

## PAPERS ON SPIDERS

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## I.

*The Genus TMETICUS (Simon, 1884; Cambridge, 1900)  
and some Allied Genera*

The species whose systematic position I now propose to discuss are the British representatives of the very heterogeneous group included under the name *Tmeticus* by M. Simon (Arach. de France, 1884; Hist. Nat. des Araignées, 1894) and the Rev. O. Pickard-Cambridge (List Brit. and Ir. Spiders, 1900), together with the species of *Hilaira* enumerated by both authors. To these must be added certain species discovered since 1900, and a few others which have been assigned to other genera, though really belonging to this alliance.

Thus constituted, the group falls into two obvious sections—*Centromerus*, in which the outer falcate teeth are three, the maxillæ quadrate, the labium short and very broad, the front eyes very unequal, while the femora of the first pair of legs (at least) bear a spine or spines; and all the remaining species, which have four or five outer falcate teeth, oblong maxillæ, a labium comparatively long, the front eyes not so diverse in size, and no femoral spines at all.

*Centromerus* is now generally recognized as an established genus, and only one author, the Norwegian arachnologist Mr. E. Strand, has proposed a sub-division. For the two very nearly related species *bicolor* Bl. and *concinuus* Thor. he proposes the genus *Centromeria*—a proposition not to be lightly set aside. The two species differ conspicuously from all the rest of the section, in that all the tibiæ are armed underneath with a double series of spines, while all the dorsal spines of the tibiæ are alike, not stronger on the posterior legs than on the anterior as in all the other species: the surface of the falces is not granulate, and the copulatory organs are of a slightly different type.

The development of the paracymbium of the male palpus is a characteristic feature of the *Centromeri*. This paracymbium is a chitinized branch of the tarsus, springing from its inner surface near the base and outer margin, behind the attachment of the bulb. In the *Centromeri* the base of attachment is comparatively large, and the limb is continuous with the upper surface of this basal part, which in the larger species is usually smooth and chitinous. In some species of lesser size (notably in *emptus*) it is only imperfectly chitinized and more or less covered with bristly hairs; but always it has the appearance of forming part of the complete crescentic sweep of the limb, never breaking the outline, and indeed usually produced on the side opposite to the main limb. Including the whole of this circuit, the paracymbium covers about three-fourths of a circle, but is much broader in the middle than at either extremity, and the inner surface is concave. It is so attached to the tarsal surface that when the palpus is viewed from the outer side nearly the whole inner surface is visible.

Typically the epigyne of the female presents a vulvar fovea, wider than long, divided by a more or less heartshaped central process. The attachment of this process is near the anterior margin, the middle of which is often produced backwards so as to overlap it considerably.

Throughout the genus two dorsal spines on each tibia is the rule, the spines of the posterior legs being longer and stronger (usually darker) than those on the anterior legs. The femoral spines vary. For the majority of species the formula is—femur i., 2 or 3; femur ii., 1 or 2; femora iii. and iv., 0 or 1; but there is a small group, of which *serratus* Sim. is the only British example, in which femur i. bears a solitary spine, and the rest are spineless. The larger species have a single feeble spine on each metatarsus.

Obviously the correct systematic position of *Centromerus* is with *Porrhomma* and *Bathyphantes* between *Lephtyphantes* and *Microneta*, a series which ought not to be broken by the intrusion of the remaining species now under review. The

latter form a continuous series lying between *Drapetisca* and *Gongylidium*, in which the predominating characters are what I should be disposed to call Nerienine, as distinguished from Linyphiine.

At the head of this series—so near to *Linyphia* as hardly to be included in the present group—is the genus *Mengia*, which is very closely allied to *Drapetisca*. They bear pretty much the same relationship to each other as *Linyphia* (*Helophora*) *insignis* Bl. bears to *L. montana* Clk., but the difference is not nearly so great, as a glance at the copulatory organs will show. To be consistent, whoever includes *insignis* in the genus *Linyphia* would naturally assign the two species of *Mengia* to *Drapetisca*. They differ from *Drapetisca* in having no femoral spines, but that is a difference which exists within the genus *Linyphia*. *Mengia*, it is true, has but four outer falcate teeth, while *Drapetisca* has five; but in the latter case the first is small and abnormally near the base of the fang, so that it may be regarded as adventitious. The other four resemble those of *Mengia*, and are similarly placed. Nevertheless I separate the two genera on the strength of differences in the form of the maxillæ, which are more quadrate in *Drapetisca* and thickened on the inner margin.

