Mr. Meldola exhibited a living Myriopod *(Spirobolus)* from San Francisco, and eggs of *Phyllium pulchrifolium* from Java.

Mr. Pascoe, referring to an observation by Mr. F. Walker in "The Entomologist," that the Fire-flies *(Luciola italica)* seen in abundance in Italy, had probably entered that country from the East, and were hindered by the Maritime Alps from occupying the Mediterranean coast of France, remarked that he had seen the insect in abundance in France between Cannes and the Var, and wished to ascertain if any Entomologist had noticed it farther westward in France.

Mr. A. Müller made some further remarks respecting certain pouch-galls found on the leaves of cinnamon from Bombay, exhibited to the Society in March last, which shewed that the question as to the originators of the pouch-galls could not be settled satisfactorily without further evidence.

The Rev. Mr. Eaton stated that he possessed a specimen of a *Trombidium* which had been taken by Mr. Benjamin Lee Smith in September last, in Spitzbergen; and also read a paper on the Trichopterous Family *Hydroptilidæ*.

Mr. A. G. Butler communicated a Monographic List of the species of the genus *Gasteracantha*, or Crab Spiders, with descriptions of new species.

ADDITIONS AND CORRECTIONS TO THE LIST OF BRITISH *SYRPHIDÆ*.

BY G. H. VERRALL.

Since my last communication to this Magazine (February, 1871) on the British species of *Syrphidæ*, I have observed several additional species, including four new to science, and have a few notes on others for publication.

1. ASCIA QUADRIPUNCTATA, Meigen.—I am convinced that this is only a variety of the species generally called *floralis*, Mg., as I have captured the females on several occasions in company with ordinary *A. floralis* in marshy lands.

2. SYRPHUS CONFUSUS, Egger.—This species, which I originally added to the British list from a specimen caught in this neighbourhood, I now believe to be only a variety of *S. albostriatus*, Fallén; but, while the typical *albostriatus* abounds in some large woods, where the males are most indefatigable hoverers, the typical *confusus* is more confined to gardens and meadows.

3. SYRPHUS NIGRICORNIS.—When at Loch Rannoch in June, 1870, I captured six specimens (4 ♂, 2 ♀) of a species which is, without much doubt, the *S. obscurus* of Zetterstedt's Insecta Lapponica (1838), but as the name *obscurus* was pre-occupied by Say (1824) for an American species, a new name is required, and I therefore propose that of *nigricornis*. The species is allied to *S. lunulatus*,

but is blacker and rather narrower, the legs being much blacker, and the antennæ quite black instead of yellowish-black, the pubescence on the scutellum is all black, instead of all yellow, and the yellow spots on the abdomen never extend to the edge.

4. Syrphus annulatus, Zett.—I am now able to describe both sexes of this species for the first time, as it was originally described from the female, and only that sex has hitherto been recognised in connection with the name. I can, however, find no satisfactory distinction in the description of the male of *S. vittiger*, but the female is readily distinguished by the pale base of the hind femora. The species belongs to the "*ribesii*" group, from which I omitted it before, as Zetterstedt places it next to *S. cinctus* and *cinctellus*, which have the abdomen very narrow. It need only be compared with *S. lineola* and *vittiger*, as it has a black line down the middle of the epistoma; but, while the male *annulatus* has the legs luteous, with the basal half of the anterior femora black, and the hind legs all black except the knees, and the female has the legs nearly all luteous, except a broad black ring on the hind femora, which leaves the basal two-fifths of the femora luteous, the male *lineola* has the legs black, with the anterior knees and base of tibiæ luteous, and the female has them luteous, with the basal third of the femora black, and the hind legs all black except the reddish knees. *Vittiger* is especially stated by Zetterstedt to have the hind femora black, with only the tip yellow, and he knew the female of *vittiger* from several specimens, though he did once (Dipt. Skan. ii, 715) refer to it a specimen having the hind femora pale at the base, which he subsequently (*l. c.* viii, 3138) considered *annulatus*. *Vittiger* has been described by Schiner in his Fauna Austriaca, and he speaks of the hind femora being black, except at the tip, without any reference to sex. I can, however, find no character by which I am able to separate the males, nor have I seen any males which I believe to be distinct, though I have seen some females answering to the description of *vittiger*. In case the two names should be synonymous, *annulatus* has the priority by some years. I found it in some abundance on Shirley Common, on May 5th, 1872, about some furze bushes; I fancy, from the fragility of the specimens, that they had only recently come to maturity. I caught one female at Rannoch in June, 1870, and I have seen eight specimens (2 ♂, 6 ♀) caught by Dr. Buchanan White at Braemar, in 1871.

