

# THE ANNALS

AND

## MAGAZINE OF NATURAL HISTORY.

[SEVENTH SERIES.]

No. 9. SEPTEMBER 1898.

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XXV.—*The Arachnida from the Province of Natal, South Africa, contained in the Collection of the British Museum.*  
By R. I. Pocock.

[Plate VIII.]

A GREAT majority of the spiders recorded in this paper were obtained at Durban by Mr. H. A. Spencer while acting as medical officer on board the S.S. 'Mexican,' and by Mr. G. A. K. Marshall during a stay of some months at Estcourt and other parts of Natal. The remaining spiders have been received from various sources, and many of them have been in the Museum collection for a great many years.

### Order SOLIFUGÆ.

#### *Solpuga hostilis*, White.

*Solpuga hostilis*, White, Methuen's Life in the Wilderness, p. 317, pl. ii. fig. 5 (1846).

Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

#### *Solpuga caffra*, Poc.

*Solpuga caffra*, Poc. Ann. & Mag. Nat. Hist. (6) xx. p. 262.

Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

Ann. & Mag. N. Hist. Ser. 7. Vol. ii.

## Order SCORPIONES.

*Opisthophthalmus pugnax*, Thor.

*Opisthophthalmus pugnax*, Thor. Act. Soc. Ital. Sci. Nat. xix. p. 232.

*Loc.* Durban (*Capt. Munn*); Estcourt, 4000 feet (*G. A. K. Marshall*).

*Opisthacanthus validus*, Thorell.

*Opisthacanthus validus*, Thor. Act. Soc. Ital. Sci. Nat. xix. p. 243.

*Loc.* Newcastle, 4000 feet, Lower Umkomaas River, and Isipingo (*G. A. K. Marshall*); Natal (*E. Howlett*).

*Hadogenes pallidus*, sp. n.

*Colour.* Trunk brownish above, terga blackish in front; tail yellowish brown, vesicle clear yellow; legs yellow; chelæ yellow, with digits and crests brownish.

*Carapace* almost as long as the first and second caudal segments, as long as the third and  $\frac{3}{4}$  of the fourth, a little longer than movable digit and than hand-back.

*Tail* short, considerably less than four times as long as carapace; first segment scarcely keeled above; inferior keels of second, third, and fourth denticulated, of fifth with about 15 or more teeth; vesicle large, its height about one third the length of the fourth caudal segment.

*Hands* rather wide; width of the upper surface much more than half the length of the movable digit.

Pectinal teeth 15.

*Measurements in millimetres.*—Total length 74; length of carapace 12; length of tail 40, of its fifth segment 7·5; width of upperside of hand 6·8; length of movable digit 11.

*Loc.* Junction of Blaauwkrantz and Tugela Rivers, Natal, 2500 feet, under stone (*G. A. K. Marshall*).

Differing from *H. trichiurus* principally in its shorter tail and wider hand; *trichiurus* also has the legs and chelæ deep brown.

*Uroplectes formosus*, Poc.

*Uroplectes formosus*, Poc. Proc. Zool. Soc. 1890, p. 134, pl. xiii. fig. 3; Ann. & Mag. Nat. Hist. (6) xvii. pp. 383 and 390.

*Loc.* Natal (*E. Howlett*); Lower Umkomaas River (*G. A. K. Marshall*).

*Uroplectes Marshalli*, Poc.

*Uroplectes Marshalli*, Poc. Ann. & Mag. Nat. Hist. (6) xvii. p. 392.

*Loc.* Durban and Tugela River (*G. A. K. Marshall*).

*Uroplectes planimanus* (Karsch).*Lepreus planimanus*, Karsch, Mitth. Münch. ent. Ver. 1879, p. 125.Loc. Durban (*G. A. K. Marshall*).

## Order PEDIPALPI.

*Damon annulatipes* (Wood).*Phrynus annulatipes*, Wood, Tr. Am. Phil. Soc. xiii. p. 441 (1869); Pocock, Ann. & Mag. Nat. Hist. (6) xiv. p. 293.Loc. Natal (*Gueinzius*); Durban (*H. A. Spencer*); Estcourt, 4000 feet (*G. A. K. Marshall*).

## Order ARANEÆ (SPIDERS).

## Suborder MYGALOMORPHÆ.

## Family Ctenizidæ.

## Genus STASIMOPUS, Simon.

*Stasimopus rufidens*, Auss.? *Actinopus caffrus*, C. Koch, Die Arachniden, ix. p. 98, fig. 751.*Cyrtocarenum rufidens*, Auss. Verh. z.-b. Wien, 1871, p. 160.*Pachylomerus natalensis*, O. P. Cambridge, P. Z. S. 1889, p. 35, pl. ii. fig. 1.*Stasimopus rufidens*, Auss., Pocock, P. Z. S. 1897, pp. 927 and 929.Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

## Family Dipluridæ.

## Genus BRACHYTHELE, Auss.

*Brachythele bicolor*, Pocock.*Brachythele bicolor*, Pocock, Proc. Zool. Soc. 1897, p. 735.Loc. Durban (*H. A. Spencer*).

## Family Theraphosidæ.

## Subfamily HARPACTIRINÆ.

## Genus HARPACTIRA, Auss.

*Harpactira curator*, sp. n. (Pl. VIII. fig. 1.)

♂.—Colour a tolerably uniform mouse-grey or brown; carapace black, with radiating pale lines; extremities of the leg-segments pale; coxæ and sternum blackish.

Carapace about one fourth longer than wide, length much

shorter than patella and tibia of first leg, and also shorter than those of fourth leg, as long as tarsus and protarsus of third, exceeding protarsus and tarsus of first, and tibia, protarsus, and tarsus of palp; its width a little less than length of fourth protarsus and a shade more than that of patella and tibia of third leg. Clypeus about one fourth the length of the ocular tubercle.

*Legs* 4, 1, 2, 3, fourth exceeding first by half the length of its tarsus, patella and tibia of first longer than of fourth, protarsus of fourth equal to protarsus and three fourths of the tarsus of the first; tibiæ of all legs with a pair of inferior apical spines, protarsi of third and fourth with about five spines at the apex and three or four in the proximal half near the base of the scopula; protarsus of first leg convex above at the base; palpus normal, its tibia with one internal apical spine. Palpal bulb less spherical than in *H. atra* and *chryso-gaster*, the posterior side of the spine continuous with that of the bulb.

♀.—Coloured as in male.

*Carapace* exceeding in length patella and tibia of first as well as of fourth leg, less than tarsus and protarsus of fourth, distinctly less than tibia, protarsus, and tarsus of third, and shorter by half the length of the tarsus than the same segments of the second leg; width just equal to tibia and protarsus of third leg, length from fovea to anterior border equal to patella and tibia of third leg.

Stridulating-organ on mandible consisting of an upper series of seven bristles running obliquely downwards across the naked space and of a lower irregular series of about nine shorter bristles presenting a distinct sigmoidal curve, the four posterior being shorter than the rest, a little further removed from the marginal bristles, and in a straight line. Marginal teeth on the mandible consisting of a series of eleven larger and smaller, with a few granuliform teeth at the posterior end.

*Measurements in millimetres.*—♀. Total length 30; length of carapace 15, width 11·8; length of first leg 37, of second 33·5, of third 31, of fourth 41; patella and tibia of first 14, of fourth 13·5; tarsus and protarsus of fourth 16.

♂. Total length 25; length of carapace 13, width 11; length of first leg 41, of second 36, of third 33, of fourth 44; patella and tibia of first 15·4, of fourth 14.

*Loc.* Malvern in Natal.

Mr. Guy Marshall, who procured these specimens, sent the following note as to their habitat:—"Female found under a stone in a large web-lined chamber with two exit-passages. Male under a neighbouring stone. Sept. 1897."

In leg-measurements this new species closely resembles *H. lineata*, Poc. (P. Z. S. 1897, p. 749), but it may be readily distinguished by the construction of the mandibular stridulating-organ, the upper series of setæ being more compact and oblique and the lower more isolated from the adjacent setæ of the oral fringe. The male differs both from *H. atra*, Latr., and *H. chrysogaster*, Poc., in colouring and shape of palpal bulb.

