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### PHALANGIDA FROM SOUTH AMERICA

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Through the generosity of The American Museum of Natural History, the writers have been able to examine a considerable collection of phalangids from South America. These animals were derived from several sources: a collection from Colombia made by Felipe Ovalle; a number of specimens from Peru, collected by H. Bassler and G. Klug; and several animals from Mt. Roraima. These last were collected by Dr. G. H. H. Tate during an expedition to the summit of Mt. Roraima in 1927. As could be inferred from the study of other

groups collected on this interesting mountain, the phalangids proved to be unusual. Of especial interest were several members of the little-known subfamily Phareinae. Mt. Roraima is located at the junction of Brazil, British Guiana and Venezuela. Dr. Tate gives a complete account of the area in his article entitled "Notes on the Mount Roraima Region."

The holotypes and paratypes of all new species are deposited in the collection of The American Museum of Natural History.

### SUBORDER LANIATORES THORELL

# PHALANGODIDAE Simon Phalangodinae Roewer

Crosbyella roraima, new species

Figures 1, 2, 3 and 4

Female.—Total length of body, 2.9 mm. Cephalothorax, 2.1 mm. Width of body at widest portion, 1.6 mm.

	I	II
Trochanter	$0.2 \mathrm{mm}$ .	$0.2\mathrm{mm}$ .
Femur	0.6	0.9
Patella	0.3	0.5
Tibia	0.5	0.8
Metatarsus	0.6	0.9
Tarsus	0.5	0.9
Total	2.7  mm.	4.2  mm.
	III	IV
Trochanter	III 0.2 mm.	IV 0.3 mm.
Trochanter Femur		
	0.2 mm.	0.3 mm.
Femur	0.2 mm. 0.7	0.3 mm. 1.2
Femur Patella	0.2 mm. 0.7 0.3	0.3 mm. 1.2 0.4
Femur Patella Tibia	0.2 mm. 0.7 0.3 0.7	0.3 mm. 1.2 0.4 0.5
Femur Patella Tibia Metatarsus Tarsus	0.2 mm. 0.7 0.3 0.7 0.8	0.3 mm. 1.2 0.4 0.5 1.2
Femur Patella Tibia Metatarsus	0.2 mm. 0.7 0.3 0.7 0.8	0.3 mm. 1.2 0.4 0.5 1.2

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Dorsum with five areas, the boundaries slightly curved but parallel to one another. Dorsum without median armature, but all dorsal areas thickly covered with tubercles. These tubercles more or less arranged in a transverse row across the fifth area and free tergites. First area without a median line. Eye tubercle (Fig. 3) clearly removed from the anterior margin of the cephalothorax. Eye tubercle in the form of a rounded tuberculate elevation. Venter and coxae armed with scattered hairs and tubercles. A transverse row of tubercles across each free sternite. Anal operculum tuberculate. A lateral row of teeth on the posterior margin of the first coxae. Spiracles not visible.

Legs: armed with numerous hairs. Femur, patella and tibia tuberculate, particularly the third and fourth legs. The prolateral margin of the femur of the fourth leg with a row of tubercles and with two distal spines as in Fig. 4. Tarsal segments: 4-6-5-6. Distitarsus of first tarsus with two segments; of second, three segments. Metatarsi not divided into astragulus and calcaneus.

Palpus: trochanter, 0.2 mm. long; femur, 0.7; patella, 0.4; tibia, 0.5; and tarsus, 0.4. Total length, 2.2 mm. Palpus armed retrolaterally as in Fig. 2. In addition on the prolateral margin, there is a median apical spine on the femur and one on the patella. Tibia and tarsus armed as on retrolateral surface.

<sup>&</sup>lt;sup>2</sup> 1930, Geogr. Rev., XX, pp. 53-68, Figs. 1-10, Pl. π.

Chelicera: normal, with scattered hairs on the distal segment.

Dorsum reddish brown with darker brown on the dorsal areas and lateral margins, with a median darker streak down the center. There are darker mottlings on the cephalothorax, particularly on the eye tubercle and just anterior to it. Venter and coxae somewhat lighter. Appendages reddish brown, with darker brown overcast. There is a darker brown spot at the proximal and distal portion of the femur, tibia and metatarsus of the fourth leg, giving a vague annulate appearance. Tarsi pale.

Type Locality.—Female holotype from Rondon Camp, Mt. Roraima, 6900 feet, November, 1927 (G. H. H. Tate).

Crosbyella roraima is related to C. tuberculata Goodnight and Goodnight, differing in general appearance and in the armature of the palpus.

## Pseudomitraceras curvatus Goodnight and Goodnight

#### Figure 5

Pseudomitraceras curvatus Goodnight and Goodnight, 1942, Amer. Mus. Novitates, No. 1167, p. 2, Figs. 3, 4 and 5.

The palpus of this animal, which is at present known only from Tukeit, British Guiana, is armed retrolaterally as in Fig. 5. Prolaterally, the femur is without a median apical spine; the patella has a median spine.

## Spinolatum medialis Goodnight and Goodnight

#### Figure 6

Spinolatum medialis Goodnight and Goodnight, 1942, Amer. Mus. Novitates, No. 1167, p. 3, Figs. 7 and 8.

The palpus of this species, recently described from Tukeit, British Guiana, is armed retrolaterally as in Fig. 6. Prolaterally the femur has a median apical spine, and the patella has one median spine.

### **COSMETIDAE** Simon

### Cosmetinae Cambridge

### Acromares lateralis, new species

### Figure 7

FEMALE.—Total length of body, 5.1 mm. Cephalothorax, 1.5 mm. Width of body at widest portion, 4.1 mm.

	I	II
Trochanter	0.4 mm.	$0.5  \mathrm{mm}$ .
Femur	1.7	3.3
Patella	0.4	0.9
Tibia	0.9	2.7
Metatarsus	1.8	3.6
Tarsus	1.4	${f 2}$ . ${f 5}$
Total	6.6 mm.	$\overline{13.5}$ mm.
	***	
	III	IV
Trochanter	111 0.5 mm.	1V 0.5 mm.
Trochanter Femur		
	0.5 mm.	0.5 mm.
Femur	0.5 mm. 2.7	0.5 mm. 3.4
Femur Patella	0.5 mm. 2.7 0.9	0.5 mm. 3.4 1.1
Femur Patella Tibia	0.5 mm. 2.7 0.9 1.8	0.5 mm. 3.4 1.1 2.4

Dorsum finely granulate, a pair of sharp spines on the fourth area. Remaining areas without median armature. Free tergites with transverse rows of very small tubercles. Eye tubercle normal, smooth. Venter and coxae finely granulate, a transverse row of very small tubercles on each free sternite. Genital operculum with a few small tubercles. Lateral teeth present on the posterior margin of coxa III, only a few present on the anterior margin of coxa III.

Legs: clothed with scattered hairs. A few small tuberculations present on the femur, patella and tibia of the legs. Basal segments of the third and fourth legs only slightly heavier than those of the first and second. Tubercles of the fourth femur, patella and tibia larger and more or less arranged in rows. Tarsal segments: 6-10-7-7. Distitarsi of both first and second tarsi with three segments.

Palpus: trochanter, 0.4 mm. long; femur, 1.0; patella, 0.5; tibia, 1.2; and tarsus, 0.7. Total length, 3.8 mm. Palpus characteristically flattened, teeth present on the ventral margin of the femur.

Chelicera: normal, not enlarged.

Dorsum reddish brown, with a few white markings as follows: a broken line at the posterior margin, in the median third, of areas I, II and III; a broken longitudinal line at the end of the transverse ones; a complete transverse line just posterior to the spine. Spines concolorous with the dorsum. Venter, coxae, chelicerae and palpi concolorous with the dorsum. Legs somewhat lighter.

Type Locality.—Female holotype from Colombia (Felipe Ovalle).

Acromares lateralis is related to A. vittatum but differs in the color markings and in the spination of the fourth leg.

### Cynorta bassleri, new species

#### Figure 8

FEMALE.—Total length of body, 3.9 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 3.4 mm.

	I	II
Trochanter	0.4  mm.	$0.5  \mathrm{mm}$ .
Femur	5.0	12.4
Patella	0.8	1.2
Tibia	2.5	10.8
Metatarsus	4.6	4.5
Tarsus	1.9	4.9
Total	$15.2 \mathrm{mm}$ .	34.3  mm.
	III	IV
Trochanter	$\begin{array}{c} \mathbf{III} \\ 0.6\ \mathbf{mm.} \end{array}$	IV 0.7 mm.
Trochanter Femur		
	0.6 mm.	0.7 mm.
Femur	0.6 mm. 8.3	0.7 mm. 12.1
Femur Patella	0.6 mm. 8.3 1.2	0.7 mm. 12.1 1.4
Femur Patella Tibia	0.6 mm. 8.3 1.2 3.4	0.7 mm. 12.1 1.4
Femur Patella Tibia Metatarsus	0.6 mm. 8.3 1.2 3.4 7.1	0.7 mm. 12.1 1.4

Dorsum finely granulate, a pair of robust spines on the third area, a pair of low tubercles on the first area. Remaining areas and free tergites unbedecked. Eye tubercle low, only finely granulate. Body somewhat arched. Venter and coxae granulate, armed with scattered hairs. A few tubercles on the lateral portion of the fourth coxae. Fourth coxae unbedecked on the dorsal apical portion. Third coxae with anterior and posterior rows of teeth.

