

## PAPERS READ.

## REVISION OF AUSTRALIAN LEPIDOPTERA.

BY E. MEYRICK, B.A., F.Z.S.

## V.

The present paper practically concludes the Australian *Geometrina*, except in so far as future discoveries may produce fresh material. The alterations of generic nomenclature which will be found in it, and the substitution of the family name *Selidosemidae* for *Boarmiadae*, are necessary, and will be understood by reference to my paper on the classification of the European *Geometrina*, which will, I hope, appear in the Transactions of the Entomological Society of London for the current year. Hence I shall not in general discuss them here.

The classification of the *Selidosemidae* is difficult, owing to the fact that in this family many structural characters are often different in closely allied species, and others vary greatly within the limits of the same species. Much judgment is therefore required in selecting suitable points on which to lay stress for distinction, so that the genera may be at once definable and natural. The results given are the outcome of considerable labour, and I think will be found satisfactory on the whole; but in some instances too little material has been available to make sure of accuracy. The neurulation is in some genera very variable, in others constant, but I have in all cases examined every specimen that could be obtained; where variation has been found, it is always mentioned.



## SELIDOSEMIDAE.

Ocelli and maxillary palpi usually obsolete. Forewings with vein 5 rising midway between 4 and 6, parallel, 7 and 8 rising out of 9. Hindwings with frenulum developed; vein 1c absent, 5 obsolete or reduced to a thickened fold, not tubular, 8 free or connected to cell at a point only.

A very large and cosmopolitan family. The group of which *Chlenias* may be considered the type is more developed in Australia than in any other region, and may be regarded as endemic and characteristic; yet even here it has evidently suffered much loss, and is now comparatively fragmentary; whilst the group of *Selidosema*, dominant in all regions but probably much later in reaching Australia, has already developed numerous endemic and connected forms, and has largely taken the place of earlier types.

In the following tabulation of genera 38, *Neoteristis* and 39, *Mochlotona* are not included, as the characters of the ♂, which are necessarily made use of, are unknown for those genera; they must be borne in mind and consulted separately. It should be noted also that the anterior triangular thoracic crest, when not largely developed, is easily rubbed off, and may then be erroneously regarded as absent (this often the case in *Amelora*), nor can I be sure, where the material has been scanty, that I have not myself passed it over in some instances. The posterior thoracic crest is less exposed.

The structure here called the *fovea* (characteristic of the *Selidosema* group, but not present in all genera of it) is a circular depression on the lower surface of the forewing, placed at the base of vein 1b, and found in the ♂ only. It has sometimes a striated appearance, and the edges are often thickened, but I know no evidence as to its functions, which are perhaps secretory.

1. Antennæ in ♂ bipectinated or rarely only acutely bidentate.....	2.
Antennæ in ♂ not bipectinated or acutely bidentate.....	28.



- |                                                                             |                            |
|-----------------------------------------------------------------------------|----------------------------|
| 2. Forewings in ♂ with well-marked fovea                                    | 3.                         |
| Forewings in ♂ without defined fovea...                                     | 10.                        |
| 3. Antennal joints with two pectinations<br>or teeth on each side.....      | 4.                         |
| Antennal joints with one pectination on<br>each side .....                  | 5.                         |
| 4. Face with long projecting tuft of scales                                 | 4. <i>Osteodes</i> .       |
| Face without defined tuft.....                                              | 14. <i>Ectropis</i> .      |
| 5. Fovea surmounted by a small distinct<br>gland.....                       | 6. <i>Cosymbia</i> .       |
| Fovea without accessory gland.....                                          | 6.                         |
| 6. Face with strong horny prominence.....                                   | 7. <i>Scioglyptis</i> .    |
| Face without horny prominence.....                                          | 7.                         |
| 7. Femora hairy beneath.....                                                | 9. <i>Lophodes</i> .       |
| Femora glabrous.....                                                        | 8.                         |
| 8. Thorax hairy beneath.....                                                | 8. <i>Selidosema</i> .     |
| Thorax only slightly hairy. ....                                            | 9.                         |
| 9. Forewings with vein 10 absent.....                                       | 2. <i>Diastictis</i> .     |
| Forewings with vein 10 present.....                                         | 3. <i>Hyposidra</i> .      |
| 10. Antennal pectinations continued to apex                                 | 11.                        |
| Antennal pectinations not continued to<br>apex.....                         | 23.                        |
| 11. Thorax with triangular anterior or cen-<br>tral crest.....              | 12.                        |
| Thorax without such crest (but some-<br>times a bifid posterior crest)..... | 16.                        |
| 12. Thorax thinly or hardly hairy beneath                                   | 24. <i>Amelora</i> .       |
| Thorax densely hairy beneath.....                                           | 13.                        |
| 13. Forewings with vein 10 rising out of 9                                  | 14.                        |
| Forewings with vein 10 rising separate                                      | 15.                        |
| 14. Anterior tibiæ with strong apical hook                                  | 28. <i>Criomacha</i> .     |
| Anterior tibiæ without apical hook ....                                     | 29. <i>Stathmorrhopa</i> . |
| 15. Forewings with vein 11 rising out of 10                                 | 33. <i>Smyriodes</i> .     |
| Forewings with vein 11 rising separate                                      | 32. <i>Chlenias</i> .      |



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|---------------------------------------------|---------------------------|
| 16. Abdomen crested near base .....         | 18. <i>Scardamia</i> .    |
| Abdomen not crested. ....                   | 17.                       |
| 17. Femora hairy beneath.....               | 18.                       |
| Femora glabrous.....                        | 21.                       |
| 18. Thorax with well-marked posterior crest | 30. <i>Conosara</i> .     |
| Thorax without posterior crest.....         | 19.                       |
| 19. Forewings with vein 10 connected with   |                           |
| 11.....                                     | 20.                       |
| Forewings with vein 10 free from 11...27.   | <i>Mnesampela</i> (part). |
| 20. Forewings with vein 11 connected with   |                           |
| 12.....                                     | 20. <i>Proboloptera</i> . |
| Forewings with vein 11 free from 12...      | 31. <i>Mictodoca</i> .    |
| 21. Female semiapterous .....               | 12. <i>Hybernica</i> .    |
| Female winged.....                          | 22.                       |
| 22. Forewings with vein 10 rising out of 9  | 19. <i>Rhinodia</i> .     |
| Forewings with vein 10 rising out of 11     | 22. <i>Metrocampa</i> .   |
| 23. Abdomen with strong dorsal crests.....  | 34. <i>Gastrina</i> .     |
| Abdomen without crests .....                | 24.                       |
| 24. Thorax with triangular central or ante- |                           |
| rior crest.....                             | 25.                       |
| Thorax without triangular crest.....        | 26.                       |
| 25. Forewings with vein 11 anastomosing     |                           |
| with 12 and 10.....                         | 37. <i>Paralaea</i> .     |
| Forewings with vein 11 separate.....        | 35. <i>Stibaroma</i> .    |
| 26. Forewings with vein 10 absent.....      | 16. <i>Lomographa</i> .   |
| Forewings with vein 10 present.....         | 27.                       |
| 27. Forewings with vein 10 rising out of 9  | 17. <i>Deilinia</i> .     |
| Forewings with vein 10 separate.....        | 1. <i>Epicompsa</i> .     |
| 28. Forewings in ♂ with large swollen sub-  |                           |
| basal gland.....                            | 25. <i>Neritodes</i> .    |
| Forewings without such gland.....           | 29.                       |
| 29. Abdomen in ♂ with dense basal tufts     |                           |
| beneath.....                                | 23. <i>Planolocha</i> .   |
| Abdomen in ♂ without tufts beneath...       | 30.                       |



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|-----------------------------------------------------------|-------------------------------|
| 30. Femora hairy beneath.....                             | 31.                           |
| Femora glabrous.....                                      | 32.                           |
| 31. Forewings with vein 10 anastomosing<br>with 9.....    | 21. <i>Idiodes</i> .          |
| Forewings with vein 10 not anastomos-<br>ing with 9.....  | 27. <i>Mnesampela</i> (part). |
| 32. Thorax densely hairy beneath.....                     | 33.                           |
| Thorax slightly or not hairy.....                         | 35.                           |
| 33. Forewings with vein 11 anastomosing<br>with 12.....   | 26. <i>Thalaina</i> .         |
| Forewings with vein 11 not anastomos-<br>ing with 12..... | 34.                           |
| 34. Forewings with vein 10 rising out of 11               | 11. <i>Aporoctena</i> .       |
| Forewings with vein 10 rising out of 9                    | 10. <i>Melanodes</i> .        |
| 35. Thorax with strong posterior crest.....               | 36. <i>Drymoptila</i> .       |
| Thorax without crest.....                                 | 36.                           |
| 36. Forewings with vein 11 running into 12                | 13. <i>Psilosticha</i> .      |
| Forewings with vein 11 not running into<br>12.....        | 37.                           |
| 37. Forewings with vein 10 running into 9                 | 15. <i>Tigridoptera</i> .     |
| Forewings with vein 10 not running into<br>9.....         | 5. <i>Discalma</i> .          |

## 1. EPICOMPSA, n.g.

Face smooth. Tongue developed. Palpi moderate, porrected, slender, shortly rough-scaled, terminal joint short. Antennæ in ♂ bipectinated, towards apex simple. Thorax smooth, beneath nearly glabrous. Femora glabrous; posterior tibiæ in ♂ not dilated. Forewings in ♂ without fovea; veins 10 and 11 separate. Hindwings normal.

The single species is at present of somewhat uncertain affinity.

1. *Epic. xanthocrossa*, n.sp.

♂. 20 mm. Head and thorax rosy-whitish, face brownish. Palpi yellowish. Forewings with hindmargin oblique, thrice



shallowly emarginate so as to form a short obtuse triangular projection on vein 6 and a broader one on vein 3; pale greyish-ochreous, becoming rosy-whitish towards costa, with a few scattered dark grey strigulæ; costa narrowly deep ochreous-yellow, with a few black dots; lines cloudy, dark grey, starting from strong oblique black costal strigulæ; first angulated on apex of strigula; second dentate, between costal strigula and middle curved outwards but nearly obsolete, on lower  $\frac{2}{5}$  followed by a reddish-fuscous blotch nearly reaching hindmargin; an interrupted blackish hindmarginal line: cilia white, with a sharp fuscous line internally edged with ferruginous, externally forming spots on projections. Hindwings with hindmargin waved, angulated on vein 3; light reddish-fuscous, more greyish towards middle of hindmargin, and becoming pale greyish-ochreous towards base, with some scattered dark grey strigulæ; second line straight, somewhat irregular, cloudy, dark grey; hindmarginal line and cilia as in forewings.

Mount Lofty, South Australia, in March; one specimen (*Coll. Guest*). A neatly marked and singular species.

## 2. DIASTICTIS, Hb.

Face with projecting tuft of scales (sometimes slight). Tongue developed. Palpi moderate, porrected, rough-scaled, terminal joint moderate, loosely scaled. Antennæ in ♂ bipectinated with short stout pectinations, apex simple. Thorax not crested, slightly hairy beneath. Femora glabrous; posterior tibiæ in ♂ somewhat dilated, often bent. Forewings in ♂ with well-marked fovea (rarely slight); vein 10 absent, 11 anastomosing or connected with 12 and 9, or free. Hindwings normal.

A nearly cosmopolitan genus of some considerable extent, forming a development of *Selidosema*, and closely connected with it, though the extreme forms differ much. In many exotic species, which cannot be generically separated, the antennæ are simple, and transitional forms occur. The absence of vein 10 of the forewings, which occurs only in some species of *Selidosema*, is here invariable. The Australian species are only stragglers.



Discal spot of forewings ochreous, edged with  
 blackish..... 2. *australiaria*.  
 Discal spot of forewings wholly dark fuscous 3. *margaritis*.

2. *Diast. australiaria*, Gn.

(*Halia australiaria*, Gn. X, 91; *Selenia apamaria*, Walk. 255; *Macaria remotaria*, ib. 938; *M. gratularia*, ib. 939; *M. infixaria*, ib. 939; *M. frontaria*, ib. 1652; *M. panagraria*, ib. 1653; *M. porrectaria*, ib. Suppl. 1659.)

♂♀. 27-32 mm. Antennal pectinations in ♂  $1\frac{1}{2}$ , very strongly ciliated. Forewings with hindmargin angularly projecting on vein 4, slightly in ♂, more strongly in ♀, upper half somewhat concave; vein 11 connected with 12 and 9; pale brownish-ochreous, sprinkled with dark fuscous dots or short strigulæ, and sometimes suffusedly irrorated with whitish towards disc and costa; first line slender, fuscous or dark fuscous, indented in middle, sometimes obsolete; a faint or indistinct fuscous median shade; a narrow transverse somewhat irregular ochreous discal spot, strongly edged with blackish in ♂, less strongly in ♀; second line formed by a series of dark fuscous dots, nearly straight, bent near costa, sometimes obsolete; terminal area beyond this line in ♀ suffused with ferruginous-ochreous, except a triangular apical patch, which is edged anteriorly by a darker streak, which exists in ♂ also as a conspicuous short dark ferruginous-fuscous streak from costa. Hindwings rather strongly angulated on vein 4, more prominently in ♀; colour, median shade, and second line as in forewings; a cloudy dark fuscous discal dot, sometimes indistinct; terminal area beyond second line more brownish-tinged, with anterior margin of a faint subterminal line usually more or less indicated with ferruginous-ochreous.

Sydney, Bathurst (2300 feet), and Orange (3000 feet), New South Wales; Melbourne, Victoria; Launceston, Deloraine, and Hobart, Tasmania; from August to January, common amongst *Acacia decurrens*, on which the larva feeds. The species is variable, but not excessively so, though the difference in the sexes is rather marked.



3. *Diast. margaritis*, n.sp.

♂♀. 26 mm. Head, palpi, and thorax white, sprinkled with pale ochreous. Antennæ whitish, pectinations in ♂  $2\frac{1}{2}$ , stout. Forewings with hindmargin in ♂ hardly perceptibly, in ♀ more distinctly angulated on vein 4; vein 11 anastomosing with 12 and 9, or free; prismatic whitish, with short scattered cloudy dark fuscous strigulae; costa and veins tinged with ochreous; first line and median shade straight, thick, dark fuscous, not reaching costa; a transverse dark fuscous discal spot before median shade; second line slender, blackish-fuscous, nearly straight, bent near costa; a series of white spots representing subterminal line, preceded by a ferruginous-ochreous suffusion nearly reaching second line, hindmarginal area beyond this pale brownish-ochreous: cilia pale brownish-ochreous, base white. Hindwings with hindmargin slightly angulated in ♂, rather prominently in ♀; colour and markings as in forewings, but first line and discal spot absent, subterminal white spots reduced or nearly obsolete.

North Queensland; two specimens.

## 3. HYPOSIDRA, Gn.

Face with appressed scales. Tongue short, imperfect. Palpi rather short, porrected, rough-scaled, terminal joint very short. Antennæ in ♂ strongly bipectinated, apex simple. Thorax not crested, slightly hairy beneath. Femora glabrous; posterior tibiae in ♂ not dilated. Forewings in ♂ with well-marked fovea; veins 10 and 11 separate. Hindwings normal.

Further material is required to prove the validity of this genus, which includes only the following species, a Malayan insect which ranges into Australia.

4. *Hyp. janiaria*, Gn.

(*Hyposidra janiaria*, Gn. X, 150; *Lagyra agrealesaria*, Walk. 59; *L. diffusata*, ib. Suppl. 1537; *L. infusata*, ib. 1538; *Hyposidra australis*, Feld. pl. cxxix, 23, 24.)