Four is also the number of outer teeth in *affinis* Bl. and *nigricauda* Cb., but it is a mere numerical coincidence, for in this case it is the four characteristic of *Erigone* and its allies, of which the fourth is usually the largest, and certainly never the least as it is in *Mengia*. As a matter of fact *Tmetiscus affinis* Bl. is undoubtedly congeneric with the spider hitherto generally known as *Gongylidium graminicola* Sund., while *nigricauda* Cb. only fails to be a *Gongylidium* (*sensu stricto*) by reason of the nature and disposition of the leg spines. Thus, oddly enough, *Tmetiscus affinis*, which has furnished a name for the whole group, must be removed to a considerable distance from its quondam associates.

On account of the characteristic leg spines of *nigricauda* (two dorsal on each tibia; black, short and slightly curved)

I propose the new genus *Ostearius* to receive it. It stands very near indeed to *Gongylidium*.

The remaining species agree in having five teeth on the outer margin of the fang-groove. The first is situated a little within the first half, followed by three others equidistant or nearly so, gradually increasing in size. The fourth is therefore the largest, while the fifth is smallest of all, and its distance from the fourth is sometimes as much as double the interval between the rest. The inner teeth vary in number from three to five, and are usually very small. The normal armature of the legs is—two dorsal spines on each of the tibiæ, one on each of the genua, and a lateral spine on the front side of tibia i., but some genera are defective in this respect.

*Oreonetides adipatus* L.K. is the type of a little group which lies nearest to *Mengia*. The falcate teeth are quite conical, straight and broad-based. It is chiefly to the strong development of the copulatory organs that these spiders owe the position here assigned to them, but in general structure (*e.g.* the form of the labium) they are nearer to *Linyphia* than to *Tmeticus*.

By virtue of the development of the genitalia, *Macrargus rufus* Wid., follows next in order; but it is very likely that it may ultimately find a place elsewhere, for Tmeticine characters are more conspicuous than in some of the genera which follow. For instance it differs from all its neighbours in the size of the inner falcate teeth in the male. They are even larger than in *Tmeticus* and *Ostearius*, and may quite easily be distinguished by the naked eye if the falces are looked at laterally. The male also has a mamilliform tuber on the front of the falces, but it is not centrally situated as in *Tmeticus*.

Very near to *Oreonetides* in external appearance is *Leptorhoptum*. There is however a conspicuous difference in the development of the copulatory organs, which are in this genus of the very simplest type. The most decisive character is the form and size of the labium. There is not much differentiation between the sexes except in the caput of *hardii* Bl.

*Reprobus* Cb. is the connecting link with *Hilaira* and *Coryphæus*. All three are included by M. Simon under *Hilaira*; but this arrangement can hardly be maintained. It may be granted at once that a falcate tuber or modification of the caput of the male is not in itself a generic character; but the structure of the oral apparatus may certainly acquire that value if it can be shown to be distinctive of a group mutually agreeing in other characters. Now *Hilaira* (as defined below) has the labium contracted below the middle after the manner of *Oreonetides*, though not so strongly; whereas in *Coryphæus* and the species *reprobus* there is no indentation of the margins below the reflexed tip—they are parallel (*Coryphæus*) or even divergent (*reprobus*). As the diagnosis will show, this character in *Hilaira* is reinforced by the dentition of the falces, the shape of the cephalothorax, and the armature and proportions of the legs. *Coryphæus* differs in all these particulars, and *reprobus* in all but the armature of the legs.

*Coryphæus* stands between two groups each characterized by a distinctive arrangement of leg spines, agreeing entirely and universally with one of them, *Oedothorax*. I do not know of a single character in which it is demonstrably nearer to *Hilaira* than to *Oedothorax*. By general consent it is to be separated from the latter; therefore, *a fortiori*, it must be regarded as distinct from *Hilaira*. It might be urged that *Hilaira uncata* Cb. has only one spine on tibia iv.; but the lateral spine on tibia i. is not wanting, and the legs are the legs of *Hilaira*, not the long pale slender legs of *Coryphæus*.

The segregation of *reprobus* Cb. follows as a natural consequence. I propose to make it the type of a genus *Halorates*, which will most probably include the continental *dentichele* Sim.

*Rivalis* Cb. has the leg armature of *Coryphæus*, but is, I think, generically distinct; for the falces and their dentition are alike in the two sexes, while the labium is broad, short, and distinctly contracted below the middle. Moreover in both sexes the inner teeth are needlelike, about half the size of

the outer teeth. These characters, together with the short legs and the general structure of the copulatory organs, exclude it from any genus with which I am familiar. There is a bare possibility that it may be congeneric with *Hillhousia desolans* Cb., as the female genitalia appear to be of similar type. *H. desolans* is unknown to me, but if the species *misera* Cb. be correctly associated with it (which I very much doubt), then certainly *rivalis* cannot be referred to *Hillhousia*. It therefore becomes necessary to establish a new genus for this species, which I now do under the name *Diplocentria*.