5. Syrphus vittiger, Zett.—If distinct from the last species, is also British, as I refer to it two females caught by Dr. Buchanan White at Braemar in 1871, and a female by myself at Rannoch in 1870.

6. Syrphus latifasciatus, Mcq.—*Abbreviatus*, Zett., must be added to the synonyms of this species, but *excisus*, Zett., may be withdrawn; as, according to Loew, it is a distinct species. Under no circumstances can the name *affinis* stand, as there is a prior *affinis* of Say.

7. Syrphus barbifrons, Fall.—In my previous notes, I added to the British list *Melanostoma barbifrons*, on the authority of two (♂) specimens belonging to Mr. B. Cooke; since then I have examined a series of a *Syrphus* that I caught at Rannoch in 1870, which I considered to represent the *Scæva arctica* (♂) and *nitidula* (♀) of Zetterstedt. I am, however, informed by Loew that it is the species known on the continent as *Melanostoma barbifrons*, Fall., and that the species I had formerly thought *barbifrons* is new to science. The species I caught at Rannoch is a true *Syrphus*, but the epistoma of the male is very much darkened, so that some specimens might readily be thought to belong to *Melanostoma*. It belongs to the "*umbellatarum*" group, in which it is distinguished by its darkened epistoma, which, however, is always luteous between the antennæ, by its dark legs, and by the very small pair of spots on the second abdominal segment. It is most allied to *Syrphus lasiophthalmus* and *Melanostoma quadrimaculatum* (the species I had previously considered *M. barbifrons*); but *S. lasiophthalmus* has the eyes slightly hairy, the epistoma distinctly luteous on the sides, the abdominal spots all larger, and the pubescence on the breast-sides yellow instead of black, while *M. quadrimaculatum* has the eyes distinctly hairy, the epistoma quite black, and the abdomen marked with only four spots in the male, and unmarked in the female. Zetterstedt himself admits that his *S. nitidula* is the female of his *S. barbifrons*, and I think his *S. arctica* must represent the form of the male that I have caught, while his *S. barbifrons* would represent the more common form on the continent, in which the basal pair of abdominal spots are wanting. In opposition to this, however, Bonsdorff professes to have caught both sexes of *S. arcticus* and *barbifrons*. The species was one of the commonest at Rannoch.

8. Syrphus punctulatus, *sp. n.*

♂ ♀. *Oculis sub-hirtulis, epistomate flavo, linea media nigra, genis nigrescentibus, fronte æneo-nigra, tomentosa; antennis nigrescentibus, articulo tertio subtus basi luteo; thorace æneo, nitidulo, punctato, scutello flavido, pilis omnibus nigris; abdomine lineari, maculis transversis semi-circularibus luteis; pedibus nigrescentibus, genubus anterioribus (sæpissime tibiis totis, femorumque dimidio apicali) luteis; alis sub-hyalinis, stigmate cinereo.* *Long.* 4½—4¾ *lin.*

♂. Very closely allied to *S. lasiophthalmus*, Zett., but the eyes are slightly less hairy, the epistoma is always covered with yellow *tomentum*, except on the well-defined, rather shortened middle line, the middle knob seems rather more defined, the cheeks are darker and apparently more descending, the long black hairs on the occiput curved forward over the eyes are more numerous, and on the vertex nearly all the hairs are black; the antennæ have the third joint luteous at the base beneath, and also rather more pointed and angulated; the frons is more covered with *tomentum*; the thorax is not quite so shining, the punctuation being larger and coarser, the pubescence is all luteous, and not quite so abundant and rather shorter; the scutellum is yellower, its pubescence less abundant, shorter, and all black. The abdomen is less pubescent; the first pair of spots is larger and more triangular, running almost up the edge towards the basal corners; the spots on the third and fourth segments show a similar tendency, and are almost semi-circular, their upper-side being straight, with the hinder angles rounded off, and they run quite up to the basal corners of the segments; as these spots curve off so much before reaching the edge, the yellow hairs standing out from the edge at the basal corners of the segments are much fewer than in *S. lasiophthalmus*, since they follow the ground colour. The anterior legs are generally yellow, with only the basal half of the femora and the tarsi black, and the hind legs black, with the knees and base of tibiæ luteous, but they vary up to being almost as black as in *S. lasiophthalmus*.