♂♀. 38-48 mm. Head and thorax pale yellow-ochreous, densely irrorated with reddish-brown. Forewings with hindmargin



obliquely sinuate, waved; whitish-ochreous or pale yellowish-ochreous, irrorated with reddish-brown, in ♀ wholly suffused with reddish-brown; lines cloudy, dark reddish-fuscous, subdentate, first curved, second rather curved, sinuate towards extremities; median shade thick, cloudy, dark reddish-fuscous, somewhat curved and sinuate, space between this and second line in ♂ suffused with reddish-fuscous; second line followed towards costa by three cloudy somewhat confluent whitish spots, beyond which is a fuscous suffusion. Hindwings with hindmargin in ♂ waved, in ♀ crenate; in ♂ yellower, in ♀ as in forewings; median shade thick, reddish-fuscous, somewhat curved; second line cloudy reddish-fuscous, subdentate, somewhat curved, followed by a very obscure whitish line.

Cooktown, Queensland; two specimens (*Coll.* Lucas). Also from Java.

#### 4. *OSTEODES*, Gn.

Face with strong well-defined tuft of scales. Tongue developed. Palpi moderately long, porrected, rough-scaled, tolerably pointed, terminal joint concealed. Antennæ in ♂ bipectinated throughout with very short pectinations, a pair on each side of each joint, ending in long tufts of cilia. Thorax not crested, glabrous beneath. Femora glabrous; posterior tibiæ in ♂ slightly dilated. Forewings in ♂ with well-marked fovea; 10 rising out of 11, connected with 9 (or in exotic species absent), 11 anastomosing with 12. Hindwings normal.

Includes one Australian and one African species, which agree in all structural characters except the neural difference noted above, which does not seem to call for generic separation.

#### 5. *Ost. procurata*, Walk.

(*Tephрина procurata*, Walk. 965; *Panagra ferritinctaria*, ib. 1002.)

♂♀. 25-27 mm. Forewings with hindmargin bowed; brown, sprinkled with short blackish strigulæ, and usually partially very finely irrorated with pale whitish-ochreous; costal edge sometimes



whitish-ochreous; first line somewhat irregular, usually nearly obsolete, sometimes preceded by a whitish-ochreous line or marked with blackish at lower extremity; median shade sometimes faintly darker; a blackish discal dot, sometimes obsolete; second line whitish-ochreous, often distinct in middle only, rarely throughout, slightly sinuate in middle, where it is preceded by a well-marked black dot, and followed by a more or less prolonged ferruginous suffusion, and sometimes also by a small blackish spot; generally two or three small blackish spots towards costa, indicating anterior margin of subterminal line. Hindwings with hindmargin bent on vein 4; pale brownish-ochreous or sometimes ferruginous-ochreous, more or less densely irrorated with fuscous; a dark fuscous discal dot; second line fuscous, bent in middle, usually indistinct; an irregular fuscous hindmarginal suffusion, with faint traces of a paler subterminal line.

Duaringa, Queensland; Sydney, New South Wales; Adelaide, South Australia; in October, November, April, and June, not uncommon, but somewhat local. It varies rather considerably.

##### 5. *DISCALMA*, n.g.

Face with short tuft of scales(?). Tongue developed. Palpi moderate, subascending, rough-scaled, terminal joint short. Antennæ in ♂ filiform, rather strongly ciliated. Thorax not crested, slightly hairy beneath. Femora glabrous. Forewings in ♂ without fovea; 10 connected with 12 and 9, 11 out of 10 between connections. Hindwings normal.

The single species does not admit of inclusion in any described genus known to me, and I have therefore been obliged to constitute a new one, but more material would have been acceptable.

##### 6. *Disc. normata*, Walk.

(*Tephрина normata*, Walk. 966; *Aspilates exfusaria*, ib. 1683.)

♂. 26 mm. Antennal ciliations  $1\frac{1}{2}$ . Forewings with hindmargin slightly bowed; pale brownish-ochreous, strewn with dark fuscous strigulæ; costa more distinctly strigulated with blackish; first line and median shade straight, slender, fuscous,



not reaching costa; a fuscous transverse discal mark before median shade; second line strongly marked, nearly straight, dark fuscous, not reaching costa, preceded by a pale line, and followed by a light fuscous suffusion extending to costa; hindmarginal area fuscous-tinged. Hindwings with hindmargin rounded; colour and markings as in forewings, but first line and discal spot absent.

Queensland; two specimens in the British Museum. I possess one from New Guinea.

#### 6. COSYMBIA, Hb.

Face with short ridge or tuft of projecting scales. Tongue developed. Palpi moderate or rather long, porrected, rough-scaled, terminal joint moderate or short, loosely rough-scaled. Antennæ in ♂ bipectinated, extreme apex simple. Thorax not crested, slightly hairy beneath. Femora glabrous; posterior tibiæ in ♂ more or less dilated. Forewings in ♂ with well-marked fovea, surmounted by a small gland; 10 usually connected with 9, 11 out of 10 or absent (coincident), sometimes anastomosing with 12 and 10, or (if 11 absent) 10 sometimes connected with 12. Hindwings normal.

A rather small genus of wide distribution, occurring also in Europe, Asia, and Africa. It is a development of *Selidosema*, and is with difficulty separated from it in some instances, though in the Australian species the characteristic gland is sufficiently marked to leave no doubt.

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|--------------------------------------------------------------------|------------------------|
| 1. Hindwings with discal dot.....                                  | 2.                     |
| Hindwings without discal dot.....                                  | 9. <i>clarissa</i> .   |
| 2. Forewings with second line marked by a<br>blackish streak.....  | 7. <i>rupicolor</i> .  |
| Forewings with second line not marked by<br>a blackish streak..... | 8. <i>penthearia</i> . |

#### 7. *Cos. rupicolor*, Butl.

(*Panagra rupicolor*, Butl., Trans. Ent. Soc. Lond. 1886, 437.)

♂♀. 32-34 mm. Antennal pectinations in ♂ 5, apical  $\frac{1}{2}$  simple. Forewings with hindmargin gently bowed; pale brownish or



brownish-ochreous, strewn with small blackish strigulae, and sometimes sprinkled with whitish-ochreous; first line represented by a short blackish mark on inner margin; a large blackish discal dot; second line represented by a straight blackish streak extending from inner margin  $\frac{2}{3}$  across wing, margined with pale whitish-ochreous anteriorly, and sometimes suffused with fuscous posteriorly. Hindwings with hindmargin rounded, slightly bent on vein 4; colour, discal dot, and second line as in forewings, but second line less marked, and hardly reaching half across wing.

Duaringa, Queensland; Geraldton and York, West Australia; in November, six specimens. Probably this species (and very likely the other two also) extends right across the interior of Australia from east to west, without reaching either the north or south coasts.

8. *Cos. penthearia*, Gn.

(*Selidosema penthearia*, Gn. X, 146; *Tephрина adustaria*, Walk. Suppl. 1661.)

♂♀. 30-35 mm. Antennal pectinations of ♂ 5, apical  $\frac{1}{5}$  simple. Forewings with hindmargin gently bowed; pale brownish or brownish-ochreous, strewn with numerous short dark fuscous strigulae, and a few scattered black scales; costal edge more ochreous-tinged; a large blackish-fuscous discal dot; a very faint darker or more ochreous shade indicating posterior margin of second line, in ♀ marked with some black scales on inner margin. Hindwings with hindmargin rounded, distinctly bent on vein 4; colour and markings as in forewings.

Duaringa, Queensland; York, West Australia; in November, six specimens.

9. *Cos. clarissa*, Butl.

(*Aspilates clarissa*, Butl., Trans. Ent. Soc. Lond. 1886, 438.)

♂♀. 27-30 mm. Antennal pectinations of ♂ 7, apical  $\frac{1}{5}$  simple. Forewings with hindmargin gently bowed; very pale whitish-ochreous, strewn with short fuscous strigulae only distinct on costa and towards hindmargin; a moderate dark grey discal dot. Hindwings with hindmargin rounded; colour as in forewings, but discal dot wholly absent.



Duaringa, Queensland; three specimens received from Mr. G. Barnard.

# 7. SCIOGLYPTIS, n.g.

Face with strong conical or rounded-conical horny scaled prominence. Tongue developed. Palpi moderate, porrected, rough-scaled, terminal joint very short. Antennæ in ♂ bipectinated, apex simple. Thorax not crested, hairy beneath. Femora glabrous; posterior tibiæ in ♂ dilated, enclosing tuft. Forewings in ♂ with well-marked fovea; 10 sometimes connected with 9, 11 sometimes out of 10, sometimes anastomosing with 12. Hindwings normal.

An extreme form of *Selidosema*, only differing essentially by the peculiar frontal prominence; perhaps it need not be separated.

Frontal prominence acute..... 10. *lithinopa*.

Frontal prominence obtuse..... 11. *hemeropa*.

# 10. *Sciogl. lithinopa*, n.sp.

♂. 27 mm. Frontal projection pointed, acute. Antennal pectinations 6, apical  $\frac{1}{3}$  simple. Forewings with hindmargin obliquely rounded, somewhat waved; whitish-ochreous, with a few fine scattered blackish scales; first, median, and second lines slender, cloudy, fuscous, darker on veins, but very ill-defined, first curved and angulated near costa, median nearly straight, second curved inwards on lower  $\frac{2}{3}$ ; an indistinct transverse discal mark beyond median line, appearing to connect median and second lines; subterminal faintly whitish, cloudy, hardly perceptibly darker-margined, preceded above middle by a small double dark fuscous spot. Hindwings with hindmargin rounded, waved; colour and markings as in forewings, but first line absent, no discal mark, median line darker, second line less curved inwards, nearly followed by a faint fuscous shade, subterminal line somewhat darker-margined anteriorly, preceded by a single very small fuscous spot above middle.

Brisbane, Queensland; one specimen received from Dr. T. P. Lucas. This specimen has vein 10 of the forewings connected



with 9, 11 rising out of 10, connected with 12; but the neuration may very possibly be as variable as in the next species.

11. *Sciogl. hemeropa*, n.sp.

♂♀. 28-32 mm. Frontal projection broadly rounded, obtuse. Antennal pectinations  $3\frac{1}{2}$ , apical  $\frac{2}{7}$  simple. Forewings with hindmargin bowed; very pale whitish-ochreous or whitish-fuscos, with a few scattered black scales, and traces of darker strigulae; basal area mixed with ochreous or fuscous; first line indicated by obscure ochreous or fuscous margins, angulated near costa; median shade ill-defined, ochreous or fuscous, sinuate; a black discal dot beyond it; second line faintly paler, dilated and more distinctly whitish on costal third, where it is margined anteriorly narrowly, and posteriorly broadly with ochreous, obtusely angulated on vein 5 and submedian fold, upper angle sometimes followed by a blackish spot, median third margined anteriorly with three ochreous or dark fuscous dots; a faint cloudy white waved subterminal line, sometimes followed by one or two cloudy blackish dots near below apex; a hindmarginal row of black dots: cilia pale whitish-ochreous, terminal half white. Hindwings with hindmargin rounded, waved; colour and markings as in forewings, but becoming whitish towards base, first line absent, median shade faint, second line darker-margined anteriorly on lower half, but becoming wholly obsolete towards costa.

Newcastle and Sydney, New South Wales; Melbourne, Victoria; in September and October, four specimens. All the variations of neuration included in the generic description occur in this species.

8. *SELIDOSEMA*, Hb.

Face with short dense somewhat projecting scales or almost smooth. Tongue developed. Palpi moderate, porrected or subascending, rough-scaled, terminal joint very short or rarely moderate. Antennae in ♂ bipectinated, pectinations slender, moderate or rather long, apex simple. Thorax sometimes shortly crested posteriorly, beneath hairy. Femora glabrous; posterior tibiae in ♂ dilated, enclosing tuft. Forewings in ♂ with well-



marked fovea ; 10 sometimes connected with 9, 11 sometimes out of 10, sometimes anastomosing with 12, sometimes absent (coincident with 10). Hindwings normal.

A large and cosmopolitan genus, of which the species are sometimes difficult to determine, owing to their obscure and similar colouring. The structural differences and the colour of the face should be carefully observed, and often give easy distinguishing characters. The neuration varies considerably ; in Australia the species fall naturally into two groups, in one of which veins 10 and 11 are stalked or coincident, whilst in the other they are separate, and I formerly supposed that these groups could be maintained as distinct genera, but a wide study of exotic species of the genus has shown me that in them the two types of structure not unfrequently occur in different individuals of the same species ; hence their discrimination is impossible.

In the following tabulation *S. despicata* is not included, as its characters are insufficiently known ; it is an inconspicuous brownish species, without any striking points. Owing to insufficiency of material, I cannot be positive that the characters on which stress is laid in the tabulation are constantly reliable, and care should always be taken to note the several points of difference which usually occur between any two species, and not to depend on one exclusively ; the specific separation of these insects will then be found easier than is supposed.

- |                                                       |                         |
|-------------------------------------------------------|-------------------------|
| 1. Forewings with veins 10 and 11 separate            | 2.                      |
| Forewings with veins 10 and 11 stalked                |                         |
| or coincident.....                                    | 7.                      |
| 2. Face wholly blackish.....                          | 38. <i>argoplaca</i> .  |
| Face not wholly blackish.....                         | 3.                      |
| 3. Antennæ in ♂ with apical $\frac{1}{6}$ simple..... | 37. <i>euboliaria</i> . |
| Antennæ in ♂ with apical $\frac{2}{5}$ or more        |                         |
| simple.....                                           | 4.                      |
| 4. Face with broad blackish median bar.....           | 5.                      |
| Face with blackish median bar incomplete              |                         |
| or obsolete.....                                      | 6.                      |



- |                                                                     |                           |
|---------------------------------------------------------------------|---------------------------|
| 5. Forewings with black discal dot.....                             | 39. <i>bitaeniaria</i> .  |
| Forewings with raised white grey-edged<br>discal mark.....          | 40. <i>acaciaria</i> .    |
| 6. Forewings clouded with pale reddish-<br>ochreous.....            | 41. <i>illustraria</i> .  |
| Forewings not clouded with reddish-<br>ochreous.....                | 42. <i>epistictis</i> .   |
| 7. Hindwings whitish, much paler than fore-<br>wings.....           | 8.                        |
| Hindwings not much paler than forewings                             | 9.                        |
| 8. Forewings with clear whitish blotch<br>beyond second line.....   | 23. <i>capnota</i> .      |
| Forewings without whitish blotch.....                               | 22. <i>exprimataria</i> . |
| 9. Face without dark markings, except scat-<br>tered scales.....    | 10.                       |
| Face more or less marked with blackish<br>or dark fuscous.....      | 15.                       |
| 10. Forewings with groundcolour white....                           | 26. <i>leucoplecta</i> .  |
| Forewings with groundcolour not white..                             | 11.                       |
| 11. Wings distinctly yellowish-tinged .....                         | 12.                       |
| Wings not yellowish.....                                            | 13.                       |
| 12. Forewings with median shade obsolete....                        | 14. <i>amphiclina</i> .   |
| Forewings with median shade tolerably<br>distinct.....              | 34. <i>destinataria</i> . |
| 13. Forewings with second line whitish .....                        | 13. <i>cheleuta</i> .     |
| Forewings with second line not whitish..                            | 14.                       |
| 14. Hindwings with hindmargin dentate.....                          | 31. <i>adelphodes</i> .   |
| Hindwings with hindmargin waved.....                                | 15. <i>eremias</i> .      |
| 15. Head wholly blackish.....                                       | 35. <i>zascia</i> .       |
| Head not wholly blackish.....                                       | 16.                       |
| 16. Face wholly dark fuscous except upper<br>and lower margins..... | 17.                       |
| Face not wholly dark fuscous.....                                   | 26.                       |
| 17. Forehead white or whitish .....                                 | 18.                       |
| Forehead not whitish.....                                           | 23.                       |



