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XXXVII.—Report upon a small collection of Scorpions and centipedes sent from Madras by Mr. Edgar Thurston, of the Government Central Museum

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on the sides of the neck, and by the entire nakedness of the throat, wing and interfemoral membranes, and limbs. The hind legs especially in *C. latidens* are clothed above to the ankles, while in *C. spadiceus* they are wholly naked. Colour dark rufous brown above and on the sides below, paler on the neck and along the centre of the belly.

Skull and dentition much as in the allied species, except that the anterior premolars are deciduous, being absent in the type; the molar teeth above are larger and heavier, those below are rather longer but not quite so broad, and the last lower molar is slightly larger. The incisors number $\frac{4}{4}$ and are subequal in size, the inner ones above being very slightly longer than, but of the same thickness as, the outer.

Measurements of the type, an adult female, preserved as a skin :—

Head and body (stretched) 130 millim.; forearm 77 (=3·05 in.); thumb, including claw, 25; lower leg 27.

Skull.—Greatest breadth 25; palate, length 19; front of canine to back of last molar, above 13·6, below 15·7; $\overline{m.1}$ 3·0 \times 2·8, $\overline{m.2}$ 2·5 \times 2·3; $\overline{m.1}$ 3·0 \times 2·9, $\overline{m.2}$ 2·7 \times 2·6.

Hab. Baram, N.W. Borneo. Collected by Mr. Charles Hose.

XXXVII.—*Report upon a small Collection of Scorpions and Centipedes sent from Madras by Mr. Edgar Thurston, of the Government Central Museum.* By R. I. POCKOCK, of the British Museum (Natural History).

[Plate XII.]

SCORPIONIDEA.

THE Scorpions sent by Mr. Thurston are referable to four species, whereof one is new. The series of the species *Sc. Swammerdami* has been most useful in showing the amount of variation presented during the passage from the young to the adult condition.

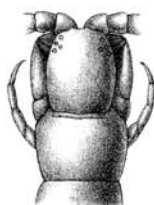
Isometrus maculatus (De Geer).

This species is cosmopolitan.

Buthus Martensii, Karsch.

Buthus Martensii, Karsch, Mitth. Münchn. ent. Ver. 1879, p. 112, ♂; Pocock, Ann. & Mag. Nat. Hist. 1889, iii. p. 335, pl. xv., ♂ ♀.

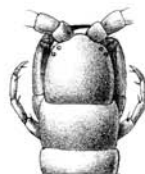
Buthus grammurus, Thorell, Ann. Mus. Genov. 1889, pp. 567-570, ♀, pl. v. fig. 4.



3.



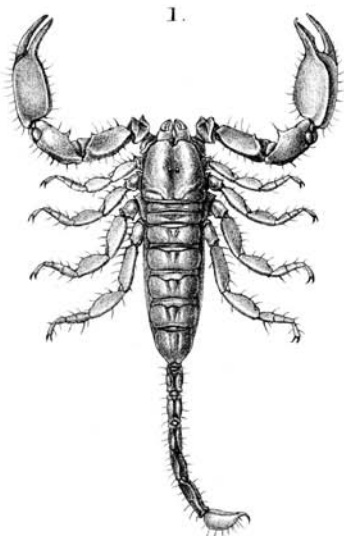
1a.



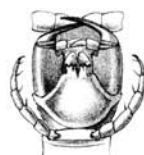
2.



3a.



1.



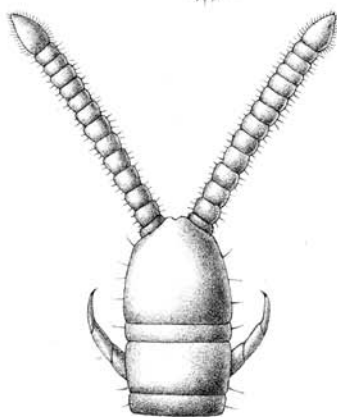
2a.



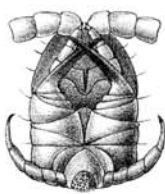
3b.



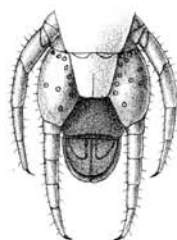
2b.



