

COLEOPTERA.



NEW BRITISH SPECIES, CORRECTIONS, &c., NOTICED
SINCE THE PUBLICATION OF THE ENTOMOLOGIST'S
ANNUAL, 1863.

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IN spite of the general complaints as to scarcity of insects, I have to record a fair average of additions to our list of Coleoptera; the workers (or *recording* workers) are not numerous, certainly, and I have, unfortunately, no occasion to mention many well-known names; still we are not standing still, and every year shows that the work of reckoning up "the British Beetle" (so often lately disparaged in the "Saturday Review") is far from ended.

In the present paper will be found notices of 40 species added to the catalogue, whereof four appear to be new to science, and about 12 have hitherto been confounded with others already known as English; there are also some corrections, &c.

These are but few, compared with the number in the last "Annual" (which, however, contained the arrears of two years), and I have consequently been enabled to give rather more lengthy descriptions, &c., at the risk of a little repetition, from the notices of the original recorders of some of the species. I hope this will not be considered injudicious, as it is convenient to have information in a compendious

form, and the present little volume is far easier for reference than the Zoologists of a twelvemonth.

Want of space will prevent me from giving any long notice of rarities captured, but the following will perhaps be interesting.

Firstly, I think the capture of *Acrognathus* and *Lyprus* in some numbers especially noteworthy (possibly because I had the pleasure of taking them myself, thanks to the courtesy of Messrs. Blackburn and Sharp, who respectively discovered the localities); *Acrognathus* is to be found bodily, or rather *half*, in the water, under sopping dead leaves, at the edges of ponds in woods. After taking it at Epping, I had no difficulty in finding it at Darenth. *Lyprus* had not appeared for many years, I believe, until Mr. Waterhouse found one specimen at Gravesend last summer: it has now turned up in some numbers close to home, at Hammersmith marshes, in tufts of grass, &c., at the edge of the bed of a dry pond.

Dr. Power has, as usual, persisted in taking good things; *Saprinus metallicus*, *Haploglossa gentilis*, and *Trachys nanus*, not being the worst; but to enumerate all (including divers novelties) would take too much room. Mr. Scott (who, with Mr. Douglas, is of course devoted to Hemiptera) informs me he has taken the last *Trichonyx sulcicollis*; a recently constructed railroad having gone out of its way to destroy *the stump*.

Turner has found *Leptura aurulenta*, *Dircæa*, *Brachonyx*, *Colydium*, and such like prizes. *Carabus auratus*, taken by Mr. Brewer on the South coast, has had a shadow of suspicion thrown upon its parentage, Mr. Walton having turned loose a score of foreign examples many years ago near Dover; but I can confirm the species as British, hav-

ing just examined a specimen taken by Mr. Bishop, of Glasgow, in 1857, on the banks of a tributary of the Clyde.

Mr. Crotch has revived many fen insects, and in addition, takes *Stenus lustrator*, *proditor*, *opticus*, *opacus*, &c.

Dyschirius elongatulus has been taken by Mr. Montague and Mr. Sharp, and the latter gentleman has also captured *Coccinella labilis* at Herne Bay, and *Badister peltatus* at Hammersmith marshes. I found the *Badister* again at Boston, though in less numbers than heretofore, and have taken *Leptinus* and *Psylliodes picipes* (the latter, I believe, hitherto unique as British) at Mickleham.

There are also rumours of *two* new British *Leisti*, and of *Brachinus sclopeta!*

More than all, those who are fond of re-arranging their collections, and delight in learning an entirely new set of names, will find ample work for the winter months, if they adopt the continental views propounded in the new Catalogue hereafter mentioned, which, amongst other novelties, contains a tantalizing list of names, representing about 80 species new to our lists.

1. AMARA BRUNNEA, Gyll.; Steph.; Dawson; Wat.
Cat.

This species must be erased from our lists, for the reasons mentioned by me in the Zool. 8530 (1863), which may be briefly recapitulated as follows. The Stephensian exponents of it are *A. rufocincta* and *A. bifrons*, and the specimens mentioned by Mr. Dawson as taken in Ireland are also to be referred to the former species. It is certain also that Dawson mistook *rufocincta* for *brunnea*, as I have seen a specimen of the former named by him as the *brunnea* of his work: moreover, in the Geod. Brit. the Latin diagnosis and

English description of the species in question do not agree, and that in a most important part, viz., the decided rounding of the hinder angles of the thorax.

A. brunnea differs from *rufocincta* as follows: it is smaller and less robust, the joints of the antennæ are more slender, the legs shorter and more slender, the tarsi especially being shorter; the thorax is not so ample, having the anterior angles rather more acute, the posterior angles contracted behind, and decidedly rotundate, the basal foveæ not so deeply punctured, and the reddish edging more evident, especially on the hinder margin; the scutellum is rather deeper, and not quite so broad, the elytra are more parallel, and not so acuminate behind.

2. *TRECHUS OBTUSUS*, Erichs. Col. March. 122, 4; Putzeys; Redt.; Thoms. Skand. Col. i. 211, 6; Schaum, Er. Ins. Deutschl. 641, 9; G. R. Waterhouse, Proc. Ent. Soc. 4 May, 1863, Zool. 8615 (1863); T. J. Bold, Zool. 8652 (1863).

lævis (Waterhouse, MSS.), Steph. Ill. et Mand.

castanopterus, Heer, Faun. Helv. 120, 7.

This species (long known to Mr. Waterhouse, and briefly described in the 5th vol. of Stephens' Ill. Mandib. and in the Manual under the MSS. name *lævis* given to it by him) is closely allied to *T. minutus*, from which it may be distinguished by its shorter elytra, more convex and ovate form (the broadest part being in the middle, whilst in *T. minutus* the elytra are broadest behind the middle), and nearly obliterated striæ, the three nearest the suture only being distinct. It is also generally darker in colour, and apterous, or rather possesses only the rudiments of wings.

In *minutus* the wings are ample, and there are at least four distinct striæ on each elytron.

T. obtusus seems more abundant in the north of England than in the south; it certainly occurs, however, in the London district, as I found it in my series of *minutus*, all taken in this neighbourhood, and Mr. C. Waterhouse found it near Croydon.

3. *BEMBIDIUM FOCKII*, Hummel, Entom. ii. 27, iii. pl. 1, f. 2; Duval, Ann. de la Soc. Ent. de France (1851), 189, 108; Fairm. et Lab. Faune Franc. 155, 9; Wollaston, Cat. Col. Mad. 21, 62; Schaum, Erichs. Ins. Deutschl. 751, 8 (*Tachys*); T. J. Bold, Zool. 8610 (1863).

We are indebted to Mr. Bold of Newcastle for the addition of this most interesting species to our list of Geodephaga, of which he captured a very few specimens beneath stones on the sea shore near South Shields, in the early part of last spring, and liberally presented an example to Mr. Waterhouse (who determined the species) and another to myself.

The size $\frac{1}{4}$ lin. given in Schaum's work is clearly a mistake; the insect seems to vary from $1\frac{1}{8}$ lin. to $1\frac{1}{4}$ lin., the largest of Mr. Bold's specimens seen by me being about the same length as *Bembidium obtusum*, but very different in shape from that species, and indeed it cannot well be compared with any British member of the genus, on account of its very short and rounded elytra. The only insect bearing the remotest resemblance to it would be a small specimen of *B. rufescens*; but, compared with *B. Fockii*, the elytra in that species are too long, not sufficiently rounded, and too flat, since in *B. Fockii* they are somewhat suddenly rounded behind, and the insect, when viewed sideways, has a remarkable elevation for a *Tachys*, or, indeed, for any of the *Bembidia*.

In colour it is entirely bright rufo-testaceous, the eyes only being black; the elytra are punctate-striate, the striæ

being deeper near the suture, and evanescent as they reach the sides and apex, but in the lower third of the elytra the fifth stria, when almost becoming obsolete, very abruptly merges into a deep oblique furrow, with a ridge on the outer side, which at its commencement is slightly rounded inwards, and is continued until it joins the margin just before the apex; the margins are reflexed, and impressed in a somewhat similar manner, the impressions getting fainter, and becoming converted into irregular punctuation as they approach the shoulders.

The second joint of the maxillary palpi (as mentioned by Mr. Bold) is very large, but a compound microscope is required to define the terminal subulated joint, on account of its minute proportions.

The position of the species is at the very head of the genus, it being most nearly allied to *B. scutellare* and *B. bistratum*, of both whereof it must take precedence.

Single examples appear from Schaum's work (loc. cit.) to have been taken (mostly on the wing) at Halle, Magdeburg, Baden, Steiermark, and in the Tyrol. It seems to extend from the South of Europe, Crimea, Caucasus, Algiers and Syria, as far northwards as St. Petersburg, but is always very rare.

4. *BEMBIDIUM MANNERHEIMII*, Sahlb. Ins. Fenn. i. 201, 26; Schaum, in Er. Ins. Deutschl. 740, 66; E. C. Rye, Zool. 8531 (1863); T. J. Bold, Zool. 8652 (1863).

unicolor, Chaudoir, Bull. d. Mosc. 1850, iii. 176, 10.

guttula, var. β , Dawson, Geod. Brit. p. 181? (nec *Philothus hæmorrhöus* (Kirby), Steph., Illust., Man. or Coll.).

This species was detected by me mixed up with *B. gut-*

tula, and is apparently almost as common as that insect, to which it is closely allied, being in the *Philocthus* group, with the posterior angles of the thorax sub-emarginate. It differs however from *guttula* in having the elytra shorter, more convex, more decidedly oval (they are oblong-ovate in the latter), and without any red sub-apical spots, the extreme apex only being sometimes of a faint reddish tone; the thorax is broader, with the sides more rotundate, and the basal foveæ not extending quite so far upwards; altogether it is a shorter, broader, and more convex insect. In colour also it differs from *B. guttula*, being deep black with a faint purplish tinge, and never exhibiting any æneous tendency.

The description of *Philocthus hæmorrhöis* in Steph. Illust. and Manual decidedly refer to *B. guttula* (in which the sub-apical spots are sometimes suffused); and the exponents of *hæmorrhöis* in the Stephensian Collection are *B. obtusum* and *B. guttula*, the type example (with the name *hæmorrhöis* attached) being a specimen of *guttula* in which the sub-apical testaceous spot joins the light colour at the apex, whereby the entire apex is more or less testaceous, and this is very easily seen as the elytra are thrust open by the pin on which the insect is pierced.

Thomson, in his Skand. Col. i. 205, 27, gives *Mannerheimii* of Sahlberg and Dejean as synonymous with *gilvipes*, Sturm, but with no explanation of his reasons for so doing; Schaum, however (loc. cit., 728, 52, note), says, that Sahlberg's insect must, from the description, "transverse thorax with rotundate angles," be referred to *hæmorhöm*, Steph. (in which decision he is right, at least in separating it from *gilvipes*, though in error about Stephens' *hæmorrhöis*), and that *B. Mannerheimii* of Dejean, Spec. v. 167, 116, is a synonym of *gilvipes*; hence probably Thomson's confusion.