Legs: long and slender, third and fourth legs not enlarged over the first and second. Legs clothed only with a few scattered hairs. Tarsal segments: 6-16-8-?. Distitarsi of both first and second tarsi with three segments.

Palpus: trochanter, 0.5 mm. long; femur, 1.2; patella, 0.6; tibia, 1.3; and tarsus, 0.6. Total length, 4.2 mm. Palpus characteristically flattened. A row of teeth along the ventral margin of the femur.

Chelicera: normal.

Dorsum reddish brown, slightly darker brown at the margins. Covered with numerous white dots. The first area has a pair of larger white dots which enclose the tubercles. Posterior to the spines is another pair of slightly larger markings. The white dots are arranged more or less in a transverse row on the fifth area and free tergites. On the eye tubercle there is a large white spot over each eye. The spines of the third area are reddish brown. On the lateral margin of the cephalothorax in the region of the first trochanter, there is a slightly larger spot on either side. Venter and coxae dark reddish brown; the tubercles on the fourth coxae are white. On the anal operculum there is a pair of round white spots. Palpi and chelicerae reddish brown, legs somewhat lighter.

Type Locality.—Female holotype from La Frontera, upper Rio Utoquinia, Peru, 1928 (H. Bassler).

This species is related to Cynorta albiadspersa Roewer but differs in having spots on the anal operculum and in having two large spots on the eye tubercle. *C. bassleri* also lacks the posterior small spines which are present on the trochanters of *C. albiadspersa*.

### Cynorta maculorum, new species Figure 9

Male.—Total length of body, 4.6 mm. Cephalothorax, 1.8 mm. Width of body at widest portion, 4.4 mm.

	I	II
Trochanter	$0.8  \mathrm{mm}$ .	1.0  mm.
Femur	4.8	10.3
Patella	1.1	1.7
Tibia	3.0	7.7
Metatarsus	4.9	11.4
Tarsus	2.7	5.7+
Total	17.3 mm.	${37.8 + \text{ mm.}}$
10001	11.0 mm.	01.01 mm.
	III	IV
Trochanter	III 1.0 mm.	IV 1.1 mm.
Trochanter Femur		
	1.0 mm.	1.1 mm.
Femur	1.0 mm. 7.5	1.1 mm. 9.9
Femur Patella	1.0 mm. 7.5 1.8	1.1 mm. 9.9 1.9
Femur Patella Tibia	1.0 mm. 7.5 1.8 4.0	1.1 mm. 9.9 1.9 5.1
Femur Patella Tibia Metatarsus	1.0 mm. 7.5 1.8 4.0 8.0	1.1 mm. 9.9 1.9 5.1 12.0

Dorsum granulate. Body rounded, truncate caudad as seen from above. A pair of low tubercles on the first area and a pair of large divergent spines on the third area. Remaining areas and free tergites without median armature. Eye tubercle low, normal. Venter and coxae granulate, with numerous scattered hairs. A few lateral teeth present on the anterior and posterior margins of coxae III.

Legs: long, clothed throughout with scattered hairs. Femur, patella and tibia tuberculate. On the third and fourth legs, these tuberculations assume the size of spinules and are more or less arranged in rows, there being two larger rows of the prolateral surface of the third and fourth femur and the fourth tibia. Tarsal segments: 6-16+-12-10. Distitarsi of both first and second tarsi with three segments. Basitarsus of first tarsus slightly enlarged.

Palpus: trochanter, 0.5 mm. long; femur, 1.8; patella, 0.9; tibia, 1.8; and tarsus, 1.1. Total length, 6.1 mm. Palpus characteristically flattened. Teeth present on the ventral margin of the femur.

Chelicera: roughly granulate, with a slight elevation of the proximal and distal segments.

Dorsum reddish brown with white reticulate markings on the lateral margins of the cephalothorax and white curved lines at the lateral portions of the first, second and third areas, as in Fig. 9. Two transverse curved lines at the posterior margin of the fourth area and a white line, broken in the middle, at the posterior margin of

the fifth area. Tips of spines dark. Venter, coxae and appendages concolorous with the dorsum.

FEMALE.—Total length of body, 5.6 mm. Cephalothorax, 2.2 mm. Width of body at widest portion, 4.6 mm.

Similar in appearance to male, but with smaller tuberculations on the third and fourth legs. Without the enlarged basitarsi of the first legs. Chelicerae reduced.

Type Locality.—Male holotype and female paratype from Colombia (Felipe Ovalle).

Cynorta maculorum is related to C. unciscripta Roewer but differs in the dorsal color pattern.

### Cynortula unapunctata, new species Figures 10 and 11

Male.—Total length of body, 5.4 mm. Cephalothorax, 1.5 mm. Width of body at widest portion, 3.3 mm.

	I	II
Trochanter	$0.5~\mathrm{mm}$ .	$0.6  \mathrm{mm}$ .
Femur	3.5	7.1
Patella	0.9	1.2
Tibia	2.3	5.8
Metatarsus	3.8	7.2
Tarsus	<b>2</b> . $2$	4.7
	-	
$\mathbf{Total}$	$13.2 \mathrm{mm}$ .	26.6  mm.
	III	IV
Trochanter	III 0.7 mm.	IV 0.7 mm.
Trochanter Femur		
	0.7 mm.	0.7 mm.
Femur	0.7 mm. 5.4	0.7 mm. 5.9
Femur Patella	0.7 mm. 5.4 1.2	0.7 mm. 5.9 1.4
Femur Patella Tibia	0.7 mm. 5.4 1.2 2.8	0.7 mm. 5.9 1.4 4.1
Femur Patella Tibia Metatarsus Tarsus	0.7 mm. 5.4 1.2 2.8 5.1	0.7 mm. 5.9 1.4 4.1 7.5 3.2
Femur Patella Tibia Metatarsus	0.7 mm. 5.4 1.2 2.8 5.1	0.7 mm. 5.9 1.4 4.1 7.5

Dorsum much elongated, slender. Paired tubercles on the first and third areas, remaining areas and free tergites without median armature. Entire dorsum finely granulate. Eye tubercle normal. Venter and coxae slightly granulate. Lateral teeth present on the anterior margins of coxae I and II and on the posterior margins of III. A short spine at the dorsal distal portion of the fourth coxae.

Legs: clothed with scattered hairs. Femur granulate, the fourth femur with an outer row of small spines, larger in the median portion. Inner margin with a row of four or five widely scattered tuberculations. Tarsal segments: 6–15–8–9. Distitarsi of both first and second tarsi with three segments.

Palpus: trochanter, 0.7 mm. long; femur, 1.5; patella, 0.7; tibia, 1.6; and tarsus, 0.6. Total length, 5.1 mm. Palpus characteristically flattened with a ventral row of small teeth on the

femur and tibia and a few small teeth on the dorsal portion of the femur.

Chelicera: proximal segment slightly enlarged, granulate.

Dorsum reddish brown with a conspicuous median white spot beginning at the posterior margin of the cephalothorax and extending through the second area. This white spot is bordered by an indefinite darker brown color; extending caudad from this spot are two curved lines of darker brown. Just laterad to each of the tubercles of the third area is a small light dot with a suggestion of an elevation. This dot is lacking on some specimens. Darker brown markings on the free tergites, lateral margin of the scute, and on the cephalothorax. Venter, coxae and appendages reddish brown, concolorous. Free sternites darker brown, concolorous with the free tergites.

FEMALE.—Total length of body, 5.0 mm. Cephalothorax, 1.5 mm. Width of body at widest portion, 3.1 mm.

Similar to male, except lacking spines on the fourth femur. Chelicerae normal.

Type Locality.—Male holotype and female paratypes from Rio Alto Marañon between Rios Cenipa and Nieva, Peru, September 10–24, 1924 (G. Klug).

This form is related to *Cynortula stellata* Roewer and *C. oblongata* Roewer, differing in the form of the white marking on the dorsum.

### Eucynortella duapunctata, new species

Figure 12

Female.—Total length of body, 3.9 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 3.1 mm.

	I	II
Trochanter	$0.3 \ \mathrm{mm}$ .	0.4  mm
Femur	2.3	5.0
Patella	0.9	1.0
Tibia	1.5	3.3
Metatarsus	2.5	4.6
Tarsus	1.7	7.2
Total	$9.2 \ \mathrm{mm}$ .	21.5  mm.
	III	IV
Trochanter	0.4  mm.	0.4 mm.
Femur	3.4	4.4
Patella	1.1	1.2
Tibia	1.9	2.9
Metatarsus	<b>3.2</b>	4.6
Tarsus	1.9	<b>2</b> . $1$
${f Total}$	11.9  mm.	15.6  mm.

Dorsum finely granulate, without median paired spines or tubercles. Eye tubercle nor-

mal, low. Venter and coxae granulate, with only a few small scattered hairs.

Legs: clothed with a few scattered hairs. A few larger granulations on the femora. Tarsal segments: 6-12-7-7. Distitarsi of both first and second tarsi with three segments.

Palpus: trochanter, 0.3 mm. long; femur, 0.7; patella, 0.6; tibia, 1.0; and tarsus, 0.4. Total length, 3.0 mm. Palpus characteristically flattened, a row of small teeth on the ventral margin of the femur.