*Harpactira curvipes*, Poc.

*Harpactira curvipes*, Poc. Proc. Zool. Soc. 1897, p. 750.

Loc. Natal (*Gueinzius*).

Suborder ARACHNOMORPHÆ.

Family Eresidæ.

Genus STEGODYPHUS, Simon.

*Stegodyphus gregarius*, O. P. Cambridge.

*Stegodyphus gregarius*, O. P. Cambridge, Proc. Zool. Soc. 1889, p. 42, pl. ii. figs. 4, 5.

Loc. Durban (*Col. Bowker*). Specimens from the same nest as those described by Mr. Cambridge.

*Stegodyphus dumicola*, sp. n. (Pl. VIII. fig. 7.)

♀.—*Colour* (in alcohol). Carapace nearly black, reddish at the sides above the base of the legs and on the facial portion; mandibles blackish brown; maxilla and labium reddish brown; sternum blackish at the sides, reddish brown in the middle, this reddish central portion expanding posteriorly; abdomen testaceous above and at the sides, mottled (especially in front) with black spots and patches, forming along the row of sigilla an irregular band on each side of the pale dorsal middle line; lower side of abdomen black, with a longitudinal yellow stripe on each side behind the stigma; epigastric area black in the middle, with a large yellow opercular patch on each side, bordered externally with a broad black band, continuous in front with the black area above the pedicle, and behind with an irregular black band which passes back on the outer side of the yellow stripe as far as the spinning-mamillæ, which are deep brown; legs and palpi infuscate, banded with yellow; femora and tibiæ with a median yellow band; protarsi with basal yellow band; tarsi

reddish. When dry the hairy clothing of the carapace is white, rusty red on the face, with a fine median white stripe between the eyes and a broader white stripe running from the top of the head to the lateral angles; the upper half of the mandibles is clothed with white hairs; on the abdomen the hairs along the median pale band are white intermixed with rusty yellow, at the sides rusty yellow intermixed with white and spotted with black in front, beneath the hairs on the black areas are black, white on the yellow areas; on the anterior pairs of legs the hairs are mostly whitish, concealing the banding, the posterior pairs being much more strongly striped black and white, the femora and tibiæ of the fourth having two jet-black spots on the protarsus, with its apex white and its basal third yellow; the hairs of the coxæ and sternum are greyish white.

*Carapace* as long as patella and tibia and as protarsus and tarsus of first leg, longer than patella and tibia and than tibia and protarsus of fourth; width of head equal to length of first protarsus and to length of patella and tibia of second; ocular quadrangle a little narrowed in front, wider than long, the posterior median eyes about a diameter apart and about half their diameter from the anterior medians, which are about a diameter from each other and from the edge of the clypeus; their diameter is about two thirds of the diameter of the posterior medians.

*Measurements in millimetres.*—Total length 11; length of carapace 4·5; width of head 2·8; length of first leg 12·2, of second 9, of third 7, of fourth 10·5.

♂.—*Colour* as in the female, but with more rusty-red hair upon the upperside of the head and upon the sides of the upper surface of the abdomen, the median fusiform white stripe on the abdomen strongly defined; legs yellow, banded with black, as in female. Much smaller than the female, with the head higher and the legs longer; carapace as long as protarsus of first leg and as protarsus and tarsus of second, barely as long as patella and tibia and as protarsus and tarsus of fourth, width of head about equal to protarsus of second. Tibia of first leg without tuft of hairs. Palp with patella and tibia short, subequal, shorter together than the tarsus; tibia with long hairs forming a distinct fringe; tarsus also thickly hairy, externally concave at the base, internally convex; palpal organ as in Pl. VIII. fig. 7.

*Measurements in millimetres.*—Total length 7; length of carapace 3·2; width of head 2; length of first leg 12, of second 8·5, of third 7·5, of fourth 10.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

This species and *S. gregarius* may be readily distinguished as follows:—

- a. Total length of ♀ about 8 mm.; ocular quadrangle much narrowed in front; anterior median eyes very much smaller than posterior medians; femora and tibiæ of first legs and in a lesser degree of the second black, especially within; tarsi and protarsi of these legs not banded; tibia of first leg in ♂ furnished with thick fringe of long hair . . . . . *gregarius*, O. P. Cambr.
- b. Total length of ♀ 11 mm.; ocular quadrangle much less narrowed in front; anterior medians much larger as compared with posterior medians; femora, tibiæ, and protarsi of legs distinctly banded; tibia of first leg in ♂ like that of ♀, not plumose . . . . . *dumicola*, sp. n.

### Genus DRESSERUS, Simon.

*Dresserus obscurus*, sp. n. (Pl. VIII. fig. 8.)

*Colour.* Carapace and posterior legs reddish brown, anterior legs and mandibles blacker; abdomen mouse-brown; the whole body covered with greyish-black hairs.

*Carapace* high in front, nearly vertically elevated just in front of the fovea, its length about equal to that of tibia, protarsus, and tarsus of first leg; width of head as long as patella, tibia, and protarsus of third leg, scarcely as long as patella and tibia of fourth leg or as tibia and protarsus of first, longer than protarsus and tarsus of first by about one third the length of the tarsus, also about equal to tibia and protarsus of fourth; space between posterior median eyes about equal to twice their diameter, space between posterior medians and anterior laterals about four times the diameter of the former.

*Legs* of first pair a little longer than those of fourth, patella and tibia of fourth longer than of first, tarsus and protarsus of first about equal to patella and tibia of first.

*Measurements in millimetres.*—Total length 15; length of carapace 7; width of head 5; length of first leg 13·5, of fourth 12·8; patella and tibia of first 5, of fourth 5·5.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

The only known species of this genus up to the present time is *D. fuscus*, Simon (Bull. Soc. Ent. France, 1876, p. lxxxvii), from Zanzibar. This species, based upon an immature female, is too briefly described to make any comparison between it and *D. obscurus* possible. The difference of locality, however, is, apart from other considerations, sufficient justification for describing the Natal form as new.

## Family Dinopidæ.

Genus DINOPIS, Macleay.

*Dinopis cylindricus*, sp. n.

♂.—*Colour*. Carapace and abdomen with a dark olive-green clothing of hair; abdomen with a broad silver-white band on each side; carapace also with silver-white marginal band on its thoracic portion and a V-shaped silver mark on the head; face silvery white; mandibles with two silver bands; legs and palpi brown, clothed with greyish-white hairs; labium and maxillæ with silvery hairs; sternum dark at the sides, with broad, posteriorly pointed, median silver stripe; lower side of abdomen variegated with silver and brown.

*Carapace* flat, narrowed behind, very broad at the base of the anterior legs, the width at this spot about two thirds the length of the carapace; cephalic area narrower in front than behind, produced into a horn covered with white hairs and projecting over the upper rim of the posterior median eyes, these eyes not very large, separated by a space which equals their radius, and not occupying the entire width or height of the face; anterior median eyes about a diameter apart.

*Palpi* slender; femur sinuate; tarsus globular, considerably shorter than tibia.

*Legs* long and slender (*cf.* measurements).

*Abdomen* long, slender, parallel-sided, flat above and below, about five times as long as wide, its apex projecting and bifid.

*Measurements in millimetres*.—Total length 19; length of carapace 5, width 3.5; length of abdomen 13, width 2.5; length of palp 8, of first leg 66, of second 50, of third 39, of fourth 40; length of anterior femur 18.5, posterior femur 13.5.

*Loc.* Durban (*H. A. Spencer*).

Apparently resembling *D. cornigera*, Gerstaecker (Von der Decken's 'Reisen' &c. iii. 2, p. 478, pl. xviii. fig. 5), from Aruscha, in East Africa, in the form of the carapace, but differing at least in its much longer legs and palpi. In *cornigera* the femur of the first leg is barely twice as long as the carapace ( $9\frac{1}{2} : 5$ ); the palpus is much shorter than the carapace, with its tarsus longer than its tibia.