5. *ALEOCHARA INCONSPICUA*, Aubé, Ann. de la Soc. Ent. de Fr., sér. 2, viii. 312, 17; Ktz. Ins. Deutschl. ii. 107, 28 (?); G. R. Waterhouse, Proc. Ent. Soc. 6 Apr. 1863, Zool. 8534 (1863).

Brought forward by Mr. Waterhouse from the recently dispersed Collection of Mr. Jeakes (probably captured by the late Mr. Squire), with no note however of its locality, further than that the specimen was British.

As large as a middle sized *A. mæsta*, and remarkable on account of the terminal joint of the antennæ being equal to the united three preceding joints; glossy black, and rather densely clothed with very pale ash-coloured pubescence, especially on the thorax and elytra; legs, palpi and basal joints of antennæ pitchy, terminal joint of the palpi and the tarsi testaceous. The abdomen has the transverse grooves on the basal segments strongly and thickly punctured, and the penultimate segment with its hinder margin not crenulated, but rather indistinctly emarginate in the middle.

Compared with *A. mæsta*, which it resembles in its slender legs, it differs in having the head smaller, the antennæ longer and more slender, and the thorax less convex, more contracted in front and more delicately punctured; also in the transverse grooves of the basal segments, which are more strongly and rather more densely punctured, the basal part of the fifth segment being strongly punctured, instead of smooth as in *mæsta*.

From *A. lanuginosa* it differs in having the legs not so stout, and the posterior tarsi longer and more slender.

This insect appears to agree with *A. inconspicua*, Aubé, in the remarkable structure of its antennæ and strong punctuation of the transverse grooves of the abdominal segments, but it seems to be too large, and not to have the penultimate

segment crenulated as in *inconspicua*, hence its identification with that species is somewhat doubtful.

6. OXYPODA UMBRATA, Mann. Brach. 70, 5; Erichs. Gen. et Spec. Staph. 144, 5; Kraatz, Ins. Deutschl. ii. 168, 10; E. C. Rye, Zool. 8476 (1863).

? *Aleochara umbrata*, Gyll., Ins. Suec. ii. 424, 46.

Taken by me at Highgate in January last, and determined by the assistance of Mr. Waterhouse; subsequently taken by Dr. Power.

It is shorter and much narrower than *O. opaca*, and not quite so dull as that insect; black, clothed with fine pubescence, the elytra pitchy brown, legs and base of antennæ rufo-testaceous, and having in the abdomen (which is attenuate at the apex) the entire terminal segment, the greater part of the penultimate, and the hinder margins of the remaining segments, ferruginous. The antennæ are as long as the head and thorax, not so long or incrassate as in *O. opaca*, and with the terminal joint shorter and more blunted; the thorax is convex, rather shorter than its breadth, deflexed at the sides, especially in front, where it is slightly narrowed, and with all its angles obtuse.

It appears to be the most finely and closely punctured species of the genus, and has much the appearance of *O. brevicornis*, Steph., but is much larger than that insect.

7. OXYPODA LENTULA, Erichs. Col. March. i. 349, 13; id., Gen. et Spec. Staph. 150, 20; Redt. Faun. Austr. 665, 10; Ktz. Ins. Deutschl. ii. 168, 11; G. R. Waterhouse, Proc. Ent. Soc. 4 May, 1863, Zool. 8614 (1863).

This species, determined by Mr. Waterhouse, resembles

certain of the *Myllænæ*, on account of its dullish slaty black colour.

It is about the size of *Homalota Fungi*, but rather more linear, very finely and densely punctured, and thickly clothed with fine ashy pubescence.

The antennæ and legs are pitchy, with the knees and tarsi a little paler; the elytra in certain lights exhibiting an indistinct faint brownish tint, the apex of the abdomen being more distinctly tinted with brown. The thorax has a pretty distinct transverse fovea behind, and a faint dorsal channel, disappearing in front.

Taken by Mr. Waterhouse at Hammersmith marshes, also by Mr. Morris Young at Paisley, by Dr. Power in the London district, and by myself in Epping Forest.

S. OXYPODA MISELLA, Kraats, Ins. Deutschl. ii. 190, 43;
G. R. Waterhouse, Proc. Ent. Soc. 4 May, 1863,
Zool. 8615 (1863).

This species (taken by myself in sand-pits near Wickham last spring, in company with *O. annularis*, *brachyptera*, *rufula* and *exigua*, and detected as distinct at the time) was determined by Mr. Waterhouse, and belongs to that section of the genus which comprises species with the elytra shorter than the thorax.

On account of the shortness of its antennæ it can only be confounded with *O. annularis*, the terminal joint being very little longer than broad, and the intermediate joints strongly transverse as in that species, but the antennæ in *O. misella* are rather less stout, and of a dark pitchy colour, except at the base. It is also smaller, and its general colour pitchy, with the thorax, elytra, apex of abdomen and edges of abdominal segments more or less rufo-piceous, whilst *annularis*

is rufo-testaceous, with the head and middle of the abdomen dusky.

In colour it more closely resembles dark specimens of *O. brachyptera* (*ferruginea*, Er.), but in the latter the antennæ are longer, with the terminal joint fully twice as long as broad, and the elytra are rather longer, with the punctuation more distinct and somewhat rugulose.

9. HOMALOTA VELOX, Kraatz, Ins. Deutschl. ii. 201, 4;
G. R. Waterhouse, Proc. Ent. Soc. 2 Feb. 1863,
Zool. 8453 (1863).

pallipes, Rey (in litt.).

This species must be placed next after *H. debilicornis* in our lists.

It appears to be not unlike *H. gregaria*, but considerably smaller, with more slender and longer antennæ, and longer elytra. It is depressed, nigro-fuscous, with testaceous legs and fuscous elytra, closely and delicately punctured, the elytra nearly half again as long as the thorax, the first five segments of the abdomen thickly and delicately punctured, and the sixth segment smooth. In the male the middle of the upper surface of the sixth abdominal segment is armed with an acute prominent tubercle, and the hinder margin of the penultimate segment is somewhat similar to the same part in *H. currax* or *sulcifrons*, except that in *velox* the middle tubercles are somewhat stronger, whilst the outer little points are scarcely perceptible, and the hinder margin slopes off obliquely from the middle tubercle.

One specimen taken by Mr. Waterhouse at Brockenhurst, in the New Forest, and another by Mr. Hislop, in Scotland.

10. HOMALOTA OBLONGA, Erichs. Gen. et Spec. Staph. 101, 40; Redt. Faun. Austr. 662, 36; Ktz. Ins. Deutschl. ii. 205, 8; G. R. Waterhouse, Proc. Ent. Soc. 2 Mar. 1863, Zool. 8480 (1863).

This species must be placed next before *H. pagana* in our lists; it has been taken by Mr. Waterhouse near London, and I have also received it from Mr. Morris Young of Paisley.

It is $1\frac{2}{3}$ lin. in length, somewhat similar to *H. vestita* in build, pitchy black and shining, the elytra and antennæ entirely pitchy, and the legs fusco-testaceous.

The thorax is somewhat widely and faintly impressed; the first four segments of the abdomen are sparingly punctulated, and the fifth and sixth smooth.

11. HOMALOTA PLANIFRONS, Waterhouse, Proc. Ent. Soc. 1 June, 1863, Zool. 8667 (1863), (*described*).

Four specimens of this new species were taken by Mr. Waterhouse in the corridor of the Crystal Palace at Sydenham, and a fifth by one of that gentleman's sons in the courtyard of the British Museum.

In size, form, colouring and structure of the antennæ it very closely resembles *H. gregaria*, but may be readily distinguished from that species by the larger size of the head (which is also subquadrate and depressed), by the parts of the mouth being more produced and the fifth abdominal segment being punctured, though rather sparingly.

The male characters are moreover very different, nearly resembling those of *H. sulcifrons*, from which it differs in being smaller and narrower, in the form of the head, and in having the anterior abdominal segments rather less thickly punctured, and the fifth segment somewhat sparingly punctured.

The head in bulk is very nearly equal to the thorax, nearly square behind the antennæ, the upper surface being depressed, and it is from this peculiarity of structure that Mr. Waterhouse has given the insect its specific name; it may here be observed that he at first intended to call the species *H. platycephala*, forgetting at the time the existence of another species in the same genus under that name; this error was corrected in the diagnosis of the species, but escaped notice in the subsequent description, where the name *platycephala* still remains.

The male has a small laterally compressed tubercle on the upper surface of the sixth abdominal segment, and the terminal segment with four denticles in the middle, the middle pair nearest each other and most prominent, the external pair slightly obtuse, and separated by a deep nearly semicircular notch from a spine forming the lateral boundary of the plate.

The basal joint of the hinder tarsi is, as in *H. gregaria*, pretty distinctly longer than the three following joints; in which character these species are at variance with most of the other members of the genus.

12. HOMALOTA PUNCTICEPS, Thomson, Öfv. af Vet. Ac.

Förh. 1852, 133, 6; id., Skand. Col. iii. 49, 1

(*Halobrectha*); G. R. Waterhouse, Proc. Ent. Soc.

2 Feb. 1863, Zool. 8453 (1863), (nec Cat.).

atricilla (Erichs.), Ktz. (in error).

algæ, Hdy. and Bold.

anthracina, Fairm.

This species, found under rejectamenta on the sea-shore, resembles *H. occulta*, but with smaller antennæ. It is black, with the antennæ, palpi and legs more or less pitchy, the former without any paler colouring at the base, and the

latter having the tarsi, knees and tips of the tibiæ more or less testaceous.

Head nearly as wide and large as the thorax, with the eyes small, the upper surface convex, *thickly and distinctly punctured*; thorax subquadrate, hinder part rounded, and the surface thickly and distinctly punctured; elytra depressed, nearly half as long again as the thorax, densely punctured and dull; abdomen glossy, the basal segments sparingly punctured, the fifth very sparingly, and the sixth hardly at all, the apex more or less pitchy. The posterior tarsi are short.

13. HOMALOTA MARITIMA, Waterhouse, MSS.; G. R. Waterhouse, Proc. Ent. Soc. 2 Feb. 1863, Zool. 8453 (1863).

Halobrectha flavipes, Thoms. Skand. Col. iii. 50, 2.

Homalota puncticeps, Wat. Cat. (nec Ktz.)

algæ, var., Hardy and Bold.

Found by Mr. Waterhouse and others on the banks of the Thames and Medway at Gravesend and near Strood, and generally more common on the coast than *H. puncticeps*, next after which it must be placed in our lists.

It resembles the latter species somewhat in the strong punctuation of the head and fore parts of the body, but is less dark in colour, being pitchy black, with the elytra more inclined to piceous. The legs, antennæ, palpi and parts of the mouth are testaceous, the terminal joint of the palpi, apical half of antennæ, and the femora and tibiæ however being more or less fuscous.

The antennæ are rather stouter than in *H. puncticeps*, the head, thorax and elytra less densely punctured, and hence less dull; the elytra are but little longer than the thorax and the posterior tarsi more elongate. The apex of the abdomen is more or less rufescent.

