



LXV.—New species of Pyralidæ from the Khasia Hills

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which are directed, one in front, the other behind: the first of these branches becomes the axis of the glandular tubes of the *first order* so-called; the second enlarges to form one or two oval reservoirs, into which there open some hundreds of glandular tubes of the *second order* so-called. These latter are barely 60μ in diameter; they are but a third of the size of the others, but four times more numerous.

In the genera *Ephippigera*, *Meconema*, &c. I have noticed in the midst of the tubes of the second order a special bundle more strongly coloured, formed by half a dozen cæca.

Lastly, in the Locustidæ there is to be found a pair of prostatic glands with a lenticular appearance.

In the Mantidæ there are four kinds of appendicular organs:—

1. Some fifty tubular cæca which are glandular.
2. About twenty shorter cæca gathered into knots, which are also glandular in character.
3. A pair of large vesiculæ seminales, which are concealed by the organs before mentioned.
4. A pair of prostatic glands.

From the histological point of view all these organs are, as a rule, made up of a single layer of cells supported on a basilar membrane; around the vesiculæ a peritoneal envelope is plainly visible.

There is a further remarkable fact, namely the development of very tiny crystals in the glandular tubes just before copulation.

LXV.—*New Species of Pyralidæ from the Khasia Hills.*

By W. WARREN, M.A., F.E.S.

THE types of the species now described are, like those of my previous papers, in the possession of the Hon. Walter Rothschild. The majority, as will be seen, are from the Khasia Hills, a district whose richness appears to be by no means yet exhausted.

Family *Pyralidæ*.

Subfamily *CHRYSAUGINÆ*.

Genus *LOPHOPALPIA*?, Hmps., MS.

Lophopalpia? *chalybopicta*, sp. n.

Fore wings deep brown, with a strong chalybeous reflection

in certain lights except at base, along the costa, along the inner line, and over the outer third of wing; first line from one fourth of costa to near the middle of inner margin, broader above; a deep brown spot at end of cell; second line from shortly before apex to inner margin shortly before anal angle, bent outwards in middle, edged inwardly with deeper velvety brown, which broadens into a blotch towards the discal spot; marginal area dull brown, with steely reflection along the hind margin; fringe deep coppery brown, with a lustrous tinge. Hind wings olive-ochreous, tinged with darker olive; central area from near base to hind margin occupied by a dull fuscous elongated triangle, containing towards hind margin two broad brown bars, separated and preceded by steely scales; fringe like fore wings from apex to elbow, thence olive-fuscous like the inner margin. Abdomen ochreous, suffused with dark fuscous; head, thorax, face, and palpi dark purple-brown with lustrous reflections. Underside of both wings towards margin coppery red; base and disk of fore wings cinereous; base of costa bronze-black; bed of hairs yellowish, with dark hairs crossing them from the costa; fringes of both wings dark bronzy brown.

Expanse of wings 48 millim.

Several males from the Khasias.

PROROPERA, gen. nov.

Fore wings with costa straight, slightly indented beyond middle; apex produced, bluntly rounded; hind margin with a strong blunt beak in middle, concave on either side; anal angle rectangular. Hind wings with apex rounded and squared; hind margin straight to end of first median, where it is sharply bent inwards, thence rounded off into the inner margin. Head and face hairy; basal joint of male antennæ long and thick, the shaft lamellate, pubescent, and curving; tongue present; ocelli and maxillary palpi absent; labial palpi porrect, twice the width of head, laxly scaled, with terminal joint indistinct; a thick bed of scales along base of costa of fore wings beneath; hind tibia with four spurs. Neuration: fore wings, cell half the length of wing; discocellular acutely angled inwards; first median at four fifths, second at seven eighths; third and lower radial from lower angle of cell; upper radial from upper angle; last three subcostals stalked from upper angle, first and second free, first strongly curved upwards near its base towards the costal. Hind wings with the discocellular produced obliquely below; the two subcostals from upper angle of cell, the first anasto-

mosing for a short distance with the costal; third median and radial on a short stalk, first and second medians as in fore wings. Scaling dense and somewhat glossy.

Type *Proropera vinosalis*, sp. n.

Proropera vinosalis, sp. n.