It more nearly resembles *D. bubo*, Brito Capello (Mem. Ac. Sci. Lisboa, (3) iv. pt. 1, p. 16, 1867, pl. ii. fig. 3), from the Quilo River, W. Africa, but may be at once recognized by the length and narrowness of the abdomen, this region in *D. bubo* being less than three times as long as wide.

From *D. bubalus*, Simon (Ann. Soc. Ent. France, 1890, p. 126), from Kilimanjaro, which is, perhaps, the female of *D. cornigera*, *D. cylindricus* at least differs in the form of the abdomen, this region in *bubalus* being described as strongly bituberculate in front of the middle.

### Family Argiopidæ.

#### Genus NEPHILA, Leach.

##### *Nephila madagascariensis* (Vinson).

*Epeira madagascariensis*, Vinson, Aranéides des Iles Réunion &c. p. 191, pl. vii.

Loc. Pietermaritzburg (*F. J. Quekett*).

Ranges throughout East Africa from Natal to Masailand.

##### *Nephila annulata*, Thorell.

*Nephila annulata*, Thorell, Öfv. Vet.-Akad. Förhandl. xvi. p. 299; Eugénies Resa, Araneæ, p. 34.

*Nephila transvaalica*, Poc., W. L. Distant's Naturalist in the Transvaal, p. 180, pl. v. fig. 4.

Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

##### *Nephila cruentata* (Fabr.).

Loc. Durban (*H. A. Spencer*).

##### *Nephila pilipes* (Lucas).

*Epeira pilipes*, Lucas, Thomson's Arch. Ent. ii. p. 416, pl. xiii. fig. 7.

Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

#### Genus ARGIOPE, Aud.

##### *Argiope nigrovittata*, Thorell.

*Argiope nigrovittata*, Thorell, Öfv. Vet.-Akad. Förhandl. xvi. p. 300; Eugénies Resa, Araneæ, p. 31 (1868).

(= *caudata*, Blek.; *suavissima*, Gerst.)

Loc. Durban (*H. A. Spencer*); Estcourt, 4000 feet (*G. A. K. Marshall*).

Ranging throughout tropical and subtropical Africa from Somaliland and the Congo to Cape Colony.

##### *Argiope clathrata*, C. Koch.

*Argiope clathrata*, C. Koch, Die Arachniden, v. p. 40, fig. 362 (1839). (= *australis*, Walck.; *leta*, Thorell.)

Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

*Argiope trifasciata* (Forskål).

Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

## Genus ARANEUS (Linn.).

(=*Epeira* of authors.)

*Araneus rufipalpis* (Lucas).

*Araneus rufipalpis* (Lucas), Thomson's Arch. Ent. ii. p. 422.  
(=*semiannulatus*, Karsch and others.)

Loc. Durban (*H. A. Spencer*), ♀; Estcourt, 4000 feet  
(*G. A. K. Marshall*), ♂.

Abundant throughout tropical East and West Africa.

*Araneus mimosicola* (Simon).

*Araneus mimosicola* (Simon), Bull. Soc. Zool. France, 1884, p. 17.

Loc. Durban (*H. A. Spencer*).

Originally recorded from Khartoum and subsequently from Somaliland (*Donaldson Smith*), whence the British Museum has examples identified by M. Simon.

*Araneus cyrtoscapus*, sp. n. (Pl. VIII. figs. 2-2*b*.)

Colour yellow, like a pale example of *A. diadema*; the bristles and spines on the thorax, abdomen, and legs arising from fuscous spots; the spines themselves, being dark at the tips, impart a somewhat speckled appearance to the integument; the patellæ, tibiæ, and protarsi lightly infuscate apically, tibiæ and protarsi also marked with the median fuscous patch; tarsi apically black; sternum infuscate, paler at the sides; upper side of abdomen with two pale yellow spots between the shoulder-points and a pale faint transverse line running inwards and slightly backwards from each shoulder-point to the middle line of the abdomen; the area behind this marked with similar faint lines, emphasized anteriorly by a greyish tint; a faint greyish irregular band running along the middle line from the anterior end of the abdomen between the two yellow spots, past the middle line; lower side of abdomen behind the epigastric fold infuscate, the median infuscate area bounded on each side by a crescentic yellow band, passing on each side from the stigma to meet a short yellow bar running forwards from the sides of the anterior spinner.

Cephalic region of *carapace* distinctly convex from before backwards; ocular quadrangle wider in front, posterior

medians close together, barely a radius apart, anterior medians about a diameter apart; eyes of anterior line recurved, the laterals higher than the medians, space between medians and laterals about three times as great as that between medians. Carapace much longer than first tibia, almost as long as patella and tibia of fourth leg, a little longer than protarsus and tarsus of first and fourth legs; width greater than length of first tibia.

*Mandibles* prominent at the base; the fang-groove armed with four teeth in front, three behind the tooth at the posterior or upper extremity of the groove the largest.

*Legs* strong and short; femur of first incrassate distally on the inner side and spined, tibiæ and protarsi of first and second biserially spined below.

*Abdomen* heart-shaped, with low shoulder-points, widely rounded anteriorly, ovals elongate from the shoulders backwards.

*Measurements in millimetres.*—Total length 15; length of carapace 7, width 5.5; length of abdomen 10, width 8.5; length of first leg 19, of second 19, of third 14, of fourth 18.5.

♂.—Smaller than female, with long deep thoracic groove; ocular region produced over base of mandibles, eyes on a median and lateral prominence.

*Legs* strongly spined; femora with a series of strong spines, each rising from a tubercle below; coxa of first with elongate process; tibia of second mesially thickened in front, armed with about 12 or 13 strong black spines arranged in two longitudinal rows.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*), ♂ ♀; Durban (*H. A. Spencer*), ♂.

Allied to *A. suedicola*, Sim., *similis* and *striata*, Bösenberg and Lenz, *mossambicensis*, Pavesi, &c.

*Araneus Marshalli*, sp. n. (Pl. VIII. fig. 3.)

*Colour.* Carapace black posteriorly, its cephalic region reddish brown, blackish at the sides; mandibles reddish brown, black distally; maxillæ yellowish brown, darker basally; labium brownish; sternum mostly yellow, brownish at the sides; palpi yellow, infuscate apically, the spiniform hairs black; femora and patellæ of first and second pairs of legs red, blackish at distal end; tibiæ and protarsi yellow, blackish at the distal ends, with a faint median dark spot on the middle of the protarsi; third and fourth legs coloured like the others, but the femora yellower, with a median and a distal darker band. Abdomen variegated, anterior portion

brown, with a large sooty-black patch on each side, the upper surface ornamented in front with three longitudinally fusiform brown spots on a yellowish field; these spots are narrowed in front, the median lying longitudinally, the laterals obliquely and rather behind the others; the folium extending from the large central sigilla and consisting of a brown triangular area divided along the middle line by a pale yellowish-grey band, continuous in front with a transverse stripe of the same tint, the two forming a somewhat dagger-shaped pattern, the handle of which is in contact in front with the posterior extremity of the median fusiform spot; sides of abdomen dirty yellowish grey, with a series of indistinct stripes above and a second series of darker longer stripes below; lower surface yellow and black; a transverse yellow stripe behind the epigastric fold, this is followed by a pair of large black spots, from the posterior inner ends of which a black line passes backwards and joins with a transverse brown ring surrounding the spinners below and laterally; the area between these black spots is brownish yellow and is in contact in front with the yellow band behind the epigastric fold; immediately behind the black spot there is a bright yellow spot, bordered internally by the black line and in contact posteriorly with a transverse yellow spot at the sides and in front of the anterior mamillæ; mamillæ deep reddish brown.

