XLII. COLEOPTERA, IX: TENEBRIONIDAE.

By F. H. Gravely, *M.Sc., Assistant Superintendent, Indian Museum.*

(Plates XLIII—XLIV.)

The Tenebrionidae collected by the Abor Expedition were for the most part found under bark or in rotten wood. Many Tenebrionids live in such situations, where they may be found even in the cold season. It is therefore not surprising that their species are more numerous than those of many other groups which are more readily met with in the open, but chiefly during the hot weather and rains.

Insects of such retiring habits as these Tenebrionids have been less collected everywhere than those which are more readily found; and the large proportion of new species in the Abor collection is probably as much due to the way in which they were collected as to zoogeographical causes.

The most unexpected insects in the collection are perhaps the two new species of *Leptoscopha*, a genus hitherto recorded only from Madagascar; but it is at present impossible, in view of the imperfect state of our knowledge of Indian Tenebrionidae, to attach any special significance even to these.

The present, like a number of other papers in this series, contains records not only of species obtained by the Abor Expedition, but also of species collected by Mr. H. Stevens in north-east Assam and the Darjeeling District, and by myself in the Amherst District of Tenasserim.

All the species enumerated below were determined for me by Herr Hans Gebien, when I visited Hamburg about two years ago. Several of the known species with which new forms are compared were lent to me by him for that purpose, and were still with me when the war deprived me of his continued help. Other work prevented my taking up the writing of this paper till after the commencement of the war, and I have omitted from it descriptions of several new species for an adequate description of which I have felt my own knowledge to be insufficient, and concerning which I have wished to consult him again. I cannot thank him too deeply for his constant kindness to me in Hamburg, and for the assistance with which he was ever ready, so long as he was able to communicate with me. Information given below as to the distribution of known species has been obtained from his Catalogue (Junk's "Coleopterorum Catalogus") where references to previous literature will be found, from his private collection and notes, and from the Indian Museum collection.

Pseudoblaps javana, Wied.

Several specimens were collected under the bark of a fallen tree-trunk in Kawkareik, one between Kawkareik and Third Camp, and one at Dhammathat—all in the Amherst District of Tenasserim. The species is recorded in Gebien's catalogue from Further India and the Sunda Islands. His collection includes specimens from Rangoon, Annam, Cambodia, Sumbava, and Tenimber in Larat Island near New Guinea. There are a few specimens in the Indian Museum collection from Victoria Point.

Scleron ferrugineum, Fabr.

A single specimen was found in the Thaungyin Valley, at Myawadi, *ca.* 500 ft., on the Burmo-Siamese frontier. Gebien's collection includes specimens from Borneo, the Philippines and Formosa, which localities, together with those previously recorded, show that the species occurs throughout the Oriental Region, to which it appears to be confined.

Gonocephalum depressum, Fabr.

This species, recorded from India by Gebien, was found at Kawkareik, and on both eastern and western slopes of the Dawna Hills in Tenasserim.

Gonocephalum pubens, Mars.

Mr. Kemp obtained a single specimen of this Japanese species at Dibrugarh, N.-E. Assam. It has recently been recorded by Gebien from Formosa.

Gonocephalum ruficornis, Geb.

This species was found at Yembung, 1100 ft., and Rotung, 1400 ft. in the Abor Country. It appears to have been described since the publication of Gebien's "Catalogue," but I have been unable to discover where.

Gonocephalum subspinosum, Fairm.

Originally described from Kurseong. Mr. Kemp found it at Kobo, 400 ft., in rotten wood; at Rotung, 1400 ft., under bark; between Rotung and Kalek, 2000-3500 ft.; near Parong, 3300 ft., under stones; and above Panji, 4000 ft., under bark.

Dichraeosis capucinus, n. sp.

(Plate xliii, fig. 1.)

Gopaldhara, Rungbong Valley, Darjeeling District. One specimen, collected by Mr. W. K. Webb, from whom it passed into Mr. Stevens' collection.

A slender almost cylindrical insect whose general russet brown colour is produced by golden scale-like hairs—much coarser than in *D. bacillus*—overlaying the dark brown integument, which is further obscured between its numerous coarse tubercles by a paler dull brown secretion. *Length* 8 mm. Maximum width of pronotum 2·2 mm. Maximum width of elytra 2·8 mm.

The *head* is transverse, very coarsely and closely punctured behind, less so near the anterior margin which is scarcely emarginate. The dorsal surface is transversely depressed between the eyes, and slightly elevated on either side in front of them. There is a very distinct membrane between the anterior margin of the head and the labrum, but the head and all parts belonging to it are particularly deeply embedded in secretion, which must be removed before any of their features can be seen. The labrum is transversely oval, with a transverse elevation about half way between the anterior and posterior margins; behind this elevation it is smooth and polished; in front, it bears a few fine punctures and hairs, the latter forming a dense fringe on the margin.

The *pronotum* is inflated in front of its narrowest part, which is very near the raised posterior margin. Its middle line is depressed throughout, especially in front and behind. The depression in front is much deeper than in *D. bacillus*. A pair of stout conical processes project laterally beside the base of the head from the ventral part of the anterior margin.