Chelicera: normal.

Dorsum reddish brown with a white V at the junction of the cephalothorax and the abdomen. The arms of the V extending to the region of the second trochanter. A broken median white line in the first three areas. A transverse white line at the posterior margin of the third area. A white dot on either side at the junction between the second and third area halfway between the median line and the lateral margin. Venter and coxae concolorous with the dorsum. Appendages somewhat lighter.

Type Locality.—Female holotype from Rio Niger [= Negro?], Brazil.

This species is related to Eucynortella sexpunctata Roewer, differing by having the entire body of a lighter coloration and by having fewer white spots on the dorsum. It also differs from E. pauper Toledo-Piza in the color pattern.

## Paecilaema altaspinulatum, new species Figure 13

Male.—Total length of body, 6.9 mm. Cephalothorax, 2.1 mm. Width of body at widest portion, 5.1 mm.

	I	II
Trochanter	$0.8\mathrm{mm}$ .	$0.9  \mathrm{mm}$ .
Femur	4.3	9.5
Patella	1.2	1.3
Tibia	2.7	6.6
Metatarsus	3.5	9.3
Tarsus	2.8	5.3
Total	$15.3 \mathrm{mm}$ .	32.9  mm.
	TIT	IV
_	III	IV
Trochanter	0.9 mm.	1.4 mm.
Trochanter Femur		
	0.9 mm.	1.4 mm.
Femur	0.9 mm. 6.5	1.4 mm. 10.0
Femur Patella	0.9 mm. 6.5 1.5	1.4 mm. 10.0 2.0
Femur Patella Tibia	0.9 mm. 6.5 1.5 4.1	1.4 mm. 10.0 2.0 5.6
Femur Patella Tibia Metatarsus	0.9 mm. 6.5 1.5 4.1 6.2	1.4 mm. 10.0 2.0 5.6 10.2

Dorsum finely granulate, a median pair of tubercles on the first area, second area without median armature but with two very small tubercles on either side of the lateral portion. Third area with a pair of median spines. These spines are situated on two large elevations which occupy most of the median portion of the third area. These elevations are tuberculate. Fourth area without median armature, but with four very small tubercles on either side. Fifth area and free tergites with a transverse row of tubercles. Eye tubercle low, thickly covered with small tubercles. Venter and coxac thickly covered with small tubercles. Venter and coxac thickly covered with small tubercles. Anal operculum with scattered hairs. Each free sternite with a transverse row of small tubercles. Anal operculum with scattered hairs and tubercles. Lateral teeth present on the posterior margin of coxae III.

Legs: thickly clothed with hairs. Femora with tubercles more or less arranged in rows. These tubercles are larger on the distal portion of the third and fourth femora. Fourth legs straight; basal segments of the third and fourth legs not enlarged over those of the first and second. Tarsal segments: 7-20-9-11. Distitarsi of both first and second tarsi with three segments.

Palpus: trochanter, 0.8 mm. long; femur, 1.7; patella, 1.1; tibia, 1.6; and tarsus, 1.1. Total length, 6.3 mm. Palpus characteristically flattened, with a row of teeth on the ventral margin of the femur.

Chelicera: with scattered hairs and tuberculations on the proximal segment.

Dorsum reddish brown with somewhat lighter pencilings margining the dorsal areas. Venter, coxae and appendages concolorous.

Female.—Total length of body, 6.0 mm. Cephalothorax, 1.5 mm. Width of body at widest portion, 4.6 mm.

Female similar to male but with smaller elevations on the third area and more acute spines. Tubercles of legs also smaller. The female is lighter in color and does not show the light boundaries of the areas.

Type Locality.—Male holotype and female paratypes from Colombia (Felipe Oyalle).

This species is related to *Paecilaema* atroluteum Roewer, but it differs in the dorsal tuberculations and the elevations of the third area.

### Paecilaema waratukum, new name

Paecilaema reticulata GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, No. 1167, p. 5, Fig. 12.

This species was described under the name *P. reticulata*, but this name had been previously used by Roewer for another species. The female holotype was taken at Waratuk, British Guiana, in 1911 by Dr. F. E. Lutz.

### GONYLEPTIDAE Sunvdeall

### Cranainae Roewer

#### AGUAYTIELLA, NEW GENUS

Dorsal scute with four distinct areas. First area with a median line. Third area with a median pair of spines. Second and third free tergites with median paired spines. Remaining dorsal areas and free tergites without median armature. Eye tubercle with a pair of spines. Femur of palpus with a dorsal apical spine and median apical tubercle. All tarsal segments numbering more than six.

Genotype.— $Aguay tiella\ maculata$ , new species.

Aguaytiella is related to the genus Phareicranaus Roewer but lacks the tubercles of the first area.

### Aguaytiella maculata, new species

Figures 14, 15 and 16

 $M_{\rm ALE}$ .—Total length of body, 8.0 mm. Cephalothorax, 3.4 mm. Width of body at widest portion, 6.5 mm.

	I	II
Trochanter	0.9  mm.	1.0 mm.
Femur	5.3	9.0
Patella	1.5	1.9
Tibia	3.4	7.6
Metatarsus	5.4	9.5
. Tarsus	2.4	6.0+
Total	18.9 mm.	35.0 + mm.
^	III	${f iv}$
Trochanter	1.1 mm.	1.1 mm.
Femur	7.8	10.6
Patella	1.9	<b>2.4</b>
Tibia	4.9	6.5
Metatarsus	8.4	1.8
Tarsus	3.7	4.5
Total	27.8 mm.	26.9 mm.

Dorsum finely granulate, with four distinct areas. Spines of the third area slender and acute. Just posterior to these spines are a pair of tubercles. Spines of the second and third free tergites similar to those of the third area. There are some small hair-tipped tubercles on the lateral portion of the fourth area and the free tergites. On the third free tergite, these go completely across. Eye tubercle with a robust spine over each eye. Anterior margin of the cephalothorax with three small spines on the lateral margin. Two small spinules in front of the eye tubercle and a very small one between these spines and the lateral ones. Venter and coxae with scattered tubercles. A row of large tubercles on the ventral portion of the first and second coxae. There are a large spine and a number of hair-tipped tubercles on the distal portion of the fourth coxae. Lateral teeth present on the anterior and posterior margin of coxae III. A transverse row of hair-tipped tubercles across each free sternite and a number of irregularly placed tubercles on the anal operculum.

Legs: clothed with scattered hairs. Larger tubercles on the femora of the legs and a small posterior pointing spine on trochanters I to III. Several larger tubercles on the fourth trochanter. Distal portion of the fourth femur with a large curved spine on the prolateral surface. Tarsal segments: 8 to 9-16+-8 to 11-11. Distitarsi of both first and second tarsi with three segments.

Palpus: trochanter, 0.9 mm. long; femur, 4.5; patella, 2.3; tibia, 2.7; and tarsus, 2.4. Total length, 12.8 mm. Trochanter dorsally and ventrally with a small spinule. Femur with a ventral row of five to six spines. Dorsally armed with an acute dorsal apical spine. On the retrolateral surface there is a row of tubercles. Prolaterally armed only with the very small median apical tubercle at the distal end. Patella armed only with an anterior median tubercle. Tibia armed ventrally on either side with two large and two small spines and a few small hair-tipped tubercles. Tarsus armed with two large and two small spines on either side

Chelicera: much enlarged with the proximal and distal portions both swollen. Dorsal portion of the proximal segment with numerous small tubercles. Entire chelicera clothed with scattered hairs.

Dorsum reddish brown, cephalothorax darker. A large white spot present on either side of the first and second areas, making four spots in all. The tubercles posterior to the spines of the third area are each enclosed in a yellow spot. The tubercles on the lateral portion of the free tergites, fourth area, posterior free sternites and the anal operculum are yellowish. There is variation in the number of these smaller white tuberculations, some specimens having more than others. In an occasional specimen, there may be a small white spot on the posterior portion of the cephalothorax, but this is usually lacking. Venter and appendages reddish brown, concolorous.

FEMALE.—Total length of body, 8.1 mm. Cephalothorax, 3.4 mm. Width of body at widest portion, 6.5 mm.

Similar to male in appearance but lacking the spine on the distal portion of the fourth femur, and with the chelicerae somewhat reduced in size.

Type Locality.—Male holotype and male and female paratypes from Rio Aguaytia, Peru, September, 1923 (H. Bassler).

One male specimen (holotype) had the large paired spines of the third free tergite. Another male specimen and a female lack the spines entirely, there being no suggestion of them.

### CENIPA, NEW GENUS

Dorsum with four distinct areas, first area with a median line. First and third areas and second free tergite with median paired spines. Remaining areas and free tergites without median armature. Eye tubercle with a pair of spines. Tarsal segments: 6-remaining more than 6. Distitarsi of first and second tarsi with three segments. Femur of palpus without dorsal apical or median apical spines.

GENOTYPE.—Cenipa nubila, new species.

Cenipa shows affinities to Deriacrus Roewer but differs in having paired spines on the first area and on the second free tergite.

### Cenipa nubila, new species Figures 17, 18 and 19

Male.—Total length of body, 3.6 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 2.6 mm.