Fore wings vinous red, with scattered black scales; traces of two parallel deeper red antemedian lines, running obliquely outwards from costa to below middle, then straight and vertical to inner margin; a large roundish diffuse black discal spot, followed by a cloud of blackish scales; two postmedian zigzag deep red lines, marked with black scales in their upper half, the second rising from a small pale yellowish costal spot; fringe vinous red, preceded by a row of irregular black dashes, and these by black scales on a ground paler than the rest of the wing. Hind wings glossy fuscous, slightly tinged with red, with traces of two dark parallel lines before hind margin; fringes vinous red; the red of the fringes and the two lines stop short opposite the incision in hind margin, the inner marginal area being without markings and fuscous only. Head, face, thorax, and abdomen bright vinous red; extreme tip of abdomen pale. Underside glossy dark cinereous.

Expanse of wings 24 millim.

One male from the Khasias.

Subfamily *EPIPASCHINÆ*.

Genus *PARASARAMA*, Warr.

Parasarama conjuncta, sp. n.

Fore wings white, with olive and fuscous markings and suffusion; a white blotch at base of costa; basal area olive, its outer edge darkened with fuscous, the upper part vertical, then running out along the submedian to the inner margin just before the middle; on centre of costa a subquadrate olive blotch, with fuscous scales on it, enclosing a tuft of raised white scales in cell and followed by a large white oval costal blotch; exterior line dark fuscous, thick and bluntly dentate, curved outwards round the white blotch and attaining the inner margin at two thirds, where it is preceded by a central line, also fuscous, of two or three curves, not reaching the median vein; marginal area olive, much darkened with fuscous scales, containing a row of white submarginal spots; this dark marginal shade extends inwards as far as the central

line, filling up the space between the first and third median nervules, and is thus connected with the lower end of the central costal blotch; fringe olive, chequered with fuscous, with a white apical spot, and preceded by a row of small white marginal dots. Hind wings white, with a broad diffuse olive-fuscous border; the whole of the space below the median vein from base to the border also suffused with olive, so that but a small portion of the wing towards base remains of the pale ground-colour; traces of a curved fuscous submarginal line, distinct only on the first median and internal vein, where there is a darker spot edged outwardly by a whitish one; fringe and margin as in fore wings. Head, face, palpi, thorax, and abdomen olive-ochreous; the metathorax and two basal segments of abdomen broadly white. Underside whitish; both wings suffused with dark fuscous towards base and apical region; the outer line very distinct, especially on the hind wings.

Expanse of wings 34 millim.

One male from the Khasias.

There is a female in the British Museum collection.

In this species the first subcostal of the hind wing approximates to, but does not anastomose with, the costal vein.

Parasarama rufitinctalis, sp. n.

Fore wings white, dusted finely with olive-green scales; a small white costal blotch at base; basal area restricted, fuscous olive, edged with darker, not reaching beyond one fourth of inner margin, where there is a blackish spot; a central costal dark blotch above the two cell-tufts, which are of raised black scales, with white scales beyond them; exterior line blackish, rather thick, running obliquely outwards, and curved in over the three median nervules, below which it disappears;—marginal area fuscous black, strongly tinged with vinous, the vinous scales being massed along the veins, leaving a slightly paler edging to the outer line and a whitish spot on the costa; fringe vinous, chequered with dark fuscous at the ends of the veins, where there is a series of small pale dots. Hind wings pure white, with a deep fuscous border tinged with reddish, its inner edge running from four fifths of costa to the margin at the first median, there narrowed to the anal angle, with slight darker projections along the veins; fringe as in fore wings, with a pale basal line, preceded by a broad dark fuscous line. Head, face, thorax, and abdomen white; collar and patagia streaked with ochreous olive; abdomen mixed with grey scales and becoming ochreous

towards anal segments. Palpi white beneath and internally, black externally. Underside white, with hind margins of both wings and costa of fore wings dark fuscous.

Expanse of wings 30 millim.

One male from the Khasias.

There is a female of this species in the British Museum collection from Sarawak.

Genus SCOPOCERA, Moore.

Scopocera aglossalis, sp. n.