- |                                                                                           |                            |
|-------------------------------------------------------------------------------------------|----------------------------|
| 18. Forewings with second line followed by ochreous-brown shade.....                      | 19.                        |
| Forewings with second line not followed by ochreous-brown shade .....                     | 20.                        |
| 19. Undersurface pale yellowish ....                                                      | 21. <i>lyciaria</i> .      |
| Undersurface not yellowish.....                                                           | 12. <i>silicaria</i> .     |
| 20. Forewings with first line obsolete on upper half.....                                 | 25. <i>leptodesma</i> .    |
| Forewings with first line marked throughout.....                                          | 21.                        |
| 21. Forewings with second line strongly dentate beneath costa .....                       | 20. <i>canescaria</i> .    |
| Forewings with second line not strongly dentate beneath costa.....                        | 22.                        |
| 22. Hindwings with hindmargin dentate.....                                                | 18. <i>curtaria</i> .      |
| Hindwings with hindmargin not dentate                                                     | 24. <i>cognata</i> .       |
| 23. Forehead ferruginous-ochreous.....                                                    | 24.                        |
| Forehead fuscous or pale fuscous.....                                                     | 25.                        |
| 24. Antennæ of ♂ with apical sixth simple..                                               | 29. <i>excursaria</i> .    |
| Antennæ of ♂ with apical tenth simple..                                                   | 30. <i>aganopa</i> .       |
| 25. Forewings with median shade strongly marked.....                                      | 17. <i>suasaria</i> .      |
| Forewings with median shade almost obsolete.....                                          | 32. <i>pallidiscaria</i> . |
| 26. Lower half of face white.....                                                         | 19. <i>externaria</i> .    |
| Lower half of face not white.....                                                         | 27.                        |
| 27. Forewings with dark shade beyond second line running to hindmargin beneath apex ..... | 28. <i>luxaria</i> .       |
| Forewings with dark shade not running to hindmargin.....                                  | 28.                        |
| 28. Forewings grey-whitish.....                                                           | 36. <i>perfectaria</i> .   |
| Forewings ochreous.....                                                                   | 29.                        |



29. Hindwings with second line almost  
straight..... 27. *agoraea*.  
Hindwings with second line distinctly  
curved..... 16. *thermaea*.

12. *Sel. silicaria*, Gn.

(*Hemerophila silicaria*, Gn. IX, 220; *H. mundifera*, Walk. 322; *Boarmia disrupta*, ib. 391; *Hemerophila excursaria*, ib. 1532.)

♂♀. 30-35 mm. Face dark fuscous, forehead and lower margin whitish. Antennal pectinations of ♂ 7, apical  $\frac{1}{5}$  simple. Forewings with hindmargin obliquely bowed; vein 11 out of 10, anastomosing with 12; pale brownish-ochreous, finely irrorated with whitish, and with a few dark fuscous scales; lines slender, blackish-fuscous, sinuate, becoming obsolete towards costa, first nearly preceded and second nearly followed by rather dark ochreous-brown parallel shades; a black discal dot before median shade, which is slender, ochreous-brown, ill-marked, nearly straight; subterminal obscurely whitish, irregularly waved, edged with brownish, connected with hindmargin beneath apex by an oblique suffused dark brown streak, opposite which it is edged anteriorly with blackish; a hindmarginal row of black dots. Hindwings with hindmargin hardly rounded, unevenly waved-dentate; in ♂ beneath with a very deep longitudinal furrow below middle from base to  $\frac{3}{4}$ ; colour, median shade, subterminal line, and hindmarginal dots as in forewings; discal dot dark grey, obscure; second line slender, blackish-fuscous, somewhat irregular, nearly straight, indistinct towards costa, nearly followed by a parallel brown shade.

Sydney, New South Wales; Melbourne, Victoria; Mount Lofty, South Australia; Albany, West Australia; in September, October, and March, six specimens. It is distinguished from all by the peculiar longitudinal furrow in the hindwings of the ♂.

13. *Sel. cheleuta*, n.sp.

♂♀. 27-30 mm. Head pale greyish-brown, mixed with whitish, with a few black scales. Forewings with hindmargin rounded;



vein 11 out of 10, anastomosing with 12; whitish-ochreous, greyish-tinged, towards base and costa more brownish, thinly sprinkled with blackish; first line blackish, irregular, interrupted, subdentate; median shade nearly straight, black, posteriorly suffused with brownish; a black discal dot; second line ochreous-whitish, unevenly and interruptedly margined with dark fuscous, especially towards disc posteriorly, subdentate, irregular, twice sinuate, lower sinuation stronger and subangulated; space between second and subterminal lines brownish on upper half; subterminal hardly pale, partially blackish-margined, triangularly dilated at apex, dentate; a hindmarginal row of black dots. Hindwings with hindmargin rounded, waved; colour and hindmarginal dots as in forewings; median shade and margins of second and subterminal lines straight, waved, dark fuscous, becoming obsolete above; a black discal dot touching anterior margin of second line.

Melbourne, Victoria; three specimens (*Coll.* Lucas). Recognisable amongst similar species by the peculiar form of the second line of the forewings. *Tephrosia bispinaria*, Gn. IX, 266, which I have not succeeded in identifying, should apparently have this line nearly similarly formed, and it is just possible that it may be synonymous, but the description agrees very ill in other particulars; it may be a species unknown to me:

14. *Sel. amphiclina*, n.sp.

♂. 32 mm. Head and thorax unicolorous ochreous. Antennal pectinations 7, apical  $\frac{1}{5}$  simple. Forewings with hindmargin obliquely bowed; vein 11 absent; pale yellowish-ochreous, with scattered grey strigulae and a few black scales; first line indicated by blackish strigulae but very indistinct, slightly curved, margined posteriorly by a deeper yellow-ochreous shade; a black discal dot; median shade obsolete; second line faintly paler, hardly traceable, except where margined posteriorly with blackish from vein 3 to 6, where it is slightly sinuate, but apparently with a biangulated projection below this; subterminal very faintly whitish, connected with hindmargin beneath apex by an ill-marked dark fuscous oblique streak; three blackish dots on upper half



of hindmargin: cilia whitish-ochreous. Hindwings with hindmargin rounded, unevenly waved; colour and strigulæ as in forewings, but basal half more whitish-ochreous; a dark grey discal dot; median shade forming a short grey line from inner margin; second line faintly traceable as a pale sinuate shade.

Sydney, New South Wales; in October, two specimens. Easily known by the yellowish-ochreous colouring, obsolescence of lines, and unicolorous head and thorax.

15. *Sel. eremias*, n.sp.

♂. 28 mm. Head and thorax pale brownish-ochreous, face moderately tufted, thorax with two posterior black dots. Antennal pectinations 8, apical  $\frac{1}{6}$  simple. Forewings with hindmargin obliquely bowed; vein 10 connected with 12 and 9, 11 rising out of 10 between the bars; pale brownish-ochreous, with a few scattered black scales; first and second lines and median shade indistinctly traceable as sinuate series of blackish dots; two cloudy blackish spots towards hindmargin above and below middle, on which alone is the slender dentate paler subterminal line visible; a hindmarginal row of black dots: cilia pale brownish-ochreous. Hindwings with hindmargin somewhat rounded, unevenly waved; colour and hindmarginal dots as in forewings, but surface more thickly sprinkled with black scales; a blackish mark on middle of inner margin; a small black discal dot.

Sydney, New South Wales; in March, one specimen. A small species of obscure appearance, characterised by the usual lines reduced to series of dots, and the blackish submarginal spots; it recalls some species of *Deilinia*, but is longer-winged.

16. *Sel. thermea*, n.sp.

♀. 38 mm. Head and thorax pale ochreous, suffused with ochreous-brown. Forewings with hindmargin obliquely rounded, strongly waved; vein 11 absent; ochreous-brown, thinly strewn with dark fuscous strigulæ; first and second lines slender, black, somewhat interrupted, first curved, angulated near inner margin, nearly preceded by a dark ochreous-brown shade, second angulated outwards above middle and inwards near inner margin, nearly



followed by an indistinct dark ochreous-brown shade; space between first and second lines brownish-grey; median shade thick, cloudy, irregular, dark brown, tolerably parallel to second line; subterminal ochreous-whitish, very indistinct, dentate, preceded on costa by a dark fuscous spot; a dark fuscous blotch on hindmargin beneath apex; an interrupted dark fuscous hindmarginal line. Hindwings with hindmargin rounded, dentate; colour and markings as in forewings, but first line almost basal, median shade almost obsolete, angulation of second line more rounded.

Newcastle, New South Wales; one specimen (*Australian Museum*). Differs markedly from its allies by its deep ochreous-brown colouring, and the contrasted median band.

17. *Sel. suasaria*, Gn.

(*Boarmia suasaria*, Gn. IX, 243 (*teste* Moore); *B. proposita*, Walk. 390; *Tephrosia gratularia*, ib. 415; *T. propinquaria*, ib. 415.)

♂♀. 29-34 mm. Face blackish, forehead and lower margin pale fuscous. Palpi with long rough hairs. Antennal pectinations in ♂ 8, apical  $\frac{1}{6}$  simple. Forewings with hindmargin bowed; vein 10 anastomosing with 12, 11 absent; light fuscous, closely irrorated with dark fuscous and whitish; lines evenly curved, blackish-fuscous, interrupted to form dots in disc, second edged with paler posteriorly, sinuate inwards on submedian fold; median shade curved, thick, blackish-fuscous, strongest on lower half, sinuate outwards above and below middle; a light ochreous suffusion on submedian fold before first and beyond second line; subterminal line very indistinct, slender, dentate; an interrupted dark fuscous hindmarginal line. Hindwings with hindmargin rounded, slightly waved; colour and markings as in forewings, but first line absent, median shade straight, second line followed by a paler suffusion.

Brisbane, Queensland; Newcastle, New South Wales; said also to be from Albany, West Australia; four specimens. Characterised by the fuscous colouring, absence of white markings, strongly marked median shade, and wholly blackish face.



18. *Sel. curtaria*, Walk.

(*Tephrosia curtaria*, Walk. Suppl. 1592.)

♂. 22 mm. Face blackish (?). Antennal pectinations about 7, apical  $\frac{1}{10}$  filiform. Forewings with hindmargin obliquely rounded, waved; whitish-fuscos, sprinkled with blackish; first and second lines curved, blackish, somewhat interrupted; median shade cloudy, hardly curved, blackish, connected by a slender bar with a cloudy blackish spot before second line in middle; subterminal cloudy, subdentate, whitish, anteriorly margined obscurely with blackish. Hindwings with hindmargin rounded, dentate; colour and markings as in forewings, but first line absent, a blackish discal dot beyond median shade, no spot or connecting bar before second line.

Queensland (Walker's citation of the locality as "Swan River" is erroneous, as I have shown elsewhere); one specimen in the British Museum, from which the above description is taken. The characters are incomplete, but the species appears to be a good one, recognisable by its small size and the bar connecting median shade and second line.

19. *Sel. externaria*, Walk.

(*Tephrosia externaria*, Walk. Suppl. 1591.)

♂♀. 31-34 mm. Face with upper half blackish, lower half white, forehead white. Antennal pectinations of ♂ 9, apical  $\frac{1}{5}$  simple. Forewings with hindmargin waved, rounded; vein 10 connected with 12, 11 out of 10; light fuscous, closely strewn with white partially confluent strigulæ, and with some dark fuscous or blackish scales or strigulæ; first line curved, dark fuscous, little marked; median shade thick, blackish-fuscos, almost rectangularly angulated in or above middle, upper half sometimes rather curved inwards; a blackish-fuscos transverse discal mark on or sometimes beyond this; second line blackish-fuscos, tending to form dots on upper half, rather irregularly sinuate, somewhat angulated above middle; subterminal whitish, ill-defined, partially margined anteriorly with blackish-fuscos



on upper half and towards inner margin ; a thick oblique blackish-fuscous suffused streak from hindmargin below apex to middle of second line ; an interrupted blackish hindmarginal line. Hindwings with hindmargin rounded, dentate ; colour and markings as in forewings, but first line absent, median shade straight, second line not angulated.

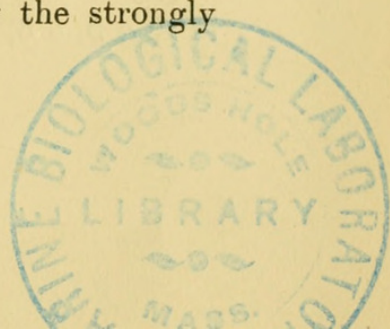
Duaringa, Queensland ; three specimens received from Mr. G. Barnard. A strongly marked insect, very distinct by the face half black and half white, and the peculiar angulated median shade, but otherwise closely resembling some forms of *S. canescaria*.

20. *Sel. canescaria*, Gn.

(*Boarmia canescaria*, Gn. IX, 249.)

♂. 31-32 mm. Face blackish, forehead white. Antennal pectinations 9, apical  $\frac{1}{5}$  simple. Forewings with hindmargin waved, rounded ; vein 10 connected or anastomosing with 12, 11 out of 10 ; light fuscous, sprinkled with dark fuscous, and more or less suffusedly irrorated with white ; first line slender, dark fuscous, very acutely angulated near costa ; a small black transverse discal mark, sometimes obsolete, before median shade ; median shade slender, blackish-fuscous, angulated first inwards and then outwards beneath costa, on lower half often wholly suffused with second line ; second line slender, slightly irregular, blackish-fuscous, sending a long very acute dentation inwards below costa, angulated outwards beneath this ; subterminal whitish or white, often conspicuous and rather thick, margined anteriorly throughout with blackish-fuscous, connected with hindmargin beneath apex by a short blackish-fuscous suffused streak ; a blackish hindmarginal line. Hindwings with hindmargin rounded, dentate ; colour and markings as in forewings, but first line absent, median shade thicker, straight, second line nearly straight or slightly sinuate.

Duaringa, Queensland ; Mount Lofty, South Australia ; received commonly from Mr. G. Barnard and Mr. E. Guest. Readily known from the other species with black face by the strongly





marked lines, sharply angulated beneath costa, and in particular by the long acute subcostal dentation of the second line.

21. *Sel. lyciaria*, Gn.

(*Boarmia lyciaria*, Gn. IX, 250; *B. poecilaria*, ib. 250, pl. VI, 1; *B. semitata*, Walk. 389.)