	I	II
Trochanter	$0.3 \ \mathrm{mm}$ .	$0.6\mathrm{mm}$ .
Femur	1.9	5.1
Patella	0.6	1.0
Tibia	1.1	3.0
Metatarsus	1.9	4.3
Tarsus	1.5	3.8
Total	7.3  mm.	17.8  mm.
	III	IV
Trochanter	III 0.6 mm.	IV 0.6 mm.
Trochanter Femur		
	0.6 mm.	0.6 mm.
Femur	0.6 mm. 3.4	0.6 mm. 4.5
Femur Patella	0.6 mm. 3.4 0.7	0.6 mm. 4.5 0.9
Femur Patella Tibia	0.6 mm. 3.4 0.7 1.4	0.6 mm. 4.5 0.9 2.2

First area with a median line, a pair of moderately large spines and four tubercles grouped about each spine. Second area without median armature, but with three tubercles on either side and one on the median line, slightly anterior to the other six. Third area with a median pair of large spines which are tuberculate at the base. A tubercle laterad to each spine and one posterior to it. Fourth area with three tubercles on either side. First free tergite with two tubercles on either side, widely spaced. Second free tergite with a median pair of large spines and a tubercle on either side at the lateral margin. Third free tergite with three small spines in the median portion, the median one being somewhat smaller than the other two. Eye tubercle with three tuberculations over each eye, the median tuberculation somewhat larger than the other two, so it may be considered a small spine. A small tubercle anterior to each eye. Somewhat posterior and laterad to the eye tubercle, there are several small tubercles.

Anterior margin of the cephalothorax with a median projection and three spinules on either side at the lateral margin. A few small tubercles along the lateral margin of the cephalothorax. Venter and coxae with scattered tuberculations, a transverse row of larger tubercles across the first coxae. A transverse row of tubercles across each free sternite and several scattered tubercles on the anal operculum. A spine present at the distal portion of the fourth coxae.

Legs: clothed with scattered hairs, tuberculations more or less arranged in rows, present on all segments except the tarsi. These tuberculations are larger on the femora and of greatest size on the fourth leg. The distal portions of the femora have two spines. These spines are quite large on the fourth leg. There are two larger tubercles present at the distal portion of the fourth patella. Tarsal segments: 6–12–7–7. Distitarsi of both first and second tarsi with three segments.

Palpus: trochanter, 0.3 mm. long; femur, 1.2; patella, 0.6; tibia, 0.8; and tarsus, 0.7. Total length, 3.6 mm. Palpus armed retrolaterally as in Fig. 17. The lateral row of tubercles on the femur is much reduced. Prolaterally the palpus is armed similarly to the retrolateral surface, except on the tibia which has a tubercle at the proximal portion, two at the distal portion and a very small one in between.

Chelicera: clothed with scattered hairs, slightly enlarged.

Dorsum reddish brown, fourth area and free tergites darker. Darker mottlings on the cephalothorax and lateral margins of the scute. Venter, coxae and appendages, except palpi, concolorous. Palpi yellowish brown, lighter.

FEMALE.—Total length of body, 4.5 mm. Cephalothorax, 1.5 mm. Width of body at widest portion, 3.1 mm.

Similar to male, except spines of the first area are reduced to tuberculations; those of the second free tergite are much reduced or lacking. Chelicerae reduced and legs less tuberculate.

Type Locality.—Male holotype and male and female paratype from Rio Alto Marañon, between Rios Cenipa and Nieva, Peru, September 10–24, 1924 (G. Klug).

### Holocranaus albimarginis, new species

Figures 20, 21 and 22

FEMALE.—Total length of body, 9.4 mm. Cephalothorax, 3.4 mm. Width of body at widest portion, 6.9 mm.

	1	11
Trochanter	$0.9  \mathrm{mm}$ .	1.1 mm.
Femur	7.1	15.2
Patella	1.4	1.9
Tibia	4.1	11.1
Metatarsus	6.8	14.3
Tarsus	<b>2</b> . $1$	6.4
	-	
Total	$22.4 \mathrm{\ mm}$ .	50.0  mm.

	III	IV
Trochanter	1.4 mm.	1.4 mm.
Femur	11.2	15.2
Patella	2.2	2.6
Tibia	6.4	9.2
Metatarsus	11.7	12.6
Tarsus	3.7	5.4
Total	36.6 mm.	46.4 mm.

Dorsum with four distinct areas. First area with a median line and with a median pair of very small spines. On either side is a small tubercle laterad to the median spine. Second area without median armature but with four small tubercles on either side. Third area with a pair of large acute spines, and on either side a small tubercle lateral and posterior to the spines. Fourth area with a median pair of small tubercles; three other tubercles on either side, laterad to the median one. First free tergite with a median pair of small tubercles and two laterad on either side. Second and third free tergites with a median pair of large spines and two small tubercles on either one at the lateral margins. Eye tubercle with a pair of large divergent spines, a small tubercle posterior to each spine on the eye tubercle. Anterior margin of the cephalothorax with a pair of small spines in the median portion and a small spine at each lateral portion. Venter and coxae irregularly armed with scattered hair-tipped tubercles. These hair-tipped tubercles are arranged in transverse rows across each free sternite. There are a few very small scattered tubercles on the anal operculum. These hair-tipped tubercles are arranged in a more or less transverse row across coxae I to III and are almost spinose in character across the first coxa, there being five or six larger ones in a row. Fourth coxa dorsally with a large posterior spine.

Legs: trochanters armed with scattered tubercles and small spines. A larger spine on the dorsal surface of the fourth trochanter. Legs long, with scattered hairs. Femora of legs with many small tubercles, more or less arranged in rows. These tubercles are somewhat larger on the fourth femur. Fourth femur straight. Tarsal segments: 8–15–9–11. Distitarsi of both first and second tarsi with three segments. Third and fourth tarsal claws simple, tarsi without scopulae.

Palpus: trochanter, 1.4 mm. long; femur, 5.4; patella, 3.2; tibia, 2.9; and tarsus, 2.0. Total length, 14.9 mm. Palpus armed on retrolateral surface as in Fig. 21. In addition on the prolateral margin of the femur is a large hair-tipped spine. This spine, while at the apical third of the femur, does not appear to be in a median apical position. Patella unarmed on the prolateral surface; tibia with two large and two small spines; tarsus with two large and four small spines.

Chelicera: robust, four or five small spinules on the proximal segment. Scattered hairs also present.

Dorsum reddish brown, spines somewhat lighter. Some darker mottlings on the cephalothorax and lateral portions of the abdomen. An irregular white marking on the lateral margin of the dorsum extending from the region of the second trochanter to the middle of the third area. Venter and coxae concolorous, tubercles of the free sternites lighter, yellowish. Appendages reddish brown, concolorous with the dorsum.

Type Locality.—Female holotype from Rio Alto Marañon between Rios Cenipa and Nieva, Peru, September 1, 1924 (G. Klug).

This species differs from other species of the genus *Holocranaus* in the armature of the femur of the palpus, and in the color markings of the dorsum.

### Phareicranaus albigyratus Roewer

Phareicranaus albigyratus ROEWER, 1932, Arch. Naturg. (N.F.), I, p. 303, Fig. 19.

RECORD.—Contayo Hills, Upper Rio Tapiche, Peru, November 20, 1926 (H. Bassler).

### Santinezia albimedialis, new species

Figures 23, 24 and 25

FEMALE.—Total length of body, 7.9 mm. Cephalothorax, 2.9 mm. Width of body at widest portion, 5.9 mm.

	I	II
Trochanter	$0.8  \mathrm{mm}$ .	1.0
Femur	5.2	12.0
Patella	1.2	1.6
Tibia	2.9	8.1
Metatarsus	5.4	10.3
Tarsus	3.3	
Total	$18.8 \mathrm{mm}$ .	_
	III	IV
Trochanter	III 1.3 mm.	IV 1.4 mm.
Trochanter Femur		
	1.3 mm.	1.4 mm.
Femur	1.3 mm. 9.1	1.4 mm. 10.8
Femur Patella	1.3 mm. 9.1 1.8	1.4 mm. 10.8 2.5
Femur Patella Tibia	1.3 mm. 9.1 1.8 4.9	1.4 mm. 10.8 2.5 6.6
Femur Patella Tibia Metatarsus	1.3 mm. 9.1 1.8 4.9 8.3	1.4 mm. 10.8 2.5 6.6 12.6

Dorsal scute with four distinct areas. First area with a median line and with median paired tubercles; on either side, two additional tubercles, one laterad and one mesiad. Second area without median armature, but with two or three small tubercles on either side. Third area with large paired median spines. Fourth area without median armature, but with small tubercles arranged in a transverse row, these tubercles arranged with two in the median portion and

six or seven closely grouped on either side in the lateral portion. First free tergite without median armature, but with several small tubercles arranged in a transverse row, these tubercles arranged with two in the median portion and six or seven closely grouped on either side in the lateral portion. Second and third free tergite with a median pair of acute spines and with two small tubercles between the spines and two on either side. Eye tubercle with a blunt spine over each eye and numerous small tuberculations at the posterior half. Anterior margin of the cephalothorax with three spinules at the lateral portion and a pair of small spinules in the median por-Venter and coxae granulate, with scattered hairs, a transverse row of hair-tipped tubercles across each free sternite. On the ventral portion of the fourth coxa, just anterior to the spiracle, is a conspicuous large blunt tubercle pointing downward. A transverse row of large hair-tipped tubercles across the ventral portion of the first coxa. On the dorsal surface of the fourth coxa there is a distal spine.