4.



4a.



4b

This species has been recorded from so many widely separated localities in India that it is not rash to surmise that it exists all over the country. The British Museum has specimens from Sikkim, Umballah, Bengal, Madras, and Bombay. All the specimens possess the black lines on the tail which Thorell states to be characteristic of *grammurus*, and a feature by which it may be separated from *hottentotta*. This, however, is not the case, for nearly all the specimens of *hottentotta* in the British Museum have black-lined tails.

Scorpio Swammerdami (Simon) *.

Heterometrus Swammerdami, Simon, Rev. Mag. Zool. 1872, p. 56, pl. vi. fig. 3.

Pandinus asper, Thorell, Etudes Scorp. pp. 125-128 (1876).

Pandinus Kochii (Peters, MS.), Karsch, Mitth. Münch. ent. Ver. 1879, p. 127.

Scorpio lucidipes, Simon, Bull. Soc. Zool. Fr. x. p. 38 (1885).

This Scorpion is the largest of the Indian species and one that is very easily recognized in the adult condition; the cephalothorax is much depressed laterally and posteriorly, the inner border of the hand is straight, and the tail is long and powerful.

Four species presenting these characters have been described—two by Mons. Simon, one by Dr. Thorell, and one by Dr. Karsch. But the examination of a long series of forms, such as exists in the British Museum, shows that the characters of these so-called species are not constant and that they vary with age, sex, and individuals. This is clearly shown by the appended table of measurements of some of the Museum specimens. Included in the table are many of the examples sent by Mr. Thurston from Madras, and these specimens, being immature and adult examples of both sexes, have proved most useful in establishing the above-given synonymy.

Of *Sc. asper* Dr. Thorell says:—“*P. Swammerdami* (Sim.) valde affinis est *P. asper*; forma manuum in utraque specie eadem, sed *P. Swammerdami* major est, obscurior,

* All must agree with Dr. Thorell that if the name *Aranea* be abolished as a generic term the name *Scorpio* must be treated in a similar fashion. But the principle upon which this system rests, if widely extended—and consistency demands that if it be applied to one case it be extended to all—would lead to the abolition of many names which are now in common use. Thus *Papilio*, *Musca*, *Vespertilio*, *Anguis*, &c. would have to be abandoned, and much confusion would thereby be occasioned. Consequently it were surely better that these terms, which were originally used in a general sense, be retained as restricted by zoologists of the present day.

minusque scaber, et granula in superficie superiore manuum ejus majora sunt, humilia et rotundata, cephalothorax multo brevior quam segmenta caudæ $1^m + 2^m$, cauda circiter $4\frac{1}{2}$ longior quam cephalothorax, vesica latior quam segm. caudæ 5^m , parum longior quam latior, aculei longitudo vesicæ latitudine minor."

However, in specimens of *Swammerdami* the colour of the trunk varies from reddish brown to dark green; the degree of granulation also varies considerably, in smaller specimens the granules upon the hands are relatively coarser and much more defined than in larger specimens, in which they appear to have been worn away and fused together; the length of the tail increases with the size of specimens and varies with sex, being considerably longer in the adult male than in the adult female. In young specimens the cephalothorax equals in length the length of the first two caudal segments taken together; in the adult female it is shorter and in the adult male very much shorter; the width of the vesicle also increases with age; in small specimens it is as wide as the fifth caudal segment, in large specimens it is much wider.

So far, then, the differences between *asper* and *Swammerdami* may be accounted for on the supposition that *asper* is merely an immature specimen. But on glancing over the table of measurements given by Dr. Thorell of his type, there may be noticed some curious facts which seem at first irreconcilable with the view of the specific identity between *Swammerdami* and *asper*. The following measurements are given in millimetres:—Total length 97, cephalothorax $15\frac{1}{2}$, tail 60, first two caudal segments $16\frac{1}{4}$, fifth caudal 13, width of vesicle 5; manus, length $15\frac{1}{2}$, width $12\frac{1}{4}$.

