## ON THE GENERA

 OF

G. W. and E. G. PECKHAM.

Extract from the Proceedings of the Wisconsin Academy of Sciences, Arts and Letters.
$\qquad$


MADISON, WIS :
DEMOCRAT PRINTING CO., STATE PRINTERS. 1885.


## INTRODUCTION.

In the following paper we have endeavored to bring together the definitions of those genera of the family Attidae which have been generally received, and also of those which are part of the synonymy of the received genera. Up to this time these definitions have been so widely scattered through different works and periodicals that it has been a matter of great practical inconvenience to study and to compare them. It is probably due, in a measure, to this fact that many species have been placed in genera from which a moderate regard for the generic definitions would have excluded them; although perhaps a further difficulty may have arisen from a confusion of the two modes of classification, the one based on a type, and the other based on a general definition. To make clear the distinction between these two modes, we quote from Whewell', "Natural groups given by type, not by definition . . . . . the class is steadily fixed, though not precisely limited; it is given, though not circumscribed; it is determined, not by a boundary line without, but by a central point within; not by what it strictly excludes, but by* what it eminently includes; by an example, not by a precept; in short, instead of a definition we have a type for our director. A type is an example of any class, for instance, a species of a genus, which is considered as eminently possessing the character of the class. All the species which have a greater affinity with this typs-species than with any other, form the genus and are ranged about it, deviating from it in various directions and different degrees." On the other side we have from Mill:" " . . . . . the next step is to ar-

[^0]range those infimae spacies into larger groups
and in doing this it is true that we are naturally and properly guided, in most cases at least, by resemblance to a type. . . . . . But though the groups are suggested by types, I cannot think that the group, when formed, is determined by the type; that in deciding whether a species belongs to the group, a reference is made to the type and not to the characters. . . . . . The truth is, on the contrary, that every genus or family is framed with distinct reference to certain characters, and is composed, first and primarily, of species which agree in possessing all those characters. To these are added, as a sort of appendix, such other species, generally in small number, as possess nearly all the properties selected; wanting some of them one property, some another, and which, while they agree with the rest almost as much as those agree with one another, do not resemble in an equal degree any other group. Our conception of the class continues to be grounded on the characters; and the class migit be defined, those things which either possess that set of characters, or resemble the things that do so, more than they resemble anything else. And this resemblance itself is not, like resemblance between simple sensations, an ultimate fact unsusceptible of analysis. Even the inferior degree of resemblance is created by the possession of common characters. . . . . . Nor can there be any real difficulty in representing, by an enumeration of characters, the nature and degree of the resemblance which is strictly sufficient to include any object in the class. There

[^1]are always some properties common to all things which are included. Others there often are, to which some things, which are nevertheless included, are exceptions. But the objects which are exceptions to one character are not exceptions to another; the resemblance which fails in some particulars, must be made up for in others. The class, therefore, is constituted by the possession of all the characters which are universal, and most of those which admit of exceptions. If a plant had the ovules erect, the stigmata divided, possessed the albumen, and was without stipules, it possibly would not be classed among the Rosaceæ. But it may want any one, or more than one, of these characters, and not be excluded. The ends of a scientific classification are better answered by including it. Since it agrees so nearly, in its known properties, with the sum of the characters of the class, it is likely to resemble that class more than any other in those of its properties which are still undiscovered."

A further confusion has arisen from certain authors making their generic definitions descriptive rather than comparative. For example, the definition of the genus Maratus Karsch is doubtless a good description, so far as it goes, of the species for which the genus was formed, and yet is equally applicable to many other genera, and in no way assists in organizing knowledge, nor in facilitating identification, which should be the two-fold purpose of a classification.

The synonymy of the genera is only partial; and those who have had most experience in the difficulties of this
lizard are reptiles. You see he does class by type, and not by definition. But how does this classification differ from that of the scientific zoologist? how does the meaning of the scientific class-name of "Mammalia" differ from the unscientific of "Bэasts?" Why, exactly because the former depends on a definition, the latter on a type. The class Mammalia is scientifically defi sed as "ill animals which have a vertebrated skeleton and suckle their young." Here is no reference to type, but a definition rigorous enough for a geometrician, and such is the character which every scientific naturalist recogeizes as that to which his classes must aspire knowing, as he does, that classification by type is simply an acknowledgment of iynorance and a temporary device." Elucational Value of Natural History Sciences; Lay Sermons, Addresses and Reviews, pp. 8\%, 83.
class of work will be least harsh in their criticism of its defects.
The key is based almost entirely on the generic descriptions, and is designed not only to aid in the identification of genera, but also, in a general way, to group together those genera which have common characteristics, and thus to aid in a comparison of the different groups. Its usefulness must be lessened by the fact that the generic position of a species has been commonly determined merely by its possessing a greater number of the characteristics of one genus than of any other. For example: Cyrba Simon has legs $4,1,3,2$. The greater number of characteristics of C. bi-maculatu Keyserling carry that species to the genus Cyrba, although it has the leg-formula $4,3,1,2$. If in the key Cyrba has been distinguished from other genera by the fact that its leg-formula is $4,1,3,2$, bi-maculata must go elsewhere.

We have also, for the purpose of facilitating comparison, arranged the characteristics of the different genera in the form of a table.

We have been perplexed by a lack of precision in the stating of characteristics. We venture to suggest that it would be well to express the dimensions of parts in terms of other parts of the same species. For example, the clypeus should be described not as " very low," or "rather high," but as one fifth or one half as wide as the middle anterior eyes. We believe that Menge is the only author who states definitely the height of the cephalothorax. He does so by comparing the height with the width.

Not having the work in which it is described, we have omitted the genus Portia Karsch. In his Arachnol. Blätter V. Zur Attiden-Gattung Portia, Dr. Karsch says that this genus resembles Eris (C. Koch) Simon, but differs from it in that the first pair of legs is not much more robust than the others; metatarsus + tarsus of the fourth are longer than patella + tibia of fourth, not equal or shorter as in Eris); and the spines on the tibiae and metatarsi of the hind legs extend to the base. The quadrangle of the eyes, also, is not wider behind than in front.
As we have undertaken to prepare a monograph of this
family, we shall be very glad to reciive Attidae from any part of the world, and to send in return spiders of the United States.

We give below a brief account of the Attid genera.
Miluaukiee, Wisconsin, March, 188 壬.

## THE ATTID GENERA.

From Latreille to Walckener, inclusively, the whole family constitutes but one genus, Salticus Latr. or Attus Walck. In 1832 Hentz detached the genera Lyssomanes, Synemosyna, and Epiblemum; Lyssomanes having the eyes in four rows; Synemosyna corresponding in part to Salticus (Latr.) C. Koch, or Leptorchestes Thorell, 1870; and Epiblemum in part to Calliethera C. Koch, 1837. In 1833 Sundevall divided Attus Walck. into two genera, Salticus and Attus. Salticus having the cephalic abruptly higher than the thoracic part, and the quadrangle of the eyes nearly square. Between 1833 and 1850 twenty four genera were formed by C. Koch, most of which were so poorly defined by their author that their identification has been difficult or impossible. These genera, however, have been used as a basis of work by later authors who have redefined and united them, so that eighteen out of Koch's twenty-four genera are still used, beside some of his sub-genera which have been raised to the rank of genera by Thorell. A short history of C. Koch's genera would run as follows: Heliophanus, 1833; Euophrys, 1834; Dendryphantes, 1837; Pyrophorus, 1837; (the name Pyrophorus had already been used, and the genus was identical with Salticus (Latr.) Sund., 1833); Toxeus, 1846; (probably also included in Salticus (Latr.) Sund.; Janus, 1846; (the name Janus was preoccupied; the genus is in part Synemosyna Hentz, 1832, and in part Janigena Karsch, 1880); Philia, 1816, (the name Philia was preoccupied, and for it Thorell substituted, Philæus in 1870); Hyllus, 1846; (identical with Dineresus White, formed in the same year); Thiania, 1846; Marpissa, 1846; (the name Marpissa was preoccupied;

Thorell substituted Marptusa in 1877); Cocalus, 1846; Plexippus, 1846; Phidippus, 1846; Amycus, 1846; Alcmena, 1846; Asaracus, i845; (this genus, without any striking characteristic, and formed for one imperfect individual, has never been used); Phyale, 1846; Eris, 1846; Ciris, 1848; Mævia, 1848; Rhanis, $18 \pm 8$ (identical with Homalattus White, 1841); Psecas, 1850; (this vaguely characterized genus has not been adopted by later authors); Icelus, 1850; (the name Icelus being preoccupied Simon substituted Icius in 1873); Ballus, 1850; (this was a sub-genus of Attus, made a genus by Thorell in 18\%0); Dia and Parthenia, two sub-genera of the genus Euophrys, were combined and made a genus with the name Ælurops (both Dia and Parthenia being preoccupied) by Thorell also in 1870.

During this period only one author, beside Koch, made any genera in the family Attidae. This was A. White, who, in 1841, made Homalattus; and in 1846 Dineresus, of which Hyllus C. Koch, takes precedence; and after 1850 no new genera were formed for many years. Of Westring and Blackwall, both writing in 1861, the former followed Sundevall's division (1833); into Salticus and Attus, while the latter used only Salticus Latr. unmodified. In 1864, Simon combined the Attid genera to form five: Rhanis C. Koch, Attus Walck, Cyrtonota Sim., Heliophanus C. Koch, and Salticus (Latr.) This arrangement, which was not generally adopted, seems not to have satisfied its author, as in 1869, Simon made an entirely new classification of the Attidae, recombining them into ten genera of which two, Menemerus and Yllenus were new.

We now come to 1870 , in which year Thorell published the first part of his work on the genera and species of European spiders, probably the most important contribution thus far offered to arachnological literature in the department of classification. In so far as the Attidae are concerned his most valuable work was the unravelling of C. Koch's European genera. He resolved the family into thirteen provisional genera, one of which, Leptorchestes, was new. He also formed the genus Diolenius for the species A. phrynoides Walck.; and he made the changes in the
nomenclature of some of C. Koch's genera which have already been mentioned.
In 1871, the genus Hasarius was formed by Simon. In 18\%2, Taczanowski described a new genus, Jelskia, which he placed under the family Dinopidae, but which seems to us to belong to the Attidae, since although the eyes are in four rows, (as in Lyssomanes Hentz), the eyes of the third row, are small, not as in the Dinopidae, larger than the others In 1873 Simon substituted the name Icius for Icelus C. Koch.
In 1876, Simon modified his classification of the Attid genera, and succeeded in making an arrangement so good that as Dr. L. Koch remarks, it will form the basis for all future work. The new genera which he formed in this year were Synagles, Neera, Neon, Hyctia, Thya, Saitis, Pellenes, Habrocestum, Cyrba and Phlegra.
In 1877, Thorell made the genera Agorius and Viciria, and substituted the name Marptusa for Marpissa C. Koch. In the same year Simon formed the genus Bavia, and Simon and Cambridge each described a genus having the eyes in four rows; these are Evenus Simon, and Athamas Cambridge. Also in 187\%, the genera Oedipus and Scartes were formed by Menge.

In $18 \% \mathrm{~s}$, Thorell formed the genera Boethus and Sinis; Karsch, the genera Lycidas, Ligonipes, Ligurinus, Maratus, Ascyltus and Mopsus; and Taczanowski, the genus Chirothecia.
In 1879, L. Koch formed the genera Astia, Scirtetes, Rhombonotus, Scaea, and Lagnus, and in 1880, Opisthoncus. In 1880, also, we have the genus Janigena Karsch. In 1881, Keyserling formed Jotus, and Ergane, and Thorell, Simaetha, Discocnemius, Ephippus, Euryattus, Omoedus and Coccorchestes.

In 1882, Keyserling formed Thorellia (which afterwards proved to be identiral with Saitis Simon), Eulabes, Tanypus, Acmaea (these three names being preoccupied they were afterward supplanted, Eulabes by Pirithous, Tanypus by Sinnamora, and Acmaea by Drepanephora); Morgaromma, Erasmia, Sobara, Selaophora, Prostheclina, Cytaea, Atry-
tone, Hadrosoma and Therosa; and Cambridge formed the genus Mago. This latter author, who has described a large number of species, has, with a few exceptions, included them all in the genus Salticus Latr.

In 1883, Keyserling formed the genera Lauharulla, Scythropa and Sandalodes, and substituted the names Pirithous, Sinnamora, and Drepanephora for Eulabes, Tanypus, and Acmaea.

In 1884 Simon formed the genera Mithion, Lystrocteisa and Chalcolecta.

Finding that several generic names now in use are preoccupied we make the following substitutions:

For Evenus Simon 1877, "Epeus." (Evenus Hübu. Lep. 1816. Agassiz' Nomencl. Zool. Fivenus Lap. Col. 1836. Agassiz' Nomencl. Zool.)

For Sinis Thorell 1878, "Linus." (Sinis Heer. Col. 1862. Scudder's Nomencl. Zool.)

For Scirtetes L. K. 1879, "Damoetas." (Scirtetes Wagn. Mamm. 1841. Agassiz' Nomencl. Zool.)

For Ephippus Thorell 1881, "Zenodorus." (Ephippus Cuv. Pisc. 1829. Agassiz' Nomencl. Zool.)

For Erasmia Keyserling 1882, "Iona." (Erasmia Hope. Lep. 1840, Agassiz' Nomencl, Zool. Erasmia Heine. Aves 1863. Scudder's Nomencl. Zool.)

For Atrytone Keyserling 1882, "Tara." (Atrytone Scud. Lep. 1872. Zool. Record.)

For Hadrosoma Keyserling 1882, "Bootes." (Hadrosoma Fieb. Orth. 1853. Scudder's Nomencl. Zool.)

For Scythropa Keyserling 1883, "Bianor." (Scythropa Chand. Col. 18\%1. Zool. Record.)

For Drepanephora Keyserling 1883, "Hypoblemum." (Drepanephora Loew. Dipt. 1869. Zool. Record.)

We divide the family Attidae into two sub-families, the Attinae, having the eyes in three rows, and the Lysomanae, having the eyes in four rows.

## KEY TO THE GENERA OF THE FAMILY ATTIDAE. ${ }^{1}$

1. Eyes in three rows ..... 3
2 Eyes in four rows ..... 161
2. ${ }^{2}$ Trochanter I elongated much longer than the others ..... 5
3. Trocharter I not elongated ..... 13
4. Trochanter I much longer than coxa, shorter than femir ..... 7
5. Trochanter I shorter than coxz (especially \&), much shorter than femur ..... 9
6. Cephalothorax low; quadran yle of eyes wider than long: tibia I slender and parallel ${ }^{3}$ l'ara Peckham.
7. Cephalothorax rather high; quadrangle of eyes almost equal in length and breadth; tibia I more or less dilated.... Diolenius Thor.
8. Quadrangle of eyes much longer than wide, and much longer thanthoracic part; eyes of second row much nearer lateral than dor-sal eyesLystrocteisa E. S.
9. Quadrangle of eyes almost equal in length and breath; thoracic and cephalic parts alniost equally long; eyes of second row scarcely further from dorsal than from lateral ..... 11
10. Legs short; anterior tibia strongly compressed and dilated, and conspicuously furnished below with two rows of strong spines, and in the middle line with thick hairs........ Discocnemius Thor.
11. Legs long; anterior tibia compressed, parallel, not dilate $\mathfrak{l}$; armed below with numerous and strong spines in a double row.
Chalcolecta E. S.
12. Cephalothorax distinctly wider in the middle than at the ends.
Ihombonotıs, L. K.
13. Cephalothorax not distinctly wider in the middle than at the ends ..... 15
14. Body slender, autlike; legs weak ..... 17
15. Body not antlike in form ..... 29
16. Cephalic part higher than thoracic Salticus Latr.
17. Cephalic part not higher than thoracic ..... 19
18. Abdomen with a dietinct constriction ..... 21
19. Atdomen without, or with a very slight constriction ..... 23
20. Cephalic and thoracic parts separated by a constriction.
Janigena Karsch
${ }^{1}$ On account of the vagueness of their definitions, we have been obliged to omit from the Key the genera Phyale, Asaracus, Alcmena, Psecas, and Thiania of C. Koch, and Lycidas, Ligurinus, and Maratus Karsch.
${ }^{2}$ We have here made use of the table given by M. Simon in his Note sur le Groupe des Diolenii. This group, so far as is yet known, is confined to Australian and Malesian islands.
${ }^{3}$ Tara $=$ Atrytone Keyserling, preoccupied.
21. A cunstriction dividing the thoracic part into a shorter anterior and a longer posterior portion. Synemosyna Hentz.
22. Sternum prolonged between cosae I. ..... 25
23. Sternum not prolonged between coxae I. Agorius Thor.
24. Pedicle of the abdomen not visible from above. . ${ }^{1}$ Damoetas Peckham.
25. Pedicle visible from above. ..... 27
26. Sternum scarcely as wide as intermediate coxae; labium at least twice as long as wide Leptorchestes Thor.
27. Sternum wider than intermediate coxae; labium as long as wide.
Synageles F. S.
28. Clypeus very low in fron', high below anterior lateral eses, ex- tended and a little curved backward on the sides, forming an acute angle below the eyes of the second row.....Ascyltus Karsch.
29. Sides of clypeus forming no acute angle. ..... 31
30. Body short, convex, beetle like; cephalic part not, or scarcely so long as thoracic ..... 33
31. Body not beetle like in form ${ }^{2}$ ..... 35
32. Body strongly convex both longitudioally and transversely; abdo- men high and widely truncated in front, where it is received into an excavation of the cephalothorax; eyes of the second row further from the dorsal than f. om the lateral eyes.
Coccorchestes Thor.
33. Anterior part of abdomen not overlapped by cephalothorax; eyes of second rox half way between dorsal and lateral eyes.
Omoedus Thor.
34. C-phalic part as long as, or longer than thoracic ..... 37
35. Cephalic part short=r than thoracic ..... 61
36. Eyes of the second row at least half as large as eyes of the third row Cocalus C. K.
37. Eyes of second row less than one half as large as eyes of the third row ..... 39
38. Quadrangle of eyes longer than wide; tibia I greatly dilated.
Chirothecia Tacz.
39. Quadrangle as wide as, or wider than long; tibia I not dilated ..... 41
40. Cephalic and thoracic parts equal. ..... 43
41. Cephalic part longer than thoracic ..... 55
42. Legs III and IV without spines. ..... Ballus C. K.
43. Spines on the four pairs ..... 45
44. Third leg longer than fourth ..... 47
45. Third leg shorter than fourth ..... 49

[^2]47. Quadrangle of $t$ e eyes wider behind: third ler much longer than fourth ${ }^{1}$ Neatha E. S.
49. Quadrangle of eyes wi ler in front; third leg but little longer than fourth Ciris C. K.
49. Cephalothorax not wider than third row of eyes at that place ..... 51
50. Cephalothorax wider than third sow of eyes at that plice: lateral eyes of first row well separated from middle eyes... Pirithous Keys.
51. Anterior row of eyes curved; later , l widely separate I from middle eyes ..... 53
52 Anterior row of eyes almost straight; literal but little emoved from middle eyes...................................... ${ }^{2}$ Bianor Peckham.53. Quadrangle of еуез equally wide in front and behiad: meta'arsus+ tarsus IV longer than patella + tibia; tibial and motatarsalspines to the base, on legs III aud IV............... Portia Kirsch.
54. Quadrangle of eses wider behind than in front; meta'arsus + tarsus IV, equal to or short-r than patella + tibia; only circles of spines at the extremities of the tibiae and metatarsi of. legs III and IV. Eris, C. K.
55. Quadrangle of eyrs wider in front than behind........ ${ }^{3}$ Iona Peckham.
56. Quadrangle of eyes not wider in front ..... 57
57. Cephalothorax as high behind as it is long Mago Cambridge.
53. Cephalothorax not as hig's b hind as long ..... 59
59. Fir:t row of eyes straight, touching ..... Neou E. s.
60. First row of eyes curved, sepa ated by nearly equal distanc s from each other Homalattus White.
61. Quadrangle of eyes longer than wide ..... 63
62. Quadrangl+if eyes wider than long ..... 65
63. Quadrangle of eyes $m$ re than twice as long is wide.
Ligonipes Karsch.
64. Quadrangle of eyes one fourth or one fifth only longer thanwide.Plexippus C. K.
65. A more or less prominent tabercle between the dorsal eyes.
Opisthoncus L. K.
66. No tubercle present ..... 67
67. Ce, halothorax short and very high, thoracic part much dilated and f,lling steeply from cephalic p'ate; cephalothorax wider than the third row of eyes ..... ${ }^{5}$ Amyens C. K.
68. Form of cephalothorax unlike the above ..... 69
69. Quadrangle of eyes wifer in front than behind ..... 71

[^3]70. Quadrangle as wide or wider behind. ..... 91
71. Tibia + patella III shorter than tibia + patel'a IV ..... 73
72. Tibia + patell، III longer than tibia + patella IV ..... 81
73. Metat,rsus + tarsus IV equal to or shorter th $\ddagger n$ patella + tibia IV. ..... 75
74. Metatarsus + tarsus IV longer than tibia + patella IV. ..... 77
75. Metatarsus IV spined only at extremity lauharulla Keys.
76. Metatarsus IV spined to base Astia L. K.
77. Ctphalothorax wider than third row of eyes ..... 79
\%8. Cephalothorax not wider than third row of eyes....Sinnamora Keys.
79. Legs moderately long; metatarsus IV with sfines. Boethus Thor.
80. Legs extremely long; metatarsus IV without spines Lagnus L. K.
81. E-jes of the sec nnd row more than $\frac{1}{8}$ as large as dorsal eyes; tibiæ spioed above ${ }^{1}$ Linus Peckham.
82. Eyes of second row less than $\frac{1}{3}$ as large as dorsal eyes; tibiæ not not spiued ab $\quad$ ve ..... 83
83. Cephalothorax not wider than third row of eyes ..... 85
84. Ceph lothorax wider than third row of eyes ..... 87
85. Cephalothorax narrow in front, wider and rounded behind; quad- rangle of eyes scarcely wider than long ........ Prostheclina Keys.
86. Cep alothorax with sides nearly parallel; quadrangle of eyes one- third wider th in long ..... Saitis E. S.
87. Abdomen very long and slender, much longer than cephalothorax ; cephalothorax much wider than third row of eyes ...Viciria Thor.
88. Abdomen rather short ; cephalothorax but little wider than third row of eyes ..... 89
89. Abdomen a hout as wide as long; eyes of second row further from lateral than from dorsal eyes Margaromma Keys.
90. Ablomen slender; eyes of secoad row half way between lateraland dorsal eyes.Therosa Keys.
91. Quadrangle of eyes equa'ly wide in front and behind; tibia + patella III longer than tibia + patella IV. ..... 93
92. Quadrangle of eres wider behind ; or equally wide in front and behind, with tibia + patella III equal to, or shorter than tibia + patella IV. ..... 99
93. Eyes of the tlrird row distant by at least double their diameter from the margin of the cephalothorax ? Zenodorus Peckham.
94. Eyes of the third row not, or only a little removed from the mar- gin of the cepha'othorax ..... 95
95. Metatarsus + tarsus IV equal to, or shorter than, tibia + pa- tella IV ..... $9 \pi$
96. Metatarsus + tarsus IV longer than tibia + patella IV.
Ergane Keys.

[^4]97. Legs III and IV nearly equal; eyes of third row further from each other than from lateral borders; anterior lateral well separated from large middle eyes.....................................Cytaea Keys.
98. Third legs longer than fourth : eres of third row equally far fromeach other and from lateral borders; anterior lateral very nearlarge middle eyes.Habrocestum E. S.
99. Quadrangle of eyes equally wide in front and behind; anterior row of eyes straight ..... 101
100. Quadrangle wider behind; or, if equally wide in front aud behind, anterior row curved ..... 117
101. Coxae I touching. Hyctia E. S.
102. Coxae I separated by width of labium ..... 103
103. Tibia IV as large as patella at base, cylindrical, parallel or a little enlarged at extremity. ..... 105
104. Tibia IV narrower than patella at base ; slightly enlarged and a little compressed at extremity ..... 109
105. Quadrangle of eyes as long as wide ; fore central eyes excessively large, at least five times as large as the lateral.......... Mithion E. S.
106. Quadrangle of eyes wider than long; fore central eyes not exces- sively large ..... 107
107. Thoracic part a little dilated; coxæ IV longest....... Menemerus E. S.
108. Thoracic part parallel; coxæ I largest. ..... Bavia E. S.
109. Patella III as long as or longer than patella IV; tibia III much shorter than tibia IV, but more robust. ..... 111
110. Pate'la III shorter than Patella IV; tibia III more slender than tıbia IV. ..... 113
111. Clypeus at least $\frac{1}{3}$ as wide as large middle eyes; patellae always without spines. Euophrys C. K.
112. Clypcus very narrow, scarcely $\frac{1}{5}$ as wide as large middle eyes; patellae armed with two spines Cyrba E. S.
113. Sternum wider than intermediate coxae; ( $\delta$ ) femur of palpusarmed with a strong apophysis.................. Heliophanus C. K.
114. Sternum of same width or narrower than intermediate coxae; femur of palpus unarmed ..... 115
115. Thoracic part twice as long as cephalic. Phlegra, E. S.
116. Thoracic part only $\frac{1}{8}$ longer than cephalic. ..... Attus Walck
117. Quadrangle of eyes equally wide in front and behind ..... 119
118. Quadrangle of eyes wider behind. ..... 133
119. Anterior row of eyes strongly curved, a straight line from the summit of the middle eyes cutting the lateral eyes through, or $\mathrm{b}=$ low the middle. Scaea C. K.
120. Anterior row of eyes slightly curved, a straight line from sum- mit of middle eyes cutting lateral eyes above the middle ..... 121
121. Legs without fem ral and tibial spines; ( $s$ ) falces l ng and hori- zontal. Epiblemum Hentz
122. Legs having femoral and tibial spines on the four pairs ..... 123
123. Eyes of the third row nearer to each other than to lateral bor- ders. ..... Maevia E. S.
124. Eyes of the third row equally distant from lateral borders and from each other. ..... 125
125. Eyes of the second row nearer the dorsal than the lateral eyes,
Selaophora Keys.
126. Eyes of second row half-way between dorsal and Jateral eyes, or nearer the lateral. ..... 127
127. Cephalothorax only $\frac{1}{6}$ larger than wide; scarcely wider than third row of eyes; first legs not stouter than the others,
${ }^{1}$ Bootes Peckham,
128. Cephalothorax at least $\frac{1}{5}$ longer than wide; first legs stouter than the others ..... 129
129. Cephalothorax considerably wider than third row of eyes; moder- ately high. ..... 131
130. Cephalothorax only slightly wider than third row of eyes; very high and convex. Jotus Keys.
131. Second row of eyes half-way between dorsal and lateral eyes; falces net diverging. Sandalodes Keys.
132. S $\in$ cond row of eyes nearer the lateral than the dorsal eyes; falses diverging Hyllus C. K.
133. Anterior row of eyes very strongly curved, a straight line from the summit of the middle eyes cutting only the lower borders of the lateral eyes. ${ }^{2}$ Elurillus E. S
134. Anterior row of eyes straight or only moderately curved, a straight line from the summit of the middle eyes cutting the lateral eyes uot below the middle. ..... 135
135. Clypeus as wide as large middle eyes ..... 137
136. Clypeus not so wide as large middle eyes. ..... 139
137. Cephalothorax as wide as or barely narrower than long. Sobara Keys.
138. Cephalothorax at least $\frac{1}{2}$ longer than wide. Mopsus Karsch.
139. Tibia + patella III shorter than tibia + patella IV ..... 141
140. Tibia + patella III as long as or longer thau tibia + pa'ella IV ..... 153
141. Coxae I separated by width of labium at base. ..... 145
142. Coxae I touching or nearly touching. ..... 143
143. Cephalothorax short, high, convex; relative length of legs $1,4,2$, 3 ; abdomen short. Simaetha Thor.
144. Cephalothorax elongated, flattened; relativ - Jength of legs $1,2,3$, 4; abdomen long Marptusa Thor.
145. Trochanter IV very long, diverging, visible from above; tarus and metatarus IV as thick as tibia and patella Vllenus E. S.

