Complements of the authors

# ON THE GENERA

OF



# THE FAMILY ATTIDÆ,

BY

G. W. AND E. G. PECKHAM.

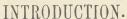
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In the following paper we have endeavored to bring together the definitions of those genera of the family Attidae which have been generally received, and also of those which are part of the synonymy of the received genera. Up to this time these definitions 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 type-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-

<sup>&</sup>lt;sup>1</sup> The Philosophy of the Inductive Sciences, Vol. 1, pp. 476, 477.

<sup>&</sup>lt;sup>2</sup> A System of Logic, pp. 504, 505. Huxley, also says: "It is said, in short, that a natural history class is not capable of being defined—that the class Rosaceæ for instance, or the class Fishes, is not accurately and

range those infimae species 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 might be defined, those things which either possess that set of characters, or resemble the things that do so, amore 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

absolutely definable, inasmuch as its members will present exceptions to every possible definition; and that the members of the class are united together only by the circumstance that they are all more 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 according to resemblances 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 a reptile and he cannot do it; but he says, things like a cow or a horse are beasts, and things like a frog or a

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 "Beasts?" Why, exactly because the former depends on a definition, the latter on a type. The class Mammalia is scientifically defined as "all 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 recognizes as that to which his classes must aspire—knowing, as he does, that classification by type is simply an acknowledgment of ignorance and a temporary device." Educational Value of Natural History Sciences; Lay Sermons, Addresses and Reviews, pp. 82, 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 receive 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. Milwaukee, Wisconsin, March, 1884.

# 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, 1846, (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, 1846; (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, 1848 (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 1870); 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 1872, 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 1877, the genera Oedipus and Scartes were formed by Menge.

In 1878, 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 identical 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. Evenus 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. 1871. 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
	<sup>2</sup> Trochanter I elongated much longer than the others	5
4.	Trochapter I not elongated	13
5.	Trochanter I much longer than coxa, shorter than femur	7
6.	Trochanter I shorter than cox & (especially 9), much shorter than	
	femur	9
7.	Cephalothorax low; quadrangle of eyes wider than long; tibia I slender and parallel <sup>3</sup> Tara Peckha	m.
8.	Cephalothorax rather high; quadrangle of eyes almost equal in	
	length and breadth; tibia I more or less dilated Diolenius Th	r.
9.	Quadrangle of eyes much longer than wide, and much longer than	
	thoracic part; eyes of second row much nearer lateral than dor-	
	sal eyes Lystrocteisa E.	S.
10.	Quadrangle of eyes almost equal in length and breadth; thoracic	
	and cephalic parts almost equally long; eyes of second row	
	scarcely further from dorsal than from lateral	11
11.	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 Discornemius Th	or.
12.	Legs long; anterior tibia compressed, parallel, not dilated; armed	
	below with numerous and strong spines in a double row.	
	Chalcolecta E.	S.
13.	Cephalothorax distinctly wider in the middle than at the ends.	117
	Rhombonotus, L.	K.
14.	Cephalothorax not distinctly wider in the middle than at the	15
15	ends	17
	Body slender, antilke; legs weak	29
	Body not antilike in form.	
	Caphalic part higher than thoracic	19
	Cephalic part not higher than thoracic	21
	Abdomen with a distinct constriction	23
	Cephalic and thoracic parts separated by a constriction.	20
21.	Janigena Karse	h
	Janigena Raise	AL.

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.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> Tara = Atrytone Keyserling, preoccupied.

24. Sternum not prolonged between coxae I	5 7 7
23. Sternum prolonged between coxae I	5 7 7
24. Sternum not prolonged between coxae I	7
25. Pedicle of the abdomen not visible from above Damoetas Peckhan 26. Pedicle visible from above	7
26. Pedicle visible from above	7
27. Sternum scarcely as wide as intermediate coxae; labium at least twice as long as wide	1
twice as long as wide	. 1
twice as long as wide	. 1
28. Sternum wider than intermediate coxae; labium as long as wide.  Synageles F. S.  29. Clypeus very low in front, high below anterior lateral eyes, extended and a little curved backward on the sides, forming an acute angle below the eyes of the second rowAscyltus Karsch  30. Sides of clypeus forming no acute angle	. 1
Synageles F. S.  29. Clypeus very low in front, high below anterior lateral eyes, extended and a little curved backward on the sides, forming an acute angle below the eyes of the second rowAscyltus Karsch 30. Sides of clypeus forming no acute angle	1
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acute angle below the eyes of the second rowAseyltus Karsch 30. Sides of clypeus forming no acute angle	1
30. Sides of clypeus forming no acute angle 3	1
	3
	3
long as thoracic	
32. Body not beetle like in form 2	5
33. Body strongly convex both longitudinally 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	
34. Anterior part of abdomen not overlapped by cephalothorax; eyes	
of second row half way between dorsal and lateral eyes.	
Omoedus Thor	
35. C-phalic part as long as, or longer than thoracic	7
36. Cephalic part shorter than thoracic	
37. Eyes of the second row at least half as large as eyes of the third	
row	
38. Eyes of second row less than one half as large as eyes of the third	
row	)
39. Quadrangle of eyes longer than wide; tibia I greatly dilated.	
Chirothecia Tacz	a
40. Quadrangle as wide as, or wider than long; tibia I not dilated 4	-
41. Cephalic and thoracic parts equal 45	3
42. Cephalic part longer than thoracic	5
43. Legs III and IV without spinesBallus C. K	
44. Spines on the four pairs	
45. Third leg longer than fourth 4'	7
46. Third leg shorter than fourth 49	)

<sup>&</sup>lt;sup>1</sup> Damoetas=Scirtetes L. K., preoccupied.

<sup>&</sup>lt;sup>2</sup> Some of the species of Homalattus White resemble beetles, but in this genus the cephalic part is longer than the thoracic.

47.	Quadrangle of t'e eyes wider behind: third leg much longer than fourth  Neaetha E. S.
49.	Quadrangle of eyes wiler in front; third leg but little longer than
	fourth
49.	Cephalothorax not wider than third row of eyes at that place 51
50.	Cephalothorax wider than third low of eyes at that place; lateral
P 1	eyes of first row well separated from middle eyes Pirithous Keys.
31.	Anterior row of eyes curved; later I widely separate I from middle
-	eyes
92	Anterior row of eyes almost straight; lateral but little emoved
50	from middle eyes
00,	
	+tarsus IV longer than patella+tibia; tibial and metatarsal spines to the base, on legs III and IV Portia Karsch.
51	Quadrangle of eyes wider behind than in front; meta arsus + tarsus
04.	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 eyes wider in front than behind3 Iona Peckham.
	Quadrangle of eyes not wider in front
	Cephalothorax as high behind as it is longMago Cambridge.
	Cephalothorax not as high b hind as long
	First row of eyes straight, touching
	First row of eyes curved, sepa ated by nearly equal distances from
	each other
61.	Quadrangle of eyes longer than wide
62.	Quadranglacf eyes wider than long
63.	Quadrangle of eyes more than twice as long as wide
	Ligonipes Karsch.
64.	Quadrangle of eyes one fourth or one fifth only longer than
	wide 4Plexippus C. K.
65.	A more or less prominent tabercle between the dorsal eyes.
	Opisthoneus L. K.
	No tubercle present
67.	Cerhalothorax short and very high, thoracic part much dilated
	and falling steeply from cephalic plate; cephalothorax wider
	than the third row of eyes
	Form of cephalothorax unlike the above
69.	Quadrangle of eyes wider in front than behind
1	Neaetha=Nee a E. S., preoccupied.
	B'anor = Scythropa Keyserling, preoccupied.
	Iona = Erasmia Keyserling, preoccupied.
	See genus Plexippus.
5	The face in Amycus is very high, but not equally high in the different

species.

	70.	Quadrangle as wide or wider behind
1		Tibia + patella III shorter than tibia + patel'a IV
	72.	Tibia + patell : III longer than tibia + patella IV
	73.	Metatorsus + tarsus IV equal to or shorter than patella + tibia IV. 75
		Metatarsus + tarsus IV longer than tibia + patella IV
		Metatarsus IV spined only at extremity Lauharulla Keys.
		Metatarsus IV spined to base
		C-phalothorax wider than third row of eyes
		Cephalothorax not wider than third row of eyesSinnamora Keys.
		Legs moderately long; metatarsus IV with scines Boethus Thor.
		Legs extremely long; metatarsus IV without spinesLagnus L. K.
		Eges of the second row more than $\frac{1}{3}$ as large as dorsal eyes; tibiæ
		spined above Linus Peckham.
	82.	Eyes of second row less than \( \frac{1}{3} \) as large as dorsal eyes; tibiæ not
		not spined above
	83.	Cephalothorax not wider than third row of eyes
		Ceph lothorax wider than third row of eyes
		Cephalothorax narrow in front, wider and rounded behind; quad-
		rangle of eyes scarcely wider than long Prostheelina Keys.
	86.	Cep alothorax with sides nearly parallel; quadrangle of eyes one-
		third wider than long
	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 about as wide as long; eyes of second row further from
		lateral than from dorsal eyes
	90.	Abdomen slender; eyes of second row half way between lateral
		and dorsal eyes
	91.	Quadrangle of eyes equally wide in front and behind; tibia +
		patella III longer than tibia + patella IV
	92.	Quadrangle of eyes wider behind; or equally wide in front and
		behind, with tibia + patella III equal to, or shorter than tibia
		+ patella IV
	93.	Eyes of the third 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.	Metatarsus + tarsus IV equal to, or shorter than, tibia + pa-
		tella IV 97
	96.	Metatarsus + tarsus IV longer than tibia + patella IV.
		Ergane Keys.

<sup>&</sup>lt;sup>1</sup> Linus = Sinis Thorell, preoccupied.

<sup>&</sup>lt;sup>2</sup> Zenodorus=Ephippus Thorell, preoccupied.