*Carapace* with cephalic region flattened above, but more convex longitudinally than in *A. Spenceri*; ocular quadrangle wider in front than behind, posterior medians less than a diameter apart, anterior medians about one diameter apart; eyes of anterior line slightly procurved, distance between medians less than half as great as distance between median and lateral on each side; carapace about as long as first and fourth femora, only slightly longer than first tibia, a little longer than fourth tibia, its width scarcely as long as first tibia and a little shorter than first protarsus.

*Mandibles* basally prominent, armed below as in *Spenceri*—4 teeth in front, 3 behind.

*Legs* long, first more than  $3\frac{1}{2}$  times as long as carapace; femora, patellæ, tibiæ, and protarsi armed with many spines.

*Abdomen* a little longer than broad, heart-shaped, without shoulder-points, broadest in its anterior third, widely rounded in front, gradually narrowed to an acute angle in its posterior two thirds, its apex rounded, scarcely surpassing the mamillæ.

*Measurements in millimetres.*—Total length 15; length of carapace 6, width 5; length of abdomen 10, width 9; length of first leg 22.5, of fourth 21.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

*Araneus Spenceri*, sp. n. (Pl. VIII. fig. 4.)

*Colour.* Carapace deep blackish brown, with a yellowish spot on each side of the thoracic portion and one on each side involving the lateral eyes; labium and maxillæ deep brown in the basal half, yellowish brown distally; sternum black, with its median third bright yellow; palpi yellow, with the distal end of the segments black; mandibles deep brown; legs mostly yellow, the patellæ and the distal end of the femora, tibiæ, protarsi, and the distal half of the tarsi black; abdomen above and at the sides yellowish grey, black in front above the pedicle, the lower surface and spinners black; a smallish subcircular yellow spot on each side of the anterior spinners, preceded by a posteriorly expanded, anteriorly pointed, longitudinal yellow spot, and in front of this a transverse posteriorly pointed yellow spot lying immediately behind the pulmonary stigmata; epigastric area mesially black, laterally yellow.

*Carapace* about as long as femora of first and fourth legs, much longer than their tibiæ, its width also longer than the first tibia and about as long as the protarsus; cephalic region flat above longitudinally; ocular quadrangle wider in front than behind, the posterior medians about a diameter apart, the anterior medians about two diameters; eyes of anterior line at most slightly recurved.

*Mandibles* not basally prominent, the fang-groove armed with 4 teeth in front, 3 behind.

*Legs* short, first three and a half times as long as the carapace; femora, tibiæ, and protarsi spiny.

*Abdomen* voluminous, almost as wide as long, widely rounded in front and behind, without shoulder-prominences.

Basal pillar of *vulva* scarcely wider than the scape; scape longish, bent at right angles, the distal end of the basal portion not projecting above its proximal extremity.

*Measurements in millimetres.*—Total length 15; length of carapace 6, width 5; length of abdomen 12, width 11·8; length of first leg 21, of fourth leg 18·5.

*Loc.* Durban (*H. A. Spencer*). A single female specimen.

*Araneus haploscapus*, sp. n. (Pl. VIII. fig. 5.)

*Colour.* Carapace and legs reddish brown, the legs indistinctly banded on femora and tibiæ; abdomen a uniform creamy yellow, a richer yellow on the area between the epigastric fold and the spinners; sternum with broad median yellow band.

*Carapace* only a little longer than tibia of first leg,

distinctly shorter than patella and tibia of fourth; width of carapace less than first tibia. Eyes of anterior line slightly procurved; posterior medians about a diameter apart, anterior medians about two diameters; distance between median and lateral of anterior line more than twice as great as that between the medians.

*Mandibles* basally prominent; fang-groove armed below with 4 teeth in front, 3 behind.

*Legs* longish and slender, spiny.

*Abdomen* at least as wide as long, voluminous, without shoulder-points, widely rounded in front, shortly ovate behind.

*Vulva* differing from that of *A. Spenceri* and *A. Marshalli* in that, viewed from the side, the scape is seen to rise from the anterior end of the basal pillar, the posterior part of which is separated from the scape by a deep notch, smaller, but of the same nature as that which obtains in *rufipalpis*.

*Measurements in millimetres*.—Total length 14·5; length of carapace 4·5; length and width of abdomen 9·5; length of first leg 15, of fourth 14.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

The females of the species of *Araneus* here mentioned may be distinguished as follows:—

Female.

- a. Basal portion of vulva expanded at the sides and projecting laterally beyond the lateral margins of the scape; scape broad at the base, narrower posteriorly, its basal half horny and hairy, its distal half soft and membranous, bent upon itself and folded within the vestibule of the vulva in such a way that the somewhat heart-shaped expanded terminal portion is in contact with the hairy portion of the vulva. (Eyes of anterior line slightly recurved; carapace much longer than tibia of first leg.) . . . . . *cyrtoscapus*, sp. n.
- b. Basal (vestibular) portion of vulva not expanded laterally beyond the side-margins of the scape, forming a horny pillar; scape entirely horny and not folded or bent upon itself.
  - a<sup>1</sup>. When viewed from the side the scape is seen to be much narrower than the distal end of the basal portion, and to rise from its anterior edge, being separated by a deep notch or narrow space from the posterior edge of the distal end of the basal portion.
  - a<sup>2</sup>. Eyes of anterior line recurved; legs of anterior pair reddish, those of posterior two pairs reddish, with deep black stripe on distal end of patella, tibia, protarsus, and tarsus; carapace much longer than tibia 1 and longer than tarsus and protarsus 4 . . . . . *rufipalpis*, Luc.

- b*<sup>2</sup>. Eyes of anterior line straight or slightly procurved; legs reddish brown, indistinctly multiannulate; carapace in adult scarcely as long as protarsus and tarsus 4 and a little longer than tibia 1 ..... *haploscapus*, sp. n.
- b*<sup>1</sup>. When viewed from the side the scape of the vulva is seen to be as thick as the basal portion, to rise without constriction or notch from the entire distal end of the basal portion.
- a*<sup>3</sup>. Of very small size, total length about 5 mm.; abdomen with very large angular prominences, posteriorly pointed ..... *mimosicola*, Sim.
- b*<sup>3</sup>. Of large size, about 15 mm. in length; abdomen without large shoulder-prominences.
- a*<sup>4</sup>. Legs shorter, tibia of first much shorter than carapace; abdomen subcircular; femora yellow ..... *Spenceri*, sp. n.
- b*<sup>4</sup>. Legs longer, tibia of first only a little shorter than carapace; abdomen oval; femora not uniformly yellow ..... *Marshalli*, sp. n.

*Araneus coccinella*, sp. n. (Pl. VIII. fig. 6.)

*Colour.* Carapace black, scantily clothed with white hairs; mandibles black, with reddish anterior spot at distal end; labium, maxillæ, and sternum black; abdomen orange-yellow above, ornamented with eight large black oval spots, forming two parallel lines, lower side entirely black; coxæ and trochanters of legs black, remainder of legs orange-yellow, with a broad black band on the distal end of the protarsus; tarsi black, with basal yellow band and paler apex; femur of third leg black basally, of fourth black in its basal half.

Cephalic region of *carapace* coarsely coriaceous, high, elevated behind, strongly compressed posteriorly, its upper surface mesially depressed. *Eyes* of posterior line procurved when viewed from above, the medians rather more than a diameter apart; ocular quadrangle about as long as wide, wide in front, the anterior eyes about two diameters apart and about the same distance from the posterior medians, the clypeus receding, exceeding the diameter of the median eyes; anterior line of eyes procurved, lateral eyes not in contact, the space between them nearly equal to their radius.

*Legs* shortish, scarcely spined, the protarsi and tarsi furnished with rigid setæ; carapace about as long as patella and tibia of first pair.

*Abdomen* large, oval, about one third longer than broad, projecting some distance beyond the spinners behind, but rounded and not pointed posteriorly; evenly rounded in front,

without shoulder-points, flattened above, its height about half its length.

*Vulva* as in Pl. VIII. fig. 6; the scape much narrower than the subjacent portion, deeply excavated above, ending posteriorly in a rounded apex which overlaps the latter.

