

Length from 52-73 millim.

A number of examples from New Caledonia.

Very closely allied to *Sp. albidicollis* of Porath, from the same locality, but undoubtedly differing in being smooth and polished instead of coriaceous. The colour, too, is distinct, the collum being by no means largely white.

EXPLANATION OF PLATE XVI.

- Fig. 1.* *Spirostreptus stenorhynchus*, sp. n.; head and first tergite of male. 1 a. Ditto of female. 1 b. Anal somite. 1 c. Anterior aspect of copulatory apparatus. 1 d. Protrusible portion of copulatory apparatus.
- Fig. 2.* *Spirobolus erythrocephalus*, sp. n.; head and first tergite of male. 2 a. Anal somite. 2 b. Anterior aspect of copulatory apparatus.
- Fig. 3.* *Spirobolus urophorus*, sp. n.; head and first tergite. 3 a. Anal somite.
- Fig. 4.* *Spirobolus Naresü*, sp. n.; head and first tergite. 4 a. Anal somite. 4 b. Anterior aspect of copulatory apparatus.
- Fig. 5.* *Spirobolus hoplurus*, sp. n.; head and first tergite. 5 a. Anal somite. 5 b. Anterior aspect of copulatory apparatus.
- Fig. 6.* *Spirobolus caledonicus*, sp. n.; head and first tergite. 6 a. Anal somite. 6 b. Anterior aspect of copulatory apparatus.

N.B.—All the figures are enlarged.

XLIV.—*Descriptions of some new Genera and Species of Longicorn Coleoptera.* By C. J. GAHAN, M.A., of the British Museum (Natural History).

THE genera and species described in this paper are all from Asia.

Philus costatus, sp. n.

Flavo-testaceus; prothorace quam longiore sesqui-latiore, dorso crebre punctulato, lateribus subrotundatis, postice sat distincte carinatis elytris crebre punctulatis, utrisque costis quatuor paullo elevatis, quarum duabus internis distinctioribus, obtectis; articulis antennarum a tertio ad decimum subæqualibus, apice intus angulatis.

♂. Antennis quam corpore longioribus; femoribus subtus longitudinaliter canaliculatis, canaliculis pilosis.

♀. Antennis medium elytrorum haud superantibus; femoribus subtus versus apicem subplanatis, vix canaliculatis.

Long., ♂ 20, ♀ 22-25 millim.

Hab. Siam (*J. C. Bowering*).

Head thickly punctured, with the punctures somewhat coarser towards the occiput; the front divided by a median longitudinal groove, and separated from the clypeus by a rather deep transversely arcuate groove. Prothorax densely but feebly punctured, with a very narrow space along the

middle, which is smooth, nitid, and impressed with a faint line; sides distinctly carinate in an oblique direction on their posterior half, the carina becoming obsolete in front of the middle. Scutellum and sides of mesonotum rather thickly punctured. Elytra closely punctulate, each with three or four raised lines or costæ, of which the two innermost are usually very distinct and unite posteriorly, to be continued a little further back as a single line; the third costa is less distinct, and a little before the apex bends in to join the posterior end of the common stem of the two inner costæ; the fourth line is still less distinct and is sometimes almost quite obsolete. A very faint pubescence, consisting of very short suberect fulvous hairs, is present over all parts of the body.

PARAPHILUS, gen. nov.

Allied to *Vesperus*, but differing from that genus by the following characters:—Head shorter, gradually narrowed from the eyes backwards, and without a distinct constriction or neck. Prothorax slightly rounded at the sides, and scarcely narrower anteriorly than at the base, its lower front margin not deeply emarginate; prosternal process somewhat wider, so that the anterior coxæ are less approximated. First abdominal sternite of the female more sharply pointed in front. Third joint of the tarsi less deeply cleft.

The great resemblance which the unique species of this genus presents to some of the species of *Philus* is further evidence in favour of the view that *Vesperus* is nearly related to, and should be placed near, the Monodesmid group of Prionidæ.

Paraphilus duplex, sp. n.

Testaceus, fulvo tenuissime pubescens; elytris pallidioribus; prothorace paullo transverso, supra subnitido, sat dense minuteque punctulato; elytris crebro punctulatis, pallidis, versus basin subnitidis testaceis, (♂) apicem abdominis paullo superantibus, (♀) segmentum primum abdominis ventrale vix excedentibus.

Long. ♂ 17–21 millim.

Hab. China: Pekin (*Swinhoe*); Foochow (*J. de la Touche*).

Head dull reddish testaceous, closely and minutely punctured. Prothorax somewhat nitid above, minutely and rather densely punctured, the sides slightly rounded in the middle, and without any trace of a lateral carina. Elytra in the male completely covering the abdomen, closely punctulate, pale yellowish testaceous in colour, with the base more reddish and slightly nitid, each narrowed and subacuminate at the apex; in the female scarcely reaching beyond the second ventral segment of the abdomen, deliscent at the suture, each rounded at the apex.