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
98.	Third legs longer than fourth; eyes of third row equally far from
	each other and from lateral borders; anterior lateral very near
	large middle eyes
99.	Quadrangle of eyes equally wide in front and behind; anterior row
	of eyes straight
100.	Quadrangle wider behind; or, if equally wide in front and behind,
	anterior row curved
· 101.	Coxae I touching
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
104.	Tibia IV narrower than patella at base; slightly enlarged and a
	little compressed at extremity
105.	Quadrangle of eyes as long as wide; fore central eyes excessively
	large, at least five times as large as the lateralMithion E. S.
106.	Quadrangle of eyes wider than long; fore central eyes not exces-
	sively large
107.	Thoracic part a little dilated; coxæ IV longest Menemerus E. S.
108.	Thoracic part parallel; coxæ I largestBavia E. S.
109.	Patella III as long as or longer than patella IV; tibia III much
	shorter than tibia IV, but more robust
110.	Patella III shorter than Patella IV; tibia III more slender than
	tıbia IV
111.	Clypeus at least \( \frac{1}{3} \) as wide as large middle eyes; patellae always
	without spines Euophrys C. K.
112.	Clypeus 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; (3) femur of palpus
	armed with a strong apophysis Heliophanus C. K.
114.	Sternum of same width or narrower than intermediate coxae;
	femur of palpus unarmed
115.	Thoracic part twice as long as cephalic
116.	Thoracic part only & longer than cephalicAttus Walck
117.	Quadrangle of eyes equally wide in front and behind 119
118	Quadrangle of eyes wider behind
119.	Anterior row of eyes strongly curved, a straight line from the
	summit of the middle eyes cutting the lateral eyes through, or
	below the middleScaea 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 femoral and tibial spines; (3) falces long and hori-
	zontalEpiblemum Hentz

	, in the second
122.	Legs having femoral and tibial spines on the four pairs 123
	Eyes of the third row nearer to each other than to lateral bor-
	ders
124.	Eyes of the third row equally distant from lateral borders and
	from each other
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 lateral eyes, or
	nearer the lateral. 127
127.	Cephalothorax only 1/6 larger than wide; scarcely wider than third
	row of eyes; first legs not stouter than the others,
	Bootes Peckham,
128.	Cephalothorax at least 1 longer than wide; first legs stouter than
	the others
129.	Cephalothorax considerably wider than third row of eyes; moder-
	ately high
130.	Cephalothorax only slightly wider than third row of eyes; very
	high and convexJotus Keys.
131.	Second row of eyes half-way between dorsal and lateral eyes;
	falces not divergingSandalodes Keys.
132.	Second row of eyes nearer the lateral than the dorsal eyes; falces
	diverging
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
134.	Anterior row of eyes straight or only moderately curved, a
	straight line from the summit of the middle eyes cutting the
	lateral eyes not below the middle
	Clypeus as wide as large middle eyes
	Clypeus not so wide as large middle eyes
	Cephalothorax as wide as or barely narrower than long. Sobara Keys.
	Cephalothorax at least \( \frac{1}{2} \) longer than wide
	Tibia + patella III shorter than tibia + patella IV
	Tibia + patella III as long as or longer than tibia + patella IV 153
	Coxae I separated by width of labium at base
	Coxae I touching or nearly touching
143.	Cephalothorax short, high, convex; relative length of legs 1, 4, 2,
4.4.4	3; abdomen short
144.	Cephalothorax elongated, flattened; relative length of legs 1, 2, 3,
1.45	4; abdomen long
140.	Trochanter IV very long, diverging, visible from above; tarus and
	metatarus IV as thick as tibia and patellaYllenus E. S.

<sup>&</sup>lt;sup>1</sup> Bootes=Hadrosoma Keyserling, preoccupied.

<sup>&</sup>lt;sup>2</sup> Ælurillus=Aelurops Thorell, preoccupied.

146.	Trochanter IV short, not visible from above; metatarsus and tar-
	sus IV more slender than tibia and patella
147,	Metatarsus IV having only a circle of spines at extremity (some-
	times lacking these)
148	Metatarsus IV armed to base
149.	Anterior row of eyes rather strongly curved; l gs very hairy,
	Dendryphantes C. K.
150.	Anterior row of legs straight or almost straight; legs almost glab-
	rous
151.	Eyes of second row double as far from dorsal as from lateral
	ryes Phidippus C, K.
152.	Eyes of second row almost half-way between dorsal and lateral
	eyesPhilaeus 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
155.	Cephalothorax dilated toward the front; clypeus very low, less
	than \( \frac{1}{4} \) as wide as the laree middle eyes Euryattus Thor.
156.	Cephalothorax with thoracic part very strongly dilated; clypeus
	about \frac{1}{2} as wide as large middle eyes
157.	Metatarsus + tarsus IV equal to tibia + patella IV
158.	Metatarsus + tarsus IV shorter than tibia + patella IV.
	Pellenes E. S.
159.	Second legs longer than the first Hypoblemum Peckham.
160.	First legs longer than the second
161.	Cephalic and thoracic parts on the same plane
162.	Cephalic and thoracic parts on different planesJelskia 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-
	allel
166.	Third pair of legs longest; cephalic part plane, sides converging
	behind Epeus Peckham.

¹ Thyene=Thya Simon, preoccupied.

<sup>&</sup>lt;sup>2</sup> Hypoblemum=Drepanephora Keyserling, preoccupied.

<sup>&</sup>lt;sup>3</sup> Epeus=Evenus Simon, preoccupied.

# SUB-FAMILY 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. Koch, 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, plane 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.

Legs 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.

Lystrocteisa E Simon. Note sur le Groupe des Diolenii; Comptes Readus de la Société Entomologique de Belgique. 1884.

Related to Diolenius, but distinct by the following characteristics: ocular quadrangle longer than the thoracic part, much longer than wide, convex in front, flattened in the middle; eyes of the third row very prominent, larger and plainly further apart than the lateral anterior; eyes of the second row much nearer the lateral anterior; trochanter I cylindrical, a little

<sup>\*</sup>Tara is substituted for Atrytone, the latter name being preoccupied.

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; Comptes 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 2) 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, alternately shorter and longer; metatarsus shorter than the tibia, 3 shortened, compressed and angular, 2 cylindrical and provided below with three or four pairs of long spines; relative length of legs 1, 4, 3, 2.

# DISCOCNEMIUS THORELL. 1881.

Discornemius Thorell, Studi sui Ragni Malesi e Papuani, III, p. 428. Cephalothorax long, moderately high, cephalic part not abruptly higher than thoracic, limite 1 by a transverse depression.

Clypeus 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.

Muxillae 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.

In the original this sentence reads "metatarse plus court que le tibia, to mutique comprimé et auguleux," etc.

# SALTICUS (LATR.) 1804. SIMON.

- Syn.: 1804. Salticus Latr., Nouv. Dict. d'Hist. Nat., XXIV, p. 135, (ad partem).
  - 1805. Attus Walck., Tabl. d. Aran., p. 22 (ad partem).
  - 1837. Pyrophorus C. Koch, Ueters. d. Arachn.—Syst., 1, p. 29.
  - 1846. Toxeus C. Koch, Die Arachn., XIII, p. 19.
  - 1864. Salticus [Saltica]: Sub-gen. Pyrophorus [Pyrophora] Sim. H. N. D. Araignees, p. 336.
  - 1869. Pyroderes Id., Monogr. 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.
  - 1877. "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. Blätter 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 long, not, or scarcely projecting.

Sternum very narrow, projecting between the anterior coxe.

Falces (3) very long, flat above, horizontal; inferior border of the groove with a continuous row of strong teeth. (3) Falces short, robust, vertical.

Maxillæ 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 (ξ) 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. (ξ) 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 the patella and tibia of the fourth; tarsus and metatarsus of the fourth a little shorter than the patella and tibia.

# LEPTORCHESTES (THORELL) 1870. SIMON.

Syn.: 1832. Synemosyna HENTZ, On North Amer. Spid., p. 108 (ad partem).

1837. Salticus C. Koch, Uebers. d. Arachn.—Syst., 1, p. 29 (ad part∈m.)

1869. "SIM Monogr d. Attid., p. 6 (16), 241 (707) (ad partem).

1870. 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. Koch, Arachniden Australiens, p. 1057.

Cephalothorax plane, but little elevated, parallel, 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 coxæ.

Lip almost twice as long as wide, parallel, terminating in an obtuse point. Falces robust, short, vertical in both sexes.

Palpus (3) not robust; tibia short with an external apophysis; bulb simple. Legs 4, 1, 3, 2; third and fourth pairs unarmed: (3) metatarsi of the first and second with some inferior spines; (3) 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. 1876.

Syn.: 1837. Salticus C. Koch, Uebers. d. Arachn.—Syst., I, p. 29 (ad partem).

1869. "SIM., 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. " ID., Arachn. de L'Ocean Atlantique, Ann. Soc. Ent. de France 1862, p. 261.

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Cephalothorax 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.

Maxillæ extending much beyond the lips but nevertheless rather short and very wide. Square at the extremity.

Legs: Fourth legs the longest; the three anterior pairs equal or almost equal; the two posterior pairs unarmed; (\$\delta\$) metatarsi of the first and second alone provided with some inferior spines; (\$\delta\$) 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 ( & 2 ) robust, short, vertical.

Palpus (3) 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; (3) rather slender; tarsus slightly enlarged and cylindrical.

## AGORIUS THORELL. 1877.

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 vertical 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. Anterior 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  $\circ$ ).

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 slender, 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 longer, sub-cylindrical.

Pubescence fine and sparse.

Type. A. gracilipes.

This genus is related to Synemosyna Hentz, Salticus Latr., Leptorchestes Thor., and especially to Synagels 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 cephalothorax. The middle eyes are much further 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.

<sup>&</sup>lt;sup>1</sup> Damætas is substituted for Scirtetes, the latter name being preoccupied.

- 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 length; 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. Koch, 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 mandible, 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 proposed 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 Synexosyna 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. Leptorch stes Thorell, on Europ. Spid., I. p. 209 (ad partem).

1876. "Sim., Arachu. 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. Koch, Arachniden Australiens, p. 1052.

1880. Synemosyna Karsch, Arachnol. Blätter VIII, Zur Kenntniss 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.

 $\it Maxillae$  slightly inclined toward the lip, truncated at the tip.  $\it Lip$  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 typical species—S. formica—he states that "the cheliceres are large only in the male." A'll the other species placed by him in this genus, both in the male and female 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. Koch. 1879.

Rhombonotus L. Koch. Arachniden Australiens, p. 1067.

Cephalothorax almost twice as long as wide, contracted 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 behind; the third row of eyes placed behind the middle of the cephalothorax and above the lateral declivity of the same, more widely separated 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 row 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.

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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, slanting in front of the posterior eyes, behind them nearly level, strongly rounded behind, when 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.

Maxillas 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, ( $\circ$ ) 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 cephalothorax; anterior row with the eyes sub-touching, only slightly curved upward, eyes of the second row further from the posterior eyes than from the anterior lateral eyes; posterior 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.

Maxillae short, narrow at the base, wide at the apex, almost ovate triangular. Lip a little longer than wide, rounded 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, both 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. Rhanis C. Koch, Die Arachn., XIV, p. 86.

1870. Rhene THORELL, on Europ. Spid. I, p. 37.

1877. Homalattus Id., Studi sui Ragni Mal. e Pap., I, p. 289.

1878. Rhene Tacz., Aranéides du Pérou, Bull. de la Soc. Imp. de Moscow, LIII, 4, p. 289.

1879. Homalattus L. Koch, Arachniden Australiens, p. 1083.

1880. " Karsch, Arachnol. Blätter VIII, Zur Kenntniss der Attiden, *in* Zeitsch. f. d. gesammt. Naturw.ssensch., 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 line 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.

Syn.: 1869. Attus Sim., 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. Neon 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.

Cephalothorax not high; cephalic part a little longer 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 quadrangle 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 presenting below two rows of tibial and metatarsal spines usually long and bristle-like. Tibia and patella of the third shorter than 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 Keyserling, Arachniden Australiens, p. 1350.

Cephalothorax one third longer than wide, a little contracted 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.

<sup>\*</sup>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, Soc., 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; fore 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 moderate length and strength.

Maxillae long, strong, straight; widened on both sides at the extremities, which are rounded.

Labium long, about two thirds the length of the maxillae, and narrower 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. Koch). 1846. SIMON.

Syn.: 1846. Eris C. Koch, Die Arachn., XIII, p. 189.

1850. "ID., Uebers. d. Arachn.-Syst., 5, p. 59.

1869. Attus Sim., 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 rounled, before and behind equally contracted, high and convex, not wider than the dorsal row of eyes.

Clypeus low.

Quadrangle 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.