[^5]146. Trochanter IV short, not visible from above; metatarsus and tar- sus IV more slender than tibia and patella ..... 147
147, Metatarsus IV havirg only a circle of spines at extremity (some- times laciing these) ..... 149
148. Metatarsus IV armed to base ..... 151
149. Anterior row of eses rather strongly curved; l-gs very hairy. Dendryphantes C. K.
150. Anteriur row of legs straight or almest straight; legs almost glab- rous. Icius E. S.
151. Eyes of second row double as far from dorial as from lateral ryes Phidippus C, K.
152. Eyes of second row almost half-way betweea dorsal and lateral eyes. Philaeus Thor.
153. Interval between lateral and middle eyes of first row as wide or nearly as wide as the diameter of the lateral ..... 155
154. Lateral separated by a space not more than $\frac{1}{2}$ as wide as their diameter from the middle eyes ..... 15 \%
155. Cephalothorax dilated toward the front; clypeus very low, less than $\frac{1}{4}$ as wide as the laree middle eyes Euryattus Thor.
1j6. Cephalothorax with thoracic part very strongly dilated; clypeus about $\frac{1}{2}$ as wide as large middle eyes. ${ }^{1}$ Thyene E.s.
157. Metatarsus + tarsus IV equal to tibia + patella IV ..... 159
158. Metatarsus + tarsus IV shorter than tibia + patella IV.
Pellenes E. S.
159. Seconci legs longer than the first ${ }^{2}$ Hypohlemum Peckham.
160. First legs longer than the secund. Hasarius E. S.
161. Cephalic and thoracic parts on the same plane. ..... 163
102. Cuplic and thora $p$ on different plaves. 162. Cephalic and thoracic pirts on different planes ..... Jelskia Tacz.
163. Thoracic part but little longer than cephalic ..... 165
164. Thoracic part much longer than cephalic . Lyssomanes Hentz.
165. First pair of legs longest; cephalic part very convex, sides par-allelAthamas Cambridge.
166. Third pair of legs longest; cephalic part plane, sides convergingbehind
${ }^{3}$ Epeus Peckham.

[^6]
## SUB-FAVILY ATTINE.

## DIOLENIUS Thorell, 1870.

Syn.: 1870. Diolenius Thorell, on Europ. Spid. Part I, p. 203.
1878. " Id., Ragni Malesi e Papuani, Part II, p. 215.
1881. " L. Косн, Arachniden Australiens, p. 1240.

Thorell (in Europ. Spid., Part I, p. 203,) says that this genus is characterized by the long trochanters of the fore legs.

## * TARA N.

Syn.: 1882. Atrytone Keyserling, Arachniden Australiens, p. 1378.
Cephalothorax low; one quarter longer than wide, in front moderately contracted, behind rounded, wider at the third row of eyes, plage above.
Clypeus very low.
Quadrangle of eyes wider than long, as wide before as behind, placed in front of the middle of the cephalothorax. Dorsal eyes further from each other than from the margin of the cephalothorax. Anterior row of eyes moderately recurved, eyes close together; small medium eyes further from the dorsal eyes than from the lateral anterior eyes.
Falces wide, short, not diverging.
Maxillae dilated in front.
Sternum plane, longer than wide.
Abdomen elongated, above level.
Leg.s 1, 4, 2, 3, Coxa and trochanter of first pair very much elongated. Patella and tibia of the third shorter than patella and tibia of the fourth; Metatarsus and tarsus of the fourth shorter than the patella and tibia.

LYSTROCTEISA Simon, 1884.
Lystrocteisal E Simon. Note sur le Groupe des Diolenii; ('omptes Rendus de la Société Entomologique de Belgique. 1884.
Related to Diolenius, but distinct by the following characteristics: ocular qua irangle longer than the thoracic part, much longer than wide, convex in front, flattened iu the middle; eyes of the third row very prominent, larger and plainly fusther apart than the lateral anterior; eyes of the second row much nearer the lateral anterior; trochanter J. cylindrical, a little

[^7]shorter than the coxa, much shorter than the femur; femur very wide, claviform; tibia almost globular, compressed below with two rows of long spines; metatarsus slender, with two pairs of long spines.

## CHALCOLECTA Simon. 1884.

Chalcolecta E Simon. Note sur le Groupe des Diolenii; Cımptes Rendus de la Société Entomologique de Belgique. 1884.
Ocular quadrangle at least as long as the thoracic part, of the same form as that of Diolenius; anterior row of eyes less curved than in that genus. Trochanter I shorter than the coxa (particularly \&) and much shorter than the femur; femur and tibia I very long, compressed, parallel, not dilated, and tibia provided below with two rows of at least $10+10$ strong spines, alternat-ly shorter and longer; metatarsus shorter than the tibia, of shortened, compressed and angular ${ }^{1}$, \& cylindrical and provided below with three or four pairs of long spines; relative length of legs $1,4,3,2$.

DISCOCNEMIUS Thorell. 1881.
Discocnemius Thorell, Studi sui Ragni Malesi e Papuani, III, p. 428.
Cephalothorax long, moderataly high, cephalic part not abruptly higher than thoracic, limite 1 by a transverse depression.
Clypers very low.
Sternum not narrower than the coxae, not usually projecting between those of the first pair.
Eyes area occupying about half the length of the cephalothorax; quadrangle at least as wide behind as it is long; anterior middle eyes very large; eyes of the second row almost in the middle, between the posterior and the anterior lateral eyes; posterior eyes scarcely or not higher by their own diameter than the anterior lateral eyes.
Mcaxillae sub-parallel, about twice as long as wide, and about twice as long as the lip. Lip longer than wide, sub-truncated at the extremity.
Legs 4, 1, 2, 3, slender, except the first pair, which is robust (excepting the metatarsus and tarsus); tibia especially wide and compressed, and underneath furnished with a medium longitudinal fascia of dense, long hairs, and two rows of spines, patella and trochanter not usually longer.
Abdomen long.
Spinnerets six, superior and inferior not differing much in length, last joint short.
Type: D. lacertosus.
Related both to Diolenius Thorell and Chirothecia Tacz.

[^8]
## SALTICUS (Latr.) 1804. Simon.

Syn.: 1804. Salticus Latr., Nouv. Dict. d'Hist. Nat., XXIV, p. 13̃̃, (ad partem).
1805. Attus Walck., Tabl. d. Aran., p. 22 (ad partem).
1837. Pyrophorus C. Косн, Uerers. d. Arachn.-Syst., 1, p. 29.
1846. Toxeus C. Kосн, Die Arachn., XIII, p. 19.
1864. Salticus [Saltica]: Sub-gen. Pyrophorus [Pyrophora] Sim. H. N. D. Araignees, p. 336.
1869. Pyroderes Id., Monngr. d. Attid., p. 248 (714).
1870. Salticus Thorell, On Europ. Spid. I, p. 208.
1871. " Sim., Révis. d. Attid.
1876. " ID., Arachn. de France, III, p. 6.

187\%. " Thorell, Studi Ragni Malesi e Papuani, I, p. 213.
1878. " Lebert, Die Spinnen der Schweiz, p. 296.
1878. " Tacz., Aranéides du Pérou, Bull. Soc. Imp. des Nat. de Moscou, LIII, 4, p. 371.
1879. " L. Koch, Arachniden Australiens, p. 1055.
1880. " Karsch, Arachnol. Blärter VIII, Zur Kenntniss der Attiden, in Zeitsch, f. d. gesammt. Naturwissensch., LIII p. 395.
1880. Toxeus Id, ibid., pp. 393, 394.

Cephalothorax elongated; cephalic part high, parallel, level, almost as wide as long, its posterior angles rounded; thoracic part narrower, lower, on a different plane, rounded or obtusely truncated behind.
Clypeus very narrow, with sparse hair.
Eyes of the face very unequal, sub-touching, in a straight line, with some hairs around them; dorsal eyes as large as the lateral, a little further apart, forming with them a group wider than lnng, not, or scarcely projecting.
Sternum very narrow, projecting between the anterior coxæ.
Falces ( $\ddagger$ ) very long, flat above, horizontal; inferior border of the groove with a continuous row of strong teeth. (\&) Falces short, robust, vertical.
Maxillo long, square at the extremity, with the superior external angle projecting a little.
Lip much longer than wide, almost parallel, truncated or slightly hollowed.
Palpus ( © ) slender; tibia as long and wider than the patella; tarsus oval, rather narrow, and truncated; bulb discoidal, occupying only the inferior part of the tarsus. (i) Palpus with the tibia and tarsus enlarged in the form of an oval palette.

Legs 4, 1, 3, 2: Third and fourth pairs unarmed; tibiæ and metatarsi of the first and second pairs with two rows of inferior spines; tibia of the first much longer than the patella; patella and tibia of the third much shorter than tine patella and tibia of the fourth; tarsus and metatarsus of the fourth a little shorter than the patella and tibia.

LEPTORCHESTES (Thorell) 18\%0. Simon.
Syn.: 1832. Syliemosyna Hentz, On North Amer. Spid., p. 108 (ad partem).
1837. Salticus C. Косн, Uebers. d. Arachn.-Syst., 1, p. 29 (ad partem.)
1869. " Sim. Monogr d. Attid., p. 6 (16), 241 (707) (ad partem).

18i0. Leptorchestes Thorell, On Europ. Spid., I, p. 209 (ad partem).
1871. " Sim., Révis. d. Attid. (ad partem).
1876. " Id., Arachn. de France, III. p. 10.
1878. " Lebert, Die Spinnen der Schweiz, p. 297.
1879. " L. Косн, Arachniden Australiens, p. 1057.

Cephalothorax plane, but little elevated, farallel, rounded or obtusely truncated behind; a slight transverse depression separating the cephalic part.
Clypeus very narrow.
Eyes of the face very unequal, in a straight line, touching. Dorsal eyes of the same size or barely smaller than the lateral, forming with them a group much longer than wide.
Sternum at least as narrow as the intermediate coxæ, projecting between the anterior сохæ.
Lip almost twice as long as wide, parallel, terminating in an obtuse point. Falces robust, short, vertical in both sexes.
Palpus ( f ) not robust; tibia short with an external apophysis; bulb simple.
Legs 4, 1, 3, 2; third and fourth pairs unarned: (8) metatarsi of the first and second with some inferior spines; ( 8 ) tibiæ and metatarsi of the first and second presenting two rows of inferior spines; patella and tibia of the third much shorter than patella and tibia of the fourth; metatarsus and tarsus of the fourth shorter than the patella and tibia.

SYNAGELES Simon. $18 \% 6$.
Syn.: 183\%. Salticus C. Koch, Uebers. d. Arachn.-Syst., I, p. 29 (ad partem).
1869. " Sry., Monogr. d. espéces Europ. de la fam. d. Attides, p. 241 (707) (ad partem).

1870, Leptorchestes Thorell. On Europ. Spid. I, p. 209 (ad partem) 1871. " Sim.
1876. Synageles Id., Arachn. de France, III, p. 14.
1883. 6 ID., Arachn. de L'Ocean Atlantique, Ann. Soc. Ent.• de France 1862, p. 261.

Cephulothorax flat, but little elevated, very much elongated, parallel, obtusely truncated behind; a slight horizontal depression separating the cephalic part.
Eyes: The dorsal eyes situated a little beyond the middle of the cephalothorax, scarcely projecting above, of the same size as the lateral, and forming with them a group much longer than wide. Eyes of the face very unequal, touching, forming a straight line, surrounded by fine circles of hairs.
Clypeus very narrow; hairs forming the beard sparse.
Sternum oval, more slender at the two extremities, wider in the middle than the intermediate coxae, projecting between the anterior coxae.
Lip at least as wide as long, semi-circular, or in a very obtuse triangle.
Maxillce extending much beyond thé lips but nevertheless rather short and very wide. Square at the extremity.
Legs: Fourth legs the longest; the three auterior pairs equal or almost equal; the two posterior pairs unarmed; ( $\ddagger$ ) metatarsi of the first and second alone prorided with some inferior spines; ( $\&$ ) tibiae and metatarsi of the first and second presenting two rows of inferior spines; tibia of the first robust, of the same length or scarcely shorter than the patella; patella and tibia of the third much shorter than patella and tibia of the fourth; metatarsus and tarsus of the fourth shorter than patella and tibia.
Falces (oे \&) robust, short, vertical.
Palpus ( $\delta$ ) not very robust; tibia very short, provided with an external apophysis; tarsus obtuse oval; bulb simple, reaching at least the superior third of the tarsus; (i) rather slender; tarsus slightly enlarged aud cylindrical.

## AGORIUS Thorell. 187\%.

Agorius Thorell, Studi sui Ragni Malesi e Papuani, I, p. 216. Cephalothorax about twice as long as wide, the posterior part plainly narrowing a little, almost rertical towards the sides, rather low, the cephalic part scarcely higher than the thoracic.
Clypeus very low, less than $\frac{1}{4}$ the diameter of the anterior middle eyes, without thick hairs.
Sternum much wider than the coxæ, not projecting between the coxæ of the first pair.
Eyes: Are a large, occupying almost half the length of the cephalothorax. Quadrangle only a little wider than long, at least as wide in front as behind. Avterior row of eyes rather strongly curved upward, middle eyes plainly visible when the cephalothorax is looked at from above, touching, the lateral well separated from the middle, eyes of the second row small, and a little further from the posterior eyes,
which are but little smaller than the anterior lateral eyes, than from these; posterior eyes further from each other than from the margin of the cephalothorax.
Falces small, vertical (at least in \&).
Maxillae diverging a little, sub-ovaté, the extremities appearing rounded, almost twice as long as the lip, which is a little wider than long, narrowing toward the apex.
Legs exceedingly slendtr, long: 4, 1, 3, 2; trocharters, at least of the fourth pair, much longer than thick; space between the coxæ of the first pair nearly as wide as the sternum; posterior tibiæ and metatarsi without spines. First pair with patellae very long, almost as long as the femora, and the tibiæ and metatarsi, on the contrary, very short. Two claws, small, slender, bent, strongly curved at the apex, armed with teeth, especially small and short in the tarsi of the first pair; claw tufts distinct.
Abdomen slender. sub-cylindrical; pedicle short, not articulated.
Maxillae longr, sub-cylindrical.
Pubescence fine and sparse.
Type. A. gracilipes.
This genus is related t) Synemosyna Hentz, Salticus Latr., Leptorchestes Thor., and especi tlly to Syaagels Sim., differing from this genus in not having the sternum produced between the coxae of the first pair, in the quadrangle of the eyes being shorter, and in the structure of the first pair of legs, which resemble those of Diolenius Thor. However, in Diolenius, it is the trochanters which are elongated, not, as in Agorius, the patellae.

## ' DAMCETAS N.

Syn.: 1879. Scirtetes L. Koch, Arachn. Australiens, p. 1070.
Cephalothorax almost twice as long as wide, slightly rounded on the sides contracted equally toward the anterior and posterior, convex above. Clypeus low, equaling in h-ight the radius of the lateral eye of the first row.
Quadrangle of eyes longer than wide, wider behind than in front; third series of eyes as wide as cephalothorax. First row of eyes slightly recurved, placed close together. Eyes of the third row more widely separated from each other than they are separated from the margin of the cephaiothorax. The middle eyes are much furtber from the posterior eyes than they are from the lateral eyes of the first row.
Maxillae convex, margin in fro t a little rounded. Lip scarcely equals half the length of the maxilla, convex, contracted toward the anterior, the tip rounded and swollen.
Sternum long and contracted, convex, projecting between the first pair of thighs.

[^9]Abdomen twice as long as wide; anterior part limited by a transverse impression, covered by a thin skin; posterior part convex, clothed with a hard dorsal integument.
Legs spined, 1, 4, 2, 3: 1 and 4 equal, and 3 and 4 differ slightly in leng'h; first pair stouter than the others. Patella with the tibia of the third pair storter than the same articulations of the fourth pair; the metatarsus and the tarsus of the fourth pair are shorter than the patella with the tibia.

## JANIGENA Karsch. 1880.

Syn.: 1846. Janus C. Kосн, Die Arachn., XIII, p. 21. (ad partem).
1880. Janigena Karsch, Arachnol. Blätter VIII, Zur Kenntniss der Attiden, in Zeitschr, f. d. gesammt. Naturwissensch., LIII p. 393. The cephalic part sharply marked off, but not higher than the thoracic part, very flat and wide. The quadrangle of the eyes is wider behind than in front, the palpus over-reaches the very short mavdible, also in the male in length in wide contrast to Toxeus and Synemosyna. The two single barren typical specimens do not admit of a more exact definition. Type, Janus melanoc phalus (K). As the generic name Janus was preoccupied, (Verany, 1844, Gastropoda) Karsch pruposed the name Janigena.
Thorell. in his review of the genera of European spiders, p. 36, had called attention to the fact that the name Janus was preoccupied, even before Verany, 1844. (Janus Steph. [Hymenopt] 1835). See remarks on the genus Syner.osyna under that genus.

## SYNEMOSYNA Hentz. 1832.

Syn.: 1832. Synemosyna Hentz, on North Amer. Spid., p. 108.
1846. Janus Koch, Die Arachn., XII I, p. 21 (ad partem).
1870. Leptorchrstes Thorell, on Europ. Spid., I. p. 209 (ad partem).
$1876 . \quad$ " Sim., Arachı. de France, III, p. 10 (ad partem.)
1877. Synemosyna Thorell, Studi Ragni Malesi e Papuani, I, p. 198.
1878. Janus Tacz., Arané des du Pérou, Bull. Soc. Imp. des Nat. de Moscou. L III, 4, p. 372.
1879. Synemosyna L. Косн, Arachniden Australiens, p. 1052.
1880. Synemosyna Karsuh, Arachnol. Blätter VIII, Zur K^nntniss der Attiden, in Zeitschr. f. d. gesammt. Naturwissensch., L. III, p. 395.
1881. " Thorell, Studi Ragni Malesi e Papuani, III, p. 406.

Eyes eight, unequal, in three rows, the first composed of four eyes, the two middle ones largest, the second composed of two small ones placed nearer the first than the third, which is composed of two larger eyes.

Falces short in the females.
Maxillae slightly inclined toward the lip, truncated at the tip.
Lip short, rounded.
Legs slender, fourth pair longest, the other three variable.
Abdomen contracted near the middle: body nodose, elongated.
Type, S. formica Hentz.
S. formica, upon which species Hentz founded this genus, is undoubtedly identical with Janus gibberosus Koch, which was used to form the genus Janus. Both Hentz and Koch had the spider from Pennsylvania. The other species of Janus described by Koch, J. melanocephalus, has been made the type of the genus Janigena by Karsch.
Hentz, when defining his genus Synemosyna, wrote " cheliceres short in emale," and in contrasting it with Myrmecia notes that in the genus (Myrmecia) "the cheliceres are large in this, (Synemosyna) they are small at least in the female." When describing his typictl species - S. formica he states that "the cheliceres are large only in the male." A'l the other species placed by him in this genus, both in the male and fema'e have the cheliceres short. Now as a matter of fact both sexes in S. formica have short cheliceres. Mr. Emerton first called attention to the error in his notes to Burgess' edition of Hentz's arachnological writings. We have seen a good many males of this spider and all had the short falces. If S. formica represents Hentz's genus, then nearly, if not all, the species placed here by Messrs. L. Koch, Thorell and Karsch, belong in another genus.

## RHOMBONOTUS L. Kосн. 1879.

Rhombonotus L. Koch. Arachniden Australiens, p. 1067.
Cephalothorax almost twice as long as wide, coutructed equally in front as behind, slightly convex.
Clypeus about the radius of the middle eyes of the first row.
Quadrangle of eyes longer than wide, narrower in front than bohind; the third row of eyes placed behind the mildle of the cephalothorax and above the lateral declivity of the sams, more widely sep rated from one another than from the margin of the cephalothorax. The first row of eyes slightly recurved and close together. The middle eyes are nearer the lateral eyes of the first ros than the eyes of the third row.
Maxillae moderately convex, anterior margin round.
Labium half as long as the maxilla, a little contracted toward the anterior, the tip rounded.
Sternum convex, long, contracted, projecting between the anterior thighs
Legs 4, 1, 2, 3.: the second and third pairs of equal length, the first pair more robust than the others. Patella with the tibia of the third shorter than the patella with the tibia of the fourth. The fourth leg has the metatarsus with the tarsus longer than the patella with the tibia.

Abdomen cylindrical, constricted in front of the middle by a transverse impression.

## OMOEDUS Thorell. 1881.

Omoedus Thorell, Studi sui Ragni Malesi e Papuani, III, p. 668.
Cephalothorax high behind, anteriorly a little dilated above, the back therefore wide, slantiog in front of the posterior eyes, behind them nearly level, strongly rounded behind, whea looked at from above, only slightly convex transversely; the posterior slope almost vertical, and transversely concave.
Clypeus rather high.
Eyes quadrangle much wider than long, not occupying half the length of the cephalothorax; almost rectangular; anterior row usually curved; eyes of the second row half-way between the posterior eyes and the anterior lateral eyes; posterior eyes at least their own diameter higher than the anterior lateral eyes, and further from each other than from the lateral borders.
Sternum wider than the coxae, not projecting between the widely separated coxae of the first pair.
Falces short, sub-vertical.
Maxillae long, narrow at the base, sub-ovate. Lip scarcely or not wider than long, apex somewhat rounded.
Palpi those of the female not dilated nor flattened toward the apex.
Legs rather short, (8) 4, 3, 1, 2 (or 2,1 ?); tibia with patella of the fourth pair longer than tibia with patella of the third.
Abdomen short, a little flattened, the anterior margin truncated, covered with delicate skin.
Spinnerets six, the superior much more slender than the inferior.
Type O. niger.
This genus resembles Coccorchestes Thor., differing from it especially in having the body sub-flattened, not strongly convex. It differs from ordinary Attidae much less than Coccorchestes.

## COCCORCHESTES Thorell. 1881.

Coccorchestes Thorell, Studi sui Ragni Malesi e Papuani, III., p. 671.
Cephalothorax slanting in front of the posterior eyes, very high behind them and nearly level or ascending, the posterior margin of the back widely truncated.
Clypeus high, inclined backward.
Eyes quadrangle wider than long, scarcely or not occupying half the greatest length of the cephaluthorax; anterior row with the eyes sub-touching, ouly slightly curved upward, ey es of the second row further from the posterior eyes than from the antcrior lateral eyes; posteriur eyes more than their own diameter higher than anterior lateral eyes.

Sternum wider than the coxae, not projecting between the separated coxae of the first pair.
Falces short, sub-vertical.
Maxlllae sh rrt, narrow at the base, wide at the apex, almost ovate triangular. Lip a little lunger than wide, ruunde at apex.
Palpi of the female a little dilated and usually convex toward the apex. Legs moderately short, 4, 1, 2, 3(3,2), femora robust and compressed.
Abdomen short, almost ovate triangular, high and widely truncated in front, anterior slope convex, and received into the excavation of the cephalothorax, covered with hard shining scales forming a shield.
Spinnerets six, the superior long r and more slender than the inferior.
The whole spider is very convex, koth longitudinally and transversely when looked at from above strongly resembling a beetle.

HOMALATTUS White. 1841.
Syn.: 1841. Homalattus White. Description of new or little known Arachn., in Ann. and Mag. of Nat. Hist., VII, p. 476.
1848. Rlanis C. Koch, Die Arachn., XIV, p. 86.
1870. Rhene Thorell, on Europ. Spid. I, p. 37.

187\%. Homalattus Id., Studi sui Ragni Mal. e Pap., I, p. 289.
1878. Hhene Tacz., Aranéides du Pérou, Bull. de la Soc. Imp. de Moscow, LIII, 4, p. 289.
1879. Humalattus L. Косн. Arachniden Australiens, n. 1083.
1880. " Karsch, Arachnol. Blätter VIII, Zur Kenntniss der Attiden, in Zeitsch. f. d. gesammt. Naturwissensch., LIII, p. 396.