To this section in which the inner falcate teeth are five in number, belong (besides *Diplocentria* and *Coryphaeus*) the two genera *Sintula* and *Gongylidiellum*, but in both genera these teeth are reduced to mere blunt granules. In *Oedothorax* they are long, slender, and uniformly four in number in both sexes.

As far as I know, only two of the species enumerated by Mr. Pickard-Cambridge in 1900 under *Sintula* can enter the genus as now defined—*cornigera* Bl., the type, and *fausta* Cb. The rest do not belong to this series at all, with the possible exception of *pygmæa* Cb. *Frederici* Cb. (which by favour of Dr. Jackson I have had an opportunity of examining) is certainly congeneric with *Microneta beata* Cb., etc. *Pholcomoides* Cb. is a *Syedra*, while *aëria* Cb., as the lateral spine on tibia i. indicates, is possibly a congener of *Hillhousia misera* Cb. The minute species *diluta* Cb. is evidently intermediate between *Microneta* and *Syedra*. From both it differs in the relative size of the eyes and their position. As in the former genus, the falces are slightly modified in the male and the number of fang-teeth reduced. I propose for it the new genus *Rhabdoria*. The remaining species when better known—the type specimens are all unique—will probably be found to form a group intermediate between the more typical *Microneta* and the section of that genus as at present constituted, of which *subtilis* Cb. is the type—a section which will certainly have to be separated from the true *Microneta*, from which its members differ in the form of the

cephalothorax and of the falces, in the length of the legs, and in the structure of the copulatory organs. In support of this opinion I propose for them the genus *Agyneta*, of which a diagnosis is given below.

*Diagnoses of the Genera discussed above.*

**Centromerus** Dahl.

Outer teeth of the fang-groove three, inner none. Maxillæ quadrate, apical margin gently convex, chitinous, black. Labium very short and broad, narrowed below the reflexed tip. Femur i. (at least) bearing a spine or spines. Paracymbium of male very large, more or less crescent-shaped, hollowed within; epigyne of female with transverse fovea, divided by a median process. Front middle eyes very small, close together, their laterals at least three times as large.

British species: *silvaticus* Bl., *expertus* Cb., *prudens* Cb., *arcanus* Cb., *emptus* Jackson, *serratus* Sim., *similis* Kulc., ? *commodus* Cb., ? *adeptus* Cb.

Sub-genus: **Centromeria** Strand.

Differs from true *Centromerus* in having a double series of spines under all the tibiæ, and several spines on metatarsus iv. Also all the dorsal spines of the tibiæ are of the same strength and character, not larger and stronger on the posterior legs as in true *Centromerus*; the falces are not granulate, nor the copulatory organs so much developed.

British species: *bicolor* Bl., *concinna* Thor.

**Mengia** F. Cb.

Outer fang-teeth four, equidistant, the fourth least; inner teeth three, rather longer than broad at the base, acute, equidistant. Maxillæ much longer than broad. Tibiæ all bearing spines on both sides and beneath. Metatarsi also spined; femora spineless.

British species: *scopigera* Grube, *warburtonii* Cb.

*Oreonetides* Strand.

Outer fang-teeth five, equidistant, increasing in size to the fourth, the fifth equal and similar to the first; inner teeth three, equidistant, the third largest, all conical, acute, as broad at the base as high. Labium much broader than long, narrowed below, not reaching the middle of the maxillæ, which are parallel-sided and slightly convergent. Two dorsal spines on all the tibiæ, one on the front side of tibia i. near the apex; femoral none, metatarsal none. Falces similar in male and female.

British species: *abnormis* Bl., *adipatus* L.K., *firmus* Cb., *contritus* Cb.

*Macrargus* Dahl.

Outer teeth as in *Oreonetides*, inner teeth three or four, small in the female, similar to the outer in the male and as large. Tumid base of the falces granulate, projecting far in front of the clypeus. Labium large, half the length of the maxillæ, reflexed almost from the base, where it is broadest. Upper middle eyes larger than the laterals, their interval half the lateral interval. Leg spines as in *Oreonetides*.

British species: *rufus* Wid.

*Hilaira* Sim.

Outer teeth five, the fifth much smaller than the others, darker, separated by a wider interval; inner teeth three, very small, almost granular, obtuse or subacute, first interval narrower than the second. Labium wider than long, widest in the middle (but not much wider than at the base), not reaching the middle of the maxillæ. Legs short and stout, spines as in *Oreonetides*. In the British species (*montigena* excepted) the tarsi and metatarsi of the first pair are equal.