♂♀. 52-55 mm. Face blackish, forehead whitish. Antennal pectinations 9, apical  $\frac{1}{8}$  simple. Forewings with hindmargin strongly waved, rounded; vein 10 connected with 12, 11 out of 10; whitish-ochreous, densely strewn with fuscous strigulae, and with scattered black scales; first line curved, rather dark fuscous; median shade slender, blackish-fuscous, curved, irregularly dentate and sinuate, angulated outwards above middle; second line blackish-fuscous, slightly irregular, twice dentate inwards beneath costa, angulated outwards beneath this, nearly followed except towards costa by a rather dark brown shade; subterminal slender, dentate, whitish, anteriorly margined with blackish-fuscous, forming a well-marked subtriangular unmargined white spot in middle; a blackish hindmarginal line. Hindwings with hindmargin rounded, strongly dentate; colour and hindmarginal line as in forewings, but basal third suffusedly darker; a white subbasal bar; median shade rather strong, blackish-fuscous, straight; a conspicuous transverse or subcrescentic blackish discal mark; second line somewhat irregular, blackish-fuscous, nearly followed by an ochreous-brown shade; subterminal narrow, white, margined anteriorly with blackish-fuscous, with a projecting angulation above middle. Undersurface pale yellowish-ochreous, with blackish discal spot and variable dark fuscous hindmarginal suffusion.

Tasmania; four specimens received from Messrs. G. Barnard and G. H. Raynor. Conspicuous by its large size, yellowish undersurface, white median spot on the subterminal line, and other striking characters.

22. *Sel. exprimataria*, Walk.

(*Larentia exprimataria*, Walk. 1704.)

♂♀. 22-26 mm. Head wholly blackish. Antennal pectinations in ♂ *a* 5, *b* 6, apical  $\frac{1}{4}$  simple. Thorax with small posterior crest.



Forewings with hindmargin rounded ; vein 10 connected or anastomosing with 12 and 9, 11 absent ; light grey, irrorated with black and sometimes partially mixed with whitish, sometimes ochreous-tinged, especially on veins ; first line black, curved, indented below middle ; median shade cloudy, blackish, nearly straight, slightly angulated in middle ; a black transverse-linear discal mark much beyond this ; second line somewhat irregular, black, angulated above middle ; subterminal hardly paler but sharply margined with black anteriorly, irregular, subdentate, approximated to second line beneath angle, where it is followed by an indistinct somewhat paler suffused patch ; a black hindmarginal line. Hindwings with hindmargin rounded ; grey-whitish ; median shade and second line grey, very faint, nearly straight ; a faint grey discal dot between these ; a cloudy grey hindmarginal band, its anterior edge more strongly marked towards lower extremity.

Melbourne, Victoria ; three specimens taken by Dr. Lucas, to whom I am indebted for a type. I have a specimen from Duaringa, Queensland, received from Mr. Barnard, which appears to be very closely allied but probably distinct ; I do not venture to describe it at present. This species and the following are distinguished from the rest by their small size, blackish heads, thoracic crest, and whitish hindwings contrasting with dark forewings ; the present species differs from the next in having all the lines well-marked, the second angulated, and the simple apical portion of the antennæ longer.

23. *Sel. capnota*, n.sp.

♂. 26 mm. Head and thorax blackish, thorax with well-developed posterior crest. Antennal pectinations 6, apical  $\frac{1}{5}$  simple. Forewings with hindmargin somewhat bowed ; vein 10 connected with 9, 11 out of 10 ; ochreous-whitish, densely and suffusedly irrorated with black throughout, so as to appear wholly blackish, except a large round clear spot adjoining second line above middle, and second line itself, which is slender, hardly curved, with three or four slight dentations. Hindwings with



hindmargin rounded, somewhat uneven; whitish; inner margin narrowly suffused with blackish; median shade very faint, cloudy, grey; a grey discal dot; second line slender, grey, very indistinct; a cloudy fuscous-grey irregular subterminal shade; an interrupted fuscous hindmarginal line.

Albany, West Australia; in October, one specimen amongst *Leptospermum* in a swamp. Easily separated from the preceding by the general black suffusion obliterating most of the markings of the forewings, and the clear white posterior patch; the neuration is also different, but would perhaps not be constant.

24. *Sel. cognata*, Walk.

(*Boarmia cognata*, Walk. 392.)

♂♀. 24-27 mm. Face blackish, forehead grey-whitish. Antennal pectinations of ♂ 8, of ♀ 6, apical  $\frac{1}{2}$  simple. Forewings with hindmargin obliquely bowed; 10 sometimes connected with 12 and 9, 11 absent; pale ochreous-grey, densely irrorated with whitish; first and second lines and median shade fine, fuscous-grey, more or less marked with black dots on veins, somewhat irregular, oblique, angulated near costa, second line nearly followed by a fuscous-grey parallel more cloudy line; a dark grey discal dot before median shade; subterminal obscurely whitish, slender, dentate, margined with fuscous-grey; a hindmarginal series of black dots. Hindwings with hindmargin somewhat unevenly rounded; colour and markings as in forewings, but first line obsolete, median nearly straight.

Sydney, New South Wales; Melbourne, Victoria; Deloraine and Hobart, Tasmania; Mount Lofty, South Australia; from September to January, common. Characterised by its small size, light colour and general whitish irroration, dotted lines, and especially by the unusually strongly pectinated antennæ of the ♀, which are little inferior to those of the ♂ in development.

25. *Sel. leptodesma*, n.sp.

♂♀. 28-33 mm. Face blackish, lower edge and sometimes upper whitish, crown pale grey or white. Antennal pectinations



in ♂ 8, in ♀ 3, apical  $\frac{1}{10}$  simple. Abdomen with a black subapical ring on each segment. Forewings with hindmargin obliquely rounded; 10 sometimes connected with 9, 11 absent; fuscous, densely irrorated with grey-whitish and with scattered black scales; first line only visible on lower half, fine, black, straight, very oblique; a dark grey discal dot, sometimes obsolete; median shade fine, indistinct, dark fuscous with a few black scales, indistinctly acutely dentate and angulated near costa, touching extremity of first line in middle; second line represented by two black dots near costa, and a somewhat sinuate black line running from hindmargin below apex to  $\frac{2}{3}$  of inner margin, nearly followed by a parallel obscure fuscous shade; subterminal obscurely paler, darker-margined, cloudy, dentate; a fine black hindmarginal line. Hindwings with hindmargin slightly rounded, rather strongly waved; colour, subterminal, and hindmarginal lines as in forewings; median shade slender, dark fuscous, slightly curved; a dark grey discal dot beyond this; second line slender, black, nearly straight, slightly bent near costa, nearly followed by a parallel fuscous shade.

Port Lincoln, South Australia; Fremantle, West Australia; in October, four specimens. Distinguished from the other species with grey colouring and blackish face by the peculiar disposition of the slender black first and second lines; the antennæ of the ♀ are pectinated as in *S. cognata*, but less strongly.

26. *Sel. leucoplecta*, n.sp.

♂. 25-27 mm. Face grey mixed with white. Forewings with hindmargin obliquely rounded; 10 anastomosing with 9, 11 absent; white, towards base and costa sprinkled with dark fuscous; first line cloudy, blackish, angulated above middle; median shade cloudy, fuscous, twice indented outwards; second line slender, black, forming an abrupt rounded projection posteriorly at  $\frac{1}{3}$ , and an obtuse angulation at  $\frac{2}{3}$ ; posterior area beyond second line wholly fuscous, except subterminal line, which forms a narrow white fascia from apex to anal angle, suffusedly bordered with



darker; a dark fuscous hindmarginal line. Hindwings with hindmargin rounded, slightly waved; white, sprinkled with grey towards base; a small dark fuscous spot on middle of inner margin; a grey discal dot; second line dark fuscous, slightly waved, somewhat angulated above middle; posterior area beyond this wholly light fuscous-grey, except subterminal line, which forms a narrow white somewhat angulated anteriorly dark-margined fascia from apex to anal angle.

Melbourne, Victoria; two specimens (*Coll.* Lucas). Distinct by the white groundcolour and form of second line.

27. *Sel. agoraea*, n.sp.

♂♀. 31-33 mm. Face brownish, mixed with dark fuscous and whitish-ochreous. Forewings with hindmargin obliquely rounded, strongly waved; 11 rising out of 10; pale whitish-ochreous, irrorated with ochreous and dark fuscous, sometimes suffused almost wholly with brownish, especially posteriorly; first line fuscous, very indistinct, curved, nearly preceded by a fainter brownish shade; a black discal dot, sometimes obsolete; median shade indistinct, fuscous, curved, sometimes obsolete; second line blackish, curved and becoming nearly obsolete towards costa, more or less sinuate on lower half, on lower  $\frac{2}{3}$  nearly followed by a parallel reddish-brown or sometimes deep black streak; a cloudy fuscous blotch on hindmargin below apex; subterminal very indistinct, whitish, dentate; a fuscous hindmarginal line. Hindwings with hindmargin scarcely rounded, dentate; colour, discal dot, subterminal and hindmarginal lines as in forewings; wing up to second line generally closely strigulated with dark fuscous; median shade cloudy, ochreous-brown or dark fuscous, rather curved; second line dark fuscous or black, straight, nearly followed by a parallel reddish-brown or deep black streak.

Melbourne, Victoria; four specimens (*Coll.* Lucas). Appears to vary considerably, but recognisable by the nearly straight dentate hindmargin of hindwings, and their strongly-marked straight second line and following streak.



28. *Sel. luxaria*, Gn.

(*Hemerophila luxaria*, Gn. IX, 220; *Tephrosia disperdita*, Walk. 416.)

♂. 34-35 mm. Face blackish-fuscous, lower margin and a bar above middle whitish-ochreous. Antennal pectinations 6, apical  $\frac{1}{8}$  simple. Thorax pale brownish-ochreous, with a strong black anterior bar. Forewings with hindmargin obliquely rounded, waved; 10 connected with 9, 11 rising out of 10; pale brownish-ochreous, with scattered black scales; a blackish line beneath costa from base to about  $\frac{1}{4}$ ; first line and median shade fine, blackish-fuscous, very oblique, becoming obsolete towards costa; a black discal dot between these; second line represented by a black twice sinuate line running from hindmargin beneath apex to  $\frac{1}{3}$  of inner margin, preceded by a broad suffused whitish irroration, and nearly followed by a dark fuscous shade; a short irregular blackish-fuscous very oblique line from costa before apex; subterminal whitish, partially dark-margined, dentate, obsolete towards costa; a hindmarginal row of black dots or interrupted line. Hindwings with hindmargin gently rounded, unevenly dentate; colour and hindmarginal line as in forewings; median shade straight, slender, dark fuscous; a black discal dot; second line somewhat irregularly sinuate, black, nearly followed by a parallel dark fuscous shade; subterminal whitish, rather irregular, margined with blackish-fuscous.

Sydney, New South Wales; from September to November, rather common. Easily known from the other ochreous species by the characteristic form of the second line, and the blackish basal subcostal line. I may mention that Guénée's *hemipteraria*, which some have referred to this species, is in my opinion a New Zealand species of a different group (vid. Trans. N. Zeal. Inst. 1887, 60).

29. *Sel. excursaria*, Gn.

(*Tephrosia excursaria*, Gn. IX, 267; *T. exportaria*, ib. 268; *T. phibalapteraria*, ib. 268; *Hemerophila vestita*, Walk. 322; *Boarmia attributa*, ib. 390; *B. decertaria*, ib. 391.)



♂♀. 34-40 mm. Face blackish-fuscous, lower margin and forehead ferruginous-ochreous. Antennal pectinations of ♂ 4, apical  $\frac{1}{6}$  simple. Forewings with hindmargin obliquely rounded, waved; 11 rising out of 10; varying from ochreous to fuscous, more or less irrorated with dark fuscous and sometimes with whitish; first line slender, curved, dark fuscous, marked with black on veins, sometimes thick and blackish-fuscous on lower half, preceded by a deeper ochreous shade; median shade slender, irregular, dark fuscous, ill-marked, angulated above middle, sometimes preceded by a blackish discal dot; second line black, usually slender, but sometimes thickened on lower  $\frac{2}{3}$ , costal third usually reduced to three black dots, acutely angulated above middle and with a rounded-triangular prominence below middle, nearly followed by an ochreous-brown parallel shade, tending to be continued to hindmargin beneath apex; subterminal obscurely paler, partially darker-margined, slender, dentate; a hindmarginal black line or series of dots. Hindwings with hindmargin rounded, dentate; colour, subterminal, and hindmarginal lines as in forewings; median shade slender, cloudy, dark fuscous, nearly straight; a blackish discal dot; second line somewhat irregular, slightly sinuate, black, sometimes rather thickened, nearly followed by an ochreous-brown parallel shade.

Sydney, New South Wales; Melbourne and Warragul, Victoria; Mount Lofty, South Australia; from April to December, common and widely distributed. The larva feeds on *Acacia decurrens*, but perhaps not exclusively. I have bred dwarfed specimens very much smaller than the size given, but do not regard them as natural. The species is very variable in intensity of marking, but recognisable by the blackish-fuscous face and ferruginous-ochreous forehead from all but the following.

30. *Sel. aganopa*, n.sp.

♂♀. 27-30 mm. Face dark ferruginous-fuscous, lower margin and forehead lighter ferruginous. Antennal pectinations of ♂ 6, apical  $\frac{1}{10}$  simple. Forewings with hindmargin rounded, waved; 11 rising out of 10; in ♂ light ochreous, in ♀ pale reddish-fuscous,



with some scattered black scales, in ♀ with some white irroration in disc; first and second lines represented by series of black dots, partially connected by extremely fine dark fuscous lines, first curved, nearly preceded by a deep ochreous parallel shade, second sinuate, forming a rounded-angular projection above middle and another below middle, nearly followed by a deeper ochreous or ochreous-brown shade on lower  $\frac{2}{3}$ , which forms a small suffused darker spot in middle, preceded by a stronger black mark on second line, and tends to be continued to hindmargin beneath apex; median shade slender, deeper ochreous or ochreous-brown, rather irregular, somewhat angulated above middle; subterminal obscurely paler, somewhat darker-margined, dentate; a hindmarginal row of black dots. Hindwings with hindmargin gently rounded, dentate; colour and subterminal line as in forewings; median shade ochreous, nearly straight; a blackish discal dot; second line slender, dark fuscous marked with black dots, slightly sinuate, nearly followed by an ochreous or ochreous-brown shade; a very fine blackish hindmarginal line.

Albany, West Australia; in December, five specimens. Allied to the preceding, but structurally distinct by the much shorter simple portion of the antennæ in ♂, and also distinguishable by the dotted lines and dark median spot beyond second line of forewings, and more ferruginous face.

31. *Sel. adelphodes*, n.sp.

♂♀. 29-30 mm. Face ochreous-white, with a few blackish scales. Antennal pectinations of ♂ 6, apical  $\frac{1}{10}$  simple. Forewings with hindmargin rounded, strongly waved; 10 connected with 9, 11 rising out of 10; light fuscous, partially tinged with ochreous on veins, and irrorated with black, disc greyer and sprinkled with whitish; first and second lines and median shade very indistinctly marked, slender, darker fuscous, rather sinuate and obtusely angulated near costa, second line forming a more conspicuous dark fuscous mark in middle, and nearly followed on lower  $\frac{2}{3}$  by an obscure darker shade irregularly continued to hindmargin beneath apex; a dark fuscous discal dot; subterminal



obscurely paler, dentate, partially darker-margined; a hindmarginal row of dark fuscous dots. Hindwings with hindmargin rounded, dentate; colour, subterminal line, and hindmarginal dots as in forewings; median shade cloudy, fuscous, nearly straight; a dark fuscous discal dot; second line hardly sinuate, fuscous, dotted with darker, nearly followed by an obscure fuscous parallel shade.

Albany, West Australia; in September, two specimens. Nearly allied to *S. aganopa*, but immediately separable by the ochreous-white face; it is also duller and more indistinctly marked, with the lines not dotted.

32. *Sel. pallidiscaria*, Walk.

(*Aspilates pallidiscaria*, Walk. 1683.)