Now, if the accompanying table of measurements be examined, it will at once be seen that specimen N is almost of the same length as the type of *asper*, and therefore, unless the two be different species, the other measurements should coincide approximately. But this is certainly not the case, the measurements of *asper* being enormously greater in each instance. But no doubt the explanation of this discrepancy is that the type of *asper* being dry, the segments of the abdomen, as is often the case, have become drawn together by the shrinking of the arthrodial membrane, so that the first overlaps the second, the second the third, and so on. Now specimen N is preserved in spirit and the tergites and sternites of the abdomen are perfectly distinct. But if it be allowed that the shrinkage in the type of *asper* amounts to a little more than 2 millimetres for each abdominal segment, we may roughly put the original length of the specimen at about 115

or 116 millimetres. If, then, it be compared with specimen G in the list, which is $115\frac{1}{2}$ millim. in total length, it will be found that the other figures agree remarkably well, the only exception being that the length of the tail in *asper* is far too little, being 60 as opposed to 63. But if we take the measurement as given by Dr. Thorell of each caudal segment separately, we find that the total amounts to $61\frac{1}{4}$. Thus only a slight difference is left, and this needs no accounting for if it be remembered that 63 represents the length of the segments *plus* the arthrodial membrane, whereas $61\frac{1}{4}$ is the length *minus* this membrane. The type of *asper*, then, appears to be a young male of *Swammerdami*.

Dr. Karsch describes his species as follows:—“*Pandinus Kochii* (Peters, MS.), quam formam a *Pandino Swammerdami* (E. S.) differre nullo modo possum quam magnitudine minore, ca. 105, in *Swammerdami* 158 mm.; sed Thorell cephalothoracem hujus speciei caudæ segmentis $1^{\circ} + 2^{\circ}$ conjunctum multo breviorē descripsit, qui in nostra forma in duobus exemplis siccatis ex Java segmenta $1^m + 2^m$ caudæ anteriora longitudine omnino æquat et ad *P. asprum*, Thor., speciem minorem long. ca. 97 mm. cadere non potest, quum Thorell ejus cephalothoracem segmentis caudæ $1^{\circ} + 2^{\circ}$ conj. parum breviorē describeret et species nostra *P. Swammerdami* nec *P. aspri* sculpturam ostendat.”

It is clear from what is written above that at the time Dr. Karsch had not seen a specimen of *S. Swammerdami*; consequently the statement about the sculpture of his species must be treated with caution. For the rest, the difference in the length of the first two caudal segments observed between *Swammerdami*, *asper*, and *Kochii* is, as we have shown, a character dependent upon age and sex. For instance, in specimen N in our table—a young female—the cephalothorax equals in length the first two caudal segments. I believe therefore that the types of *Kochii* are young females of *Swammerdami*. It must be admitted, however, that an element of doubt on this point exists on the strength of Java being assigned as the locality for the species.

Mons. E. Simon separates *lucidipes* from *Swammerdami* for the following reasons:—the size is smaller, the legs are bright yellow, the hand is much smoother and a little wider than long (in *Swammerdami* it is exactly as wide as long), the fifth caudal segment is the same length as the cephalothorax (a little longer in *Swammerdami*), of the same width as the vesicle, and strongly channelled above in its upper half (a little narrower than the vesicle and scarcely channelled in *Swammerdami*). But each of these as a specific

character may be taken exception to. Size by itself is of course valueless; the colour of the legs, as shown by the Museum series, varies from very dark brown to clear pale yellow—thus in specimen J they are very deep brown, in A light brown, in F dark yellow, in M pale yellow; the fifth caudal segment is shorter than the cephalothorax in females, as long in males of a certain age, and longer in large males; and the vesicle, as stated above, is wider than the fifth caudal segment in adults and of the same width in young forms; the groove on the upper surface of the vesicle varies from being invisible to clearly pronounced; the sculpturing of the hand is also a matter of individual variation.