<sup>\*</sup>Bianor is substituted for Scythropa, the latter name being preoccupied.

Falces vertical, not diverging.

Maxillae twice as long as the labium, dilated 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 spined only at the apex.

Abdomen oviform; one fourth longer than wide.

Spinnerets as usual; superior 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 anterior lateral. Dorsal eyes further from one another than from the margin of the cephalothorax.

Falces diverging.

Maxillae long, a little dilated in front.

Labium longer than 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.

## <sup>1</sup> NEAETHA SIMON. 1885.

Syn.: 1869. Attus Sim., Monogr. d. espèces 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.

<sup>&</sup>lt;sup>1</sup> Neatha = Neera, preoocupied.

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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.

Clypeus almost half as wide as the middle eyes, with thick hairs.

Sternum oval, of the same width as the intermediate thighs.

Legs 3, 1, 4, 2, or 1, 3, 4, 2; first 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 and 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. KOCH. 1848.

Syn.: 1848. Ciris C. Koch, Die Arachn., 14, p. 85.

1850. "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 famale 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 Ciris 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. Koch). 1850. SIMON.

Syn.: 1837. Euophrys C. Koch, 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. "SIM., Monogr. d. Attid., p. 3 (16) 14 (24) (ad partem).

1870. Ballus Thorell, On Europ. Spid., I, p. 212.

- 1871. Attus SIM., Revis 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. 665.
- 1882. " L. Koch and Keyserling, Arachn. 'Australiens, p. 1335.
- Cephalothorax flattened: cephalic and thoracic parts of the same length; 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 (\$\delta\$) 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 posterior pairs entirely without spines (except ænesiens); legs of the two first pairs having below two rows of tibial and metatarsal spines.
- Integument covered with moderately long pubescence, simple, rarely scaly.

# CHIROTHECIA TACZANOWSKI. 1878.

- 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 shender 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 placed very far back.

## COCALUS C. Koch. 1846.

Sun.: 1846. Cocalus C. Koch, 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 row looking sideways, standing in a quadrangle with the first row, and as large as the lateral eyes of that row; the eyes of the second row only a little smaller than 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 knotig), 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 somewhat shorter 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 longer 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 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 plainly visible when looked at from above, is a litt'e curved upward. Middle anterior eyes 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 or 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 \$\delta\$ 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 Sim., 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.

<sup>&</sup>lt;sup>1</sup> Linus is substituted for Sinis, the latter name being preoccupied.

Eyes of the face very unequal, touching, at least the middle eyes, forming a straight line; dorsal eyes almost as large as the lateral, not further apart, the sides of the head thus being parallel; the square almost as long as wide; the dorsal eves much further from each other than from the lateral borders.

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 others, 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 third the longer; these two articulations longer (3) or almost as long (9) 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 shorter, or almost as long as the patella and tibia. On the anterior pairs two inferior rows of tibiae and metatarsal spines; on the posterior pairs two inferior tibial spines, and one or two metatarsal spines.
- Falces robust, longer than the face, (2) vertical, (3) lightly inclined for-
- Palpus (3) slender; femur narrow and a little curved; tarsus oval, not large; bulb simply rounded above, prolonged into a point behind. Abdomen narrow, elongated.

#### MITHION SIMON. 1884.

- Mithion E. Simon, Arachnides recueillis a Khartoum; 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 prominent. Dorsal eyes as large as the lateral, not, or scarcely further apart. Quadrangle as long as wide, parallel. Dorsal eyes much further from one another than from the lateral borders.

Clypeus having scarcely a quarter the diameter of the midde eyes.

Falces (2) 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.

<sup>1</sup> Simon's description reads "first, third and fourth;" doubtless an error.

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, neither attenuated or enlarged at the extremity. Spines short 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 Hyctia, 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 little 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 underneath and two internal lateral) on the posterior metatarsi, besides the terminal circle. It presents also a certain resemblance to the genus 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), 1877. SIMON.

- Syn.: 1837. Dendryphantes C. Koch, Uebers. d. Arachn.-Syst., 1, p. 31 (ad partem).
  - 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 France, 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 third 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 than long; dorsal eyes much further from each other than from the lateral borders.

Sternum narrow, takice as long as wide. Anterior coxae almost touching, their interval 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 almost equal; those of the third and fourth a little shorter, equal or almost equal. First pair very robust; femur dilated and compressed; patella and tibia cylindrical, equal, or tibia barely longer (M. radiata &); 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. Continuous 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 Arachuiden Australiens (p. 1093) Koch has used this genus in a different sense from both Simon and Thorell. The two latter define the clypeus as about half the middle eyes of the first row. Dr. Koch on the contrary extends the definition to include 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 included in this genus form a very heterogenous group.

## MENEMERUS SIMON, 1869.

Syn.: 1848. Euophrys C. Koch, 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. "THORELL, On Europ. Spid., I, p.214 (ad parten

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. Koch, Arachniden Australiens, p. 1123.

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 scarcely 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 (sometimes 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 from one another.

Sternum almost twice as long as wide; attenuated in front. Anterior thighs separated by the 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. Legs of the first pair thickest; femur compressed; patella and 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 very 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 the length of the quadrangle of the eyes.

# DENDRYPHANTES (C. Koch), 1837. 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).

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1878. Dendryphantes SIM., Arachm. de France, III, p. 35.

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. "SIM., Arachnides de l' Ocean Atlantique, Ann. Soc. Ent. de France, 1882, p. 260

Cephalothorax moderately high; thoracic part plainly dilated, at least a third the larger; cephalic part level, often 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 lateral borders.

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 (  $\varepsilon$  ) rather slender; patella longer than tibia; tarsus narrow, oval, truncated at the extremity.

Legs (\$) 1, 2, 4, 3, or 4, 1, 2, 3; (\$\varphi\$) 4, 1, 2, 3, or rarely 4, 1, 3, 2; the first and (som times) second pairs more robust with compressed femora. Tibia and patella of the first shorter than the cephalothorax; (\$\varphi\$) tibia longer: (\$\varphi\$) tibia and patella equal. Tibia and patella of the third much shorter than tibia and patella of fourth. Tarsus and metatarsus of the fourth plainly shorter than tibia and patella. Tibia of the fourth cylindrical and parallel; metatarsus of the fourth with only a circle of spines at the extremity.

# PSECAS C. Koch, 1850.

Psecas C. Koch, 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 some likeness.

## BŒTHUS THORELL, 1878.

Syn.: 1878. Rothus 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 \( \frac{2}{3} \) (not indeed half) of the length of the cephalothorax, a little wider than long, wider i \( \frac{1}{3} \) front than behind, where it is only a little narrower than the cephalothorax at that place. The anterior row of eyes, which is plainly 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 eyes, 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 the posterior and the lateral eyes, and as high as the latter.

Falces as usual, sub-vertical.

Maxillae long and narrow, more than twice as long 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 adpressed; tibia but little longer than metatarsus. Tibia with patella of fourth, longer than tibia with patella of third. Posterior metatarsi 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 more like Synemosyna and Diolenius.

# PLEXIPPUS (C. KOCH), 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 Atuden, in Zeitsch. f. d. Naturwissensch.

LIII, p. 398.

1881. " Thorell, Studi Ragni Malesi e Papuani, III, p. 526.

1883. " L. Koch and Keyserling, Arachniden Austra-

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.

lieus, p. 1425.

Eyes of the face in a moderately bent row, the lateral half as large as the middle eyes and only slightly separated from them. The eyes of the third row smaller than the lateral eyes of the first row. The small median eyes nearer the anterior than the posterior lateral eyes. 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.

Lip not longer than wide.

Palpus rather long, somewhat slender; (\$) the tarsus scarcely longer than the metatarsus, but little swollen, with the extremity directed downward, and with a moderately large bulb.

<sup>&</sup>lt;sup>1</sup>In all the species described by Keyserling under this genus the quadrangle is wider than long.

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 fourth. 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 Ragni, III, pp. 526-642) we find the following formulæ:  $\circ$  1, 3, 4, 2; 3, 4, 1, 2; 3, 1, 4, 2; 1, 3, 2, 4,  $\overline{34}$  12; 1, 2, 3, 4;  $\circ$  3, 4, 1, 2; 1, 4, 3, 2;  $\overline{14}$ , 3,  $\overline{2}$ . The same is true of the height of the clyp us. In these species the height varies 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.

#### 'ZENODORUS N.

Syn.: 1881. Ephippus Thorell, Studi sui Ragni Male-i e Papuani, III, p. 643.

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 \( \frac{1}{6} \) 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 lateral anterior eyes separated by less than their diameter from the large middle eyes, eyes of the second row almost in the middle between the anterior lateral and the posterior eyes; posterior eyes further from the lateral borders than from each other.

Sternum rather short, wider than the coxee, not projecting between the coxee of the first pair.

Falces vertical, ordinary.

Maxillæ 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.

<sup>&</sup>lt;sup>1</sup> Zenodorus is substituted for Ephippus, the latter name being preoccupied.

Spinnerets ordinary: the second joint of the superior, wider than long, and obtuse.

Type: Z. d'Urvillei (Walck.).

#### EURYATTUS THORELL. 1881.

Euryattus Thorell, Studi sui Ragni Malesi e Papuani III, p. 660.

Cephalothorax short. dilated anteriorly, not high.

Clypeus very low, not \( \frac{1}{2} \) of the diameter of the middle eyes.

Eyes small; quadrangle very short, about twice as wide as long, and a little wider behind than in front. The auterior row usually curved upward, the middle eyes wid ly separated, the lateral eyes separated from the middle eyes by their own diameter; eyes of the second row a little further from the posterior eyes than from the anterior lateral eyes; the posterior eyes are placed much higher than the lateral anterior eyes, and are as far or farther from each other as from the lateral borders.

Sternum not much wider than the coxae, not projecting between the coxae of the first pair.

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 patella 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 (Thor.).

By the greater space, says Thorell, between 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 lowness of the clypeus this genus is easily distinguished from Ephippus Thorell.

## PHIDIPPUS C. Koch. 1846.

Syn.: 1846. Phidippus C. Koch, Die 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. Phidippus Thorell, On Ara eae of Colorado, Bull. U. S.
1878. "Tacz., Les Aranèides de Pèrou, Bull. de. la. Socièté Impériale des Naturalistes de Moscou, LIII, 4, p. 333.

Eyes: The first row rather strongly bent, the two middle eyes moderately large, somewhat smaller than is usual, near together, the outer ones in diameter scarcely half as large, placed somewhat away from the middle eyes. The eyes of the third row nearly as large as the outer eyes of the first row, on little hills; the eyes of the second row very small, near to the outer eyes of the first row.

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, bent, the bulb projecting 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 short angular plate. The thorax is short and steeply 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 remale, but in the male 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 longer; the third pair is the shortest.

## PHILÆUS THORELL 1870. SIMON.

Syn.: 1837. Dendryphantes C. Koch, Uebers.d. Arachu, Syst., 1, p. 31 (adpartem).

1837. Calliethera ID., ibid., p. 30 (ad partem).

1846, Philia ID, Die Arachn., XIII, p. 54, 56.

1846. Phidippus 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 Europ. Spid., I, p. 217 (  $\delta$  ).

7 1870. Attus ID., ibid., p. 218 (9).

1876. Philaus Sim., Arachn de France, III, p. 45.

1877. "KEYSERLING, Spinnen aus Uruguay. Vienna, 1877 78. p. 617.