Legs: trochanters with numerous tuberculations and scattered hairs; on the fourth trochanter, these tuberculations reached spinous proportions, particularly on the distal portion. Legs clothed throughout with hairs. The tuberculations which are on the femora are larger on the fourth femora. In addition on the prolateral margin of the fourth femur, at the distal portion, is a large curved spine. On the retrolateral margin are several spinose tubercles at the proximal portion and a small spine at the distal. Fourth femora straight. Tarsal segments: 7–?–8–10. Distitarsus of the first tarsus with three segments. Third and fourth claws simple, tarsi without scopulae.

Palpus: trochanter, 1.2 mm. long; femur, 3.6; patella, 1.3; tibia, 2.5; and tarsus, 2.1. Total length, 10.7 mm. Palpus armed retrolaterally as in Fig. 24. Prolaterally the femurand patella are unarmed except for small tuberculations. The femur with large dorsal apical spine. The tibia with an additional large spine at the proximal portion, otherwise armed as on the retrolateral surface. Tarsus armed on prolateral surface as on the retrolateral surface. Tarsal claw long and curved.

Chelicera: with a few scattered hairs and a few tuberculations. A row of larger tuberculations at the proximal portion of the first segment. Distal segment slightly elevated.

Dorsum reddish brown with darker brown mottlings on the anterior portion of the cephalothorax, the dorsal areas and free tergites. The spines of the eye tubercle and the area from the eye tubercle to the posterior margin of the cephalothorax white. The median portion of the first area on either side with a large white spot. Second and third area with two parallel white lines in the median portion. Fourth area with a white spot on the median portion. The tubercles in the median portion of the fourth area and first free tergites white, the spines of the second and third free tergites light with their

bases white. This median white marking gives the appearance of an irregular white line broken into two halves at the anterior portion. In addition, there is a white spot on either side at the lateral portion of the second area. Spines of the third area reddish brown. Venter and coxae reddish brown, with darker brown mottlings. Chelicerae, palpi and legs concolorous with the venter.

Type Locality.—Female holotype and female paratypes from Peru (H. Bassler).

Santinezia albimedialis shows closest affinities to S. albilineata Roewer. S. albimedialis has a greater number of tuberculations and an entirely different dorsal color pattern.

While males were lacking, these large tuberculations on the fourth coxae would be undoubtedly spinose in the male; hence this species has been included in the genus Santinezia.

### Santinezia spinulata, new species Figures 26, 27 and 28

Male.—Total length of body, 13.0 mm. Cephalothorax, 6.0 mm. Width of body at widest portion, 11.2 mm.

	I	II
Trochanter	$3.0  \mathrm{mm}$ .	2.2 mm.
Femur	10.0	24.1
Patella	4.0	4.1
Tibia	6.0	18.0
Metatarsus	12.0	24.0
Tarsus	5.1	12.0
		<del></del>
Total	40.1  mm.	84.4 mm.
	III	$\mathbf{IV}$
Trochanter	III 2.5 mm.	IV 4.0 mm.
Trochanter Femur		
	2.5 mm.	4.0 mm.
Femur	2.5 mm. 18.0	4.0 mm. 31.0
Femur Patella	2.5 mm. 18.0 4.6	4.0 mm. 31.0 5.9
Femur Patella Tibia	2.5 mm. 18.0 4.6 9.3	4.0 mm. 31.0 5.9 12.0
Femur Patella Tibia Metatarsus	2.5 mm. 18.0 4.6 9.3 18.0	4.0 mm. 31.0 5.9 12.0 27.0

Dorsum with four distinct areas, granulate. First area with a median line and a pair of median tubercles. Third area with a pair of large, acute, divergent spines. Second and third free tergites with median paired spines. Second and fourth areas and first free tergite without median armature. A transverse row of tubercles across the posterior margin of the fourth area and the free tergites, giving a lobate appearance to the margins. In the first free tergite, this row of tubercles is not complete. Eye tubercle large, eyes widely separated with a robust spine over each eye. The anterior margin of the cephalothorax prolonged in the median portion into a

large recurved spine. On either side of this projection is an acute spine pointing anteriorly and dorsally, At the anterior lateral margin, there are three smaller spines. Venter and coxae granulate. Free sternites with transverse rows of tubercles and a few small tubercles on the anal operculum. A transverse row of spinules across coxae I to III, those of the first being quite large while those of the third are reduced to tubercles. A lateral row of teeth on the posterior margin of the third coxae. Fourth coxae with a few scattered tubercles and several larger ones on the lateral margin; on the ventral surface at the posterior margin is a large spine, while at the dorsal posterior margin is a large spine projecting over the trochanter. Fourth coxae not widened laterally beyond the lateral margin of the dorsal scute.

Legs: robust. Trochanters armed with scattered spines and tubercles. First to third femora with scattered spines which are more or less arranged in rows. The spines of the first, second and third femora enlarged at the proximal portion. The third femur, in addition to the larger spines at the proximal portion, with more large spines at the distal portion. Fourth femur armed with larger spines and numerous spinules. The larger spines are arranged in a row in the proximal third, on the retrolateral margin, and at the distal third on the prolateral margin; at the distal end of the prolateral margin is a curved spine; fourth tibia with two rows of spines, there being several larger ones on the retrolateral margin in the proximal portion. Remainder of legs armed with scattered tubercles and numerous small hairs. Fourth femur straight. Tarsal segments: 9-18-9-10. Distitarsi of both first and second tarsi with three segments. Third and fourth tarsal claws simple, tarsi without scopulae.

Palpus: trochanter, 2.0 mm. long; femur, 6.4; patella, 3.9; tibia, 5.0; and tarsus, 4.2. Total length, 21.5 mm. Palpus armed on retrolateral surface as in Fig. 26. On the prolateral margin of the femur are visible the four large spines of the dorsal margin and the large dorsal apical spine. The tibia and tarsus with the prolateral margin armed the same as the retrolateral margin. Patella unarmed except for a few tuberculations at the dorsal surface.

Chelicera: somewhat enlarged, clothed with scattered hairs.

Dorsum reddish brown, darker brown at the posterior margin of the cephalothorax and with darker markings scattered about the scute. Free tergites lighter. Venter and legs concolorous with the dorsum. Palpus and chelicerareddish brown, somewhat lighter. In some specimens the dorsum and legs are very dark.

FEMALE.—Total length of body, 15.0 mm. Cephalothorax, 5.5 mm. Width of body at widest portion, 11.5 mm.

Similar in appearance to male, but with fewer spines on the femora, and the chelicerae are slightly smaller.

Type Locality.—Male holotype and

male and female paratypes from Colombia (Felipe Ovalle).

Santinezia spinulata is related to S. gigantea Roewer but differs in the spination of the fourth leg and the cephalothorax. It differs from S. magna Goodnight and Goodnight (Fig. 29) in lacking white markings and in the spination of the fourth leg.

### Pachvlinae Roewer

### Ampycus tellifer (Butler)

Gonyleptes tellifer Butler, 1873, Ann. Mag. Nat. Hist., (4) XI, p. 116, T. 3, Figs. 3, 4.

Ampycus tellifer SIMON, 1879, Ann. Soc. Ent. Belgique, XXII, p. 241.—ROEWER, 1913, Arch. Naturg., LXXIXA, Fasc. 4, p. 49, Fig. 18.—ROEWER, 1923, Die Weberknechte der Erde, p. 411, Fig. 506.—MELLO-LEITAO, 1932, Rev. Mus. Paulista, XVII, p. 208.

RECORD.—Rio Alto Marañon, between Rios Cenipa and Nieva, Peru, September 10–24, 1924 (G. Klug).

### Phareinae Roewer

### COLOMPHAREUS, NEW GENUS

Dorsum with five distinct areas. First area with a median pair of tubercles. Third area with a median pair of spines. Remaining areas and free tergites without median armature. No common eye tubercle present. Cephalothorax with a median elevation. Tarsal segments: 6-?-6-more than 6. Distitarsus of first tarsus with three segments. Secondary sexual characteristics of the male in the enlarged chelicerae and in the spination of the fourth leg.

GENOTYPE.—Colomphareus rugosus, new species.

Colomphareus shows closest affinities to Phareus Simon, differs in the number of tarsal segments in the third tarsus.

### Colomphareus rugosus, new species

Figures 32, 33, 34 and 35

Male.—Total length of body, 7.6 mm. Cephalothorax, 2.7 mm. Width of body at widest portion, 5.1 mm.

	I	II
Trochanter	1.2  mm.	1.2 mm.
Femur	5.8	11.4
Patella	1.7	<b>2</b> . $2$
Tibia	3.8	8.1
Metatarsus	5.9	5.3
Tarsus	2.7	_
Total	21.1  mm.	