British species: *excisa* Cb., *uncata* Cb., *pervicax* Hull, *montigena* L.K.

*Leptorhoptrum* Kulcz.

Outer teeth five, similar in the two sexes, the fifth less than the first, the interval between fourth and fifth greater than the



other intervals; inner teeth three, very small but acute. Labium large, reaching the middle of the maxillæ, as wide at the middle as at the base, only slightly narrowed between these two points, the reflexed part equal to half the whole length. Tibial and patellar joints of the male palpus more or less elongate, the tarsal joint small. Epigyne of the female exceedingly simple, without any special sculpture.

British species: *huthwaitii* Cb., *hardii* Bl.

#### Halorates gen. nov.

Outer teeth like those of *Hilaira*, but the fifth is rather larger; inner teeth similar to those of *Oreonetides*, but larger, being quite equal to the fifth of the outer series. The dentition is similar in the two sexes, but the male has a mamilliform tuber on the front of the falces. Labium widest at the base, reaching the middle of the maxillæ. Outer margin of the maxillæ straight. Leg spines as in *Oreonetides*.

British species: *reprobus* Cb. (type).

#### Sintula Sim.

Outer teeth five, subequal, equidistant; inner five, granular, obtuse; both series similar in the two sexes. Labium as in *Hilaira*. Maxillæ not converging beyond the labium. Legs fairly long; two dorsal spines on all the tibiæ, none lateral. Cephalothorax very broad, oval, narrowed to the lateral eyes without indentation. Sides of the caput vertical, the eyes occupying the whole width.

British species: *cornigera* Bl., *fausta* Cb.

#### Diplocentria gen. nov.

Outer teeth five, subequal, equidistant; inner teeth five, similar to the outer, but only about half as long; neither series modified in the male. Labium similar to that of *Oreonetides* on a smaller scale. Legs rather short; one dorsal spine only on tibia iv.; none lateral. Cephalothorax narrow, oval, slightly indented at the base of the maxillæ; eyes not occupying the whole width of the caput.

British species: *rivalis* Cb. (type).

**Gongylidiellum** Sim.

Teeth similar in the two sexes; outer five, the fourth much the longest, the first four very close together, the fifth small and remote: inner five, granular and very minute. Front eyes closely approximate. Legs short; anterior tarsi fusiform, equal in length to the metatarsi. Maxillæ much inclined inwards; labium small.

British species: *latebricola* Cb., *vivum* Cb., *paganum* Sim., *murcidum* Cb., *dolosum* Cb.

**Coryphæus** F. Cb.

Outer teeth as in *Oreonetides*, but not so strong, smaller and wider apart in the male; inner teeth five, obtuse or acute, small. Inner margins of the maxillæ subparallel beyond the labium; outer margins diverging widely towards the base. Labium large, reaching the middle of the maxillæ, widest at the base. Legs long; one dorsal spine only on tibia iv.; no lateral spines.

British species: *distinctus* Sim., *simplex* F. Cb., *fortunatus* Cb.

**Oedothorax** Bertk.

Outer teeth of the female as in the same sex of *Coryphæus* but broader at the base, in the male closer and more slender; inner teeth in both sexes four, fairly long, blunt, very close together. General characters of *Coryphæus*, but the cephalothorax of the male is subject to modification and the copulatory organs are of a different type.

British species: *fusca* Bl., *agrestis* Bl., *retusa* Westr., *apicata* Bl., *gibbosa* Bl., *tuberosa* Bl., *gibba* Cb., *mora* Cb.

**Gongylidium** Sim.

Outer teeth four or five in the female, in the male two contiguous at the inner extremity of the fang-groove; inner three in both sexes, similar to the outer. Falces not very tumid at the base, smooth. Legs long and slender, their armature as in *Oedothorax*.

British species: *rufipes* Sund.

**Ostearius** gen. nov.

Teeth as in *Gongylidium*, but one outer tooth only in the male. Two dorsal spines on all the tibiae, short and black. Other characters of *Gongylidium*.

British species: *nigricauda* Cb. (type).

**Tmeticus** Menge.

Outer teeth four, very short and far apart in the male; inner teeth large. Maxillae nearly rectangular in the upper half, very strongly inclined inwards. Labium not large, margins parallel below the reflexure. Falces very tumid at the base and granulate. Leg spines of *Gongylidium*.

British species: *affinis* Bl., *graminicola* Bl., *dentatus* Wid.

I append the formal diagnoses of the two new genera which I have proposed to separate from *Microneta* and *Sintula*.

**Agyneta** gen. nov.

Cephalothorax broad oval, thoracic part almost circular. Falces short, narrowed to the extremity on both sides. Fang unusually thick; groove deep, without marginal teeth. Eyes small, very closely grouped, not occupying the whole width of the caput. Legs shorter than in *Microneta*.

