. sp.

Types: 1 ♂, 1 large and 5 smaller ♀, dug out of the earth at Bonnie Vale Farm near Bushmans Drift on the Breede River, Swellendam Div. (near Ashton), by Mr. Charles Groom.

♂. *Colour*.—Carapace strongly infuscated; chelicerae brownish black, reddish near the base; femora strongly infuscated above and distally at the sides, the sides and under surface otherwise pale ochraceous; tibia of first leg blackish red all round, the metatarsus and tarsus also red; the remaining segments of the other legs pale

ochraceous and more or less infuscated, the distal segments being paler; coxæ and sternum pale ochraceous; abdomen very pale yellowish, marked as in *H. sagittarius*.

Carapace as long as the metatarsus and $\frac{1}{3}$ of the tarsus of fourth leg, and equal to the metatarsus and about $\frac{2}{3}$ of the tarsus or the tibia and $\frac{2}{3}$ of the metatarsus of first leg. Fovea strongly recurved.

Chelicerae with 11-14 teeth in the inner row below, the under side (measured along the groove) considerably shorter than the sternum.

Labium and *coxæ* of pedipalps muticous.

Posterior spinners with the apical segment slightly more than $\frac{1}{2}$ as long as the penultimate segment (measured below).

Pedipalps.—Tibia strongly gibbous on the outer surface at the commencement of the distal third; the process of the palpal organ shorter than the bulb, strongly curved, stout, broad and flattened, the apex somewhat pointed.

Legs very stout; the tarsi muticous. Metatarsus I lightly but distinctly curved, the under side lightly concave, without spines, excepting an apical one at the inner and 3 along the outer edge, the inner surface besides with 3 long, lightly curved spines in the basal half and a small distal one, all in a row, sometimes also with a short mesial spine at the upper inner edge, the outer surface also with a mesial spine; II spined much as in I, but the inner inferior edge with an additional spine in the middle; III and IV numerously spined. Tibia I short and stout, its dorsal length only about $2\frac{1}{2}$ times its height distally, the segment strongly incrassated below distally, the apical tubercle rather large, bearing 2 short, blunt, very broad, lightly curved, subequal, spur-like spines, of which the outer one (representing the inner, apical, inferior spine of the previous species) is narrower than the inner, and separated from it by a conical process of the tubercle, which fits into a concavity at the base of the inner spur; the more proximal tubercle on the inner surface bearing a larger, very strong, spur-like spine with strong sigmoid curvature; under side of tibia with an apical outer spine, 3 spines in the middle and a pair at the base, the inner surface also with a row of 3 spines above and the outer surface with 1-2 spines in the upper part; tibia II with several spines below, 3 along the upper inner edge and 1 on the outer surface. All the patellæ spined, III with the usual anterior row of 3 spines. Femora spined above. Tarsi I-III with a thick, very wide scopula, divided by a broad dense band of bristles, IV also scopulate below. Metatarsi I and II also scopulate, except in the basal part, the scopulæ divided by a band of bristles, III with a thin patch of scopular hairs in the distal part.

♀ *Colour*.—In the largest example the chelicerae are black, the

carapace and the femora of the legs very dark olivaceous brown, the 2 longitudinal bands on the cephalic portion of the carapace and the remaining leg segments reddish ochraceous, and the under side of the coxæ and the sternum fuscous-brown. In all the other, presumably not quite mature, examples, the chelicerae, the carapace, the femora of the legs, the under side of the coxæ and the sternum are pale greenish or yellowish green, the 2 longitudinal stripes on the cephalic portion of the carapace and the remaining leg segments pale ochraceous. The abdomen is as in the ♂.

Carapace slightly longer than the metatarsus and tarsus of fourth leg, but a little shorter than tibia and metatarsus of first leg (in the younger examples longer than these segments of the first leg). Fovea more or less distinctly procurved or merely transverse.

Chelicerae with about 10 teeth in the inner row, the under side distinctly shorter than the sternum.

Posterior spinners with the apical segment short, half or a little more than half as long as the penultimate segment.

Labium with 2-5 apical teeth in 1-2 rows. *Coxæ* of pedipalps with a large basal area with 40-50 teeth.

Legs as in the ♀ of *H. sagittarius*, but the inferior distal spine in metatarsi I and II often accompanied by 1 or 2 other spines, and patella III often with an additional spine on the anterior surface above or below the row of 3 spines.

Measurements.—Total length ♂ 16, ♀ $25\frac{1}{2}$; length of carapace ♂ $7\frac{1}{2}$, ♀ $8\frac{3}{4}$.

This species is chiefly remarkable for its powerful build, shown especially in the anterior pair of legs in the ♂.