♂. 28 mm. Head fuscous, face rather dark fuscous, lower margin white. Antennal pectinations 8, apical  $\frac{1}{6}$  simple. Forewings with hindmargin obliquely rounded, waved; 10 connected with 9, 11 rising out of 10; rather light purplish-fuscous, basal and hindmarginal areas darker, inner margin tinged with reddish; costa strigulated with whitish; first and second lines and median shade slender, hardly darker except on inner margin, slightly curved, second line nearly followed by a parallel shade merged in darker posterior area; subterminal subdentate, hardly perceptibly paler except towards inner margin, where it is distinct and whitish. Hindwings with hindmargin unevenly rounded and waved; colour and subterminal line as in forewings; median shade well-marked, rather dark fuscous, nearly straight; a dark fuscous discal dot; second line very faint.

Sydney, New South Wales; in October, two specimens. Distinguished from the other species with dark fuscous face by the fuscous forehead, purplish tinge of wings, and very indistinct lines and median shade of forewings.

33. *Sel. despicata*, Walk.

(*Tephrosia despicata*, Walk. 418.)

29 mm. (Head broken.) Form of wings and markings much as in *Ectropis fractaria*, but colouring distinctly brown; all



markings indistinct ; discal mark of hindwings (apparently lunular) touching median line.

Said to be from South Australia ; one specimen in the British Museum, from which the above notes are taken ; it is a very obscure insect, and not in fit condition to be worth describing, yet it does not seem identifiable with any other species, and claims some notice.

34. *Sel. destinataria*, Gn.

(*Gnophos destinataria*, Gn. IX, 297 ; *Boarmia attenta*, Walk. 393 ; *Tephrosia indirecta*, ib. 418 ; *T. vagaria*, ib. 1542.)

♂. 29-33 mm. Head pale ochreous, face irrorated with fuscous. Antennal pectinations 7, apical  $\frac{1}{10}$  simple. Forewings with hindmargin rounded, strongly waved ; 10 connected with 9, 11 out of 10 ; light yellowish-ochreous, irrorated with grey and a few blackish-grey and whitish scales ; veins partially suffused with bright ferruginous-ochreous ; first and second lines and median shade indistinct, ferruginous-ochreous, dotted with black on veins, rather irregular, forming small rather dark grey spots on costa ; a blackish discal dot ; subterminal forming a series of disconnected whitish marks ; a hindmarginal series of black dots. Hindwings with hindmargin rounded, dentate ; colour and markings as in forewings, but first line absent.

Blackheath (3500 feet), New South Wales ; occurs also in Tasmania ; in September, three specimens. A distinct species, easily known by the mottled yellowish-grey appearance, ferruginous veins, and dotted lines.

35. *Sel. zascia*, n.sp.

♂♀. 31-32 mm. Head blackish, with a few whitish scales. Antennal pectinations of ♂ 6, apical  $\frac{1}{6}$  simple. Thorax blackish, irrorated with whitish, with three black bars. Abdomen white, sprinkled with black, two basal segments barred with black. Forewings with hindmargin bowed, waved ; 10 connected with 9, 11 rising out of 10 ; grey, densely irrorated with black and white ; first line and median shade blackish-grey, bent near



costa, somewhat curved; a large black discal dot immediately preceding median shade; second line blackish-grey, marked with black on veins, bent above middle, slightly sinuate below middle, nearly followed by a strong blackish-grey parallel shade, connected with hindmargin below apex by an ill-defined blackish-grey oblique streak; subterminal white, margined with blackish-grey, dentate, interrupted above and sometimes below middle; a hindmarginal row of large black dots, connected by a fine line. Hindwings with hindmargin rounded, dentate; colour and markings as in forewings, but first line absent, median shade straight and indistinctly marked, discal black dot considerably beyond it.

Melbourne, Victoria; a pair taken by Dr. Lucas and Mr. G. H. Raynor. Very distinct by the dense black and white irroration, and the almost wholly black head.

37. *Sel. perfectaria*, Walk.

(*Tephrosia perfectaria*, Walk. 418.)

♂♀. 28 mm. Face grey-whitish, with black median band. Antennal pectinations of ♂ 4, apical  $\frac{1}{6}$  simple. Forewings with hindmargin bowed; grey-whitish, sprinkled with black; first and second lines and median shade fuscous, strongly dotted with black on veins; first somewhat curved; median slightly sinuate; second sinuate outwards in middle, inwards below middle, nearly followed by a dentate fuscous shade; subterminal dentate, whitish, preceded by cloudy blackish dots, two above middle larger and more conspicuous; a hindmarginal series of large black dots. Hindwings with hindmargin rounded, waved; colour and markings as in forewings, but first line absent, median nearly straight, a large black discal dot beyond it, second line hardly sinuate, a single larger dot (not two) before subterminal.

Said to be from Sydney, New South Wales; three specimens in the British Museum, from which the above description is taken. It is a very distinct species, characterised by the pale colouring and rows of strong black dots on all lines.



37. *Sel. euboliaria*, Walk.

(*Tephrosia euboliaria*, Walk. 419 ; *Scotosia fractata*, ib. 1359.)

♂♀. 26-28 mm. Head pale ochreous, with a ferruginous-blackish bar across forehead, and lower part of face sprinkled with blackish. Antennal pectinations of ♂ 5, apical  $\frac{1}{6}$  simple. Thorax with a small double posterior crest. Forewings with hindmargin rounded, waved ; 10 sometimes connected with 9, 11 separate ; whitish-ochreous, tinged with brownish along costa, with a few scattered black scales, in ♀ tinged with fuscous-grey throughout ; basal area more or less wholly brownish-ochreous ; first line slender, slightly curved, ochreous-brown or blackish, sometimes nearly preceded by a parallel blackish shade ; median shade rather strong, slightly curved, ochreous-brown or usually blackish, anteriorly sharply marked, posteriorly suffused with ochreous-brown ; a black discal dot beyond this ; second line fine, black or ochreous-brown, moderately curved, slightly sinuate inwards in middle, nearly followed by a more or less marked parallel dark ochreous-brown shade ; subterminal obscure, ochreous-whitish, subdentate, closely approximated to preceding shade in middle, more or less margined with dark fuscous, and connected with an oblique angularly bent blackish-fuscous or ochreous-brown streak from hindmargin beneath apex ; a hindmarginal row of black dots. Hindwings with hindmargin rounded, waved ; colour and markings as in forewings, but paler whitish-ochreous towards base, first line and preceding shade absent, median shade straight, obsolete towards costa, second line nearly straight, slightly sinuate, subterminal not approximated to preceding shade.

Geraldton, West Australia ; in November, common. A peculiar species, combining the antennal characters of the first group with the neururation of the second.

38. *Sel. argoplaca*, n.sp.

♂. 34-36 mm. Head whitish mixed with fuscous and dark fuscous, face blackish-fuscous. Antennal pectinations 5, apical  $\frac{2}{5}$  simple. Thorax with short broad posterior crest. Forewings



with hindmargin slightly rounded, somewhat waved; 10 sometimes connected with 9, 11 separate; grey, partially tinged with ochreous, irrorated with white, and with numerous rather long dark fuscous strigulae marked with black scales; a white spot at base of inner margin; first line blackish-fuscous, somewhat curved, indented below middle; median shade broad, suffused, blackish-fuscous, straight; a black transverse discal spot much beyond this, sometimes little marked, sometimes conspicuous; second line blackish-fuscous, partially interrupted, evenly and rather strongly edged with whitish posteriorly, curved outwards on upper half, sinuate inwards on lower half, followed by an ochreous shade; subterminal obscurely paler or sometimes white, irregular, subdentate, margined anteriorly with blackish and posteriorly with an ochreous-brown suffusion; a blackish suffusion before hindmargin above middle; a hindmarginal row of large black dots, connected by a fine line. Hindwings with hindmargin rounded, waved; white, bluish-tinged in disc; a blackish discal dot; a broad dark grey band along upper  $\frac{2}{3}$  of hindmargin, including a suffused white apical spot; lower third of hindmargin and a broad longitudinal streak near inner margin not reaching base coloured and marked as in forewings; cilia round apex white.

Sydney, New South Wales; Quorn, South Australia; in October, four specimens. A handsome and strongly marked insect, differing from all others in the white upper  $\frac{2}{3}$  of the hindwings.

39. *Sel. bitaeniaria*, Le Guill.

(*Boarmia bitaeniaria*, Le Guill., Rev. Zool. 1841, 257, Gn. IX, 249, pl. III, 1; *Gastrina erebina*, Walk. 326.)

♂♀. 43-45 mm. Head fuscous-whitish, lower part of face blackish-fuscous with some pale scales on lower margin, and a blackish bar on forehead, sometimes nearly obsolete. Antennae in ♂ with apical  $\frac{2}{5}$  simple. Thorax with slight posterior crest. Forewings with hindmargin gently rounded, waved; 10 and 11 separate; light fuscous, irrorated with whitish and with scattered black scales, with darker strigulae posteriorly; a small ferruginous basal patch; first line slender, dark fuscous, slightly curved,



indented below middle ; median shade rather thick, blackish, posteriorly rather broadly suffused with ochreous-brown, nearly straight, slightly indented in middle ; a small black discal dot close beyond this ; second line fuscous, indistinct except near inner margin where it becomes black, obtusely prominent above and below middle, tolerably nearly followed by an indistinct ochreous-fuscous parallel shade ; subterminal slender, whitish, partially obscure, irregular and subdentate, anteriorly strongly margined with black except towards inner margin, somewhat dilated with whitish-ochreous in middle, posteriorly margined with an ochreous or pale ferruginous suffusion ; a black hind-marginal line. Hindwings with hindmargin slightly rounded, dentate ; colour and markings as in forewings, but base and anterior half of costa suffused with ochreous-whitish, first line absent, second line sinuate, subterminal without pale dilation in middle.

Melbourne, Victoria ; Campbelltown, Tasmania ; in January, four specimens. From the three following species, which resemble it structurally, it is immediately known by the black discal dot of forewings.

40. *Sel. acaciaria*, Boisd.

(*Boarmia acaciaria*, Boisd., Faun. Mad. 116, pl. xvi, 4, Gn. IX, 255 ; *B. alienaria*, Walk. 370 ; *B. displicata*, ib. 389 ; *B. gelidaria*, ib. 1537.)

♂♀. 35-38 mm. Face with rather prominent tuft, whitish-grey, with broad blackish bar across lower part of face, and narrow more obscure bar on forehead. Antennæ in ♂ with apical  $\frac{2}{5}$  simple. Forewings with hindmargin obliquely rounded, waved ; 10 sometimes connected with 9, 11 separate or sometimes connected with 10 ; grey, sometimes ochreous-tinged, densely irrorated with white, and with scattered black scales ; first line slender, black, dentate, roundly angulated near costa ; a transverse discal mark of raised whitish scales, suffusedly margined with grey, placed on and interrupting median shade, which is slender, blackish, curved, rather irregular ; second line well-marked, black, subdentate,



gently curved, nearly followed by a very indistinct grey parallel shade, and usually marked in middle with a small blackish spot or a short longitudinal line extending to hindmargin; subterminal whitish, very obscure, subdentate, grey-margined, forming a small dark spot on anterior edge above middle; a hindmarginal series of black dots, connected by a fine line. Hindwings with hindmargin gently rounded, dentate; colour and markings as in forewings, but first line absent, median shade stronger, nearly straight, second line more strongly marked on lower half, nearly followed by a more or less distinct brownish-ochreous parallel shade, without blackish spot in middle.

Newcastle, New South Wales; Geraldton, West Australia; in November, eight specimens. This and the two following species differ from the rest in the discal transverse spot of raised scales; *S. acaciaria* is smaller than the other two, and distinguishable from both by the well-marked black bar of face. This species occurs also in India, Ceylon, South Africa, and probably the adjoining islands; there is a tendency to the origination of slight local forms, and the Australian form thus inclines to show the ochreous or brownish tinge of some markings more distinctly, but I can see no more reliable point of distinction.

41. *Sel. illustraria*, Walk.

(*Boarmia illustraria*, Walk. 1539.)

♂♀. 40-41 mm. Face densely rough-scaled, fuscous-whitish, with indications of a blackish median bar. Antennæ in ♂ with apical  $\frac{2}{5}$  simple. Forewings with hindmargin obliquely rounded, waved; 10 and 11 separate; whitish-ochreous, clouded with pale reddish-ochreous; first line black, rather irregular, curved, nearly preceded by a fuscous-reddish parallel shade sometimes wholly suffused with black; a moderately large white discal spot, including a transverse ridge of raised scales, in ♀ suffused with fuscous, placed on median shade, which is slender, fuscous, rather irregular, tending to form a blackish spot on costa; second line black, subdentate, upper half unevenly curved, nearly followed by a fuscous-reddish or blackish parallel shade, becoming broadly suffused with



fuscous or black on upper half, and sometimes emitting a streak anteriorly to touch discal spot; subterminal white, subdentate, margined with fuscous and partially with black, sometimes double for a short distance above middle, where it is surrounded by a blackish suffusion, beneath this forming a moderately large pale or white spot on hindmargin; a hindmarginal series of black marks. Hindwings with hindmargin rounded, dentate; colour and markings as in forewings, but median shade blacker, discal spot margined with black, second line sometimes obscured on lower  $\frac{2}{3}$  by a very broad band of blackish suffusion, sometimes followed by a whitish suffusion, pale spot on middle of hindmargin little marked.

Brisbane, Queensland; three specimens (Dr. Lucas and Australian Museum). This species appears to be very variable in the extent and intensity of the blackish markings, and at present I cannot decide what points are most reliable for its characterisation, but the reddish-ochreous suffusion seems constant.

42. *Sel. epistictis*, Meyr.

(*Boarmia epistictis*, Meyr., Trans. Ent. Soc. Lond. 1889, 499.)

♂♀. 48-50 mm. Face ochreous-whitish, sometimes with a blackish lateral mark in middle. Antennal pectinations *a* 8, *b* 10, apical half filiform. Forewings with hindmargin gently rounded, in ♀ faintly waved; 10 and 11 separate; pale brownish-ochreous, with scattered blackish scales, more or less irrorated with white, in ♀ sometimes very densely; first line black, rather irregular, gently curved, nearly preceded by an ochreous-brown parallel shade, sometimes nearly obsolete; median shade ochreous-brown, obscure, somewhat irregular, nearly straight; an ill-defined transverse-oval dark grey discal spot, including a more or less marked ridge of somewhat raised whitish scales, sometimes hardly perceptible, adjoining posterior edge of median shade; second line black, subdentate, nearly straight, with a small sinuation outwards above middle, nearly followed by a very obscure ochreous-brownish shade; subterminal white, dentate, anteriorly margined by a small double blackish spot above middle, and posteriorly in



♀ by a darker suffusion between middle and apex; a hindmarginal row of round black dots, sometimes connected with two or three short black longitudinal streaks on veins. Hindwings with hindmargin rounded, waved; colour and markings as in forewings, but first line absent, median shade well-marked, more or less thick, blackish, discal spot more distinctly white, black-margined, second line curved outwards on upper  $\frac{2}{3}$ , often more strongly marked, subterminal without dark marginal suffusions above middle, but sometimes margined anteriorly with a blackish suffusion towards lower extremity.

Brisbane, Queensland; one specimen received from Dr. Lucas; also sent commonly from New Guinea. Differs from the two preceding by its large size, hindmargin of hindwings waved but not dentate, and longer simple portion of antennæ in ♂, as well as by its dull colouring, and reduction of frontal bar to a lateral mark.