*Measurements in millimetres.*—Total length 6; length of abdomen 4.5, width 3.5.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

This peculiar species, apparently mimicking a *Coccinella*, is recognizable at once from all the species described in this paper and from all known to me by its peculiar colouring. The exact generic position of the species appears to me to be doubtful. In spite of the separation of the lateral eyes, it appears to me to fall rather into *Araneus* than into *Cyrtophora*. The coloration suggests that of *Paraplectana Walleri* (Blck.).

#### Genus CYRTOPHORA, Simon.

##### *Cyrtophora citricola* (Forsk.).

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

#### Genus ARGYROEPEIRA, Emerton.

##### *Argyroepeira Antinorii* (Pavesi).

? *Epeira undulata*, Vinson, Aranéides des Iles Réunion &c. p. 207, pl. v. fig. 3 (1863).

? *Meta Rabli*, Karsch, Zeits. gesammt. Naturwiss. 1878, p. 771.

*Meta Antinorii*, Pavesi, Ann. Mus. Genova, xx. p. 22 (1883).

*Argyroepeira blanda*, O. P. Cambridge, P. Z. S. 1890, p. 626, pl. liii. fig. 6.

*Argyroepeira undulata*, Vinson, Simon in Donaldson Smith's 'Through Unknown African Countries,' p. 388.

*Loc.* Durban (*H. A. Spencer*); Estcourt, 4000 feet (*G. A. K. Marshall*).

These Natal specimens appear to me to be specifically identical with examples from Shoa named *M. Antinorii* by Pavesi and presented to the British Museum by the Marquis G. Doria, and also with Somaliland specimens identified as *undulata*, Vinson, by Simon. If they are in reality identical with *undulata*, the latter name, having priority, must stand. Judging, however, from Vinson's figures, the abdomen of *undulata* is longer and more pointed behind than in the African species.

## Genus CÆROSTRIS, Thorell.

*Cærostris sexcuspidata* (Fabr.).

Loc. Durban (*H. A. Spencer*); Estcourt, 4000 feet (*G. A. K. Marshall*).

## Genus GASTERACANTHA, Sund.

*Gasteracantha cicatricosa*, C. Koch.

Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

*Gasteracantha tabulata*, Thor.

Loc. Port Natal (*Gueinzius*).

*Gasteracantha ensifera*, Thor.

Loc. Durban (*W. L. Distant*); Port Natal (*J. Sanderson*).

## Genus PARAPLECTANA, Brit. Cap.

*Paraplectana Thorntoni* (Blackw.).

*Eurysoma Thorntoni*, Blackwall, Ann. & Mag. Nat. Hist. (3) xvi. p. 348 (1865).

*Peniza testudo*, Thorell, Eugenes Resa, Araneæ, p. 10.

Loc. Estcourt, 4000 feet.

According to a note affixed by Mr. Marshall to this specimen, the spider when living is coral-red and mimics very exactly a common local ladybird (Coccinellid), *Chilomenes lunata*.

## Genus PYCNACANTHA, Blackw.

*Pycnacantha tribulus* (Fabr.).

*Aranea tribulus*, Fabr. Ent. Syst. ii. p. 428.

*Pycnacantha Meadii*, Blackwall, Ann. & Mag. Nat. Hist. (3) xvi. p. 351 (1868).

*Pycnacantha tribulus*, Fabr., Simon, Hist. Nat. Araignées, i. p. 889, fig. 958.

Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

## Family Theridiidæ.

## Genus LATHRODECTUS, Walck.

*Lathrodectus tridecim-guttatus* (Rossi).

Loc. Estcourt, 4000 feet (*G. A. K. Marshall*).

*Lathrodectus geometricus*, C. Koch.

Loc. Durban (*H. A. Spencer*).

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Family **Hersiliidæ**.Genus **HERSILIA**, Aud.*Hersilia sericea*, sp. n. (Pl. VIII. fig. 9.)

*Colour* (in alcohol). Carapace testaceous, clouded with black; clypeus yellow; mandibles black, with pale transverse median band; abdomen testaceous, mottled with black, with an irregular median black band anteriorly; legs yellow, spotted and mottled with black; distal segment of posterior spinners yellow, with two black spots and black at the apex; lower side of trunk and limbs yellow. When dry the integument is seen to be covered with silky white hairs.

*Carapace* as wide as long, its width about equal to distal protarsal segment of second leg and to patella, tibia, and half the protarsus of the third; ocular quadrangle longer than wide, a little wider in front. *Eyes* subequal; the posterior medians rather less than a diameter apart, the anterior medians a little more than a diameter apart, the anterior and posterior median on each side about a diameter apart; clypeus exceeding the length of the ocular quadrangle.

*Legs*: femora with superior spines black, anterior and posterior spines white; patellæ with two superior spines and one posterior; protarsi with a pair of superior spines at the base above and four (rarely three) additional spines, two superior, one anterior, and one posterior; tibiæ of first and second armed with 8-9 spines.

*Spinners* with distal segment of posterior pair rather short, about as long as tibia of fourth leg, shorter than tibia of first.

*Vulva* with lateral portion projecting beyond the median and ending in an inwardly directed spiniform process.

*Measurements in millimetres*.—Total length 8.5; length and width of carapace 3; length of abdomen 4.5, of posterior spinners 6.2, its distal segment 5; length of first leg 24, of second 25, of third 8, of fourth 22.5.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

Apparently resembling in colour *H. albicomis*, Simon (*Ann. Soc. Ent. France*, 1887, p. 273), from Assinie, W. Africa, but certainly differing from it in having the ocular quadrangle wider in front and not perfectly parallel; nor does the description of the vulva in *albicomis* apply to that organ in *H. sericea*.

It is also closely allied to *H. Hildebrandti*, Karsch (*Zeits. ges. Naturwiss.* 1878, p. 312), from Zanzibar; but without

figure or description of the vulva of the latter it is not possible to make any satisfactory comparison between the two.

Family Oxyopidæ.

Genus PEUCETIA, Thorell.

*Peucetia pulchra* (Blackw.).

*Pasithea pulchra*, Blackwall, Ann. & Mag. Nat. Hist. (3) xvi. p. 338 (1865).

Loc. Natal (*J. Sanderson*).

Family Pisauridæ.

Genus EUPROSTHENOPS, Poc.

*Euprosthénops australis*, Simon.

*Euprosthénops australis*, Simon, Ann. Soc. Ent. Belg. xlii. p. 12 (1898).

Loc. Durban (*H. A. Spencer*); Estcourt (*G. A. K. Marshall*).

The South-east African form of the genus *Euprosthénops*, which M. Simon regards as distinct from *E. bayonianus*, I had identified as that species, having no West-African examples with which to compare it.

Genus SPENCERELLA, nov.

Allied to *Euprosthénops* and *Tetragonophthalma*; differing from the former in that the anterior lateral eyes are subsessile and close together in the middle line, the distance between them being about equal to the distance between the posterior medians; in *Euprosthénops* these eyes are strongly stalked and far apart, the distance between them being equal to the distance between the posterior laterals. In *Tetragonophthalma* the anterior laterals, although sessile, are widely separated and above the edge of the clypeus.

Type *S. lineata*, sp. n.

*Spencerella lineata*, sp. n. (Pl. VIII. fig. 17.)

*Colour.* Carapace ochre-brown, covered with yellowish hairs at the sides and a broad pale median longitudinal stripe; hairs on face silvery, two silver stripes on the mandible; legs and palpi covered with yellowish-brown hairs, speckled below on the femora; lower side of third leg darkened with a fuscous longitudinal stripe; abdomen yellowish brown, spotted at the sides with black, with two faint longitudinal infuscate stripes,

separated by a paler median area running along the upper-side; sternum mesially infusate, with a fine median white longitudinal line.

*Carapace* longer than wide, width equal to distance between posterior border and posterior lateral eye; facial portion more vertical than in *Euprosthénops*; the median band of pale hairs running out into a crest between the eyes; posterior median eyes about a diameter apart, anterior medians much smaller and about half a diameter apart; the ocular quadrangle longer than wide, and narrowed in front as in *Euprosthénops*; inferior angles of head prominent; carapace shorter than palpus by distal half of its tarsus, about as long as tibia of third leg.