1878. "LEBERT, Die Spinnen der Schweiz, p. 305.

1879. " L. Koch, 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 eyes.

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. (3) 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 plainly shorter than patella and tibia (sometimes of the same length in the males). Metatarsus of the fourth armed with 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.

Clypeus low.

Eyes: area occupying about \( \frac{1}{2} \) 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; middle 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; posterior 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 (\$\delta\$) 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.

## <sup>1</sup> THYENE SIMON, 1885.

Syn.: 1850. Plexippus C. Koch, Uebers d Arachn.-Syst. 5, p. 51 (ad partem.)
1869. Attus Sim., Monogr. d. espèces 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 p rt 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 pojecting widely above; quadrangle at least a third wider than long; dorsal eyes further from one another than from the lateral 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 (particularly the first), the thickest; the fourth a lit'le longer than the third.

Legs (3) 1, 3, 4, 2; (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 cephalothorax, 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 fourth cylindrical and parallel. Short, robust, conical tibial and metatarsal spines on the two first pairs, forming inferior rows; spines equally short, more slender, and not serial on the posterior parts; meta arsus of the fourth provided with spines throughout the length.

<sup>&</sup>lt;sup>1</sup> 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. Koch. 1846.

Syn.: 1846. Amycus C, Koch, Die Aracha., 13, p. 182.

1878. " TACZ, Araneides du Pérou, Bull. de la Soc. Imp. des Nat. de Moscow LIII, 4, p. 345.

1880. " L. Koch Arachnicen Australiens, p. 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 the first; those of the second row very small, half way between these two.

Mandibles very long, nearly equally thick, somewhat curved on the inner corn r of the extremity, toothed, the fang rather large.

Palpus: that of the male slender, the second joint bent, the third cylindrical, plainly longer than the fourth, the tarsus long in front, swellen, the bulb covered from 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 long; of these the third pair is the longest, then follows the first, then the second 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 placed in this genus by Dr. L. Koch seem to us (judging by his plates) to belong to at least two if not three different genera.

#### ASARACUS C. Koch. 1846.

Asaracus C. Koch. Die Arachn., XIII, p. 188.

Eyes form and position as in Phidippus.

Palpus of the male slender, rather loag, the second joint long gently, elightly bent, the third and fourth short, not longer than thick, the tarsus moderately 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 come under my observation. Head, thorax, and abdomen agree with those of the above mentioned genus.

## LIGONIPES KARSCH. 1878

Ligonipes Karsch, Diagn. Attoid. aliquot nov. 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 tiliae 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. 1878.

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 anterior eyes, and is so widely ornamented with dense oblique hairs that if the cephalothorax is looked at from above the eyes are entirely hidden.

#### LYCIDAS KARSCH, 1878.

Lycidas Karsch, Diagn. Atteid. aliquot nov. Novae Holl., cet., in 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 long; 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 third row; eyes 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.

<sup>&</sup>lt;sup>1</sup>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, Diag. Attoid. aliquot nov. Novae Holl., cet., in Mittheil. d. Münchener Entom. Ver., 1878, p. 27.

Cephalothorax not long, high.

Eyes: those of the third row, a little in front of the middle of the cephalothorax. Eyes of the second row half way between the posterior and 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, eet. in Mittheil d. Münchener Entom. Ver, 1878. p. 31.

1881. "THORELL, Studi sui Ragni Mal. e Pap., III, p. 462.

Mopous 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.

Eyes: 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 within the quadrangle.

Falces nearly perpendicular to the face.

The species placed by Koch & Keyserling (Archinden Australiens, p. 330) in this genus were subsequently made the basis of the genus Sandalodes, Arachniden Australiens, p. 1476.

#### ASCYLTUS KARSCH. 1878.

Syn: 1878. Ascyltus Karsch, Diagn. Attoid. aliquot nov. Holl.. cet. in Mittheil. d. Münchener Entom. Vər., 1878, p. 29.

1881. " L. KOCH and KEYSERLING, Arachniden Australiens, p. 1319.

Cephalothorax 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  $\log$ .

Falces nearly straight; (?) rounded, smaller, (3) longer, a little flattened bove, sharp on the edges, diverging.

Legs: first and second pairs more robust and longer 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. Koch, Die Arachn., xiii, p. 161.

1846. Deineresus 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., Aranéides du Pérou Bull. Soc. Imp. des Nat. de Moscou, LIII, 4, p. 336.

1882. " 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 further 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 moderately 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.

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Lip more than half as long as the maxillae, growing narrower toward the extremity.

Palpus (3) 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 (\$\delta\$) 1, 2, 4, 3, (\$\varphi\$) 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 longer than 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.

Ascyltus pencillatus Karsch, has the legs (†) 1, 4, 3, 2, (\$) 4, 1, 3, 2. L. Koch and Keyserling, Arachniden Australiens, p. 1319.

## ICIUS SIMON. 1873.

- Syn.: 1850. Marpissa C. Koch, Uebers. d. Arachn.-Syst., 5, p. 47 (adpartem).
  - 1850. Icelus ID., ibid, p. 55.
  - 1869. Attus Sim., Monogr. d. Attid., p. 14 (24) (ad partem).
  - 1870. Marpessa Thorell, on Europ. Spid., I, p. 213 (ad partem).
  - 1871. Attus SIM., Révis. d. Attid.
  - 1873. Icius ID.
  - 1876. "ID., Arache. de France, III, p. 54.
  - 1877. "KEYSERLING, Spinnen aus Uruguay. Vienna, 1877-78, p. 621.
  - 1878. " THORELL, Studi Ragni Mal si e Papuani, II, p. 232 (ad partem).
  - 1879. " L. Koch, Arachniden Australiens, p. 1127.
  - 1881. " THORELL, Studi 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 lent forward.
- Clypeus scarcely a quarter as wide as the large middle eyes.
- Eyes of the face very unequal, touching, or the lateral ones a little separated, forming a straight line. Dorsal eyes as large, or almost as large as the lateral, a little further apart since the sides of the quadrangle diverge very slightly behind; quadrangle only a quarter wider than long; dorsal eyes much further from each other than from the lateral borders.
- Sternum contracted in front, scarcely wider than the intermediate thighs. Anterior thighs separated by the width of the lip, much thicker than the others; thighs of the second and third pairs equal, those of the fourth a little longer.
- Falces ( $\circ$ ) short, rather thick, almost square, vertical; ( $\circ$ ) longer, a little inclined forward, their external border presenting an elevated, longitudinal ringe.
- Palpus (\$\delta\$) slender; tibia shorter than the patella, provided with a small superior external apophysis; tarsus narrow and long.
- Legs (\$\delta\$) 1, 4, 3, 2; (\$\delta\$) 4, 1, 3, 2; those of the first pair more robust; tibia and patella at least a quarter shorter than the cephalothorax; tibia the longer, and slender. Tibia and patella of the fourth much longer than the tibia and patella of the third; tarsus and metatarsus, male, almost 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.: 1882. Mopsus Keyserling, Arachniden Australiens, p. 1333 (ad partem).

1882. Acompse Id., Arachniden Australiens, p. 1326 (ad partem).

1883. Sandalodes ID., " p. 1476.

Cephalothorax 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 steeply from the posterior margin to the third row of eyes, the cephalic part sloping forward. The middle line is just 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 thirl 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 vertical, not diverging, and short.

Maxillae widely separated at their extremiti s, only a third longer than the lip.

Lip longer than wide.

Sternum long and narrow, narrower than the coxae of the second pair.

Legs, 1, 4, 3, 2; all set with spines, the first pair thicker than the others. Patella and tibia of the third shorter than patella and tibia of the fourth; metatarsus and tarsus of the fourth also shorter than the patella and tibia of the fourth; metatarsus of the fourth with spines throughout its length.

Abdomen fully twice as long as wide.

This genus has great similarity to Jeius, and is distinguished from that genus principally by its narrow sternum.

#### BAVIA SIMON. 1877.

Syn: 1877. Bavia Simon. Amm. Soc. Entomol. de France, (5), vii. pp 60-62.

1879. Acompse L. Koch. Arachniden Australiens, p. 1352.

Cephalothorax not very long; thoracic part a little longer, not dilated rounded; cephalic part plane, but slightly elevate l, almost a regular quadrangle; the swellings 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 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 (3) 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 patella; patella and tibia of the fourth much longer than patella and 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 metatarsi 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, of which the cephalic part is relatively much longer, and by the posterior legs, which lack spines on the tibiae and metatarsi.

# MAEVIA (C. KOCH) 1848. SIMON.

Syn.: 1848. Maevia C. Koch, Die Archn., XIV, p. 69 (ad partem).

1876. "SIM., Archn. de France, III, p. 60.

1877. " THORELL, Studi Ragni Malesi e Papuani, I, p. 241 (ad partem).

1878. " TACZ., Aranéides du Pérou, 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  $\frac{1}{3}$  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, equally far apart, quadrangle scarcely a quarter wider than long. Dorsal eyes nearer one another than the lateral borders.

Sternum almost rounded, wider than the intermediate coxae. Anterior coxae separated by at least the width of the lip.

Falces (5) much longer than the face, vertical, parallel, a little diverging only at the extremity, cylindrical, not ridged.

Palpus ( \$\delta\$) 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: (\$\delta\$) 2, 1, 4, 3; 1, 4, 3, 2; 4, 3, 1, 2; 4, 1, 3, 2; (\$\delta\$) 4, 3, \frac{1}{1}, \frac{1}{2}. The first 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, "21 pair of legs never the longest." We find the variation in the clypeus of Thorell's species to run from scarcely \(\frac{1}{2}\) to about \(\frac{1}{2}\) the height of the lage middle eyes.

#### OPISTHONCUS L. Koch. 1880.

Opisthoneus L. Koch, Arachniden Australiens, p. 1184.

Cephalothorax longer than wide, high, declining toward the posterior, sides moderately rounded, cephalic part -lightly contracted in front, having a smooth, low protuberance, between the third row of eyes, more or less prominently adorned.

Clypeus very low.

Quadrangle of eyes wider than long, behind and in front equally wide, or behind a little wider. First row of eyes almost straight or slightly curved, middle 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 than from the margin of the cephalothorax.

Sternum long, contracted.

Maxillae long, contracted at the base, dilated toward the anterior; anterior margin rounded.

Labium more than one half the length of the maxillae, contracted toward 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 female. 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 least half as wide as the anterior middle eyes.

Sternum rather short, not twice as long as 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 prominent; the lateral eyes are rather small, and are separated by an interval greater than their own 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 cephalothorax at that place. Eyes of the second row minute, about in the middle, or a little in front of the middle, between the anterior lateral and the posterior 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 sub-truncated extremity.

Palpus slender, in the female neither dilated nor flattened at the extremity. Legs rather long, slender or moderately stout, first pair, at least in some cases, more robust than the others; third pair (sometimes 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 fourth spined throughout their length.

Abdomen long and slender.

Spinnerets six, long 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 large middle eyes, and the greater space between them and the lateral eyes.

# EPIBLEMUM (HENTZ) 1882. THORELL.

Syn.: 1832. Epiblemum HENTZ, On North America Spiders, p. 108 (ad partem).

1837. Calliethera C. Koch, Uebers. d. Arachn. Syst. I, p. 30 (ad partem).

1850. " ID., ibid, 5, p. 45 (ad max. part.).