This is the insect referred to as *H. puncticeps* in Wat. Cat., Mr. Waterhouse having had it returned to him from Dr. Kraatz with that name.

On account of the existence of the specific name *flavipes* already in the genus, Mr. Waterhouse has proposed the name *maritima* for the present species.

14. HOMALOTA GEMINA, Erichs. Col. Mar. i. 330, 27; id., Gen. et Spec. Staph. 112, 65; Redt. Faun. Austr. 659, 15; Ktz. Ins. Deutschl. ii. 255, 59; G. R. Waterhouse, Proc. Ent. Soc. 2 Feb. 1863, Zool. 8453 (1863).

This species must be placed in our lists next before *analis*, and is about the size of large specimens of that insect.

It is linear, somewhat depressed, black with fuscous elytra, the base of the antennæ, legs and apex of the abdomen being testaceous; the first four segments of the abdomen are thickly and delicately punctured, and the 5th and 6th smooth.

Taken by Mr. Waterhouse at Hammersmith marshes, also by Dr. Power; it is also in my own collection.

15. HOMALOTA SOROR, Kraatz, Ins. Deutschl. ii. 257?
 ? *Amischa platycephala*, Thomson, Skand. Col. ii. 294.
 G. R. Waterhouse, Proc. Ent. Soc. 2 Feb. 1863, Zool. 8455 (1863).

Mr. Charles Waterhouse detected among some specimens of *H. analis*, taken by him at Hammersmith marshes, a series of both sexes of apparently a distinct species, and which will most probably prove to be that first above mentioned. I have since taken it at the same place, but it appears *not* to be mixed up with *analis* in collections, and is probably very local.

It differs from *analis* in the uniformly dark (nearly black) colour of the body and antennæ, and in the sexual differences afforded by the emargination of the upper surface of the penultimate segment of the abdomen in the male, which in *analis* exhibits, in the centre of its hinder margin, a large notch in the form of an obtuse-angled triangle, varying slightly in depth, but always of the same outline, with no impressed line following within the margin and round the edges of the notch; the upper part of the segment is also slightly arched only, in a transverse direction.

In Mr. C. Waterhouse's insect the notch has its depth slightly exceeding its width, its sides nearly parallel, and its termination nearly semicircular, giving the outline of a bluntly terminated cone; the edges have, moreover, a delicately impressed line immediately within the margin, and the upper part of the segment has its lateral portions curved downwards. The apex of this segment is tinted with piceous colour, the entire segment never being testaceous, as in *analis*.

The antennæ are dusky, often to the base, though the two basal joints are sometimes dusky-testaceous, whilst in *analis* they are clear testaceous, which colour extends in part also to the third joint.

Mr. G. R. Waterhouse considers it not unlikely that this species may be referred to *H. soror*, Ktz., with which Thomson's *platycephala* may possibly be synonymous.

It must at all events be placed next after *H. analis*.

16. HOMALOTA VILIS, Erichs. Col. March. i. 325, 18; Gen. et Spec. Staph. 97, 32; Redt. Faun. Austr. 819; Ktz. Ins. Deutschl. ii. 257, 62; G. R. Waterhouse, Proc. Ent. Soc. 2 Feb. 1863, Zool. 8453 (1863).

A single specimen taken long since by Mr. Waterhouse, who has no note of the locality.

Its place is next before *palleola* in our lists, but it is in the same section as *analis* and *gemina*, having the thickly punctured abdomen of the former, and the depressed appearance of the latter, but it is decidedly smaller than either of the latter species; from the description it appears to be a linear, nigro-fuscous insect, with the antennæ and legs testaceous, and the abdomen very closely and delicately punctured, the male having a longitudinal groove on the forehead.

17. HOMALOTA FUSCO-FEMORATA, Waterhouse, MSS.;
G. R. Waterhouse, Proc. Ent. Soc. 2 Feb. 1863,
Zool. 8453 (1863).

Atheta picipes, Thomson, Öfv. af Vet. Ac. Förh. 1856,
99, 20; Skand. Col. iii. 81, 30.

A single specimen taken long since by Mr. Waterhouse, who has no note of its locality, and has proposed the name above given for the species, on account of there being another *picipes* in the genus *Homalota*.

Its place is next to *H. nigrītula*, Grav., in our lists. From Thomson's work, loc. cit., it appears to be $1\frac{1}{3}$ lin. in length, linear elongate, somewhat depressed, shining, very delicately alutaceous, sparingly fusco-pubescent, black, palpi and legs pitchy-testaceous; the thorax transverse sub-quadrate, rather narrower than the elytra, and foveolate at the base; the elytra pitchy black, longer than the thorax; the abdomen with the first four segments sparingly and delicately punctured.

The male has the 2nd, 3rd and 4th joints of the antennæ thickly clothed with white pubescence on the inner side, and the penultimate segment of the abdomen with a distinctly, but delicately, crenulated and almost angular emargination.

18. HOMALOTA ANGUSTICOLLIS, Thomson, Öfv. af Vet. Ac. Förh. 1856, 100, 22, id. (*Atheta*), Skand. Col. iii. 87, 38; G. R. Waterhouse, Proc. Ent. Soc. 2 Feb. 1863, Zool. 8453 (1863).

? *ravilla* (Er.), Schaum, Cat. Col. Eur. 1862, p. 25.

Mr. Waterhouse has brought forward this species as British, on the authority of two specimens (apparently females) taken by himself, and which he has compared with a male specimen of *H. ravilla*, Er., sent by Dr. Kraatz to the British Museum, and also with a male of *H. angusticollis* received by Mr. Crotch from Mr. Thomson, with the latter of which they agree perfectly, except in the sexual character of absence of emargination of the upper surface of the penultimate abdominal segment, the antennæ in each especially having the terminal joint only half as long again as that immediately preceding it; in the male *H. ravilla* however (mentioned above) the terminal joint of the antennæ is almost *thrice* the length of the preceding joint, and in this respect it agrees with Erichson's characters for *ravilla*, in other respects the specimens seem to agree.

Dr. Schaum appears to have been under some difficulty about these two species, since in his catalogue *angusticollis*, Thoms., is given as distinct (near *H. divisa*), and afterwards again appears as a synonym of *ravilla* (near *palustris*).

The place of *angusticollis* in our lists must be next after *H. Thomsoni*, Jans.

19. HOMALOTA DILATICORNIS, Kraatz, Ins. Deuts. ii. 293, 102; G. R. Waterhouse, Proc. Ent. Soc. 5 Jan. 1863, Zool. 8416 (1863).

Introduced by Mr. Waterhouse, and comes next after *H. scapularis*.

This species is in size and form somewhat like a small

example of *H. subterranea*, but can be distinguished from that insect by the more transverse joints of its antennæ.

It is sub-linear, rufo-testaceous, the head and a band on the abdomen pitchy, the latter with its four first segments sparingly and gently punctured, the 5th and 6th segments being smooth.

20. HOMALOTA LÆVANA, Mulsant, Opusc. Entom. i. 39, 18, t. 1, f. 12; Kraatz, Ins. Deutschl. ii. 306, 116; G. R. Waterhouse, Proc. Ent. Soc. 5 Jan. 1863, Zool. 8416 (1863).

This species, introduced by Mr. Waterhouse, must be placed next after *H. villosula*, in our lists.

It is rather smaller than *H. longicornis*, and narrower and more elongate than *H. intermedia*, from which it may be known by its uniformly brown wing cases and testaceous legs.

It is subdepressed, black and somewhat shiny, the base of the antennæ and apex of abdomen being pitchy, the elytra fusco-brunneous and legs testaceous; the first four segments of the abdomen are closely and delicately punctured, the punctures being more scattered on the fifth segment, and the sixth is smooth.

21. HOMALOTA PARVA, Sahlb.
parvula, Mann.
parvula (Kirby), Steph.
cauta, Erichs.

The above correction of nomenclature must be made in Waterhouse's Cat. Brit. Col. p. 19, sp. 76, a specific importance having been unduly given to one of the synonyms by the figures 77 accidentally placed before it. No. 77

ought to refer to *picipes* (Kirby) Steph., and so on to the end of the genus, deducting one number from each species as they now stand.

22. OLIGOTA GRANARIA, Erichs. Col. March. i. 364, 4 (1837); Wat. Cat. p. 19.

This species must be restored to our lists. I was induced to expunge it, from the notice in the Entom. Ann. for 1859, p. 126, which simply states it was taken by Dr. Power at the Holt, Hampshire; and, as the insect taken there by the latter was certainly *O. apicata*, I presumed we had no right to consider *granaria* as a British species. The species was, however, introduced by Mr. Waterhouse on the authority of a specimen taken by himself, vide Proc. Ent. Soc. 3 May, 1858, Zool. 6116 (1858). This reference is given in the above-mentioned Annual; but the locality therein stated has no connexion with Mr. Waterhouse's insect.

23. BRYOPORUS (?) CASTANEUS, Hardy and Bold, Cat. Ins. North. and Dur. 1851, p. 107 (*Boletobius*); G. R. Waterhouse, Proc. Ent. Soc. 2 Mar. 1863, Zool. 8480 (1863).
nec *Megacronus castaneus*, Steph.

Mr. Waterhouse has brought forward this species on the authority of the original specimen mentioned in Messrs. Hardy and Bold's Catalogue, and which he has personally examined. It was formerly considered by the latter authors as identical with *Megacronus castaneus*, Steph., which, however, appears to be only an immature example of *Boletobius analis*.

The present insect appears to belong to the genus *Bryoporus*, on account of the structure of its maxillary palpi, the apical joint of which is short and moderately stout, of an elongate conical form, and only a trifle shorter than the preceding joint. In the typical *Boletobii* the palpi are elongate and slender, but Mr. Bold's insect approaches very nearly in these members to the form exhibited by the section *Megacronus* of Stephens, and more especially to *Bryoporus rufus*; it is, however, smaller and narrower than the latter species, with shorter and stouter antennæ, the only punctures on the elytra being about five (somewhat indistinct) in the ordinary discoidal and sutural striæ.

It also in size, form and proportions, bears a great resemblance to *Mycetoporus splendens*, but differs from that insect in the greater development of the terminal joint of the maxillary palpi, in the antennæ being rather stouter, with the basal joints (especially the 2nd, 4th, and 5th) shorter, the punctures on the striæ of the elytra fewer and less distinct, and the abdomen less thickly punctured, the basal segment being nearly impunctate.

In colour it is rufo-testaceous, with the head rufo-piceous, the abdomen pale castaneous, and the antennæ, except the three basal joints, black.

24. MYCETOPORUS LONGULUS, Mann. Brach. 63, 4; Erichs. Col. March. i. 413, 3, Gen. et Spec. Staph. 283, 3; Ktz. Ins. Deutschl. ii. 461, 7; G. R. Waterhouse, Proc. Ent. Soc. 2 Mar. 1863, Zool. 8479 (1863).

lepidus pars, Wat. Cat.