*Legs* long and slender, 1 and 2, 4, 3, apparently normally spiny.

*Palpi* with patella a little shorter than tibia; tibia with an external nodular prominence in its basal half and a somewhat quadrate subbifid spine on its anterior half; tarsus broad at the base, narrowed and pointed distally.

*Abdomen* long and slender, gradually narrowed posteriorly, nearly four times as long as broad.

*Measurements in millimetres.*—Total length 13; length of carapace 4·2, of abdomen 9, width of latter 2·5; length of first and second legs 23·5, of third 18·5, of fourth 23.

*Loc.* Durban (*H. A. Spencer*). Two adult male examples.

#### Family Lycosidæ.

Genus LYCOSA, Latr.

*Lycosa Spenceri*, Poc.

*Lycosa Spenceri*, Poc. Ann. & Mag. Nat. Hist. (7) i. p. 313, figs. 1, 1 a.

*Loc.* Durban (*H. A. Spencer*); Estcourt, 4000 feet (*G. A. K. Marshall*).

*Lycosa Darlingii*, Poc.

*Lycosa Darlingii*, Poc. Ann. & Mag. Nat. Hist. (7) i. p. 314, figs. 3, 3 a.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

#### Family Palpimanidæ.

Genus PALPIMANUS, Duf.

*Palpimanus armatus*, sp. n. (Pl. VIII. fig. 11.)

♀.—*Colour.* Carapace, anterior legs, palpi, sternum and

mouth-parts, and epigastric area mahogany-brown, remaining legs yellowish red, these parts rather scantily covered with greyish-yellow hairs; abdomen more thickly covered with hairs of the same tint, brownish yellow beneath.

*Carapace* granular, high, its height about equal to the width of the cephalic area, its length equal to that of patella and tibia of first leg, a little longer than tibia, protarsus, and tarsus of second, and a little less than the same segments of the third leg, its width about equal to the length of the elevated portion, to femur of first leg, patella and half the tibia of this same appendage, and to patella and tibia of second, a little less than patella and tibia of fourth. *Eyes* of posterior line nearly straight, a little recurved, distance between medians a little less than between medians and laterals and equal to about five diameters; ocular quadrangle a little narrowed in front, about one fourth longer than wide; eyes of anterior line strongly procurved, medians less than a radius apart and about their diameter from the anterior laterals, which are much smaller and well in advance of them.

*Mandibles* and *sternum* granular.

*Legs*: height of femur of first about half its length; tibia and patella subequal; tibia and protarsus with complete internal scopular fringe; tarsus scopulate in the median third of its length; the rest of the legs with protarsi and tarsi distally scopulate below.

Epigastric area of *abdomen* marked with a pair of transverse crescentic grooves, its posterior border very lightly emarginate.

*Measurements in millimetres*.—Total length 13; length of carapace 5.5, width 4; length of first leg (from base of femur) about 11, of fourth 12.

♂.—Differing from female principally in the structure of the anterior legs, the femur of which is higher; the patella is armed externally with a stout conical process, and the tibia is arched and is furnished with a thinner backwardly directed process close to the base.

Total length 11 millim.

*Loc.* Durban (*H. A. Spencer*), ♀; Estcourt, 4000 feet (*G. A. K. Marshall*), ♀; and Port Natal (*Gueinzus*), ♂, type.

In the arrangement of the eyes this species approaches *P. capensis*, Sim., and *P. globulifer*, Sim., both of which were obtained at Port Elizabeth, and especially the latter, in having the eyes of the posterior line almost straight, but certainly differs from both in the male in the structure of the

legs of the first pair, which in *globulifer* and *capensis* are not armed as in *P. armatus* (see Simon, Ann. Soc. Ent. France, 1893, p. 312, and Hist. Nat. Araignées, i. p. 406, 1893).

### Family Zodariidæ.

#### Genus CYDRELA, Thorell.

*Cydrela spinimanus*, sp. n. (Pl. VIII. fig. 10.)

*Colour.* Carapace deep blackish brown; abdomen black, ornamented above with symmetrically arranged yellow spots; femora of legs blackish brown; patellæ, tibiæ, protarsi, and tarsi yellowish red; patellæ, tibiæ, and protarsi, especially of anterior pairs, with a dark longitudinal stripe along the sides.

*Carapace* long, about one third longer than wide, its length about equal to protarsus and tarsus of first leg, a little longer than protarsus and than patella and tibia of fourth, its width equal to patella and tibia of third; head high. *Eyes* of posterior line recurved, the medians less than a diameter apart; ocular quadrangle narrowed in front, much longer than wide.

*Legs* long and slender, the distal segments from the patella to the tarsus scantily clothed above with yellow hairs; patellæ, tibiæ, and protarsi strongly spined, especially of third and fourth legs, tarsi of latter also strongly spined; tarsi of third and fourth, and in a lesser degree of the second, lightly scopulate below, scopulate hairs also traceable upon the protarsus, at least of the third leg.

*Palpi* short and robust; femur much swollen and produced below; patella and tibia short, subequal, the latter with a conspicuous external spur; tarsus large, armed at the apex and internally with strong spines.

*Measurements in millimetres.*—Total length 7; length of carapace 4, width 2.5; length of first leg 10, of second 9, of third 10, of fourth 12.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

Differs from the previously described species, at least in the pattern of the upperside of the abdomen, which consists of circular yellow spots. In *C. unguiculata*, Cambr., from Natal (Proc. Zool. Soc. 1870, p. 731), the upperside is ornamented with a broad pale orange-yellow band.

In *C. stigmatica*, Simon (Bull. Soc. Ent. Fr. 1876, p. lxxxvii), from Zanzibar, the abdomen is furnished in front with a transverse arched stripe, two white spots in the middle, and a broad longitudinal band behind. *C. aculeata*, Karsch, from S. Africa (Zeits. gesamt. Naturw. 1878, p. 779), has the abdomen ornamented with a horseshoe-shaped anterior stripe, followed by a pale longitudinal band on each side.

*C. approximata*, Karsch, from Walfisch Bay (*loc. cit.* p. 780), is, judging from the description of the eyes, a different genus, perhaps belonging to *Capheris*. Lastly, *C. rutilans*, Simon (Ann. Soc. Ent. France, 1888, p. 370), from Kálahari, differs from all the other species in having the abdomen uniformly coloured above.

Family Gnaphosidæ\*.

(=*Drassidæ* of authors.)

Genus PLATYOIDES, O. P. Cambridge.

*Platyoides laterigradus*, sp. n. (Pl. VIII. fig. 12.)

*Colour.* Carapace and mandibles mahogany-brown; sternum and basal three segments of legs ochre-yellow; legs from patellæ to tarsi lightly infuscate, though paler below; abdomen ashy grey, paler beneath.

*Carapace* a little longer than broad, about as long as the tibia and half the protarsus of the first and as the femur of the fourth leg; anterior median eyes separated by a space slightly exceeding their diameter, but separated from the anterior laterals by a space which equals almost two diameters.

*Mandibles* with one largish tooth near the base of the inferior border; hairy below, the hairs arising from the summits of little papillæ; front of mandibles sparsely setose.

*Legs* also sparsely setose, not spined; protarsi and tarsi of first and second lightly scopulate below; the scopulæ of the second thinner than of first; patella and tibia of first and fourth about equal, and less than patella and tibia of second; fourth leg exceeding second leg by the length of its tarsus.

*Abdomen* oval, nearly twice as long as wide.

*Vulva* as in Pl. VIII. fig. 12; inferior spinners short and conical, scarcely longer than broad.

*Measurements in millimetres.*—Total length 13; length of carapace 4, width 3.3; length of first leg 11, of second 13, of third 10, of fourth 12 (measured from base of femur).

*Loc.* Estcourt, Natal, 4000 feet.