Antennæ of the male a little longer than the body, first joint short, third to tenth subequal to one another, each nearly three times as long as the first, the eleventh a little longer than the tenth; the joints from the third are all slightly flattened and are a little thickened, but scarcely angulate at their distal ends. The antennæ of the female extend beyond the apex of the elytra, but do not reach to the tip of the abdomen, and, besides being shorter, are slenderer than in the male.

PSEUDOPHILUS, gen. nov.

Head strongly exserted, with the upper side oblique, and slightly depressed between the eyes; front rather short, subvertical, with its upper portion longitudinally impressed in the middle, its lower part with a somewhat elliptical impression circumscribing a narrow transverse area. Mandibles and palpi of moderate length. Inner border of each of the antennary condyles forming a slightly projecting process above. Antennæ of the male about equal in length to the body; first joint slightly curved, thickened towards its apex, third joint scarcely longer than the first, the fourth much shorter, the fifth distinctly longer than the fourth, the sixth to eleventh gradually increasing in length. Antennæ of the female reaching to very little beyond the middle of the elytra. Eyes coarsely faceted, emarginate, with the lower lobes rather large. Prothorax slightly constricted and transversely impressed near the base and apex, with its sides slightly rounded in the middle; its greatest breadth about equal to its median length. Scutellum somewhat concave from side to side; the anterior part of the mesonotum, which is separated from the scutellum by a transverse groove, has no stridulating surface, but bears instead an impressed line along the middle, on each side of which it is rather coarsely and thickly punctured. The elytra, which are a good deal broader than, and about three and a half times as long as, the prothorax, are rounded at the apex. The anterior cotyloid cavities are angulate externally and are somewhat open behind. The legs, which slightly increase in length from the anterior to the posterior, have the femora somewhat compressed and broader towards the middle of their length.

This genus seems to me to be best placed in the group of the Hesperophanides, of which it possesses all the most essential characters. It has some resemblance in general appearance to the Prionid genus *Philus*, and, like the Prionidæ in general, it is without a stridulating surface to the mesonotum.

Pseudophilus testaceus, sp. n.

Brunneo-testaceus, fulvo sparse erecteque setosus; capite dense punctato; prothorace subrugoso-punctato, disco nonnihil leviore,

linea media elevata plus minusve distincta; clytris fulvo tenuissime pubescentibus et sparse setosis.

Long. 27-31 millim.

Hab. Valley of the Tigris and Euphrates.

Prothorax rather strongly and somewhat rugosely punctured at the sides; the disk sometimes rather smooth, especially posteriorly, and provided with a median, slightly elevated line or carina, which in some examples is almost obsolete. The elytra each bear one or two feeble or almost obsolete longitudinal costæ, and are furnished with small punctures of two kinds:—1st, the very minute pits from which the short hairs of the pubescence arise, and, 2nd, the somewhat larger and sparser pits from which the longer setæ spring; they are of a testaceous colour, somewhat darker towards the base.

The female of this species, which was taken at Fao, on the Persian Gulf, has been presented to the Museum by Mr. W. D. Cumming; for the male, taken at Bussorah, I am indebted to the liberality of Mr. R. Wylie Lloyd. A much damaged specimen, which has long been in the Museum collection, was brought from near the ruins of Nineveh.

Niphona tibialis, sp. n.

N. cylindracea similis, sed prothorace lateraliter minus valde dentato, tibiis intermediis (♂) versus apicem intus crassatis et valde spinosis.

Long. 22 millim.

Hab. Canara, South India (*Bell*).

Pubescence greyish, with a number of small scattered rust-coloured spots. Prothorax rather darker than the rest of the upperside, with two short feeble ridges running close together along the middle of the disk, and, external to these, two or three small tubercles on each side of the disk. There is a rather small but distinct tooth low down on each side a little behind the anterior margin of the prothorax, and a larger blunter tooth or tubercle higher up and nearer to the middle. The elytra are thickly and strongly punctured, though the punctures are to some extent obscured by the close pubescence; each has at the base a few small tufts of dark brown hairs, and, just below the shoulder, two very short dark brown vittæ; a pubescence of a paler grey forms two somewhat irregular and ill-defined bands crossing the elytra, one before, the other behind, the middle. In the male the fifth abdominal sternite has a peculiar form; the posterior half is marked by two grooves, which divide off two lateral portions from a median portion; the median part is flattened, and is transversely truncate behind; the lateral portions are slightly curved downwards, and are produced behind into two processes, which arch over and meet in the middle line. The second abdominal segment has a narrow transverse depression

on each side anteriorly, which is covered over by the fringe of fulvous hairs attached to the hind margin of the first segment. The anterior tibiæ of the male are strongly bent inwards from about the middle of their length, and each bears a spine on the inner side between the middle and apex; the tibiæ of the middle pair are strongly bent inwards towards their apex, and each has a strong sharp spine placed on the inner side of this somewhat thickened apical portion. The trochanters of the middle pair are also produced into a small spine at their extremities.