1864. Cyrtonota sub-gen. Calliethera Sim., H. N. d, Araignees, p. 324, 327 (ad part.).

1868. Calliethera [Calletheras] In., 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.

1876. 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 the point.

Lip conical.

Legs 1, 4, 2, 3 or 1, 4, 3, 2.

Type: E Scenicum (faustum) Cl.

When Hentz, in 1832, formed 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 f om Europe. Hentz is wrong in saying that the falces are horizontal in both sexes. They are vertical in the female of E. faustum.

## THIANIA C. Koch. 1846.

Syn.: 1846. Thiania C. Koch, Die Arachn., XIII, p. 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 moderately 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 plain and constant division. The scaly covering of the abdomen is highly colored, taking the form of transverse bands.

#### HASARIUS SIMON. 1871.

Syn.: 1846. Plexippus C. Koch, Die Arachn., XIII 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. Attid., p. 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 Keyserling, 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 and 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 further 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 (3) 1, 3-4, 2; (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 tibia and patella. Tibia of the fourth parallel, or slightly enlarged at the extremity. Femoral, tibial, and metatarsal spines on the four pairs; metatarsus of the fourth with spines throughout its length.
- Falces as long or longer than the face, vertical, often deep set in both sexes, never ridged.
- Palpus (3) 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, 2, 3, 4; 1, 4, 3, 2; 1, 3, 4, 2; 1, 2, 3, 4; 4, 3, 1, 2; 4, 3, 1, 2; male, 1, 2, 3, 4; 1, 3, 2, 4; 1, 3, 4, 2; 1, 4, 3, 2; 1, 4, 3, 2; 1, 4, 3, 2; 4, 3, 1, 2; 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 while in the species described by Keyserling there seems to be a very constant relation between the length of the whole body and the longest pair of legs, the length of the longest legs being only very little greater or less than the total length, H. chrysostomus, male, has its total length 7 mm., and its longest 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 species of this genus. The same remarks are applicable also to H. lautus.

<sup>1</sup> The French word is "renfoncée."

### PELLENES SIMON. 1876.

- Syn: 1850. Enophrys: sub. gen. Pales C. Koch, Uebers. 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 Sim., Arcahn. de France, III, p. 90
- Cephalothorax rather long, high; thoracic part distinctly dilated, at least a third the longer; 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 behind. Quadrangle 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 (3) 1, 3, 4, 2; (2) 3, 1, 4, 2; first legs much the most robust, with compressed femora; tibia and patella 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 base 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; metatarsus 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 (3) 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 Austrolians, p. 1260.

Cephalothorax longer than 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 of eyes wider than long, placed before the middle of the cephalothorax, as wide in front as 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 touching.

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 fourth. The fourth pair has the metatarsus and the tarsus longer than the patella with the tibia.

Abdomen ovate, longer than wide.

Spinnerets, inferior and superior equal y long.

#### PHYALE C. Koch. 1846.

Syn.: 1846. Phyale C. Koch, Die Arachn., 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 row 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 hair; 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 covered 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 fronta 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. Anterior eyes near together, forming a row slightly curved upward. Small median eyes half way between the dorsal 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 rather 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, rounded in front, behind pointed.

Spinnerets rather long, inferior and superior equally large and long.

## HABROCESTUM SIMON. 1876.

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 intermediate 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 Æ 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 enlarged from the base to the extrem ty 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. Koch.) 1833. Simon.

Syn.: 1833. Heliophanus C. Koch, in Herr.-Schaeff, Deutschl. 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. Callethera [Callietherus] In., ibid., p. 6 (16), 180 (646) (ad partem).

1870. "THORELL, Europ. Spid. I, p. 211.

1876. "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, 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, often unequal. Anterior coxae separated by the width of the lip at the base.

Falces rather robust, vertical, never ridged.

- (3) Maxillae wide at the extremity; their superior external angle presenting one or two conical projections.
- (†) Palpus short; femur, robust, arened 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 and parella of the first shorter than the cephalothorax; metatarsus more slender than tibia and patella of the fourth. Patella (a'one) of the third as long and often a little more obust than patella of the fourth; tibia of the fourth almost parallel 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.

1983. "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 depression, 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 than 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 sepaparated 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 metatarsal 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 ( $\dot{z}$ ) femur slender; tibia with apophyses; tarsus oval. ( $\dot{z}$ ) 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,  $\overline{12}$ .

#### 'ÆLURILLUS SIMON. 1885.

Syn.: 1850. Enophrys (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 d. Attid.

1876. Elurops ID., Arachn. de France, III, p. 134.

1876. " LEBERT, Die Spinnen der Schweiz, p. 309 (ad partem).

<sup>2</sup> 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 eyes smaller than the lateral, further apart. Quadrangle at least a third (often more) wider than long. Dorsal eyes as near or nearer to one another as to the lateral borders.

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 equal 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 (3) short and thic; femur compressed; patella and tibia short and almost equal; tibia always with two small superior external apophyses; tarsus wider, oval and a little compressed, passing beyond the bulb.

<sup>&</sup>lt;sup>1</sup> Ælurillus is substituted for Ælurops, the latter name being preoccupied.

<sup>&</sup>lt;sup>2</sup> This is Simon's definition of the genus Ælurops Thorell.

Legs 3, 4, 1, 2, or 3,4, 1, 2, rarely 4, 3, 1, 2. The two anterior pairs shorter and more robust; tibia and patella of the first equal and 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 extremity; 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. Metatarsus of the fourth with spines to the base.

### YLLENUS SIMON. 1869.

Syn.: 1869. Yllenus Sim., Monogr. d. Attid., 166 (632).

1870. "THORELL, On Europ. Spid., I, p. 219 (ad partem).

1876. "Sim., 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 separated, particularly the lateral forming a line strongly curved, the summit of the middle eyes being on a level with the center of the lateral eyes, or very slightly higher. 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 cond, 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 leg 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 to base.

Integument entirely covered with thick pubescence.

Nearest Ælurops 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 (562).

1876. Saitis Sim., Arachn. de France, III, p. 168.

1877. "THORELL, Studi sui Ragni Mal. e Pap. I, p. 225.

1882. Thorellia L. Koch and Keyserling, Arachniden Australiens, p. 1352.

1883. Saitis ID., ibid., p. 1434.

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. Quadrangle a third wider than long; dorsal eyes further from each other than from the lateral borders.

Sternum moderately wide, contracted in front. Anterior coxae separated by the width of the lip; fourth coxae a little the longest.

Falces a little shorter than the face, and narrower, not robust, and inclined.

Legs (\$\delta\$) 3, 4, 1, 2; the first and second pairs almost equal and much shorter than the others; (\$\varphi\$) 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. (\$\delta\$) 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; (\$\delta\$) 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 (\$\varphi\$ 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. Koch, 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).

1870. "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 &).

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 than long; dorsal eyes equally far or a little further from each other than from the lateral borders.

Sternum elongated, as narrow as the intermediate coxae (except A. attellanus  $\delta$ ).

 $Falc\epsilon s$  weak, vertical, as long or shorter than the face.

Palpus 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. Wagæ, frigidus) or most often shorter than the cephalothorax; (\$\varphi\$) these two articulations equal; (\$\varphi\$) tibia longer; tarsus and metatarsus more slender (except A. cingulatus) and shorter (often barely) than the two preceding articulations. Fourth legs 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 extremity and a little compressed; tarsus and metatarsus 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. Enophrys (sub-gen. Parthenia) C. Koch, Uebers. d. Arachn.-Syst. 5, p. 65.
  - 1869. Attus (9th 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.; Revis d. Attid.
  - 1876. Phlegra Id., Arachn. de France, III, p. 120.
- Cephalothorax very long, parallel in the cephalic part, a little dilated beyond; thoracic part at least twice the longer. Cephalic part plane and inclined not, or barely limited behind.
- Eyes: those of the face very unequal; the middle eyes almost touhcing; the lateral a little separated, forming a line almost straight, or perceptibly 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.
- Clypeus always more than half as wide as the middle eyes, often fully aswide ( $\delta$ ), 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 quarter shorter than the cephalothorax, these two articulations being equal in length and thickness, and a little longer than the tarsus and metatarsus, the latter teing equal and more slender. Femur, tibia and patella of the fourth much longer than those of the third pair, exactly of the same length as the tarsus and metatarsus; tibia of the fourth 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 in both sexes.

## OEDIPUS MENGE. 1877.

- 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 hind 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.

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The clypeus is still more oblique.

Eyes like those of Dendryphantes.

Legs also like Dendryphantes except that the femur and tibia of the first pair 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 sach like bulb. The point of the hook lies on a small tongue-shaped leaf.

\*\*Epigynum(\$\phi\$) closely resembling D. rudis; the openings of the spermathecal tubes lie on the inner half of the chitinous arched enclosure and end, after many turnings, close to the outer half of the orifice.

\*\*Spinnerets like those of Dendryphantes.

The species live in moss under fallen leaves and bushes,

### SCARTES MENGE. 1877.

Scartes Menge, Preussische Spinnen, IX, p. 494.

Cephalothorax oblong; the cephalic part with the forehead widely projecting; higher than wide, rounded on the sides, sloping steeply behind, the margin marked with a slight furrow.

Clypeus strongly retreating.

The large middle 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 (3) has on the lower edge of the inner side of the second joint a deep-lying hook shaped apophysis 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 only two openings for the future spermathecal tubes.

Abdomen oval. The whole body finely haired.

Legs 4, 3, 1, 2, with long slender claws and two pairs of spines on the metatarsi of both first legs.

.Spinnerets with small tubes.

They live under heath plants.

## EUOPHRYS (C. Koch) 1834. SIMON.

- Syn.: 1834. Enophrys C. Koch, in Herr.-Schaeff., Deutschl. Ins., 123, (adpart.:) 7, 8.
  - 1837. " ID., Uebers. d. Arachn.-Syst., 1, p. 33 (ad partem).
  - 1848. Attus ID., Die Arachn., XIV, (ad part.:) p. 44-49.
  - 1850. " ID., Ueb rs. d. Arachn.-Syst., 5, p. 68 (ad partem).
  - 1869. "SIM., Monogr. d. Attid., p. 6 (16), 14 (24) (ad partem).
  - 1870. Euophrys Thorell, on Europ. Spid., I, p. 216, (ad partem).
  - 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 Moscou, LIII, 4, p. 280.
  - 1883. " L. Koch and Keyserling, Arachniden Australiens, p. 1430.
  - 1883. "SIM., Arachoides 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, cut by a small, very short longitudinal stria; thoracic part often 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 membranous 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 intermediate coxec. Anterior coxacseparated by at least the width of the lip; coxac of the fourth pair longest.
- Falces weak, vertical or incl ned backward (renfoncees), 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 shorter than the cephalothorax and slightly unequal; tarsus and metatarsus shorter and more slender than the two preceding articulations. Tibia and patella of the third (together) a little, (often scarcely) shorter than the tibia and patella of the fourth; tibia of the

third much shorter, and a little thicker, than tibia of the fourth; patella (alone) longer than patella of the fourth; tarsus and metatarsus of the fourth as long or scarcely shorter than patella and tibia; tibia of the fourth, slightly enlarged at the extremity and a little compressed. Femoral, tibial, and metatar al, but no patellary spines.