The only character that seems of importance is the width of the hand, for in *lucidipes* it is stated that the hand is wider than it is long. Now, a glance at our table of measurements shows that, although subject to variation, the length of the hand is always greater than the width; so that when, in addition to the statement about *lucidipes*, it is noticed that Mons. Simon asserts that in *Swammerdami* the width of the hand is as great as the length, the conclusion seems almost inevitable that his measurements have been taken along different lines from those in the table. In the table the greatest width is taken along a line at right angles to the axis of the brachium, and the greatest length from a point on the anterior (inner) surface at the base of the dactylar prolongation to the extremity of the dilatation of the hand. And this measurement of the length always exceeds that of the width. If, however, the width be taken from the point of articulation of the movable dactylus to the extremity of the dilatation, it will be found to be as great or greater than the length.

That this explanation is the true one is rendered practically certain by the fact that in the figure of the type of *Sc. Swammerdami* the form of the hand is the same as in the specimens in the Museum collection, and that when measured as these have been measured the length is always greater than the width.

Sufficient grounds have now, I think, been found in each case to justify the conclusion respecting the specific identity of the forms that have received the above names.

Table to show the amount of Variation presented by Sc. Swammerdami.

Specimen.	Mode of preservation.	Sex.	Total length.	Tail length.	Cephalo-thorax length.	1st two tail-segments length.	5th tail-segment,		Vesicle, width.	Manus,		Locality.
							length.	width.		width.	length.	
A ..	In spirit.	♂	millim. 176	millim. 98	millim. 20	millim. 27.3	millim. 21	millim. 8	millim. 9	millim. 21	millim. 24	Ceylon.
B ..	"	"	140	82	18	23	18	7	7	17	18	"
C ..	Dry.	"	131	81	18	22	18	7	8	17	19	Madras.
D ..	"	"	127	80	17	21	17	7	8	17	18.5	Burdwan.
E ..	"	"	119	68	15.5	17.1	15	6	7	13	16	"
F ..	In spirit.	"	Trunk distorted.	76	16.5	20	17	7.3	7	17.5	18	India.
G ..	"	"	115.5	63	15.5	16.5	13.5	5.3	5	12.7	15	Madras.
H ..	"	"	91	49	12.5	13	10	3.5	3.5	9	11	"
I	"	♀	75	39	10.5	10.5	8	3	3	6	9	"
J	"	♀	166	95	21	25	20.5	8.3	9	20.5	23.5	"
K ..	Dry.	"	151.5	89	21	23	19.5	8	9	20	22.5	India.
L ..	"	"	146	84	20	24	19	7	8	18.5	22	"
M ..	"	"	140	80	19.3	21	17.5	7	8	19.5	21	"
N ..	In spirit.	"	96	51	13.5	13.5	11	4	4	10	12	Coonoor. Madras.

Hormurus laeviceps, sp. n. (Pl. XII. figs. 1 and 1 a.)

Colour of upper surface of trunk varying from ochraceous to piceous, under surface always much paler, testaceous or ochraceous; palpi and legs reddish brown to almost black above, paler beneath; vesicle always much paler than the rest of the tail, usually streaked beneath with darker bands of colour; aculeus dark brown.

Cephalothorax closely and finely punctured throughout, almost wholly smooth, sometimes very slightly and finely granular in its postero-lateral portions, marked here and there, especially on its margin, with setiferous pores; marked throughout its extent by a median longitudinal sulcus; its anterior margin somewhat shallowly excised; the area around the median eyes flat or slightly depressed; the median eyes of relatively small size and not elevated on to a tubercle.

Tergites very finely and closely punctured, smooth or feebly granular at the sides, the punctures very numerous and fine on the hinder margin; the third, fourth, fifth, and sixth marked with two conspicuous depressions, which define a more or less pyriform area; these depressions only faintly developed on the first, second, and seventh tergites.

Sternites marked with two abbreviated subparallel depressions, very faintly and closely punctured.

Tail.—Lower surface thickly and closely punctured, the first four segments not keeled below, the lines of the keels being marked by serially arranged setiferous pores, the fifth segment with its inferior keels marked by three rows of unevenly spaced granules; upper surface of the tail without keels; the anterior segments very slightly granular at the sides; the posterior segments smooth throughout; the median sulcus perfectly smooth; vesicle pyriform, flatter and lightly sulcate above, smooth and setose beneath; aculeus short and abruptly curved.