4. HERMACHASTES CAMBIERÆ n. sp.

Type: 1 ♂ (No. 8345) from Houw Hoek, Caledon Div., named after my wife, who discovered the specimen.

♂. *Colour*.—Carapace pale ochraceous, the cephalic portion and part of the thoracic portion more or less infuscated; chelicerae pale ochraceous, with infuscate lines; legs pale yellowish olivaceous, in parts, especially the patellæ above and the femora at the sides, pale ochraceous; under side of coxæ and the sternum pale ochraceous; abdomen pale yellowish, the markings similar to those of *H. lightfooti*.

Carapace equal in length to the metatarsus of the fourth leg, and to the metatarsus and $\frac{2}{3}$ of the tarsus of the first leg. Fovea slightly recurved.

Chelicerae with 9 teeth in the inner row; the under side much shorter than the sternum.

Labium and *coxae* of pedipalps muticous.

Posterior spinners longish, with the apical segment about $\frac{1}{2}$ or slightly more than $\frac{1}{2}$ as long as the penultimate segment.

Pedipalps.—Process of palpal organ longer than the bulb, slender, lightly curved, pointed at the apex.

Legs.—Tarsi muticous. *Metatarsus* I straight, not concave below at the base, the under surface with an inner apical spine and 3 spines along the outer edge, the inner surface besides with 2–5 long spines without sigmoid curvature, the outer surface with 2 spines, the dorsal surface with 0–1 spine; II with 2–3 outer and 2 inner spines below, also 2 along the inner and 2 along the outer surfaces, and 1 on the dorsal surface; III and IV numerously spined. *Tibia* I rather stout, appearing parallel-sided and not incrassated at the apex, when seen from the side, the 2 distal tubercles strong, the apical one bearing 2 short, subequal, very broad spurs, one of which (the modified inner apical spine of the inferior surface) is situated at the apex of the tubercle, while the other and slightly shorter one is more proximal and situated on the upper inner edge of the tubercle near its base; the more proximal tubercle situated at the end of the middle third of the segment and much further from the apex than is the case in any of the other species, bearing a very strong, broad and sharply pointed spur; under surface of tibia with 1 inner (mesial) and 3 outer spines, the inner surface with a row of 3 and the outer surface with 1–2 other spines; II with 3 apical, 2 mesial and 2 basal spines below, also 2 on the inner and 1 on the outer surface; III and IV with a number of spines. *Patellæ* I–III spined, III with the usual row of 3 spines on the anterior surface. *Femora* spined above. *Tarsi* I–III scopulate below, the scopulæ divided by a narrow band of short setæ in I and II, and by a broader band of longer setæ in III. *Metatarsi* I and II broadly scopulate, except in the basal part, the scopulæ divided by stoutish setæ, III thinly scopulate in the distal third.

Measurements.—Total length 11; length of carapace $4\frac{1}{2}$.

Differs from all other species in the more proximal position of the inner tubercle on the tibia of the first leg.

5. *HERMACHASTES INERMIS* n. sp.

(a) *Types*: 3 ♂ (No. 3664) collected by Mr. M. Schlechter at Pakhuisberg, Clanwilliam Div.

♂. *Colour*.—Carapace pale ochraceous, the cephalic portion in-

fuscated, with a longitudinal ochraceous stripe extending from each side of the ocular area; chelicerae pale ochraceous, with infuscate lines; legs pale ochraceous, the femora with some weakly infuscated lines above; sternum and under side of coxae pale yellowish; abdomen pale yellowish, the upper surface and generally also the posterior part of the sides strongly blackened, with numerous pale yellowish dots and spots, but without well-defined, obliquely transverse, dark stripes.

Carapace slightly exceeding or slightly shorter than the fourth metatarsus, and equal to the metatarsus and $\frac{3}{4}$ of the tarsus and to the tibia and $\frac{1}{2}$ the metatarsus of first leg. Fovea scarcely recurved.

Chelicerae with about 11 teeth in the inner row below; the under side distinctly shorter than the sternum.

Labium with 1-2 small apical teeth. *Coxae* of pedipalps with about 4 such teeth at the base.

Posterior spinners with the apical segment subequal to or longer than the penultimate segment.

Pedipalps.—Process of palpal organ about as long as the bulb, curved and very slender, except at the base.