Fore wings pale ochreous, almost entirely covered with olive and fuscous scales; the base dark fuscous; first line at one third, bent in the middle, dark fuscous, preceded by a pale band and followed by diffused fuscous; a small obscure dark cell-spot; second line at two thirds, thick, forming an outward curve to the submedian fold, thence straight to inner margin not far before the anal angle, followed by a paler line; marginal area fuscous, darker at costa, and with a rosy tinge in places; a rosy diffused streak below the costa and along the submedian fold; fringe olive-fuscous. Hind wings olive-fuscous, with a darker denticulate central and postmedian curved line. Head, thorax, and abdomen concolorous; the abdomen somewhat darker. Underside paler, with the outer line marked in both wings; the disk of fore wings tinged with cinereous.

Expanse of wings, ♂ 30, ♀ 36 millim.

A few from the Khasias.

TRICHOTOPHYSA, gen. nov.

Fore wings of male with costa slightly curved; apex blunt; hind margin curved, not very oblique; inner margin convex in the basal half. Hind wings with curved hind margin. Labial palpi slender, upcurved in front of face, the second joint long, reaching well above vertex, the third short and acute; maxillary palpi very fine, acute; antennæ pubescent, with a short tuft of scales from their base behind; tongue and ocelli present. Neuration: fore wings, cell not half as long as wing; the discocellular bent, followed by a fovea of crumpled membrane between the upper radial and the stalk of the last three subcostals, causing a distortion of all the veins and a bend in the costa itself above it; the fovea is covered above by a flat comb of curled scales; the median vein is much bent downwards towards end of cell, the three median nervules all rising near together and the lower radial

from just above the angle; upper radial sinuous from below the upper angle; first, second, and stem of the other three subcostals curved at origin, the third, fourth, and fifth all starting from a point. Hind wings with costal closely approximated to, but not actually anastomosing with, the first subcostal nervule, which leaves the other close to their origin; first median at two thirds, second shortly before angle of cell, third and radial together from the angle.

Type *Trichotophysa olivalis*, sp. n.

Trichotophysa olivalis, sp. n.

Fore wings olive, tinged in parts with reddish, and dusted and suffused with dark fuscous; the central area between the lines darkest; first line at one third, wavy, obscure; the basal area paler, tinged with rosy, and with a black spot at base; second line at two thirds, curved and crenulate to inner margin at two thirds; a black spot at end of cell before the olive comb of scales; marginal area olive, with a darker fuscous shade in the middle, most evident on costa; a row of black spots before the olive fringes. Hind wing semitransparent, pale olive, tinged with rosy and fuscous, with traces of a denticulate submarginal grey line; fringe as in fore wings. Head and thorax olive; abdomen reddish, with paler anal tuft; metathorax with a dark brown tuft. Underside glossy, dull olive; the fore wings smeared with darker.

Expanse of wings 30 millim.

One male from the Khasias.

Subfamily *PYRALIDINÆ*.

POLYCAMPISIS, gen. nov.

Fore wings elongate, narrow; costa uneven, bulged at one third and two thirds, concave between the bulges and between the second and apex; apex shortly but strongly produced; hind margin shortly but strongly incised below apex, then remarkably gibbous; anal angle obtuse and rounded off; inner margin convex. Hind wings with apex somewhat produced, the hind margin slightly excised below it, then faintly curved; both wings beneath with strong wisps of hair from the base; fore wings with an oval indentation beneath at costa close to base, appearing above as a scale-covered blister. Antennæ of male simple, filiform, short; forehead oblique, hairy; maxillary palpi large, laxly haired, triangular; labial palpi decumbent, hairy, blunt, five times as long as head; the forehead, the maxillary and the labial palpi united to form a

single plane; tongue very small; ocelli invisible; hind tibiæ with four spurs. Neuration: fore wings, cell about half as long as wing; discocellular deeply angled; first median at three fourths, second just before angle of cell, third from the angle; lower radial from just above the angulation; upper radial stalked with the last three subcostals, the third and fourth rising on a common stem from the fifth; first and second subcostals free. Hind wings: costal free; the subcostals on a long stalk; discocellular angulated, the lower arm very oblique; medians and radial as in fore wings.

Type *Polycampsis longinasus*, sp. n.

Polycampsis longinasus, sp. n.