In size and colouring this species certainly resembles *P. Abrahami*, O. P. Cambridge (P. Z. S. 1890, pp. 624–5, pl. liii. fig. 4), which is described vaguely as from S. Africa; but the omission in the description of certain important characters, such as the armature of the mandible and the

\* Since the name *Drassus* disappears as a synonym, the name *Drassidæ* should be discarded for the same reasons that have led to the substitution of *Argiopidæ* for *Epeiridæ*.

scopulation of the protarsi and tarsi of the first and second legs, makes the identification of the two types as co-specific extremely hazardous. Moreover, the spinners of *P. Abrahami*, as represented in fig. 4 e, showing the anterior pair to be much longer than broad and subcylindrical, and the nearness of the eyes of the anterior line, as shown in fig. 4 b, make such a reference of the species here described impossible. The vulva of *P. Abrahami* also appears to be different.

Lastly, according to Simon (Hist. Nat. Araignées, i. p. 342 &c.) the superior edge of the lower surface of the mandible presents only rudimentary teeth. This statement, I venture to think, applies not to the single largish tooth present in *P. laterigradus*, but to the papilliform supports of the hairs, which M. Simon describes as granules. Consequently since neither Mr. Cambridge nor Mons. Simon detected in *P. Abrahami* the tooth that I have described in *laterigradus*, one is compelled to assume that it is absent in the former species.

*Platyoides pusillus*, sp. n. (Pl. VIII. fig. 13.)

*Colour.* Carapace yellowish ochre-brown, with narrow blackish rim; legs practically a uniform ochre-yellow, the femora not noticeably paler than the remaining segments; abdomen testaceous above, clouded with fuscous at the sides.

*Carapace* about as wide as long, a little shorter than patella and tibia of first leg; eyes of anterior line subequally spaced, the medians about their own diameter from the laterals.

*Legs* as in the preceding species, but with the setæ more rigid, those on the lower side of the tibiæ and protarsi of the first converted into spines; protarsi and tarsi of first and second without scopulate hairs.

*Vulva* as in Pl. VIII. fig. 13.

*Measurements in millimetres.*—Total length 7; length and width of carapace 2.3.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

This species, based upon a single immature female, may, apart from the form of the vulva, be readily distinguished from *laterigradus* as follows:—

- a. Carapace narrower, noticeably longer than wide; distance between anterior median eyes only about half as great as that between median and lateral; protarsi and tarsi of first and second legs lightly scopulate, tibiæ and protarsi of first not spined: length of adult 13 mm. . . . . *laterigradus*, sp. n.

- b. Carapace almost as wide as long; distance between eyes of anterior line subequal, that between the medians only a little less than that between the median and lateral on each side; anterior legs not scopulate, tibiæ and protarsi of first spined below: adult 7 mm. long ..... *pusillus*, sp. n.

### Family Clubionidæ.

#### Genus CLUBIONA, Latr.

##### *Clubiona valens*, Simon.

*Clubiona valens*, Simon, Ann. Soc. Ent. Belg. xli. p. 10.

*Loc.* Durban (*H. A. Spencer*).

Three examples (two females, one male) are doubtfully referred to this species, recorded from Natal, but insufficiently diagnosed. The two females present a small difference in the form of the vulva, and are, perhaps, not conspecific. The description of the vulva of *valens* applies to both examples.

#### Genus CORINNA, C. Koch.

##### *Corinna natalis*, sp. n. (Pl. VIII. fig. 14.)

*Colour.* Carapace deep brown, yellow at the sides of the thoracic portion, nearly black on the cephalic area, covered with greyish-yellow hairs; palpi and legs yellowish brown, darker distally; labium, maxillæ, and sternum deep brown; abdomen greyish black, covered above with greyish-white hairs.

*Carapace* about as long as patella, tibia, and tarsus of palp and as protarsus of fourth leg, a little shorter than patella and tibia of third and second leg, its width as long as protarsus and one third of the tarsus of the second leg, and just about equal to protarsus of third. *Eyes* of posterior line very slightly procurved, subequal and subequally spaced, posterior medians rather more than a diameter apart; quadrangle a little wider in front; anterior medians larger than posterior medians and about half a diameter apart; anterior medians considerably larger than anterior laterals and a little nearer to them than to each other; anterior line procurved when viewed from the front.

*Mandibles* prominent, strongly geniculate at the base; fang-groove armed with 4-5 teeth behind and 3 in front.

Tarsus of *palp* longer than tibia.

*Maxilla* and *labium* normal.

*Sternum* circular.

*Legs*: (first pair missing); third a little longer than

second, patellæ unarmed; tibia of second armed with 3 pairs of spines below, of third and fourth with 2 pairs, protarsus of second and third with 2 pairs of inferior spines.

*Abdomen* oval, not twice as long as wide.

*Vulva* marked with two subcircular impressions, separated by a narrow partition.

*Measurements in millimetres.*—Total length 14; length of carapace 7, width 5.5; length of palpus 9, of second leg 21, of third 23, of fourth 26; patella and tibia of fourth 8.5.

*Loc.* Durban (*H. A. Spencer*). A single female example.

### Family Heteropodidæ.

Genus PALYSTES, L. Koch.

*Palystes natalius* (Karsch).

*Heteropoda natalia*, Karsch, Zeits. gesammt. Naturwiss. 1878, p. 772.

*Palystes Spenceri*, Pocock, Ann. & Mag. Nat. Hist. (6) xvii. p. 58, pl. viii. fig. 3 (1896).

*Loc.* Durban (*H. A. Spencer*); Estcourt, 4000 feet, and the Lower Umkomaas River (*G. A. K. Marshall*).

The species that I named *P. Spenceri* is so abundant in Natal and the neighbouring parts of South Africa, that it seems to me almost certainly identical with the form that Karsch previously described as *Heteropoda natalia*.

Genus SPARASSUS, Walck.

*Sparassus (Olios) Spenceri* (Pocock).

*Olios Spenceri*, Pocock, Ann. & Mag. Nat. Hist. (6) xvii. p. 62, pl. viii. fig. 6.

*Loc.* Durban (*H. A. Spencer*).

*Sparassus (Midamus) Marshalli*, sp. n. (Pl. VIII. fig. 15.)

*Colour* of integument ochre-yellow, paler on abdomen, but darker towards the extremities of the appendages; mandibles lightly tinted with fuscous; carapace with a faint fuscous rim behind the head; abdomen marked dorsally with a median purplish-red band, which in the anterior half of its length is divided into two, the two branches enclosing a darker brown area; the carapace, abdomen, and legs covered with a short coating of silky white hairs.

*Carapace* high, convex, a little wider than long, its length a little exceeding patella, tibia, and tarsus of palp, equal to protarsus and tibia of fourth leg, almost equal to tibia of first.

*Legs* long and slender, 2, 1, 4, 3, the second exceeding

first by its tarsus and about one fourth of the protarsus, fourth exceeding third by the length of its tarsus; patella and tibia of first a little greater than of fourth, patella and tibia of second about twice the length of the carapace; patellæ without spines.

*Eyes* of posterior line procurved, distance between the medians greater than that between median and lateral; ocular quadrangle narrowed in front, its posterior width exceeding its length; eyes of anterior line subequal, subequally spaced, distance between medians less than their diameter.

*Labium* with convex border, distinctly wider than long; maxillæ short, scarcely longer than broad.

*Abdomen* nearly twice as long as wide.

*Measurements in millimetres.*—Total length 14; length of carapace 4·5, width 4·8; length of abdomen 10, width 5·5; length of first leg 21, of second 24, of third 17, of fourth 19.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

*Sparassus (Vindullus) stictopus*, sp. n.  
(Pl. VIII. figs. 16, 16 a.)

*Colour.* Carapace ochre-yellow, with a dark brown stripe extending from the fovea and dividing anteriorly and passing along the cephalic groove, circumscribing the cephalic area behind, the thoracic portion bearing a brownish spot on each side behind the head; head with a faint median fuscous band; legs ochre-yellow, spotted with black at the base of the spines; tibiæ and protarsi with three spots; patella fuscous at base; abdomen with a faint median fuscous band.