Cephalothorax flat, transverse, not so wide as the body, covered like it with papillae.
Eyes eight, on short elevations of thorax; may be considered as placed in three lines, two of which are approximate, the third bein; distant; the first line, which is somewhat bent, contains four eyes, placed on the front margin of the cephalothorax at nearly equal distances from each other, the two intermediate eyes are much the largest. The second live contains two very minute eyes, somewhat removed from the edge of the thorax; they are placed rather nearer the outer eye of the first line than the outer is to the intermediate; the third line contains two eyes, one on each side of the margin of the thorax, the space between the outer eye and the first line being equal to the distance between the outer eyes of the first line.
Abdomen as broad as long; in front straightish; behind somewhat pointed; the sides rounded; it is flat and compressed, and somewhat convex above.

## NEON SImon. 1876.

S'yn.: 1869. Attus Sım., Monogr. d. espèces Europ. de la fam. d. Attides, p. 14 (24) (ad partem).
1871. " Id., Revis d. Attid.
1872. Euophrys Thorell, on European Spiders, II, p. 404.
1876. Neoll Sim., Aracha. de France, III, p. 208.
1880. " Karsch, Arachnol, Blätter VIII, Zur Kenntniss der Attiden, in Zeitsch. f. d. Na urwissensch., LIII, p. 397.
Ccphalothorax not high; cephalic part a li tle lunger than the thoracic: the latter very slightly contracted and widely truncated.
Eyes of the face touching, forming a straight line. Dorsal eyes at least as large (often larger) than the lateral, very convex, not prominent; as far apart as the lateral eyes, since the sides of the quadrasgle are parallel.
Clypeus less than half as wide as the middle eyes, almost glabrous.
Sternum triangular, much wider than the intermediate thighs.
Legs short; those of the fourth pair the longest; those of the first and third pairs nearly equal; those of the second pair the shortest; first pair a little thicker than the others; third and fourth pairs without spines; first and second pairs pr senting below two rows of tibial and metatarsal spines usually long and bristle-like. Tibia and patella of the third shorter chan tibia and patella of the fourth; tarsus and metatarsus of the fourth very slightly shorter than the patella and tibia.
Falces obliquely inclined, short, slender, taken together narrower than the two middle eyes.
Integument ornamented.
Spinnerets the superior ones longer than the inferior, and more slender; very far apart. leaving visible the inferior ones to the base, formed of two articulations, the second very short.

> *IONA N.

Syn.: 1882. Erasmia Keyserlivg, Arachniden Australiens, p. 1350.
Cephalothorax one third longer than wide, a little c intracted toward the front, behind rounded, not wider at the dorsal eyes, above plain.
Clypeus half the diameter of the large eyes.
Quadrangle of eyes wider than long; wider in front than behind; dorsal eyes placed a little behind the middle of the cephalothorax, almost further from each other than from the margin of the cephalothorax. First row of eyes slightly recurved and very close together. Small median eyes half way between the anterior lateral and the dorsal eyes.
*Iona is substitued for Erasmia, the latter name being preoccupied.

Falces short, not diverging.
Labium half as long as the maxilla; slightly contracted anteriorly.
Sternum oval; one third longer than wide.
Legs 1, 4, 3, 2. Third and fourth equally long. First pair as stout or a little stouter than than the others. Patella and tibia of the third longer than the patella and tibia of the fourth. Metatarsus and tarsus of the fourth longer than the patella and the tibia. Metatarsus of the fourth without spines.
Abdomen long, ovate.

## MAGO Cambbidge. 1882.

Mago O. P. Cambridge. Proc. Zool, Soz., London, May 16, 1882, p. 432.
Cephalothorax as high behind as it is long; the posterior slope curved inwards, but almost perpendicular; profile of upper side; of caput slightly convex, and sloping a little forward. The caput is exceedingly large, absorbing, in fact, almost the whole cephalothorax. Looked at from above, its upper surface forms nearly a square; the sides are perpendicular.
Height of clypeus less than the diameter of the fore central eyes.
Ocular area slightly broader than long, and equal in breadth before and behind; fore central pair of eyes very large, and of a dull, pearl-grey hue; f.re laterals in a line with base of fore centrals, and of same color; posterior pair a little smaller than fore laterals, and as nearly as possible equally divided from them by the minute, intermediate eye, which is placed a little inside of their straight line.
Legs moderately long, tolerably strong, 1, 3, 2, 4; first pair much the strongest. Armed with spines. and with a small claw-tuft beneath the terminal tarsal claws.
Falces long, straight, divergent, and directed forward; denticulations small; fang of morate length and strength.
Maxillae long, strong, straight; widened on both sides at the extremities, which are rounded.
Labium long, about two thiràs the length of the maxillae, and narrover at the apex than base; apex rounded. The direction of the maxillae and labium is very nearly perpendicular (or at right angles) to the sternum, which is small, nearly round, slightly pointed behind and truncated in front; the truncation is very gently curved, the convexity of the curve directed backwards.
Abdomen small, short, oval, very convex before, and fitting up pretty closely to the incurved thorax.

ERIS (C. Косн). 1846. Simon.
Syn.: 1846. Eris C. Kосн, Die Arachn., XIII, p. 189.
185̃0. " ID., Uebers. d. Arachn.-Syst., 5, p. 59.
1869. Attus Sinf., Monogr. d. Attid., p. 6 (16) 14 (24) (ad partem).
1871. " Id., Révis, d. Attid. (ad partem).
1876. Eris Id., Arachn. de France, III, p. 197.
1880. " Karsch, Arachnol. Blätter VIII, Zur Kenntniss der Attiden, in Zeitsch. f. d. gesammt. Naturwissensch., LIII, p. 397.
1883. " Sim., Arachn. de l'Ocean Atlantique. Ann. Soc. Ent. de France, 1882, p. 303.
Cephalothorax moderately high, wide, and short; cephalic and thoracic parts of the same length; the latter very much inclined, contracted, truncated or slightly hollowed.
Clypeus moderately high, with hairs.
Eyes of the face very unequal, in a curved line; the lateral widely separated. Dorsal eyes scarcely smaller than the lateral, situated at the widest point of the cephalothorax, and not prominent.
Sternum short, as narrow or narrower than the intermediate coxae. Interval between the anterior coxae often less wide than the lip at the base.
Falces vertical, short, thick.
Legs $1,4,3,2$, or $4,1,3,2$ : first pair more robust than the others, often, in the males, its femur and tibia dilated. Tibia and patella of the third plainly shorter than tibia and patella of the fourth. Tarsus and metatarsus of the fourth of the same length as or scarcely shorter than patella and tibia. Tibial and metatarsal spines on the four pairs; less numerous, and only appearing at the extremities of the articulations on the posterior pairs.

## *BIANOR N.

Syn: 1883. Scythropa Keyserling, Arachniden Australiens, p. 1446.
Cephalothorax a little longer than wide, sides roun led, before and behind equally contracted, high and convex, not wider than the dorsal row of eyes.
Clypeus low.
Quudrangle of eyes behind wider than long, in front contracted, reaching the middle of the cephalothorax. Anterior row substraight; the lateral a little separated from the middle eyes. Dorsal eyes further from one another than from the margin of the cephalothorax. The small median eyes are nearer the anterior lateral than the dorsal eyes.

[^10]Falees vertical, not diverging.
Maxillae twice as long as the labium, dilat d and rounded in front.
Labium not longer than wide.
Sternum twice as long as wide.
Legs 1, 4, 3, 2. First pair stouter than the others. Patella and tibia of the third shorter than the patella and tibia of the fourth; metatarsus and tarsus of the fourth a little shorter than the patella and tibia. Metatarsi of the fourth spued only at the apex.
Abclomen oviform; one fourth longer than wide.
Spinnerets as usual; superi $r$ and inferior equally long.

## PIRITHOUS Keyserling. 1883.

Syn.: 1882. Eulabes Keyserling, Arachniden Australiens, p. 1387.
1883. Pirithous Keyserling, Arachniden Australiens, p. 1477.

Cephalothorax a little longer than wide, sides rounded, behind slanting and contracted, above moderately high and plane, wider at the dorsal row of eyes.
Clypeus low.
Quadrangle of eyes wider than long, behind wider than in front, almost reaching the middle of the cephalothorax. First row of eyes strongly recurved, lateral eyes from the large middle eyes widely separated. small medium eyes further from the dorsal eyes than from the anter:or lateral. Dorsal eves further from one another than from the marsin of the cephalothorax.
Falces diverging.
Maxillae long, a little dilated in front.
Labium longer $t^{\text {h }}$ an wide, not longer than half the length of the maxilla. Sternum small and a little longer than wide.
Abdomen oval.
Legs spined, $1,2,4,3$, or $1,4,2$, 3; first pair stouter than the others; patella and tibia of the third shorter than the patella and tibia of the fourth. Metatarsus and tarsus of the fourth shorter than the patella and the tibia. Metatarsi of the fourth spined.
The generic name Eulabes was preoccupied.

## ${ }^{1}$ NEAETHA Smon. 1885.

Syn.: 1869. Attus Sim., Monogr. d. espêces Europ. de la fam. d. Attides, p. 14 (24) (ad partem).
1871. " ID., Revis. d. Attid.
1876. Neera id., Arachn. de France, III, p. 199.
1885. Neaetha id., Etude sur Arachn. recueillis en Tunisie, Paris, Imp. Nat. 1885.

Cephalothorax high; cephalic and thoracic parts of the same length; the latter very much inclined, contracted, truncated, or slightly hollowed.
Eyes: those of the face but little separated, forming a straight line. Dorsal eyes a little smaller than the lateral, not prominent, situated at the widest point of the cephalothorax, further apart than the lateral since the sides of the quadrangle diverge behind. ${ }^{3}$
Clypers almost half as wide as the middle eyes, with thick hairs.
Sternum oval, of the same width as the intermediate thigns.
Legs $3,1,4,2$, or $1,3,4$, 2 ; firss pair much more robust, with the femur compressed, dilated above, and claviform; patella and tibia of the first thick and cylindrical. Tibia and patella of the third much longer than tibia and patella of the fourth; metatarsus ind tarsus of the fourth as long or scarcely shorter than the tibia and patella. Tibial and metatarsal spines on the four pairs; the metatarsus of the fourth having only a circle of terminal spines.
Falces vertical, not long.

## CIRIS C. Косн. 1848.

Syn.: 1848. Ciris C. Kосн, Die Arachn., 14, p. 85.
180̄0. " Id., Uebers. d. Arachn. Syst., 5, p. 69.
1877. " Thorell, Studi Ragui Malesi e Papuani, I., p. 283

Cephalothorax short, flat above, scarcely longer than it is wide.
Eyes of the face in a straight row.
Falces strong, thick, not long, wrinkled, shining, vertical.
Palpus of the $f$ male of not unusual form, the tarsus tapering oval.
Legs short, nearly equally long,
Abdomen very short, almost circular.
Spinnerets drawn in and scarcely visible.
Thorell remarks that Cizis is near to Ballus (C. Koch) and more especially to Neera Simon, in that the eye area is large, occupying one half the cephalothorax; while it differs from Neera in having the quadrangle of the eyes not wider, but a little narrower hehind than in front, and the third pair of legs only a little longer than the fourth. Studi Ragni Malesi e Papuani, I, p. 285.

BALLUS (C. Косн). 1850. Simon.
Syn.: 1837. Euophrys C. Kосн, Uebers, d. Arachn. Syst., I, p. 33 (ad partem.
1846. Marpissa Id., Die Arachn. XIII, p. 53 (ad partem).
1850. Attus: sub.-gen. Ballus Id., Uebers. d. Arachn. Syst., 5 p. 68.
1869. " Sny., Monogr. d. Attid., p. ô (16) 14 (24) (ad partem).
1870. Ballus Thorell, On Europ. Spid., I, p. 212.
1871. Attus Sim., Révis d. Attid.
1876. Ballus Id., Arachn. de France, III, p. 201.
1876. Oedipus Menge, Preussische Spinnen, IX, p. 482.
1877. Ballus Thorell, Ragni Malesi e Papuani, p. I, 286.
1878. " Lebert, Die Spinnen der Schweiz, p. 301.
1881. " Thorell, Ragni Malesi e Papuani, III. 660̃.
1882. " L. Koch and Keyserling, Arachn.'Australiens, p. 1335.

Cephalothorax flattened: cephalic and thoracic parts of the same leugth;
the latter contracted, inclined, truncated or slightly hollowed behind.
Clypeus less than half as wide as the large middle eyes.
Eyes of the face sub-touching, forming a straight or barely curved line.
Dorsal eyes of the same size as the lateral, not prominent, situated at the widest point of the cephalothorax, much further apart than the lateral.
Sternum attenuated at both extremities, a little wider than the intermediate coxae.
Falces short, plane, or a little flattened in front.
Palpus ( 8 ) not very long, and not robust; tibia shorter than patella, with an external terminal apophysis, slender, tarsus oval, relatively narrow.
Legs short; the fourth pair longest, the first pair much the most robust, with femur and tibia much dilated, often flattened and claviform. Tibia and patella of the third much shorter than tibia and patella of the fourth; metatarsus and tarsus of the fourth usually shorter than tibia and patella. Legs of the two pos'erior pairs entirely without spines (except ænesiens); legs of the two first pairs having below two rows of tibial and metatarsal spines.
Integrıment covered with moderately long pubescence, simple, rarely scaly.

## CHIROTHECIA Taczanowski. $18 \% 8$.

Chirothecia Taczanowski, Bulletin de la Société Impériale des Naturalistes de Moscou, Tome LIII, 1878, No. 4, p. 362.

Cephalothorax low, flattened on the back; head much longer than wide, perfectly plane above; thoracic part shorter than the cephalic, a little lower behind.
Eyes of the third row placed very far back; those of the second row nearer the anterior than to the posterior eyes, and nearer each other than are the anterior and posterior lateral eyes. The tops of the anterior eyes are in a perfectly straight line; the middle eyes are very large, occupying the entire width of the face; the external eyes of this row are considerably larger than the eyes of the other rows.
Falces large, short and almost vertical in the female; long, horizontal, and armed with a long recurved hook in the male.

Legs ordinary and sl-nder excepting those of the first pair which are thicker than the others, with the tibia enlarged and hollowed on its internal border to form a moderately deep groove; each of the borders of this groove has three long spines each articulated on an elevation which is low but much larger than the spine, and some irregularly distributed bristles; at the bottom of the groove is found a comb composed of wide, flattenel hairs, which are crowded closely together, and disposed in a simple row.
Figure small.
This curious genus, in which the first legs are much thicker than the others, with the tibia greatly enlarged, resembling at the first glance the claws of crayfish and yet more those of chelifers, is characterized also by the extreme flatness of the cephalothorax, by the length of the cephalic part, and by the eyes of the last row being plac ${ }^{\circ}$ dery far back.

## COCALUS C. Косн. 1846.

Syn.: 1846. Cocalus C. Kосн, Die Arachn., 13, p. 180.
1850. " Id., Uebers. d. Arachn. Syst., 5, p. 48.
1877. " Thorell, Studi Ragni Malesi e Papuani, I, p. 254.
1878. " ID., ibid., II, p. 283.
1881. " Id., ibid., III, p. 492.

Eyes of the first row all close together in a straight line. The two middle eyes are large, the outer, in diameter, scarcely half as large as the middle eyes; the eyes of the third roo looking sideways, standing in a quadrangle with the first row, and as large as the lateral eyes of that rnw; the eyes of the second row only a little sumaller thau these, and placed half way between them.
Falces. long, slender, vertical, cylindrical, with a rather short fang.
Palpus rather long, the first three joints slender, the fourth wide and short, the tarsus large, swollen, the bulb entirely covered; the bulb simple, with protuberances (einfach kuotig), projecting a little forward.
The cephalothorax of this spider departs from all known species. The headplate forms an ascending slope from the first row of eyes, and ends in a roof-shaped ridge from which the thorax falls in a steep slope, to the hinder edge; the sides of the cephalothorax. however, are almost vertical, and therefore when looked at from above, it appears narrow. The abdomen is much narrower than the cephalothorax and cylindrical. The spinnerets are, in comparison with other genera, long and slender, the two upper and the two lower however, have but half the length of the two middle ones. The legs are rather long, the first and fourth pairs almost equally long, the second pair some what s'sorter than the first, and the third somewhat shorter than the second. All are rather slender.

## ' LINUS N.

Syn.: 1878. Sinis Thorell, Studi sui Ragni Malesi e Papuani, II p 269.
Cephalothorax not much longr than wide, and very high, sloping steeply in front.
Clypeus at least half as high as the middle anterior eyes.
Sternum sub-ovate, wider than the coxae.
Eyes: quadrangle rather large, occupying about $\frac{3}{3}$ of the length of the cephalothorax, not much wider than long, a little narrower behind than in front, and but little narrower behind than the cephalothorax at that place. The anterior row of eyes, which is pl.inly visible when looked at from above, is a litt'e curved upward. Middle anterior ezes very large, at least three times larger than the lateral eyes, and separated from them by only a small interval; eyes of the second row rather large, more than a third as large as the posterior eyes, and placed half-way between these, and the anterior lateral eyes; the posterior eyes, which are placed more than their own diame er higher than the anterior lateral eyes, are further from the lateral borders than from each other.
Falces short, not.
Maxillae sub-ovate, diverging, narrow at the base, almost twice as long as the lip; lip a little longer than wide.
Legs long, 1, 4 (in .\& 4, 1), 2, 3, metatarsi and tarsi very narrow; first pair only a little more robust than the others, tibiae much longer than patallae; tibiae also spined above; posterior metatarsi with spines throughout their length.
Abdomen sub-ovate.
Spinnerets ordinary, two articulations, the superior the longer.
Type: S. fimbriatus (Dol.).
This genus is nearly related to Cocalus (C. L. Koch).

## HYCTIA Simon. 1876.

Syn.: 1869. Marpissus Sruc., Monogr. d. espèces Europ. de la fam. d, Attides, p. 7 (17) (ad part.).
1871. " Id., Rèvis. d. Attid.
1876. Hyctia Id., Arachn. de France, III, p. 18.

Cephalothorax elongated, almost parallel; thoracic part scarcely at all enlarged, at least a third longer than the cephalic part. Cephalic part flat, not inclined, limited by a wide depression, not deep, bent behind.

[^11]Eyes of the face very unequal, touching, at least the middle eyes, forming a straight line; dorsal eyes almost as large as the lateral, no: further apart, the sides of the head thus being parallel; the square almost as long as wide; the dorsal eyes much further from each other than from the lateral torders.
Clypeus scarcely a third as wide as the middle eyes.
Sternum small, narrow, twice as long as wide, thighs longer than wide, those of the first pair much thicker and longer that the otiners, tou hing.
Legs 1, 4, 2, 3; first pair very long and robust; femur dilat d and compressed; patella and tibia cylindrical, the latter always a thir the longer; these two articulations longer ( 8 ) or almost as long ( 8 ) as the cephalothorax; tarsus and metatarsus slender, shorter than the patella and tibia; tarsus a third shorter than the metatarsus. ${ }^{1}$ Second, third, and fourth legs short and slender. Tarsus and metatarsus of the fourth shorier, or almost as long as the patella and tibia. On the anterior pairs two inferior rows of tibiae andmetatarsal spines; on the posterior pairs two inferior tibial spines, and one or two metatarsal spints.
Falces robust, longer than the face, ( \&) vertical, ( $\delta$ ) lightly inclined forward.
Palpus ( © ) slender; femur narrow and a little curve'; tarsus o:al, not large; bulb simply rounded above, prolonged into a point behind.
Abdomen narrow, elongated.

## MITHION Simon. 1884.

Mithion E. Simon, Arachnides recueillis a Khartomm; Bulletin de la Société Zoologique de France, T. IX.
Cephalothorax much elongated, almost parallel; thoracic part at least a third the longer; cephalic part almost plane, little elevated, not inclined, with posterior depression lacking, or very slight.
Eyes of the face touching, with their tops in a straight line, extremely unequal, the median at least five times the larger, very convex and promivent. Dorsal eyes as large as the lateral, not, or scarcely further apart. Quadrangle as long as wide, parallel. Dorsal eyes much further from one auother than from the lateral borders.
Clypeus having scarcely a quarter the diameter of the midde eyes.
Falces ( $\&$ ) very short, almost square and vertical.
Sternum oblong oval, narrowing in front and behind, of the same width in the middle as the intermediate thighs. Thighs I separated by the width of the labium at the base, much thicker than the others; thighs II thicker than III; III and IV almost equal.

[^12]Patella and tibia I shorter than the cephalothorax, tibia scarcely longer than patella and as thick; tibia and patella IV a little longer than tibia and patella III; tarsus and metatarsus IV almost as long as patella and tibia; tibia IV at least a third longer than patella, cylindrical, neicher attenuated or enlarged at the extremity. Spines shoct and serial on the tibiae and metatarsi I and II; slender on pairs III and IV; metatarsi III and IV with a whorl of terminal spines; and with two or three small spines toward the middle; spinnerets very long, particularly the superior ones, cylindrical.

This new genus resembles Marpissa, and still more Hrctia, differing from them in having the anterior thighs separated at the base by the width of the labium. It is closely related to the genus Icius E. S, but is distinguished from it by the quadrangle of the eyes being as long as wide and parallel, while in Icius it is plainly wider than long, and a listle wider behind than in front, by the anterior me lian eyes being yet more large and prominent, and finally by the presence of several spines (one uncierneath and two internal lateral) on the posterior metatarsi, besides th: terminal circle. It presents also a certain resemblance to the geaus Thya, having the same kind of coloring, the scaly hairs, and the tufts of hairs in the form of horns on the cephalothorax, but it is far removed from it by the form of the cephalothorax and the proportions of the articulations of the two pairs of posterior legs.

MARPTUSA (Thorell), 187\%. Snion.
Syn.: 1837. Dendryphantes C. Косн, Uebers. d. Arachn.-Syst., 1, p. 31 (ad part m ).
1846. Marpissa ID., Die Arachn., XIII, p. 56 (ad partem).
1869. Marpissus Sim., Monogr. d. Attid., p. 6 (16), 7 (17) (ad partem).
1870. Marpessa Thorell, on Europ. Spid., I, p. 213 (ad partem).
1876. Marpissa Sim, Arachn. de Fiance, III, p. 23.
1877. Marptusa Thorell. Ragni Malesi e Papuani, I, p. 221 (ad partem).
1878. " ID., ibid., II, p. 24 (ad partem).
1878. Marpessa Lebert, Die Spinnen der Schweiz, p. 201 (ad partem).
1878. Marpissa Tacz., Aranéides du Pérou, Bull. Soc. Imp. d. Nat. de Moscou, LIII, 4, p. 217.
1879. Marptu•a L. Koch, Arachnidea Australiens, p. 1092 (ad partem).
1881. " Thorell, Studi Ragni Malesi e Papuani, III, p. 432 (ad partem).
Cephalothorax long; thoracic part a little dilated, at least a thind the longer; cephalic part entirely plane, limited behind by a transverse depression.

Clypeus about half as wide as the middle eyes.
Eyes of the face rather unequal, forming a straight or scarcely curved line. a little separated; interval of the lateral wider than that of the middle, and yet not more than half their diameter. Dorsal eyes as large or almost as large as the lateral, a little further apart, since the sides of the head diverge a little behind; quadrangle at least a quarter wider tran long; dorsal eyes much further from each other than from the lateral borders.
Sternum narriw, $t$ xice as long as wide. Anterior coxae almost touching, their int:rval much less wide than the lip; all the coxae longer than wide, those of the first pair thicker and a little longer than the others.
Palpus ( $\delta$ ) with the tarsus much enlarged in the form of a palette, and projecting beyond the bulb on all sides.
Legs of the first and second pairs equal or almo t equal; those of the third and fourth a little shorter, equal o: almost equal. First pair very robust; femur dilated and compressed; patella and tibia cylindrical, equal, or tibia barely looger (M. radiata $\hat{\delta}$ ); these two articulations always shorter than the cephalothorax; tarsus and metatarsus more slender and shorter than patella and tibia; tarsus a little shorter than the metatarsus. Tarsus and metatarsus of the fourth shorter than the patella and tibia. Cintinuous inferior rows of tibial and metatarsal spines; tibial spines less numerous and less regular on the posterior pairs; usually the metatarsi of the fourth with only a terminal circle of spines.
In the Arachniden Australiens (p. 1093) Koch has used this genus in a different sense from boti Simon and Thorell. The two latter define the clypeus as about half the middle eyes of the first row. Dc. Koch on the contrary extends the definition to inclu le species where the middle eyes are equal to the clypeus or even overhanging the falces. Judging from the excellent figures which Koch gives, the spiders include 1 in this genus form a very heterogenous group.

## MENEMERUS Simon, 1869.

Syn.: 1848. Eıophrys C. Kосн, Die Arachn., XIII, p. 200 (ad partem).
1869. Menemerus Sim., Monogr. d. Attid., p. 6 (16), 196 (662).
1870. " Thorell, On Europ. Spid., I, p. 214 (ad partem).
1870. Marpessa Id.. ibid., p. 213 (ad partem).
1876. Menemerus Sim., Arachn. de France, III, p. 30.
1877. " Thorell, Studi Ragni Malesi e Papuani, I, p . 228 (ad partem).
1878. " Id., ibid., II., p. 237 (ad partem).
1879. " L. Косн, Arachniden Australiens, p. 1133.
1881. Menemerus Thorell, Studi Ragni Malesi e Papuani, III, p. 500 (ad partem).
1883. " L. Koch and Keyserling, Arachniden Australiens, p. 1461.
1883. " Sim , Arachn., de l'Ocean Atlantique. Ann. Soc. Ent. de France, 1882, pp. 261, 284, 303.
Cephalothorax elongated; thoracic part a little dilated, at least a third the longer; cephalic part flat, or very slightly convex, limited by a wide and shallow transverse depression.
Clypeus scarc -1 y half the anterior middle eyes.
Eyes of the face rather unequal, forming a line slightly curved (rarely straight), a little separated, particularly the lateral eyes. Dorsal eyes a little smaller (s'metimes as large; M. falsificus) than the lateral, not further apart, since the sides of the head are straight; quadrangle a quarter or a fifth only (M. semilimbatus) wider than long; dorsal eyes as far from one another as from the lateral borders (M. semilimbatus) or further fr m one another.