Fore wings fulvous, mixed with yellowish and ferruginous; the two lines pale, diffuse, obliquely curved; first from middle of costa to inner margin at one fourth; second from apex to inner margin at middle; fringe ferruginous (?). Hind wings black-brown, as if burnt, the hind margin fuscous towards apex and the fringe lighter fuscous. Thorax ferruginous mixed with grey; metathorax pale, whitish; abdomen black-brown, with pale anal segment; palpi grey above, deep coppery red on sides and beneath. Underside fuscous cinereous; disk of fore wing with chocolate-brown hairs; hind wing more cinereous, with a pale curved submarginal line.

Expanse of wings 34 millim.

One male from the Khasias.

The type being somewhat rubbed, the coloration of the fore wings cannot be given with accuracy.

XENOMILIA, gen. nov.

Fore wings narrow, elongate; costa strongly shouldered at base, then faintly incurved to apex; apex produced, falcate; hind margin with a prominent blunt rectangular projection at end of the second median nervule; concave above and below, but more strongly below; the upper half running slightly outwards, the lower very obliquely inwards; anal angle rectangular; inner margin convex towards base. Hind wings decidedly broader than fore wings, with both angles and the hind margin rounded. Abdomen of male long, with strong anal tuft; antennæ of male with a long basal joint, somewhat thickened at its upper end, the shaft simple, lamellate, forming an angle with basal joint; forehead with tuft of hair; labial palpi long, rostriform, decumbent, laxly scaled, terminal joint as long as second; no maxillary palpi or tongue; ocelli distinct; legs stout; hind tibiæ with four

spurs; retinaculum a long recurved tuft of hair-like scales from the costal vein; frenulum stout. Neuration: fore wings, cell fully half as long as wing; the discocellular very oblique in its lower arm; first median at five sixths, second close before lower angle of cell, third and lower radial from the angle; upper radial stalked with the last four subcostals; the radial and the second subcostal rising from the same point, third subcostal halfway between second and the origin of fourth and fifth. Hind wings with costal free, the two subcostals stalked; medians and radial as in fore wings.

Type *Xenomilia humeralis*, sp. n.

Xenomilia humeralis, sp. n.

Fore wings reddish fawn-colour, deeper at base and along hind margin, dusted with black specks; first line double, at one third, slightly oblique outward, zigzag, dark grey; second line also double, at four fifths, sinuous, parallel to hind margin, followed above anal angle by a blackish shade. Hind wings paler, more ochreous, with a broad dark border along hind and inner margin. Head, palpi, face, and thorax reddish; abdomen dark grey. Underside duller, the exterior line single and broad.

Expanse of wings 38 millim.

One male from the Khasias.

HETEROCRASA, gen. nov.

♀. Fore wings elongate; costa curved; apex produced but blunt; hind margin obliquely rounded. Hind wings with both angles rounded, the hind margin slightly curved. Fore-head tufted; labial palpi long, rough with hairs above and below, the third joint pointed, drooping; maxillary palpi invisible; tongue excessively minute; ocelli very indistinct, pale; antennæ filiform. Neuration: fore wings, cell half the length of wing; postmedian at three fourths, third and lower radial from end of cell, second halfway between first and third; first and second subcostals free; upper radial short-stalked with the other three; the three rising almost from the same point. Hind wings with costal free; the two subcostals from upper end of cell; medians as in fore wings, but the radial well above the lower angle; discocellular strongly angulated, the lower angle blunt.

Type *Heterocrasa expansalis*, sp. n.

Heterocrasa expansalis, sp. n.

Fore wings ochreous, with a pink suffusion, which is

strongest at base and along costa and inner margin; the two lines slightly darker, the first at one fourth, curved, the second at three fourths, nearly parallel to hind margin; a slightly darker discal spot; fringe concolorous. Hind wings ochreous, hardly tinged with pink, but dusted with pale fuscous, with a faint submarginal darker line. Head, face, thorax, and abdomen ochreous, more or less tinged with pink, the patagia pink. Underside like upper, but the fore wings darker, being dusted with fuscous.

Expanse of wings 40-48 millim.

Many females, but no males, from the Khasias.

Genus ORTHOPYGIA, Rag.

Orthopygia pellucidalis, sp. n.