Legs long; the tarsi muticous. Metatarsi I and II straight, not concave at the base below, the inferior surface with 2 inner and 2-4 outer spines (the apical outer spine being often doubled), the inner surface besides with 2 and the outer surface with 1-2 other spines; III and IV numerously spined. Tibia not at all or only feebly incrassated at the apex on the inner side below, but without the pair of tubercles found in the previous species; the under side with 2 spines at the base, 1-3 in the middle and 3 at the apex, the 2 apical spines at the inner inferior edge close together, not thicker than the outer apical spine but long and slender, with more or less distinct sigmoid curvature, the outer side of the tibia also with 0-1, the inner side with 2 other spines; II spined much as in I, except that the 2 inner, inferior, apical spines are slenderer and straighter; III and IV with a number of spines. Patellae often with a spine, III with only 2 spines in the row on the anterior surface. Femora spined above. All the tarsi scopulate below, the scopulae divided by a rather narrow band of short setae in I-III and by a broad band of stouter setae in IV. Metatarsi I-III more sparsely scopulate distally, the scopulae divided by long setae, IV with a few scopular hairs (sometimes almost absent) sparsely scattered over the distal third.

Measurements.—Total length 12-14; length of carapace $5\frac{1}{4}$ -6.

(b) 1 ♂ from the Onder Bokkeveld (in the neighbourhood of

Nieuwoudtville and Oorlogs Kloof), Calvinia Div., also collected by Mr. M. Schlechter. Paler than the typical specimens, the abdomen with the black markings confined to the dorsal surface and forming obliquely transverse bands separated by broader yellow spaces; the legs longer, the carapace being much shorter than the fourth metatarsus and equal to the metatarsus and $\frac{1}{7}$ of the tarsus and to the tibia and $\frac{1}{6}$ – $\frac{1}{5}$ of the metatarsus of the first leg; the chelicerae with 8 teeth; the coxae of the pedipalps with 7–8 teeth at the base.

This is a very long-legged species, easily distinguishable from all other species of the genus by the absence of the distal pair of spur-bearing tubercles on the inner side of the tibia of the first leg.

The males of the genus *Hermachastes* may be distinguished as follows:—

- a. Inner side of tibia of first leg with a pair of distal tubercles, each bearing 1–2 stout spurs (modified spines).
- a¹. Tibia of first leg strongly incrassated at the apex below, very thick and only about $2\frac{1}{2}$ times as long above as high at the apex; the apical tubercle bearing 2 broad spurs. All the tarsi thickly and broadly scopulate. Swellendam Div. *H. validus* n. sp.
- b¹. Tibia of first leg longer and slenderer, the fourth tarsus not broadly scopulate.
- a². Apical tubercle of first tibia bearing 2 short, equally and very broad spurs; the spur of the more proximal tubercle distant $\frac{1}{3}$ of the length of the segment from the apex. Caledon Div. *H. cambieræ* n. sp.
- b². Apical tubercle of first tibia with only 1 broad spur at its apex and with a much slenderer spur or spine on or near its base externally; the spur of the more proximal tubercle less than $\frac{1}{4}$ of the length of the segment from the apex.
- a³. Metatarsus III not scopulate. Apical segment of posterior spinners considerably shorter than the penultimate segment. Posterior tarsi generally spined. Cape Div. *H. collinus* Poc.
- b³. Metatarsus III thinly but distinctly scopulate below in the distal $\frac{1}{2}$ at least. Apical segment of posterior spinners subequal to or longer than the penultimate segment. Tarsi muticous.
- a⁴. Carapace as long as the metatarsus and $\frac{3}{4}$ of the tarsus of first leg. Process of palpal organ stoutish. Under side of chelicerae (measured along the groove) distinctly shorter than the sternum. Worcester Div. *H. sagittarius* n. sp.
- b⁴. Carapace longer than the metatarsus and tarsus of first leg. Process of palpal organ slender. Under side of chelicerae almost as long as or longer than the sternum. Cape Div.
H. lightfooti n. sp.
- b. Tibia of first leg without a pair of distal spur-bearing tubercles, all the spines being normal. All the tarsi scopulate. Clanwilliam and Calvinia Divs.
H. inermis n. sp.

The females of *Hermachastes* are often only with difficulty

separable from one another, but the 4 species described may be distinguished as follows:—