Palp.—*Humerus* with upper surface thickly and finely punctured, and either, at all events in its proximal half, thickly and finely granular, or almost wholly smooth, its anterior surface finely and sparsely granular and bounded above and below by a series of stronger sharp tubercles; its inferior surface finely and closely punctured, smooth; the posterior surface somewhat coarsely granular above. *Brachium* with upper surface smooth and punctured, posterior surface feebly granular and defined above and below by a subtuberculate ridge; inferior surface smooth and punctured; anterior surface smooth or slightly granular proximally, defined below by a series of conspicuous denticles

and above by a subtubercular or subgranular ridge, the basal prominence armed with two larger and sometimes a few smaller teeth, each of the larger teeth bearing a setiferous pore. *Hand* thickly punctured above, smooth or subrugulose, distinctly though sparsely granular in front, smooth below and somewhat coarsely granular behind, the "hand-back" defined above and below by a conspicuous subgranular keel. Movable dactylus slightly or considerably shorter than the "hand-back," with a feebly developed lobe at the distal end of the inner surface; when the dactyli are closed a corresponding but less well developed lobe on the immovable dactylus fits in front of that on the movable dactylus.

Femora of the first three pairs of legs furnished beneath with a posterior long and an anterior short series of granules; *femora* of the fourth pair granular beneath only at the distal extremity.

Pectines with, as a rule, five teeth, rarely four or six, and in one instance only three.

Stigmata slit-like.

The *genital operculum* in the female without trace of median suture, the right and left halves having coalesced to form a plate, very much wider than long, with angularly produced posterior margin.

Measurements in millimetres of a ♂ specimen.—Total length 55; cephalothorax, length 8, width 8.5; tail, length 25—first segment 3, second segment 3.5 (taken together 7), fifth segment 5.4; vesicle and aculeus, length 6; humerus, length 7; brachium, length 7.5; "hand-back," length 9; width of hand 5.5; movable dactylus, length 7.

A number of specimens of various ages and both sexes.

This species is closely allied to *H. caudicula*, L. Koch, a species found in the Australian and Austro-Malayan region. *H. laeviceps*, however, may be recognized by being almost wholly smooth (*H. caudicula* having distinctly sculptured tergites and coarsely granular cephalothorax and palpi), in having the median eyes much smaller and not situated on an eminence, in having the form of the dactyli the same in the two sexes, and in having the genital operculum in the female of a different shape (in *caudicula* this plate bears distinct traces of the median suture, is more heart-like in shape, less angularly produced behind, and less wide relatively to its length); moreover, the ridge which forms the upper boundary to the "hand-back" is more strongly developed.

In addition to the series sent by Mr. Thurston from Madras the British Museum possesses two specimens (♂ ♀) sent by Mr. W. Davidson from the Anamallai Hills, Koim-

batur. These appear to differ slightly from the Madras form in being a little more granular, in having a slightly longer tail, and in having the anterior margin of the cephalothorax a little more deeply excised.

This species also presents strong points of resemblance with *H. diremptus*, Karsch—the only species of the genus known from Africa—but, according to the description, the cephalothorax of *diremptus* is a little longer than the “hand-back,” whereas in *laviceps* it is always shorter; moreover, the movable finger of *diremptus* bears near the middle of its inner surface a large lobe and the fingers are widely separated at the base when closed (in *laviceps* they are in contact throughout their length).

CHILOPODA.

Only a few species of this group were obtained, yet more than half of them prove to be new. Of these one is a species of *Himantarium* and the others are species of *Otostigma*. It seems at first a surprising fact that out of the four species of *Otostigma* in the collection all should be new to science; but it is not a matter for wonder in the face of the circumstance that, although this genus is richer in species in the Oriental Region than any other (with the exception perhaps of *Scolopendra*), yet until now only one species, and that a widely distributed one, has been recorded from India proper!

In fact, the knowledge that we possess of Indian Myriopoda—and the same almost may be said with respect to Spiders and Scorpions—is ridiculously scanty considering the length of time that the country has been occupied by the English. Judging by analogy, these animals must be exceedingly abundant, and an enormous number of new forms could doubtless be collected by anyone who would but take the trouble to look for them.