British species: *passiva* Cb. (type), *subtilis* Cb., *cauta* Cb., *decora* Cb., *clypeata* F. Cb.

**Rhabdoria** gen. nov.

Falces straight, longer than the facial height, not attenuate or divergent in the male. Outer teeth three in the female, two in the male; inner teeth none. Eyes closely grouped, the fore central pair small and dark, the rest larger, nearly white. Legs normal, two slender spines or bristles on each tibia; no lateral spines. Cephalothorax rather long, not much narrowed at the caput.

British species: *diluta* Cb. (type).

I have to thank the Rev. O. Pickard-Cambridge for the loan of type specimens of *Coryphaeus fortunatus* Cb. and *Ostearius nigricauda* Cb., and Dr. Jackson for the loan of a male of *Microneta frederici* Cb. Mr. W. Falconer has sent me a female of *Maro minutus* Cb. since the above was written. I have not been able to examine it closely, but there seems to be no doubt that the genus *Maro* should stand next to *Gongylidiellum*. The general appearance is the same, and so is the form of the maxillæ and labium; but falces, eyes, legs, and copulatory organs all show marks of difference. The outer falcal teeth are exceedingly minute, the first four unusually distant from the base of the fang, and very close together. If the fifth exists I have not been able to see it; nor can I distinguish any inner teeth.

## SYNONYMY.

[Abbreviations: Cb., 1900=List of British and Irish Spiders, Pickard-Cambridge, 1900.

Cb., P.D.F.C.=Pickard-Cambridge, Proceedings of the Dorset Nat. Hist. and Antiquarian Field Club.

Sim., A.F.=Simon, Arachnides de France, vol. v., parts 2 and 3, 1884].

## Centromerus:

*C. silvaticus* Bl.=*Tmeticus silvaticus* Bl.—Cb., 1900.

*C. expertus* Cb.=*Tmeticus expertus* Cb.—Cb., 1900.

*C. prudens* Cb.=*Tmeticus prudens*, Cb.—Cb., 1900.

*C. arcanus* Cb.=*Tmeticus arcanus* Cb.—Cb., 1900.

*C. emptus* Jackson=*Centromerus emptus* Jackson—Jackson, Proc. Chester Soc. of Nat. Sc., &c., 1907.

*C. serratus* Sim.=*Tmeticus serratus* Sim., A.F.

*Sintula balteatus* Sim. (♀ non ♂), A.F.

*Tmeticus serratus* Sim.—Cb., P.D.F.C., 1907.

*C. similis* Kulcz.=*Centromerus similis* Kulcz.—Cb., P.D.F.C., 1905.

*C. (?) commodus* Cb.=*Tmeticus commodus* Cb., P.D.F.C., 1905.

*C. (?) adeptus* Cb.=*Tmeticus adeptus* Cb., P.D.F.C., 1900.

## Centromeria:

*C. bicolor* Bl.=*Tmeticus bicolor* Bl.—Cb., 1900.

*C. concinna* Thor.=*Tmeticus concinnus* Thor.—Cb., 1900.

## Mengia :

- M. scopigera* Grübe=*Tmeticus scopiger* Grübe—Cb., 1900.  
*M. warburtonii* Cb.=*Tmeticus warburtonii* Cb.—Cb., 1900.  
*Mengea warburtonii* Cb.—Cb., P.D.F.C., 1909.

## Oreonetides :

- O. adipatus* L.K.=*Porrhomma adipatum* L. Koch—Cb., 1900 ;  
 Sim., A.F.  
*O. abnormis* Bl.=*Tmeticus abnormis* Bl.—Cb., 1900.  
*O. firmus* Cb.=*Tmeticus firmus* Cb.—Cb., P.D.F.C., 1905.  
*O. contritus* Cb.=*Tmeticus contritus* Cb.—Cb., 1900.

## Macrargus :

- M. rufus* Wid.=*Tmeticus rufus* Wid.—Cb., 1900.

## Hilaira :

- H. excisa* Cb.=*Hilaira excisa* Cb.—Cb., 1900.  
*H. uncata* Cb.=*Hilaira uncata* Cb.—Cb., 1900.  
*H. pervicax* Hull=*Hilaira pervicax* Hull—J. E. Hull, Trans. Nat.  
 Hist. Soc. Northd., &c., vol. iii, 1908.  
*H. montigena* L. K.=*Tmeticus montigena* L. Koch—Cb., 1900.  
*Porrhomma montigena* L. Koch—Sim., A.F.