- a.* Under side of chelicerae (measured along the middle of the groove) longer than the sternum. Coxæ of pedipalps with very few (2-4) teeth at the base. Claws of anterior legs with 2-4 teeth in each row; claws of fourth leg with 2-3 teeth in each row, but the outer claw with 0-1 tooth in the inner row. Anterior tarsi not distinctly scopulate below. Cape Div. *H. lightfooti* n. sp.
- b.* Under side of chelicerae sometimes subequalling but generally distinctly shorter than the sternum. Coxæ of pedipalps with a number (15-50) of teeth at the base. Claws of anterior legs with 5-9 teeth in each row; claws of fourth leg with 4-6 teeth in each row, but the outer claw sometimes with only 3 teeth in the inner row. Anterior tarsi distinctly scopulate.
- a*¹. Outer claw of fourth leg with 3-4 (very rarely 5) teeth in the inner row. The oblique black stripes on posterior $\frac{1}{2}$ of the dorsal surface of abdomen more or less distinctly continued over the sides to the ventral surface. Posterior tarsi muticous or spined. Coxæ of pedipalps with 30-42 basal teeth. Cape Div. *H. collinus* Poc.
- b*¹. Outer claw of fourth leg with 5-6 (sometimes only 4) teeth in the inner row. The oblique black dorsal stripes for the most part not continued over the sides to the ventral surface posteriorly. Posterior tarsi muticous.
- a*². Coxæ of pedipalps with 15-30 teeth at the base. Worcester Div.
H. sagittarius n. sp.
- b*². Coxæ of pedipalps with 40-50 teeth at the base. Swellendam Div.
H. validus n. sp.

GEN. HERMACHA Sim.*

1. HERMACHA LANATA n. sp.

Type: 1 ♂ (No. 3639) collected by Mr. M. Schlechter in the Bokkeveld, east of Pakhuisberg, Clanwilliam Div.

♂. *Colour*.—Carapace brown, with darker radiating stripes, the cephalic portion more yellowish laterally, the surface thickly covered in places with pale cream-coloured, long, mostly appressed, silky

* In both sexes of the species of this genus known to me the claws of all the legs are biserially dentate below, the rows being opposite to one another, composed of numerous teeth, and of about equal length, each extending from the base up to or beyond the middle of the claw. The inferior claw is minute in the anterior pairs of legs but distinct in the posterior pairs. The rastellum is composed of slender or moderately stout setæ, sometimes with a few slender spines in addition. The anterior surface of the chelicerae is always thickly covered with numerous, short, stout bristles, as in the other members of the family. The females may be readily distinguished from those of *Hermachastes* by the broad, dense, entire scopula which covers the whole under surface of the tarsi and metatarsi of the 2 anterior pairs of legs. The posterior spinners in both sexes are frequently very long and the anterior ones widely separated, as in the *Dipluridae*, and it is very probable that the species described by Ausserer as *Brachythelae capensis* belongs to this genus. In the adult male the tibia of the first leg is much stouter than the metatarsus and its outer apical spine below is stout and spur-like. By far the greater number of the *Ctenizidae* usually found in collections made in South Africa belong to the genera *Hermachastes* and *Hermacha*.

hairs, the margins with fine black bristles in addition, especially behind; chelicerae reddish black, with pale cream-coloured hairs above; sternum pale ochraceous; coxae and femora of legs pale yellowish olivaceous, the legs becoming paler and more ochraceous distally; abdomen pale yellowish below and at the sides, the upper surface black, speckled with numerous, small, pale yellowish spots.

Carapace as long as the metatarsus and $\frac{1}{2}$ the tarsus of the fourth leg, and equal to the tibia and $\frac{5}{6}$ of the metatarsus but much longer than the metatarsus and the tarsus of the first leg. Fovea transverse at the bottom.

Ocular area less than twice as wide as long; the anterior row of eyes strongly procurved (seen from above), the lateral eyes scarcely $\frac{1}{2}$ longer than the medians, their distance from the anterior margin of the carapace almost twice the diameter of the median eyes; posterior eyes forming a scarcely recurved row, equal in size, the laterals separated by nearly their own length from the anterior lateral eyes and much smaller than the anterior median eyes, the medians very close to the laterals and much further from the anterior median eyes.

Labium mucicous. *Coxae* of pedipalps with a large, very numerously toothed area at the base.

Posterior spinners rather short (contracted), much shorter than the sternum and than $\frac{1}{2}$ the abdomen, the distal segment subequal to or perhaps longer than the second segment, these 2 segments together apparently only as long as the stout basal segment. Anterior spinners short, only about their own diameter apart.

Chelicerae with 6 teeth in the inner row below, the outer row composed of about 2-3 minute posterior teeth; rastellum composed of rather slender setae.

Pedipalps.—Femur and patella with 1 or 2 spines above. Tibia with 5-6 spines on the distal $\frac{1}{2}$ of the inner surface, the outer surface with 2 spines along the inferior edge behind and a longitudinal row of 2 (1 apical and 1 submesial) spines along the middle. Tarsus unspined. Bulb turbinate, the process long and slender, nearly straight, longer than the bulb, reaching to the base of the tibia.