Sternum almost twice as long as wide; attenuated in front. Anterior thighs separated by tiee width of the lip at the base; all the thighs longer than wide; those of the first pair the longest.
Legs ( ) ) $1,4,2,3$, or $4,1,2,3 ;$ ( \& ) $4,1,2,3$. Lezs of the first pair thickest; femur compressed; patella atd tibia cylindrical, the latter longer (except M. fals ficus); tarsus and metatarsus more slender and much shorter than the patella and tibia; tarsus shorter than the metatarsus. Tarsus and metatarsus of the fourth shorter than patella and tibia; patella and tibia of the fourth much longer than patella and tibia of the third: tibia of the fourth cylindrical and parallel. Tibial and metatarsal rows of inferior spines on the four pairs.
Palpus short; femur rery much dilated, almost as wide as long; convex above; patella and tibia short and almost equal; tarsus rather small, very convex.
Abdomen oval, a litt'e flattened.
This seems to differ from Attus only in the slightly lesser width in proportion to th $\geqslant$ length of the quadrangle of the eyjs.

## DENDRYPHANTES (C. Koch), 183\%. Simon.

Syn.: 1837. Dendryphantes C. Koch, Uebers. d. Arachn.-Syst., I, p. 31 (ad partem).
1850. "، Id., ibid., 5 p. 60 (saltem ad partem).
1869. Attus Sim., Monogr. d. Attid., p. 6 (16), 14 (24) (ad partem).
1870. Dendryphantes Thorell On Europ. Spid., I, p. 214.
1870. Marpessa Id, ibid., p. 213 (ad partem).
1871. Attus Sim., Révis. d. Attid. (ad partem).
1876. Dendryphantes Smı, Arachn. de France, III, p. 3 õ.
1878. " Lebert, Die Spinnen der Schweiz, p. 303 (ad partem).
1878. " TACz., Aranéides du Pérou in Bull. Soc. Imp. d. Nat. de Moscou LIII, 4, p. 309.
1880. " Karsch, Arachnol Blättter VIII, Zur Keuntniss der Attiden, in Zeitsch. f. d. gessamt. Naturwissensch., LIII, p. 397.
1883. " Sry., Arachnides de l' Ocean Atlantique, Ann. Soc. Ent. de France, 1882, p. 260
Cephalothorax moderately high; thoracic pirt plainly dilated, at least a third the larger; cephalic part level, of ten a little limited by a transverse depression.
Clypeus less than half as wide as the large middle eyes.
Eyes of the face rather unequal, in a line considerably curved; the middle eyes not touching; the lateral separated by an interval often cqual to half their diameter. The dorsal eyes almost as large as the lateral, a little further apart, since the sides of the head diverge behind. Quadrangle a third wider than long. Dorsal eyes further from one another than from the late al border :
Sternum elongated, rather narrow. Anterior coxae separated by the width of the lip, and much thicker than the others; coxae of the fourth pair a little longer than the intermediate pairs.
Falces robust and vertical in both sexes.
Palpus ( $\delta$ ) rather slender; patella longer than tibia; tarsus narrow, oval, truncated at the extremity.
Legs ( ( ) $1,2,4$, 3 , or 4, 1, 2, 3; (8) 4, 1, 2, 3, or rarely 4, $1,3,2$; the first and (som times) second pairs $m$ re robust with compressed femora. Tibia and patella of the first shorter than the cephalothorax; ( $\delta$ ) tibia longer: ( i) tibia and patella equal. Tıbia and patella of the third much shorter than tibia and patella of fourth. Tarsus and metatarsus of the fourth plainly shorter than tibia and patell t. Tibia of the fourth cylindrical and parallel; metatarsus of the fourth with only a circle of spines at the extremity.

PSECAS C. Косн, 18 ฮัO.
Psecas C. Косн, Uebers. d Arachn. Syst., 5, p. 49.
Eyes like the genus Marpissa.
Falces rather long, cylindrical, vertical.
Palpus in the male rather short, the tarsus glossy, the bulb pointed at the extremity.

Head and thorax nearest in form to the genus Marpissa. The face in front is as low, and is scarcely higher than the middle eyes of the first
row. The falces are somewhat longer and in the only example that I have seen somewhat hidden under the palpus, so that the form is only imperfectly to be seen. The legs differ essentially from all the genera of the Salticidae, in that the tarsal joint is very short in proportion to the metatarsal. The legs are somewhat robust, the first and fourth pairs the longest and about equal in length, the second and third pairs growing somewhat shorter by degrees. The middle spinnerets are long, decidedly longer than usual, the others only half as long; in this the genus unites with Cocalus, to which altogether, it bears soce likeness.

BCETHUS Thorell, $18 \%$.
Syn.: 1878. Roethus Thorell, Studi sui Ragni Malesi e Papuani, II, p. 220. 1881. " ID., ibid., III., p. 431.

Cephalothorax short, high, sloping steeply in front, the cephalic part not narrower anteriorly.
Clypeus about $\frac{1}{4}$ as high as the middle eyes.
Sternum much wider than the coxae.
Eyes: quadrangle large, occupying more than (not indeed half) of the length of the cephalothorax, a little wider than long, wider i it front than behind, where it is only a little narrower than the cephalothorax at that place. The anterior row of eyes, which is plinly visible when the cephalo horax is looked at from above, is only slightly curved upward; the middle anterior eyes are large, very prominent and sub-touching. the lateral much smaller, and a little larger than the posterior eye - , which are placed more than their own diameter higher than the lateral eyes, and are a little further from the lateral borders than from each other. Eyes of the second row rather large, placed almost in the middle between th $\lrcorner$ posterior and the lateral eyes, and as high as the latter.
Falces as usual, sub-vertical.
Maxillae lnng and narrow, more than twice as 1 ng as the lip. Lip almost equally long and wide, widely truncated at extremity.
Legs moderately long, rather slender, 4, 1, 2, 3. First pair a little more robust than the others, tibiae and metatarsi with a few spines underneath, which are long and adpresse i; tibia but little longer than metatarsus. Tibia with patella of fourth, longer than tibia with patella of third. Posterior metatarei with spines throughout their length. The two tarsal claws moderate, not curved, slightly convex on the back, pectinated with many short teeth. Scopula dilated a little at the apex.
Abdomen long, a little flattened.
Spinnerets the superior, rather long, with two joints, which are conical, and at least as long as wide, the inferior ones sub-conical thicker and shorter than the superior.
Type: B. spinimanus.

In the general form of the body this genus stands about half-way between Attus (Walck) Thorell and Euophrys (C. Koch) Thorell, being distinguished from the former by its low clypeus, and from the latter by the posterior eyes being a little further from the margin of the cephalothorax than from each other; and agreeing in the form of the abdomen more with Marptusa Thorell ; the form and armature of the first pair of legs, however, separates it widely from these genera; in this respect it is $m$ rre like Synemosyna and Diolenius.

## PLEXIPPUS (С. Колн), 1843. Keyserling.

Syn.: 1846. Plexippus C. Koch, Die Arachn., XIII, p. 93.
1877. " Thorell, S udi Ragni Malesi e Papuani, I, p. 262.
1878. " Id., ibid., II, p. 240.
1880. " Karsch, Arachnol. Blätter, VIII, Zur Kenntniss der Attıden, in Zeitsch. f. d. Naturwissensch. LIII, p. 398.
1881. " Thorell, Studi Ragni Malrsi e Papuani, III, p. 526.
1883. " L. Koch and Keyserling, Arachniden Aus!ralieus, p. 1425.

Cephalothorax moderately high, descending steeply to the posterior border, slightly convex over the back, a fourth or a fifth longer than wide, gently rounded on the sides, and only a little wider at the third row of eyes.
Eyes of the face in a modera'ely bent row, the lattral half as large as the middle eyes and only slightly separated from them. The eyes of the third row smal'er than the lateral eyes of the first row. The small median eyes nearer the anterior than the posterior lateral eyes. ${ }^{1}$ The quadrangle longer than wide, and a little wider behind than in front, not reaching the middle of the cephalothorax. The eyes of the third row further from each other than from the lateral borders.
Sternum somewhat wider than the coxae of the second pair.
Falces rather long, stout, vertical, locked together, almost cylindrical, rough with transverse wrinkles, and having a dull lustre; the fang rather short and bent.
zip not longer than wide.
Palpus rather long, somewhat slonder; ( $\%$ ) the tarsus scarcely longer than the metatarsus, but little swollen, with the extremity directed downward, and with a moderately large bulb.

[^13]Legs: patella and tibia of the third shorter than those joints in the fourth pair; metatarsus and tarsus of the fourth somewhat shorter, or more often as long as patella and tibia of the fcurth. Spines on all the legs, those on the metatarsi of the fourth throughout their length.
In this genus the relative length of the legs is very variable. In the species described by Thorell (Studi Ragui, III, pp. 526-642) we find the following formulæ: of $1,3,4,2 ; 3,4,1,2 ; 3,1,4,2 ; 1,3,2,4, \overline{34} 12$; $1,2,3,4 ; \& 3,4,1,2 ; 1,4,3,2 ; \overline{1,4,3,2}$. The same is true of the height of the clyp us. In these species the height variez from less than $\frac{1}{4}$ to $\frac{1}{3}$, to $\frac{1}{2}$ and in one spider almost equals the diameter of the large middle eyes.

## ${ }^{1}$ ZENODORUS N.

Syn.: 1881. Ephippus Thorell, Studi sui Ragni Male-i e Papuani, III, p. 6.43.
1883. "، Keyserling, Arachniden Australiens, p. 1422.

Cephalothorax high, on both sides in front, especially in the male, dilated and inflated.
Clypeus at least half as high as diameter of middle eyes. Quadrangle of eyes usually occupying $\frac{1}{8}$ of the length of the cephalothorax, nearly equally wide in front and behind, about a quarter wider than long, and narrower than the cephalothorax at that place by three or four times the diameter of the posterior eyes. The line bordering on the upper edges of the anterior eyes is more or less strongly curved upward; the lat-ral anterior eyes separated by less than their diameter from the large middle eyes, eyes of the second row almost in the middle b tween the anterior lateral and the fosterior eyes; posterior eyes further from the lateral borders that from each other.
Sternum rather short, wider than the coxæ, not projecting between the cozæ of the first pair.
Falces vertical, ordinary.
Maxillce parallel, sub-ovate, at least half longer than the lip.
Legs: third pair longer than the others (-xcept in some males which have the first leg longer than the others), much longer than the fourth pair; patella with the tibia of the third longer than patella with the tibia of the fourth. (In the males the first pair of legs is enlarged, and densely haired, at least underneath.)
Abdomen sub-ovate.

[^14]Spinnerets ordinary: the second joint of the superior, wider than long, and obtuse.
Type: Z. d'Urvillei (Walck.).

## EURYATTUS Thorell. 1881.

Euryattus Thorella. Studi sui Ragni Malesi e Papuani III, p. 660.
Cephalothorax short. dilated anteriorly, not high.
Clypeus very low, not $\frac{1}{\frac{1}{2}}$ of the diameter of the middle eyes.
Eyes small; quidrangle rery short, about twice as wide as long, and a litt'e wider behisd than in front. The auterior row usually curved upward, the middle eyes wid ly separated, the lateral eyes se parated from the middle eyes by their own diameter; eyes of the second row a little further from the posterior eyes than from the anteriur lateral eyes; the posterior eyes are placed much higher than the lateral anterior eyes, and are as far or farther from each $u$ iher as from the latral borders.
Sternum not much wider than the coxae, not projecting between the coxae of the first piir.
Falces ordinary, sub-vertical.
Maxillae parallel, sub-ovate; lip longer than wide, rather widely truncated at the apex.
Legs those of the first pair longer than the others; the third pair not much longer than the fourth; tibia with the patella of the third longer than tibia with patellia of the fourth. The tibiae have spines above; the posterior metatarsi have spines throughout their length. Abdomen sub-ovate.
Spinnerets: ordinary, the second joint of the superior one being the shortest.
Type: E. porcellus (Thur.).
By the greater space, says Thorell, bstween the anterior middle and lateral eyes and by the line which touches the upper borders of the first row of eyes being straight and by the lowaess of the clypeus this genus is easily distinguished from Ephippus Thorell.

PHIDIPPUS C. Косн. 1846.
Syn.: 1846. Phidippus C. Koch, Diө Arachn., 13, p. 125.
1850. " Id., Uebers. d. Arachn.-Syst., 5, p. 53.
1864. Crytonota (sub.-gen. Phidippus) Sim., H. N. d. Araignées, p. 324 (ad partem).
1877. Philippus Thorell, On Araveae of Colorado, Bull. U. S. 1878. " Tacz., Les Aranèides de Pèruu, Bull. de. la. Sociètè Impèriale des Naturalistes de Moscou, LIII, 4. p. 333.

Eyes: The first row rather strongly bent, the two middle eyes moderately large, somewhat smaller thau is usual, near together, the outer ones in diameter scarcely half as large, place 1 somewhat away from the middle eyes. The eyes of the third row nearly as large as the outer ejes of the first row, on little hills; the eyes of the second row very small, near to the outer eyes of the first ro v .
Mandibles stout, standing away from each other toward the extremity, wrinkled transversely, somewhat shining; the fang nearly as long as the upper part of the mandible, strong and bent.
Palpus: That of the female rather long, not stout, entirely of the customary shape, well covered with long hairs; the male palpus moderately stout, shorter jointed, the tarsus oval, thick, beat, the bulb pro jecting strongly in front.
The species belonging to this genus are all handsome, the mandibles of all having more or less metallic reflections. The head is high, the sides dilated with a shori angular plate. The thorax is short and sterply slop ing, in most examples, when not rubbed one notices upright brushes or fringes of hair between the upper eyes. The abdomen is rather large in the female. but in the ma'e narrower than the cephalothorax. The spinnerets do not stand far forward. The legs are rather stout, the two first legs the longest, particularly long in the male; the second and fourth pairs are about equally long, the fourth being a little the lo iger; the third pair is the shortest.

## PHILEUS Thorell 18\%0. Simon.

Syn.: 183\%. Dendryphantes C. Koch, Uebers.d. Arachu, Syst., 1, p. 31 (ad partem).
1837. Calliethera Id., ibid., p. 30 (ad partem).
1846. Philia Id, Die Arachn., XIII, p. 54, $̃ 6$.
1846. Phidippas Id., ibid., p. 125 (ad partem).
1846. Plexippus Id., ibid., p. 93 (ad partem).
1869. Attus Sim., Monogr. d. Attid, p. 6 (16), 14 (24) (ad partem).
1869. Dendryphantes Id., ibid., p. 168 (634), (ad partem).
1870. Philæus Thorell, on Eurup. Spid., I, p. 217 ( 8 ).
1870. Attus Id., ibid., p. 218 ( 8 ).
1876. Philæus Sim., Arachn de France, III, p. 45.
1877. " Keiserling, Spinnen aus Uruguay. Vienna, 1877 78. p. 617.
1878. " Lebert, Die Spinnen der Schweiz, p. 305.
1879. " L. Косн, Arachniden Australiens, p. 1080.
1880. " Karsch, Arachnol. Blätter VIII, Zur Kenntniss der attitden, in Zeitsch, f. d. Naturwissensch, LIII, p.397.

Cephalothorax very high; thoracic part dilated, at least a third the longer; cerhalic part plane or slightly convex, inclined, limited by a very weak transverse stria.
Clypeus less than half as wide as the middle eses.
Eyes of the face rather unequal, in a moderately curved line; the middle not touching; the lateral separated by an interval equal to half their diameter. Dorsal eyes almost as large as the lateral, scarcely further apart. Quadrangle at least a third wider than long. Dorsal eyes equally distant from each other and from the lateral borders.
Sternum long, rather narrow. Anterior coxae separated by the width of the lip, thicker than the others.
Falces robust, longer and often a little oblique in the males.
Palpus ( $\delta$ ) very slender; patella and tibia equal or the latter the longer, tarsus oval, narrow. obtusely truncated at the extremity.
Legs. (o) 1, 2. 4, 3, (\&) 4, 1, 3, 2. Anterior pairs more robust. Tibia and patella of the first male almost as long, female shorter than the cephalothorax; male tibia longer, female tibia and patella equal; tarsus and metatarsus more slender and shor er than the tibia and patella. Tibia and patella of the third much shorter than tibia and patella of the fourth; tarsus and metatarsus of the fourth plaiuly shorter than patella and tibia (sometimes of the same length in the males). Metatarsus of the fourth armed wit. spines to the base. Tibia of the fourth cylindrical and parallel.

## SIMAETHA Thorell. 1881.

Simaetha Thorell, Studi Sui Ragni Malesi e Papuani III, p. 520.
Cephalothorax short. high, the dorsum strongly convex longitudinally, above, toward the middle dilated and very wide, in front moderately wide, posteriorly very perceptibly narrower
Clypers low.
Eyes: area occupying about $\frac{\overbrace{}}{5}$ of the length of the cephalothorax; the quadrangle very wide, much wider than long, wider behind than in front; ante ior row of eyes curved upward; mildle eyes not touching, separated from the lateral eyes by an interval at least equal to their diameter; eyes of the second row further from the posterior eyes than from the anterior lateral eyes; posteri $r$ eyes not further from the lateral borders than from each other.
Sternum scarcely or not wider than the coxae of the first pair; these coxae separated by less than the width of the lip.
Legs ( § ) $1,4,2,3$; rather robust, without many spines; legs of the first pair more robust than the others, femora compressed anteriorly and and strongly bent above; tibia with patella of the fourth leg longer than tibia with patella of the third.
Abdomen short.

Spinnerets as usual, superior longer and more slender than the inferior; with two joints, which are sub-cylindrical, about as long as wide. Type : S. thoracica.

This genus, says Thorell, agrees with Philaeus in the distance between the middle and lateral eyes of the first row, but differs from it especially in the form of the cephalothorax; in the latter respect it approaches Bellus (C. L. Koch) and Homalattus (White), but differs from them since the quadrangle of the eyes only occupies $\frac{2}{5}$, not $\frac{1}{2}$, the length of the cephalothorax.
${ }^{1}$ THYENE SIMON, 1885.
Syn.: 1850. Plexippus C. Kocr, Uebers d Arachn.-Syst. 5, p. 51 (ad partem.) 1869. Attus Sin., Monogr. d. espèses Europ. de la fam. d. Attides, p. 14, (24) (ad partem).
1871. " ID., Révis d. Attid.
1876. Thya Id, Arachn. d. France, III, p. 51.

Cephalothraax but slightly elevated; thoracic prt ve y strongly dilated and rounded, at least a third the longer; cephalic part plane and inclined, not limited behind; a very short and fine longitudinal stria between the dorsal eyes.
Eyes of the face very unequal, forming a line slightly curved; the median eyes not touching; the lateral eyes separated by an interval almost as wide as their diameter. Dorsal eyes scarcely + maller than the lateral. much further apart, since the sides of the head diverge behind; these eyes $p$ ojeccing widely above; quadrangl $\rightarrow$ at least a third wider than long; d rsal eyes further from one another than from th $\Rightarrow$ literal borders. Clypeus about half the diameter of the middle eyes.
Sternum elongated, contracted in front; anterior thighs separated by the width of the lip; the two anterior pairs (parcicularly the first), the thickest; the fourth a lit'le longer than the third.
Legs (o) $1,3,4,2$; (\&) 4, 3, 1, 2; first pair the most robust; femur compressed and claviform; tibia and patella very thick and cylindrical, male as long, female shorter than the cephalothor x , male tibia a little longer, female tibia and patella equal. Tibia and patella of the third at least as long as patella and tibia of the fourth (only by the greater length of the patella). Tarsus and metatarsus of the fourth a little shorter than the tibia and patella. Tibia of the fonrth cylindrical and parallel. Short, robust, coniral tibial and metatarsal spines on the two first $r$ airs, forming inferior rows; spines equally short, more slender, and not serial on the posterior parts; meta'arsus of the fourth provid d with spines throughout the length.
${ }^{1}$ Thyene is substituted for Thya, the latter name being preoccupied.

Falces robust, short, conical and vertical in both sexes.
Palpus rather slender; tibia and patella almost equal; tarsus oval; narrow.

AMYCUS C. Косн. 1846.

Syn.: 1846. Amycus C, Kocir, Die Arach "., 13, p. 182.
1878. " Tacz, Araneides du Pérou, Bull. de la Soc. Imp. des Nat. de Moscow LIII, 4, p. 345.
1880. " L. Kосн Arachniden Australiens, $\boldsymbol{\mu} .1170$.

Eyes: the first row is high over the mouth and strongly b.n ${ }^{-}$, the two middle eyes large, the side eyes in diameter not half as large. The eyes of the third row just as large a, the side eyes of th iir.t; those of the second row very small, half way between these two.
Mandibles very long, nearly equally thick, somewt at curved on the inner corn $r$ of the extremity, toothed, the fang rather large.
Palpus: :hat of the male slender, the second joint bent, the third cylindrical, plainly longer th n the fourth, the tareus long in front, swcllen, the bulb covered ir m above.
Cephalothorax short and very high, falling steeply from the cephalic plate, rather flat, with distinct elevations at the eyes; also the face is very high, but not equally high in the different species, and the first row of eyes high above the mouth. The abdomen is somewhat longer than the cephalothorax, narrow, oblong oval, and equally with the cephalothorax, (the latter, however, only partially) covered thickly with scaly hairs. The spinnerets a e slender and rather long, the legs also are l ng; of these the third pair is the longest, then follows the first, then the secoad and after this the fourth.
One of the species described by C. Koch and all the Australian species described by $L$. Koch und $r$ this genus have the eyes of the second row nearer the anterior than the posterior side eyes and the legs $1,3,2,4$, not $3,1,2,4$. See note by Dr. Koch, p. 1170 of the Arachniden Australiens. The species pl ced in this geaus by Dr. L. Koch seem to us (judging by his plates) to belong to at le ist two if not three different genera.

## ASARACUS C. Косн. 1846.

Asaracus C. Косн. Die Arachn, XIII, p. 188.
Eyes form and position as in Phidippus.
Palpus of the male slender, rather loag, the second joint long. gently, slightly bent, the third and fourth short, not longer than thick, the tarsus moderatoly long. humped at the proximal end, somewhat raised in knots, in the middle on the back somewhat contracted, the bulb covered from above.

Falces very stout, very iride:cent, large, strong, convex in front, the sides somewhat widened into a corner, standing away from each other at the extremit es, with a long, strong fang.
This genus has a likeness to the genus Amycus; but the palpus, and particularly the falces are differently shaped; also the third pair of legs is not so long as the last pair. The first pair was broken, in the only example that up to this time has cume under my obserration. Head, thorax, and abdomen agree with those of the above mentioned genus.

## LIGONIPES Karsch. 1878

Ligonipes Karsch, Diagn. Attoid, aliquotnov. Novae Holl., cet., in Mittheil. d. Münchener Entom. Ver., 1878, p. 26.

Cephalothorax more than twice as long as wide, not high, level.
Eyes of the third row not far in front of the middle of the ceph lothorax. Legs of the first pair remarkable: femora, patellae, and ti iae very much dilated, compressed, the tibiae having stiff short hairs on the inner side, their form being that of a hoe. Second, third and fourth pairs more slender.
Abdomen narrow.

## LIGURINUS Karsch. $18 \%$.

Ligurinus Karsch, Diagn. Attoid. aliquot nov. Novae Holl., cet., in Mittheil d. Münchener Entom. Ver., 1878. p. 27.

The genus Ligurinus is much like genus Hyllus C. Koch, and yet is easily distinguished from it; the forehead is a little higher than the auterior eyes, and is so widely ornamented with dense oblique hairs that if the cephalothorax is looked at from above the eyes are entirely hiddin. ${ }^{1}$

## LYCIDAS KARSCH. 1878.

Lycidas Karsch, Diagn. Att id. aliquot nov. Novae Holl., cet., ins Mittheil. d. Münchener Entom. Ver., 1878, p. 25.

Cephalothorax high, gradually descending in three parts, cephalic part level. Posterior part sloping obliquely, rounded on the sides.
Eyes: quadrangle wider than lag; eyes of the first row touching, the lateral being about a quarter smaller than the middle eyes, but a little larger than the eyes of the th rd row; $\epsilon y$ es of the second row the smallest of all.
Clypeus: middle eyes of the first row distant from the margin of the clypeus by a space which nearly equals their diameter.
Legs: anterior legs short, robust; posterior legs. more slender, those of the third pair longest.
Abdomen looked at from above, almost triangular, pointed behind.
${ }^{1}$ The presence of dense hairs ornamenting the forehead, would seem to be so completely adaptive a characteristic as scarcely to be a sufficient basis upon which to found a genus.

MARATUS Karsch. 1878.
Maratus Karsch, D.ag. Attoid. aliquot nov, Norae Holl., cet., in Mittheil. d. Münchener Entom. Ver., 1878, p. 27.

Cephalothorax not long, high.
Eyes: thuse of the third row, a little in front of the middle of the cephalothorax. Eyes of the second row half way between the posterior aud the anterior lateral eyes. Quadrangle of the eyes a little wider in front than behind.
Legs slender.
Abdomen flat, with parallel sides, quadrangular, longer than wide. Body hairy.

MOPSUS Karsch, 1878.
Syn: 1878. Mopsus Karsch, Diagn. Attoid. aliquot nov, Novae Holl., cet. in Mittheil d. Münchener Entom. Ver, 1878. p. 31.
1881. " Thorell, Studi sui Ragni Mal. e Pap., III, p. 462.

Mop-us is very like the genus Ascyltus in appearance, but the clypeus is not dilated on the sides, is higher and not so wide, grows a little narrower above, and is covered above on the anterior cephalic margin and on the sides, with long, slender hairs.
Cephalothorax: Cephalic part higher and shorter than in Ascyltus. Thorax sloping obliquely behind the dorsal eyes.
Eyis: Those of the first row curved backward, touching, placed below
the frons. Those of the second row placed further from the lateral eyes and a little wi:hin the quadrangle.
Falces nearly perpendicular to the face.
The species placed by Koch \& Keyserling (Archinden Australiens, p. 330) in this $g$ nus were subsequentlv made the basis of the genus Sandalodes, Arachniden Australiens, p. 1476.