## Leptorhoptrum :

- L. huthwaitii* Cb.=*Tmeticus huthwaitii* Cb.—Cb., 1900 ; Sim., A.F.  
*Leptorhoptrum huthwaitii* Cb.—Kulez., Aran.  
 Hung. ii.  
*L. hardii* Bl.=*Tmeticus hardii* Bl.—Cb., 1900 ; Sim., A.F.

## Halorates :

- H. reprobus* Cb.=*Tmeticus reprobus* Cb.—Cb., 1900.

## Sintula :

- S. cornigera* Bl.=*Sintula cornigera* Bl.—Cb., 1900 ; Sim., A.F.  
*S. fausta* Cb.=*Sintula fausta* Cb.—Cb., 1900.

## Diplocentria :

- D. rivalis* Cb.=*Tmeticus rivalis* Cb.—Cb., P.D.F.C., 1905.  
*Centromerus subalpinus*, de L. (♂ non ♀)—Rev. Suisse  
 Zool., 1907.

## Coryphaeus :

- C. distinctus* Sim.=*Gongylidium distinctum* Sim.—Cb., 1900.  
*C. simplex* F. Cb.=*Tmeticus simplex* F. Cb.—Cb., 1900.  
*C. fortunatus* Cb.=*Tmeticus fortunatus* Cb.—Cb., 1900 ; P.D.F.C.,  
 1907.  
*Oreoneta fortunata* Cb.—Cb., P.D.F.C., 1909.

## Oedothorax :

All the species enumerated under this genus are included in *Gongylidium* Cb., 1900, and Sim., A.F. Of *Gongylidium* the type is *rufipes* Sund., and as the present species are not congeneric with *rufipes*, Simon (Hist. Nat. des Araignées, 1894), following Kulczynski (Aran. Hung.), adopted for this group Blackwall's name *Nerienne*. As originally propounded in 1833, *Nerienne* consisted of *marginata* Bl. (= *Linyphia clathrata* Sund.), *rubens* Bl., and *cornuta* Bl., and no type was indicated. In 1868 Menge (Preuss. Spinn., vol. ii.) made *rubens* Bl. the type of his *Gonatum*—a genus still maintained—under the name of *Gonatum cheliferum* Menge. *Cornuta* Bl. was thus left as the type of *Nerienne*, and the genus before us must take the name *Oedothorax* (Bertkau, Beitr. z. Kennt. Spinn. f. Rheinp., 1883), the type being *gibbosa* Bl.

## Gongylidium :

*G. rufipes* Sund. = *Gongylidium rufipes* Sund.—Cb., 1900.

## Ostearius :

*O. nigricauda* Cb. = *Tmeticus nigricauda* Cb. - Cb., P.D.F.C., 1907.

## Tmeticus :

*T. affinis* Bl. = *Tmeticus affinis* Bl.—Cb., 1900.

*T. graminicola* Bl. = *Gongylidium graminicola* Bl.—Cb., 1900.

*T. dentatus* Wid. = *Gongylidium dentatum* Wid.—Cb., 1900.

## Gongyliellum :

All the species enumerated are included in the same genus Cb., 1900.

## Agyneta :

All the species enumerated are recorded by Mr. Pickard-Cambridge as *Microneta*.

## Rhabdoria :

*R. diluta* Cb. = *Sintula diluta* Cb.—Cb., 1900.

The original types of *Hilaira uncata*, *H. pervicax*, *Oreonetides abnormis*, *O. contritus*, *O. firmus* ♂, *Centromerus prudens*, *C. arcanus*, *Sintula fausta* ♀, and *Coryphæus distinctus* ♀ were all Northumbrian; while *Oreonetides adipatus* was discovered in the Tyrol and on Cheviot Hill almost simultaneously. *Hilaira pervicax* and *Oreonetides contritus* still remain peculiar to the county, and several others are more abundant here than elsewhere, according to our present knowledge—notably *Diplocentria rivalis*, *Sintula fausta*, and

*Oreonetides firmus*. Northumberland is therefore very closely connected with the history of these spiders, and may legitimately be regarded as their British headquarters.

## II.

*Some Northern Records for 1909.*

By far the most interesting spiders which have passed through my hands in 1909 were captured in Cleveland and sent to me by my nephew, Mr. J. W. H. Harrison of Middlesbrough. These included two species new to the British list, and another which may prove to be a new species. Besides these, I have received from him close upon 200 species from Cleveland, and upwards of 100 species from Durham county. To the Durham list also belongs an interesting little collection received from Mr. W. L. Turner of the Derwent Valley Field Club. I have myself had little opportunity for collecting, and my rather tame records represent a brief visit to the Galloway coast in June, and a similar excursion to the Northumbrian coast in September. The latter expedition was undertaken in the hope of picking up the unknown female of *Cnephalocotes incurvatus* Cb., but it did not turn up. I give the more noteworthy records under territorial heads.