Legs.—Metatarsi I and II straight, the under surface with 2 outer and 2 inner spines (including an apical pair), the inner surface besides with 2 straight spines and the outer surface with 1 spine, II sometimes with 5 spines on the inner and 2 on the outer surfaces; III and IV numerously spined. Tibia I robust but not incrassated, the under surface with 1 outer apical, 3 submesial and 3 basal spines but no inner apical one, the outer apical spine spur-like, much stouter

than the others and lightly curved, placed on a slight tubercle, the inner surface also with a longitudinal row of 3 strong spines nearer the upper edge and the outer surface with a row of 3 spines along the middle; II with 1 inner apical and 3 outer spines on under surface and a row of 3 along inner surface; III with 3 apical, 1 mesial and 2 basal spines below, also 2 on outer, 1 on dorsal and 2 on inner surfaces; IV with paired spines below, besides 3-5 on the outer and 3 on the inner surfaces. Patellæ with 1-2 internal spines, I and II also with 1, III with 3 and IV with 2 external spines. Femora spined above. Tarsi I-III scopulate below, the scopulæ entire in I and II, divided by a moderately wide band of setæ in III, IV with a very broad band of setæ below and a strip of scopula, equalling the band of setæ in width, on each side of it. Metatarsus I scopulate in the distal $\frac{1}{2}$ - $\frac{2}{3}$, II scopulate to near the base, the scopulæ entire, broad and moderately dense, III with a few scopular hairs in the distal part. Inferior claws of anterior legs very minute, hidden by the scopula and only with difficulty distinguishable, those of posterior legs small but distinct.

Measurements.—Total length 13; length of carapace 6, width 4.6.

This species is evidently very closely allied to the type of the genus, *H. caudata* Sim., from Delagoa Bay, but it differs in the spine armature.

2. HERMACHA SERICEA n. sp.

Type: 1 ♂ (No. 3666) found by Mr. L. Mally during a journey in Van Rhyns Dorp Div. and the western part of the Calvinia Div., Cape Colony.

♂. *Colour* yellowish brown; carapace with some indistinct, dark brown stripes radiating from the fovea, the hairs as in the preceding species but more yellowish; legs paler distally, with an under coat of fine, yellowish, mostly appressed, silky hairs, in addition to the more erect, fine, black bristles; under side paler, pale ochraceous; abdomen hairy, pale yellowish below and at the sides but without markings, the upper surface with numerous blackish-brown markings.

Carapace as long as the metatarsus and $\frac{1}{4}$ of the tarsus of the fourth leg, and equal to the metatarsus and the tarsus and to the tibia and $\frac{2}{3}$ of the metatarsus of first leg. Fovea large, rotund.

Ocular area less than twice as wide as long; anterior row of eyes with the hind margins in a straight line, the lateral eyes large, more than twice as long as the small median eyes, their distance from the anterior margin of the carapace scarcely equalling the diameter of the medians; posterior eyes with their anterior margins forming a

scarcely recurved line, the medians smaller than the anterior median eyes, much smaller than the posterior laterals and much nearer to the latter than to the former, the posterior lateral eyes much larger than the anterior medians but smaller than the anterior laterals and separated from them by a space about equal to $\frac{1}{2}$ their own length.

Labium muticous. *Coxæ* of pedipalps with a small patch of about 20 small teeth at the base.

Posterior spinners long, almost as long as the sternum and labium together and $\frac{1}{2}$ as long as the abdomen, the 3 segments subequal in length, the stout basal one being only slightly longer than each of the other two, the distal segment slender, considerably longer than the anterior spinners, which are slightly more than twice their own diameter apart.

Chelicera with 8 teeth in the inner row below, the outer row represented by about 3 very minute posterior teeth; anterior surface covered as usual with numerous, short, stout setæ; the rastellum composed of numerous, long, rather slender setæ.

Pedipalps.—Femur and patella with a spine above. Tibia with 5 spines on the distal $\frac{1}{2}$ of the inner surface, the outer surface with 2 spines along the inferior edge behind and a longitudinal row of 2 (1 apical and 1 mesial) spines along the middle. Tarsus with a group of short stout spines at the apex above. The bulb is subspherical, the process slender and lightly curved, longer than the bulb but ending at a little distance from the base of the tibia.