Scutigera longicornis (Fabr.).

A very widely ranging species. Common in India and Burma, and extending through Sumatra and Borneo.

Genus RHYSIDA.

Rhysida, Wood, Journ. Ac. Sci. Philad. v. p. 40 (1863).

This name was put forward by Dr. Wood to take the place of *Branchiostoma* of Newport, *Branchiostoma* having been previously applied by Costa to the genus which is commonly known as *Amphioxus*. But Dr. Wood's proposal has

met with no acceptance. Nevertheless, in accordance with the laws of nomenclature, his name *Rhysida* must be adopted for those centipedes which, since Newport's days, have been termed *Branchiostoma*.

Rhysida immarginata (Porath).

Branchiostoma immarginatum, Porath, Bih. Sv. Vet.-Ak. Handl. iv. p. 24 (1876).

Common in Further India, but never before recorded from India proper.

Heterostoma spinosum, Newport.

Hitherto known only from Ceylon.

Otostigma splendens, sp. n.

Colour mostly ochraceous, but shining with metallic lustre.

Head-plate not narrowed behind, a little wider than long, not sulcate.

Antennæ short, composed of seventeen segments, whereof the basal two are naked and the rest pubescent.

Maxillary sternite convex from before backwards and from side to side; prosternal plates short, armed with four sharp teeth; basal tooth bidentate; claw stout and short.

Tergites from the fifth strongly bisulcate, from the eighth marginate, from the sixth faintly wrinkled laterally, and in the posterior half of the body obsoletely grooved between the sulci.

Sternites marked with two very abbreviated sulci in front and with two median impressions, one central, the other posterior.

Anal somite.—*Sternite* with straight converging sides and lightly concave hinder margin; *pleuræ* covered with small pores, the process slender, short, armed apically with two strong spines and above with one strong spine; *legs* moderately long; femur armed with six spines, one in the middle of the upper inner margin, two on the under inner margin, and three on the under outer margin; tarsus unarmed, claw spined; *tergite* not impressed behind.

Legs.—Tarsal segment of the preanal legs unarmed; proximal tarsal segment of the rest of the legs armed with a single spur.

Three specimens, length 50 millim.

This species is undoubtedly very closely allied to *O. ceylonicum*, Haase, but it appears to be very much less wrinkled;

moreover, in *ceylonicum* the tarsus of the preanal leg is armed with a spur, the pleuræ terminate in a single spine, and the anal tergite has a different form.

Otostigma morsitans, sp. n.

Colour olivaceous, legs and under surface paler, not or hardly metallic.

Head-plate wider than long, not narrowed behind and not sulcate, sparsely but somewhat deeply punctured.

Antennæ short, composed of seventeen segments, whereof the basal two are naked and the rest pubescent.

Maxillary sternite punctured like the head, prosternal plates short, in contact, and obscurely divided into four teeth; basal tooth of the maxillipedes bearing two feebly developed teeth.

Tergites very finely and closely punctured and also furnished with larger and more scattered punctures; from the sixth bisulcate, from the eighth marginate, and from the fifth wrinkled laterally; in the posterior half of the body the tergites are wrinkled also in the centre and those in about the hindmost third of the body are armed with many irregularly arranged spicules.

Sternites punctured like the tergites, not bisulcate, but furnished with two impressions on each side of the middle line in the centre of the plate and a much fainter impression in the middle of its posterior border.

Anal somite.—*Sternite* with nearly straight converging sides and very lightly concave hinder margin; *pleuræ* thickly and finely punctured, bearing a single well-developed spine in the middle of the posterior edge, the process very short and armed with two apical spines; legs moderately long and slender, tarsus unspined, femur armed with only five spines, situated on the under surface—two of these form an internal and three an external series; *tergite* bearing a median keel in its anterior half, scarcely impressed behind.

Legs.—Proximal tarsal segment of all the legs, including the preanal pair, armed with a single inferior spur and sometimes also with an anterior spine.

Length of largest specimen 61 millim.

This species is also closely allied to *O. ceylonicum*. It differs, however, in having a very short pleural process terminated by two spines and in having the spines on the anal femora confined to the under surface. In having the posterior tergites covered with spicules it resembles *O. carinatum*, but with this species it cannot be confounded.