♀. Differs from *S. lasiophthalmus* like the male, in the antennæ, epistoma, cheeks, pubescence, punctuation of thorax, &c., and on the scutellum the pubescence is entirely black, while in *S. lasiophthalmus* it is usually entirely yellow; in many of the specimens I possess, instead of the usual coppery longitudinal lines on the thorax, there appears a most peculiar coppery filagree work on the disc, arising, I presume, from the drying of the internal juices; the abdominal spots curve upwards considerably as they approach the edge, the second and third pairs being more rounded behind, and nearer the fore-margin.

This species has hitherto been confounded with *S. lasiophthalmus*, from which I consider it perfectly distinct; I have captured it in abundance near Shirley Common in May, and have also taken it at the Plashett Wood, near Lewes, at Boxhill and here (Denmark Hill).

9. Syrphus compositarum, *sp. n.*

♂ ♀. *Oculis nudis; epistomate flavido-albo, peristomate lineaque media nigris; antennis nigrescentibus; fronte flavido-pollinosa, macula super antennas nigricante; thorace sub-nitente* (♂), *aut cærulescenti-æneo nitido* (♀), *scutello flavo, nigro-piloso; abdomine lineari, maculis bis tribus transversis, linearibus, sub-quadrangulis, stramineis; pedibus nigrescentibus, geniculis anterioribus testaceis; alis sub-vitreis, stigmate pallido.* *Long.* 4½—5 *lin.*

♂ ♀. This species belongs to the group containing *S. umbellatarum*, F., *lasiophthalmus*, Zett., *punctulatus*, Verr., *decorus*, Mg., *guttatus*, Mg., *flavifrons*, Verr., *nigritibiis*, Rond., *barbifrons*, Fall., and *auricollis*, Mg. From *umbellatarum* (its nearest ally) it is distinguished by its smaller, sub-quadrate basal pair of abdominal spots, which do not reach the edge; by the almost entirely black-haired scutellum; by the blackish-brown anterior tibiæ and tarsi, and blacker femora; by the duller thorax of the male; by the broader epistomatal line; by the more free second and third pairs of abdominal spots; by the black, instead of yellow, genitalia; by the broader dark middle line on the frons of the female, and smaller black spot above the antennæ; and by the thinner hind metatarsus, &c.: from *lasiophthalmus* and *punctulatus*, the bare eyes, paler epistoma, yellow cheeks, yellower scutellum, paler abdominal spots, and slight pubescence, at once distinguish it: *decorus* has the antennæ entirely, and the legs nearly all, yellow, &c.: *guttatus* and *flavifrons* are smaller, and have the epistoma and frons all yellow, the scutellum pale-haired, and have traces of a pale line down each side of the thorax: *nigritibiis* and *barbifrons* have the epistoma and front nearly all black, and the basal pair of abdominal spots, either very small or altogether wanting: and *auricollis* in the variety *maculicornis*, Zett., has the antennæ pale beneath the third joint, and has the abdominal spots trapezoidal or triangular, and much larger and yellow; its legs are also considerably more yellow.