Ischnosoma melanura, Steph.

Mr. Waterhouse has brought forward this species, which

he formerly confounded with *M. lepidus*, Grav., through the bad condition of his old specimens when originally determining the *Mycetopori* for his Catalogue. It is common in the London district, especially in gravel and sand-pits during the spring.

It differs from *M. lepidus* in having the sides of the body less parallel, the thorax being broader behind, with the elytra still broader, and the abdomen more attenuated; the antennæ and legs are also rather longer. It may also be at once (as far as our experience goes) separated by its colour, its head and thorax being shiny black and elytra bright red; this combination seems never to occur in *lepidus*, which varies from uniformly rufous to pitchy black, and the specimens nearest to *longulus* in coloration are pitchy, with the elytra more or less rufous at the base.

Both these species have two oblique punctures on the sides of the disc of the thorax, *lepidus* sometimes having three or four.

M. longulus also resembles small specimens of *M. splendens*, being (with the exception of the pale legs and basal joint of the antennæ) exactly like that species in colour; it is however narrower and not so fusiform, with the antennæ longer and less stout; the four penultimate joints being less strongly transverse; the abdomen also is more thickly punctured, not so deep black, and with the edges of the segments always more or less rufo-piceous.

M. splendens also has no oblique punctures on the sides of the thorax.

By a curious error Mr. Waterhouse (loc. cit.) is made to refer *Ischnopoda melanura* of Stephens as a synonym of this species; the name should of course have been *Ischnosoma melanura*.

25. MYCETOPORUS NANUS, Grav. Mon. 28, 8 (*Tachinus*);
 Erichs. Gen. et Spec. Staph. 286, 7; Kraatz, Ins.
 Deutschl. ii. 463, 10; E. C. Rye, Zool. 8612 (1863);
 T. J. Bold, Zool. 8652 (1863).

A single example of this species was detected by me among some *Brachelytra* taken near Croydon by Mr. Haward, and four others were soon afterwards taken by Mr. Bold (who, I believe, also made out the species) on the sea-shore near Hartley; it is also in Dr. Power's Collection.

It resembles *M. angularis*, but differs from that insect in its shorter elytra, which have an accessory row of punctures commencing at the apical margin and running upwards for nearly their whole length, parallel to the dorsal row and between it and the sutural stria; the joints of the antennæ also are not so transverse.

From *M. clavicornis* it may be known by its more parallel shape and much narrower antennæ, also by its abdomen being less strongly punctured, by the large punctures on the anterior part of the thorax being closer to the front margin, and by the accessory stria above mentioned.

Neither of these three species have any oblique punctures on the side of the disc of the thorax, although *angularis* is placed by Fairmaire (Faune Franc. iii. 493, 5) in a section supposed to possess them.

The full colour of *M. nanus* is black, with the apex of the elytra rufo-testaceous, but it seems to vary considerably, having sometimes the thorax and elytra pitchy, rufo-piceous or testaceous, with the head darker.

The specimen taken by Mr. Haward is one of these varieties, but all the others I have seen are of the normal colour.

The accessory row of punctuations also seems to vary

somewhat in intensity, but the species is always easily separated from its congeners.

26. MYCETOPORUS LONGICORNIS, (Mäklin, Symbol. 12, 11 ?) Kraatz, Ins. Deutschl. ii. 467, 14; E. C. Rye, Zool. 8611 (1863).

splendidus, var. 2, Erichs. Gen. et Spec. Staph. 287, 9; Fairm. et Lab. Faun. Ent. Franc. iii. 496, 13.

This species was determined by me from a specimen taken by myself at Wickham last April, and I have since detected it in the collections of Mr. Waterhouse, Dr. Power, and Mr. Douglas.

It is closely allied to *M. splendidus*, but differs from that insect as follows. It is apparently always larger, somewhat flatter and broader, the thorax especially being wider; the joints of the antennæ are comparatively not quite so stout, with the terminal joint more oblong ovate, and the punctuation of the abdomen rather more remote. In colour also it differs very considerably, being more uniformly rufo-testaceous, with only a slight scutellar patch and the base of the abdominal segments (especially the fifth and sixth) more or less pitchy; whilst *splendidus* has the head and often the greater portion of the elytra pitchy or even black, and the abdomen more or less black, with the outer margins of the segments testaceous. The head in *longicornis* is rufo-testaceous beneath, and black, with the gular area yellow in *splendidus*; in *longicornis*, also, the three basal joints of the antennæ are especially lighter, whilst in *splendidus* the first joint only is light.

In the male of *splendidus* the sixth segment of the abdomen beneath is widely emarginate, the sides set with stiff black hairs, and the emargination itself filled up with a very thick bushy fringe of stout yellow hairs; the seventh seg-

ment is more deeply, but not so widely, emarginate, the emargination having its sides also thickly fringed with stout yellow hairs, and terminating at its upper and smaller end in a thick button of similar golden pubescence, the whole forming a very stout semi-erect cushion, slightly curved towards the apex of the abdomen.

In *M. longicornis* (male) the sixth segment is very gently emarginate, the sides set with stiff black hairs, and the emargination fringed with very short fine yellow pubescence, whilst the seventh segment is not so decidedly emarginate as in *M. splendidus*, the emargination being edged with short slight yellow hairs, and terminating at each outer angle in a pencil of long golden pubescence, the flat part of the under surface of the segment being clothed with very short, fine yellow down.

The unvarying size of *one line* given by Kraatz for *M. splendidus* is erroneous; I have seen specimens of that species sent over by Kraatz himself, for which the smallest length should be a line and a half.

27. *PHILONTHUS SUCCICOLA*, Thomson, Skand. Col. ii. 157, 7; E. C. Rye, Zool. 8649 (1863).

carbonarius, Erichs. Gen. et Spec. Staph. 437, 15 (nec var.); Kraatz, Ins. Deutschl. ii. 577, 9 (nec var.); Wat. Cat. Brit. Col.; nec Gyll.

The insect for which Thomson has proposed the name *succicola*, hitherto known as *P. carbonarius*, Gyll., appears to differ from the latter species in having a lesser head, the thorax punctured on the sides, the penultimate joint of the antennæ transverse (in *carbonarius*, Gyll., it is not so broad as long), and the sixth segment of the abdomen beneath, in the male, widely and gently emarginate, in addition to the

smaller emargination of the seventh segment, the sixth segment in the true *carbonarius* exhibiting no emargination.

In the latter species, also, the legs, margins of the abdominal segments beneath, and the terminal segment beneath entirely, are pitchy-brown.

The above correction of nomenclature must therefore be made.

28. *PHILONTHUS TEMPORALIS*, Mulsant, Opusc. Ent. 2me Cah. 1853, p. 73; E. C. Rye, Zool. 8477 (1863).

There are two specimens of this insect in Mr. Waterhouse's collection (long separated by him as distinct), and I have also detected another among some *Brachelytra* belonging to Mr. T. J. Bold.

It is about the size of *P. punctiventris*, Ktz., but not so parallel in shape, the elytra being more ample, decidedly æneous in colour, and with rather less distinct punctuations, which are slightly rugulose transversely; the abdomen is rather more closely punctured, and has the lower surface less thickly punctured than the upper; the antennæ are entirely and decidedly black, and somewhat broader, having the penultimate joints more transverse, but not so wide as in *P. æneus* or *P. succicola* (*carbonarius*, olim); the head and thorax are set with long and stiff black hairs, the former having numerous coarse punctures behind the eyes, and the basal joints of the anterior tarsi in the male are very slightly dilated, in which characters it resembles *P. punctiventris*. The penultimate segment of the abdomen in the male beneath has a shallow rounded notch in the centre of its hinder margin, whilst the same sex in *punctiventris* exhibits in the corresponding place a deeper, wider, and more angular emargination.

Mulsant does not notice the above sexual character, and

apparently only refers to the female; in other respects, however, the specimens examined by me (and which are certainly sexes of the same species) agree with his description.

Referring to my remarks in Zool. 8478 (1863), I should be much obliged to any one who could give me any information about *P. tenuicornis*, Muls.

29. *PHILONTHUS AGILIS*, Grav. Mon. 77, 70 (*Staphylinus*); Kraatz, Ins. Deutschl. ii. 603, 37; Thoms. Skand. Col. ii. 165, 34; E. C. Rye, Zool. 8649 (1863).

varians, var. d. Erichs. Gen. et Spec. Staph. 470, 70.

This species was detected by me in my own collection, in the cabinets of Mr. Douglas and Dr. Power, and among some undetermined *Brachelytra* taken by Mr. Waterhouse. I have no doubt it is a common insect.

It is closely allied to *P. varians*, Payk. (which it must immediately follow in our lists), being in the section with the thoracic striæ composed of five punctures, and having the anterior coxæ fusco-testaceous; it may, however, be distinguished from that species by its smaller size and different colour, the elytra not being (as in the latter) black, with a greenish reflexion, and very often bearing a red spot, but dull black, with the hinder margin at the extreme apex only subferruginous. The elytra also are narrower, with the punctuation rather more remote, and not exhibiting so much transverse rugulosity; the thorax is a little more contracted in front, and the antennæ are much shorter, with the penultimate joints transverse, being, moreover, deep black in colour.

30. *PHILONTHUS RUBRIPENNIS* (Kirby) Stephens, Ill. Mand. v. 239, Man. 389, 3165; Wat. Cat.

There seems to be some confusion in collections between

this species and *P. fulvipes*, Fab., and it is erased from the list of British Coleoptera by Mr. Crotch, in his recently published catalogue; but we have no means of judging whether it is considered by him as non-existent, or as a synonym of the last-mentioned insect. *P. fulvipes*, according to description (Erichson), ought to have the three basal joints of the antennæ and the legs entirely bright rufo-testaceous, the only variety mentioned being one with the basal joints of the antennæ pitchy; *P. rubripennis*, however, has the entire antennæ, femora and tibiæ always dark pitchy, and, although immature examples may be found with those members of a lighter colour, they never present the appearance of *P. fulvipes*. In other respects the description of *P. fulvipes* applies well enough to *P. rubripennis*; but it must remain open to doubt whether the two insects can be referred to the same species.

31. XANTHOLINUS CHALYBÆUS, Brullé, Hist. Nat. Ins. vi. 72, 1; Erichs. Gen. et Spec. Staph. 309, 6.

Staphylinus saphyrinus, Perty.

W. S. Rooke, Zool. 8413 (1863), *Xantholinus saphyrina*.

It is, of course, perfectly impossible for this magnificent denizen of the tropics of the new world to be an inhabitant of England, except (as Captain Rooke suggests) when imported in the larva state in mould with some plant, or perhaps accidentally brought over in merchandise in the perfect state.

32. TROGOPHLÆUS TENELLUS, Erichs. Col. March. i. 605, Gen. et Spec. Staph. 811, 24; Redt. Faun. Austr. Ed. ii. 236; Kraatz, Ins. Deutschl. ii. 880, 14.

Tœnosoma gracile, Mann. Brach. 51, 1?