Fore wings pale pearly olive, the basal area and a shade beyond the second line slightly deeper olive; the lines pure white, both antemedian and postmedian vertical and wavy; the median area yellowish olive, darker towards inner margin, and with a patch of brown scales on the inner side of postmedian line; cell-spot minute; costal edge of median area dark, with three white dots; fringe concolorous with a row of concise black dots at base. Hind wings like fore wings, the basal and median areas both dusted with fuscous atoms. Head, thorax, and abdomen concolorous. Underside duller, with only the outer of the two lines shown, dull white; the small white costal dots extended to the base.

Expanse of wings 18 millim.

One male from the Khasias.

Genus PYRALIS, Linn.

Pyralis rectisectalis, sp. n.

Fore wings pinkish ochreous, sparsely dusted with black scales; basal area dull chocolate, edged by the first line at one sixth, which is perfectly straight, dull white; marginal area dull olive, edged inwardly by the second line at five sixths, which is also dull white and nearly straight; fringe olive, with a row of distinct triangular black spots at base; cell-spot denoted by a few black scales. Hind wings with the costal area whitish; basal area as in fore wings, but more restricted, followed by a distinct black spot; second line curved and edged inwardly by blackish spots, two larger ones below the costa and two before the inner margin; marginal area and fringe as in fore wings. Head, thorax, and

abdomen pinkish ochreous. Underside less pink; the basal and marginal areas of fore wings dark brown, broader than above. Hind wings with basal area much dusted with dark brown, and with a strongly marked, curved, dark brown central line; cell-spot black, distinct.

Expanse of wings 26 millim.

One male from Peermaad.

A very distinct species.

Genus PEUCELA, Rag.

Peucela fumosalis, sp. n.

♀. Fore wings pinkish ochreous, the basal and marginal areas and the hinder part of the median area suffused with fuscous scales; first line at one third, bluntly elbowed in middle, whitish, finely edged with darker; second line beyond two thirds, crenulated, whitish, edged internally, except at costa, with a thick dark line; costa fuscous, dotted with ochreous; a rather large blackish cell-spot; a row of black triangular marks along hind margin; fringe reddish grey, ochreous towards base. Hind wings wholly suffused with fuscous, reddish ochreous along inner margin; a pale line edged outwardly with darker at one third, followed by a small dark cell-spot; a curved and crenulate submarginal line, edged internally with dark; marginal line dark; fringe darker than in fore wings, with a thick dark dividing line. Head, thorax, and abdomen ochreous, dusted with fuscous. Underside of fore wings thickly dusted with fuscous, of hind wings pale ochreous, more sparsely dusted; both wings with discal spot and outer line marked.

Expanse of wings 26 millim.

One female from the Khasias.

Peucela rubrifuscalis, sp. n.

Fore wings greyish stone-colour, sprinkled with black atoms; antemedian line at one fourth, curved outwards in upper half and inwards below, black, edged internally with red, entirely red in the lower half, the reddish tinge extending along the costa to the base; a small dark cell-spot; postmedian line from three fourths of costa to near anal angle, sinuous outwards in middle, inwards above and below, blackish, preceded by a very fine dark line of blackish atoms; marginal area black-brown, the apical region reddish; fringe black-brown and reddish, chequered, with a pale basal line; costa between the two lines dotted with black. Hind wings

like fore wings, with two curved blackish lines, the ante-median preceded by a reddish and fuscous shade; the post-median followed by a curved red line; hind margin and whole apical area tinged with red. Head, thorax, and abdomen concolorous with ground-colour, the abdomen red-tinged. Underside with basal and marginal areas broadly red.

Expansion of wings 24 millim.

One male from the Khasias.

Genus COMARIA, Rag.

Comaria unilinealis, sp. n.

Fore wings pale brick-red, darker along costa, which is marked with dark slight points; a small reddish discal dot; an oblique line at three fourths parallel to hind margin, pale yellowish internally, edged beyond with dark red-brown; marginal area brick-red; fringe concolorous, with a pale basal line and darker dividing line. Hind wing dull reddish grey, dusted with darker, with a very broad dark grey border. Head, thorax, and abdomen reddish, dusted with dark atoms. Underside like upper.

Expansion of wings 24 millim.