## CLEVELAND (Mr. Harrison).

*Lepthyphantes nebulosus* Sund. Plentiful under stones on the coast.

*Lepthyphantes tenebricola* Wid. Both sexes.

*Hillhousia misera* Cb. Adult males.

*Bathyphantes approximatus* Cb. Adult female, January, 1910.

*Centromerus expertus* Cb. Both sexes.

*Notioscopus sarcinatus* Cb. Adult males in June; adult females from March to October. First British record. Previously recorded only for Central Europe and the middle of France. The female is now figured for the first time. Taken on Eston Moor from sphagnum in ditches.

*Hypselistes florens* Cb. (*Teste auctore*). Swampy places on old jet-workings on Eston Moor, one adult male and two adult females in June. First British record. Previously known only in the temperate region of the United States, where it appears to be fairly common, along with other members of the same genus. Whether one of these is identical with our British *Hypselistes* (*Entelecara*) *jacksonii* Cb. remains to be seen. No representative of the genus has yet been taken on the continent of Europe.

#### DURHAM COUNTY.

##### (1) DERWENT VALLEY (Mr. Turner).

*Chiracanthium lapidicolens* Sim. Adult female, Axwell Park.

*Pachygnatha listeri* Sund. Adult male, Axwell Park.

*Cyclosa conica* Pallas. Immature male, Axwell Park.

##### (2) TEAM VALLEY (Mr. Harrison).

The following species were taken in the neighbourhood of Birtley in December, 1909.

*Amaurobius ferox* Walck. Adult female.

*Maso sundevallii* Westr. Adult females.

*Troxochrus scabriculus* Cb. Males and females, adult.

*Evansia merens* Cb. Adult male.

*Ceratinella brevipes* Westr. Adult females.

NORTHUMBRIAN COAST (J. E. H.) Near Newbiggin,  
September, 1909.

*Agroeca proxima* Cb. Both sexes.

*Erigone longipalpis* Sund. Both sexes, abundant.

*Erigone arctica* White. Two females.

*Troxochrus scabriculus* Cb. Both sexes.



- Troxochrus cirrifrons* Cb. Males, with the preceding.  
*Evansia merens* Cb. Both sexes; in nests of *Lasius niger*.  
*Xysticus erraticus* Bl. Both sexes.  
*Oxyptila atomaria* Panz. Both sexes.

## DUMFRIES AND KIRKCUDBRIGHT (J. E. H.)

- Clubiona brevipes* Bl. Adult male, Collin.  
*Clubiona grisea* L. K. Both sexes, Clarencefield.  
*Cryphoea silvicola* var. *carpathica* Herm. An adult female, Auchencairn. Rather larger than typical *silvicola* C. L. K., and the legs are pale, almost concolorous. The epigyne answers exactly to Kulczynski's figure (Aran. Hung., ii., Tab. vi., fig. 29a).  
*Enoplognatha thoracica* Hahn. Both sexes, Rascarrel. Under stones on the shore.  
*Asagena phalerata* Panz. Adult female, Rascarrel.  
*Hillhousia misera* Cb. Adult females, Collin.  
*Microneta saxatilis* Bl. Adult females, Collin.  
*Microneta conigera* Cb. Adult females, Collin.  
*Microneta cauta* Cb. Adult females, Collin.  
*Sintula fausta* Cb. An adult male, Collin.  
*Erigone arctica* White. Adult females, Rascarrel.  
*Metopobactrus prominulus* Cb. Adult female, Rascarrel.  
*Cnephalocotes elegans* Cb. Adult females, swarming under sea-weed in Auchencairn Bay.  
*Cnephalocotes curtus* Sim. A single adult female, Rascarrel. Under dry sea-weed on the beach.  
*Evansia merens* Cb. Adult female, Solway Banks, close to high-water mark; no ants' nests anywhere near.  
*Oxyptila atomaria* Panz. Collin; Auchencairn; Rascarrel.  
*Pirata piscatorius* Clerck. Adult female, Collin.  
*Pirata latitans* Bl. Both sexes, near Dalbeattie.

*Lycosa arenicola* Cb. Adult females, Rascarrel.

*Lycosa monticola* Sund. Adult females, Rascarrel.

*Heliophanus cupreus* Walck. Adult females, Rascarrel.