ASCYLTUS Karsch. 1878.
Syn: 1878. Aseyltus Karsch, Diagn. Attoid. aliquot nov. Holl.. cet. in Mittheil. d. Münchener Entom. Vər., 1878, p. 29.
1881. " L. Косн and Keyserling, Arachniden Australiens, p. 1319.
Cephatothorax not high, rounded, wider in front, narrow behind, cephalic part not inclined.
Clypeus transversely vertical on the sides, somewhat extended. forming an acute angle, dilated, the extreme edge of the dilatation ornamented with some long hairs.

Eyes of the first row placed in front of the forehead. Quadrangle wider than long.
Falces nearly straight; (\&) rounded, smaller. ( $\ddagger$ ) longer, a little flattened bove, sharp on the edges, diverging.
Legs: ${ }^{1}$ first and secund pairs more robust and lowger than the others; third and fourth pairs more slender. shorter, having spines.
Abdomen narrower than the cephalothorax: elongated.
Spinnerets long.
HYLLUS (C. Koch). 1846. Keyserling.
Syn: 1846. Hyllus C. Косн, Die Arachn., xiii, p. 161.
1846. Heineresus White, Ann. and Mag. of Nat. Hist., 18. p. 179.
1877. Hyllus Thorell, Studi Ragni Malesi e Papuani, I, p. 258.
1878. " Id.,ibid II, p. 264.
1878. " Tacz., Aravéides du Pérou Bull. Soc. Imp. des Nat. de Moscou, LIII, 4, p. 336.
1883. ". L. Koch and Keyserling, Arachniden Australiens, p. 1339.

Cephalothorax low and flat, a fifth longer than wide, much wider at the third row of eyes, rounded behind, convex on the back.
Clypeus one fourth as wide as the large middle eyes
Eyes of the face in a line a little curved backward, lateral half as large as the middle eyes and separated from them. Eyes of the second row fur her from the dorsal than from the lateral eyes. Quadrangle wider than long, equally wide in front and behind, placed before the middle of the cephalothorax. Eyes of the third row further from each other than from the lateral borders.
Sternum woderately convex, a third longer than wide.
Falces large, long, somewhat curved, diverging; the fang very long, somewhat fine, very pointed; on the inner side, before the bent point, a little corner.
Maxillae rounded at the extremity.
Lip more than half as lons as the maxillae, gruwing narrower toward the extremity.
Palpus ( $\delta$ ) slender, almost filiform, the second joint the longest and somewhat bent; the third and fourth equally long, both conical; the last joint bent; the bulb covered from above.
Legs ( $\%$ ) $1,2,4,3,(8) 1,4,2,3$; the first legs much longer and thicker than the others, which are nearly equal. Patella with tibia of the third not linger tban patella with tibia of the fourth; metatarsus with the tarsus of the fourth shorter than patella with tibia. Metatarsus of the fourth with spines throughout its length.

[^15]ICIUS Simon. $18 \% 3$.
Syn.: 1850. Marpissa C. Koch. Uebers. d. Arachn.-Syst., 5, p. 47 (ad partem).
1850. Icelus Id., ibid, p. 5 5ั.
1869. Attus Sin., Mono-r. d. Attid., p. 14 (24) (ad partem).
1870. Marpessa Thorell, on Europ. Spid., I, p. 213 (ad partem).
1871. Attus Sim., Révis. d. A!tid.
1873. Icius Id.
1876. " Id., Arachr. de France, III, p. 54.

187\%. " Keyserling, Spinnen aus Uruguay. Vienna, 1877-78, p. 691.
1878. " Thorell, Studi Ragni Mal si e Papuani, II, p. 232 (ad partem).
1879. " L. Kосн, Arachniden Australiens, p. 1127.
1881. " Thorell, Stưdi Ragni Malesi e Papuani, III, p. 461 (ad partem.)
Cephalothorax rather elongated; thoracic part parallel, or very slightly enlarged, at least a third the longer; cephalic part plane, slightly elevated, often inclined, limited by a transverse depression which is straight or slightly l ent forward.
Clypeus scarcely a quarter as wide as the lar.e middle eyes.
Eyes of the face very unequal, touching, or the lateral ones a little separated, forming a strai乞ht line. Dorsal eyes as large, or a most as large as tise lateral, a little further apart since the sides of the quadrangle diverge very slightly behind; quadrangle only a quarter wider than long; dorsal eyts much further from each other than from the lateral borders.
Sternum contracted in front, scarce! y wider than the in:ermediate thighs. Anterior thighs separated by the width of the lip, much thicker than the others; thighs of the second and third pairs equal, thos of the fourth a little longer.
Falces ( \&) short, rather thick, almost square, vertical; ( $\%$ ) longer, a little inclined forward, their externai border presenting an elevated, longitudinal riđ̀ge.
Pulpus ( t ) slender; tibia shorter than the patella, provided with a small superior external apophysis; tarsus narrow and long.
Legs (o) $1,4,3,2$; ( $\left.)^{\prime}\right) 4,1,3,2$; those of the first pir more robust ; tibia and patella at least a quarter shorter than the cephalothorax; tibia the longer, and sleader. Tibia and patella of the fourth much longer than the tibia and patella of the third; tarsus and metatarsus. male, alm st as long, female, sensibly shorter tibia and patella. Tibia of the fourth scarcely a quarter longer than the patella, cylindrical, and a little more slender at the extremity. Spines short, rather robust,
and serial on the tibia of the first ; sleader and very far apart on the second, third and fourth legs ; metatarsi of the third and fourth having only terminal spines.

## SANDALODES Keyserling. 1883.

Syn.: 1883. Mopsus Keyserling, Arachniden Au-traliens, p. 1333 (ad partem).
1852. Acompse Id., Arachniden Australiens, p. 1326 (ad partem). 1883. Sandalodes ID., " " p. 1476.

C'ephalothorax scarcely a fifth longer than wide, moderately high, rounded on the sides, considerably wider than the third row of eyes, becoming gradually smaller behind and in front, ascending s'eeply from the posterior margin to the third row of eyes, the cephalic part sloping forward. The middle line is ju-t behind the third row of eyes ; the clypeus is one fourth as wide as the anterior middle eyes.
Quadrangle of the eyes wider than long, as wide in front as behind, reaching only to the first thir 1 of the cephalothorax. The first row moderately bent, and the eyes rather near together. The eyes of the second row half-way between the posterior and the anterior lateral eyes. The posterior eyes further from each other than from the lateral b rders.
Falces rertical, not diverging, and short.
Muxillae widely separated at their extrem ti s, only a third longer thau the lip.
Lip longer than wide.
Sternum long and narrow, narrower than the coxae of the seco $\lrcorner \mathrm{d}$ pair.
Legs, 1, 4, 3, 2; all set with spices, the first pair thicker than the others. Patella and tibia of the third shorter than patella an I tibia of the fourth; metatarsus and tarsus of the fourth also shorter than the patella and tibia of the fourth; metatarsus of the fourta with spines throughout its length.
Abdomen fully twice as long as wide.
This genus has grat similarity to Jcius, and is distinguished from that genus principally by its narrow sternum.

## BAVIA Simon. 187\%.

Syn: 187\%. Bavia Simon. Amm. Soc. Entomol, de France, (5), vii. pp. 60-62.
1879. Acompse L. Kосн. Arachniden Australiens, p. 1352. Cephalothorax not rery !lnng; thoracic 1 art a little longer, not dilated rounded; cephalic part plane, but slightly elevate 1 , almost a regular quadrangle; the swe'lings above the eyes strong.

Eyes of the face very unequal, almost touching, in a straight line. Dorsal eyes as large as the lateral, not, further apart since the sides of the head are straight.
Clypeus scarcely $\boldsymbol{a}$ third as wide as the middle eyes.
Sternum scarcely wider than the intermediate thighs. Anterior coxae separated by the width of the lip, much longer and more robust than the others.
Falces rather short, a little projecting, not ridged.
Lip twice as long as wide.
Legs ( f ) 4, 1, 2, 3, those of the first pair much more robust; patella and tibia of the first as long as the cephalothorax, tibia much longer than watella; patella and tibia of the fourth much longer than patella aid tibia of the third, much more slender; tarsus and metatarsus of the fourth a little shorter than patella and tib:a; patella and tiba of the third equal; tibia of the fourth much longer than the patella: trochanters of the fourth long and diverging. On the first pair two inferior rows of short and robust tibial and metatarsal spines; on the second pair a single row of two internal tibial spines coming near together at the top; on the third pair two rows of lateral spines; the anterior having a single one, the posterior two; all the patellae, the me atarsi of the third and fourth, and the tibia of the fourth completely unarmed.
This genus is near Maevia and Icius; it is distinguished from them by the form of the cephalothorax, $o^{\circ}$ which the $c \in p h a l i c ~ p a r t ~ i s ~ r e l a t i v e l y ~$ much longer, and by the posterior legs, which lack spines on the tibiae and metatarsi.

MAEVIA (C. Косн) 1848. Simon.

Syn.: 1848. Maevia C. Kосн, Die Archn., XIV, p. 69 (ad part-m).
1876. " Sim., Archn. de France, III, p. 60.
1877. " Thorell, Studi Ragni Malesi e Papuani, I, p. 241 (ad partem).
1878. " Tacz., Aranéides du Pér uu, Bull. Soc. Imp. des Nat. de Moscou, LIII, 4, p. 227.
1880. " Karsch, Arachnol. Blätter VIII, Zur Kenntniss der Attiden, in Zeitsch. f. d. Naturwissensch., LIII, p. 398.
1881. " Thorell, Studi Ragni Malesi e Papuani, III, p. 467 (ad partem).

Cephalothorax elongated, very high; thoracic part enlarged, at least a third the longer; cephalic part slightly convex, and a little hollowed between the dorsal eyes.
Clypeus narrow, rarely $\frac{1}{8}$ as wide as the large middle eyes.

Eyes of the face very unequal, forming a straight or almost straight line; the middle touching, the lateral well separated. Dorsal eyes as large as the lateral, equilly far apart, quadrangle scarcely a quarter wider than long. Dorsal eses nearer one another than the lateral borders.
Sternum almost rounded, wider than the intermediats coxae. Anterior coxae sepa ated by at least the width of the lip.
Falces (of) much longer than the face, vertical, parallel, a little diverging only at the extremity, cylindrical, not rid red.
Palpus ( $\ddagger$ ) short, resembling that of Heliophanus except the femar which is unarmed.
Legs $1,4,3,2$; the first and second pairs a little more robust: tibia of the first longer than patella, these two articulations at least as long as the cephalothorax. Tibia and patella of the fourth much longer than tibia and patella of the third; tarsus and metatarsus, male, as long as patella and tibia. Posterior legs having only very few spines a terminal circle only on the metatarsus (sometimes however a pair of median spines on that articulation).
In the species placed by Thorell in this genus (Stadi Ragni Malesi e Papuani, III, pp. 467-492) the legs vary as follows: ( f) $2,1,4,3 ; 1,4,3,2$;
$4,3,1,2 ; 4,1,3,2 ;($ \& $) 4,3,1, \geq$. The firrt formula, $2,1,4,3$, makes the second leg the longest. Simon in his Arachnides de France, III, p. 1, gives as one of the characteristics of the family Attide, " 2 l pair of legs never the longest." We fiad th, variation in the clypeus of Thorell's species to run from scarcely $\frac{1}{1}$ to about $\frac{1}{2}$ the height of the la ge middle eyes.

## OPISTHONCUS L. Косн. 1880.

Opisthoncus L. Kосн, Arachniden Australiens, p. 1184.
Cephalothorax longer than wide, high, declining $t$ ward the posterior, sides mo lerately rounded, cephalic part lightly contracted in front, having a smoo h, low protuberance , between the third row of eyes, more or less prominently adorned.
Clypeus very low.
Quadrangle of eyes wider than long, behin 1 and in front equally wide, or behind a litcle wider. First row of eyes almost straight or slightly curved, middie eyes close to the lower margin of the clypeus, close to each other, and moderately distant from the lateral. Second row of eyes smallest, and from the lateral eyes of the first row less distant than from the eyes of the third row, and placed either not high r , or only a little higher than these; eyes of the third row, more widely separated from each other thas from the margin of the cephalothorax.
Sternum long, contracted.

Maxillae long, contractel at the base, dilated toward the anterior; anterior margin rounded.
Labium more than one half the leugth of the maxillae, contracted to ward the anterior, apex truncated.
Legs $1,2,4,3$ or $1,4,2,3: 2,3,4$ of almost equal length. First pair of legs more robust than the others, and in the male much longer than in the fenale. Patella and tibia of the third pair shorter that these joints in the fourth pair; the patella with the tibia is longer than the metatarsus with the tarsus in the fourth pair.

## VICIRIA Thorell. 1877.

Viciria Thorell, Studi Sui Ragni Malesi e Papuani, I, p. 233.
Cephalothorax about a third longer than wide, moderately high.
Clypeus at lea,t half as wide as the anterior middle eye.s.
Sternum rather short, not twice as long ai wide, wider than the coxae, not projecting between coxae of the first pair of legs, which are separated by at least the width of the lip.
Eyes: those of the first row plainly visible when the cephalothorax is looked at from above; this row slightly curved upward. Middle anterior eyes large, very pro ninent; the lateral eyes are rather small, and are separated by an interval greater than their owa diameter from the middle eyes. Quadrangle of the eyes a little wider in front than behind, not occupying half the length of the cephalothorax, much narrower behind than is the cephalot torax at that place. Eyes of the second row miaute, ab ut in the middle, or a little in front of the middle, between the anterior lateral and the posteriur eyes. Posterior eyes placed about their own diameter higher than the anterior lateral eyes, and further from the lateral borders than from each other.
Falces directed downward and more or less forward.
Maxillae long. diverging a little, and slightly curved outward, about half longer than the lip; lip nearly half longer than wide, plainly narrowing toward the rounded or suh-truncated extremity.
Palpus slender, in the female neither dilated nor flattened at the extremity.
Legs rather long, slender or moderately stout, ficst pair, at least in some cases, more robust than the others; third pair (s smetimes excepting the first), longer than the others; tibia with the patella of the third longer, or at least not shorter than tibia with patella of the fourth. Tibiae much longer than patellae. Metatarsi of the fourch spined throughout their length.
Abdomen long and slender.
Spinnerets six, loog and cylindrical.
Type: V. Pavesii.

Viciria differs from Maevia (Koch) Sim. in the tibia and patella of the third being longer or at least not shorter than the tibia and patella of the fourth, and in the gr ater prominence of the larg? miodle eses, and the greater space between them and the lateral eyes.

## EPIBLEMUM (Hentz) 1882. Thorell.

Syn.: 1832. Epiblemum Hentz, On North America Spideris, p. 108 (ad partem).
1837. Calliethera C. Косн, Uebers. d. Arachn. Syst. I, p. 30 (ad partem).
18̃̃0. " Id., ibid, 5, p. 45 (ad max. part.).
1864. Cyrtonota sub-gen. Calliethera Sim., H. N. d, Araignees, p. 32f, 327 (ad part.).
18ü8. Calliethera [Calletheriss] ID., Monogr. d, espéces Europ. de la fam. d Attides, p. 6 (16) 180 (646 (ad max. part.).
1870. Epiblemum Thorell, on Europ. Spid. I, page 210.
1876. " Lebert, Die Spinnen der Schweiz, p. 297.

187b. Calliethera Sim., Arach. de France, III, p. 62.
1883. " " " de l' ocean Atlantique, Ann. Soc. Ent. de France, 1882, p. 261.
Eyes eight, unequal, in three rows, the first composed of four, the two middle ones somewhat larger, the second composed of two very small ones placed nearer the third row, which is composed of two larger ones.
Falces very long, slender, horizontal, in both sexes, fang nearly as long.
Maxillae parallel, wide at base, narrow above the insertion of the palpi, cut obliquely on both sides toward th $\Rightarrow p$ sint.
Lip conical.
Legs 1, 4, 2, 3 or 1, 4, 3, 2 .
Type: E Scenicum (faustum) Cl.
When Hentz, in 1832, formtd the genus Epiblemum, he founded it on Epiblemum faustum; while Koch in 1837 founded the genus Calliethera on Aranea scenica. E. faustum and A. scenica are undoubtedly identical. This species is probably a comparatively recent importation fom Euroue. Hentz is wrong in saying that the falces are horizontal in both sexes. Thes are vertical in the female of E. faustum.

THIANIA C. Косн. 1846.
Syn.: 1846. Thiania C. Kосн, Die Arachn., XIII, n. 171.
1877. " Thorell, Studi Ragni Malesi e Papuani, I, p. 251.

Eyes of the first row close over the front edge of the head. The two middle eyes of this row very large, occupying nearly the whole height of the head. The eyes of the third row smaller than the lateral eyes of the first row; the small median eyes placed a little beyond the middle, nearer the hind eyes.
Falces of the male somewhat short, rather flat above.
Palpus moderat-ly long and somewhat stout, the two first joints as usual, the third and fourth very short, oval, the small bulb covered from above.
The species belonging to this genus resemble those of the genus Calliethera. Eyes, falces, and palpus, however, make a plaia and constant division. The scaly covering of the abdomen is hi hly colored, taking the form of transverse bands.

## HASARIUS Simon. $18 \% 1$.

Syn.: 1846. Plexippus C. Косн, Die Arachn., XIIL p. 93 (ad partem).
1850. Euophrys Id, Uebers. d. Arachn. Syst., 5, p. 60.
1850. " sub-gen, Maturna ibid., p. 65.
1869. Attus Sim., Monogr. d. Atti.d., f. 14 (24).
1869. Plexippus Id., ibid., p. 177 (643).
1870. Attus Thorell, on Europ. Spid., I, p. 218 (ad partem).
1871. " Sim., Révis. d. Attid,
1871. Hasarius Id., ibid.
1876. " Id., Arachn. de France III, p. 77.
1880. " Karsch, Arachnol. Blätter VIII, zur Kenntniss der Attiden, in Zeitsch. f. d. Naturwis ensch. LIII, p. 398.
1881. " L. Koch and Kerserling, Arachniden Australiens, p. 1272.
1883. " Sim., Arachn. de l' Ocean Atlantique, Ann. Soc. Ent. de France, 1882, p. 284.

Cephalothorax rather long, high. Thoracic part sensibly dilated, at least a third the longer. Cephalic part slightly convex aud inclined, limited by a very faint depression, which is straight or bent forward.
Eyes of the face rather unequal, forming a line very slightly curved; the middle eyes scarcely separated, the interval of the lateral, wider. Dorsal eyes a little smaller or as large as the lateral, a very little further apart, since the sides of the quadrangle diverge a little behind; quadrangle at least a third wider than long; dorsal eyes a little furcher from each other than from the lateral borders.
Clypeus usually wider than half the middle eyes, with thick hairs.

Sternum elongated, rather narrow. Anterior thighs separated by the width of the lip; all the thighs longer than wide, those of the first pair thicker and sometimes longer than the others, which are almost equal.
Legs usually (o) 1, 3-4, 2; (\%) 3-4, 1, 2; the first and second pairs more robust, with femoral joints compressed. Tibia and patella of the first a little shorter than the cephalothorax, these two articulations equal, or the tibia a little the longer; tarsus and metatarsus shorter, more slender, almost of the same length. Femora of the third and fourth equal; tibia and patella of the third a little longer than tibia and patella of the fourth or often of the same, length. Tarsus and metatartus of the fourth of the same length as the tib:a and patella. Tibia of the fourth parallel, or slightly enlarged at the extremity. Femoral, tibial, and metatar:al spines on the four pairs; metatirsus of the fourth with spines throughout its length.
Falces as long or longer than the face, vertical, often deep set ${ }^{1}$ in both sexes, never ridged.
Palpus ( $\ddagger$ ) robust and short (except H. Adausoui); tibia shorter than patella and provided with external apophyses; tarsus longer than the preceding articulations and wide (except H. Adausoni); bulb simple, reaching almost the extremity of the tarsus; hook rarely apparent.
The species described by Messrs. Koch and Keyserling under this genus have the following variations in the leg formula: female, $1,2,3,4 ; 1, \overline{2,3,4 ;}$ $1,4,3,2 ; 1,3,4,2 ; 1, \overline{2,3}, 4 ; 4,3,1,2 ; 4, \overline{3}, 1,2 ;$ male, $1,2, \overline{3}, \overline{4} ; 1,3,2,4 ; 1,3$, 4,$2 ; 1,4,3,2 ; 1, \overline{4,3}, 2 ; \overline{1,4}, 3,2 ; 4,3,1,2 ; \overline{4}, 3,1,2 ; 3,4,1,2 ; 4,1,3,2$. In the same species the clypeus varies in height from $\frac{1}{3}$ to $\frac{1}{2}$ the large middle eyes. It is interesting to note that whil $\Rightarrow$ in the species described by Keyserling there sems to be a very constant relation b twee: the length of the whole body and the longest pair of legs, the length of the longest legs being ouly very little greater or less than the tetal length. H. chrysostomus, male, has its total length 7 mm ., and its lagest leg 11.6 mm . H. vittatus, male, a fair representative of the other species, has its total length 4.2 mm ., and its longest leg 3.8 mm . The greater proportional length. of the longest legs in H . chrysostomus is correlated with other structural modifications which seem to separate it from the other speces of this genus. The same remarks are applicable also to H . lautus.
${ }^{1}$ The French word is "renfoncée."

Syn : 1850. Enophrys: sub. gen. Pales C. Koch, Uebərs. d. Arachn.-Syst., 5, p. 64.
1869 Attus Sim., Monogr. d. espéces Europ. de la fam. d. Attides p. 14 (24) (ad partem.)

1870 " Thorell, On Europ. Spid. I., p. 218 (ad partem).
1871 " Sim., Revis d. Attid.
1876. Pellenes Sin., Arcahn. de France, III, p. 90

Cephalothorax rather long, high; thoracic part distinctly dilated, at least a third the lor,ger; cephalic part sightly convex; inclined, limited by a depression which is bent forward.
Eyes of the face rather unequal, forming a line which is straight or slightly curved forward; the middle eyes but little separated; the interval of the lateral eyes wider. Dorsal eyes a little smaller than the lateral and further apart, since the sides of the quadrangle diverge benind. Quarirangle about a third wider than long. Dorsal eyes further from one another than from the lateral borders.
Clypeus at least half as wide as the middle eyes.
Stermum long; anterior thighs separated by the width of the lip and thicker than the others; the lateral almost equal, longer than wide.
Legs ( $\ddagger$ ) $1,3,4,2$; (\&) $3,1,4$, firot legs much the most robust, with compressed femora; tibia and paiella of the first shorter than the cephalothorax; male, these two articulations equal; female, tibia a little the longer, tarsus and metarsus more slender and shorter than the two preceding articulations. almost equal. Femur, patella, and tibia of the third much longer and a little thicker than the femur, patella and tibia of the fourth; tarsus and metarsus of the fourth generally a little shorter than the patella and tibia of the third strongly enlarged, from the b se of the extremity tibia; tibia of the fourth almost parallel or a little enlarged. Femoral, tibial and metatarsal spines on the four pairs, very short, and serial on the tibiae and metatarsi of the first and second; metatarisus of the fourth, with spines to the base.
Falces as long, or a little shorter than the face. Vertical or inclined backward in both sexes.
Palpus ( $\delta$ ) robust and short; tarsus oval, wider and at least as long as the two preceding; bulb generally simple, reaching almost the end of the tarsus; tibia shorter than the patella, provided with a superior external apophysis, directed forward, usually received into a little depression of the tarsal border and hidden from above.

## ERGANE Keyserling. 1881.

Ergane Keyserling, Arachniden Austrol'ans, p. 1260.
Cerhalothorax longer then wide, a little wider in the middle than in front, behind rounded, above high and convex, sloping in front.
Clypens less than half the diameter of the large eyes.
Quadrangle ofeyes wider than long, placed bufore the middle of the cephalothorax, as wide iu front $\because$ s behind. Dorsal eyes from one another and from the margin of the cephalothorax almost equally distant. Small median eyes half way between the dorsal eyes and the lateral eyes of the ffrst row. First row of eyes curved.
Sterum oblong.
Falces short and tcuching.
Maxillae dilated in front, not twice longer than the lip.
Legs spined. 1-3, 4, 2, 3. 1, 2, 4, 1, 4, 3, 2, or $4,3,1,2$. Legs of the first pair a little stouter than the others. Patella and tibia of the third longer than the patella and tibia of the furth. The fourth pair has the metatarsus and the tarsus longer than the patella with the tibia.
Abdornen ovate, longer than wide.
Spinnerets, inferior and superior equal y long.

## PHYALE C. Косн. 1846.

Syn.: 1846. Phyale C. Kосн, Die Arachr., XIII, p. 193.
1878. " Tacz., Aranéides du Pérou, Bull. Soc Imp. des Nat. de Moscou, LIII, 4, p. 315.

Eyes of the first row bent, the two middle eyes nearly touching, very large, close over the front edge of the head, the side eyes of this row in their diameter not half so large as the middle eyes; the eyes of the third ruw somewhat smaller than the outer eyes of the first row and almost forming a square with them; the eyes of the second row unusually small, half way between the eyes of the third row and the outer eyes of the first row.
Falces short, stout, swollen, shining, scarcely longer than thick, fang not long.
Palpus of the female of the customary form, somewhat covered with short hirir that of the male unknown.
All high colored beautiful little spiders. The head is flat above and rather long, the cephalothorax usually nearly as long as wide; the sides of the cephalothorax are gently rounded, and steeply falli $g$; the head is not much higher than the middle eyes in front, the clypens being narrow and somewhat retreating. The abdomen is usually oval, almost always rather
short, not thicker than cephalothorax. Cephalothorax and abdomen are closely covere 1 with scaly hairs above, these giving the color. The spinnerets are very short. The legs are moderately long, the first and second pairs being the shortest, but the stoutest, usually having the femur thickened; they are about one and a half times as long as the thorax; the third pair somewhat exceeds the second in length, and the fourth is plainly longer than the second; above, the first joints, and in part the tipiae are covered with brightly colored scaly hairs; the hair of the other joints is fine and light, and the spines very fine.