*Carapace* a little longer than wide, resembling that of *Palystes*, distinctly shorter than tibia of third leg, a little longer than patella, tibia, and protarsus of palp, about half the length of the patella and tibia of second leg. *Eyes* of second line straight, laterals a little larger than medians and nearer to them than the medians are to each other; ocular quadrangle scarcely narrowed in front, about as long as wide; eyes of anterior line straight, medians much larger than laterals, distance between them greater than that between median and lateral.

*Labium* nearly as long as wide; maxillæ longer than wide.

*Legs* long and slender, patella unspined, second exceeding the first by the length of its tarsus, patella and tibia of first considerably longer than those of fourth; tibiæ with 3 pairs of long inferior spines.

*Palp* as in Pl. VIII. fig. 16 a, its tibia armed externally with a long inferior spine and a superior bidentate process.

*Abdomen* oval, one third longer than wide.

*Measurements in millimetres.*—Total length 12; length of carapace 5, width 4.5; length of first leg 29, of second 32, of third 21, of fourth 24.

*Loc.* Durban (*H. A. Spencer*). A single male example.

This species may prove to be based upon the male specimen belonging to the same species as the immature female from Natal which M. Simon makes the type of his *S. (Vindullus) guttipes* (*Hist. Nat. Araignées*, ii. p. 36, 1897). The coloration of the legs and carapace, however, seems to differ in the two. No great reliance must be placed either upon the ocular or other characters of an immature specimen.

The three species of this genus here recognized may be readily distinguished as follows:—

- a. Eyes of posterior line procurved; carapace slightly wider than long; ocular quadrangle much wider behind than in front; second leg exceeding the first by much more than the length of its tarsus . . . *Marshalli*, sp. n.
- b. Eyes of posterior line straight or very slightly recurved; carapace not wider than long; second leg exceeding first by the length of its tarsus.
  - a<sup>1</sup>. Distance between anterior median eyes less than that between anterior and lateral; eyes of anterior line subequal; tibiæ with two pairs of short spines below . . . . . *Spenceri*.
  - b<sup>1</sup>. Distance between anterior median eyes greater than between medians and laterals; anterior medians much larger than anterior laterals; tibiæ with three pairs of spines below . . . . . *stictopus*, sp. n.

### Genus SELENOPS, Latr.

#### *Selenops Spenceri*, Pocock.

*Selenops Spenceri*, Pocock, *Ann. & Mag. Nat. Hist.* (6) xvii. p. 55, pl. viii. fig. 8 (1896).

*Loc.* Durban (*H. A. Spencer*); Estcourt, 4000 feet (*G. A. K. Marshall*).

This species was based upon a female collected by Mr. H. A. Spencer. Mr. Guy Marshall was fortunate enough to procure the male.

### Family Thomisidæ.

#### Genus THOMISUS, Walck.

#### *Thomisus granulatus*, Karsch.

*Thomisus granulatus*, Karsch, *Zeits. gesammt. Naturwiss.* 1880, p. 382.

*Loc.* Durban (*H. A. Spencer*); Port Natal (*Dr. Krauss*).

*Thomisus albus* (Gmelin).

*Loc.* Durban (*H. A. Spencer*).

Two immature females are referred with some doubt to this common European species. They do not appear to differ from immature examples of *albus*. Simon has recently recorded the latter from King William's Town in Cape Colony (*Bull. Soc. Zool. France*, 1896, p. 221).

*Thomisus anthobius*, sp. n. (Pl. VIII. fig. 18.)

*Colour* yellow; carapace with a large brown patch on its lateral slope, the upper surface and sides mottled with white; ocular region white, ornamented with black stripes, forming an obtuse angle, the longest side of which runs along the upperside of the head from horn to horn, the obtuse angle being on the middle of the clypeus; from the centre of the basal line runs a pair of black lines to the opposite sides, involving the anterior median eyes; edge of clypeus white; mandibles mottled with white in front; tibia of palp with a median white stripe; femora, patellæ, and tibiæ of first and second legs mottled with white below; abdomen mostly creamy yellow, transversely infusate behind the points.

In colour and in almost all structural details this species resembles the West-African *T. tripunctatus*, Lucas (*Yolophus*, Doum.), but may be distinguished by the form of the vulva and by its lower carapace. The vulva consists of a transversely oval or subquadrate elevated plate, marked with a pair of subcircular pits, separated by a broad partition, which widens posteriorly. In a specimen from Sierra Leone which I identify as *T. tripunctatus* the pits on the vulva are elongate, at least twice the length that they are in *T. anthobius*.

*Measurements in millimetres.*—Total length 14; length and width of carapace 5; length of abdomen 9.5, width 12; length of first leg 15, of second 16, of third 9, of fourth 11.

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

## Genus DIÆA, Thorell.

*Dicæa decens*, Karsch.

*Dicæa decens*, Karsch, *Zeits. gesammt. Naturwiss.* 1878, p. 773

*Loc.* Estcourt, 4000 feet (*G. A. K. Marshall*).

Originally recorded from Natal.

## EXPLANATION OF PLATE VIII.

- Fig. 1. *Harpactira curator*, sp. n. External aspect of palpal organ.  
 Fig. 2. *Araneus cyrtoscapus*, sp. n. Vulva from below.  
 Fig. 2 a. Ditto. Vulva from the side.  
 Fig. 2 b. Ditto. Left palpal organ of ♂, from below.  
 Fig. 3. *Araneus Marshalli*, sp. n. Vulva from the side.  
 Fig. 4. *Araneus Spenceri*, sp. n. Vulva from the side.  
 Fig. 5. *Araneus haploscapus*, sp. n. Vulva from the side.  
 Fig. 6. *Araneus coccinella*, sp. n. Vulva from below.  
 Fig. 7. *Stegodyphus dumicola*, sp. n. Palpal organ of ♂, outer view.  
 Fig. 8. *Dresserus obscurus*, sp. n. Vulva.  
 Fig. 9. *Hersilia sericea*, sp. n. Vulva.  
 Fig. 10. *Cydrela spinimanus*, sp. n. Palp of ♂, outer view.  
 Fig. 11. *Palpimanus armatus*, sp. n. Anterior leg of ♂, outer view.  
 Fig. 12. *Platyoides laterigradus*, sp. n. Vulva.  
 Fig. 13. *Platyoides pusillus*, sp. n. Vulva.  
 Fig. 14. *Corinna natalis*, sp. n. Vulva.  
 Fig. 15. *Sparassus Marshalli*, sp. n. Vulva.  
 Fig. 16. *Sparassus stictopus*, sp. n. Tibia of palp of ♂, outer view.  
 Fig. 16 a. Ditto. Palpal organ from below.  
 Fig. 17. *Spencerella lineata*, gen. et sp. n. Right palpal organ from below.  
 Fig. 18. *Thomisus anthobius*, sp. n. Vulva.

XXVI.—*Descriptions of some new Species of Heterocera from Tropical America.* By HERBERT DRUCE, F.L.S. &c.

Fam. Syntomidæ.

*Neacerea brunnea*, sp. n.

*Male*.—Dark red-brown; palpi in front and pectus greyish. Fore wing with faint traces of sinuous antemedial and curved postmedial lines and of discoidal lunule. Hind wing fuscous brown, with diffused semihyaline streak below median nervure. The anal angle produced to a pointed lobe, the inner area with a fold containing a tuft of hair.

Expanse 30 millim.

*Hab.* Brazil, Espiritu Santo.

Type in Mus. Oxon.

Fam. Thermesiidæ.

*Selenis cades*, sp. n.

*Male*.—Primaries dark brown, crossed from the costal to the inner margin by a number of fine black lines, with a pale brown rather wide submarginal line extending from the apex



Pocock, R. I. 1898. "The Arachnida from the province of Natal, South Africa, contained in the collection of the British Museum." *The Annals and magazine of natural history; zoology, botany, and geology* 2, 197–226.

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