#### ALCMENA C. Koch. 1846.

Syn.: 1846. Alemena C. Koch, Die Arachn., XIII, p. 176.

1880. "KARSCH, Arachnol. Blätter VIII, Zur Kenntniss der Attiden, in Zeitsch. f. d. Naur Wissensch., LIII, p. 397.

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 row than to the eyes of the third row.

Falces in the male large, convex, smooth, twice as long as the face; in the female smaller.

Palpus without distinctive characteristic.

This genus stands very near to the genus Euophrys, but the position of the eyes and the large falces separate it essentially. Moreover the cephalothorax and abdomen are thinner, that is to say narrower and longer, and also are covered closely with shining scales, which give the color and marking. The female palpus has nothing unusual; that of the male I know only from young animals with immature bulbs; these are not different from those of Euophrys.

#### 'HYPOBLEMUM. N.

Syn.: 1892. Acmaea KEYSERLING, Arachniden Australiens, p. 1420.
 1883. Drepanenhora Id., Arachniden Australiens, p. 1477.

Cephalothorax one-third or one-fourth longer 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 long, 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 than from the margin of the cephalothorax, small median eyes are half way between the lateral anterior and the dorsal eyes.

Falces short.

Maxillae dilated and rounded in front.

<sup>&</sup>lt;sup>1</sup> Hypoblemum is substituted for Drepanephora, the latter name being preoccupied

Labium contracted toward the front, a little longer than wide, scarcely longer than half the length of the maxilla.

Sternum convex, o e third longer than wide, toward the posterior dilated.

Legs spined, 3, 4, 2, 1. Fourth pair more slender than the others. Patella and tibia of the third longer than the patella and tibia of the fourth; metatarsus and tarsus of the fourth not longer than the patella and the tibia, metatarsi spined throughout their length.

Abdomen sub-ovate, twice as long as wide.

Spinnerets moderately long, superior and inferior of equal length.

### SELAOPHORA KEYSERLING. 1882.

Selaophora Keyserling, Archniden Australiens, p. 1374.

Cephalothorax not high, about one-third longer than wide, contracted 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 wide before as behind, situated in front of the middle of the cephalothorax. 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 diverging.

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 and tarsus of the fourth not longer than the patella and tibia.

#### SOBARA KEYSERLING. 1882.

Sobara 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 large eyes.

Quadrangle of eyes wider than long, wider behind than in front not so long as the half of the cephalothorax, anterior row of eyes a little curved 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, Arachpiden 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 the margin of the cephalothorax. First row of eyes curved, close together; small median eyes half way between 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, contracted 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 behind. Dorsal eyes almost as far 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 than 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 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 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 tibia of the fourth. Metatarsus and tarsus of the fourth longer than the patella and tibia.

#### LAGNUS L. KOCH. 1879.

Lagnus L. Koch, Arachniden Australiens, p. 1073.

Cephalothorax a little longer than wide, high; lateral and posterior, margins rounded. Cephalic part convex.

Clypeus low.

Quadrangle of eyes in front a little wider than long and wider than behind; first row of eyes recurved, close together, the median very large. Middle eyes 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.

Written "third" but evidently a misprint for fourth.

Sternum hardly longer than wide, plane.

Abdomen long, sensibly narrowed toward the posterior.

Palpi (3) 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.

### SCAEA L. Koch. 1879.

Scaea L. Koch. 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 eyes wider than long, equally wide in front and behind, and placed in front of the middle of 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; eyes 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.

### BOOTES N.

Syn: 1882. Hadrosoma Keyserling. Arachniden Australiens, 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 before as behind, almost reaching the middle of the cephalothorax. Dorsal eyes further from one another than from the margin of the cephalothorax. 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 dilated 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 little longer than wide.

<sup>&</sup>lt;sup>1</sup> Bootes is substituted for Hadrosoma, the latter name being preoccupied.

Legs spined 4, 1, 3, 2. First pair not stouter than the others. Patella and tibia of the third shorter than the patella and tibia of the fourth. Metatarsu and tarsus of the fourth not larger than the patella and tibia.

### CYTÆA KEYSERLING. 1882.

Cytea Keyserling, Arachniden Austra'iens, p. 1380.

Cephalothorax one-third or fourth part longer than wide, slightly contracted toward the front, behind rounded, a little wider at the third row of eyes, above slightly convex, not high.

Clypeus a third of the diameter of the large eyes.

Quadrangle of eyes wider than long, behind and in front equally wide or a little narrower behind, placed far 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 recurved and more or less close together. Small median eyes half way between the anterior lateral and dorsal eyes.

Falces short and not diverging.

Maxillae 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 than the patella and tibia 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 Id., Arachniden Australiens, p. 1477.

Cephalothorax about one-fifth longer than wide, toward the posterior moderately dilated, contracted in front, a little wider at the dorsal row of eyes, 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 reaching 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.

<sup>&</sup>lt;sup>1</sup> The generic name " Tanypus" was pre-occupied.

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.

### LANUARULLA KEYSERLING. 1883.

Lauharulla Keyserling, Arachniden Australiens, p. 1431.

Cephalothorax one-fourth longer than wide, not wider in the middle than in front, scarcely wider at the third row 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 dorsal eyes.

Sternum heart-shaped, scarcely longer than wide.

Falces vertical, short, and not diverging.

Maxillae more than twice as long as the labium.

Labium wider than long, rounded in front.

Legs 4, 1, 3, 2. First pair not 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. Matatarsi 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 KOCH. 1879.

Astia 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 eyes nearer the front lateral than the posterior eyes, and placed perceptibly higher than these.

Sternum ovate-cordate.

Abdomen ovate, truncated in front, sensibly contracted toward the apex. Patella 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 with the tibia.

### SUB-FAMILY LYSSOMANAE.

### LYSSOMANES HENTZ. 1832.

Syn.:	1832.	Lyssomanes	HENTZ.	Silliman's Journal of Science and Arts
				XXI pp. 99–152.
	1844.	66	66	Journal Boston Soc. Nat. Hist., IV pp.
				386–396.
	1875.	66	66	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, slightly 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. 1872.

Syn.: 1872. Jelskia TACZ, Aran. de la Guyane française, Horae. Soc. Ent. Rossicae, VIII. 1871, pp. 128–132.

1878 " ID., Ar méides 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 and higher.

Eyes eight, in four rows; the first pair very large, occupying the entire height of the face, very near together but not touching, 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 than 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 backward.

Eyes very unequal in size, disposed in four transverse lines of two each, and almost of same length.

Maxillae rather short, slighty divergen, 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 three-jointed.

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 Cambridge's genus the cephalothorax in front is very convex; the sides of the head are parallel, the clypeus as wide as the middle 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. 207.

#### PSEUDICIUS SIMON. 1885.

Syn.: Attus AUCT (ad part.). Dendryphantes E. Sinn., Ar. Fr., III (ad part. eucarpatus, etc.) + Calliethera E. Sinn., Ar., Karth., 1884 (ad p. icioides). Pseudicius E. Sin, Faune Arach. de l'asie Mérid., Bulletin de la Soc. Zool. de France, t. x. 1885.

Related to the genus *Icius* E. Sim., differing in having the eye area parallel above, and the falces in & 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); & 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 ATTIDÆ.

leius Marptusa Epiblemum Philaeus Ballus Simætha Dendryphantes Attus Pellenes Menemerus Hasarius Boethus Aelurillus Viciria	Very high  High  Moderately high  High  High	Rather long Long		or not.	Contracted in front or behind.	Dilated in front or behind.	Dilated in or behind the middle.	Vertical or rounded.	Slanting, rounded or truncated.	Plane or convex.	Inclined or	Length compared with cephalic part.	Height compared with middle an
leius Marptusa Epiblemum Philaeus Ballus Simætha Dendryphantes Attus Pellenes Menemerus Hasarius Boethus Aelurillus Viciria	Very high  High  Moderately high  High  High	Rather long Long		Sometimes					transasca.		level.	Part	terior eyes.
lius.  larptusa.  piblemum  hilaeus  allus  imætha  bendryphantes  ettus  ellenes  lenemerus  lasarius  oethus  elurillus  llenus  ævia  iciria	Very high  High  Moderately high  High  High	Rather long Long		Sometimes.	Both		Middle	Rounded	. Slanting		Inclined		<u>‡</u> .
piblemum hilaeus allus allus imætha endryphantes ttus ellenes enemerus asarius oethus elurillus llenus ævia	Very high High Moderately high High High	Short				Sometimes behind.			1	Plane	Otten inclined	At least & longer	carcely 4.
ilaeus Illus mætha udryphantes. tus Illenes nemerus sarius ethus lurillus lenus evia	High	Short											
nætha ndryphantes tus llenes nemerus sarius ethus lurillus lenus evia iria	Moderately high. High. High.	Short					Behind middle			Plane or couvex	Inclined	At least & longer	
endryphantes ttus ellenes enemerus esarius pethus elurillus llenus ævia eciria	Moderately high. High				Both		Middle			Convex longitudinally			Low.
Henes enemerus sarius sethus lurillus lenus evia	High										Logal	At least & longer	less than 1
enemerus		Rather long				Behind				Convey	Inclined	1 longer longer	About 1.
esariusethuselurilluselurilluseviaeviaevia		Long				Benind				Plane or convex		At least & longer	Scarcely 1
lurillus lenus evia ciria	High	Rather long			Notin front		In and behind middle.			Convex	Inclined	At least & longer	Often more than
lenus	Very high		. Little wider				Behind middle			Convex	Inclined	Twice as long	
riria	Very high	Rather long					Behind middle			Convex	Inclined	Twice as long	Almost as wide
11100	Moderately high	Long	Much wider			Belind				• • • • • • • • • • • • • • • • • • • •		At least \frac{1}{8} longer	Rarely 1.
via	Not high	Not very long						Rounded		Plane			Scarcely 1
ophyrs	Moderately high.						Behind middle				Level or incli'd	& or \ longer	At east 1.
on	Not high	Short			Behind				Slanting			Equal to cephalic	Moderately high.
malattus	Low									Plane	Level	Much shorter than cephalic	
abrocestum	Very high	Rather short					Behind middle			Convex	Inclined	la longer	
ctia		Long		Almost							Level	At least & longer	Scarcely 4.
rba	Not high				Behind					Plane	Inclined	About 1 longer	Very low.
legra		Very long Moderately long		Almost			Middle			Plane	Inclined	At least twice as long	
etha	High				Behind				Truncated			As long as cephalic	Almost 1
480B	Not high						Middle	Rounded		Plane	Inclined	At least 1 longer	A hout. 4.
nodorus	High					In front						3	At least 1.
irvattus	Not high	Short	. Wider			In front							Not. 1
ndippus	High	Short					Middle	Vertica	Slanting		Inglined		
nus	Very high	Not much longer than wide.	. Little wider								Inclined		At least 1.
vllus	Low	a longer than wide	. Much wider						Rounded	Convex	Level		1.
nveus	Very high	Short							Slanting		Luvul		
vale		Nearly as long as wide						Rounded			1.676		Very low.
ania										1		Shorter than cephalic	
scocnemius	Moderately high.	Long											Very low.
olenius													
opsus	Moderately high				Bening	In front			Slanting		Level		
ccorchestes	High								Truncated		Inclined		High.
noedus	High behind	Almost twice as long as wide			Beth		Middle		Truncated	Thoracic part convex	Inclined		Rather high.
moetas		Almost twice as long as wild	As wide		DUL		Middle	Rounded					Less than 1.
nemosyna													
nageles	Not high	Very long		Farallel					Truncated				Very low
orius	Low	Twice as long as wide			Benind			Almost vertical					Less than 1
LICUS	Cephalic of high	LOng											Very low
poblemum	Not high	+ or ± longer than wide	. Little wider		In Irout		Middle		Rounded	Convex			Low.
la		longer than wide	. Not wider		In front				Rounded	Plane			1
tæa	Not high	or 4 longer than wide			In front		Middle		Rounded	Convex			Very low.
ra	Low	1 donger than wide			In Iront		Middle		Rounded	Plane	7 10-		Very low.
	High	I donger than wide		Almost						Conver			Very low.
	High	1 & I nger than wide			In Iront	Behind		Rounded	Slanting		Inclined		1
	High	Little longer than wide	. Not wider		Both			Rounged		Convex		Not longer	Low.
	High	4 longer than wide			IH ITOHU				Rounded	COUNTRY			Luce than 1
	High	I longer than wide			In iront	Behind	Middle		Rounded				1.
	Madayatala high	I de longer than wide			In iront	Behind			Rounded				1.
gane	Moderately high.	Longer than wide			Both				Rounded	Convex	Inclined		Less than 4.
ea	High	Longer than wide								Convex	Incinid		
sthonocus	High	Little longer than wide						Roun ed	Rounded	Convex			Low
otes		\frac{1}{6} longer than wide	Little wider		Behind				Rounded	Convex			More than 1.
90	High behind							Vertical	Truncated	Convex	Inclined		Less than middle ev
artes.									Slanting	Convex	Inclined		
igena													
thion		Very long				Almost parallel				Cephalic part almost plane	Not inclined	At least 1 longer	Scarcely 1.
alcolecta												110 1000 8 102801	
eomanus													
soumanes		Long Moderately long											
skia							F260F11F161 F231, 161167			Charlette	T 31 3	C 1-1 1	Almost 1