This species has been detected (and determined) by Mr.

C. Waterhouse, who took it at Kingsbury Reservoir. Its place is at the extreme end of the genus. It most nearly resembles *T. pusillus*, but may be distinguished from that species by its smaller size and decidedly narrower form; the elytra, moreover, are fuscous instead of fusco-testaceous, and the head and thorax almost of the same width, the latter a very little narrower than the elytra, with its sides somewhat contracted towards the base and scarcely rounded in front, the foveæ on the disc being somewhat indistinct; the thorax, indeed, may be shortly described as sub-quadrate, instead of transversely sub-cordate, as in *pusillus*.

33. *OMALIUM RIPARIUM*, Thomson, Öfv. af Vet. Ac. Förh. 1856, 224, 3; id., Skand. Col. iii. 212, 3; G. R. Waterhouse, Proc. Ent. Soc. 5 Jan. 1863, Zool. 8416 (1863).

fuscicola, Kraatz, Ent. Zeit. 1857, p. 286.

Taken by Mr. Waterhouse at Southend and elsewhere on the coast; also by Mr. Bold at Newcastle. Its place in our lists will be next after *O. rivulare*, which it resembles very much in size and form; it may, however, be distinguished from that species by the following characters:—The front of the head is more sparingly punctured, the neck especially being alutaceous and scarcely punctured; the thorax is narrower in front, with its flexuous lateral foveæ more deeply impressed in front, and the disc sparingly punctured; the elytra are longer, pitchy black, and less strongly punctured.

34. *OMALIUM RUGULIPENNE* (n. s.).

O. fusco-piceum, nitidulum; antennis brevioribus, palpis, pedibusque rufo-testaceis; capite thoraceque longitudinaliter bifoveolatis, punctatis; elytris lon-

gioribus, rugulis longitudinalibus crebrè impressis; collo, thorace utrinque ad angulos posticos, scutello, abdomineque alutaceis, vix punctulatis.

Habitu et staturâ *O. ricularis*, sed antennis brevioribus totisque rufo-testaceis, elytris longioribus rugosèque punctatis, collo, scutello, thoraceque ad angulos posticos alutaceis, facilè distinguitur.

Ab *O. ripario*, cui elytris longioribus et collo alutaceo plerùmque affine, antennis elytrorumque rugulis inter alia differt. *O. cæsum*, ac præcipue *O. Allardi*, ob elytra plus minusve confluentim vix rugosè punctata, paululùm *O. rugulipenni* accedunt; utriusque tamen elytra et breviora sunt, et comparatè parum rugosa.

Fusco-piceum, nitidulum, palpis, antennis, pedibusque rufo-testaceis; oculis, clypeo, scutello et elytrorum suturâ nigricantibus; thoracis et elytrorum marginibus posticis, abdominis apice marginibusque dilutioribus.

Subtùs nigrum, capite, thorace, elytrorumque marginibus deflexis dilutioribus; pube brevi, sparsâ, dilutiore vestitum.

Caput thorace angustius, subtriangulare; fronte parcius, basin versùs crebrius punctatum; utrinque foveolâ longitudinali, latiore, parum profundâ, apicem versùs alutaceâ impressum; oculis prominulis, clypeo lævi; collo alutaceo, vix punctato.

Antennæ capite thoraceque paulò breviores, apicem versùs modicè incrassatæ; articulo secundo tertio validiori ac paulò breviori, tertio quarto longiori; articulis 7—10 transversis; ultimo breviter ovato, latitudine vix longiori.

Thorax coleopteris angustior, latitudine plus dimidio brevior; lateribus ante medium rotundatus, inde vix sinuatim basin versùs leviter angustatus; angulis anticis rotundatis, posticis obtusis; sat crebrè profundèque punctatus, tenuiter marginatus; lineâ elevatâ basali lævi transversè notatus;

disco sat convexo, nitido; dorso foveis duabus parallelis, profundis, basi latioribus, parum nitidis, rugoso-punctatis, anticè foveolâ tertiâ intermediâ obsoletiore angustiore divisis, et anticè utrinque fossulâ oblongâ, profundâ, sub-laterali impressus; spatio utrinque angulis posticis confini alutaceo, sat depresso, vix punctulato.

Scutellum alutaceum.

Elytra thorace plus quam duplo longiora; humeris vix prominulis; angulis externis posticis obliquè rotundato-truncatis; sat crebrè et profundè punctata, rugulis confluentibus, longitudinalibus, irregularibus, nitidulis, apicem versùs imminutis; suturâ nitidâ, vix elevatâ.

Abdomen sat convexum, fortitè marginatum; alutaceum, subtilissimè et remotè punctulatum.

Specimen unicum (ac certè maturum) propè Londinium a meipso lectum, sed notæ ipsius loci mihi desunt.

This species has the general form, appearance and size of *O. rivulare*, but differs from that insect in having the antennæ shorter and entirely pale, the elytra longer, and densely rugulose, the neck alutaceous, and with very few and indistinct punctures, and the thorax with the region of the posterior angles likewise alutaceous, with scarcely any trace of punctures; whereas in *O. rivulare* the neck and region of the posterior angles of the thorax are glossy and strongly punctured. In most of these distinctive characters the present species approaches *O. riparium*, from which, however, its shorter antennæ and rugosely punctured elytra will serve to distinguish it; and although *O. cæsum* and *O. Allardi* come somewhat nearer to it in the latter respect, their elytra are comparatively too short, with the punctures too gentle, and not sufficiently confluent.

It is for the most part shining, its prevailing colour being

pitchy-brown, rather inclined to ferruginous, with the palpi, antennæ and legs entirely rufo-testaceous, the abdomen rather darker; the front of the foveæ of the head, the head and thorax beneath, the hinder angles and base of thorax, the humeral callus, apex and deflexed margins of the elytra, and the apex and margins of the abdomen, being lighter, and the front of the clypeus, eyes, scutellum, suture and abdomen beneath, black.

The head is smooth at the extreme apex, sparingly punctured on the vertex, and more strongly at the base, impressed with two parallel, uninterrupted, longitudinal, shallow, and rather wide foveæ; the reflected angles of the clypeus above the insertion of the antennæ are reddish, each enclosing an alutaceous space formed by the apical termination of the above-mentioned foveæ, and the neck is alutaceous, with scarcely any punctures.

The antennæ are shorter than in any species of the first section of the genus hitherto recorded as British; gradually thickened towards the apex, the penultimate joints decidedly transverse, and the apical joint but little longer than broad.

The thorax is decidedly broader than long; widest a little in front of the middle, and not so rounded off at that point as in *O. rivulare* or *O. riparium*, thence sloped gently backwards to the base in a slightly sinuous line, the anterior angles being rounded, and the posterior obtuse; its disc is rather elevated, shining, punctured more remotely than the head, with two deep, dull, roughly-punctured parallel foveæ, scarcely oval, being widest towards the base, having between them in front a narrower, more obsolete, shining impression, which is widest at a little distance from the front margin, gradually contracts to a point, and vanishes about the centre of the mesial line; it has also the usual deep foveola on each side, which commences in front, follows the lateral outline,

and is merged in the alutaceous space hereafter mentioned ; each of these lateral foveolæ is also connected on its inner side by an oblique, narrow and obsolete channel, with the dorsal fovea nearest to it ; the thorax is delicately margined, the margins rather strongest and a little reflected at the sides, and there is a narrow space parallel to and almost touching the base, but not quite reaching the posterior angles, free from punctures, and a little elevated ; the raised part of the disc terminates rather suddenly and obliquely at the hinder angles, leaving a flat, alutaceous space, enclosed by the margins of each posterior angle, and bearing the faintest possible trace of punctuation.

The scutellum is alutaceous.

The elytra are more than twice the length of the thorax, with their sides straight, but getting slightly wider until about the middle of their lower third, thence obliquely sloped to the posterior margin, the angles being rounded ; rather thickly and coarsely punctured, the punctuation being confluent, whereby irregular, longitudinal, rugulose and shining elevations are formed, which are somewhat finer towards the apex ; delicately margined, the sides strongly deflexed ; the suture is shining, and but little elevated.

The abdomen is alutaceous, and very indistinctly punctured, rather convex in the middle, and strongly margined at the sides.

I have long had a single specimen (which is certainly quite mature and symmetrical) of this distinct species, unnamed in my collection ; it was taken by myself in the London district, but I cannot, unfortunately, specify any more exact locality.

35. *OMALIUM TESTACEUM*, Erichson, Gen. et Spec. Staph.

885, 22; Kraatz, Ins. Deutschl. ii. 992, 22; Rev. A. Matthews, Zool. 8650 (1863).

pygmæum, Grav. (nec Payk.).

This species must come next after *O. concinnum* in our lists.

It appears to be somewhat like *O. deplanatum*, but less pubescent, more strongly punctured, and with longer antennæ, &c.; and from *O. pygmæum*, Payk. (which it resembles in colour), it seems to differ in its linear shape, and by its thorax being slightly narrowed towards the base. It is a line and a half in length, sub-depressed, rufo-testaceous, with the head and scutellar region infuscate, the head, thorax, and elytra thickly punctured, and the abdomen (which is rather dilated at the apex) sparingly and most delicately punctulated.

Mr. Matthews remarks that this species may be known from *O. concinnum* by its being shorter, with a much smaller and narrower thorax, and invariably paler in colour.

Three specimens were taken during the summer of 1862, in rotten wood near Gumley, Leicestershire, by Mr. Matthews.

36. *OMALIUM BREVICORNE*, Erichs. Gen. et Spec. Staph. 884, 20; Ktz. Ins. Deutschl. ii. 993 (note); Rev. A. Matthews, Zool. 8650 (1863).

This species, according to Kraatz (loc. cit.), is more nearly allied to *O. vile* than to *O. monilicorne*, to which latter it is likened by Erichson, and it seems to be capable of distinction from the former by its stronger punctuation.

From Erichson's description it is one line in length, shining black, the legs and first five joints of the antennæ rufo-testaceous, the antennæ scarcely longer than the head and

thorax, the latter with two oblong gentle impressions, and the elytra very closely punctured and sub-rugulose.

Its very short antennæ will serve to distinguish it from the other elongate depressed species.

One specimen taken during the summer of 1862, in rotten wood near Gumley, Leicestershire, by the Rev. A. Matthews.

37. *OMALIUM CRASSICORNE*, Matthews, Zool. 8650 (1863),
(described).

Taken by the Rev. H. Matthews, near Waddington, in Lincolnshire, about the year 1850.

Mr. A. Matthews, who describes this species, remarks, that it differs from *O. salicis* (to which it comes nearest) in its very short antennæ, smaller thorax, and very dissimilar punctuation.