#### 9. LOPHODES, Gn.

Face with tolerably appressed scales. Tongue developed. Palpi rather short, porrected, with projecting scales, terminal joint very short. Antennæ in ♂ very strongly bipectinated, apex simple. Thorax without crest, densely hairy beneath. Femora hairy beneath; posterior tibiæ in ♂ not dilated. Forewings in ♂ with small fovea; 11 separate or from a point with 10 (or probably sometimes stalked) or absent. Hindwings normal.

Includes only the following species, which is nearly related to the preceding genus.

#### 43. *Loph. sinistraria*, Gn.

(*Lophodes sinistraria*, Gn. IX, 212, pl. x, 5.)

♂. 38-45 mm., ♀ 54-62 mm. Head and thorax blackish or partly deep ferruginous, anterior margin of thorax ochreous-whitish. Antennal pectinations of ♂ 18, apical  $\frac{1}{10}$  simple. Forewings in ♀ elongate, hindmargin in ♂ somewhat rounded, waved, in ♀ more oblique, rounded-dentate, tooth on vein 5 nearly obsolete, so that there is a deep emargination between 4 and 6; rather deep ferruginous-ochreous, in ♀ sometimes towards costa and lower part of



hindmargin, in ♂ almost wholly suffused with dark fuscous, with scattered blackish scales; basal fourth of costa rather broadly in ♂ pale ochreous, in ♀ whitish, with scattered dark scales; first line black, curved, in ♂ twice, in ♀ once obtusely angulated, on lower half nearly preceded by a blackish shade; usually a pale patch on inner margin beyond this; median shade slender, usually very indistinct, dark fuscous or blackish, angulated near costa; second line slender, black, slightly irregular, curved and somewhat sinuate, followed on costa by a small ochreous-whitish or white spot; in ♀ sometimes a whitish shade beyond this; subterminal obscurely paler or nearly obsolete, in ♀ more whitish and dentate near costa, traversing a round pale spot of ground colour between veins 6 and 7, which in ♀ extends to hindmargin; a black interrupted hindmarginal line. Hindwings with hindmargin rounded, dentate; colour as in forewings, but lighter towards base; median shade, second, and subterminal lines as in forewings, but second line irregularly dentate, no pale subapical spot before hindmargin; a transverse black discal mark beyond median shade.

Newcastle and Sydney, New South Wales; Fernshaw, Victoria; in October, November, February, March, and May, locally common. It is a variable insect, and the sexes differ markedly. The larva feeds on *Acacia decurrens*.

#### 10. MELANODES, Gn.

Face rough-scaled. Tongue developed. Palpi rather short, porrected, second joint with dense loose scales, terminal joint very short. Antennæ in ♂ subdentate, shortly ciliated. Thorax not crested, densely hairy beneath. Femora glabrous (?); posterior tibiæ in ♂ not dilated. Forewings in ♂ without fovea (?); 10 rising out of 9 below 7. Hindwings normal.

Contains the following species only; certainly a good genus, but although apparently sometimes common, I have not yet succeeded in obtaining good specimens for detailed examination, and the characters given above are in part uncertain. Hence the affinity of the species is also doubtful, but it seems allied to *Lophodes*.



44. *Mel. anthracitaria*, Gn.

(*Melanodes anthracitaria*, Gn. IX, 222, pl. ix, 7; *Praxis corvus*, Walk. Noct. 1087.)

♂♀. 45-55 mm. Forewings with hindmargin rounded, waved; blackish, the veins somewhat dotted with whitish; first and second lines black, first twice angulated outwards, second sinuate outwards in middle, followed on costa by a yellowish dot; median shade obscure, sinuate. Hindwings with colour and markings as in forewings, but first line absent, median and second straighter; a transverse black discal spot. Sometimes an ochreous-white suffusion forms a band beyond second line in both wings, and before first line in forewings.

Sydney, New South Wales; Fernshaw, Victoria; also in Tasmania (Austr. and Brit. Mus.). The above incomplete description is sufficient for identification.

## 11. APOROCOTENA, n.g.

Face with appressed scales. Tongue developed. Palpi short, porrected, rough-scaled, terminal joint very short. Antennæ in ♂ filiform, shortly ciliated. Thorax without crest, densely hairy beneath. Femora glabrous; posterior tibiæ in ♂ dilated, containing tuft, tarsi extremely short. Forewings in ♂ with well-marked fovea; 10 rising out of 11, connected with 9. Hindwings normal.

Endemic; nearly related to *Selidosema*, differing only by the simple antennæ.

45. *Apor. scierodes*, n.sp.

♂. 26 mm. Head fuscous, crown whitish-ochreous behind, face with blackish median band, and mixed with whitish below this. Antennal ciliations  $\frac{1}{4}$ . Forewings with hindmargin rounded, slightly waved; ochreous-brown, strewn with numerous dark fuscous transverse strigulæ, space between first and second lines suffused with dark fuscous; lines blackish, somewhat irregular, placed near together, first curved, preceded by some whitish scales, median sinuate, second obtusely somewhat angulated above middle, sinuate inwards on lower half, edged with whitish posteriorly,



ground colour immediately beyond this somewhat mixed with whitish; subterminal very obscure, whitish, subdentate, suffused towards middle with dark grey, which forms a short oblique subapical streak; an interrupted black hindmarginal line. Hindwings with hindmargin rounded, somewhat waved; yellowish-ochreous, more whitish towards base and inner margin, strewn with dark fuscous scales or short strigulæ, apex suffused with dark grey; median shade blackish, somewhat bent in middle; second line rather thick, blackish, slightly sinuate, edged with whitish posteriorly; subterminal suffusedly edged with blackish anteriorly; an interrupted black hindmarginal line.

Brisbane, Queensland; one specimen received from Dr. Lucas. The yellowish tinge of the hindwings, though obscure, is a noticeable characteristic.

## 12. HYBERNIA, Latr.

Face tolerably smooth. Tongue short. Palpi moderate, porrected, rough-scaled, terminal joint short. Antennæ in ♂ moderately bipectinated throughout. Thorax not crested, slightly hairy beneath. Femora glabrous; posterior tibiæ in ♂ not dilated. ♀ semiapterous. Forewings in ♂ without fovea; 11 absent. Hindwings normal.

A small genus, occurring in the temperate regions of both hemispheres. The neuration quoted above is simply that of the Australian species; those of other regions display great variability in this character, but it is unnecessary to complicate the description of the genus by recording these variations here.

### 46. *Hyb. indocilis*, Walk.

(*Zermizinga indocilisaria* (!), Walk. 1530; *Hybernia boreophilaria*, Gn., Ent. Mo. Mag. V, 61; *H. indocilis*, Meyr., Trans. N.Z. Inst. 1883, 97.)

♂. 24-29 mm. Antennal pectinations *a* 6, *b* 7. Forewings with hindmargin gently rounded, waved; pale fuscous-grey, irrorated with dark fuscous; first line dark fuscous, curved, somewhat irregular; median shade cloudy, dark fuscous, slightly curved; second line dark fuscous or blackish, slightly curved, twice slightly



sinuate, sometimes nearly followed by an obscure ochreous shade ; subterminal obscurely paler, subdentate, anteriorly margined by a darker fuscous shade ; a hindmarginal series of blackish dots, connected by a fine line. Hindwings with hindmargin rounded, crenulate ; colour and markings as in forewings, but first line absent, second line hardly sinuate ; a transverse dark fuscous discal mark beyond median shade.

♀. 12-14 mm. Wings exceedingly narrow, apex suddenly dilated, angles acute, hindmargin dentate ; colour and markings as in ♂, but lines blacker and more sharply marked.

Brisbane, Queensland ; Sydney, New South Wales ; Mount Lofty, South Australia ; also occurs in New Zealand ; from July to January, rather common, attached to *Leptospermum*.

### 13. PSILOSTICHA, n.g.

Face with tolerably appressed scales. Tongue developed. Palpi short, porrected, rough-scaled, terminal joint very short. Antennæ in ♂ simple, shortly ciliated. Thorax not crested, somewhat hairy beneath. Femora glabrous ; posterior tibiæ in ♂ dilated (?). Forewings in ♂ with fovea ; 11 rising out of 10, running into 12. Hindwings normal.

At present confined to the following species. It is allied to *Ectropis*, but further material is required to fix its relationship.

### 47. *Psil. mactaria*, Gn.

(*Tephrosia mactaria*, Gn. IX, 270 ; *Boarmia attacta*, Walk. 392 ; *Tephrosia integraria*, ib. 420 ; *T. absorpta*, ib. 420.)

♂♀. 30-31 mm. Face white, with a black median bar. Forewings with hindmargin bowed, slightly waved ; white, irregularly irrorated with fuscous and black ; first, median, and second lines slender, irregularly subdentate, dark fuscous or black, tending to form dots on veins and larger ones on costa ; first curved, nearly preceded by a grey line ; median curved above middle, preceded by a black discal dot ; second curved outwards on upper half, sinuate inwards below middle, nearly followed in ♂ by a dark grey, in ♀ by a fuscous thicker shade, strongest on lower half ;



subterminal pale, dentate, margined suffusedly with dark grey ; a fine black interrupted hindmarginal line, forming dots between veins. Hindwings with hindmargin rounded, waved ; colour and markings as in forewings, but first line absent, median and second not or hardly curved, discal dot placed beyond median line.

Melbourne, Victoria ; Georges Bay, Tasmania ; in December and January, two specimens.

#### 14. ECTROPIS, Hb.

Face tolerably smooth or with hardly projecting scales. Tongue developed. Palpi moderate, porrected, rough-scaled, terminal joint short. Antennæ in ♂ biserrate-dentate, or bipectinated partially or throughout with two short slender (or rarely long) pectinations on each side of each joint, terminating in tufts of cilia. Thorax smooth or with slight crest, moderately or slightly hairy beneath. Femora glabrous ; posterior tibiæ in ♂ moderately or slightly dilated, sometimes containing tuft. Forewings in ♂ with well-marked fovea ; 10 sometimes anastomosing or connected with 12 and 9, 11 out of 10 between connections, sometimes running into 12 or absent. Hindwings normal.

The genus is comparatively small, but widely distributed, at least in temperate regions. The species included in it show considerable diversity of structure, but it seems unnecessary to subdivide the genus further, the differences being properly regarded as specific only ; they agree in all essential points, and particularly in the possession of two teeth or pectinations on each side of each joint of the antennæ in the ♂, instead of one. In observing this point it must be remembered that there is a slight ridge of scales in the middle of each joint which might cause the impression that the joints are twice as numerous as they really are ; this must be guarded against.

- |                                                               |    |
|---------------------------------------------------------------|----|
| 1. Antennæ in ♂ with moderate or long pectina-<br>tions ..... | 2. |
| Antennæ in ♂ with very short pectinations<br>or teeth.....    | 3. |



- |                                                         |                           |
|---------------------------------------------------------|---------------------------|
| 2. Forewings with a transverse discal mark ...          | 54. <i>camelaria</i> .    |
| Forewings with a discal dot only .....                  | 51. <i>exsuperata</i> .   |
| 3. Head fuscous .....                                   | 4.                        |
| Head whitish or ochreous .....                          | 5.                        |
| 4. Hindwings with hindmargin dentate.....               | 48. <i>pristis</i> .      |
| Hindwings with hindmargin waved .....                   | 50. <i>isombra</i> .      |
| 5. Face with a blackish median bar.....                 | 6.                        |
| Face unicolorous whitish-ochreous .....                 | 49. <i>argalea</i> .      |
| 6. Wings light grey ; discal mark ringed .....          | 53. <i>fractaria</i> .    |
| Wings pale yellowish-ochreous ; no discal<br>ring ..... | 52. <i>subtinctaria</i> . |

The antennal structure affords good distinguishing characters for each species.

48. *Ectr. pristis*, n.sp.

♂♀. 20-25 mm. Head and thorax fuscous-grey or dark fuscous, lower margin of face sometimes whitish. Antennæ in ♂ flatly dentate, with a moderate acute anterior tooth and a very minute posterior one on each side of each joint, emitting fascicles of cilia. Forewings with hindmargin obliquely rounded, waved ; 10 anastomosing or connected with 12 and 9, 11 out of 10 between connections ; light fuscous, sprinkled with whitish and blackish scales ; first and second lines and median shade obscurely darker, more or less marked with blackish on veins, rather curved, somewhat irregular, second line sinuate inwards on submedian fold ; a conspicuous black discal dot on median shade ; subterminal obscurely whitish, subdentate, anteriorly edged by a darker suffusion ; a fine interrupted blackish hindmarginal line. Hindwings with hindmargin rounded, dentate ; colour and markings as in forewings, but first line absent, second line not sinuate, discal dot smaller, placed beyond median shade.

Duaringa and Maryborough, Queensland ; Newcastle and Sydney, New South Wales ; Melbourne, Victoria ; from November to April, not uncommon. Specially characterised in the genus by the unequal size of the antennal teeth, and also through the small size, dark colour of the head and thorax, and dentate hindwings.



49. *Ectr. argalea*, n.sp.

♂. 19 mm. Head and thorax whitish-ochreous. Antennæ with two short slender pectinations (1) on each side of each joint, terminating in fascicles of cilia. Forewings with hindmargin gently rounded; 10 separate, 11 absent; pale ochreous, slightly brownish-tinged, with a few scattered black scales; usual lines faintly indicated by groups of black scales, but not distinctly traceable; a conspicuous black discal dot; a series of indistinct blackish marks on hindmargin. Hindwings with hindmargin rounded, unevenly waved; colour and markings as in forewings.

Sydney, New South Wales; in October and April, two specimens. The smallest species in the genus, differing from all the rest in the wholly whitish-ochreous head and thorax.

50. *Ectr. isombra*, n. sp.

♂♀. 23 mm. Head fuscous or whitish-fuscous, face sometimes with an indistinct darker bar. Antennæ in ♂ with two short acute teeth on each side of each joint, terminating in extremely long fascicles of cilia. Forewings with hindmargin gently rounded; 11 out of 10, running into 12; pale whitish-fuscous, irrorated with white and black; first line dark fuscous, very ill-defined, preceded by a cloudy brown shade; median shade slender, ill-defined, dark fuscous, irregular, rather strongly curved, preceded by a dark fuscous discal dot; second line blackish, tending to be interrupted or dotted, slightly curved, sinuate inwards near inner margin, nearly followed by an indistinct brownish shade; subterminal obscurely whitish, waved, more or less suffusedly margined with dark fuscous; a hindmarginal series of blackish dots. Hindwings with hindmargin rounded, waved; colour and markings as in forewings, but first line absent, median shade straight, followed by discal dot.

Duaringa and Brisbane, Queensland, in April; two specimens received from Mr. Barnard and Dr. Lucas. Differs in neurulation from all the rest of the genus; an obscure-looking species, resembling *E. exsuperata* but smaller and duller, and the antennæ of the ♂ bear small teeth instead of well-developed pectinations as in that species.



51. *Ectr. exsuperata*, Walk.

(*Boarmia exsuperata*, Walk. 393; *Tephrosia disposita*, ib. 421.)