Thyzzz

	Eyes		QUADR.	ANGLE OF EYES.				FIRST Row of	F EYES.	SECOND RO	w of Eyes.		THIRD ROW OF EYES.			
	in 3 or in 4 rows.	As long or longer than	How much wider than long.	Wider in front, or behind.	Width equal in front and behind.	Occupying what proportion of Cephalot'rax.	In a curved or in a straight line.	Middle eyes touching or separated.	Lateral eyes touching or separated.	Nearer to anterior or posterior eyes.	Halfway between anterior and posterior eyes.	Size compared with lateral eyes	Further from each other or from lateral borders.	Equally dist r from each of er and later borders.		
andalodes			Wider		4	0	Curved	Separated				Smaller or equal				
arptusa			d wider	Behind		• • • • • • • • • • • • • • • • • • • •	Straight					Smaller or equal				
piblemum	. 3		A4 1 4 1	Dahind			O	G			1	Cmaller		Usually.		
hilaeus			At least \frac{1}{3}	Behind			Straight or curved.	Separated	Separated Sub-touching			Smaller Equal		. Usuany.		
mætha	3		Much	Behind		2	Curved	Separated	Widely separated				Each other sometimes.			
endryphantes	. 3			Little behind Sometimes behind.	Comptimes		Curved Straight or curved.	Separated				Smaller Usually smaller				
ttus			Scarcely $\frac{1}{3}$	Behind	Sometimes				Separated			Smaller	Each other			
enemerus	. 3		½ or ½		Equal		Straight or curved.					Smaller or equal		Sometimes.		
asarius			At least $\frac{1}{3}$ A little	Little behind			Little curved	Little separated Sub-touching	Separated			Smaller or equal.	Lateral borders			
Clurillus	. 3		At least 1	Behind			Much curved	Separated	Separated			Smaller	Sometimes lat'l borders			
llenus			At least \(\frac{1}{3}\)		Equal.	• • • • • • • • • • • • • • •	Much curved Straight or curved.	Separated	Separated			Smaller Equal	Each other Lateral borders			
iciria			J 4	Little in front			Little curved	Touching	Widely separated				Lateral borders			
avia	. 3	As long as wide	,				Straight		Separated			Equal	Fach other			
ophyrs			\$	Much behind	Equal		Straight or curved.		Widely separated			Smaller or equal, Scarcely smaller.	Each other			
eon	. 3							Touching	Touching			At least as large.				
omalattus		As long as wide	O 1 .				Straight or curved.	Separated	Separated			Smaller		Equally.		
abrocestum			Scarcely $\frac{1}{3}$ or $\frac{1}{2}$		Equal		Straight or curved.	Separated	Separated			Smaller				
yctia	. 3	As long as wide			Equal		Straight	Touching				Smaller				
yrba nlegra			Almost $\frac{1}{3}$	Sometimes behind.	Equal		Straight	Separated Near together.	Separated			Scarcely smaller. Smaller				
itis	. 3		7	T 1 A			Straight	Separated	Separated			Smaller	Each other			
eætha	. 3		A 4 1 4 1	Behind			Straight	Separated				Smaller	Each other			
exippus		Longer than wide				Not 4	Curved		Widely separated	Anterior		Smaller Smaller	77 1 11			
enodorus	. 3		About 1		Nearly	Usually $\frac{1}{3}$	Curved		Separated		Almost		Lateral borders			
aryattus				Little behind			Usually curved	Much separated Near together.	Much separated	Anterior		Smaller	Sometimes each other.			
calus								Near together.	Near together			Equal		Equally.		
nus	. 3		A little	Little in front		About 3	Curved			Antonion			T 1 41			
yllusris			Wider			NOT \$	Curved Straight		Separated	Anterior			Each Offici			
mycus	. 3						Curved			Sometimes anterior	Sometimes halfway	Equal				
nyale					1		Curved	Separated		Posterior	Halfway	Smaller				
nirothecia							Straight			Anterior						
scocnemius		As wide behind as long				About ½										
olenius																
opsus	. 3						Curved	Touching	Touching	Posterior						
occorchestes	. 3					Not 4	Curved Usually curved		Sub-touching		Halfway		Each other			
nombonotus		Longer than wide		Behind	Almost		Curved		Close together	Anterior			Each other			
amoetas		Longer than wide		Behind			Curved	Close together.	Close together	Anterior			Each other			
nemosyna		Longer than wide					Straight	Touching								
nageles	. 3	Longer than wide		222600000000000000000000000000000000000		More than 1	Straight	Touching	Touching			Equal				
gorius		About as long as wide.		Behind		Almost 1	CurvedStraight		Separated				Each other			
laophora	. 3		Wider		Equal	Not ½	Nearly straight	Separated	Separated				Each other			
poblemum				Behind		Not 1	Curved		Separated		Halfway					
na erosa			Wider	In front		More than ½	Curved	Close together.	Close together		Halfway	· · · · · · · · · · · · · · · · · · ·	Each other			
tæa	. 3		Wider	Sometimes in front	Sometimes	Not \( \frac{1}{2} \\ \dots  \cdots \)	Curved				Halfway		Each other			
ra uharulla			Wider	In front	Equal	Not ½			Close together			Smaller	Each other			
rithous	. 3		Wider	Behind		Not ½	Curved		Widely separated	Anterior	,		Each other			
nnamora	. 3					Not ½	Curved	Close together.	Close together		Halfway		Lateral borders			
anorstia			Wider	Behind					Separated	Anterior			Each otherSometimes each other.	Sometimes.		
tus	. 3		Wider		Equal	Not $\frac{1}{2}$	Curved	Close together.	Close together		Halfway		Lateral borders			
ostheclina			Wider	In front		Not +	Curved	Close together.	Close together	Posterior	Halfway		Lateral borders Each other			
bara							Curved	Separated	Separated		Halfway		Each other			
gane					Equal	Not \frac{1}{2}	Curved				Halfway			Almost.		
æagnus				In front	Equal		Curved	Close together	Close together		Halfway		Lateral borders			
isthoneus	. 3		Wider	Sometimes behind.	Sometimes		Curved	Close together.	Separated	Anterior			Each other			
ootes			Wider				Curved		Separated			Smaller				
agoaipus			Little wider		Equal		Straight									
artes	. 3						Curved		Separated							
nigena thion		As long as wide					Straight	Touching		• • • • • • • • • • • • • • • • • • • •			Each other			
strocteisa		Much longer than wide					Straight	Touching				Larger	Each other			
alcolecta	. 3					At least $\frac{1}{2}$	Little curved									
ssomanes				In front					Separated							
Iskia	- 1															
skia eus hamas	. 4			In front				Little separated	Separated			Equal				

# TABLE III.

## ANALYSIS OF GENERA OF THE FAMILY ATTIDAE - Continued.

	1			1			1				
		COXAE				Li	ARDOMEN.				
	Length.	Width.	Shape.	1st pair separated by width of lip or by less.	Which pair thickest.	Which pair longest.	Length.	Shape.	Length.	Shape.	Shape.
Sandalodes	Long	Narrow	Control of the form				1 longer than lip		Longer than wide		Twice as long as wide
Epiblemum		Dathon nonvoir		Ry width		IV		Pointed, parallel, wide at base		. Conicar	
D 1 1	T	Rather narrow		By width							
Attus	Long			By width	T						
3.5	41 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		( ontracted in front	By William							O van and inde
	Long.	Much wider than cover					More than twice as long as IID.	Narrow	About as long as wide	. Writery trumcated at tip	Dong and nationed
X711	Long	Narrower than 2d and 3d cover		By less		1 V					
Mævia		Widow them come		At least by width			Long		N. arly 1 longer than wide	Narrower and rounded at tip	Long, slender
Bavia	Rather short	A hour width of ad and ad agree		Ry width at least					Twice as long as wide		
Euophyrs	Short	As narrow as 2d and 3d coxae		Often by less		IV					
Neon		Wider than 2d and 3d coxae	Triangular								Broad as long
1 T - 1	T one	Narrower than 9d and 2d goven		Ky less				å very wide with projections			
Heliophanus Hyctia	Twice as long as wide	Narrow	Small	1st coxae touching	1	1					Mairow, long
Cyrba	Twice as languag wide	Wider than 2d and 3d coxae	Contracted in front	At least by wicth		IV					
C. idia		Moderately wide	Contracted in front	By width		I V					
Neætha	Long.		Contracted in fr. nt.	By width and II	1						
Zanadarue	Rather short	Wider than coxae					At least 1 longer than lip	Parallel, sub-ovate			Sub-ovate
Eurvatus		Wider than coxae						Parallel, sub-ovate.	Longer than wide	Truncated	Sub-ovate
Cocalus											Cylinarical
Hyllne	1 longer than wide		Moderately convex					Narrow at base, sub-ovate	More than as long as maxillae	Narrowing at tip	
Ciris					1						Almost circular
Phyale											
Chirothecia											
Discocnemius		Not usrrower than coxae					About twice as long as wide	About as wide as length of lip	Longer than wide	Sub-truncated	Long
Ascyltus											Long, narrow
		Wider than coxae					Short	Narrow at base, wide at tip	Longer than wide	Rounded at tip	Truncated in Front, high, short
Omoedus		Wider than coxae		Widely separated			Long	Narrow at base, sub-ovate Convex, tip rounded.	Scarcely or not wider than long	Rounded at tip	
Damoetas	Long	Narrow						Convex, tip rounded	Scarcely \(\frac{1}{2}\) as long as maxillae	Rounded at tip	Long, constricted
Leptorchestes		As narrow as 2d and 3d coxae						Tip truncated	About twice as long as wide. Parallel.	Obtuse at tip	
Synageles		Wider in middle than 2d and 3d coxae.	Oval				Rather short	Very wide, square at tip Sub-ovate rounded	As wide as long	Semi-circular	
Salticus		Very narrow					Long	Tip truncated	Much longer than wide	Truncated	Long
Hynoblemum	1 longer than wide	Wider behind	Convex			!		Dilated, rounded at tip	A little longer than wide	Narrowing at tip	Twice as long as wide
Theres	Twice as long as wide	Contracted in front						Dilated, rounded at tip	+ as long as maxillae	Rounded at tip	Long, narrow
	Longer than wide		Oval					Dilated, rounded at tip	Not more than \( \frac{1}{2} \) as long as maxillae.		Lorg
Lowbowyllo	Langer than wide		Heart-shaped				More than twice as long as lin	Dilated at tip	Wider than long	Rounded at tip	Short
Sinnamora	Longer than wide		Rounded plane					Dilated, rounded at tip	Longer than wide		Long, narrow
Actio			Ovate cordate					Dilated and rounded at tip			Ovate, truncated in front
Jotus	Much longer than wide		Ovate convex				Rather long	Dilated and rounded at tip	More than \( \frac{1}{2} \) as long as maxillae		Rounded in front, pointed behind.
Proethodling			Oval convex					Dilated and rounded at tip Dilated and rounded at tip	l as long as maxillae	Narrowing at tip	Ovate
Sobara			Plane rounded				Not twice as long as lip	Wide at tip	More than \( \frac{1}{2} \) as long as maxillae	Narrowing and truncated at tip	Long, narrow
Sama			Ovate cordate					Tip dilated ant. and lat. margins form an angle.			Broad, ovate
Onigthonana	Long	Narrow					long	Dilated and rounded at tip	More than 1 as long as maxillae	Contracted and truncated at tip	
Bootes			Nearly round				Long	Dilated and rounded at tip	½ length of maxillae not longer than wide.	Contracted and rounded at tip	Small, convex in front
Oedinus								Ziana and Ioanaca at ap			
Janigena											
Mithion	Long	In middle equal to intermediate coxae.	Oval. Narrowing at ends.	By width	Ι .						
Chalcolecta								Parallel, rounded			
Jelskia											Cylindrical, long, slender
Eneus		Scarce wider than coxae 2d and 3d	Convex	At least by the width.				Dilated and rounded at tip			
Truamas											