From the description (loc. cit.) this insect is $1\frac{3}{4}$ lin. in length; rufo-castaneous, shining; the head pitchy-black, distinctly and remotely punctured, and impressed with a deep, rugose, transverse fovea, the eyes large and very prominent; the antennæ, palpi and legs bright orange-red, the former being short and stout, scarcely longer than the head, gradually incrassated towards the apex, the penultimate joints transverse, and the apical joint large and acuminate; the thorax rather wider than its length, with rounded sides and acute posterior angles, distinctly and remotely punctured, and with two slight oval depressions behind the middle, the margins being pale; the elytra about twice as long as the thorax, and wider, rugosely and confusedly punctured, but distinctly striate, the striæ evanescent at the sides and apex; the abdomen broad, depressed, strongly margined, smooth and shining, clearly and very finely punctured.

38. *OMALIUM NIGRUM*, Grav. Mon. 212, 17; Erichs. Gen. et Spec. Staph. 880, 11; Ktz. Ins. Deutschl. ii. 997, 28; Rev. A. Matthews, Zool. 8650 (1863).
salicinum, Gyll.
atrum, Heer.

Mr. Matthews brings forward this species on the authority of an example taken by himself in Oxfordshire. It is closely allied to *O. florale* (which it must immediately follow in our lists), and differs from that insect in the following points: it is rather less, the antennæ are longer, with the first five joints red and the remainder black; the thorax is rather shorter and more narrowed in front, with the sides more widely margined, and the margins pitchy; the scutellum is sparingly and delicately punctured, and the elytra are rather longer, with the punctuation more generally inclined to run in striæ.

39. *HYDNOBIUS STRIGOSUS*, Schmidt, in Germ. Zeits. iii. 198, 3; Er. Ins. Deutschl. 49, 3; Thoms. Skand. Col. iv. 29, 3; Wat. (Pocket) Cat. Brit. Col. 1861.

Mr. Waterhouse introduced this species from his own collection. I have also taken it by sweeping at Hammer-smith marshes in last July, and it is in the collections of Dr. Power and others. It is an oblong, rather convex, shining, brunneo-testaceous insect, varying in length from half to two-thirds of a line, with the thorax delicately punctured, and the elytra faintly punctate-striate, the interstices being obliquely scratched, the scratches composed of very minute punctuations, gathered closely together in rather irregular series. The male has the posterior femora armed with a short, sharp tooth on the under side, just before the apex.

It may possibly be mixed up in collections with *Colenis dentipes*, from which it can, however, be at once distinguished

by its more oblong form, shining appearance, and the comparative coarseness of the oblique scratches on the elytra, which are, moreover, more transverse in *C. dentipes*.

40. HELOPHORUS DORSALIS, Mulsant, Palp. 40, 6; G. R. Crotch, Zool. 8610 (1863).

Mr. Crotch says this insect may be readily distinguished from *H. granularis*, by its superior size and crenate striæ, and that *H. Lapponicus*, Thoms., must be very near it from the description. A specimen given to me by Mr. Crotch certainly differs from all our other recorded species.

In that gentleman's Catalogue of Brit. Col. (Cambridge, 1863), this species is brought forward thus—“*dorsalis*, Marsh. ? Muls.” but Marsham's insect (about which there can be no doubt I should think) is that afterwards referred to by Mr. Crotch as *quadrisignatus*, Bach., and is, moreover, not found in brackish water as far as my experience goes, but in ponds near London, being not uncommon at Hammersmith marshes, Hampstead, and Wimbledon.

H. dorsalis, Muls., was taken by Mr. Crotch in some numbers at Liverpool.

41. HELOPHORUS ÆNEIPENNIS, Thomson, Öfv. af Vet. Ac. Förh. 1853, 43, 10, id. Skand. Col. ii. 81, 10; G. R. Crotch, Zool. 8611 (1863).

granularis, var. b, Mulsant.

aquaticus, Er.

Mr. Crotch says this insect is about the size of *H. griseus*, with the elytra sub-æneous and legs darker, and the interstices of the striæ clearly more convex.

42. *HELOPHORUS ARVERNICUS* (Rey), Mulsant, Supplement to the Palpicornes, published in his "Coleoptères Sécuripalpes" in 1846; G. R. Crotch, Zool. 8611 (1853) "*arçonicus*."

Mr. Crotch says that all the specimens he has seen (in England, I presume) of *H.* "*pumilis*," Er. (*pumilio*), belong to this species, and that the true *H.* "*pumilis*" (*pumilio*) is a much shorter and broader insect. He adds, also, that the present species may be recognized from our other indigenous species by the sub-carinate interstices of its elytra.

Mr. Waterhouse informs me that he now believes the insect entered in his Catalogue as *H. pumilio*, Er., is *H. arvernicus*, Muls., the original description of which species he was, until very recently, unable to consult.

43. *PHILHYDRUS MARITIMUS*, Thomson, Öfvers. af Vet. Ac. Förh. 1853, 51, 2; Skand. Col. ii. 96, 2.

I have taken this species in brackish water at Gravesend. It is very like *P. testaceus*, Fab., but is rather more shiny, a little narrower, and more oblong, the punctuation not quite so close, and a trifle more distinct; the palpi are entirely testaceous (not having the penultimate joint pitchy), and the club of the antennæ not so black; the head also is only slightly infuscate in the middle, whilst in *testaceus* it is decidedly black, with the sides of the clypeus testaceous. According to Thomson's description (loc. cit.) the femora appear to differ in colour in the two species, being black with the extreme apex pale in *testaceus*, and blackish with the upper side of the apex testaceous in *maritimus*, but these last-mentioned minute differences of colour can scarcely be relied upon as constant, and the insects could only present the proper tone when alive.

I have remarked that the apical joint of the antennæ is longer in *maritimus* than in *testaceus*.

44. *PHILHYDRUS NIGRICANS*, Zett. Ins. Lapp. 123, 7 (*Hydrophilus*); Thoms. Skand. Col. ii. 97, 4.
frontalis, Erichs. Col. Mar. i. 210, 6; G. R. Crotch, Zool. 8611 (1863).

Mr. Crotch briefly mentions that he has identified this species as British from types sent to him by Mr. Thomson. I have also made it out from Thomson's work (loc. cit.), having taken it in brackish water at Gravesend.

It is almost the same size as *P. melanocephalus*, but shorter and more convex than that species, with the punctuation of the elytra generally stronger, but without any rows of larger, irregular punctures. The palpi are entirely rufous (not fuscous at the apex of the last joint, as in *melanocephalus*), and the femora are also rufous, but fuscous on the upper side.

45. *PHILHYDRUS OVALIS*, Thoms. Öfvers. af Vet. Ac. Förh. 1853, 52.6, id. Skand. Col. ii. 97, 6; G. R. Crotch, Zool. 8611 (1863).

Mr. Crotch mentions that he has identified this species as British from types sent to him by Thomson.

I find from the latter's description (loc. cit.) that the insect in question is closely allied to *marginellus*, Fab., but larger and more obtuse, more strongly punctured and more obscure in colour than that species, with the palpi entirely red, the femora and tibiæ black and the tarsi rufescent.

According to my experience it is a much more common insect than *P. marginellus*.

46. *ATHOÛS UNDULATUS*, De Geer, Ins. iv. 155, 18. Tab. 5, f. 23, 26; Payk. Faun. iii. 8, 10; Schön. Syn. iii. 287, 108; Wat. Cat. Brit. Col. 1861; J. A. Power, Zool. 8735 (1863).

trifasciatus, Hbst., Gyll., Redt.

bifasciatus, Gyll., Redt.

A single specimen of this magnificent Elater (on the authority of which the species was introduced as British) was taken about three years ago by Charles Turner at Rannock; but it has hitherto unaccountably escaped notice in the Ent. Annuals.

Turner has however again taken it, at the same place and in some numbers. He informs me it comes from the Scotch pine.

The sexes vary considerably in size and colour; the males being the smallest, of a deeper black and with more distinct bands; some of the females have the elytra pale brown, banded with lavender grey, with the fascia more suffused.

47. *CIS LINEATO-CRIBRATUS*, Mellié, Ann. de la Soc. Ent. de France, 1848, p. 336, 43, pl. 3, fig. 14 of Monog.; Thomson, Skand. Col. v. 197, 3 (*Orophius*); J. A. Power, Zool. 8792 (1863).

Dr. Power has determined this species from some specimens taken by Mr. H. Montague in fungus near Loch Tay in September, 1862 (in company with *Octotemnus glabriculus*, I believe). Thomson states that he had no opportunity of getting rightly to know the structure of the antennæ and tibiæ of this insect, which he places in the genus *Orophius*, Redt. (*Octotemnus*, Mellié), wherein the antennæ should be eight-jointed. Dr. Power, however, states that it is a true *Cis*, with ten-jointed antennæ. In build, size and colour it is

very like *O. glabriculus*, but can be at once distinguished from that species (and indeed from all others of the genus) by the serial disposition of deep punctures on the elytra.

The head of the male has a transverse projecting ridge between the eyes, slightly hollowed on the upper side and with a wide emargination in the middle, whereby two blunt horns are formed, which curve a little upwards; the thorax is large, curved outwards at the sides, shining, of an inflated appearance, finely and rather thickly punctured, with the posterior and lateral edges narrowly margined; the elytra are cylindrical, not so wide as the greatest breadth of the thorax, clothed sparingly with very short and somewhat indistinct pubescence, distinctly punctate-striate, the striæ formed of large and rather irregular points, and the interstices with very minute punctures.

It seems to vary somewhat in size, since the specimen given to me by Mr. Montague is larger than any *O. glabriculus* I possess.

Dr. Power is made (by a printer's error) in the Zoologist to say the elytra are *not* pubescent, and that the elytra have an *angulose* appearance, whatever that may be.

48. ZEUGOPHORA TURNERI, Power, Zool. 8735 (1863).

Dr. Power has named this grand addition to our list of *Coleoptera* after its captor, Charles Turner; a compliment certainly well earned by the latter, who undergoes more lengthened hardships and privations, and exhibits more persistent energy in the pursuit of rarities, than all the purchasers of his good things are acquainted with, and who has now crowned his long list of revivals, &c., by taking a species new to science—a species, moreover, neither small nor commonplace in appearance, and in a well-worked group. He informs me that he took the insect in question is some

numbers near Rannoch, not by breeding them, or finding them in winter-quarters after his usual fashion of hunting, but by catching them with a net as they settled on the young shoots of the birch in the hot sunshine; also that they were very active and not easy to take, and this I can easily understand, as I have found the common *Z. subspinoso* a most wary and artful little animal, tucking in its limbs and rolling off its leafy perch on the approach of the net.

Z. Turneri may be briefly described as looking very like a large and long specimen of *subspinoso* in an immature condition, but any idea of immaturity is of course dispelled by the number of specimens, taken at different times, by their symmetrical outline and hard substance, and by the above-mentioned remarks as to their capture.

The elytra, thorax, head, antennæ and legs are testaceous-yellow, the abdomen, mesosternum, metasternum and eyes deep black, and the apex of the mandibles slightly pitchy. When compared with *Z. subspinoso* the head is more closely and deeply punctured, and not so contracted behind the eyes, which are less prominent; the thorax is decidedly broader, with the lateral projection more prominent, more abruptly produced, and continued with a slight curve until it meets the anterior margin, the junction forming a decided angular process, so that the front margin appears almost on a level with the outer edge of the eye, whilst in the common species the lateral projection is more gradually produced and slopes off more inwards to the anterior margin, with which it forms a very slight and feeble angle, the entire front margin scarcely exceeding the level of the inner edge of the eye.