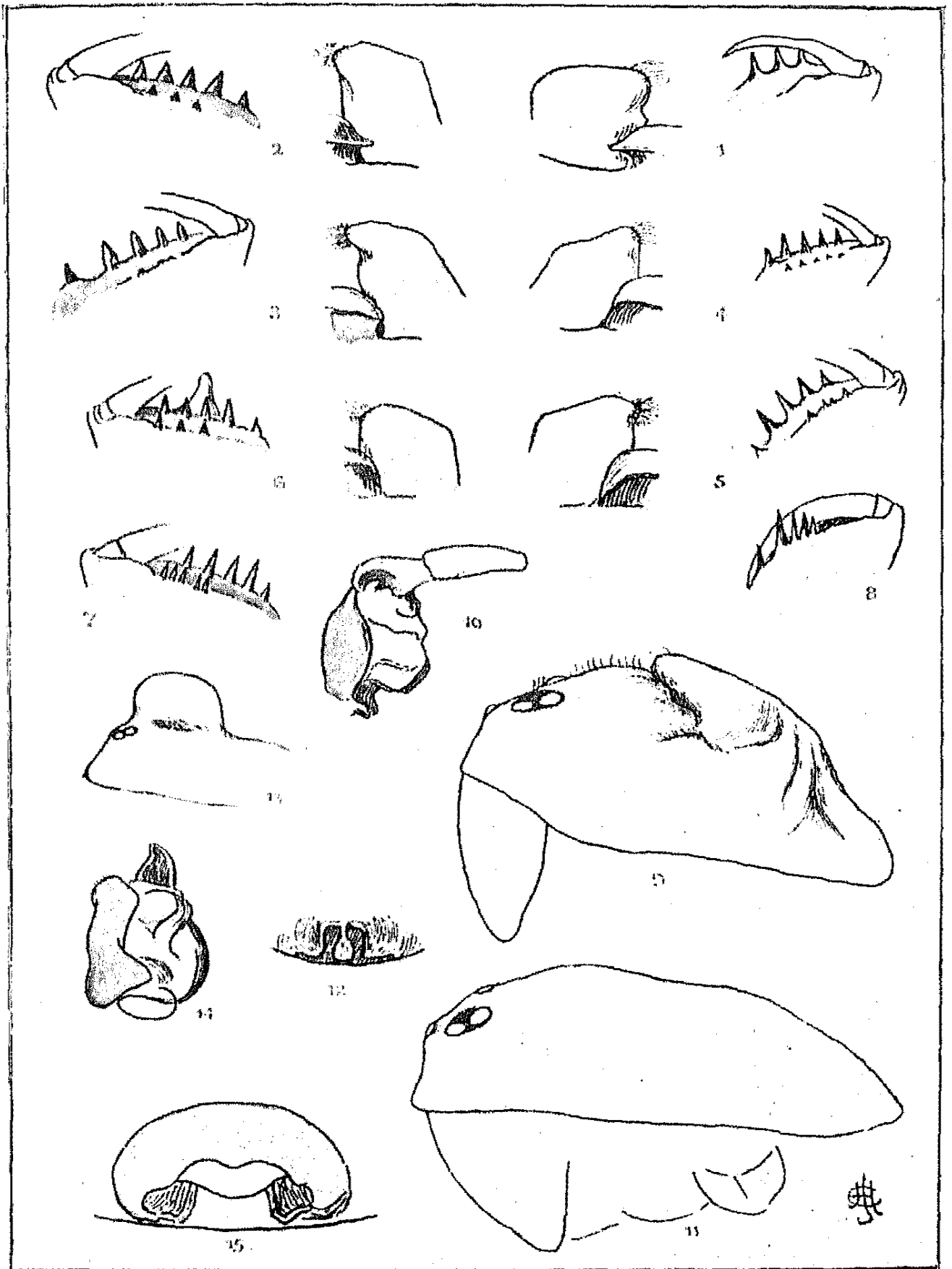
*Euophrys frontalis* Walck. Both sexes, Rascarrel; abundant under stones on the beach. The females were spun up with their eggs.

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REFERENCES TO PLATE XV.

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1. *Centromerus*, teeth, maxilla, labium.
2. *Orconetides*, " "
3. *Hilaira*, " "
4. *Coryphaeus*, " "
5. *Macrargus* ♀, " "
6. *Halorates* ♂, " "
7. *Diplocentria*, teeth.
8. *Gongylidictum*, external teeth.
9. *Notioscopus sarcinatus* ♂, cephalothorax.
10. " " ♂, left palpus, outside.
11. " " ♀, cephalothorax.
12. " " ♀, epigyne.
13. *Hypselistes florens* ♂, caput, side view.
14. " " ♂, left palpus, above.
15. " " ♀, epigyne.



Two Spiders new to Britain; with Oral Details of certain Genera to illustrate a proposed subdivision of *Tmeticus* (Sim., 1894; Cb., 1900).