The *elytra* are almost parallel-sided, slightly widest at a distance of about two-thirds of their length from their anterior end, gradually tapering behind. They are marked throughout by parallel lines of tubercles; of these the two innermost are discontinuous, the next five are much coarser, with their tubercles united to form more or less continuous ridges, and the last two, though coarse and distinct behind, are obsolete in front.

The *lower surface of the head* is marked centrally by a series of transverse grooves; laterally it is coarsely and closely punctured.

The *prosternum* is marked with irregular, coarse, shallow punctures. In front of the coxae it is T-shaped, with all its edges slightly raised; behind them it is hour-glass shaped.

The *mesosternum* is depressed in front, where it is coarsely roughened except in the middle line which is strongly keeled and highly polished. Behind it is elevated to the level of the metasternum and is rough throughout.

The *metasternum* and *abdominal sterna* are covered with golden scale-like hairs such as occur on the upper surface. A depression borders the smooth and hairless rims of the posterior coxal cavities.

The *antennae* are 11-jointed. The two basal joints are subspherical, a little longer than broad, the first a little larger than the second which is inserted at an obtuse angle. The third joint is slender, about three times as long as broad, distinctly thickened distally. The next three joints are alike, scarcely longer than broad. The seventh joint is similar, but more distinctly thickened

distally. The eighth joint is fully as broad as long, the ninth and tenth successively broader. The eleventh is larger and subspherical.

The right *mandible* is compressed distally, and has one large terminal tooth with a smaller dorsal tooth above it. The outer margin is ventrally elevated. The whole space between the terminal tooth and the broad molar tooth is occupied by a mandible-sac. The left mandible is missing.

The lacina of the *maxilla* is about half as large as the galea; both are expanded and clothed with stout curved hairs distally. The palp is 4-jointed. The first joint is small and parallel-sided; the second is fully twice as long as the first, somewhat broader at the base and fully twice as broad distally; the third joint resembles the second in form, but is only about two-thirds as long; the fourth joint is large and triangular, about as long as the first and second together and about as broad as long.

The *labial palps* are 3-jointed; the second joint is somewhat larger than the first, and the third than the first and second together.

The *mentum* is trapezoidal.

The *legs* are moderately slender, and present no special features.

Byrsax tuberculatus, n. sp.

(Plate xliii, fig. 2.)

Kobo, 400 ft., Abor Country, 30-xi-11. One specimen.

A small brown, parallel-sided, oval beetle about twice as long as broad, covered with strong tubercles none of which form massive elevations as is the case in *B. excisicollis*, Gebien, from Borneo.[1] *Length* 4·3-5·0 mm.

The *head* is shaped as in *B. excisicollis*, but is smoother between the eyes and bears a pair of erect horns of variable length, directed somewhat backwards and bowed a little outwards, obliquely truncate and spiny postero-laterally at the end.

The *pronotum* and *elytra* are punctured and tubercular (see pl. xliii, fig. 2). The posterior margin of the former is shaped as in *B. excisicollis*.

The *lower surface of the head* is closely and coarsely punctured, as is also the *prosternum* which is strongly keeled between the coxae. The *mesosternum* is more finely and sparsely punctured, with the space between the punctures highly polished. The *metasternum* is grooved in the middle line; both it and the *abdominal sterna* are closely and coarsely punctured.

The *antennae* are 11-jointed. The first joint is about as long as the second and third together, the third is longer than the fourth which is fully as long as the second, the fifth to tenth joints are enlarged in front, the fifth slightly, the others more and

[1] Described in *Sarawak Museum Journal* II, pp. 9-11, pl. i, fig. 6, since the publication of the "Catalogue."

more in series. The terminal joint is about equal to the ninth in width, is evenly rounded, and slightly longer than broad.

The right *mandible* is terminated by a single large pointed tooth, with a slightly smaller tooth above and a little behind it. The mandible-sac fills the space between these teeth and the broad molar tooth. The left mandible is stout, and horizontally cleft at the tip; the lower external margin of the dorsal of the two teeth so formed is finely and evenly serrate. There is a mandible-sac and a large molar tooth.

Dysantes elongatus, Redt.

Hitherto recorded only from Java. A specimen was obtained at Sukli on the eastern side of the Dawna Hills (Tenasserim), at an altitude of about 2000 feet.

Platydema aurimaculata, n. sp.

(Plate xliii, fig. 3.)

Kobo, 4000 ft., Abor Country, 30-xi-11. A number of specimens found in *Polyporus*.

A convex elyptical, smoothly shining insect whose black colour is varied with orange on the elytra. *Length* 3·8-4·5 mm.

The *head* is rather sparsely punctured, transversely grooved between the inner angles of the eyes, black behind this, black fading to reddish-brown in front. The anterior margin of the clypeus is straight or lightly concave, making a widely rounded angle with the anterior margin of the canthus on each side. The labrum is reddish-brown, with a number of short hairs in front. In males a dorso-ventrally depressed horn of variable size projects from the middle line between the posterior margins of the eyes. It is black at the base, but when well developed is reddish at the tip.