## JOTUS Keyserling. 1881.

Jotus Keyserling, Arachniden Australiens, p. 1243.
Cephalothorax about one-fifth part longer than wide, in front a little more contracted than in the middle, rounded behind, above high and convex.
Clypeus less than half the diameter of the large eyes.
Quadrangle of eyes wider than long, equally wide in front and behind and not occupying half the length of the cephalothorax. Aaterior eyes near together, forming a row slightly curved upward. Small median eyes half way between the dursal eyes and the lateral eyes of the first row. Dorsal eyes almost as far from each other as from the margin of the cephalothorax.
Sternum slightly convex, ovate, much longer than wide.
Falces short and diverging, in front commonly plane.
Maxillae rathar long, in front dilated and rounded.
Labium more than half the length of the maxilla.
Legs moderately long, spined, 4, 3, 1, 2, or 4, 1, 3, 2, or 1, 4, 3, 2. First pair a little stouter than the others. Patella and tibia of the third shorter than the patella and tibia of the fourth. The fourth pair has the metatarsus and tarsus not longer than the patella and tibia.
Abdomen longer than wide, roundesi in front, behind pointed.
Spinnerets rather long, inferior and superior equally large and long.

Syn.: 1869. Attus Sim., Monogr. d. espéces Europ. de la fam d. Attides. p. 14 (24) (ad partem).
1871. " Id,, Revis. d. Attid.
1876. Habrocestum Id., Arachn. de France, III, p. 131.
1882. " Keyserling, Arachniden Australiens, p. 1401.

Cephalothorax rather short, very high; thoracic part often convex, but slightly dilated on the side, only a third the longer. Cephalic part slightly convex, very much inclined, limited by a faint depression which is straight or bent forward.
Eyes: these of the face, rather unequal but little separated, forming a line straight or slightly curved forward. Dorsal eyes a little smaller than the latteral, not further apart, little or not at all prominent above; quadrangle scarcely a third wider than long; dorsal eyes almost equally distant from each other and from the lateral borders. Clypeus about half as wide as the middle eyes.
Sternum small, long, narrower than the in'ermediat, thighs. Interval between the anterior thighs less than the width of the lip at the base.
Legs $3,4,1,2$; the first legs like those of $\mathbb{\text { ® lurops. Femur, patella and }}$ tibia of the third much longer than the same articulations in the fourth pair. Tibiae of the third and fourth much ealarged from the base to the extremity and a little compressed. Tarsus and metatarsus of the fourth as long as patella and tibia.
Falces weak, scarcely as long as the face, vertical or obliquely directed backward in both sexes.
Palpus short and robust as in Ælurops.

## HELIOPHANUS (C. Косн.) 1833. Simon.

Syn.: 1833. Heliophanns C. Koch, in Herr.-Schaeff, Deuts shl. Ins., 119, 1, 2.
1837. " Id,, Uebers. d. Arachn.-Syst., p. 29.
1864. " [Heliophana] Sim., H. N. d. Araignees, p, 332.
1868. " Sim., Monogr., d. espéces Europ. de la fam. d. Attides, p. 6 (16), 201 (667).
1868. Callether:a [Callietherus] Id., ibid., p. 6 (16), 180 (646) (ad partem).
1870. " Thorell, Europ. Spid. I, p. 211.
$1876 . \quad$ Sim., Arach. de France, III, p. 140.
1878. " Lebert Die Spinnen der Schweiz, p. 298.

Cephalothorax high; thoracic part dilated, at least a third the longer. Cepholic part slightly convex, a little inclined, limited by a depression which is usually wide, straight, or bent backward; thoracic part presenting indistinct diverging striae.
Clypeus scarcely one fourth ${ }_{4}^{n}$ as wide as the large middle eyes, without hairs.
Eyes of the face very unequal in a straight or slightly curved line; dorsa eyes a little smaller than the lateral and not further apart.
Quadrangle a third or a quarter wider than long.

Sternum wider than the intermediate coxae, of ten unequal. Anterior coxae separated by the width of the lip at the base.
Felces rather robust, vertical, never ridged.
(ڭ) Maxillae wide at the extremity; their superior external angle presenting one or two conical projections.
( © ) Palpus short; femur, robust, armed below with a simple or bifid apophysis; patella long and a little convex; tibia shorter armed with external apophyses, s'ender and slightly developed; tarsus narrow and elongated, terminating in a point, projecting beyond the bulb.
Legs $4,1,2,3$, or $4,1,3,2$, slightly unequal. Tibia aud parella of the first shorter than the cephalothorax; metatarsus more slender than tibia and patella of the fourth. Patell $\llcorner$ (a'one) of the third as long and often a little more obust than patella of the fourth; tibia of the fourth almost $\downarrow$ arallel and cylindrical. Femoral, tibial, and metatarsal spines on the four pairs; no patellary spines.

## CYRBA Simon. 1876.

Syn.: 1869. Attus Sim., Monogr. d. espéces Europ. de la fam. d. Attides, 14 (24) (ad part)
1871. " ID., Révis d. Attid.
1876. Cyrba Id., Arachn. d. France, III, p. 165.
1883. " Keyserling, Arachniden Australiens, p. 1436.

Cephalothorax but slightly elevated; thoracic part not dilated, a little contracted, about a third the longer; cephalic part plane, inclined, limited by a very faint transverse depres-ion, cut by a longitudinal stria.
Eyes: those of the face very unequal, almost touching, forming a straight line. Dorsal eyes scarcely smaller than the lateral, not prominent, and not further apart. Quadrangle almost a third wider thau long; dorsal eyes further from each other than from the lateral borders. clypeus very narrow, with hair.
Sternum oval, wider than the intermediate thighs. Anterior thighs eepaparated by at least the width of the lip; thighs of the fourth longer.
Legs 4, 1, 3, 2; first pair much more robust, particularly the femur and the tibia. Tibia of the first a little longer than the patella; the two articulations shorter than the cephalothorax; tarsus and metatarsus more slender and almost as long as the two preceding articulations. Tibia and patella of the third much shorter than the tibia and patella of the fourth. Tibia of the fourth almost parallel; tarsus and metatarsus of the fourth as long or almost as long as tibia and patella. Femoral, tibial and metatrosal spines on the four pairs; two patellary spines on the two posterior pairs.

Falces rather weak, vertical, of the same length as the face.
Palpus ( $\ddagger$ ) femur slender; tibia with apophyses; tarsus oval. (\&) Tibia and patella a little dilated; tarsus pointed.

The species placed by Keyserling in this genus have the legs 4, 3, 1,2 , or 4, 3, $\overline{12}$.

## ${ }^{1}$ ÆLURILLUS Simon. 1885.

Syn.: 1850. Eıophrys (Sub-gen. Dia) C. Koch, Uebers. d. Arachn. Syst., 5, p. 64.
1869. Attus (6th gr.) Sim., Monogr. d. espèces Europ. de la fam. d. Att des, p. 54 (44).
1870. Elurops Thorell, on European Spiders, I, p. 219.
1871. Attus (6th gr.) Sim., Rèvis di. Attid.
1876. Elurops Id., Aıachn. de France, III, p. 134.
1876. " Lebert, Die Spinnen der Schweiz, p. 309 (ad partem).
${ }^{2}$ Cephalothorax very high; thoracic part strongly dilated, twice as long as the cephalic. Cephalic part slightly convex, inclined, limited by a slight transverse depression, generally straight.
Clypeus as wide or almost as wide as the middle eyes.
Eyes of the face rather unequal, well separated, particularly the lateral, in a line so much curved that a straight line from the top of the middle eyes cuts the lateral eyes below the center. Dorsal $\epsilon$ yes smalier than the lateral, further apart. Quadrangle at least a third (of ten more) wider than long. Dorsal eyes as near or nearer to one another as to the lateral horders.
Sternum long, very narrow, particularly in the males. Anterior coxae separated by about the width of the lip. Coxae of the first, second, and third pairs equil in length and thickness, and a little longer than wide; coxae of the fourth a little longer than the others.
Falces not very robust, shorter than the face, inclined backward in both sexes.
Palpus ( $\%$ ) short and thici; femur compressed; patella and tibia short and almost equal; tibia always with two small superior external apophyses; tarsus wider, oval and a little compress $\lrcorner d$, passing beyond the bulb.

[^16]Legs $3,4,1,2$, or $\overline{3,4}, 1,2$, rarely $4,3,1,2$. The two anterior pairs shorter ard more robust; tibia and patella of the first equal ard much shorter than the cephalothorax: tarsus and metatarsus almost equal, a little (scarcely in the males) shorter than the patella and tibia. Femur patella and tibia of the third, of the same length or scarcely longer than the same articulations in the fourth pair. Tibia of the third (and of the fourth, though less) enlarged from base to ex. tremity; tarsus and metatarsus of the fourth as long as patella and tibia. Femoral, tibial and metatarsal spines on the four pairs; patellary spines on the third and fourth. Netatarsus of the fourth with spines to the bise.

## YLLENUS Simon. 1869.

Syn.: 1869. Yllenus Sim., Monogr. d. Attid., 166 (632).
1870. " Thorell, On Eurup. Spid., I, p. 219 (ad partem).
1876. ". Sin., Arachn. de France, III, p. 127.
1878. " Lebert, Die Spinnen der Schweiz, p. 313 (ad partem).
Cephalothorax rather long; very high; thoracic part strongly dilated, twice as long as the cephalic. Cephalic part slightly convex, inclined, limited by a very slight depression.
Clypeus almost as wide as the middle eyes, with thick hairs.
Eyes of the face quite unequal, well stparated, particularly the lateral forming a line strongly curved, the summic of the middle eyes being on a level with the center of the lateral eyes, or very slightly high r. Dorsal eyes smaller than the lateral, and further apart, not prominent. Quadrangle at least a third wider than long; dorsal eyes further from each other than from the lateral borders.
Sternum short, narrower than the intermediate coxae. Interval between the anterior coxae not quite so wide as the lip. Anterior coxae thicker than the others; $s: c o n d$, third and fourth coxae equal in thickness; fourth coxae longest.
Falces weak, shorter than the face, vertical in both sexes.
Palpus short, very robust and massive; patella and tibia well developed tarsus relatively small, often compressed and raised into a ridge.
Legs 4, 3, 1, 2; first and second pairs shorter and much more robust, particularly the first; tibia and patella of the first equal, and much shorter than the cephalothorax: tarsus and metatarsus equal and much shorter than patella and tibia; femur, patella and tibia of the third much shorter than the same articulations of the fourth pair. Tibia of the fourth a good deal enlarged from base to extremity, and compressed; tarsus and metatarsus of the fourth much shorter
than patella and tibia; trochant rs of the fourth les very long, visible from above. Femoral, tibial and metatarsal spines on the four pairs; patellary spines on the third and fourth; metatarsus of the fourth with spines 10 base.
Integument entirely covered with thick pubescence.
Nearest Alurops Thorell, agreeing with that genus in having the upper part of the frons so prominent that the anterior eyes are hidden from above; and differing from it in that the tibia of the fourth leg is at least as long as the metatarsus with the tarsus.

## SAITIS Simon. 1876.

Syn.: 1869. Attus (gr. 10) Sim., Monogr. d, espèces europ. de la fam. d. Attides, p. 96 ( $\overline{5} 62$ ).
1876. Saitis Sim., Arachn. de France, III, p. 168.

187\%. " Thorell, Studi sui Ragni Mal. e Pap. I, p. 22テ̃.
1882. Thorellia L. Koci and Keyserling, Arachniden Australiens, p. 1352.
1883. Saitis Id., ibid., p. 143 i.

Cephalothorax moderately long, almost parallel; thoracic part a third the longer, not dilated; cephalic part plane and a little inclined, limited by a very slight depression.
Clypeus very obliquely inclined, scarcely half as wide as the middle eyes. Eyes of the face very unequal, scarcely separated, in a straight line. Dorsal eyes very convex, scarcely smaller than the lateral, and a little nearer together. Quairangle a third wider than long; dorsal eyes further from each other than from the lateral borders.
Sternum moderately wide, contracted in front. Anterior cosae separated by the width of the lip; fourth coxae a little the longest.
Falces a little shorter than the face, and narrower, not robust, a.d inclined.
Legs ( © ) 3, 4, 1, 2; the first and second pairs almost equal and much shorter than the others; (\&) $4-3,1,2$. Tibia and patella of the first a third shorter than the cephalothorax and almost equal, of the same length as the tarsus and metatarsus which are equal. (o) Femur, patella, tibia and metatarsus of the third longer and much more robust than those of the fourth pair, ornamented with long hairs, which are very thick and disposed in longitudinal lines; (\&) third and fourth legs a little more alike. Tibia and patella of the fourth a little longer than the metatarsus, tibia of the fourth longer than the patella, parallel and cylindrical. Very long femoral, patellary ( $\&$ on the posterior pairs), tibial and metatarsal spines; on the fourth pair metatarsal spines throughout the length of the articulation.

## ATTUS (Walck.) 1805. Simon.

Syn.: 1805. Attus Walck., Tabl. d. Aran. p. 22 (ad partem).
1850. Europhrys C. Косн, Uebers. d. Arachn. Syst., 5, p. 60 (ad partem).
I869. Attus Sim., Monogr. d. espèces europ. de la fam. d. Attides, p. 6 (16), 14 (24), (ad partem).

18\%0. " Thorell, On Europ. Spid., I, p. 218 (ad partem).
1870. Elurops Id., ibid. p. 219 (ad partem).
1871. Attus Sim., Révis. d. Attidae (ad partem).
1876. " Id., Arachn. de France, III, p. 101.
1877. " Thorell, Studi sui Ragni Malesi e Papuani, I, p. 280 (ad partem),
1878. "، id.. ibid. II, p. 290 (ad partem).
1878. " Lebert, Die Spinnen der Schweiz, p. 306 (ad partem).
1881. " Thorell, Studi sui Ragni Malesi e Papuani, III, p. 509 (ad partem).
Cephalothorax high; thoracic part a little dilated, a third, or only a quarter ( $A$. saltator) the longer. Cephalic part plane or a little convex, inclined forward, limited by a slight depression which is straight or slightly bent.
Clypeus equal to half the large middle eyes, or a little narrower, rarely wider ( $A$, floricola $\delta$ ).
Eyes of the face rather unequal, a little separated, at least the lateral, and usually in a slightly curved line; dorsal eyes usually a little smaller than the lateral, as far or a little further apart; quadrangle scarcely a third wider tnan long; dorsal eyes equally far or a little further from each other than from the lateral borders.
Ster num elongated, as narrow as the intermediate coxae (except A. attellanus ô).
Falces weak, vertical, as long or shorter than the face.
$P$ alpus normal.
Legs 4, 1, 2, 3, rarely 1, 4, 2, 3; remarkable for the pre-eminence of the second pair over the third. Tibia and patella of the first as long (A. Wagce, frigidus) or most of ten shorter than the cephalothorax; ( \& ) these two articulations equal; ( \%) tibia lnnger; tarsus and metatarsus more slender (excepi $A$. cingulatus) and shorter (often barely) than the two preceding articulations. Fourth leys much longer than the third in all their articulations, principally the femur and the tibia; tibia at least a third longer than the patella, slightly enlarged from the base to the extrenity and a little compressed; tarsus and mftatar:us of the fourth much shorter than the patella and tibia (except some males: A. floricola, etc.). Femoral, tibial and metatarsal spines on the four pairs and throughout the length of the articulations.

## PHLEGRA Simon. 1876.

Syn: 1850. Eipphrys (sub-gen. Parthenia) C. Koci, Uebars. d. Arıchn.Syst. 5, p. 65.
1869. Attus ( 9 th gr.) Sim,. Monogr. d. espèces Europ. de la fam. d. Attides, p. S5 (551).
1870. Elurops Thor., On European Spiders, I, p. 219 (ad partem).
1871. Attus (10th gr.) Sim.; Rèvis d. Attid.
1876. Phlegra Id., Arachn. de France, III, p. 120.

C'ephalothorax very long, parallel in the cephalic part, a littlo dilated beyond; thoracic part at least twice the longer. Cephalic part plane and inclined not, or barely limite 1 behind.
Eycs: those of the fase very unequal; the middle eyes almost touhcing; the lateral a little separated, forming a line almost straight, or per . ceptibly curved. Dorsal eyes a little smaller than the lateral eyes, not, or very slightly further apart. Quadrangle a quarter wider than long; dorsal eyes a little further from one another than from. the lateral borders.
Clupeus always more than half as wide as the middle eyes, of ten fully as wide ( $\hat{0}$ ), with hairs.
Sternum contracted in front, at least twice as long as wide, as wide or slightly wider than the intermediate thighs. Anterior thighs separated by the width of the lip; thighs of the first, second and third legs almost equal; those of the fourth longer.
Legs $4,1,3,2$, or $4,3,1,2$. Tibia and patella of tha first at least a quartershorter than the cephalotholax, these two articulations being equal in length and thickness, and a little longer than the tarsus and metatarsus, the latter reing equal and more slender. Femur, tibia and patella of the fourth much longer than those of the third pair, exact'y of the same length as the tarsus and metatarsus; tibia of thefourth much longer than the patella, slightly enlarged and compressed at the extremity. Posterior metatarsi armed to the base with very long spines.
Falces vertical or obliquely inclined backwards, shorter than the face ind both sexes.

OEDIPUS Menge. 18\%\%.
Syn. : 1869. Attus Sim., Monogr. d. Attid., p. 6 (16) 14 (24) (ad partem).
1876. Ballus Id., Arachn. de France, III, p. 201 (ad partem).
1877. Oedipus Menge, Preussische Spinnen, IX, p. 482.

Cephalothorax oblong; higher than wide between the dorsal eyes; the convex cephalic part inclined forward, the hitd part descending abruptly. The forehead and large middle eyes are so oblique that from directly above only the upper margin of the eyes is visible.

The clypeus is still more obliqu?.
Eyes iike those of Dendryphantes.
Legs als, like Dendryphantes except that the femur and tibia of the first nair are more robust. Number of claw-teeth small.
Palpus (3) with a sharp apophysis on the inner side of the fourth joint The palpal tube makes a single turn and then passes into the sac. like bulb. The point of the hook lies on a small tongue-shaped leaf.
? Epigynum ( $\rho$ ) closely resembling D. rudis; the openings of the spermathecal tubes lie on the inner half of the chitinous arched enclosure. and end, after many turning , c!ose to the outer half of the orifice.
$\therefore$ Spinnerets like those of Dendryphantes.
The species live in moss under fallen leaves and bushes.

SCARTES Menge. 18\%\%.

Scartes Menge, Preussische Spinnen, IX, p. 494.
Cephalothorax oblong; the cephalic part with the forehead widely projecting; higher than wide, rounded on the side3, sloping steeply behind, the margin marked with a slight furrow.
Clypeus strongly retreating.
The large miadle anterior eyes stand forward, the lateral anterior in a curve, some what removed from them. The small median eyes and the hind side-eyes stand rather on the side than on the top of the 'head.
The palpus ( $\delta$ ) has on the lower edge of the inner side of the second joint a deep-lying hook shaped apoph $\bar{j}$ sis with one small and one large tooth at the end. The fourth joint has on the inner side a short leaf-like apophysis; the fifth joint is long and has a small oval depression for the palpal organ, and the forepart long and curved over, the end of the palpal organ has four rounded corners, and is extended at one corner into a long awl-shaped projection, which consists of the palpal tube (Eindringer) and the covering which accompanies it to the very point. The awl-shaped projection is at one, place narrowed; the palpal-tube passes, after a short winding course' into the sack-like bu b .
I have found the female only in the immature stage, where the epigynum shows ouly two openings fur the future spermathecal tubes.
Abdomen oval. The whole body inely haired.
Legs 4, 3, 1, 2. with long slender cla ws and two pairs of spines on the metatarsi of both first legs.
Spinnerets with small tubes.
They live under heath plants.

# EUOPHRYS (C. Косн) 1834. Simon. 

Syn.: 1834. Eıophrys C. Koch, in Herr.-Schaeff., Deutschl. Ins., 123, (ađ part.:) 7, 8.
1837. " Id., Uebers. d. Arachn.-Syst., 1, p. 33 (ad partem),
1848. Attus Id., Die Arachu., XIV, (ad part.:) p. 44-49.
1850. " Id., Ueb rs. d. Arachn.-Syst., 5, p. 63 (ad partem).
$1869 . \quad$ " Six., Monogr. d. Attid., p. 6 (I6), 14 (24) (ad pa'tem).
1870. Euophrys Thorell, on Europ. Spid., I, p. 216, (ad pirtem).
1871. Attus Sim., Revis. d. Attid. gr. 15 (ad partem).
1876. Euophrys Id., Arachn. de France, III, p. 170.
1878. " Lebert, Die Spinnen der Schweiz, p. 302.
1878. " Tacz, Araneides du Perou. Bull. Soc. Imp. des Nat. de Moscıu, LIII, 4, n. 280.
1893. " L. Koch and Keyserling, Arachniden Australiens, p. 1430.
1883. " Sim., Arachnides de l'Ocean Atlantique, Ann. Soc. Ent. de France, 1882, p. 261.
Cephalothorax rather high; thoracic part dilated, a third or a quarter longer than the cephalic which is usually plane, little inclined, limited by a badly defined impression, cat by a small, very short longitudinal stria; thoracic part of ten having some diverging striae faintly indicated.
Clypeus half the middle eyes, or wider, with, usually, sub-ocular, and longer buccal hairs; the latter are often rooted in a me nbranous part which separates the border of the clypeus from the falces.
Eyes of the face very unequal, forming a straight, or rarely, a slightly curved line; dorsal eyes of the same size, or a little smaller than the lateral, not or scarcely projecting, and not further apart, since the sides of the square are straight; square a quarter wider than long; dorsal eyes further from one another than from the lateral borders.
Sternum oval, usually wider than the interme iiate coxie. Anterior coxae separated by at least the width of the lip; coxae of the fourth pair longest.
Falces weak, vertical or incl ned backward (renfuncees), shorter than the face.
Legs 4, 3, 1, 2 or 4, 1, 3, 2, rarely 1, 4, 3, 2. First and sometimes seco d pairs more robust than the others, particularly in the males, the femora being compressed and claviform. Patella and tibia of the first almost always shoiter than the cephalothorax and slightly unequal; tarsus and metatarsus shorter and more slender than the two preveding articulations. Tibia and patella of the third (together) a little, (of ten scarcely) shorter than the tibia and patella of the fourth; tibia of the

## i3:0 Wisconsin Academy of Sciences, Arts and Letters.

third much shorter, and a little thicker, than tibia of the fourth; patella (alone) longer thau patell $\iota$ of $t h \Rightarrow$ fourth; tarsus and metatarsus of the furth as long or scarcely shorter than patella and tibia; tibia of the fourth, slightly enlarged at the extremity and a little compressed. Femozal, tibial, and metatar al, but no patellary spines.

## ALCMENA C. Koch. $18 k 6$.

Syn.: 1846. Alcmena C. Kосн, De Arachn., XIII, p. 176.
1880. " Karsch, Arachnol. Blätter VIII, Zar Keuntniss der Attiden, in Zeitsch. f. ब. Na ur Wissensch., LIII, p. 897.

Eyes of the first row as in Euophrys. The eyes of the third row plainly smaller than the outer eyes of the first row, and further removed from them, the eyes of the secon $\$$ row very small, nearer to the outer eyes of the first ro $x$ than to the eyes of the third row.
Falces in the male large, convex, smooth, twice as long as the face; in the female snialler.
Palpus without distinctive cuaracteristic.
This genus stands very uear to the genu; Euophrys, but the position of the eyes and the large falces separate it essentially. Moreover the cephalothorax and abdom $n$ are thinner, that is to say narrower and longer, and also are covered cl sely with shining scales, which give the color and marking. The female palpus has nothing unusual; that of the maie I know only from young animals with immature bulbs; these are not different from those of Euophrys.

## ' HYPOBLEMUM. N.

Syn.: 1882. Acmaea Keyserling, Arachniden Australiens, p. 1420.
1883. Drepauephora Id., Arachaiden Australiens, p. 147\%.

Cephalothorax o e-third or one-fourth louger than wide, sensibly contracted toward the front, behind rounded, wider at the dorsal eyes, rather low, slightly convex above.
Clypeus low.
Quadrangle of Eyes, wider than ling, in front moderately contracted, not reaching the middle of the cephalothorax. First row of eyes curved upward; the lateral are separated by half their own diameter from the large eyes. Dorsal eyes are further from one another $t$ ian from the margin of the cephalothorax, small median eyes are half way between the lateral anterior and the dorsal eyes.
Falces short.
Maxillae dilited and rounded in front.

[^17]Labium contracted toward the front, a little longer than wide, scarcely louger than halt the length of the maxilla.
Sternum convex, $u$.e third longer than wide, toward the $p$ sterior dilated.
Legs spined, 3, 4, 2, 1. Fourth piir more slender than the others. Patella and ibia of the third longer than the patella and tibia of the $f$ surth; metatarsus and tarsus of the fourth not longer than the patella and the tibia, metatarsi spined throughout their length.
Abdomen sub-ovate, twile as long as wide.
Spinnerets moderately long, superior and inferior of equal length.

## SELAOPHORA Keyserling. 188\%.

Selaphora Keyserling, Archniden Australiens, p. 1374.
Cephalothorax not high, about one-third longer than wide, contracied in front, behind wide and rounded, scarcely wider than the dorsal row of eyes, convex above.
Clypeus scarcely as high as half the diameter of the large eyes.
Quadrangle of eyes wider than long, as wido before as behind, situated in front of the midlle of the cephilhorax. Anterior row of eyes nearly straight, not touching. Small median eyes a little nearer the dorsal eyes than the lateral anterior. Dorsal eyes further from each other than from the margin of the cephalothorax.
Falces short and not direrging.
Maxillae twice as long as the labium.
Labium contracted in front and not longer than wide.
Abdomen long.
Legs spined 4, 3, 1, 2. Patella and tibia of the third shorter than patella and tibia of the fourth. Metatarsus aud tarsus of the fourth not longer than the patella and tibia.