♂♀. 23-27 mm. Head whitish-ochreous or whitish, lower margin of face white surmounted by a narrow dark fuscous bar. Antennæ in ♂ with a closely approximated pair of moderate pectinations ( $3\frac{1}{2}$ ) on each side of each joint, almost touching at base but diverging towards apex, apical  $\frac{1}{8}$  simple. Forewings with hindmargin rounded; 10 separate, 11 absent; pale brownish-ochreous, irrorated with whitish, and with scattered blackish scales; first line and median shade ill-marked, slender, dull reddish-ochreous, angulated near costa, first line partially marked with blackish; a blackish discal dot preceding median shade; second line slender, blackish, more or less interrupted or dotted, somewhat curved, rather sinuate inwards on lower third, nearly followed by a dull reddish-ochreous parallel shade; subterminal whitish, waved, suffusedly margined with dull reddish-ochreous, anterior margin partially dotted with blackish; a hindmarginal row of black dots. Hindwings with hindmargin rounded, waved; colour, second, and subterminal lines as in forewings; a rather strongly marked slightly sinuate blackish median shade, nearly followed by a dull reddish-ochreous sometimes broad parallel shade.

Newcastle and Sydney, New South Wales; Melbourne, Victoria; Mount Lofty, South Australia; in October and March, rather common. Distinguished by the approximated pairs of moderate antennal pectinations, and the dull reddish-ochreous transverse shades.

52. *Ectr. subtinctaria*, Walk.

(*Tephrosia subtinctaria*, Walk. 415.)

♂♀. 29-44 mm. Head pale yellowish-ochreous or ochreous-whitish, face with a median blackish bar. Antennæ in ♂ with joints flatly dentate, each dentation emitting two short teeth on each side, terminating in long fascicles of cilia. Abdomen with a dark fuscous subbasal band. Forewings with hindmargin rounded, waved; 11 rising out of 10; pale yellowish-ochreous, in ♀ partially suffused with whitish, strewn with short fuscous strigulæ and a



few dark fuscous scales ; first line slender, blackish, somewhat irregular, sharply angulated near costa ; median shade slender, cloudy, dark fuscous, irregular, angulated above middle, dilated on costa, approximated to second line towards inner margin ; second line blackish, indented beneath costa, forming a strong bidentate projection above middle, and a broader short obtusely bidentate projection below middle, concavity between these followed by a suffused fuscous or ochreous-brown spot ; subterminal pale or whitish, slender, dentate, partially margined anteriorly and sometimes posteriorly by a dark fuscous suffusion ; a hindmarginal row of black dots. Hindwings with hindmargin rounded, dentate ; colour and markings as in forewings, but first line absent, median shade nearly straight or slightly bent in middle, somewhat irregular, second line tolerably evenly curved, without projection, sinuate near inner margin, followed by a parallel deeper ochreous shade throughout ; a cloudy dark fuscous discal dot beyond median shade.

Newcastle and Sydney, New South Wales ; in July and October, four specimens. From the other species with toothed antennæ it is at once separated by the large size and ochreous colouring ; there is considerable superficial likeness to *Selidosema excursaria*, but apart from structural differences the colour and marking of the face appear to give a good distinction.

53. *Ectr. fractaria*, Gn.

(*Tephrosia fractaria*, Gn. IX, 270 ; *Hypochroma dissonata*, Walk. 443 ; *H. nigraria*, Feld. pl. cxxvi, 1.)

♂♀. 28-34 mm. Head grey-whitish, face with more or less broad blackish-grey median bar. Antennæ in ♂ with two short acute projections on each side of each joint, terminating in moderate fascicles of cilia. Forewings with hindmargin rounded, strongly waved ; 10 sometimes connected with 9, 11 absent ; light grey, irrorated and sometimes mixed with whitish, and densely irrorated with dark grey, often forming short strigulæ ; lines dark fuscous, obscure, rather curved, first and second marked with blackish dots or wedges on veins, first line nearly preceded and



second followed by cloudy parallel dark fuscous shades; a short pale transverse discal mark before median shade, enclosed by a dark grey ring; subterminal whitish, dentate, partially margined anteriorly with dark fuscous spots; a hindmarginal row of blackish dots. Hindwings with hindmargin rounded, dentate; colour and markings as in forewings, but first line absent, median shade straight, more distinctly marked, preceding discal mark, second line followed by a more distinctly marked waved darker shade.

Sydney, New South Wales; Melbourne, Victoria; Launceston and Hobart, Tasmania; from September to March, rather common. From the other species with toothed antennæ in ♂ it is separable by the pale discal mark enclosed in a dark ring, as well as the grey colouring and moderate size.

54. *Ectr. camelaria*, Gn.

(*Boarmia camelaria*, Gn. IX, 256; *Cleora velutinaria*, Walk. Suppl. 1580.)

♂♀. 37-46 mm. Head whitish, face with a more or less distinct fuscous median bar. Antennæ in ♂ with a pair of slender pectinations (7), rising from same point, on each side of each joint, apical  $\frac{2}{5}$  filiform, simple. Forewings with hindmargin obliquely rounded, waved; 10 connected with 12 and 9, 11 rising out of 10 between connections; white, strewn with pale brownish-ochreous strigulae marked with darker ochreous-brown scales; lines ochreous-brown, irregular, starting from small dark fuscous spots on costa, first ill-defined, angulated near costa, nearly preceded by a subdentate similar line, median forming an angulated projection outwards, within which is a transverse dark fuscous discal mark, second reduced to a series of dark fuscous dots, curved, nearly followed by a parallel dentate ochreous-brown line; subterminal obsoletely dentate, whitish, margined anteriorly by a series of small dark fuscous spots, and posteriorly by an interrupted ochreous-fuscous line; a hindmarginal series of round black dots. Hindwings with hindmargin rounded, dentate; colour, second and subterminal lines, and hindmarginal dots as in forewings; first line only indicated near inner margin; median shade irregular,



ill-defined, followed by a roundish dark fuscous discal spot, including a whitish transverse mark or cross.

Duaringa and Brisbane, Queensland; Newcastle, New South Wales; four specimens. Differs from all in the long pectinations and filiform apical  $\frac{2}{5}$  of antennæ in ♂, and characterised also by the white groundcolour, ochreous irroration, and dotted lines.

### 15. TIGRIDOPTERA, HS.

Face with tolerably appressed scales. Tongue developed. Palpi moderate, ascending, shortly rough-scaled, terminal joint short. (Antennæ in ♂ probably ciliated.) Thorax not crested, glabrous beneath. Femora glabrous. Forewings (in ♂ probably with fovea); 10 rising out of 11, running into 9. Hindwings normal.

The characters of the ♂ are still unknown, and possibly they may present additional peculiarities. The genus is however distinct enough as it stands, and is most allied to the Palæarctic genus *Abraaxas*.

1. Forewings with white markings ..... 55. *mariana*.  
Forewings without white markings..... 2.
2. Wings with hindmarginal series of black  
marks..... 56. *matutinata*.  
Wings without hindmarginal black marks... 57. *rotundata*.

#### 55. *Tigr. mariana*, White.

♀. 90-94 mm. Forewings black; a rather broad white fascia from  $\frac{1}{3}$  of costa to  $\frac{3}{5}$  of inner margin, lower extremity suddenly attenuated; a moderate white spot beneath costa at  $\frac{2}{3}$ , two smaller ones before hindmargin towards middle, and two very small ones towards apex. Hindwings black; a broad yellow fascia before middle, containing an irregular black spot above middle, suddenly attenuated above this and not reaching costa; two posterior curved series of moderate irregular yellow spots, second hindmarginal, middle spot of each confluent together into a single elongate spot.



Cape York, Queensland ; two specimens (*Coll. Macleay*). I omitted to make a sufficient investigation of the characters of this species, but believe it is correctly referred to this genus.

56. *Tigr. matutinata*, Walk.

(*Panaethia matutinata*, Walk. 1109.)

♀. 58-62 mm. Head yellow-ochreous, face dark fuscous. Thorax light grey-blue, anterior margin blackish, shoulders with a yellow-ochreous spot. Abdomen ochreous-yellow. Forewings with hindmargin obliquely rounded ; rather deep yellow-ochreous ; entire disc light grey-blue, except a rather broad longitudinal streak from centre of disc outwards, and another along submedian fold ; a small blackish spot near base below middle ; six irregularly curved rather thick cloudy black lines, margined with light grey-blue on the yellow areas, first not reaching inner margin, second and third confluent on submedian fold, fourth and fifth interrupted to form small spots, fifth interrupted by the yellow longitudinal streaks, sixth forming a series of larger roundish spots ; a round black discal spot before third line ; a black spot, surrounded with grey-blue, connecting sixth line with hindmargin below apex, and two much smaller similar spots beyond sixth line above anal angle ; a hindmarginal series of black marks, edged and partially connected with light grey-blue. Hindwings with hindmargin rounded, waved ; colour and markings as in forewings, but blue of disc extended to base, first two lines absent, third twice angulated, not curved, discal spot placed before fourth line, subapical spot much smaller.

Brisbane, Queensland ; two specimens received from Mr. Raynor.

57. *Tigr. rotundata*, Butl.

(*Tigridoptera rotundata*, Butl., Ent. Mo. Mag. XIV, 108.)

♀. 51 mm. Head and thorax pale grey, slightly bluish and yellowish-tinged, patagia with a cloudy blackish spot. Abdomen ochreous-yellow. Forewings with hindmargin obliquely rounded ; pale whitish-blue-grey, with a rather broad streak from centre of disc outwards, another along submedian fold, and a hindmarginal



band light dull yellow-ochreous ; five rather thick cloudy curved black lines, second and third confluent on submedian fold, fifth interrupted by the ochreous longitudinal streaks; a series of cloudy oval black spots representing the sixth line, rather broadly interrupted in middle ; a faint grey subapical spot before hind-margin, and another above anal angle. Hindwings with hind-margin rounded ; colour and markings as in forewings, but first two lines absent, grey subapical and supra-anal spots absent.

Cardwell, Queensland; one specimen received from Mr. Raynor.

#### 16. LOMOGRAPHIA, Hb.

Face nearly smooth. Tongue developed. Palpi short, porrected, rough-scaled, terminal joint very short. Antennæ in ♂ bipectinated, apex simple. Thorax not crested, slightly hairy beneath. Femora glabrous ; posterior tibiæ in ♂ not dilated. Forewings in ♂ without fovea ; 10 absent, 11 anastomosing or connected with 12 and 9. Hindwings normal.

There are several European species of this genus ; probably it occurs in other regions, but is as yet insufficiently recognised. It is nearly allied to *Deilinia*, but differs in the absence of vein 10. In some European species vein 11 is not connected with 12, the same variation which occurs in *Deilinia*, and therefore not involving separation ; I mention it, as this may occur in the Australian species also, though no instance has met my observation.

Head and thorax grey ..... 58. *spodina*.

Head and thorax ochreous ..... 59. *isocyma*.

#### 58. *Lom. spodina*, n.sp.

♂. 20-24 mm. Head and thorax grey. Antennal pectinations 5, apical  $\frac{1}{10}$  simple. Forewings with hindmargin somewhat bowed, waved ; grey, sprinkled with blackish ; first and second lines somewhat curved, waved, slightly darker, marked with blackish dots on veins ; median shade very faintly darker ; a blackish discal dot ; subterminal slightly paler, obscurely edged with darker, anterior edge sometimes dotted with darker ; a hind-marginal row of blackish dots. Hindwings with hindmargin



rounded, waved; colour and markings as in forewings, but first line absent, median shade more perceptible, second line distinctly darker.

Sydney, New South Wales; Mount Lofty, South Australia; in September, October, March, and April, rather common; an obscure species, and probably overlooked.

59. *Lom. isocyma*, n.sp.

♂♀. 22-23 mm. Head and thorax pale ochreous or brownish-ochreous. Antennal pectinations in ♂ 6, apical  $\frac{1}{2}$  simple. Forewings with hindmargin rounded, hardly waved; pale ochreous, sprinkled with ochreous-whitish, and more or less suffusedly irrorated with deeper ochreous or fuscous; first line and median shade hardly traceable; a rather dark fuscous discal dot; second line fuscous, waved, slightly curved, margined posteriorly by a pale shade; subterminal pale, subdentate, margined with darker suffusions; no hindmarginal dots. Hindwings with hindmargin rounded, waved; colour and markings as in forewings, but discal dot obsolete, median shade more perceptible, nearly straight.

Duaringa, Queensland; received commonly from Mr. G. Barnard.

17. DEILINIA, Hb.

Face with short tuft or projecting scales or smooth. Tongue developed. Palpi moderate, porrected, rough-scaled, terminal joint short. Antennæ in ♂ bipectinated, apex simple. Thorax not crested, somewhat hairy beneath. Femora glabrous or thinly hairy; posterior tibiæ in ♂ not dilated. Forewings in ♂ without fovea; 10 out of 9, 11 sometimes also out of 9, usually anastomosing or connected with 12. Hindwings normal, in ♂ sometimes densely hairy beneath towards base.

There are several European and North American species, in which however vein 10 of the forewings rises separate, but they are closely allied in all other respects, and certainly congeneric.

- |                           |                        |
|---------------------------|------------------------|
| 1. Face wholly whitish... | 64. <i>lithodora</i> . |
| Face not whitish .....    | 2.                     |



- |                                                              |                          |
|--------------------------------------------------------------|--------------------------|
| 2. Head with a clear white band behind antennæ               | 3.                       |
| Head without white band behind antennæ...                    | 4.                       |
| 3. Wings reddish-tinged .....                                | 63. <i>oenias</i> .      |
| Wings not reddish-tinged.....                                | 66. <i>ochthadia</i> .   |
| 4. Head irrorated with white .....                           | 65. <i>cremnias</i> .    |
| Head not irrorated with white .....                          | 5.                       |
| 5. Hindwings in ♂ densely hairy beneath<br>towards base..... | 62. <i>impressaria</i> . |
| Hindwings in ♂ not hairy .....                               | 6.                       |
| 6. Antennæ in ♂ with apical $\frac{1}{12}$ simple.....       | 60. <i>eccentritis</i> . |
| Antennæ in ♂ with apical $\frac{1}{5}$ simple .....          | 61. <i>rectaria</i> .    |

60. *Deil. eccentritis*, n.sp.

♂♀. 28-30 mm. Head in ♂ ferruginous-fuscous, crown ochreous, in ♀ light fuscous, crown ochreous-whitish; face smooth, with very short slight tuft on lower edge. Antennal pectinations in ♂ 16, apical  $\frac{1}{12}$  simple. Femora thinly hairy beneath. Forewings with hindmargin rounded, waved; 11 anastomosing with 12; light ochreous-brownish, more or less reddish-tinged, strewn with short dark grey transverse strigulæ; first and second lines and median shade dark grey, waved, somewhat curved, all very obscure and little traceable, in ♂ sometimes first line preceded and second followed by a broad clear reddish-ochreous suffusion; a moderately large blackish-grey discal dot, in ♂ ringed with grey-whitish scales or sometimes transformed into a small round white spot; subterminal represented by a series of obscure blackish dots, in ♂ followed by whitish scales or dots and preceded by a ferruginous suffusion, in ♀ followed by a moderately large double dark grey spot below middle; a hindmarginal row of black dots. Hindwings with hindmargin rounded, waved; colour and markings as in forewings, but first line obsolete and not preceded by reddish-ochreous suffusion.

Warragul, Victoria; taken commonly in December by Mr. G. H. Raynor, who gave me specimens. It is a remarkably variable species, but differs from all the rest by the hairy femora; the



pectinations of the antennæ in the ♂ are much longer, and the apical simple portion much shorter than in any other.

61. *Deil. rectaria*, Walk.

(*Casbia rectaria*, Walk. Suppl. 1667 ; *C. irrorata*, Butl., Trans. Ent. Soc. Lond. 1886, 438.)