	·III	IV
Trochanter	1.4 mm.	2.2 mm.
Femur	8.6	9.7
Patella	2.3	2.9
Tibia	5.7	6.4
Metatarsus	11.1	16.1
Tarsus	4.3	4.7
Total	33.4 mm.	$\phantom{00000000000000000000000000000000000$

Dorsum more or less rectangular in shape, first area with a median line. A median pair of tubercles on the first area, and three small tubercles on either side, laterad to the median tubercles. Second area without median armature but with three small tubercles on either side. Third area with a pair of spines which are somewhat enlarged at the base. These enlarged bases are quite tuberculate. The spines extend vertically. On either side of these spines is a pair of small tubercles. Fourth area without median armature but with three or four small tubercles on either side. Fifth area similarly armed. Free tergites without median armature but with transverse rows of tubercles which are somewhat larger at the lateral margin. Cephalothorax without a common eye tubercle but with each eye on a somewhat larger tubercle which is roughly tuberculate. Cephalothorax without a median spine but with a median elevation which is removed from the anterior margin about one-third of the length of the entire cephalothorax. Venter and coxae roughly granulate, a transverse row of tubercles on each free sternite and across the first coxae. Anal operculum granulate, without armature. ter and coxae with scattered hairs. Fourth coxae with a distal dorsal spine.

Legs: clothed throughout with scattered hairs. Trochanters tuberculate, a prolateral and a retrolateral spine on the distal portion of the fourth trochanter. Femora with tuberculations more or less arranged in rows, a series of spines on the prolateral margin of the distal portion of the third femur. One spine at the distal portion of the third patella. Fourth femur with a row of spines on the retrolateral margin and two longer spines at the distal portion. Fourth patella with three huge spines at the distal portion, two dorsal and one ventral. One of the three spines is smaller than the other two. Two large spines at the distal portion of the fourth tibia. Tarsal segments: 6-?-6-7. Distitarsus of first tarsus with three segments. Third and fourth tarsi with many hairs but not with scopulae. Third and fourth tarsal claws simple. Basitarsus of first leg enlarged.

Palpus: trochanter, 1.4 mm. long; femur, 6.4; patella, 2.6; tibia, 3.7; and tarsus, 2.8. Total length, 16.9 mm. Palpus armed retrolaterally as in Fig. 33. Prolaterally armed similarly, except for the tibia which has only five spines, lacking the two smaller distal ones of the retrolateral margin. Femur and patella without spines.

Chelicera: enormous, distal segment greatly

elevated over the dorsum. Clothed throughout with hairs.

Dorsum dark reddish brown, venter and coxae concolorous. Appendages somewhat lighter.

Female.—Total length of body, 9.0 mm. Cephalothorax, 2.5 mm. Width of body at widest portion, 5.9 mm.

Similar to male but with chelicerae normal and spines of the fourth leg reduced to tubercula-

Type Locality.—Male holotype and male and female paratypes from Colombia (Felipe Ovalle).

#### PARAPHAREUS, NEW GENUS

Eye tubercle lacking, cephalothorax without median spine or elevation. Dorsal scute with five areas. First area with a median line. First to fifth areas and free tergites unbedecked. Anal operculum unbedecked. Palpus characteristically long, femur without median or dorsal apical spine. All tarsal segments but the third numbering more than six; third tarsus with six segments. Third and fourth tarsal claws simple, without scopulae.

Genotype.—Paraphareus tatei, new species.

This genus is related to Nanophareus Roewer but differs in the number of tarsal segments.

### Paraphareus tatei, new species

Figures 36 and 37

Female.—Total length of body, 4.0 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 2.4 mm.

	I	II
Trochanter	$0.5  \mathrm{mm}$ .	$0.5  \mathrm{mm}.$
Femur	<b>2.2</b>	3.1
Patella	0.7	0.6
Tibia	1.6	2.3
Metatarsus	<b>2</b> .7	2.8
Tarsus	1.3	3.5
Total	9.0  mm.	12.8  mm.
	III	${f IV}$
Trochanter	III 0.5 mm.	IV 0.5 mm.
Trochanter Femur		
	0.5 mm.	0.5 mm.
Femur	0.5 mm. 2.3	0.5 mm. 3.2
Femur Patella	0.5 mm. 2.3 0.5	0.5 mm. 3.2 0.8
Femur Patella Tibia	0.5 mm. 2.3 0.5 1.4	0.5 mm. 3.2 0.8 2.2
Femur Patella Tibia Metatarsus	0.5 mm. 2.3 0.5 1.4 2.1	0.5 mm. 3.2 0.8 2.2 2.9

Dorsum finely granulate, scute with five distinct areas, first area with a median line. A row of three very small tubercles on either side of the fourth area, and three very small tubercles in the median portion of the fifth area. A transverse row of hair-tipped tubercles across the free tergites and a few on the anal operculum.

Cephalothorax unarmed. Eyes widely separated, each located on a small elevation. Cephalothorax without an elevation on the anterior margin. Entire cephalothorax somewhat rounded dorsally. Anterior margin of the cephalothorax with three small projections in the median portion, one between the two chelicerae and one on either side. Venter and coxae finely granulate, a transverse row of very small hair-tipped tubercles across each free sternite. Coxae with a few scattered tubercles which are particularly large on the ventral portion of the first coxae.

Legs: long with scattered hairs, a few small tuberculations on the femora. Fourth femora slightly curved. Tarsal segments: 7-19-6-7. Distitarsi of both first and second tarsi with three segments.

Palpus: trochanter, 0.5 mm. long; femur, 3.1; patella, 1.4; tibia, 1.6; and tarsus, 1.3. Total length, 7.9 mm. Coxae large and wedge-shaped, with one large hair-tipped tubercle ventrally, and dorsally with a few small scattered tubercles. Trochanter granulate, with one small tubercle dorsally and one ventrally. Femur long and slender, unarmed except for two small tubercles ventrally at the proximal portion. Patella unarmed. Tibia unarmed dorsally, ventrally armed on either side with five long spine-bearing tubercles, the proximal pair being the longest. Tarsus unarmed dorsally, but ventrally with five spine-bearing tubercles on either side.

Chelicera: with scattered hairs, second segment slightly elevated dorsally.

Entire animal reddish brown, with darker brown mottlings across the dorsal areas, free tergites and lateral portions of the scute. Legs and palpi somewhat lighter.

Type Locality.—Female holotype from Rondon Camp, Mt. Roraima, 6900 feet, November, 1927 (G. H. H.Tate).

### PLANOPHAREUS, NEW GENUS

Dorsum with five distinct areas, first area with a median line. Dorsal areas and free tergites without median armature. Cephalothorax lacking an eye tubercle but with a distinct elevation on the median anterior margin. Cephalothorax without a median spine. Tarsal segments: 6-more than 6-6-more than 6. Distitarsi of both first and second tarsi with three segments. Third and fourth tarsi with simple double claws, without scopulae.

GENOTYPE.—Planophareus pallidus, new species.

This genus is related to *Nanophareus* Roewer, differing in the number of tarsal segments.

### Planophareus pallidus, new species

Figures 30 and 31

FEMALE.—Total length of body, 1.8 mm.

Cephalothorax, 0.8 mm. Width of body at widest portion, 1.3 mm.

	I	II
Trochanter	$0.2  \mathrm{mm}$ .	$0.2  \mathrm{mm}$ .
Femur	0.9	0.9
Patella	0.4	0.4
$\mathbf{Tibia}$	0.6	0.8
Metatarsus	0.8	1.0
Tarsus	0.6	1.1
Total	3.5 mm.	4.4 mm.
	III	IV
Trochanter	$0.3  \mathrm{mm}$ .	$0.3  \mathrm{mm}$ .
Femur	0.9	1.0
Patella	0.4	0.4
Tibia	0.6	0.8
Metatarsus	0.8	1.1
Tarsus	0.6	0.8

Dorsum finely granulate, dorsal scutes without any tuberculations. Free tergites with a transverse row of very minute hair-tipped tubercles. Cephalothorax with the median anterior elevation large and distinct. No common eye tubercle. Venter and coxae finely granulate, a few very small tuberculations on the anal operculum and free sternites. A transverse row of larger tuberculations on the first coxae and a large forward projecting tubercle on the anterior distal portion of the first coxae.

Legs: clothed throughout with scattered hairs, no tuberculations. Fourth femur curved. Tarsal segments: 6-8 to 9-6-7. Distitarsi of both first and second tarsi with three segments.

Palpus: trochanter, 0.3 mm. long; femur, 1.1; patella, 0.6; tibia, 0.6; and tarsus, 0.5. Total length, 3.1 mm. Coxa with a ventral spine. Palpus armed retrolaterally as in Fig. 30. Prolaterally armed similar to retrolateral surface. Femur and patella without spines, only tuber-

Chelicera: normal, with scattered hairs, second segment slightly elevated dorsally.

Dorsum light reddish brown, venter and coxae concolorous. Appendages lighter, yellowish.

Type Locality.—Female holotype and female paratype from Rondon Camp, Mt. Roraima, 6900 feet, November, 1927 (G. H. H. Tate).

#### STENOPHAREUS, NEW GENUS

Dorsum with five distinct areas, third area with a pair of spines. First and second areas with median paired tubercles. Fourth and fifth areas unbedecked. Cephalothorax without a median spine between the eyes. Eye tubercle lacking. Tarsal segments: 6-more than 6-6-more than 6. Distitarsi of both first and second tarsi with three segments.

GENOTYPE.—Stenophareus roraimus, new spe-

This genus is related to *Phareus* Simon and *Stenostygnoides* Roewer but differs in the number of tarsal segments.