## SOBARA Keyserling. 1882.

Soloaria Keyserling, Arachniden Australiens, p. 1365.
Cephalothorax longer than wide, contracted toward the front, rounded behind, moderately high, cephalic part plane,
Clypeus as high as the diameter of the largө eyes.
Quadrangle of eyes wider than long, wider behind than in frout not so long as the half of the cephalothorax, anterior row of eyes a little cursed upward, middle eyes not touching, lateral eyes separated from these; small median eyes half way between the anterior lateral and dorsal eyes; dorsal eyes from each not wider than from the margin of the cephalothorax.
Falces rather long and slender, not diverging.
Maxillae wide at apex, contracted at the base.

Labium contracted in front, longer than half the length of the maxilla margin in front straight.
Sternum plane, rounded.
Abdomen long and contracted.
Legs spined, 1, 4, 2, 3 or 4, 3, 1, 2. First pair of legs scarcely stouter than the others. Patella and tibia of the third shorter than the patella and tibia of the fourth. Metatarsus and tarsus of the fourth not longer than the patella and tibia.

## THEROSA Keyserling. 1882.

Therosa Keyserling, Arachniden Australiens, p. 1413.
Cephalothorax one quarter longer than wide, not contracted in front rounded behind, a little wider at the dorsal eyes, above convex.
Clypeus very low.
Quadrangle of eyes wider than long, wider in front than behind. and placed far in front of the middle of the cephalothorax. Dorsal eyes a little further from one another than from themars in of the cephilothorax. First row of eyes curved, close together; small median eyes half way butween the anterior lateral and the dorsal eyes.
Falces short and not diverging.
Maxillae dilated and rounded in front.
Labium rounded in front and half as long as the maxilla.
Sternum twice as long as wide, contracted more in front than behind.
Abdomen long and contracted.
Legs spined 4, 3, 1, 2. First pair not'shorter than the others. Patella and tibia of the third as long as the patella and tibia of the fourth; metatarsus and tarsus of the fourth not shorter than the patella and tibia.

## MARGAROMMA Keyserling. 1882.

Margaromma Keyserling, Arachniden Australiens, pp. 1347, 1466.
Cephalothorax one fifth part longer than wide, c"ntracted in front, behind wide and rounded, high above, wider at the dorsal eyes.
Clypeus half the diameter of the large eyes.
Quadrangle of eyes wider than long, forming a trapezium, contracted behinj. Dorsal eyes almost as from each other as from the margin of the cephalothorax. First row of eyes recurved and near. to each other. Small median eyes further from the anterior lateral than from the dorsal eyes.
Falces short and not diverging.
Maxillae rather long in front, dilat-d and rounded.
Labium contracted in front, not more than half the length of the maxilla. Sternum sligtly convex, a little longer than wide.

Abdomen short and ovate.
Legs spined, 3, 4, 1, 2. First pair not stouter than the others. Patella and tibia of the third a little longer than the patella with the tibia of the fourth. Metatarsus and tarsus of the fourth not longer than the patella and tibia.

PROSTHECLINA Keyserling. 1882.
Prostheclina Keyserling, Arachniden Australiens p. 1368.
Cephalothorax one fi'th longer than wide, contracted in front, a little wider and rounded behind, equally wide at the dorsal eyes.
Clypeus half the diameter of the large eyes.
Quadrangle of eyes scarcely wider thạn long, behind a little contracted and almost reaching the middle of the cephalothorax. Anterior row of eyes almost straight, eyes close together. Dorsal eyes from each other scarcely further than from the margin of the cephalotho ax; small median eyes half way between the anterior lat.ral and the dorsal eyes.
Falces short, not diverging.
Maxillae dilated and rounded in front.
Labium contracted in front, half as long as the maxilla.
Sternum oval and moderately convex.
Abdomen ovate.
Legs 4, 3, 1, 2 or $1,4,3,2$. Patella and tibia of the third as long as the patella and ti ia of the fourth. ${ }^{1}$ Metatarsus and tarsus of the fourth longer than the patella and tibia.

## LAGNUS L. Косн. 1879.

Lagnus L. Koch, Arachniden Australiens, p. 1073.
Cephalothorax a little longer than wide, high; lateral and posterior, margins rounded. Cephalic pirt convex.
Clypeus low.
Quadrangle of eyes in front a little wider than long and wi der than behind; first row of eyes recurved, clise together, the median very large. Middle eses equally distant from the lateral anterior and the posterior eyes. Eyes of the third row placed in front of the middle of the cephalothorax and less distant from each other than from the margin of the cephalothorax.
Maxillae dilated toward the front, lateral margin with the anterior margin being lengthened to form an angle.
Lip convex, contracted in front, longer than half the length of the maxilla, lip rounded.

[^18]Sternum hardly longer than wide, plane.
Abdomen long, sensibly narrowed tuward the posterior.
Palpi (ô) elongated, equal in length to the first pair of legs.
Legs spined 1, 4, 3, 2, first pair stouter than the others. Patella and tibia of the third shorter than the patella and tibia of the fourth. Metatarsus and tarsus of the fourth evidently longer than the patella and the tibia.

$$
\text { SCAEA L. Kосн. } 18 \% 9 .
$$

Scaea L. Косн. Arachniden Australiens, p 1142.
Cephalothorax longer than wide, slightly contracted behind, high and convex, toward the anterior declining, third row of eyes high above the sides.
Quadrangle of $\epsilon$ yes wider than long, equally wide in front and behiod, and placed in front of the middle if the cephalothorax. Middle row of eyes as far from the lateral eyes of the first row as from the eyes of the third row and placed not higher than these; еуes of the third row further from the margin of the cephalothorax than from each other.
Sternum ovate c rdate.
Abdomen broadly ovate.
Legs patella with the tibia of the third pair shorter than the same joints of the fourth pair. The metatarsus with the tarsus of the fourth pair are shorter than the patella with the tibia.

## ${ }^{1}$ BOOTES N.

Syn: 1882. Hadrosoma Keyserling. Arachniden Austra!iens, p 1418.
Cephalothorax short, one-sixth longer than wide, in front not con'racted, behind rounded and a little contracted, scarcely wider at the dorsal eyes, above convex.
Clypeus more than half the diameter of the large eyes.
Quadrangle of eyes wider than long, as wide befıre as behind, almost reaching the middle of the cephalothorax. Dorsal eyes further from one another than from the margin of the ceph ilothrrax. Small median eyes half way between the anterior lateral and the dorsal eyes. First row of eyes slightly recurved and the lateral eyes separated from the middle eyes.
Falces short and not diverging.
Maxillae dilaterl and rounded in front.
Labium rounded in front, not longer than wide, half as long as the maxilla.
Sternum ova' and a little convex.
Abdomen level, a litcle longer than wide.

[^19]Legs spined 4, 1, 3, 2. First pair not stouter than the others. Patella and tibia of the third shorter than the patell $\imath$ and tibia of the fourth. Metatarsu and tarsus of the fourth not larger than the patella and tibia.

## CYTAEA KEyserling. 1882.

Cytea Keysereing, Arachniden Austra'iens, p. 1390.
Cephalothorax one-third or fourth part longer than wide, slightly contracted toward the fiont, behind rounded, a little wider at the third row of eye:, above slightly convex, not high.
Clypeus a third of the diameter of the large eyes.
Quadrangle of eyes wider than long, hehind and in front \&qually wide or a little narrower behind, placed far in front of the middle of the cephalothorax. Dorsal eyes further frum each other than from the margin of the cephalothorax. Anterior row of eyes recurved and more or less close together. Sniall median eyes half way between the anterior lateral and dorsal eyes.
Falces short and not diverging.
Mxxillae dilated and rounded in front.
Labium rounded in front, not more than half as long as the maxilla.
Sternum oval, longer than wide.
Legs spined. 1, 3, 4, 2, or 4, 3, 1, 2; first pair stouter than the others. Patella and tibia of the third longer thau the patella and tioia of the fourth; metatarsus and tarsus of the fourth not shorter than the patella with the tibia. Metatarsus of the fourth spined to the apex.

## SINNAMORA Keyserling. 1883.

Syn.: 1882. Tanypus ' Keyserling, Arachniden Australiens, p. 1415. 1883. Sinnamora ld., Arachniden Australiens, p. 1477.

Cephalothorax about one-fifth longer than wide, toward the posterior moderately dilated, contracted in frunt, a little wi ter at the dorsal row of eves, above high, slanting before and behind.
Clypeus as high as one-fourth the diameter of the large eye.
Quadrangle of eyes wider than long, wider in front than behind, almost reacbing the middle of the cephalothorax. First row of eyes recurved, close together. Dorsal eyes less distant from one another than from the margin of the cephalothorax. Small median eyes half way between the anterior lateral and the dorsal eyes.
Falces short, not diverging.
Maxillae dilated and rounded in front.
Labium longer than wide, more than half as long as the maxilla.

[^20]Sternum rounded, plane and a little longer than wide.
Abdomen long and contracted.
Legs spined, 4, 1, 3, 2. First pair hardly stouter than the others. Patella and tibia of the third shorter than the patella and tibia of the fourth; metatarsus and tarsus of the fourth a little longer than the patella and the tibia. Metatarsus of the fourth commonly spined throughout its length.

Lauliarulla Keyserling, Arachniden Australi nns, p. 1431.
Cephalothorax one-fuurth longer than wide, not wider in the middle thank in front, scarcely widtr at the third ruw of eyes, high and convex.
Clypeus very low.
Quadrangle of eyes wider than long, a little contracted behind, almost reaching the middle of the cephalothorax. Eyes of the first row close together, slightly curved or almost straight. Dorsal eyes a little smaller than the anterior lateral and further from one another than from the margin of the cephalothorax. Small median eyes are nearer the anterior lateral than the do:sal eyes.
Sternum heart-shaped, scarcely longer than wid.
Falces vertical, short, and not diverging.
Maxillae more than twice as long as the 'abium.
Labium wider than long, rounded in front.
Legs 4, 1, 3, 2. First pair not stouter then the others. Patella and tib'a of the third shorter than the patella and tibia of the fourth. Metatarsus and tarsus of the fourth not longer thin the patella and tibia. Matat-rsi of the fourth pair spined only at the apex.
Abdomen short, as long as wide.
Spinnerets as usual, superior not longer than the inferior.
ASTIA Косн. 1879.
Astial L. Koch. Arachn. Australiens, p. 1152.
Cephalothorax contracted in front, wider and rounded toward the posterior, opposite the third row of eyes wider, one quarter longer than wide.
Quadrangle of eyes wider than long, forming a trapezium contracted behind. Third row of eyes as far from one another as from the margin of the cephalothorax. Middle row of eses nearer the front lateral than the posterior eyes, and placed perceptibly higher than these.
Sternum ovate-cordate.
Abdomen ovate, truncted in front, sensibly contracted toward the apex.
Patellu and tibia of third pair shorter than the patella and tibia of the fourth pair. Metatarsus with the tarsus of the fourth pair shorter than the patella witin the tibia.

## SUb-family Lissomanal.

## LYSSOMANES Hentz. $183 \%$.

Syn.: 1832. Lyssomanes Hentz. Sillim 1 n's Journal of Science and Arts XXI pp. 99-152.
1844. " " Journal Boston Soc. Nat. Hist., IV pp. 386-396.
1875. " " Occasional Papers Boston Soc. Nat. Hist. II. The Spiders of the United States, Edited E. Burgess, p. 48.
Cheliceres moderately strong; maxillae parallel, short, rounded.
Lip conical, slight'y truncated at tip.
Eyes eight, unequal in four rows, the first composed of two very large eyes the second of two smaller ones, placed farther apart, on a common elevation with the two forming the third, which is narrower, the fourth about as wide, composed of two eyes placed on separate elevations
Feet, first pair largest, then the second, then the third, the fourth being the shortest

JELSKIA Taczanowski. 18iz.
Syn.: 1872. Jelskia Tacz, Aran. de la Guyane franģaise, Horae. Soc. Ent. Rossicae, V III. 1871, pp. 128-132.
1878 ". Id., Arınéides du Pérou, Bull. de la Soc. Imp. des Nat. de Moscou, LIII. 4, p. 373.
Cephalothorax: long, with the cephalic part distinct from the thoracic, aud higher.
Eyes eight, in four rows; the first pair very large, (occupying the entire height of the face, very near together but not touchiog, directed forward; eyes of the second row half as large, situated above those of the anterior row, a little further back, and separated from each other so as to form an almost regular quadrangle with the anterior eyes; like them directed forward and a little upward; the eyes of the third row small, situated on the horizontal face of the back, rearer to one another thin the others, and directed upward; those of the fourth row as large as those of the second, placed behind on the middle of the back, not quite so far apart as these last, directed obliquely backwaru.

Eyes very uneq:al in size, disposed in four transverse lines of two each, and almost of same length.
Maxillac rather short, slighty divergen ${ }^{\dagger}$, and much the broadest at their extremities, which are rounded.
Lip short, small, and of a somewhat curviangular form.
Legs rather slender and moderately long; those of the first pair longest; and of the second pair shortest.
Abdomen small, short, oval, and sloping from its most convex part, near the margin to the spinners.
This genus is closely allied to Lysscmanes Hentz, as well as to Jelskia Tacz. It differs, however, from both in the shortness of the cephalothorax and also of the abdomen. From Lyssomanes Hentz it differs in the superior and inferior spinners being of equal length, whereas, in that genus, those of the superior pair are much longer, slender and threejointed.

Dr. L. Koch's suggestion that Athamas is probably identical with Evenus of Simon (Arachniden Australiens, p. 1076), seems to us an error, since the genera differ in several characteristics. In Camhridge's genus the cephalothorax in front is very convex; the sides of the head are parallel, the clypeus as wide as the mid̉le eyes of the first row; the first leg longest. In the genus of Simon, the cephalic part is plane, the sides of the head converge behind, the clypeus is only one half the diameter of the large middle eye; the third leg longest.

## APPENDIX.

We give below definitions of those genera which have been formed since the completion of the preceding paper. Those of Mr. Simon and Count Keyserling we have translated with their notes. We wish, also, to refer to a genus which had heretofore escaped our notice, and of which we have not yet the definition. This is Chalcoscirtus Bertkau, formed for Calliethera infima E. Sim., cf. Ver. d. Nat. Ver., XXX, 1883, p. $20 \%$.

## PSETJDICIUS SIMON. 1885.

Syn.: Attıss auct (ad part.). Dendryphantes E. Sinn., Ar. Fr., III (ad part. eucarpatus, etc.) + Calliethera E. Sim., Ar., Karth., 1884 (ad p. icioides). Pseudicius E. Sim, Faune Arach. de l’asie Mérid., Bulletin de la Soc. Zool. de France, t. x. 1880.

Related to the genus Icius E. Sim., differing in having the eye area parallel above, and the falces in $\delta$ and $\&$ not grooved in the outer sides; tibiae I and II unarmed, or with one spine ( $P$. badius), or provided with two minute spines on the inner side; tibiae and metatarsi III and IV unarmed, (excepting with the ordinary terminal spines); of with femur and tibiae I very stout.

I believe it necessary to create this genus for a certain number of species whose characteristics are intermediate between those of Icius, and those of Dendryphantes and Calliethera, but which does not agree entirely with any one of these. The cephalothorax is long and low as in Calliethera and Icius, the first row of eyes is equally straight, this being the point which separates these genera from Dendryphantes, the ocular quadrangle is parallel above, as in Calliethera; the armature of the anterior legs is very peculiar; the tibiae are unarmed with the exception of one or two small internal spines on the first pair, but the metatarsi have two pairs of small spines. The integument is covered with simple hairs, never with scales.

This genus has for its type $P$. (Dendryphantes) encarpatus Walck.; it includes beside. P. badius E. Sim., P. picaceus E. Sim, from the south of Europe, and P. (Calliethera) icioides E. Sim., from Khartoum.

TABLE I.
analysis of genera of the family attid

| Heigth, Lexgth, and Width of Cephalothorax. |  |  |  | Sides of Cephalothorax. |  |  |  |  | Posterior Part. | Dorscm. | Cephalic Part | Thoracic Part. | Clypeus. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Height. | Length. | As wide as ol wider than 3d row of eyes. | Parallel or not. | Contracted in frontor behind. | Dilated in front or behind. | Dilated in or behind the widdle. | Vertical or rouuded. | Slanting, rounded or truncated. | Plane or convex. | Inclinad or | Length compared with cephalic part. | Height compared with middle an terior eyes. |
| Sandalodes. | Moderately high. <br> Not high. | $\begin{aligned} & \text { lon longer than wide } \\ & \text { Rather long...... } \end{aligned}$ | Wider | Sumetimes. | Both | S | Middle | Rounded.. | Slanting |  | Inclined Often incined | At least $\frac{1}{\text { diong }}$ lor |  |
| $\xrightarrow{\text { Marptuaa. }}$ Epible |  | Loug ....... |  |  |  |  | Behiud |  |  | Plane |  |  |  |
| (epinimum | Very high |  |  |  |  |  | . Behind middie |  |  | Plane or cour | luclined | At least $\frac{1}{f}$ longer |  |
| Simatha... | High........... | Sihort |  |  | Buth. |  | Middie. |  | Truncated |  |  |  | Less thau $\frac{1}{\text { d }}$. |
| Dendry $\begin{aligned} & \text { Diantes.. } \\ & \text { Atus ....... }\end{aligned}$ | Moderately high. |  |  |  |  | Beliniud. |  |  |  |  | ${ }_{\substack{\text { Level } \\ \text { Inclived }}}^{\text {a }}$ | At least $\frac{1}{\frac{1}{8}}$ longer $\frac{1}{2}$ or $\frac{1}{2}$ longer |  |
| Pellenes. | High............ | Raither long |  |  |  | Beliid. Beniud |  |  |  | Convex | Inclined. | \% louger..... | ${ }_{\text {a }}^{\text {About }}$ At |
| Menemer | нін. | Lent |  |  | Notin front |  | In and behind midide . |  |  | ${ }_{\text {Plane or convex }}^{\text {Convex ...... }}$ | Inciined |  | Scarcely Of |
| Buethus... | $\underset{\text { Very high }}{\text { High }}$ |  | Litite wider. |  | Nutin front |  | Behind mididle |  |  | Convex | $\frac{\text { Luclived }}{\text { Inclived }}$ | Twice as long | , |
| Yilenus. | Very hiph ... | Raither long. |  |  |  | Belliud. | Behind middle .,.... |  |  | Convex | 1 nclired | Twice as lung. | As wide or a'moet |
| $\underset{\substack{\text { Mxevia } \\ \text { Viciria.... }}}{ }$ | Moleratly high. | tonger tian wide | Mucli wider... |  |  | Beliud. |  |  |  |  |  | ${ }_{\text {At least }}$ tiluige |  |
| Ravia.... | Not high ${ }_{\text {Noderatily hich: }}$ | Not very long... |  |  |  |  | Behind middle | Rounde .: |  | Plane |  |  | ${ }^{\text {Actarcely }}$ A |
| Eris..... | Moderately high. | Siorior |  |  | Behind |  | Behiad midde |  | sianting |  | Level or incli'd | Equat to tepliadic | At east to |
| Noon...alis | Low.. |  |  |  |  |  |  |  |  | Plane |  | Sturter hau ceplatic. | Less than $\downarrow$. |
| Habrocestum | Very high | Rather short |  |  |  |  | Bebina midide |  |  | Conve | Incliwed | $t$ lunger. | About |
| Hyctia ..... |  | Long. |  | Aluost... |  |  |  |  |  |  | Level | At leant ${ }^{\text {a }}$ douger | ${ }_{\text {Scurcely }}^{\text {S }}$ S |
| ${ }_{\text {cher }}^{\text {Criba. }}$ | Not high | Very long |  |  | Behiud.... |  | Middle |  |  | Pla:ie | Inciiied | About tonger. | Very low. |
| Saitis.. |  | Moderately long. |  | Alnust. |  |  |  |  |  | Plane | $\xrightarrow{\text { nec.i }}$ | ${ }^{\frac{1}{3}}$ A longere. | Mure than |
| Neetha. | ${ }_{\text {Not }}^{\text {High }}$ (ighi |  |  |  | Beliud. |  | Middle | Ruunded | Truncat | Plane | Inciored | At deateras ceplay |  |
| Plexippus | Moderately high. | $\frac{1}{4}$ or $\frac{1}{6}$ longer than wide. |  |  |  |  | Middle | Ruunded. | Slanting |  |  |  |  |
| Eenouarus. | ${ }_{\text {Hithe }}^{\text {Nigh }}$ | Silort | wider |  |  | In frout.. |  |  |  |  |  |  | At least $\frac{1}{2}$. Nut |
| ${ }_{\text {Phidippus. }}^{\text {Cocalus }}$ | Higl... | Short |  |  |  |  | Midde. | Vertica | Sianting <br> Slanting |  |  |  |  |
| Linus. | very high.... |  | Litlle wider. huch wider |  |  |  |  | Ueruca |  | Cone | Incined |  | Ai least ${ }_{\text {t. }}$ |
| Ciris |  | Sloot ................... |  |  |  |  |  |  | Rounded | Conve |  |  |  |
| ${ }_{\text {Amycus }}$ | Very ligh. | Nearly as long as w |  |  |  |  |  | Ruounded. | Slanting |  | $\underset{\substack{\text { Lievel } \\ \text { Level }}}{ }$ |  | Very low. |
| Thauia ${ }_{\text {Cliai }}^{\text {Chirothecia }}$ |  |  |  |  |  |  |  |  |  | Plane |  |  |  |
| Discornemius | Moderately high. | Lung. |  |  |  |  |  |  |  |  | Level | She | Very low. |
|  | Not high |  |  |  | Behind... | In front. |  |  |  |  | Level |  |  |
| Mopsus... | Moderately high, |  |  |  |  |  |  |  | Slanting |  |  |  |  |
| Onmeredus. | Higla behind .... |  |  |  |  |  |  |  | Truncated. | Tlioracic part | lucliied |  | ${ }_{\text {Hill }}^{\text {High. }}$ Ratler high. |
| ${ }_{\text {R }}^{\text {Ramumbouot }}$ |  | Almost twice as long as wid. Almost twice as lung as wide | As wide |  | $\begin{aligned} & \text { Bot.... } \\ & \text { But... } \end{aligned}$ |  | Middle <br> Middle | Rounded..... |  | Convex |  |  | $\frac{\text { Aldou }}{\text { L }}$ L |
| Damuetas ${ }_{\text {Synemosy }}$ |  | Almost wice as long as wid | As wae. |  |  |  |  | Rounded.. |  |  |  |  | Less than |
| Seporchestes | Not high. Nut highi | Very long |  | Paralel |  |  |  |  | Rounded or truncated | Plane |  |  | Very liow. |
| Sydageles. | Low ${ }^{\text {Now }}$, | Twice as loug as wide |  |  | Behiud. |  |  | Almost reticai |  |  |  |  | Very low. |
| Sillicis.... | Cephalic p't hight |  | Little wider |  |  | Behind. |  |  |  |  |  |  | Vtry low. |
| Hypublemum | Not higli....... | ${ }^{1}$ ir tor longer than wide | Litule wider. |  | In $\begin{aligned} & \text { In frout... } \\ & \text { lut }\end{aligned}$ |  | Middle |  | Rounded | Convex Convex |  |  |  |
| $\xrightarrow{\text { Iound }}$ Therosa |  |  |  |  | lu frout. |  |  |  | Rounded Rounded | ${ }_{\text {Plane }}$ Convex |  |  | Very low. |
| Cytea. | Nut highi. | $\frac{1}{2}$ or ¢ 1 longer than W |  |  | In friout... |  | Midde |  | Rounded. | Convex |  |  |  |
| Tara ...ilia | ${ }_{\text {Ligh }}^{\text {Low }}$ | - louger lhan wide. |  | Almost. |  |  | Middle |  | Rounded. | Plane |  |  | Very liw. Very |
| Patirithus.. | Mvoderatily high. | Litle longer than wide |  | A | Behinio... Iu frout. | Belind.......... | Middie. | Rounded | Sianting | ${ }^{\text {Convex }}$ |  |  |  |
| Bianor | High | Little louger than wide | Not wider |  | buthont | Be |  | Rounded. |  | Cunvex | Inclin | Not longer | $\stackrel{\text { Liow. }}{\text { Li }}$ |
| Astia. |  | - longer lian wide |  |  | In front.. | Beh | Midd |  | Ronnded. |  |  | - |  |
| Margonim | High. | longer than wide |  |  | In fruat... | Behind | Middie |  | Rounded | Couvex |  |  |  |
| ${ }_{\text {Prosesthecli }}^{\text {Solbara }}$ |  | ${ }^{\frac{1}{2} \text { longer than wide }}$ Longer thau wide. |  |  | lin frout.: | Beliind |  |  | Rounded. Ruund d. |  |  |  |  |
| Ergane | High. | Longer tlan uide |  |  | Both..... |  |  |  | Rounded | ${ }_{\text {Conex }}^{\text {Plane }}$ Comex | Inclined |  | is wide. Less than $\frac{1}{2}$. |
| Scea... | ${ }_{\text {Hil }}^{\text {High1 }}$ | Loiter ina wid- ${ }^{\text {Litug }}$ |  |  |  |  |  | Roun ed... | Rounded. | Convex | Inc.ind |  |  |
| Opisthonocus | High.......... | L nger than wide... | Litlle wider. |  | In frout <br> Behiud |  |  |  |  |  |  |  | ery |
| Mago. | High behind . |  |  |  |  |  |  | Vertical.... | Truncated | Convex | Inclii ed |  |  |
| Oeaipus |  |  |  |  |  |  |  |  | Slanting | Convex | Incin ned |  |  |
| Janigeua |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mithion ${ }_{\text {Lysiol }}$ |  | Very long. |  |  |  | Almost paralle |  |  |  | Cephalic part almest plane. | Not incliued | At least $\frac{1}{8}$ louger | Scarcely t. |
| ${ }_{\text {Linsel }}^{\text {Lystrocteisa }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lyssomane3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jelskia |  | Longeratel 1 |  |  |  |  | Behind miudie |  |  |  | Inciined |  | Almost t . |
| Aihamas . |  | Slurt quadrate. |  |  |  |  | $\cdots \mathrm{CH}$ : $0 \times 0$ | Almost rertical | Almost vertical. | Very convex ........ |  | Scarcely longer tian cephat |  |