A figure of this interesting insect will be found in our frontispiece, fig. 8. In an allied European species, *Z. scutellaris*, the joints of the antennæ are stouter, and the thorax has no angular process at its front corners: it is also larger, and with blue-black elytra.

49. *CRYPTOCEPHALUS WASASTJERNII*, Gyll. Ins. Suec. Tom. iv (Append.) 669. 21, 22; G. R. Crotch, Zool. 8413 (1863), (*C. Wasastjernæ*).

Mr. Crotch records the discovery by him of this species among his specimens of *C. labiatus* (taken, I presume, at Weston-super-Mare). He also states that it can be easily recognized by its roughly punctured thorax, and by the different colouring of the head. I have failed to find any insect affording the above points of distinction in my collection or in those of my friends. From Gyllenhal's description (loc. cit.) *C. Wasastjernii* appears to resemble *labiatus* closely, being of the size of the smallest individuals of that species, and to be black with two lines or spots on the forehead, the mouth, base of antennæ and front legs yellowish; the words applying to sculpture of the thorax are "*subtilissime strigoso*," which cannot, I think, be translated "*roughly punctured*," and the striæ of the elytra are mentioned as almost reaching to the apex, whilst in *labiatus* they become obsolete at some little distance before the tip.

It appears to have been taken very rarely in Eastern Bothnia.

50. *SCYMNUS QUADRILUNULATUS*, Illig. (*Coccinella*) Käf. Preuss. p. 416, 7; Gyll. ; Muls. Col. de Fr. Sécurip. p. 237, 6; G. R. Waterhouse, Proc. Ent. Soc. 2 Nov. 1863.

? *colon*, Steph. Illustr. Mand. iv. 393.

Mr. Waterhouse has introduced this species from two examples in Kirby's British Collection, and which are entered by the latter in his Catalogue as the "*Coccinella bisbipustulata*" of Marsham; the species however referred to by Marsham under that name is a four-spotted variety of *Scymnus frontalis*, Auct.

Kirby's insect is much smaller than *S. frontalis*, being even rather less than *S. discoideus*; it is short-ovate in form, with the elytra obtusely rounded behind, black, with the antennæ, legs, and four spots on the elytra, testaceous; the femora however being fuscous at the base.

Of the spots on the elytra the anterior pair are oblong and placed obliquely, the hinder pair small and slightly lunate.

51. *PTILIMUM AFFINE*, Erichs. Nat. der Ins. Deutschl. iii, 27; Rev. A. Matthews, Zool. 8649 (1863).

A single specimen taken by Mr. Matthews in the fens of Norfolk.

From that gentleman's notice this species appears to belong to a section of the genus which is distinguished by three impressed lines on the disc of the thorax, and to be known from its allies by the lateral lines appearing at first sight to be paralld for their whole length with the central channel; when closely examined, however, each line shows a faint curve at its extremities, in contrary directions. The insect also seems to be much more convex and larger than any other of the same section except *P. cæsum*, Er.

Mr. G. R. Crotch, of Weston-super-Mare, and St. John's College, Cambridge, well known as an energetic and successful worker, who has done (and will, I hope, continue to do) good service by his personal communications with European Coleopterists, and to whom English Entomologists are, or ought to be, much obliged for the research and rapidity which he employs in investigating changes of nomenclature, has recently published a Catalogue of British Coleoptera, with an idea of establishing the continental system among us.

When I remark that in this Catalogue it is the exception,

and not the rule, for *any* species to remain unaltered, either in position, value, name or parentage, it will be at once seen that the limited space at my disposal, combined with the recent date of publication of the work in question, will prevent me from giving it such a notice in detail as it deserves.

I have no doubt however that Mr. Crotch has ample proofs and reasons, satisfactory at least to himself, for his alterations in the nomenclature now commonly in use with us; and that he will be ready to establish them with sufficient evidence, whenever called upon to do so by any Coleopterist who feels an interest in the subject; and with regard to the new species he has introduced, I certainly think it incumbent upon him to furnish all the information that he possesses about them with as little delay as possible.

Every one has a right to be guided entirely by his own judgment as to the combination of characters sufficient to distinguish a species from a variety, or as to grouping and transposing species, genera and families, but the test of correctness of opinion appears to me to consist in being able to persuade other observers to adopt one's views; it is therefore open to Mr. Crotch either himself to elevate varieties into the rank of species, and to sink species as varieties (with or without notes of interrogation), or to follow others who have done so; even when *Clivina collaris* and *fossor*, *Anchomenus mæstus* and *viduus*, and *Geotrupes mutator* and *stercorarius*, are (amongst many similar) respectively considered by him as specifically identical. Nor ought we to make any remark (except perhaps one of surprise) when the highly developed and eminently predatorial *Brachelytra* are degraded to the end of the list, and made to include the little abortion *Claviger* and the *Pselaphidæ* of feeble organization:—nor when the *Stylopidæ* are introduced into the order:—nor when the *Trimeræ* are made immediately to precede the *Heteromera* (apparently on account of *Lycoper-*

dina being a caricature in petto of *Blaps*):—nor when the *Scolytidæ* are removed to the beginning of the *Rhynchophora*, whose usual arrangement is inverted:—nor when the *Corylophidæ* (including *Alexia*) are made allies to the *Anisotomidæ*, with the *Trichopterygidæ* to follow:—nor when the *Lathriliadæ* are placed between *Atomaria* and *Mycetophagus*, and the non-predatorial *Philhydrida* with clavate antennæ (the aquatic representatives of the *Clavicornes*) are ranked next to the raptorial *Dytiscidæ* with filiform antennæ (the aquatic types of the *Geodephaga*).

From these examples of the foreign ideas on classification we are required to adopt, it may easily be believed (as indeed is the case) that a similar course of inversion, introduction, suppression and elevation, has been adopted by Mr. Crotch throughout his Catalogue, insomuch that there is scarcely anything left unchanged; and although credit is due to him for his intention to simplify the difficulties of conflicting nomenclature by endeavouring to place our system on the same footing as that of Continental Entomologists (who are nevertheless anything but unanimous on this point among themselves), yet I cannot refrain from observing it is too evident that he wishes to depreciate English work; Marsham, Kirby, Stevens, and more recent authors, being deposed in favour of foreign describers with a very few exceptions throughout the Catalogue in question: and, even when thus treated, stigmatized by notes of interrogation being placed before the names of their species, as if it were impossible to determine the insects referred to by them from their descriptions and collections. I fear Mr. Crotch has simply altered the names in order to try and extinguish troublesome claimants for priority over his Teutonic favourites, and that he has not endeavoured to make out the species in question by the means at the disposal of every one

willing to make use of them ; had he done so he would not have had occasion to place queries before so many species, of which several are easy to determine.

Let the first instance in the genus *Homalota* (wherein the notes of interrogation placed before Stephensian species are very numerous) be taken as an example, viz., *H. vicina*.

Has Mr. Crotch placed this insect, with a prefixed query, as a synonym of *H. umbonata*, Erichs. (to which it is confessedly anterior in date), because, after using his best powers of investigation upon the descriptions in Stephens' Illustrations and Manual, he is not satisfied that both names refer to the same species ?

Passing over the additional evidence of the types in the Stephensian Collection, which any one can examine, is not even the following abbreviated description in the Manual (p. 360), combined with the sectional characters given by Stephens, sufficient for identification ?

2807. *Shining black, smooth, disc of elytra, tibiæ and tarsi reddish ; antennæ with terminal joint elongate ; male with a dorsal tubercle on the second segment of the abdomen, penultimate segment thickly punctured, female smooth ; length one line and a half.*

Of the enormous number of species known of this genus I am confident there is but this one to which the above description could possibly apply ; and Mr. Crotch pays his own powers of discernment a very poor compliment by confessing, as he does, that he cannot make out his insect by it. Others, however, *have* taken the trouble to make these investigations, and have satisfied themselves of the soundness of the evidence that can be adduced, before bringing forward and supporting the Stephensian names (amongst others), but the publication of fifty catalogues adopting foreign names

where they are not deserved will never alter the opinion of anyone who has looked into the matter carefully, or, I trust, that of English Coleopterists in general.

Mr. Crotch has very properly collected at the end of his Catalogue numerous species hitherto included in our Lists, but which require further evidence before they can be considered British. It is, I believe, generally known that these names were included in the Catalogue of British Coleoptera now generally in use, with a view to directing attention to their claims, and that they would have been expunged therefrom, after a certain interval, in a future edition, provided they received no corroboration in the meantime; but there are, in addition to these, forty or fifty species entirely omitted by Mr. Crotch, probably intentionally, but still it would have been as well to have placed them amongst the appendix of doubtful claimants, since many of them are not more apocryphal than those to whom another chance of establishing themselves as British has been given.

The following, however, surely ought to have had a place as British:—

- Otiorhynchus sulcatus*, Fab.
- Trachyphlæus alternans* (Schön.), Walton.
- Polydrosus micans*, Fab.
- Rhynchites cupreus*, Linn.
- Adimonia sanguinea*, Fab.
- Mordellistena pumila*, Gyll.
- Dinoderus substriatus*, Steph.
- Telephorus ater*, Linn.
- Hylastes palliatus*, Gyll.
- Ptilium saxonicum*, Gillm., Matth.
- *discoideum*, Gillm.

I can now only give a list of the names of the numerous

species introduced as British in Mr. Crotch's list, regretting that it is not in my power to give further information about them. I may, however, remark that it is possible some of them are representatives, under other names, of species already recorded, and that the queries put by Mr. Crotch after some of the new species are, I suspect, not undeserved, but no definite opinion can be given when we have no evidence or sufficient synonyms.

Want of space also prevents me from noticing the very numerous new names brought forward as confessedly representing species already enumerated in our Lists, and thereby necessarily causing confusion, which is not lessened by divers small inaccuracies, such as *Strangalia attenuata*, Linn., appearing as a British species, and also being included in the list of doubtful insects, &c.

DROMIUS OBLITUS, Boield. (hitherto considered a var. of *sigma*).

PATROBUS RUBRIPENNIS, Thoms. ?

With respect to this insect, I may remark that I have examined a very large number of specimens of the mountain species of *Patrobis* from different parts of the north of England (in one instance about 80 examples kindly sent to me for that purpose by my friend Mr. Morris Young of Paisley), and that I am pretty confident we have only one species, viz., *P. picicornis*, Zett. (*septentrionis*, Dej., Dawson), excepting of course *P. clavipes* and *P. excavatus*. According to Thomson (Skan. Col., 1859, i. 215, 3), *P. rubripennis* (hitherto considered a var. of *picicornis*) should be four lines long, with the elytra red, three times longer than the thorax, their striæ distinctly punctuated, especially at the base, and the basal foveæ of the thorax sparingly punctured; whilst *picicornis* (id., loc. cit. i. 215, 4) should be from four

to four and a quarter lines in length, with the elytra black and shining, four times longer than the thorax, their striæ less deep and more gently punctured, and the basal foveæ of the thorax thickly punctured.