The *pronotum* is black, occasionally tinged with reddish-brown; it is punctured like the head.

The *scutellum* is small; it is black or reddish. The *elytra* are black with four irregular patches of orange, they are marked with eight complete longitudinal rows of fine punctures (excluding the marginal groove), and a short additional one near the scutellum.

The *under side* of the head is black, that of the rest of the body reddish-brown; the former is somewhat coarsely roughened, the latter somewhat more finely punctured. The *prosternum* and *metasternum* are not grooved or keeled in the middle line. The *mesosternum* is hidden.

The *antennae* are 11-jointed. The first joint is longer and stouter than the second; the third is also longer than the second, and is slightly thickened distally, but it is much smaller than the first. The remaining joints are uniformly thicker than the third but are of about the same length, except the last which is about twice as long.

The right *mandible* is moderately stout, bifid at the tip, and grooved externally. The dorsal tooth in front of the mandible-sac is low and broadly truncate. The left mandible is similar, its dorsal tooth is very small.

Both the lacina and galea of the *maxilla* are tipped with stout hairs; the last joint of the palp is barrel-shaped, with obliquely truncate extremity.

The *mentum* is trapezoidal, with lightly convex sides.

The femora of all the *legs* are slightly swollen. The tibiae are broader distally than proximally. The tarsi are bordered by fine spines.

Platydema subfascia, Walk.

This species is known from India, the Sunda Islands, S. China, etc. I obtained one specimen at Kawkareik in Tenasserim.

Platydema annamitum, Fairm.

Hitherto known only from Indo-China. Mr. Kemp obtained specimens from under bark at Yembung, 1100 ft., 8-ii-12, and at Rotung, 1400 ft., 28-xii-11. Both of these places are in the Abor Country.

Platydema nigroaeneum, Motsch.

Hitherto only recorded from Japan. Mr. Kemp obtained it in the Abor Country from rotten wood at Kobo, 400 ft., 1-xii-11, and there is a specimen in Gebien's collection from Phuc Son in Annam.

Platydema alticornis, n. sp.

(Plate xliii, figs. 4, 4*a*.)

Moulmein (Tenasserim), 16-xi-11. One specimen.

A somewhat flatter insect than *P. aurimaculata*, black throughout, and distinguished from all known species of the genus by the erect horn above the left eye. *Length* 5·5 mm.

The *head* is roughly semicircular, but is slightly angular in the middle line in front. It is polished and punctured throughout. Its margin is raised; the area between the eyes is depressed, and from this depression a pair of arched grooves extends forwards on either side of a slightly higher circular area. Behind the depression the surface is elevated to about the level of the pronotum, and on either side of it is a tubercle—a low one with approximately rectangular apex on the right side, and a tall erect one, ending in a tuft of hair, on the left.

The *pronotum* is closely punctured but less highly polished than the head. It bears a very indistinct median groove, with a pair of depressions on either side of it against the posterior margin.

The *elytra* are also somewhat dull; they bear rows of punctures arranged as in *P. aurimaculata* but much more deeply impressed.

The *lower surface of the head* is rugose in front and punctured behind.

The *prosternum* is keeled in the middle line and coarsely punctured in front of the coxae. The *mesosternum* is hidden. The *metasternum* is strongly grooved in the middle-line, smooth, with a few punctures laterally. The *abdominal sterna* are punctured.

The third joint of the *antenna* is long and slender, the fourth is shorter and thicker; from the fifth onwards the joints are of equal breadth.

The femora of all the *legs* are more or less swollen; the tibiae are broader distally than at the base. The tarsi are finely spinulose.

Ceropria induta, Wied.

This species is recorded from "India and the Malay Archipelago." Gebien's collection and ours show that its range extends from Japan and the eastern limits of the Oriental Region to Nepal in the Himalayas; but in neither of these collections are there specimens from the Indian Peninsula.

Mr. Kemp found the species in rotten wood and under bark in the Abor Country at Kobo, 400 ft. (5-xii-11); at Janakmukh, 600 ft. (17-xii-11); at Yembung, 1100 ft. (Jan. and Feb., 1912); at Rotung, 1400 ft. (28-xii-11); at Kalek, 3800 ft. (29-xii-11); and above Pangi, 4000 ft. (16-i-12); he also found it at Sadiya in N.-E. Assam (25—26-xi-11), and Mr. Coggin Brown found it at Puging, 3000 ft. in the Abor Country (Feb., 1912). I found specimens of an unusually pale violet colour at Moulmein, Lower Burma, 16-xi-11. We have others of this colour from Mungphu in the Darjeeling District.

Ceropria subocellata, Cast. and Brll.

Gebien tells me that this species and *C. laticollis*, Fairm. are identical. It is recorded from Java, Japan and Tonkin. Gebien has it also from Annam and "Sikkim"; and we have specimens from Buxa and Cachar as well as those obtained by Mr. Kemp in the Abor Country at Rotung, 1400 ft. (23-xii-11) and from rotten wood at Yembung, 1100 ft. (14-i-12).