Legs.—Metatarsus I straight, with 1 outer apical spine below, 1 outer and 1 inner spine near the base below, and 1 long, almost straight spine on the inner surface a little behind the middle; II spined as in I, but with an inner apical spine below in addition and 1-2 spines on the inner surface; III and IV numerous spined. Tibia I robust but not incrassated, the under surface with a double row of spines along each edge, viz., 1 apical, 2 mesial and 2 basal spines along the outer and 2 apical, 2 mesial and 1 basal spine along the inner edge, the apical outer spine spur-like, stouter than the others, placed on a slight tubercle, the inner surface also with a longitudinal row of 2 strong spines nearer the superior edge; II with an outer row of 3-4 and an inner row of 2-3 spines below and 2 superior spines on the inner surface; III with 3 apical spines and 2 other pairs of spines below, also 2 spines on outer, 1 on dorsal and 2 on inner surfaces; IV with paired spines below, besides 2 others on the outer and 2 on the inner surfaces. Patellæ with 1-2 internal spines, III with 2 outer spines as well. Femora with spines and spiniform setæ above. Scopulæ as in *H. lanata*, except that in metatarsus I the broad part of the scopula occupies at least $\frac{2}{3}$ of the

length of the segment, while metatarsus III is thinly scopular in the distal third. Claws as in *H. lanata*.

Measurements.—Total length 14; length of carapace $5\frac{1}{2}$, width 4.

Closely related to the previous species, but easily distinguishable by the longer spinners, the more numerous spined legs and, especially, by the group of spines on the tarsus of the pedipalps.

3. HERMACHA CURVIPES n. sp.

Types: 2 ♂ (No. 6011) collected by me under stones in a ravine on the mountainside at Simonstown, Cape Peninsula.

♂. *Colour*.—Carapace brown, with some dark radiating lines, rather thinly clothed with long, appressed, pale yellowish, silky hairs, the margins with erect black hairs and bristles; chelicerae reddish brown, with pale yellowish hairs and black bristles; pedipalps ochraceous to pale yellowish; legs pale ochraceous, more or less faintly infuscated, especially on the femora, the 3 distal segments of the first leg dark reddish; under side of coxae and sternum pale ochraceous; abdomen pale yellowish, the upper side with a median longitudinal and several obliquely transverse black stripes and a number of smaller irregular black markings, the under surface with a small black spot in front of each posterior spinner and a more anterior transverse row of 4 spots; posterior spinners infuscated below.

Carapace about as long as the metatarsus and $\frac{2}{5}$ – $\frac{1}{2}$ of the tarsus of fourth leg but equal to or longer than the metatarsus and tarsus and equal to the tibia and $\frac{3}{4}$ – $\frac{1}{2}$ of the metatarsus of first leg. Fovea transverse or subrotund.

Ocular area.—Anterior row of eyes transverse, the posterior margins of the eyes (when seen from above) forming a very distinctly recurved line, the lateral eyes large, twice or nearly twice as long as the median eyes, their distance from the anterior margin equal to or slightly less than the diameter of the median eyes; posterior row of eyes lightly recurved, the median eyes oval, slightly exceeding the anterior medians in length but smaller than and almost touching the posterior lateral eyes; the latter large, but smaller than the anterior laterals and almost touching them.

Labium muticous. *Coxae* of pedipalps with numerous teeth at the base, the more distal ones much more scattered than the proximal ones.

Posterior spinners very long, considerably longer than the sternum and labium together and about $\frac{2}{3}$ or $\frac{3}{4}$ as long as the abdomen, the slender distal segment subequal to or slightly longer than the stoutish

basal segment but much longer than the second segment. Anterior spinners $2\frac{1}{2}$ – $3\frac{1}{2}$ times their diameter (in the latter case more than their own length) apart.

Chelicerae with 9–11 teeth in the inner row below; rastellum composed of long, fine and moderately stout bristles.

Pedipalps.—Bulb elongate pear-shaped, composed of a subglobular basal portion and a narrowed distal portion of about equal lengths, the distal portion truncated at the apex and provided there with a short, spirally curved, slender, claw-like process, reaching a little beyond the middle of the tibia. Tarsus not spined. Tibia somewhat swollen, the excavation for the reception of the bulb extending over almost the whole length of the under surface, the outer edge bordering the excavation produced near the middle into a conical tooth; the inner surface with 4–5 spines in the distal half, and often also with an additional one near the base, the outer surface with 1 spine near the apex. Patella and femur spined at the apex above.