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			FALCES.		Legs.										
	Vertical, inclined or horizontal.	Vertical, inclined or horizontal.	Diverging or not diverging.	Robust or weak.	Length.	Relative length of legs,	Relative length of legs,	Which leg or legs most robust.	Length of tibia and patella of 1st compared with cep. th.	Length of tibia of 1st compared with patella of 1st.	Length of meta- tarsus + tarsus of 1st compared with tib. + pat. of 1st.	Length of tib.+ pat. of 3d com- pared with tib. + pat. of 4th.	Length of metatarsus + tarsus of 4th compared with tib. + pat. of 4th	boss on onl+	
Icius	Inclined forward	Vertical		Rather robust	Short short slonger	1432	4132	I	. 4 shorter	Longer		Much shorter	ै a little, ३ much sh't'r	Only at apex.	
Philaeus	Often inclined			Robust	Long  § longer than §  Short	$1243$ $41\overline{32}$	$4132$ $41\overline{32}$	I and II	Shorter	å longer 2 equal.		Much shorter  Much shorter	Shorter or equal Often shorter	To base. No spines.	
Dendryphantes Attus Pellenes	Vertical Vertical Vertical or inclined	Vertical Vertical Vertical or inclined		Robust	Not longer than face Not longer than face	1243 or 4123	4123 or 4132	I or I and II	Shorter	<ul> <li>longer \$\varphi\$ equal.</li> <li>longer \$\varphi\$ equal.</li> </ul>	Shorter	Much shorter Much shorter Longer	Shorter	Only at apex. To base. To base.	
Hasarius	Sub-vertical	Sub-vertical		Not very robust	At least as long as face	1342	3412	I and III and II	. Shorter	Longer or equal	Shorter	Longer or equal Shorter Longer or equal	Equal	To base. To base. To base.	
Yllenus	Vertical	Vertical	Diverging a little	Weak	Shorter than face  nuch l'ng'r than face  Rather short	4312	4312	I and II	Much shorter At least as long As long	EqualLonger	Shorter	Much shorter Much shorter Longer or equal Much shorter	Much shorter Equal in 3	To base.	
Euophyrs Eris	Vertical Vertical Inclined	Vertical Vertical Inclined		Robust	Shorter than face	4312 4132 or 1432 1432 or 4132 4132	4312 4132 or 1433 1432 or 4132 4132	I or I and II II	Often shorter		Shorter	Shorter Shorter		Only at apex. No spines.	
Habrocestum Heliophanus Hyctia Cyrba	Vertical or oblique. Vertical Inclined Vertical	Vertical or oblique Vertical Vertical		Rather robust Robust Not robust	About as long as face  Longer than face As long as face	3412	3412	I	Shorter At least as long Shorter	l longerLonger	Shorter	Much longer	Shorter		
Phlegra	Vertical or inclined Inclined Vertical	Vertical or inclined Inclined		Slender	Shorter than face Shorter than face Not long Short	4132 or 4312	4132 or 4312	I	\$\frac{1}{2}\$ shorter	Almost equal	Equal	å longer Longer Longer or equal	Shorter or equal	To base. Only at apex. To base.	
Plexippus Zenodorus Euryattus Phidippus	Vertical Vertical Nearly vertical	Vertical Vertical Nearly vertical	Not diverging	Robust	Rather long.	1st or 3d longest 1342 1423	1st or 3d longest					Longer		To base.	
Cocalus	Vertical Not extended	Vertical Not extended	Diverging.	Slender	Long	1423	1423 4:23 1423 Short nearly equal					Shorter or equal	Shorter	To base.	
Phyale Thiania					Very long  † rather short  † short † long	1324 or 3124	1324 or 3124 4312 or 3412	I and II							
Diolenius	Almost vertical	Almost vertical	Diverging		ð longer than 🤄	1st and second longes.	1st and second longest.	I and II							
Omoedus Rhombonotus Damoetas	Sub-vertical	Sub-vertical			Short Short	41 <del>23</del> 1 <del>4</del> 23	4312 or 4321	I				Shorter Shorter	Lorger		
Leptorchestes	Vertical	Vertical		Robust	Short Short	4th longest	4th longest			Shorter or equal		Much shorter Much shorter	Shorter	No spines.	
Salticus	Horizontal	Vertical	Not diverging	orobust	\$ short \$ long	4133	4132		•	Much longer		Much shorter Shorter Longer	Shorter	No spines. To base.	
Therosa	Vertical	Vertical	Not diverging Not diverging Not diverging Not diverging		Short	4312	4312 4312 or 1342 1423 4132	I not more robust				Equal Longer Shorter	Longer or equal Longer or equal	To base.	
Pirithous Sinnamora Bianor	Vertical	Vertical	Diverging Not diverging Not diverging		Short	1423 or 1243	1423 or 1243	I.				Shorter Shorter Shorter	Shorter	Only at apex.	
Jotus			Not diverging Not diverging Not diverging Not diverging	Slender	Short Short Rather long	4312 4132 or 1432 4312 or 1432 1423 or 4312	4312 4132, or 1432 4312 or 1432 1423 or 4312	I not more robust				Longer Longer or equal Shorter	Shorter or equal Shorter or equal Longer Shorter or equal		
Scaa					Short	1432	1432	I	•			Shorter Shorter	Shorier		
Mago Oedipus	Inclined forward	inclined forward .:	Diverging	Moderately robust.	Short	1324	1324	I							
Mithion		Vertical			Very short	1432	1432		Shorter	Scarcely longer		Shorter	Almost as long	To base.	
Jelskia	Vertical	Vertical		Sleuder		$1423$ $31\overline{24}$	1423 3124		Longer	Much longer		Longer	Longer or equal	To base.	

### PSEUDAMYCUS SIMON. 1885.

Amycus V. Hasselt, (albomaculatus) (non C. Koch nec L. Koch).

Pseudamycus E. Sim, Arachn. recueillis par M. Weyers á Sumatra, Ex.
des Comptes-rendus de la Soc. 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-rendus 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 3 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 Cytaea 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 the integument being covered with simple hairs, while the Cytaea of the hairs are scale-like.

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Salticus sinuatus Doleschall (Plexippus Th.), Plexippus laticeps Thorell, and probably many other species described by Dr. Thorell under the generic name of Plexippus belong to the genus Cytaea.

It is probable that several of the species described by Keyserling under the name of *Hasarius*, belong in the genus *Ptocusius*, particularly *lineatus*, *albocinctus*, *insularis*, *chrysostomus*, and *mulciber*, which are unknown to us.

### STAGETILLUS SIMON. 1885.

Stagetillus E. Sim., 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 pert almost  $\frac{1}{3}$  longer than the cephalic, the ocular area longer above, a little narrower 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 stouter that the others, and compressed, tibiae and metatarsi I and II furnished with stout spines disposed in two inferior rows, the posterior legs unarmed, the metatarsi with the tarsi III and IV longer than the patellae with the tibiae, trochanter IV cylindrical and long, scarcely shorter than the coxae, falces short, parallel, almost place in front, the inferior margin of the groove with 3 or 4 teeth.

#### AGOBARDUS KEYSERLING. 1885.

Agobardus Keyserling, Neue Spinnen aus Amerika, VI, p. 33.

Cephalothorax about \(\frac{1}{5}\) longer than wide, nearly vertical on the sides, narrower in front and behind, and not wider than the third row of eyes, very convex above, falling steeply to the posterior border, and having the cephalic part strongly inclined forward.

Quadrangle of the eyes equally wide in front and behind, and much wider than long, reaching behind to the middle of the cephalothorax. 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 own radius. The small eyes of the second row are about halfway 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.

Labium 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 (\$ 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 eyes wider than long, somewhat narrower in front than behind, occupying only about \( \frac{1}{3} \) of the cephalothorax. Anterior row slightly bent, with the eyes rather near together. Eyes of the third row further from each other than from the lateral borders.

Falces ( & ) rather slender, long, and diverging.

Labium longer than wide, 2 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, tibia, 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 absence of spines at the beginning of the metatarsus of the fourth leg, and chiefly in that the patella and tibia of the third 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 Sandalodes 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. 1885.

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 ‡ wider than 1 ng and equally wide in the front and behind. Anterior eyes all separated, forming 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.

Maxillae 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, about as wide as long, narrower at the insertion of the fang.

Legs 1, 4, 2, 3, in both sexes. First leg much the stoutest, with the femurand 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 shorter than patella with tibia. The 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 transcribe 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.)

We speak of the anterior row of eyes as *straight* when a straight 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 downward*, when a straight line from the top of the middle eyes passes above the lateral eyes.

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 others, 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 genus 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; metatrsus IV much longer than the tibiae.

### SIMONELLA PECKHAM. 1885.

Simonella Peckham, 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 behind 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.