Uloma javana, Gebien.[1]

Hitherto recorded only from Java. Mr. Kemp found it under stones and logs of wood at Kobo, 400 ft. (7-xii-11), and at Rotung 1400 ft. (21-xii-11) in the Abor Country.

Uloma orientalis, Cast. var. **minor**, Gebien.[2]

Uloma orientalis, Cast., *s. str.*, is recorded only from Java. Its variety *minor* is recorded only from Borneo, but Gebien

[1] Described in *Wiesbaden Jahrb. Ver. Natk.* LXV, 1912, p. 234, since the publication of the "Catalogue."

[2] Described in *Sarawak Museum Journal* II. p. 28, since the publication of the "Catalogue."

has specimens from Pengalengan, 4000 ft. in Java. Mr. Kemp obtained it from under bark at Upper Rotung in the Abor Country (6-i-12), and I obtained it at Sukli, 2100 ft., on the eastern slope of the Dawna Hills in Tenasserim in Nov. 1911.

Alphitobius (Diaclina) quadrimaculatus, Gebien.[1]

Hitherto recorded from Formosa, the Philippines, Madura, and E. Java. Mr. Kemp found it in rotten wood and under bark at Kobo, 400 ft. (1—2-xii-11), and at Rotung, 1400 ft. (7—8-iii-12) in the Abor Country.

Eutochia lateralis, Bot.

The known range of this species extends from India to the Philippines. I found one specimen at Kawkareik in Tennasserim.

Setenis laevis, Fairm.

This species is recorded from "Sikkim." Gebien's collection and ours include specimens from the Darjeeling District, Assam, Burma and Tonkin. Mr. Kemp found specimens under bark in the Abor Country above Pangi, 4000 ft. (16-i-12) as well as at Sadiya in N.-E. Assam (26-xi-11).

Setenis indosinica, Fairm.

This species is only recorded from Indo-China. Our collection shows that it occurs in the Darjeeling District, Assam (Sibsagar and Cachar) and Burma (Tavoy) as well. Mr. Kemp found it under bark at Sadiya in N.-E. Assam (26-xi-11), and at Kobo, 400 ft. (8-xii-11) and Rotung 1400 ft. (28-xii-11) in the Abor Country.

Setenis crenatostriata, Motsch.

This species is recorded from Burma. I obtained it at Moulmein in that country. The Indian Museum collection also contains a specimen from Sibsagar in Assam, and Gebien's collection one from "Sikkim."

Setenis kempi, n. sp.

(Plate xliii, fig. 6.)

Described from specimens collected by Mr. Kemp from rotten wood at Janakmukh, Abor Country, 600 ft., and from specimens collected by Mr. S. E. Peal and the Indian Museum collector in Sibsagar, Assam.

[1] The distribution of this species is indicated by Gebien in his paper on the Tenebrionidae of Formosa, *Arch. Naturg.* LXXIX (A), p. 26, 1913. I have been unable to trace the original description.

Length 23·0-28·5 mm. Like *S. dentipes*,[1] Gebien, above and below, but with less distinctly striate *elytra*.

The *appendages* also resemble those of *S. dentipes*, except that the tooth on the posterior femur, which is perhaps hardly as strong in the male, is absent in the female.

Tonkinius striatipennis, n. sp.

(Plate xliii, fig. 8.)

Above Pangi, 4000 ft., Abor Country, 16-i-12. One specimen found under bark.

A dull black insect, not unlike *T. sculptilis*, Fairm., in general appearance. *Length* 17 mm.

The *head* resembles that of *T. sculptilis*.

The *pronotum* is slightly broader than in that species, and has more evenly rounded sides. The median groove is complete and very pronounced. On either side of this groove the pronotum is thrown into four distinct longitudinal ridges of which the outermost does not reach the posterior margin.

The *scutellum* resembles that of *T. sculptilis*.

The grooves of the *elytra* are very broad and dull, with large shallow punctures; all the ridges between them are keeled, the third and fourth being polished and somewhat more pronounced than the others.

The *lower surface of the body*, the *antennae* and the *legs* resemble those of *T. sculptilis*.

Encyalesthus exularis, Geb.

Gebien based his description of this species (*Arch. Naturg.* LXXIX (A), 1913, pp. 31-32) on specimens collected by Dr. Sauter in Formosa, and on those collected by Mr. Kemp from under bark at Sadiya in N.-E. Assam (21-xi-11) and at Rotung, 1400 ft., in the Abor Country (28-xii-11).

Encyalesthus stevensi, n. sp.

(Plate xliii, fig. 5.)

Dejoo, base of hills, North Lakhimpur. One specimen, collected by Mr. Stevens.

A black *Setenis*-like insect. *Length* 18·2 mm.

The *head* is longer in front of the eyes than is that of *E. exularis*, and is lightly concave in front of the canthus. Its surface is more finely punctured, and the eyes do not extend so far back.

The *pronotum* is somewhat flatter and more coarsely punctured than is that of *E. exularis* which it resembles in other respects.