Legs.—Metatarsus I with the proximal half or more strongly bowed, the concave side below, the under surface with a pair of spines at the apex, an outer spine a little beyond the middle and a small inner spine (absent in one specimen) near the base, the inner surface with a strong straight spine in the middle; II with 2 apical, 2 (sometimes 1) mesial and 2 basal spines below, also 1–2 on the inner, 1–2 on the dorsal, and 0–1 on the outer surfaces; III and IV numerous spined. Tibia I stout, not incrassated distally, the under surface with 2 apical, 1 basal and sometimes 1 mesial spine along the inner, and a row of 4 spines along the outer margin, the basal outer spine small and sometimes absent, the 2 outer middle ones long and stout, the outer apical one short but equally stout, spur-like, stronger than the inner apical spines; the inner surface with 3 superior spines; II with similarly arranged but slenderer spines, the small basal outer spine below absent, the inner surface with only two superior spines; III with 3 apical, 1–2 mesial and 2 basal spines below, also 2 on outer, 2 on dorsal and 3 (sometimes 2 or 4) on inner surfaces; IV with 3 apical, 2 mesial and 2 basal spines below, also 2 on the outer and 3 on the inner surfaces. Patellæ with 1–2 internal spines, III also with 2 spines on the anterior surface. Femora spined above. Scopulæ as in *H. lanata*, except that in tarsus III the dividing band of setæ is obsolete and in metatarsus I the broad part of the scopula is confined to the distal third of the segment. Inferior claw of anterior legs minute but more easily distinguishable than in the 2 preceding species.

Measurements.—Total length 17; length of carapace 7, width $5\frac{1}{2}$.

GEN. LEPHERCUS nov.

Closely allied to *Hermacha* Sim., but differing in having the inferior claws of the anterior legs larger and very distinct, the ocular area wider, twice as wide as long, the coxæ of the pedipalps muticous, and the tibia of the first pair of legs in the ♂ provided with a long, spine-tipped, spur-like, apical tubercle at the inner inferior edge. Other characters as in *Hermacha*. The rastellum is composed entirely of slender and moderately stout setæ. The outer row of teeth on the under side of the chelicerae is composed, as in *Hermacha*, of a short posterior series of minute denticles. The posterior spinners are long and slender.

Type: *L. dregei* n. sp.

LEPHERCUS DREGEI n. sp.

Type: 1 ♂ (No. 5692) from Doornnek in the Zuurbergen, Alexandria Div., Cape Colony, discovered by Mr. J. L. Drège.

♂. *Colour*.—Carapace pale ochraceous, black-edged, with long, appressed, yellowish and pale olivaceous, silky hairs, the margins, especially behind, also with black bristles; chelicerae pale ochraceous, with bands of pale yellowish hairs above; legs pale ochraceous, the femora very pale below but lightly infuscated above, the tarsi whitish on the under surface and on the sides, except at the apex and base; coxæ below and the sternum pale yellowish; abdomen pale yellowish, the under surface with some black spots posteriorly, the upper surface with a broad median mark, half a dozen pairs of obliquely transverse stripes and several other spots black.

Carapace as long as the metatarsus and $\frac{1}{4}$ – $\frac{1}{2}$ of the tarsus of fourth leg, subequal to the tibia and $\frac{1}{2}$ the metatarsus and to the metatarsus and about $\frac{2}{3}$ of the tarsus of the first leg. Fovea wide, the bottom transverse.

Ocular area.—Anterior row of eyes scarcely procurved (seen from above), the lateral eyes about $\frac{1}{3}$ longer than the medians and distant from the anterior margin nearly twice the length of the median eyes; posterior row of eyes scarcely recurved, the median eyes oval, about as long as the anterior medians, the posterior lateral eyes as long as the anterior laterals and separated from them by about $\frac{1}{3}$ or $\frac{1}{4}$ of their length and narrowly separated from the posterior median eyes.

Labium and *coxæ* of pedipalps muticous.

Posterior spinners long and slender, a little longer than the sternum and labium together and about $\frac{2}{3}$ as long as the abdomen, the apical segment subequal to the basal segment but considerably longer than

the mesial segment. Anterior spinners short and stoutish, about their own diameter apart.

Chelicerae with 6 teeth in the inner row below.

Pedipalps.—Femur with several setiform spines above. Patella with an apical inner spine above. Tibia with an apical spine and 3 slender, spiniform setæ on the distal half of the inner surface, the under surface with numerous, long, fine setæ, the outer surface with a single distal spine. Tarsus not spined. Bulb subspherical, the process curved, almost as long as the bulb, somewhat flattened and rather thick in the proximal three-fourths of its length but very fine and slender distally and finely pointed.

Legs.—Metatarsus I almost straight, slightly but noticeably swollen on the infero-internal side at the end of the basal fourth, the under side with 3 spines along the outer but none along the inner edge, the inner surface with 1 mesial spine; II with 1 inner and 2 outer apical, 2 mesial and 2 basal spines below, besides 1–2 spines on the inner surface; III and IV numerous spined. Tibia I robust, slightly incrassated towards the apex below, and provided at the inner inferior edge with a long, cylindrical, tubercular spur, which curves slightly outwards and is tipped with a stout, slightly curved spine, this spine being shorter than the tubercle; under surface also with 3 outer and 2 inner spines, inner surface with 2 spines and outer surface with 1 spine; II with 3 apical, 1 mesial and 2 basal spines below, and 2 spines on the inner surface; III with 3 apical, 2 mesial and 2 basal spines below, also 2 on the outer, 2 on the dorsal and 2 on the inner surfaces; IV with 3 pairs of spines below, also 2 spines on the inner and 2 on the outer surfaces. Patellæ with 1–2 internal spines, III also with 2 spines on the outer surface. Femora spined above. All the tarsi scopulate below, the scopulæ less dense than in *Hermacha*, entire in I–III but divided in IV by a band of setæ, this band comparatively narrow. Metatarsus I scopulate on both sides below in the distal half or more, the scopula almost obsolete along the middle line below, II thinly scopulate in the distal third, III and IV not scopulate.