### Stenophareus roraimus, new species Figures 38 and 39

Male.—Total length of body, 3.1 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 2.1 mm.

	I	II
Trochanter	$0.3  \mathrm{mm}$ .	$0.4  \mathrm{mm}$ .
$\mathbf{Femur}$	1.3	<b>2</b> . <b>2</b>
Patella	0.4	0.7
Tibia	1.0	1.6
Metatarsus	1.3	1.5
Tarsus	0.9	2.1
Total	$5.2 \mathrm{mm}$ .	$8.5  \mathrm{mm}$ .
	III	IV
Trochanter	III 0.4 mm.	IV 0.5 mm.
Trochanter Femur		
	0.4 mm.	0.5 mm.
Femur	0.4 mm. 1.7	0.5 mm. 2.4
Femur Patella	0.4 mm. 1.7 0.6	0.5 mm. 2.4 0.7
Femur Patella Tibia	0.4 mm. 1.7 0.6 1.3	0.5 mm. 2.4 0.7 1.7
Femur Patella Tibia Metatarsus	0.4 mm. 1.7 0.6 1.3 1.5	0.5 mm. 2.4 0.7 1.7 2.3

Dorsal scute with five areas, first area with a median line, third area with a pair of divergent sharp spines. First and second areas with small paired tubercles. The second area with an additional pair of tubercles, laterad to median tubercles. Fourth area, fifth area and free tergites with a few scattered hairs, only slightly granular, not tuberculate. Cephalothorax without a common eye tubercle, spine or elevation. Anterior margin of the cephalothorax with a slight median projection and another projection on either side of the median line. Venter and coxae with fine granulations and with a few scattered hairs. Fourth coxa with a sharp apical dorsal spine and a few smaller spinules along the lateral enlargement.

Legs: clothed with scattered hairs. Fourth trochanter with a long dorsal apical spine and a shorter median apical. Fourth femur with a median lateral row of four large and one small spines, and with two dorsal apical spines; on the outer distal portion, there is a row of three spines. These two rows of spines point ventrally. There is some variation in the size and appearance of these spines. The dorsal portion of the fourth patella has one large spine and several smaller spinules. At the distal portion of the femora of all the legs, there are two small dorsal spines. Tarsal segments: 6–16–6–7. Distitarsi of both first and second tarsi with three segments. Double claws of third and fourth legs simple, no scopula present.

Palpus: trochanter, 0.4 mm. long; femur, 1.3; patella, 0.6; tibia, 0.9; and tarsus, 0.8. Total length, 4.0 mm. Trochanter with a dorsal

spine. Femur slender, unbedecked except for a few granulations above. Patella unbedecked.

Tibia and tarsus rounded, smooth dorsally. Tibia ventrally with six spine-bearing tubercles on the retrolateral margin, four or five on the prolateral margin. Tarsi with two long spine-bearing tubercles and five or six smaller ones on either side.

Chelicera: normal, armed with scattered hairs, second segment with a slight elevation.

Dorsum reddish brown with slightly darker markings on the free tergites and the margins of the abdominal scutes. There is an alternating series of darker and lighter spots forming a median band on the cephalothorax. There are lighter brown marks outlining the dorsal areas and present on the anterior portion of the cephalothorax. Spines of the third area light brown. Venter and coxae mottled darker and lighter reddish brown. Free sternites and anal operculum darker. Appendages lighter, with darker mottlings at their distal portions.

FEMALE.—Total length of body, 3.1 mm. Cephalothorax, 1.1 mm. Width of body at widest portion, 2.1 mm.

Similar to male, but dorsal tubercles much reduced.

Type Locality.—Male holotype and female paratype from the summit of Mt. Roraima, 8600 feet, November, 1927 (G. H. H. Tate).

### Heterostygninae Roewer

## Pseudostygnoplus longipalpus (Goodnight and Goodnight)

Pseudostygnoplus longipalpus Goodnight and Goodnight, 1942, Amer. Mus. Novitates, No. 1167, p. 10, Fig. 22.

RECORD.—Caparo, Trinidad, March 15, 1910 (P. B. Whelpley).

### Stygninae Simon

#### PARAJANELLUS, NEW GENUS

Dorsal scute with four areas. First, second and fourth areas and first free tergite with median paired tubercles. Third area and second and third free tergites with median paired spines. Anal operculum with paired tubercles. Eye tubercle lacking, cephalothorax with a median spine. Palpi elongate. Third and fourth claws simple. Tarsal segments: 6-more than 6-6-more than 6. Distitarsi of both first and second tarsi with three segments.

Genotype.—Parajanellus klugi, new species.

This genus is related to *Lojanellus* Roewer, differing in having tubercles on the second area.

### Parajanellus klugi, new species Figures 40 and 41

Male.—Total length of body, 4.5 mm. Cephalothorax, 1.7 mm. Width of body at widest portion, 3.2 mm.

	I	II
Trochanter	$0.6  \mathrm{mm}$ .	$0.8  \mathrm{mm}$ .
Femur	3.0	6.5
Patella	0.8	1.3
Tibia	1.8	4.6
Metatarsus	3.4	5.7
Tarsus	1.9	3.8
${f Total}$	11.5  mm.	$22.7 \mathrm{mm}$ .
	III	IV
Trochanter	III 0.8 mm.	IV 0.7 mm.
Trochanter Femur		
	0.8 mm.	0.7 mm.
Femur	0.8 mm. 4.9	0.7 mm. 6.8
Femur Patella	0.8 mm. 4.9 1.4	0.7 mm. 6.8 1.5
Femur Patella Tibia	0.8 mm. 4.9 1.4 2.7	0.7 mm. 6.8 1.5 3.4
Femur Patella Tibia Metatarsus	0.8 mm. 4.9 1.4 2.7 4.9	0.7 mm. 6.8 1.5 3.4 6.9

Dorsum with four distinct areas, first area with a median line. First and second areas with a pair of median enlarged tubercles, and on each area another pair latered to the median tubercles. Third area with a pair of long, acute, divergent spines. A large tubercle at the base of the spine and laterad to it. Another tubercle on either side between the spine and the lateral margin. Fourth area with a median pair of tubercles and a few small tubercles at the lateral margin. First free tergite with a median pair of tubercles and a small tubercle on each side laterad to the median tubercles. Second free tergite with a pair of median spines, a small tubercle in between these spines and two small tubercles on either side at the lateral portion. Third free tergite with a median pair of spines and a pair of tubercles between the median spines and two small tubercles on each side at the lateral margin. Cephalothorax lacking eye tubercle but with the median robust, acute spine. Anterior margin straight with a slight median projection and another larger projection on either side midway between the median line and the lateral margin. Venter and coxae tuberculate, lateral teeth present on the posterior margin of coxa III. Four or five hair-tipped tubercles on the ventral surface of coxa I. A transverse

row of tubercles on each of the free sternites. Anal operculum with a pair of low tubercles and numerous granulations. Coxae and venter clothed with scattered hairs. Fourth coxa with two spines and several tubercles dorsally.

Legs: clothed with scattered hairs. Femur, patella and tibia with tuberculations. On the prolateral margin of the third femur, these tuberculations become a larger row, with three large spines at the distal portion. Fourth trochanter with a large posterior distal spine and a dorsal distal spine. Femur and patella as in Fig. 41. Tarsal segments: 6–12–6–7. Distitarsi of both first and second tarsi with three segments. Basitarsus of first tarsus slightly enlarged.

Palpus: trochanter, 0.9 mm. long; femur, 2.8; patella, 2.1; tibia, 1.2; and tarsus, 0.9. Total length, 7.9 mm. Trochanter, femur and patella elongate, slender, granulate and unarmed. Distal portion of the patella enlarged. Tibia armed on either side with two large and two small spine-bearing tubercles, and a median spine-bearing tubercle at the proximal portion. Tarsus armed with five spine-bearing tubercles on either side. Dorsally entire palpus unarmed.

Chelicera: second segment elevated dorsally. Entire chelicera much enlarged. Armed with scattered hairs and several spines on the proximal segment.

Dorsum reddish brown with much light mottling on the cephalothorax. A series of lighter brown spots form a network roughly in the shape of a V in the median portion of the cephalothorax. Median spine light. Dorsum and free tergites dark brown with a median lighter brown line in the first three areas. Median tubercles and spine light; much darker brown along the lateral margin. Venter and coxae reddish brown. Chelicerae dark reddish brown, concolorous. Legs reddish brown, third and fourth legs darker. Palpi light.

Female.—Total length of body, 5.4 mm. Cephalothorax, 1.3 mm. Width of body at widest portion, 3.2 mm.

Female similar in appearance to the male, but chelicerae of normal size, no spines on the third and fourth legs, and paired tubercles of the anal operculum scarcely distinguishable from the other tubercles.

Type Locality.—Male holotype and male and female paratypes from Rio Alto Marañon, between Rios Cenipa and Nieva, Peru, September 10–24, 1924 (G. Klug).

### SUEORDER PALPATORES THORELL

### PHALANGIIDAE Simon

### Gagrellinae Thorell

### Geava monticola (Chamberlin)

Leiobunum monticola Chamberlin, 1916, Bull. Mus. Comp. Zool., IX, p. 193, Pl. vi, figs. 1-3.