[1] Described in *Sarawak Museum Journal* II, pp. 35-37, pl. i, fig. 9, since the publication of the "Catalogue."

The *scutellum* is triangular as in *E. exularis*. The *elytra* lack the metallic sheen found in that species, and the punctures in the striae are finer.

The *sterna* resemble those of *E. exularis*.

The *antennae* are somewhat slenderer than are those of *E. exularis*, all joints being at least as long as broad.

The femora of all the *legs* are stouter at the base, and less distinctly swollen distally than in that species. Otherwise the legs are much the same.

Derosphaerus rugosus, n. sp.

(Plate xliii, fig. 7.)

Sibsagar; Dejoo, base of hills, North Lakhimpur; Rotung, Abor Country, 1400 ft., 24-xii-11, in rotten wood. Numerous specimens from each of the two last-named localities.

An elongate, polished, black insect, very like *Derosphaerus* (*?Encyalesthus*) *impressus*, Walker, in general appearance, but smaller and more strongly rugose. *Length* 10·8-15·0 mm.

The *head* resembles that of *D. impressus*, except that it is not more coarsely punctured between and behind the eyes than it is in front of them.

The *pronotum* is somewhat broader in proportion to its length than in that species, being distinctly broader than long. Its punctures are finer near the middle, and the whole surface is rugose laterally. The anterior angles are somewhat more prominent. The median groove is distinct in front but is often absent behind; on either side of it, and about twice as far from it as from the lateral margin, is another groove parallel to it. The marginal groove is complete, except across the middle in front; it is further from the posterior than from the lateral and anterior margins.

The *scutellum* and *elytra* resemble those of *D. impressus*, except that the lines of punctures on the elytra are more sharply defined and laterally are even larger.

The *pro-* and *mesosterna* resemble those of *D. impressus* in form; they are somewhat variable in texture. The *metasternum* is very finely rugose. The first *abdominal segment* is somewhat more distinctly rugose laterally, the second throughout, and the third in its anterior half. Behind this the sterna are finely punctured.

The *antennae* are relatively shorter than in *D. impressus*, the central joints of the club being only about half as long as broad.

The *legs* resemble those of that species.

Catapiestus indicus, Fairmaire.

This species was first described from Kanara, and was recorded in the same paper as occurring in Sikkim also. We have it from the Abor Country (Kobo, 400 ft., 1-xii-11 and 30-iii-12; Rotung, 1400 ft., 8-iii-12); N.-E. Burma (Pum-pa-taung, 3600 ft.); Tenasserim (Misty Hollow, Dawna Hills, *ca.* 2200 ft.; Third Camp, W.

base of Dawna Hills; and Tavoy); and from Cochin (Parambikulam, *ca.* 1700 ft.). Specimens were found in all stages under the bark of a fallen tree-trunk at the last-named locality (see *Rec. Ind. Mus.* XI, p. 363, 1915).

Menephilus aborensis, n. sp.

(Plate xliii, fig. 9.)

Rotung, Abor Country, 1400 ft., 23-xii-11; three specimens from rotten wood.

A black, slender beetle not unlike *M. medius*, Mars., but much smaller. *Length* 10-11 mm.

The *head* is somewhat longer in front of the eyes than in *M. medius*, and is punctured all over; otherwise it is very similar.

The *pronotum* resembles that of *M. medius* in form, but is punctured all over like the head. The striae of the *elytra* are somewhat deeper than in that species.

The *lower surface of the body* differs from that of *M. medius* only in being somewhat more strongly punctured.

The *antennae* are slightly shorter and stouter than in *M. medius*.

The tibiae of all the *legs* are practically straight.

Toxicum assamense, Pic.

(Plate xliv, figs. 10, 10*a*.)

This species was first described [1] from Assam. Gebien has it from "Sikkim". We have it from the Dafla Hills (Dikrang Valley); Assam (Sibsagar and Sadiya); the Abor Country (Janakmukh, 600 ft., 18-xii-11; above Pangi, 4000 ft., 16-i-12; Yembung, 1100 ft., 14-i-12; below Dosing, 1400 ft., 29-i-12; Rotung, 1400 ft., 28-xii-11—under bark and in rotten wood), and the Chinese frontier of North East Burma (Sansi Gorge, 6000-8000 ft.); and there are specimens in the Pusa collection from the Khasi Hills (1000-3000 ft.) and the Bengal Duars (Buxa). The description is not a satisfying one and is not accompanied by figures. Gebien has, however, examined the type, and assures me that the specimens referred to above are correctly named. I therefore take this opportunity of figuring the species.

Anthracias fairmairei, Gebien.

Mr. Kemp found this species under bark at Rotung, Abor Country, 1400 ft., 28-xii-11. It is represented in Gebien's collection by specimens from Batavia and from North Borneo.

Anthracias punctipennis, n. sp.

(Plate xliv, figs. 11, 11*a*.)

Abor Country (Rotung, 1400 ft., 28–29-xii-11; above Pangi, 4000 ft., 16-i-12). Numerous specimens found under bark.