These differences of length, colour and striation in the elytra appear in several specimens examined by me, and extreme examples of either variety would answer excellently to Thomson's descriptions of his two species; but unfortunately I have also seen, and even from the same localities, other individuals wherein a transposition of the above mentioned characters takes place: *e. g.*, there are specimens with very long elytra, the striæ of which are gently punctured and not deep, but they are red instead of black, and this evidently no result of immaturity; again, there are others with black shining elytra, but short, with deeper striæ and distinctly punctured.

In fact I have seen the delicately punctured striæ and smooth interstices gradually (by a chain of examples) merge into coarser and deep punctuation, with the interstices elevated; the lurid colour tone down to deep black, and the short elytra become long. The females generally have the elytra longer in proportion and more lurid in colour than the males.

I am indeed inclined to go further than expressing my belief that we do not possess two species of *Patrobis* with long elytra in England, and to say that I strongly suspect Thomson has elevated a mere variety into the rank of species without sufficient reason; the only character given by him at all opposed to this supposition being the difference in punctuation of the basal foveæ of the thorax. I have, however, seen certain small diversities in the degree of punctuation of these foveæ in the specimens above mentioned, but they are quite irrespective of the other characters by which

they ought to have been accompanied, according to Thomson; and, if the latter has any weakness (for his work is most admirable, and exhibits an originality and keenness of discernment seldom to be met with) it is his tendency to attach an undue importance to trifling differences in sculpture or colour.

COLYMBETES SEXDENTATUS, Schiodte.

AGABUS SEXUALIS, Reiche.

HETERO CERUS ARENARIUS, Kiesnw.

CHOLEVA LONGULA, Kelln. (hitherto considered a var. of *tristis*).

pilicornis, Thoms.

COLON VIENNENSE, Herbst.

———— SERRIPES, Sahlb.

fem. *fusculum*, Er.

———— ZEBEI, Kr.

———— RUFESCENS, Kr.

———— ANGULARE, Er.

HYDNOBIUS PUNCTATUS, Sturm.

———— SPINIPES, Gyll., Thoms.

ANISOTOMA TRIEPKII, Schm.

———— PICEA, Ill.

———— SILESIACA, Kr.

? *arctica*, Th.

———— RUBIGINOSA, Schm. (re-introduced).

———— SCITA, Er.

CYRTUSA PAUXILLA, Schm.

AGARICOPHAGUS CONFORMIS, Er.

LIODES AXILLARIS, Gyll.

AGATHIDIUM PICEUM, Er.

PTILUM AFFINE, Er. (addenda).

OLIBRUS LIQUIDUS, Er. (This is no doubt the insect at present known in collections as *O. flavicornis*, Sturm.)

CERYLON DEPLANATUM, Gyll. ?

TELMATOPHILUS SCHÖNHERRI, Gyll. (var. *Typhæ* ?).

CRYPTOPHAGUS UMBRATUS, Er.

———— GRANDIS, Kr.

———— FUSCICORNIS, Sturm.

———— SUBDEPRESSUS, Gyll.

PARAMECOSOMA ABIETIS, Payk.

———— PILOSULUM, Er.

ATOMARIA FUMATA, Er.

———— RHENANA, Ktz.

LATHRIDIIUS ASSIMILIS, Mannh.

PAROMALUS PARALLELOPIPEDUS, Herbst.

ACRITUS PUNCTUM, Aubé.

APHODIUS BOREALIS, Gyll.

uliginosus, Hardy.

CRYPTOHYPNUS 4-GUTTATUS, Lap.

tetragraphus, Germ.

ATHOUS² DIFFORMIS, Lac.

campylöides, Newm.

AGRIOTES PALLIDULUS, Ill. ? (This is, I presume, the

"4* sp—," Wat. Cat., Ent. Ann. 1863, p. 96, 86.)

CYPHON NITIDULUS, Thoms.

———— FUSCICORNIS, Thoms.

TELEPHORUS FIGURATUS, Mann.

———— FULVICOLLIS, Fab.

nivalis, Germ.

TELEPHORUS FEMORALIS, Br.? (*Tel.* 21* sp——? Wat. Cat., Ent. Ann. 1863, p. 97, 87?).

DRYOPHILUS ANOBIÖIDES, Chevr.
compressicornis, Muls.

RHOPALODONTUS FRONTICORNIS, Panz.

HYLASTES ANGUSTATUS, Herbst.

BAGOÜS SUBCARINATUS, Schön. (Mr. Crotch has just informed me that this ought to be considered a synonym of *limosus*, Schön., which I have always understood to be the case).

TROPIPHORUS CARINATUS, Mull.

SITONES LINEËLLUS, Schön. (hitherto considered a var. of *tibialis*).

BRUCHUS CISTI, Payk. [Mr. Crotch informs me that this is to be considered a synonym of *ater*, Marsh. (*villosus*, Fab.), to which it has always been referred, and that it was erroneously ranked as a separate species in his Catalogue.]

CLYTHRA LÆVIUSCULA, Ratz.

CRYPTOCEPHALUS GRACILIS, Fab.

GRAFTODERA PUSILLA, Dufts.
Helianthemis, Allard.

APHTHONA CÆRULEA, Payk.

Pseudacori, Marsh. (This synonym is not correct; Marsham's insect is *violacea*, Ent. Heft.)

THYAMIS NIGRA, Ent. Heft.

———— BRUNNEA, Redt.
lurida, v.? All.

———— LATERALIS, Ill. (26 sp——? Wat. Cat.?).

THYAMIS RUTILA, Ill.

———— CANESCENS, Foud. ?

———— FERRUGINEA, Foud.

PLECTROSCELIS ARIDULA, Gyll.

BLAPS CHEVROLATII, Solier.

ULOMA CULINARIS, Linn. (mentioned in Mr. Crotch's preface as naturalized).

TYCHUS IBERICUS, Motsch.

dichroüs, Schmidt.

ACTECHARIS READINGII, Jans. MSS.

MYRMEDONIA SIMILIS, Märk. (Mr. Crotch informs me this was erroneously inserted as British.)

CALLIDERA NIGRITA, Mann. ? (*Calodera*, 1 nov. sp. ? Wat. Cat. ?).

OXYPODA RIPARIA, Fairm.

———— RECONDITA, Ktz.

———— AMÆNA, Fairm.

flavicornis, Ktz.

———— HELVOLA, Er.

? *pallidula*, Sahlb. (Hitherto considered the same as *annularis*, Sahlb.)

HOMALOTA VALIDA, Ktz.

———— CELATA, Erichs.

HYPOCYPTUS RUFIPES, Ktz.

———— SEMINULUM, Er.

TACHYPORUS ABDOMINALIS, Er.

QUEDIUS MODESTUS, Ktz. ?

OCYPUS SAULCYI, Reiche.

PHILONTHUS NITIDULUS, Grav. (Mr. Crotch informs

me this species was erroneously inserted by him as British.)

PHILONTHUS TROSSULUS, Nordm. ?

PÆDERUS LONGIPENNIS, Er. (Mr. Crotch informs me this was intended to be placed as a synonym of *fuscipes*, Curt.)

STENUS SCRUTATOR, Er.

——— SYLVESTER, Er.

——— PUMILIO, Er.

——— LITTORALIS, Thoms.

TROGOPHLEUS HALOPHILUS, Kiesenw.

E. C. RYE.

284, KING'S ROAD, CHELSEA, S.W.

October, 1863.

31*. BLEDIUS ERRATICUS, Erichs. Col. March. i. 582, 6; id., Gen. et Spec. Staph. 772, 22; Redt. Faun. Aust. ed. ii. 230, 18; Heer, Faun. Col. Helv. i. 575, 5; Kraatz, Ins. Deuts. ii. 836, 23; Fairm. et Lab. Faun. Ent. Franc. iii. 605, 18.

Since writing the above article I have determined this species as new to our lists from three examples, mixed with *B. opacus*, in my own collection, and have subsequently found others, under similar circumstances, in the cabinet of Dr. Power, who received them from M. T. J. Bold. The latter gentleman has kindly sent to me for examination all the specimens representing *B. opacus* in his collection, and I find that the greater part of them must be referred to *B. erraticus*; they were taken at different times on the

banks, or under stones in the bed, of the river Irthing, at Lanercost, Cumberland.

At first sight it considerably resembles *B. opacus*, but may be distinguished from that species by the following characters:—It is smaller, and not so robust, the elytra especially being shorter; the antennæ are rather more slender, and lighter in colour; the head is more shining, much less deeply punctured, and with only a delicate transverse line between the insertion of the antennæ; the clypeus, moreover, is alutaceous, yet almost shining, whilst in *B. opacus* it is roughly coriaceous; the thorax is more opaque, more obsoletely punctured, and with a narrow, smooth, somewhat shining, longitudinal middle space without any channel, whereas in *B. opacus* there is a very delicate but distinct dorsal groove; the sides of the thorax, moreover, are subsinuate towards the base, with the hinder angles decidedly prominent at their extreme points, and herein the two species in question differ considerably, as the sides of the thorax in *B. opacus* are obliquely truncated towards the base, with the hinder angles very obtusely rounded. I would here remark that the words “*obtusis, non verò obtusissimis,*” applied to the posterior angles of the thorax in *B. erraticus* by Erichson, hardly give a correct idea of their appearance, since they are all but acute.

In *B. erraticus* the elytra (which are red, sometimes being darker near the scutellum and suture) exhibit a somewhat greasy appearance; they are also shorter than in *B. opacus*, and not so deeply or closely punctured.

The head and thorax are inclined to pitchy brown, the extreme apex of the abdomen being more or less rufous; the former parts are rufo-piceous in some foreign specimens sent by Dr. Kraatz to the British Museum, in which also the red apex to the abdomen is very conspicuous, but the species

appears to vary considerably in colour. In size and build it is not unlike *B. longulus* (which I have indeed seen confounded with *B. opacus*), but its duller thorax and want of a dorsal channel will at once serve to distinguish it from that species, in which moreover the posterior angles of the thorax are more obtuse, though not in so decided a degree as in *B. opacus*.

47*. *BAGOÛS NODULOSUS*, Schön.

This species cannot be regarded as British, since I find that the specimen taken by myself, upon the authority of which I was induced to record it as such, is a very large, somewhat elongate, and much abraded example of *B. lutulentus*. I was in a great measure led into this error by the specimens representing the latter in the British Museum Collection (on which I, at that time, relied); these are very few in number, small in size, in bad condition, and associated with *B. petrosus*, so that I do not now wonder at my inability to make my insect agree with *B. lutulentus*, as there represented; and, as it certainly would not correspond with any other British member of the genus, I was erroneously led to refer it to *B. nodulosus*, which, from description, it seemed to resemble in size and structure.

E. C. RYE.

November, 1863.