analysis of genera of the family attide-Continued


TABLE III.
TABLE III.
analysis of genera of the family attidae - Continued

|  | Strrnim. |  |  | Coxas. |  |  | maxilae. |  | Lip. |  | Ardomen. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Length. | Width. | Shape. | 1st pair separated by less. |  |  | Length. | Stape. | Length. | Stape. | Shape. |
| Sandalodes <br> Icius <br> Marıtusa <br> Epiblemum Philaeus .. <br> Ballus <br> Dendryphantes <br> Attus <br> Pellenes. <br> Menemerus <br> Buethus. <br> Elurillu | Long |  | Contraceed in front. |  |  | ......... | - longer than lip. | ......................................... | Longer than wide. |  | Twiec as long as wide |
|  | Twice as long as wide | Narrow |  |  |  | \#....: | ............................. | Pointed, parailel, wide at base | .................................... | Conical |  |
|  | Long....0.0.0.0.0......... | Rather narrow <br> Wider than 2nd and $3 d$ coxae <br> As wide as the 1st coxae <br> Rather narrow |  | By much less |  | ד̌* |  | - ........................................... |  |  | Siort .............................. |
|  |  |  | Attenuated at both eods.: | $\begin{aligned} & \text { By width } \\ & : \begin{array}{l} \text { By less } \\ \text { By width } \end{array} \end{aligned}$ | I. |  |  |  |  |  |  |
|  | Long. | Rather narrow | .......................: | By less By widt By widul |  |  |  |  |  | -................................. |  |
|  |  | Rather na <br> Much wider than coxae Very narrow <br> Narrower than 2d and 3d coxae | Contracted in front.....: | $\begin{aligned} & \text { By widitio } \\ & \text { By w widt } \\ & \text { By with } \end{aligned}$ | $\stackrel{I}{\cdots}$ | +1... | More than twice as long as lip |  | About as long as wide | Widely l tuncated at tip. | Oval and flat <br> Long and flattened |
|  |  |  |  |  | I |  |  |  |  |  |  |
|  | Loug |  |  | Abointihe width By less |  | cicio |  | Narrow..................................... | About as long as wide |  |  |
| $\underset{\substack{\text { Mevia } \\ \text { Vieiria }}}{\text { ate }}$ | Rather shört | Wider than coxae About width of 2 d and 3 d coxae Often wider than $2 d$ and $3 d$ coxae As narrow as $2 d$ and $3 d$ coxaeTVider than $2 d$ and $3 d$ coxae. | Oval <br> Triangular | At least by widethRy width at least By width Often by less | I. ${ }_{\text {I }}$ | $\begin{gathered} \\ \hdashline i v \\ \cdots i v \end{gathered}$ | Long | -1........................................... | Niarly $\frac{1}{2}$ longer than wide Twice as long as wide | - Warrower and rounded at tip ...... | Longs iender ...................... |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Eris. | Short |  |  |  |  |  |  |  |  |  | Broad as 1 |
| Hematiatus. | Loong | Narrower than $2 d$ and $3 d$ coxae Wider than 2nd and 3d coxae. Wider than 2 d and Bd coxae. As wide as 2 d and $3 d$ coxae. As wide as $2 d$ and 3 d coxae | Sinal Contracted in front Contracted in front Contracterl in fr $n$ t | By less. <br> By widti <br> st, coxae tonching <br> At least by wicth <br> Ry width <br> By width and II | İ. | $\begin{aligned} & \text { II } \\ & \text { IV } \\ & \text { IV } \end{aligned}$ |  | \% very wide with projections. | -............................... | ... ............................ | Narrow, Iong....................: |
|  | Twice as iong as wide |  |  |  |  |  | -........................... |  |  |  |  |
| ${ }_{\text {Plilea }}^{\text {Phera }}$ | Twice as long as wide |  |  |  | I |  |  |  |  |  |  |
| ctath | Tonc |  |  |  |  |  |  |  | Not longer than wide. <br> Longer than wide |  |  |
|  | Kather sioort | As wide as $2 d$ and $3 d$ coxae <br> Wider than $2 d$ coxae <br> Wider than coxa <br> Wider than coxa | Cantracted in fr nt ........ -3................ | By width and II |  |  |  |  |  | Truncated |  |
|  | Rather stiort |  |  |  | ...... |  | At least tiouger than lip.... |  |  |  |  |
| Cooalus. |  | -................................ | Hoderately convex.. | -...- |  |  |  |  | A litile ionger than wide (ixil.e. | Narrowing at tip.................. | Culiudrial................. |
| ${ }_{\text {Hyllus }}^{\text {Hirs.. }}$ | \$ longer than wide |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {Amy }}^{\text {Ams }}$ Phyase |  |  |  |  |  |  | ............................... |  |  |  |  |
| Thiana, |  |  |  |  |  |  | Abcut twice as iong as wide... |  | Longer than wide...................... |  | Hong..................... |
| Disconem |  | Not sarrower than coxae. |  |  |  |  |  |  |  |  |  |  |
| Ascyltus |  |  |  |  |  |  | Short <br> Long | Narrow at base, wide at tip <br> Narrow at base, sub-ovat <br> Convex, tip rounded Tip truncated | Longer than wide <br> Scarcely or not wider than long <br> Half as long as maxillae <br> no as maxillae |  | Long, narrow <br> Truncated in front, high, short Short, truncated in front Cylindrical, constricted Long, constrictrd Long, constricted |
| (tamorchi |  |  |  | Widely separazaed |  |  |  |  |  |  |  |
| Rhemboon | Liong: | Narrow |  |  |  |  |  |  |  |  |  |
|  |  | As narrow as $2 d$ and $3 d$ coxae. ........ Wider in middle tlan 2 Very narrow | Orai | Widely separated |  |  | Rather short as |  | Short ........................................ As wide as !ong <br> As little wider than long |  |  |
|  |  |  |  |  |  |  |  | Very wide, square at tip <br> Tip truncated <br> Ip truncated |  | Semi-circular <br> Truncated. <br> Narrowing at ip <br> Narrowing at tip Narrowing at tip <br> Rounded at tip <br> Rounded at tip | Siender, sub-cciliidirical.,......... |
| ${ }_{\substack{\text { Selaphora } \\ \text { Hypoblemu }}}^{\text {a }}$ | longer than w | Wider behivid |  | - | -.... | . | ${ }_{\text {Len }}^{\text {Lonice as iong as lip }}$ | Ditated rounded at tip ....................... | Much longer than wide <br> Not longer than wide. <br> A little longer than wide <br> $\frac{1}{4}$ as long as maxillae $\frac{1}{2}$ as long as maxillae <br> Not more than $\frac{1}{y}$ as long as maxillae |  | Long. <br> Twice as long as wide <br> Long, Jvate. <br> Lonś, narrow |
| ${ }_{\text {Therosa }}$ | Twice as long as w | Contrated in front................. |  |  |  |  |  | D lated, rounded at tip Dilated, rounded at tip Dilated at tip |  |  |  |
| Certea | Longer than w |  |  |  |  |  |  |  |  |  | Long. <br> Short Oral. <br> Long, narrow <br> $\frac{1}{2}$ longer than wide <br> Rrate, truncated in front <br> Rounded in front, pointed behind <br> Short, ovate <br> Ovate |
| ${ }_{\text {L }}^{\text {Lauharulil }}$ |  |  |  |  |  |  | More than twice as long as lip Long <br> Twice as long as lip | Dilated at tip <br> ounded at tin . <br> Dilated and rounded at tip | Wider than long <br> Longer than wide <br> Nut longer than wide | Rounded at tip |  |
| Sinamor | Longer r han wide Twice as long as wide |  |  | ........................ |  |  |  |  |  |  |  |
| Asotus | Miuchi iongeer tian wide |  | $\begin{aligned} & \text { Ovate cordate } \\ & \text { Ovate convex } \\ & \text { Cnnvex ........................ } \end{aligned}$ |  |  |  |  | Dilated and rounded at tip Dilated and rounded at tip Dilated and rourded at tip Wide at tip <br> Dilated in front | More than $\frac{+}{4}$ as long as maxiliae <br> Not more than $\frac{1}{2}$ as long as maxillae <br> More than $\frac{1}{2}$ as lung as maxillae | Narrowing at tip <br> Narrowing at tip <br> Narrowing and truncated at tip |  |
|  | Longer than wide |  | Oval convex |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Not twice as long as lip |  |  |  |  |
| Scaanus $\substack{\text { Laanus } \\ \text { Opisthon }}$ | Sior | \arrow |  |  |  |  | Noot | Mip diatee anti.ain | More than + as 10 | Convex,narrowing and rounded at tip Contract-d and truncated at tip Contracted and <br> Contracted and rounded at tip |  |
| Soithe | Lo |  |  |  |  |  |  | Dinated and roundee at | ent |  | (eine....................... |
| ${ }_{\text {Mago }}^{\text {Medipus }}$ |  |  |  |  |  |  |  |  | Abour fas ong as |  |  |
| artes. |  | In middie equal to intermediate coxae | Oval. ${ }^{\text {ajarrowing at ends. }}$ | By w | I |  |  |  |  |  |  |
| hion strocte | Long. |  |  |  |  |  | Short .......................... |  |  |  |  |
| Coter |  |  |  |  |  |  |  | Paraliel, rounded. |  | Conical, trucated |  |
| kia |  | Scarce wider than coxae è d and ${ }^{\text {dod }}$ | Convex | At least ty the widith: |  |  |  |  |  |  | Cylindrical. long, slend |
|  |  |  |  |  |  |  | Rat | Dilated and rounded at tip | Short | turviangular | small, short, |

analysis of genera of the family attide-concluded.


## PSEUDAMYCUS Simon. 1885.

Amycus V. Hasselt, (albomaculatus) (non C. Koch nec L. Koch). Pseudaṃycus E. Sim, Arachn. recueillis par M. Weyers á Sumatra, Ex. des Comp'es-rendus de la Sjc. Ent. de Belgique, 1885.

Very closely related to the genus Ephippus Thorell, the cephalothorax and eyes being almost the same, the falces being furnished with one strong tooth on the inferior margin of the groove, and with two, the second being the smaller, on the superior margin (in Ephippus the inferior has 1, and the superior 3 or 4 minute teeth), the metatarsi and tarsi III and IV being a little shorter than the patellae with the tibiae (they are a little longer in Ephippus), and the tibiae III and IV armed with a dorsal spine below the base.

The genus Amycus C. Koch (type igneus), found in South America, is easily distinguished by its clypeus being as wide as, or wider than the anterior eyes, and by the inferior margin of the falces being provided with from 3 to 5 teeth.

## PTOCASIUS Simon. 1885.

Ptocasius Sim., Arach. recueillis par M. Weyers, à Sumatra, Ex. des Comptes-rendıs de la Soc. Ent. de Belgique, 1885.

Related to the genus Hasarius, the cephalothorax being almost the same, but the occular area being a little longer above, scarcely one fourth wider than long, parallel or barely wider behind, convex on both sides behind the eyes; eyes as in Hasarius excepting that those of the second row are more widely removed from the posterior than from the anterior eyes; labium more attenuated, falces with a pair of teeth (or a bifurcated tooth) on the inferior margin of the groove. which are very unequal, the first being much smaller than the second, the maxillae in the $s$ denticulated on the outer side behind the corner. Lcgs as in the genus Hasarius but with the tibiae and metatarsi I and II armed on both sides with lateral spines, tibiae I and II without dorsal spines, III and IV with a smaller dorsal spine placed behind the base, integuments covered with simple hairs, not with scales.

Equally near to the genus त्ytaea Keyserl. (in L. Koch, Ar. Aus'r.) but differing from it in having the cephalothorax shorter and higher, by the superior margin of the falces being provided with two teeth, as in Hasarius, while in Cytaea there are four small ones, by the two teeth of the inferior margin being very unequal, and finally by th $\geqslant$ integument being covered with simple hairs, while the Cytaed of the hairs are scale-like.

Salticus sinuatus Doleschall (Plexippus Th.), Plexippus laticeps Thorell, and probably many other species described by Dr. Thorell under the generic name of Plexippus belo g to the genus Cytaca.
It is probable that several of the species describad by Keyserling under the name of Hasarius, belong in the genus Ptocasius, particularly lineatus, albocinctus, insularis, chrysostomus, and mulciber, which are unknown to us.

## STAGETILLUS Simon. 1885.

Stagetillus E. Srm., Arach. recueillis par M. Weyers á Sumatra, Ex. des Comptes-rendus de la Soc. Ent. de Belgique, 1885.

Near the genus Bavia, but having the cephalothorax much longer; the thoracic p rt almost $\frac{1}{3}$ longer than the cephalic, the ocular area longer above, a little narro er behind than in front, the sternum plainly wider than the intermediate coxae, and very much narrower in front, the space between the anterior coxae not narrower than the width of the labium, legs $1,4,2,3$, the first much stuut. $r$ that the oth $r$ rs, and compressed, tibiae and metatarsi I and II furnished with stout spines disposed in two inferior rows, the posterior le ;s unarmed, the metatarsi with the tarsı III and IV longer than the patellae with the tibiae, trochanter IV cylindrical and long, scarcely shorter than the coxae, falces short, parallel, almost plas:e in front, the inferiur margin of the groove with 3 or 4 teeth.

## AGOBARDUS Keyserling. 1885.

Agoloardus Keyserling, Neue Spinnen aus Amerika, VI, p. 33.
Cephalothorax about $\frac{1}{3}$ longer than wide, nearly vertical on the sides, narrower in front and behind, and not wider than the third row of eyes, very convex auove, falling steeply to the posterior border, and haying the cephalic part strongly inclined forward.
Quadrangle of the eyes equally wide in frout and behind, and much wider than long, reaching behind to the middle of the rephalothorax. Looked at from in front the first row of eyes seems to be strongly curved, and the side eyes to be separated from the middle eyes by more than their owo radius. The small eyes of the second row are about half way between the fore side eyes and the eyes of the third row, which are equal y distant from each other and from the lateral borders.
Falces a little diverging, and as long and stout as the patellae of the first pair of legs.
Lakium not longer than wide, and only half as long as the maxillae, which are rounded in front and moderately wide.
Sternum only a little longer than wide, and plainly wider than the coxae.

Legs ( o 1, 4, 3, 2, and \& 4, 3, 1, 2), moderately long. the first pair scarcely stouter than the others, thinly haired and with spines on all the joints; the metatarsus of the fourth has several at the beginning and end. Metatarsus and tarsus of the fourth a little longer than patella and tibia of the fourth, and these joints as long as the patella and tibia of the third.
Abdomen not much longer than wide.

## WaLA Keyserling. 1885.

Wala Keyserling, Neue Spinnen aus Amerika, VI, p. 30.
Abdomen long and slender.
Cephalothorax scarcely wider than long, strongly rounded on the sides, much wider than the third row of eyes, contracted behind, not high above, and rather flat. The cephalic part slightly inclined forward.
Clypeus very low.
Quadrangle of the єyes wider than long, somewhat narrower in front than behind, occupying only about $\frac{1}{8}$ of the cephalothorax. Anterior row slightly bent, with the eyes racher near together. E'yes of the third row further from each other than from the lateral burders.
Falces ( © ) rather slender, long, and diverging.
Labium longer than wide, $\frac{2}{3}$ as long as the maxillae.
Sternum scarcely longer than wide and scarcely narrower than the coxae of the first pair of legs, much wider than those of the second.
Legs ( $\delta$ ) $1,4,3,2$, first pair in the male much longer and stouter than the others. Femur, tilia, and metatarsus of the first and second pairs with spines, which are found only on the femur and at the extremity of the metatarsus on the third and fourth pairs. Patella and tibia of the fourth longer than the patella and tibia of the third; also longer than the metatarsus and tarsus of the fourth.

This genus stands very near to Hyllus C. K., but is separated from it by the still shorter cephalothorax, by the $a^{h}$ sence of spines at the beginning of the metatarsus of the fourth leg, and chiefly in that the patella and tibia of the thitd are shorter than the patella and tibia of the fourth, and that the quadrangle of the eyes is a little wider behind than in front. It is also somewhat like Sandaludes Keys., but is separated from it by the short, wide sternum, and the absence of spines at the beginning of the metatarsus of the fourth. As to Mospus Keruli it offers, beside other differences, the height of the clypeus in relation to the eyes, which is the principal difference. (Bei Mospus Keruli bie et ausser anderen Verschiedenheiten die Höhe des Clypeus das am meisten in die Augen tretende Merkmal der Unterscheidung).

GANESA Peckham. 1585.

Ganesa Peckham, Proc. Nat. Hist. Soc. of Wisconsin, March, 1885.
Cephalothorax very low and flat, slightly contracted in front and behind, twice as long as wide, and a little wider than the third row of eyes, with a depression limiting the cephalic part. Thoracic part twice as long as cephalic, truncated behind.
Eyes forming a quadrangle a little more than $\frac{1}{+}$ wider than l ng and equally wide in the front and behind. Anterior eyes all separated, form. ing a line slightly curved ${ }^{1}$ downward, the middle nearly three times as large as the lateral eyes. Eyes of the second row halfway between the dorsal and lateral eyes. Dorsal eyes further from each other than the lateral borders.
Clypeus very low.
Sternum wide and oval, narrower behind than in front. Anterior coxae separated by the width of the labium.
Maxillap. less than twice as long as labium, wider at the extremity, parallel.
Labium a little longer than wide, rounded at tip.
Falces nearly vertical, not diverging, robust, short, ab-ut as wide as long, narrower at the insertion of the fang.
Legs $1,4, \overline{2,3}$, in both sexes. First leg much the stoutest, with the $\mathrm{f}+\mathrm{mur}$ and tibia greatly enlarged, and patella slightly enlarged in both sexes. The patella with tibia of the third shorter than patella with tibia of the fourth; metatarsus with tarsus of fourth shirter than patella with tibia. Tne third and fourth pairs have no spines.
Abdomen long and slender, flattened above.

ASAMONEA (Cambridge). 1869. Simon.
Syn., 1869. Asamonea Camrr, Ann. Mag. nat. hist., 1869, p. 14.
1885. " E. Sim., Faune Arachnologique de l'Asie Mérid., Bull. de la Soc. Zool. de France, t X., 1885.

We tramscribe the following remarks on the genus Asamonea, from E. Simon, (Materiaux pour servir a la faune Arachnologique de l'Asie Méridionale Bulletin de la Société Zoologique de France, t. X, 1885.)

[^21]The typical species $A$. tenuipes has been described by the Rev. O. P. Can bridge under the generic name of Asamonea, but the characters of the genus have never been formulated, the author having been of the opinion, even at the time of its publication, that this new genus was simply synonymous with Lyssomanes Hentz. It seems to us that the genus Asamonea ought to be re-established, as it differs greatly in reality from the genus Lyssomanes by the proportion and the disposition of the eyes and the form of the labium; in Asamonea the region occupied by the six dorsal eyes is much wider than long, and the eyes are almost equal, the scarcely smaller ones of the third pair are placed much within and near those of the second, the labium is as wide as long, while in Lyssomanes the dorsal ocular area is as long as wide or scarcely wider, the eyes of the third row are much smaller than the o!hers, placed equally far in, but much more behind the eyes of the second row, finally the labium is much longer than wide.

The characters of the genu; Asamonea may be thus formulated:
Cephalothorax low almost plane above, dorsal eyes $2,3,4$, occupy a trapeziform area much wider than long, eyes of the third row scarcely smaller than the other eyes, and placed within and behind the eyes of the second row. Maxillae short, almost quadrate. Labium not longer than wide, a little attenuated and truncated. Superior spinnerets much longer than the inferior, biarticulate, the first articulation scarcely shorter than the second. Legs slender, rather long, 1, 4, 2, 3, furnished with long spines; metatarsus IV much longer than the tibiae.

## SIMONELLA Peckham. 1885.

Simonella Peckhay, Proc. Nat. Hist. Soc. of Wisconsin, March, 1885.
Body long, slender, nodose.
Cephalothorax more than twice as long as wide, convex above, constricted near the middle; thoracic part twice as long as cephalic.
Eyes very unequal in size, placed in four transverse rows of two each. those of the anterior row almost touching. The quadrangle formed by the second and fourth rows is wider behind than in front, and wider behiud than long. Eyes of the third row very small, and nearer to the second than to the fourth row. Eyes of the fourth row on the upper margin of the cephalothorax.
Clypeus less than $\frac{1}{2}$ as wide as the anterior eyes, retreating.
Sternum long, narrow behind. Anterior coxae separated by the width of the labium.
Maxillae twice as long as labium, widest in the middle, tapering toward apex.
Labium as wide as long, truncated at tip.
Falces stout and long, vertical, slightly diverging.

Legs 4, 3, 1, 2, slender, differing but little in thickness, the third and fourth pairs unarmed. Patella with tibia of the-third shorter than patella with tibia of the fourth; metatarsus with tarsus of the fourth shorter than patella with tibia.
Abdomen long, slender, much narrower in the middle.
Including Asamonea Cambr., Simonella makes the sixth genus of the sub-family Lyssomanae, which includes those attidae which have the eyes in four transverse rows. Janus myrmaciaeformis Tacz. is nearest to Simonella, and Dr. Taczanowski, in describing that species, suggests that it ought to constitute a new genus. It differs, however, from Simonella, in that the first row of eyes occupies the whole of the face, and in the quadrangle of the eyes being longer than wide. Simonella is easily distinguished by its nodose form from the other genera of this sub-family. In general appearance it most resembles Synemosyna Hentz.

rcin.org.pl

rcin.org.pl
rcin.org.pl

14
rcin.org.pl


[^0]:    ${ }^{1}$ The Philosophy of the Inductive Sciences, Vol. 1, pp. 476, 47\%.
    ${ }^{2}$ A System of Logic, pp. 50t, 505. Huxley, alio say": "It is siid, in short, that a natural history class is not capzble of being defiaed - that the class Rosacer for instance, or the class Fishes, is not accurately and

[^1]:    absolutely definable, inasmuch as its members will present exceptions to every possible definition; and that the members of the class are united together on'y by the circumstance that they are all mors like some imaginary average race or average fish, than they resemble anything else. But here, as before, I think the distinction has arisen entirely from confusing a transitory imperfection with an essential character. So long as our information concerning them is imperfect, we class all objects together accoräing to ressmblances we feel, but cannot define; we group them around types, in short. Thus, if you ask an ordinary person what kind of animals there are, he will probably say beasts, birds, reptiles, fishes, insects, etc. Ask him to define a beast from it reptile and he cannot do it; but he says, things like a cow or a horse are bsasts, and things like a frog or a

[^2]:    ${ }^{1}$ Damoetas=Scirtetes L. K., preoccupied.
    ${ }^{2}$ Some of the species of Homalattus White resemble beetles, but in this genus the cephalic part is longer than t'e thor cic.

[^3]:    ${ }^{1}$ Neaetha $=$ Nee a E. S., prtoccupied.
    ${ }^{2}$ B anor $=$ Scythropa Kesserling, preoccupied.
    ${ }^{3}$ Iona = Erasmia Keyserling, preoccupied.
    ${ }^{4}$ See genus Plexippus.
    ${ }^{5}$ The face in Amycus is very high, but not equally high in the different species.

[^4]:    ${ }^{1}$ Linus $=$ Sinis Thorell, preoccupied.
    ${ }^{2}$ Zenodorus=Ephippus Thorell, preoccupied.

[^5]:    ${ }^{1}$ Bootes=Hadrosoma Keys $\epsilon$ rling, preoccupied.
    ${ }^{2}$ たlurillus=Aelurops Thorell, preoccupied.

[^6]:    ${ }^{1}$ Thyene $=$ Thya Simon, preoccupied.
    ${ }^{2}$ Hypoblemum=Drepanephora Keyserling, p: euccupicd.
    ${ }^{3}$ Eppeus = Evenus Simon, preoccu

[^7]:    *Tara is substituted for Atrytone, the latter name being preoccupied.

[^8]:    ${ }^{1}$ In the original this sentence reads " metatarse plus court que le tibia, ô mutique comprimé et auguleux," etc.

[^9]:    ${ }^{1}$ Damcetas is substituted for Scirtetes, the latter name being preoccupied.

[^10]:    * Bianor is substituted for Scythropa, the latter name being preoccupied.

[^11]:    ${ }^{1}$ Linus is substituted for Sinis, the latter name being preoccupied.

[^12]:    ${ }^{1}$ Simon's description reads " first, third and fourth;" doubtless an error.

[^13]:    ${ }^{1}$ In all the species described by Keyserling under this genus the quadrangle is wider than long.

[^14]:    ${ }^{1}$ Zenodorus is substituted for Ephippus, the latter name being preoccupied.

[^15]:    ${ }^{1}$ Ascyltus pencillatus Karsch, has the legs ( f) 1, 4, 3, 2, (8) 4, 1, 3, 2.
    L. Koch and Kesserling, Arachuiden Australiens, p. 1319.

[^16]:    ${ }^{1}$ AElurillus is substituted for Elurops, the latter name being preoccupied.
    ${ }^{2}$ This is Simon's definition of the genus Elurops Thorell.

[^17]:    ${ }^{1}$ Hypoblemum is substituted for Drepanephora, the latter name being preoccupied

[^18]:    ${ }^{1}$ Written "third" but evidentlv a misprint for fourth.

[^19]:    ${ }^{1}$ Bootes is substituted for Hadrosoma, the latter name being preoccupied.

[^20]:    'The generic name "Tanypus" was pre-occupied.

[^21]:    ${ }^{1}$ We speak of the anterior row of eyes as straight when a straicht line from the top of the middle eyes touches also the top of the lateral eyes; curved, when a straight line from the top of the middle eyes cuts the lateral eyes; curved downuard, when a straight line from the top of the middle eyes passes above the lateral eyes.