[1] *Mélanges Exotico-Entomologiques*, fasc. 6, Moulins, July 12, 1913.

A slender, dull black insect allied to *A*[1]. *fairmairei*, Gebien, and *A*[1]. *tenuis*, Fairmaire, but differing from both in that the head is usually, like the rest of the body, unpolished. *Length*, ♂ 8·3-9·9, ♀ 9·8-11·0 mm.

The *head* in all forms resembles that of *A. fairmairei*, but is somewhat more rounded in front, is not or only slightly polished, and is perhaps even more closely punctured. The horns, too, are somewhat stouter than in that species.

The anterior angles of the *pronotum* are less prominent than in *A. fairmairei*, and the whole upper surface of the pronotum is more closely punctured.

The *scutellum* is punctured and about as long as broad.

The *elytra* are marked with numerous punctures arranged somewhat irregularly in double or treble rows. In this respect they resemble *A. tenuis* rather than *A. fairmairei*.

The *lower surface* resembles that of *A. fairmairei*, but is somewhat more strongly punctured.

The *antennae* and *legs* resemble those of *A. fairmairei*, but the first joint of the antennal club is transversely rectangular rather than triangular.

Leptoscapha[2] pulchra, n. sp.

(Plate xliv, fig. 13.)

Kalek, Abor Country, 3800 ft., 29-xii-11, several specimens found under bark. This is the first record of the occurrence of the genus outside Madagascar.

A slender, parallel-sided, almost Erotylid-like beetle, with reddish head and pronotum, and yellow-tipped dark metallic green or violet elytra, each crossed by a somewhat irregular yellow band. *Length* 3·5-4·7 mm.

The *head* is very like that of *L. spissicornis* in form, but does not bear such distinct sutures. The *pronotum* is also very like that of *L. spissicornis*, but its sides are somewhat more nearly parallel.

The sides of the *elytra* are straight, not lightly convex as in *L. spissicornis*.

The *mesothoracic episterna* and *metathoracic sternum* and *episterna* are closely and strongly, the *abdominal sterna* very finely punctured. In other respects the lower surface resembles that of *L. spissicornis*.

The *antennae* are black, more or less tipped with red at either end. They are 11-jointed. The first joint is a little longer and thicker than the second, which is the shortest of all. The next three or four joints are gradually thickened, the rest are uniformly thick. The terminal joint is oval and about twice as long as broad.

[1] *Toxicum* in Gebien's "Catalogue."

[2] Gebien has pointed out to me that this genus belongs not to the Ulominae, as he supposed (following Fairmaire) when his catalogue was prepared, but to the Tenebrioninae.

The right *mandible* is laminar in front of the molar tooth. It is faintly bifid at the tip, and has a well-marked dorsal tooth above the hairy and ventrally directed anterior end of the mandible-sac. The left mandible resembles the right in shape, but is perhaps a little more distinctly bifid at the apex and has the dorsal tooth less distinct.

The lacina of the *maxilla* is slender; the galea is about $2\frac{1}{2}$ times as broad and extends somewhat further forwards; the terminal bristles are scarcely as stout on the former as on the latter; both bear a dorsal row of long hairs, the former almost along the inner edge, the latter obliquely across the surface. The three proximal joints of the palp are rather short and are together about equal in length to the broader terminal joint, which is more or less barrel-shaped but is obliquely truncate distally.

The *labrum* is short and very broad; its palps resemble those of the maxilla, but have one joint less and have the terminal joint somewhat slenderer and vertically truncate.

The *mentum* is transverse, with a pair of lateral horns directed obliquely forwards.

The *legs* are yellowish; all the femora are somewhat swollen. The tibiae are broader at their distal than at their proximal ends. The tarsi are finely spinulose beneath.

Leptoscapha lignicola, n. sp.

(Plate xliv, fig. 12.)

Kobo, Abor Country, 400 ft., 8-xii-11. One specimen found in rotten wood.

A somewhat more elliptical and more uniformly coloured insect than the last; head and pronotum reddish, the posterior margin of the latter tinged with black; elytra blackish with a reddish tinge in the position of the yellow band of the preceding species and less definitely behind this. *Length* 4·0 mm.

The *head* and *pronotum* somewhat resemble those of the preceding species, but the latter is broader in proportion to its length, especially behind, and there are some differences in detail as will be seen on comparing figures 12 and 13 (pl. xliv).

The *elytra* are almost parallel sided—more so than in *L. spissicornis*, but less so than in *L. pulchra*; they are distinctly broader than in *L. pulchra*.

The *lower surface* of the body is very finely and almost uniformly punctured; otherwise it resembles that of *L. spissicornis* and *L. pulchra*.

The *antennae* and *legs* resemble those of *L. pulchella* in structure, but are uniformly brownish in colour.

Lyprops curticollis, Fairm.

One specimen was collected by Mr. W. K. Webb at Gopaldhara, Rungbong Valley, Darjeeling District, who passed it on to Mr. Stevens. It is recorded in Gebien's Catalogue from "India."

Eucyrtus splendens, Lacord.