Measurements.—Total length $9\frac{1}{2}$; length of carapace $4\frac{1}{4}$, width 3.1.

GEN. PIONOTHELE nov.

Closely allied to *Hermacha* Sim., but differing in having the ocular area more than twice as wide as long and close to the anterior margin of the carapace. In the ♂ the tarsus of the first pair of legs is somewhat swollen in the middle, appearing convex lengthways below and more attenuated distally, when seen from the side, while

the tibia is rather slender and only very slightly thicker than the metatarsus (in *Hermacha* the tarsus is cylindrical and not attenuated distally). The rastellum is composed of a number of slender and moderately stout setæ. The inferior claw of the anterior legs is very minute and only with difficulty distinguishable; the superior claws are long, with numerous teeth in 2 series, the superior claws of the posterior legs slender. The posterior spinners are very stout. The tarsi of the fourth legs are spined.

Type : *P. straminea* n. sp.

PIONOTHELE STRAMINEA n. sp.

Type : 1 ♂ (No. 3586) found by Mr. C. L. Leipoldt, near Rondegat, about 5 miles south of Clanwilliam.

♂. *Colour* very pale ochraceous; the abdomen still paler, with about a dozen black spots above; the carapace with numerous, fine, black bristles near the margins, especially posteriorly, and some very fine, long, yellowish, silky hairs, the surface otherwise almost glabrous.

Carapace about as long as the metatarsus of the fourth leg and equal to the metatarsus and about $\frac{3}{4}$ of the tarsus of first leg.

Ocular area.—Anterior row of eyes (seen from above) scarcely procurved, the eyes subequal in size, the laterals about $\frac{1}{2}$ their diameter from the anterior margin; posterior row somewhat recurved, the eyes subequal (or the medians smaller), very much smaller than the anterior eyes, the lateral eyes distant about $\frac{1}{2}$ their diameter from the anterior lateral eyes and narrowly separated from the posterior median eyes.

Labium mucous. *Coxæ* of pedipalps with a small toothed area of about 15 teeth at the base.

Posterior spinners very thick, the apical segment short, scarcely longer than wide and almost as long as the second segment, the 2 distal segments together slightly shorter than the basal segment. Anterior spinners very short, nearly twice their diameter apart.

Chelicera short, with about 6 teeth below in the inner row.

Pedipalps.—Femur with some spiniform setæ (and spines?) above. Patella with a spine above. Tibia with 2-3 distal spines on the inner, 0-1 on the dorsal and 1 on the outer surfaces. Bulb globosoturbinate, the process slightly longer, very fine and straight, reaching backwards beyond the middle of the tibia.

Legs.—Tarsi I-III unspined, IV with a single long spine near the middle of the upper outer edge. Metatarsus I straight, scarcely slenderer than the tibia, with 2 outer and 2 inner spines

(including an apical pair) below, also 1 on the outer and 2 on the dorsal surface, and 2 along the inner upper edge; II with 3 outer and 2 inner spines (including 3 apical spines) below, 1-2 on outer surface, 1-2 on the dorsal surface, and 3 along upper inner edge; III and IV numerous spined. Tibia I not robust, the under surface with a row of 3 outer but no inner spines, the apical outer spine strong, spur-like and slightly curved at the apex, the outer surface besides with 2 inferior spines and the inner surface with 2 superior spines; II with 2 outer apical and an inner row of 3 spines below, besides 2 spines along the upper inner edge; III with paired spines below, and with 2 anterior, 1 dorsal and 2 posterior spines besides; IV with spines and spiniform setæ below, also 2 spines on the outer and 2-3 on the inner surface. Patellæ with 1-2 internal spines, III also with 3 external spines. Femora numerous spined above. Tarsi I and II imperfectly scopulate but thickly hairy below, III and IV not scopulate. Metatarsi I and II with a thin distal patch of hairs similar to those on the tarsi below.

Measurements.—Total length 9; length of carapace, $3\frac{3}{4}$; width 3.