This species has a great resemblance to *Niphona cylindracea*, White; but the latter is more strongly toothed on the side of the prothorax, its middle tibiæ in the male are not bent in strongly at the apex, and are not spined, nor are the trochanters of the same pair spinose at their extremities; the lateral processes of the last ventral segment of the male are also shorter, and in those examples that I have seen are not curved downwards towards the middle line.

ALIDUS, gen. nov. (*Niphonide*).

Prothorax angulate or feebly tuberculate at the middle of each side. Mesonotum without stridulating surface, but with a smooth polished line along the middle. Prosternal and mesosternal processes with their opposed faces subvertical, both processes transversely rugulose and longitudinally canaliculate; the horizontal face of the prosternal process somewhat dilated posteriorly to fit into corresponding depressions on the sides of the coxæ. Eyes rather small, subdivided. Antennæ of the male nearly one half longer than the body; those of the female about equal in length to the body; first and third joints subequal in length, the fifth longer and slightly curved, each of the succeeding joints, the eleventh excepted, subequal to or slightly shorter than the third.

This genus may be recognized by the rather exceptional character, for this group, which it possesses in having the sides of the prothorax tuberculate in the middle.

Alidus biplagiatus, sp. n.

Dilute fuscus, maculis punctisque flavo-albidis sparsim aspersis, prothoracis dorso plaga ovali fusco-velutina utrinque ornato. Long. 23-25, lat. 9-11 millim.

Hab. China (*J. C. Bowering*) and Assam (*Atkinson*).

Dark brown, with darker brown points and numerous minute scattered yellowish-white points and spots, the most conspicuous of which are a spot on the base of the fourth antennal joint, a small patch on the middle of each tibia, and a few spots forming a narrow zigzag band between the middle and posterior thirds of each elytron. Prothorax with a large

oval dark brown velvety area on each side of the disk, which is bounded by a narrow pale yellowish margin. The clytra are furnished with some sparsely scattered granules towards the base, and with some sparse punctures, each of which is marked in position by a small dark spot.

This species may be easily recognized by the two large oval and dark brown velvety areas on the pronotum.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

December 21, 1892.—Prof. J. W. Judd, F.R.S.,
Vice-President, in the Chair.

The following communications were read:—

1. "On a Sauropodous Dinosaurian Vertebra from the Wealden of Hastings." By R. Lydekker, Esq., B.A., F.G.S.

In addition to *Hoplosaurus armatus* and *Pelerosaurus Conybearei*, there is evidence of another large Sauropodous Dinosaur in the Wealden, now known as *Morosaurus brevis*. Up to the present time it has been impossible adequately to compare *Hoplosaurus armatus* with *Morosaurus brevis*; but recently Mr. Rufford has sent to the British Museum an imperfect dorsal vertebra of a large Sauropodous Dinosaur from the Wealden of Hastings, which enabled the required comparison to be made. The Author describes the vertebra, contrasts it with that of *Hoplosaurus armatus*, and gives presumptive evidence that it should be referred to the so-called *Morosaurus Becklesi* (Marsh), which apparently cannot be separated from *M. (Cetiosaurus) brevis*. He has not been able to compare Mr. Rufford's specimen with the dorsals of the American *Morosaurus*, in order to discover whether the English Dinosaur is correctly referred to that genus.

2. "On some additional Remains of Cestraciant and other Fishes in the Green Gritty Marls, immediately overlying the Red Marls of the Upper Keuper in Warwickshire." By the Rev. P. B. Brodie, M.A.

The vertebrate remains occur in a very thin band of marly friable sandstone lying between two beds of green marl, though in some places the same bed has itself no admixture of sandy material. Bones and teeth are so numerous that it might almost be called a bone-bed. It does not exceed three inches in thickness. It contains ichthyodorulites of Cestraciant fishes, abundant palatal teeth of *Aerodus keuperinus*, ganoid fish-scales, and abundant broken bones, some of which may belong to fishes, others to labyrinthodonts, and amongst the latter a fragment of a cranial bone.

3. "*Calamostachys Binneyana*, Schimp." By Thomas Hick, Esq., B.A., B.Sc. Communicated by J. W. Davis, Esq., F.G.S., F.L.S.

A number of preparations lately placed in the hands of the Author by Mr. W. Cash, of Halifax, give much additional information on many important points of detail connected with the