This Himalayo-Malaysian species was found in the Abor Country in rotten wood at Yembung, 1100 ft., 14-i-12, and under bark at Rotung, 1400 ft., 28-xii-11.

Tearchus annulipes, Kraatz.

Specimens were found under bark in the Abor Country at Rotung, 1400 ft., 28-xii-11, and near Kalek, 2500 ft., 15-iii-12. We have others from the Dikrang Valley in the Dafla Hills, and from Pum-pa-taung, 3600 ft., in north-east Burma.

Amarygmus pilipes, Gebien.[1]

Gebien recently described this species from specimens in his collection from Annam (Phuc Son) and Pegu, from specimens in our collection from the Amherst District of Tenasserim (Third Camp, Western base of Dawna Hills), and the Abor Country (Kobo, 400 ft., 6-xii-11; Yembung, 1100 ft., 14-i-12; and Rotung, 1400 ft., 24-xii-11), and from specimens collected by Sauter in Formosa (Kosempo, Taihorin, Fuhosho). We have additional specimens from Tavoy, Harmutti at the base of the Dafla Hills, and the Dikrang Valley in the Dafla Hills.

Dietysus filicornis, n. sp.

(Plate xliv, fig. 14.)

Three specimens were collected in the Abor Country—one from under bark at Rotung, 1400 ft., 28-xii-11, and one from under bark and one from rotten wood at Kobo, 400 ft., 1–8-xii-11.

A compact, ovate, black beetle with slender legs and antennae. *Length* 9·4-10·6 mm.

The *head* is more or less obscurely punctured, scarcely if at all convex between the eyes, slightly depressed behind the rectangular clypeus which is about twice as broad as long. The canthus is more or less elevated over the base of each antenna, which is distinctly dorsal in position. The clypeus and labrum are separated by a transverse band of pale brown chitin. The labrum, which is somewhat hairy, is nearly as wide as the clypeus and less than half as long; its anterior margin is scarcely convex, its angles are strongly rounded. The suture between the clypeus and the frons is partly or entirely obsolete.

The somewhat obscurely punctured *pronotum* is a little broader than long in front, nearly twice as broad as long behind. Its sides are convex. Its convex dorsal surface is limited in all directions by a fine marginal groove.

The *scutellum* is equilaterally triangular.

[1] Described in *Arch. Naturg.* LXXIX (A), 1913, pp. 42-44, text-fig. 11, since the publication of the "Catalogue."

The *elytra* are striate but not punctate. The ridges between the grooves are narrowed behind, all extending right back into the posterior angles of their respective elytra.

The *prosternum* is bluntly but very strongly transversely keeled in front of the anterior coxae; it is longitudinally grooved in the middle between them. On either side of the groove it is somewhat angular above the abrupt posterior declivity. Both prosternum and *mesosternum* are strongly punctured. *The metasternum* is unpunctured, but is longitudinally grooved in the middle line.

The *abdominal sterna* are somewhat sparsely punctured or finely and indistinctly rugose.

The *antennae* are 11-jointed. The first joint is pear-shaped and about as long as the third joint, which is slender and almost cylindrical. The second joint is only about as long as wide. The fourth, fifth and sixth joints are slender and are about equal in length; any two of them would be together about equal to the second and third joints together. The remaining joints are of about the same length as these, but are thicker distally.

The *legs* are all slender. The femora and tibiae are uniformly black; the tarsi are somewhat reddish.

Dietysus nodicornis, n. sp.

(Plate xliv, fig. 15.)

One specimen was found under bark at Rotung, 1400 ft., in the Abor Country, 23-xii-11.

Very like the preceding in general appearance, but much larger. Its antennae, too, are stouter and moniliform. *Length* 14·3 mm.

The *head* resembles that of *D. filicornis*, but the band between the clypeus and labrum is black, not brown, and the suture between the clypeus and frons is clearly defined. Both head and *pronotum* are very distinctly punctured. The latter resembles that of *D. filicornis* in form.

The *scutellum* and the plates of the *lower surface* also resemble those of *D. filicornis*.

The *elytra* are somewhat more parallel-sided in front than in that species. They are similarly grooved, but the ridges between the grooves appear slightly more convex.

The first joint of the *antenna* resembles that of *D. filicornis*; the second is somewhat stouter than in that species; the third is somewhat abruptly swollen at the distal end. The fourth joint is about half as long as the third; its proximal end is somewhat thinner and its distal end somewhat thicker than are the corresponding ends of the third joint. The fifth joint resembles the fourth, but is only about two-thirds of its size. The sixth joint is about equal to the fourth in length, but is almost cylindrical in its proximal half, swelling out to resemble the fifth joint distally. The next four joints are about equally long, but enlarge gradually from base to apex. The terminal joint is similar, but is obliquely

truncate distally, the lower surface being long, the dorsal shorter and about equal in length to the truncation which meets the lower surface in an acute angle forming the apex of the antenna.

The *legs* resemble those of *D. filicornis*.

Dietysus latifrons, n. sp.

(Plate xliv, fig. 16.)

A single specimen was found under bark at Kobo, 400 ft., in the Abor Country, 8-xii-11.