One female from Masuri.

Genus ZITHA, Wlk.

Zitha imperatrix, sp. n.

Fore wings rich coppery red, thickly dusted with black atoms except in the space between the first median nervule and the submedian, where the ground-colour is paler and brighter; costa to near the apex broadly putty-colour, its edge marked with numerous oblique short black strigæ; the two lines oblique, thick, black, neither reaching the costa, but starting from the lower edge of the costal streak; the first at one third, slightly sinuous, edged internally with pale coppery, which on the inner margin forms a small yellow spot; second line similar, at two thirds, edged outwardly towards inner margin with paler and likewise with a minute yellow spot on inner margin; space between costal streak and the median vein most thickly sprinkled with dark atoms; fringe dark coppery, with two or three lighter lines. Hind wings paler, bright coppery yellow, redder towards inner and hind margins, with a dark red-brown line from just above anal angle, not reaching the costa, and traces of a central line on inner margin only; fringe as in fore wings, but with dark

coppery basal line. Abdomen with two basal and the anal segments coppery yellow, intermediate segments purple-black (probably from grease); thorax, head, and face coppery brown; palpi putty-colour. Underside dull reddish brown, with strong fuscous mottling; the outer line dark in both wings, with a paler edge; costa of fore wing with alternate yellowish and black spots; legs ochreous, dusted with reddish and fuscous.

Expanse of wings 36 millim.

Two or three males from the Khasias.

A very remarkable looking and handsome species.

Genus ULOTRICHODES, Rag.

Ulotrichodes novalis, sp. n.

Fore wings yellowish ochreous, dusted in places with rather coarse blackish scales; first line at one fourth, vertical, sinuous; second line at three fourths, at first parallel to hind margin, bent in below the median and much thickened, reaching inner margin shortly before anal angle; marginal area thickly dusted with blackish; a large black cell-spot; costa regularly dotted with black; fringe concolorous. Hind wings whitish towards base, becoming pale ochreous outwardly; a submarginal darker line, parallel to hind margin. Head, thorax, and abdomen concolorous with fore wings. Underside paler and duller.

Expanse of wings 18 millim.

One male from Bombay.

Subfamily *ENDOTRICHINÆ*.

NEUROPHRUDA, gen. nov.

Fore wings narrow, with straight costa; apex produced, blunt; hind margin very oblique, slightly bent in middle. Hind wings narrow, with hind margin slightly bent. Antennæ (♂) lamellate, thick, and somewhat flattened; labial palpi porrect, rostriform, decumbent; maxillary palpi small; tongue present; ocelli invisible; legs long. Neuration: fore wings, cell about half as long as wing; discocellular in-angled; first median at three fourths; second, third, and lower radial all close together from lower end of cell; upper radial from middle of discocellular; last three subcostals stalked, the fifth rising near the cell, and approximated to the upper radial near hind margin; second free; first absent.

Hind wings with first subcostal anastomosing with costal; medians and radial as in fore wings.

Type *Neurophruda daulialis*, sp. n.

Neurophruda daulialis, sp. n.

Fore wings orange, with bright fulvous markings; first line curved obliquely inwards, preceded below the median by an acutely angled tawny blotch; second line from three fourths, oblique inwards for one third, then forming a very acute angle towards hind margin, which it nearly touches, again angled and bent below the discal mark to inner margin about middle; space between the two lines beneath the median fulvous; marginal space with fulvous streaks radiating from the outer edge of second line towards hind margin; discal mark fulvous, oblique; fringe yellow, with a fulvous line at base. Hind wings yellow, paler towards base, with outer line and marginal area as in fore wings; on the hind margin at anal angle are four raised dots of coal-black scales. Head, thorax, and abdomen orange, mixed with fulvous. Under-side dull yellow, with fulvous scales interspersed.

Expanse of wings 14 millim.

One male from the Khasias.

Superficially resembling somewhat a small *Daulia*.

Genus CANGETTA, Moore.

Cangetta venustalis, sp. n.