As far as any previous notice of this species is concerned, I think it must be the *Scæva umbellatarum* of Zetterstedt, as he says (Dipt. Skan. ii, 734) "thorace sub-opaco ♂—pedibus nigris, geniculis an-"terioribus testaceis,—scutellum fusco-pilosum;" subsequently (*l. c.* viii, 3142) he says "thorax etiam in ♂, potius nitidus quam opacus "dicitur," which is exactly the case with my specimen; afterwards (*l. c.* xiii. 5098), he appears to have noticed the true *umbellatarum*, as he records some specimens from Gothburg and Holland, with the thorax shining in both sexes. Loew informs me that specimens sent him as types by Zetterstedt were true *umbellatarum*. The original description of Fabricius (Ent. Sys. iv, 307) proves his species to have been the one I have considered *umbellatarum*, as he says "Pedes antici testacei, "femoribus basi nigris, postici nigri." Schiner (Faun. Austr. i. 308) probably had *compositarum* before him, when he refers to the specimen separated in Schummel's collection as *S. alboguttatus*.

This species was abundant at Rannoch, in June, 1870, where I also caught one melanoid female: I have never seen *S. umbellatarum* from the north, but have caught it rarely at Lyndhurst, Penzance, and here (Denmark Hill).

10. Syrphus flavifrons, *sp. n.*

♂. *Oculis nudis; epistomate toto flavo-albo; antennis nigrescentibus; fronte flava, angulo superiore angustè nigrescente; thorace æneo, nitido, scutello pallido, pilis flavo-albis; abdomine lineari, maculis bis tribus flavis, liberis; pedibus nigris, genubus luteis, tibiis tarsisque anterioribus obscuris; alis sub-hyalinis, stigmate fusco.*
Long. $3\frac{3}{4}$—4 *lin.*

♂. Smaller than *S. umbellatarum* and considerably resembling *Platychirus scutatus* ♂; eyes bare, epistoma yellowish-white, yellower on the knob, and somewhat obscurely darkened on the sides of the mouth, there are several mostly pale hairs on the sides of the disc and close to the lower part of the eyes, the upper angle of the mouth is blackish; the cheeks are clear pale yellow, with pale pubescence; the frons is yellow, with just the upper angle blackish, it is clothed with a tolerable number of longish black hairs, which, however, do not spread over its middle; the vertex is rather elongate-triangular, æneous, with longish hairs, generally black, but sometimes those behind are luteous; antennæ dull blackish, third joint short ovate.

Thorax shining æneous, finely and very sparingly punctate, with faint indications, especially in front, of two dull dark lines down the middle of the disc, the pubescence all silky whitish-yellow; a yellow line along the sides forms a distinct spot on the shoulders, and a less distinct one on the upper corner of the hinder angles; the breast-sides have a whitish pubescence; the scutellum is bright yellow, with a slight æneous tinge, and the extreme corners æneous, it is clothed with not very abundant long silky whitish-yellow hairs; alulæ and their fringes yellowish-white; halteres yellow, obscure at the base. Abdomen linear, dull velvety-black, faintly transversely rugose; about the middle of the rather long second segment near the edge on each side is a very small distinct yellow spot; near each basal corner of the third segment, but not touching the margin at all, is a larger irregularly quadrate yellow spot; these spots are distant from each other rather less than their own breadth; on the same part of the fourth segment are similar but rather narrower spots, and the basal corners of the fifth segment are entirely yellow; the pubescence down the edge of the abdomen is whitish-yellow, rather long, decreasing in length to half way down the fourth segment, after which it is short and black; on the disc, the pubescence is slight and obscure, but the longer hairs seem pale, and the others rusty-black; the belly has only the ends and edges blackish, all the disc being whitish, with obscure markings on the sides of the second and third segments; the genitalia are very small and blackish. Legs dull black, the tips of the anterior femora dull luteous, the knees brighter, the hind knees very narrowly dull luteous, the anterior tibiæ and tarsi brownish, with a tendency to yellow at their tips, the hind trochanters somewhat luteous; there is a moderate whitish-yellow pubescence behind the anterior femora; the hind metatarsus is long, scarcely thickened. Wings slightly greyish, stigma distinct, brownish.

I caught three males of this species at Rannoch in June, 1870. It is, apparently, most allied to *S. guttatus*, Meigen, but I am informed by Loew that there are several distinctive characters; according to descriptions, *S. guttatus* has a much more conspicuous, sharply-defined line down the sides of the thorax, and a pair of conspicuous whitish spots before the scutellum, and paler legs than *flavifrons*.

(*To be continued*).