Through the courtesy of Dr. Nathan Banks, the writers were able to examine the holotype of *Leiobunum monticola* Chamberlin from Peru, which is in the collection of the Museum of Comparative Zoölogy, Cambridge, Massachusetts. This examination revealed that *L. monticola* belonged to the genus *Geaya*. The nodules on the femora were: 0-3-0-0.

### ROMERELLA, NEW GENUS

Dorsum unarmed. Eye tubercle without large spines. Nodules of femora: 0-4-0-1. Coxae with lateral three-pronged teeth. Femora longer than the body.

GENOTYPE.—Romerella punctata, new species.

This genus is closely related to *Bastiodes* Mello-Leitao, differing in the number of nodules on the second femur. *Bastiodes* has five.

### Romerella punctata, new species

Figure 42

Female.—Total length of body, 4.4 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 2.2 mm. Length of femora: I, 7.4 mm.; II, 14.2 mm.; III, 7.2 mm.; IV, 10.1 mm.

Dorsum finely granulate, without armature. Eye tubercle slightly higher than wide, canaliculate. A row of five or six small teeth over each eye. Anterior margin of the cephalothorax unarmed. Supracheliceral lamellae in the form of two obtuse projections. Venter, coxae and anal operculum granulate. Characteristic three-pronged teeth present on the anterior and posterior margins of all coxae; coxae roughly granulate.

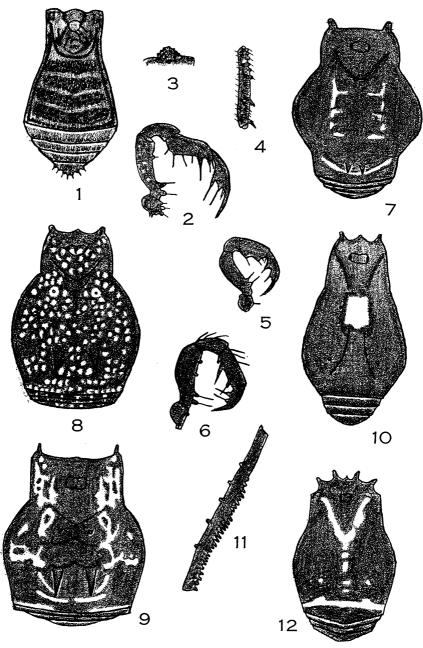
Legs: long and slender, clothed throughout with hairs. Numerous small black spines on the femora and a few on the patellae and tibiae. Nodules: 0-4-0-1.

Palpus: trochanter, 0.4 mm. long; femur, 0.8; patella, 0.4; tibia, 0.6; and tarsus, 1.2. Total length, 3.4 mm. Palpus clothed throughout with hairs. A ventral row of small spines on the femur. Patella with a distinct, long, cylindrical, median apical apophyses.

Chelicera: normal, clothed with a few long

Dorsum reddish brown with lighter areas between the segments. A few very dark brown blotches along the anterior and lateral margins of the cephalothorax and the region of the eye tubercle. Eye tubercle dark at its base, lighter above. A dark brown blotch at the lateral margin of the abdomen in the region of the fourth trochanter. Irregular darker markings are found on the dorsum, permitting the lighter areas to show through as indefinite punctations. Venter, coxae and genital operculum reddish brown. Lateral margin and free sternites very light. Trochanters of legs light, remainder of legs darker brown except for the tarsi and metatarsi which are lighter. There is a light spot present at each of the nodules. Palpi yellowish with darker brown mottlings on the femora patellae and tibiae. Tarsal claw black. Chelicerae vellowish.

Type Locality.—Female holotype from Paulo, Mt. Roraima, November, 1927 (G. H. H. Tate).



- $\frac{1}{2}$ . Fig.
- 3. 4. Fig. Fig.
- Crosbyella roraima, new species, dorsal view of female.

  Idem, retrolateral view of left palpus of female.

  Idem, lateral view of eye tubercle of female.

  Idem, prolateral view of fourth femur of female.

  Pseudomitraceras curvatus Goodnight and Goodnight, retrolateral view of left palpus of male.

  Spinolatum medialis Goodnight and Goodnight, retrolateral view of left palpus of male.

  Acromares lateralis, new species, dorsal view of female.

  Cynorta bassleri, new species, dorsal view of female.

  Cynorta macularum new species, dorsal view of male Fig.
- Fig.
- 6. 7. 8. 9. Fig.
- Fig. Fig. Cynorta maculorum, new species, dorsal view of male.
- Fig. 10.
- Cynortula unapunctata, new species, dorsal view of male. Idem, prolateral view of fourth femur of male. Eucynortella duapunctata, new species, dorsal view of female. Fig. 11. Fig. 12.

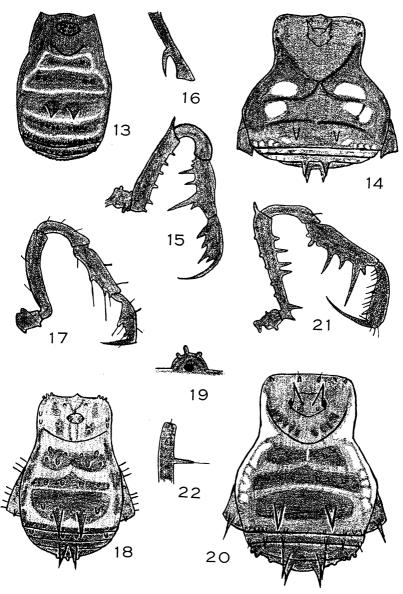


Fig. 13. Fig. 14. Fig. 15. Fig. 16. Fig. 17. Fig. 18. Fig. 19. Fig. 20. Fig. 21. Fig. 22. Paccilaema altaspinulatum, new species, dorsal view of male. Aguaytiella maculata, new species, dorsal view of male. Idem, retrolateral view of left palpus of male. Idem, prolateral view of distal portion of fourth femur. Cenipa nubila, new species, retrolateral view of left palpus of male.

Idem, dorsal view of male.

Idem, lateral view of eye tubercle of male.

Holocranaus albimarginis, new species, dorsal view of female.

Idem, retrolateral view of left palpus of female.

Idem, dorsal view of distal portion of femur of palpus of female.

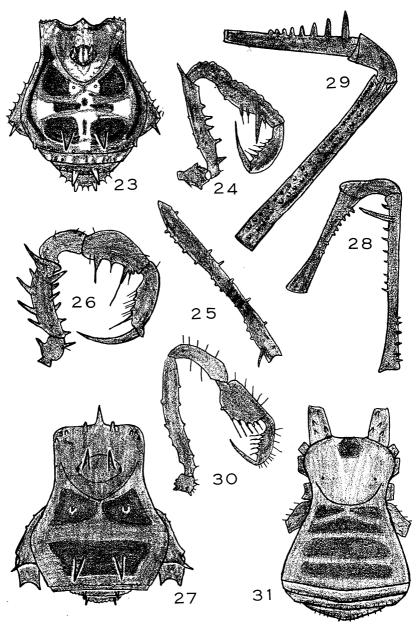
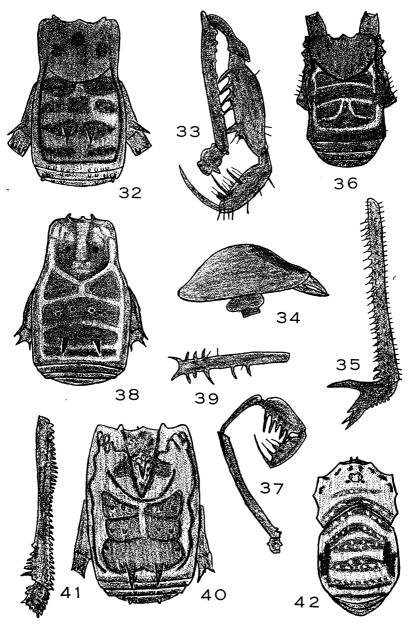


Fig. 23. S Fig. 24. I Fig. 25. I Fig. 26. S Fig. 27. I Fig. 28. I Fig. 29. S tibia of male. Fig. 30. I Fig. 31. I Santinezia albimedialis, new species, dorsal view of female.
Idem, retrolateral view of left palpus of female.
Idem, prolateral view of fourth femur of female.
Santinezia spinulata, new species, retrolateral view of left palpus of male.
Idem, dorsal view of male.
Idem, prolateral view of fourth femur, patella and tibia of male.
Santinezia magna Goodnight and Goodnight, prolateral view of fourth femur, patella and

Planophareus pallidus, new species, retrolateral view of left palpus of female. Idem, dorsal view of female.



- Fig. 32. Fig. 33. Fig. 34. Fig. 35. Fig. 36. Fig. 37. Fig. 38. Fig. 39. Fig. 40.

- Colomphareus rugosus, new species, dorsal view of male. Idem, retrolateral view of left palpus of male. Idem, retrolateral view of left chelicera of male. Idem, retrolateral view of fourth femur and patella of male. Paraphareus tatei, new species, dorsal view of female. Idem, retrolateral view of left palpus of female. Idem, retrolateral view of left palpus of female. Stenophareus roraimus, new species, dorsal view of male. Idem, prolateral view of femur of fourth leg of male. Parajanellus klugi, new species, dorsal view of male. Idem, prolateral view of femur and patella of fourth leg of male. Romerella punctata, new species, dorsal view of female. Fig. 41.