Otostigma nudum, sp. n. (Pl. XII. figs. 3-3 b.)

Colour of tergites pale olivaceous, of sternites testaceous, of head, first tergite, and maxillary sternite rufous, tarsi with pale green tint.

Head-plate ovate, long, longer than wide, not sulcate.

Antennæ short, composed of seventeen segments, whereof the proximal three are naked and the rest pubescent.

Maxillary sternite relatively long, sparsely punctured, and marked with a shallow, median, longitudinal sulcus; prosternal plates long and produced far forwards, so that the anterior edge is almost on a level with the apex of the basal tooth of the maxillipede, the two almost in contact and each armed with four poorly developed teeth; the basal tooth of the maxillipede sharp and bearing on its inner side a small tooth; claw stout and curved.

Tergites very minutely and closely punctured; from the fifth bisulcate, from the eighth marginate, those in the middle and posterior half of the body wrinkled laterally and in the middle.

Sternites conspicuously trisulcate, being marked with the usual lateral sulci and, in addition, with a median, longitudinal, more or less abbreviated sulcus.

Anal somite.—*Sternite* with posteriorly converging lateral margins and lightly concave posterior margin; *pleuræ* covered with relatively large pores, the process short, stout, slightly incurved, and terminated by two spines, not armed with lateral or superior spines; *tergite* not sulcate and not posteriorly impressed; *legs* short and stout, femur armed with seven spines—two on the upper-inner edge, two on the under-inner edge, and three on the under-outer edge; upper surface of femur, patella, and tibia obsoletely and longitudinally sulcate; tarsus not armed with spur, claw furnished with two basal spines.

Legs with tarsal segments *unarmed*; claws spined.

Length of body 52 millim.

In possessing trisulcate sternites, larger pleural pores, and forwardly-produced prosternal plates this species is allied to *O. geophilinum*, Haase; but it differs markedly from all the Old-World species of the genus known to me in having the tarsal segments of all the legs unspined.

A single specimen only was sent.

Otostigma ruficeps, sp. n. (Pl. XII. figs. 2-2 b.)

Colour of tergites somewhat grass-green, legs and sternites paler; head-plate, with exception of the frontal area, which is

green, and first tergite, castaneous; antennæ green; maxillary sternite castaneous, with the exception of its anterior third, which is pale green.

Head-plate truncate behind, wider than long, not sulcate.

Antennæ relatively long, composed of twenty-one elongate segments, whereof the basal two are naked and the rest pubescent.

Maxillary sternite wide, distinctly hollowed in its lateral portions, the concavity being bounded behind and at the sides by a well-marked ridge; prosternal plates divergent from the base, each armed with four strong and sharp teeth; basal tooth of the maxillipedes projecting far in advance of the prosternal plates, each distinctly bi- or tridentate; claw long and slender.

Tergites from the seventh sulcate, from the tenth marginate, obsoletely wrinkled.

Sternites not sulcate, at most bearing the very faintest indications of two lateral impressions.

Anal somite.—*Sternite* with very convex lateral margins and strongly concave posterior margin; *pleuræ* thickly covered with small pores, the process short and stout, terminated by one or two small spines, without superior or lateral spines; *tergite* with a faintly marked posterior impression; (anal legs absent).

Legs with the claws armed with two basal spines; the proximal tarsal segment armed with two spurs, an anterior and an inferior; in addition the patella of the first pair of legs armed with a single anterior spine, and the tibia of the first seven pairs armed with a single anterior spine.

A single specimen, length 41 millim.

In the absence of the anal and preanal legs it is not possible to point out the affinities of this species. But it is sufficiently characterized by the depressed condition of the sides of the maxillary sternite—a peculiarity which I have never seen in any other member of the genus.

Himantarium (?) *striatum*, sp. n. (Pl. XII. figs. 4–4 b.)

Colour ochraceous, with darker markings and a pale median band above, paler beneath.

Head-plate scarcely longer than wide, convex, anterior and lateral margins convex, with rounded postero-lateral angles and straight posterior margin, completely covering the maxillary feet; frontal lamina large and distinct.