A somewhat more glossy insect than the two preceding, with somewhat slender antennae, and ringed femora. *Length* 10·3 mm.

The *head* resembles that of *D. filicornis* except that it is much broader and perhaps a little smoother.

The *pronotum* is somewhat broader in front than in that species, and is obscurely grooved in the middle line.

The *scutellum* is shorter than in the two preceding species, and its sides are lightly convex.

The *elytra* resemble those of *D. nodicornis* in shape but their grooves are punctate and more lightly impressed. The areas between the grooves are flattened. The central (5th) of these areas on each elytron extends only about two-thirds of the way from the base to the tip; there is no crowding in the posterior angle as in the two preceding species.

The transverse keel of the *prosternum* in front of the anterior coxae, and the median groove between them, are less pronounced than in the preceding species. The keel sends back a median process into the groove, and the sides of the latter are not angulate.

Both *prosternum* and *mesosternum* are smooth and polished.

The *metasternum* and *abdominal sterna* resemble those of the two preceding species.

The *antennae* resemble those of *D. filicornis*, but are uniformly stouter, the penultimate joints being a little less, instead of a little more, than twice as long as broad.

The *legs* differ from those of the *D. filicornis* and *D. nodicornis* in that the femora are more distinctly swollen distally, and are banded with yellow below the apex.

Strongylium stevensi, n. sp.

(Plate xliv, fig. 17.)

Two specimens were found by Mr. Stevens at Dejoo, base of hills, N. Lakhimpur, 29-vi-10.

A glossy, hard-shelled, dark green insect, not unlike *S. sobrinum* in general appearance, but much larger. *Length* 18-19 mm.

The *head* resembles that of *S. sobrinum*. The width between the eyes is variable as in that species.

The *pronotum* also resembles that of *S. sobrinum*; but its anterior marginal rim is scarcely at all enlarged in the middle.

The *scutellum* is scarcely as long as in that species. The *elytra* are less coarsely punctured and less distinctly undulated.

The *prosternum* is narrower between the coxae than in *S. sobrinum*. The *remaining plates of the lower surface* are similar to those of that species.

The *antennae* are filiform, the third and fourth joints distinctly longer than the rest.

The *legs* of both specimens resemble those of the female of *S. sobrinum*, but are more strongly punctured.

Strongylium sobrinum, Dohrn.

A number of specimens of this Himalayan species were collected by Mr. Stevens at Dejoo, base of hills, North Lakhimpur, Assam, in June and July, 1910. Another specimen in Mr. Stevens' collection was obtained by Mr. W. K. Webb at Gopaldhara, Rungbong Valley, Darjeeling District. The Museum collection includes specimens collected by Peal in Sibsagar.

Strongylium cultellatum, Mäkl.

Two specimens were collected by Mr. Stevens at Silonbari, base of hills, North Lakhimpur, in May and June, 1911.

Strongylium westermanni, Mäkl.

Mr. Stevens collected a specimen at Dejoo, base of hills, North Lakhimpur, in July, 1910. The Indian Museum has one from Sibsagar.

Strongylium curvicomis, n. sp.

(Plate xliv, figs. 18, 18*a*.)

Four specimens were collected by Mr. Stevens at Dejoo, base of hills, North Lakhimpur, in June and July, 1910.

A glossy, olivaceous insect, covered with decumbent yellowish-white hairs which are grouped in small patches on the elytra. *Length* 16·0–17·5 mm.

The *head* differs structurally from that of *C. westermanni* only in its more swollen clypeus and larger, rounder and less transverse eyes accompanied by a longer canthus; it is perhaps a little more coarsely punctured The hairs both upon the head and upon other parts of the body differ from those of *C. westermanni* in being decumbent and more or less curved.

The *pronotum* is a little more coarsely punctured than in *C. westermanni*, and its anterior marginal rim is not enlarged in the middle as in that species. Its proportions vary from scarcely as broad as long, to a little broader than long.

The *scutellum* is triangular as in *C. westermanni*.

The *elytra* are a little more prominent at the shoulders than in *C. westermanni*; their rows of punctures are much more pro-

nounced, the punctures themselves being coarser, and the fine hair-bearing punctures on the intervening ridges confined to numerous small scattered patches.

The *plates of the lower surface* are more strongly punctured and hairy than in *C. westermanni*, as well as being greener in colour like the dorsal surface. Otherwise they are alike in the two species.

The *antennae* of the female are very broad and flat distally. The widening commences at the fifth joint, which is nearly half as wide distally as it is long. The sixth and seventh joints are successively shorter and broader; the eighth, ninth and tenth, which are shorter and broader still, are each about as wide distally as they are long. The apical joint is of about the same length but is a little narrower and is pointed at the apex.

The antennae of the male are broken, but the basal joints are slenderer, and the widening is scarcely recognizable before the sixth joint.

The *legs* resemble those of *S. westermanni* except in their greener colour, stronger puncturing, and decumbent hair, and in the fact that the anterior tibiae of the male are somewhat less strongly curved and are slightly swollen below the middle.