Fore wings white, from base to beyond middle suffused with fulvous grey; a reddish vertical outer line at three fourths, reaching only to middle of wing, the apical area beyond it being first grey, then orange-fulvous, the limit of the two colours marked by a deeper fulvous line from costa to middle of hind margin; fringe white. Hind wings white along costa and hind margin, the rest of the wing broadly orange-tawny in the middle, becoming red-brown towards inner margin; the tawny shade is bounded by a darker diffuse line, beyond which there is a grey patch; discal spot in the tawny shade white; fringe white. Head, face, and thorax whitish; abdomen more orange. Underside duller.

Expanse of wings 17 millim.

One female from the Khasias.

Genus DIPLOPSEUSTIS, Meyr.

Diplopseustis constellata, sp. n.

Closely allied to *D. minima*, Butler, but darker, the white

cross-lines and costal rings and dots more distinct; the wavy white inner line is followed above the inner margin by a round blackish blotch containing a minute white centre; the black discocellular mark is followed by a white lunule, which has three white dots beyond it, one quite close, the other two more remote, from either end of the lunule; another white dot stands near the base of the cell. Hind wings as dark as fore wings, with faint traces of a wavy submarginal pale line; fringes white, beyond a dark basal line.

Expanse of wings 18 millim.

One female from the Khasias.

Diplopeustis pallidalis, sp. n.

Fore wings pale greyish, with the costal rings and dots and the transverse lines as in *D. minima*; first line wavy, whitish, followed below the middle by deep black scales; second line preceded by blackish suffusion towards inner margin; discal spot black, linear, followed by a whitish spot. Hind wings dull whitish, with a blackish cell-spot and a submarginal white, inwardly dark-edged line, followed at middle of hind margin by a blackish blotch; palpi pale, externally grey; face white; thorax like fore wings; abdomen whitish, with blackish dorsal marks.

Expanse of wings 17 millim.

A male from the Khasias.

Genus HENDECASIS, Hmps.

Hendecasis fumilauta, sp. n.

Fore wings dull white, slightly washed with ochreous grey; the two lines double, curved, at one third and two thirds respectively; apical half of hind margin occupied by a round greyish-ochreous cloud, with darker inner edge; fringe white, with dark grey basal line. Hind wings a little more suffused with grey, with the two lines as in fore wings, but the inner one more curved outwards in middle. Head, thorax, and abdomen whitish; palpi grey. Underside duller white; fore wings with an oblique darker line, corresponding to the dark inner edge of the apical blotch.

Expanse of wings 12 millim.

Both sexes from the Khasias.

Genus COTACHENA, Moore.

Cotachena peractalis, sp. n.

Fore wings pale fawn-colour, without the yellowish tint of

histricalis, Moore, and *pubescens*, Warr.; all the three white spots more largely developed, the additional basal spot also conspicuous; the outer line, which in both of the above-mentioned species forms a slight but visible projecting sinus between the two outer spots, runs straight, and is followed by an additional white blotch consisting of three coalescent teeth. Hind wings whitish from base, becoming ochreous fawn-colour towards hind margin, but not yellowish. The fore wings have the apex more produced, subfalcate, and the hind margin is slightly elbowed in the middle.

Expanse of wings 24 millim.

Several of both sexes from Tenimber and Dili.

[To be continued.]

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

February 26, 1896.—Dr. Henry Hicks, F.R.S.,
President, in the Chair.

The following communications were read :—

1. 'On the Structure of the Plesiosaurian Skull.' By Charles W. Andrews, Esq., B.Sc., F.G.S.

Owing to the imperfection of the specimens described, various previous accounts of the Plesiosaurian skull are incomplete, and differ from one another in important particulars. There is in the National Collection a fine skull of *Plesiosaurus macrocephalus* which has lately been cleared from the matrix, with a description of which the present communication is mainly occupied, though other specimens, which are of assistance in clearing up some difficulties, are also noticed. The Author particularly considers the structure of the palate, and only such points in the structure of the rest of the skull as add to or are at variance with previous descriptions are considered.

The Author's observations indicate that a general similarity of palatal structure among reptiles does not necessarily imply any close relationship, but the very great resemblances existing between the Plesiosaurian and Rhynchocephalian palates, reinforced by numerous other points of resemblance in these skeletons noted by Baur, lead to the conclusion that the Plesiosauria are descended from a primitive Rhynchocephalian reptile, as already opined by Baur, Boulenger, and others.