Basal plate as wide as the head, very short, being about five times as wide as long.

Maxillary sternite very wide, twice as wide as long, marked by a deep and wide sulcus, which runs longitudinally from the middle of the anterior border to the middle of the posterior border; maxillipedes almost reaching the anterior border of the cephalic plate, the claw enormously long, lightly curved, and blade-like.

Antennæ not attenuate, of a uniform thickness throughout, the apical segment as long as the two that precede it; shortly hirsute.

Tergites not bisulcate, but conspicuously although finely striate.

Sternites marked with a median circular porous area and behind the middle with a transverse porous area, which in the middle and hinder half of the body becomes divided into two halves.

Anal somite.—*Tergite* not covering the pleuræ; *pleuræ* moderately inflated, furnished with many close-set pores where they come in contact with the anal tergite and sternite, and a few scattered but conspicuous pores on the disk; *sternite* parallel-sided, with rounded postero-lateral angles and straight posterior margin, its surface marked with a median longitudinal sulcus; anal legs very short, considerably shorter than the preceding pair, composed of five segments and terminated by a claw.

Number of pairs of legs (♀) 69; length 38 millim.

A single specimen.

This species has been only provisionally referred to the genus *Himantarium*; lack of material has prevented me from putting the specimen to a critical examination sufficiently exact to determine its generic position. It is undoubtedly congeneric with Dr. Meinert's *Himantarium insigne* and *indicum* (two species from Kooloo), but it differs from both in having its pleuræ distinctly porous and its anal legs armed with a claw.

Mecistocephalus punctifrons, Newport.

Common throughout the Oriental Region.

EXPLANATION OF PLATE XII.

Fig. 1. Hormurus leviceps, sp. n., ♂, nat. size.

Fig. 1 a. Ditto, ♀. Sternum, operculum, and pectines.

Fig. 2. Otostigma ruficeps, sp. n. Head from above.

Fig. 2 a. Ditto. Head from below.

Fig. 2 b. Ditto. Anal pleura from the side.

Fig. 3. Otostigma nudum, sp. n. Head from above.

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Fig. 3 a. *Otostigma nudum*, sp. n. Head from below.

Fig. 3 b. Ditto. Anal somite from below.

Fig. 4. *Himantarium* (?) *striatum*, sp. n. Head from above.

Fig. 4 a. Ditto. Head from below.

Fig. 4 b. Ditto. Anal somite from below.

XXXVIII.—*Description of a new Genus and Species of Scorpion belonging to the Group Jurini.* By R. I. POCKOCK, of the British Museum (Nat. Hist.).

[Plate XI. B, figs. 1–1 c.]

UROMACHUS, gen. nov.

Sternum pentagonal, longer than wide.

Movable and immovable dactyli of the chelicerae armed with three strong teeth above, and with a series of similar tubercular teeth below.

Hands distinctly costate.

Cephalothorax with anterior margin truncate; ocular tubercle not divided.

Stigmata circular.

Vesicle of tail elongate, about as long as the fifth segment, almost parallel-sided, not globular; slender at its anterior end, flattened beneath; aculeus very short, about one fifth of the length of the vesicle, stout in its anterior half, its posterior half becoming abruptly spiniform.

This genus is closely allied to *Chærilus* of Simon, and may only be separated from it by the remarkable form of the caudal vesicle. The vesicle is somewhat elongate in *Chærilus*, but in this new species it is so totally different in shape from that of any other Scorpion, that I have thought the peculiarity worthy of generic distinction. Is it a sexual character?

Uromachus pictus, sp. n. (Pl. XI. B, figs. 1–1 c.)

Colour reddish brown, variegated with black.

Cephalothorax.—Anterior border almost straight, very slightly emarginate; the sides abruptly sloped at an angle from the median portion; the ante-ocular area nearly flat, slightly hollowed anteriorly and smooth, the post-ocular area deeply marked by the median sulcus, which is continuous in front with a hollow on each side of the ocular tubercle, the sides of the sulcus distinctly granular; the tubercle situated well in the anterior half of the cephalothorax, not sulcate but prolonged in front and behind into a short tapering process;