♂♀. 23-27 mm. Head fuscous, crown paler ; face shortly rough-scaled. Antennal pectinations in ♂ 10, apical  $\frac{1}{5}$  simple. Femora glabrous. Forewings with hindmargin bowed ; in ♂ with a small gland surrounded by an irregular depression on lower surface immediately beneath cell near base ; 11 free ; light ochreous-brownish, with fine scattered dark fuscous or blackish scales tending to form obscure strigulæ ; costal edge more ochreous ; first and second lines and median shade obsoletely darker, hardly traceable, median shade straight and more distinct on lower half ; a black discal dot, two small variable spots or dots near beyond second line in middle and one midway between these and apex, ferruginous or white, usually edged with dark fuscous, or sometimes wholly dark fuscous ; a hindmarginal row of black dots. Hindwings with hindmargin rounded ; colour and markings as in forewings, but first line absent, median shade usually distinct throughout, posterior spots smaller or partially or entirely obsolete.

Duaringa, Queensland ; received commonly from Mr. G. Barnard. Distinguished from all by the peculiar gland of the ♂ ; and vein 11 seems to be constantly separate, whilst in the other species this structure only occurs exceptionally.

62. *Deil. impressaria*, Walk.

(*Tephrina impressaria*, Walk. 966.)

♂♀. 23-27 mm. Head ferruginous, face shortly rough-scaled. Antennal pectinations in ♂ 8, apical  $\frac{1}{5}$  simple. Femora glabrous. Forewings with hindmargin bowed ; 11 anastomosing with 12 or rarely separate ; pale greyish-ochreous, often rather strongly reddish-tinged, sometimes more grey, with a few scattered grey scales, tending to indicate strigulæ ; costa ferruginous-yellow, more or less strigulated with dark grey ; first and second lines and



median shade rather darker, nearly straight, but very faint and often hardly traceable ; a blackish discal dot ; sometimes two or three small adjacent ferruginous spots near beyond second line in middle, partially blackish-edged ; a hindmarginal row of black dots. Hindwings in ♂ clothed with dense hairs towards base beneath, hindmargin rounded ; colour and markings as in forewings, but first line absent.

Duaringa, Queensland ; received commonly from Mr. G. Barnard. Differs from all the rest by the dense hairs on the undersurface of the hindwings in the ♂.

63. *Deil. oenias*, n.sp.

♂. 27 mm. Head reddish-ochreous, a band on vertex behind antennæ white ; face smooth. Antennal pectinations in ♂ 10, apical  $\frac{1}{3}$  simple. Femora glabrous. Forewings with hindmargin straight on upper half, rounded beneath ; 11 anastomosing with 12 ; pale reddish-ochreous, with fine scattered grey strigulæ and a few blackish scales ; costal edge more yellowish ; first line and median shade grey, straight ; a black discal dot on median shade ; second line grey, sinuate, very indistinct, hardly traceable ; subterminal appearing as a grey-whitish dentate line on a patch below middle, edged anteriorly by a blackish suffusion preceded by a deep reddish suffusion, and posteriorly by a grey suffusion, elsewhere represented by a series of cloudy blackish-grey dots ; a hindmarginal series of black dots. Hindwings with hindmargin rounded, slightly waved ; colour and markings as in forewings, but first line absent, discal dot following median shade, second line straighter, markings representing subterminal line much reduced or partially obsolete.

Georges Bay, Tasmania ; in January, two specimens. The white band on the vertex of the reddish-ochreous head distinguishes it easily from the three preceding, to which it is otherwise nearly related.

64. *Deil. lithodora*, n.sp.

♂♀. 18-22 mm. Head ochreous-whitish, back of crown more ochreous, face shortly rough-haired, forming short tuft beneath.



Antennal pectinations in ♂ 8, apical  $\frac{1}{5}$  simple. Femora glabrous. Forewings with hindmargin straight on upper half, rounded beneath; 11 anastomosing or connected with 12, rarely rising out of 9; pale greyish-ochreous, irrorated with whitish, with a few blackish scales; costal edge pale rosy-ochreous, strigulated with blackish; first line and median shade fuscous, bent near costa, sometimes very indistinct; a black discal dot before median shade; second line fuscous, upper half rather curved outwards, usually darker below middle; subterminal obscurely whitish or hardly paler, irregular, preceded by a series of light red spots, sometimes incomplete, partially blackish-margined, especially below middle, where the red is sometimes obscured with black and sometimes confluent with second line; a hindmarginal series of black dots. Hindwings with hindmargin rounded; colour and markings as in forewings, but first line absent, discal dot beyond median shade, median shade and second line straight, markings preceding subterminal line fainter or usually obsolete.

Adelaide, South Australia; Geraldton and Perth, West Australia; in November, common. Distinguished by the wholly whitish face; this and the two following are nearly allied, and have the face more distinctly tufted than in the other species.

65. *Deil. cremnias*, n.sp.

♂. 22-24 mm. Head white irrorated with fuscous, face shortly tufted. Antennal pectinations 7, apical  $\frac{2}{7}$  simple. Femora glabrous. Forewings with hindmargin gently rounded; 11 anastomosing with 12; fuscous, closely irrorated with white; lines somewhat darker, very ill-defined, first angulated near costa, almost obsolete, median shade thicker on lower half, sinuate near costa, marked with a dark fuscous discal dot, second sinuate inwards, somewhat irregular; subterminal obscurely whitish, preceded by a darker fuscous suffusion; a hindmarginal row of black dots. Hindwings with hindmargin strongly rounded; rather light grey; median and second lines, and anterior margin of subterminal line faintly darker, hardly defined; a dark fuscous discal dot; an interrupted dark fuscous hindmarginal line



Geraldton, West Australia; in October and November, common. Larger and more obscure than the preceding, without red spots, and with the hindwings greyer and more obsoletely marked.

66. *Deil. ochthadia*, n.sp.

♂♀. 22-24 mm. Head ochreous-brown; with a white band behind antennæ, face shortly tufted. Antennal pectinations in ♂ 10, apical  $\frac{1}{6}$  simple. Thorax pale whitish-ochreous, more whitish anteriorly. Femora glabrous. Forewings with hindmargin straight on upper half, rounded beneath, slightly waved; 11 rising out of 9, anastomosing with 12; pale brownish-ochreous, with scattered grey or dark grey strigulæ; first line represented by two fuscous marks in disc; a blackish discal dot; second line dark fuscous, sinuate, obsolete towards costa or more or less throughout; subterminal cloudy, obscurely whitish, anteriorly margined rather thickly with fuscous or dark fuscous, not reaching costa; a more or less interrupted blackish hindmarginal line. Hindwings with hindmargin rounded, unevenly waved; colour and markings as in forewings, but lines almost wholly obsolete.

Mount Kosciusko (2700 feet), New South Wales; in January, locally common. Differs from the two preceding by the distinctly contrasted white band of the vertex; it is also the only species in which vein 11 appears to rise constantly out of 9, but this character would perhaps hardly be absolute.

18. SCARDAMIA, Gn.

Face with short conical scaled projection. Tongue developed. Palpi moderate, ascending, with tolerably appressed scales, terminal joint minute. Antennæ in ♂ bipectinated, apex simple. Thorax not crested, glabrous beneath. Abdomen shortly crested towards base. Femora glabrous; posterior tibiæ in ♂ not dilated. Forewings in ♂ without fovea; 11 rising out of 10, anastomosing with 12. Hindwings normal.

An Indo-Malayan and African genus of very few species.



67. *Scard. chrysolina*, n.sp.

♀. 26 mm. Head, thorax, and abdomen ochreous-orange; abdomen with a small golden-metallic fuscous crest near base. Forewings with hindmargin obliquely rounded; ochreous-orange; costal edge brownish; lines slender, pale golden-metallic, appearing purplish-fuscous from above; first line proceeding from base along costa, then beneath costa to  $\frac{1}{3}$ , thence abruptly bent and running in a gentle curve to inner margin before middle; a dark fuscous discal dot; second line gently curved, sinuate inwards towards inner margin; an interrupted hindmarginal line. Hindwings with hindmargin rounded; colour and markings as in forewings, but first line obsolete towards costa.

Newcastle, New South Wales; one specimen (Australian Museum).

## 19. RHINODIA, Gn.

Face with projecting tuft of scales. Tongue developed. Palpi long, porrected, rough-scaled, terminal joint moderate. Antennæ in ♂ strongly bipectinated throughout. Thorax not crested, slightly hairy beneath. Femora glabrous; posterior tibiæ in ♂ hardly dilated. Forewings in ♂ without fovea; 10 out of 9, 11 anastomosing or connected with 12 and 10. Hindwings normal.

Founded on the following endemic species only.

68. *Rhin. rostraria*, Gn.

(*Rhinodia rostraria*, Gn. X, 125; *Panagra undiferaria*, Walk. Suppl. 1663; *P. jucundaria*, ib. 1663; *Stegania allogata*, Feld. pl. cxxxi, 15.)

♂♀. 29-33 mm. Antennal pectinations in ♂ 10. Forewings with hindmargin bowed, slightly prominent in middle, upper half somewhat sinuate inwards; in ♂ pale whitish-fuscous, somewhat ochreous-tinged, more or less strewn with blackish or fuscous strigulæ, in ♀ light ochreous, strigulæ almost obsolete; first line faint, fuscous, angulated and darker towards costa; median shade in ♂ fuscous or dark fuscous, in ♀ ferruginous, rather slender, somewhat curved; second line partially marked with



fuscous or dark fuscous, in ♀ with ferruginous, only distinct near costa, usually followed by a blackish dot in middle and another towards costa. Hindwings with hindmargin obtusely angulated in middle; colour and markings as in forewings, but first line absent, a blackish discal dot beyond median shade, second line sometimes well-marked throughout, somewhat waved, sometimes followed by a series of dark fuscous dots.

Duaringa, Queensland; Sydney, New South Wales; Melbourne and Fernshaw, Victoria; York, West Australia; in October and November, rather common.

## 20. PROBOLOPTERA, n.g.

Face smooth. Tongue developed. Palpi moderate, porrected, shortly rough-scaled, terminal joint moderate. Antennæ in ♂ bipectinated throughout. Thorax not crested, hairy beneath. Femora hairy beneath; posterior tibiæ in ♂ not dilated. Forewings in ♂ without fovea; 10 sometimes out of 9, connected or anastomosing with 9, 11 anastomosing with 12 and 10. Hindwings normal.

### 69. *Prob. embolias*, n.sp.

♂♀. 32-34 mm. Head white, face with a crimson median band, back of crown ochreous-fuscous tinged with crimson. Palpi ochreous mixed with crimson. Antennal pectinations in ♂ 8, in ♀ 2. Forewings elongate-triangular, hindmargin obliquely rounded, rather strongly waved, inner margin sinuate inwards posteriorly; light purplish-grey, mixed and partially suffused with ochreous-whitish, with scattered short dark grey strigulæ, and a few black scales, in ♀ wholly suffused with light purplish-ferruginous, becoming deeper along hindmargin; first line slender, dark fuscous, less distinct in disc, angulated and sometimes dentate above middle; a dark fuscous discal dot; median shade slender, dark fuscous mixed with red, only distinct towards extremities, slightly curved; an irregular pale cloudy transverse shade (representing second line) near beyond this, becoming whitish towards inner margin, where it is followed by a cloudy dark fuscous spot mixed with red. Hindwings with costa sinuate



anteriorly, strongly excised before apex, so that the apex forms a strong acute projecting tooth, hindmargin unevenly dentate, rather deeply excised between veins 4 and 6; colour and discal dot as in forewings; median shade straight, blackish mixed with red, well-marked, preceding discal dot; second line in ♂ indicated by two very faint slender waved whitish lines.

Blackheath (3500 feet), New South Wales; in November, four specimens. This striking species appears to be nearly allied to the Indian *clelia*, Cr., which is presumably congeneric, though I have not been able to examine its structure; the locality seems an unlikely one for an insect of such affinities.

## 21. IDIODES, Gn.

Face with projecting tuft of scales. Tongue developed. Palpi moderate, subascending, rough-scaled, terminal joint short. Antennæ in ♂ rather stout, filiform, minutely ciliated. Thorax not crested, densely hairy beneath. Femora hairy beneath; posterior tibiæ in ♂ strongly dilated, enclosing large tuft. Forewings in ♂ without fovea; 10 rarely out of 9, always connected or anastomosing with 9, and usually with 11 also. Hindwings normal.

A genus characteristic of South America, and largely developed there, but not known to me elsewhere, except by the two following species.

Thorax stout.....	71. <i>apicata</i> .
Thorax slender .....	70. <i>primaria</i> .

### 70. *Id. primaria*, Walk.

(*Acidalia primaria*, Walk. 1610.)

♂. 37-38 mm. Head and thorax pale reddish-ochreous; thorax slender. Antennal ciliations  $\frac{1}{4}$ . Posterior tibiæ moderately dilated. Forewings with apex slightly prominent, hindmargin strongly bowed, somewhat bent on vein 5; light brownish-ochreous, sometimes reddish-tinged; first and second lines fuscous, marked with blackish dots on veins, first rather strongly curved, somewhat bent above and below middle, second straight, somewhat



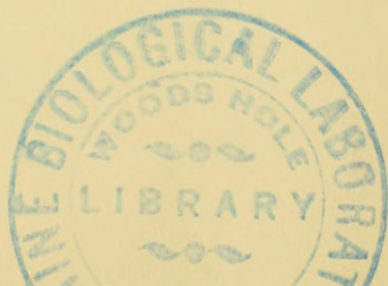
curved at costal extremity; a blackish discal dot; subterminal hardly perceptibly paler, dentate, sometimes margined anteriorly by a series of irregular blackish spots; a hindmarginal series of black dots. Hindwings with hindmargin rounded, waved; colour, second line, and hindmarginal dots as in forewings, but colour rather paler, second line almost or quite straight throughout.

Melbourne, Victoria; two specimens taken by Mr. Raynor. Perhaps this species may vary as much as the next, but it is easily distinguished from it by the slender thorax, somewhat longer antennal ciliations, slightly bent hindmargin of forewings, more strongly rounded hindmargin of hindwings, and less dilated tibiae.

71. *Id. apicata*, Gn.

(*Idiodes apicata*, Gn. IX, 40; *I. mitigata*, ib. 40, pl. XIII, 1; *I. inspirata*, ib. 40, Feld. pl. CXXIV, 3; *I. rinata*, ib. 40; *I. introducta*, Walk. 30; *Tacparia zalissaria*, ib. 234; *Choara siculoides*, ib. 291; *Phallaria conductaria*, ib. 1525; *P. inductaria*, ib. 1526; *Idiodes punctiger*, Feld. pl. CXXIV, 4.)

♂♀. 37-44 mm. Antennal ciliations of ♂  $\frac{1}{6}$ . Thorax stout. Posterior tibiae in ♂ very strongly dilated. Forewings with apex acute, prominent, hindmargin strongly bowed; pale greyish-ochreous, brownish-ochreous, or light fuscous, strewn with more or less faint dark strigulae, and a few blackish scales; costal edge sometimes white on anterior  $\frac{2}{3}$ ; first line thick, cloudy, dark grey mixed with brown, curved and twice angulated, but almost always wholly absent or represented by two or three blackish dots only; a black discal dot; median shade usually absent, sometimes partially marked with dark fuscous or reddish-fuscous on lower half; second line rather dark fuscous or hardly perceptibly darker than groundcolour, sometimes marked with black dots on veins, almost straight, costal extremity usually obsolete, sometimes margined posteriorly by a whitish-ochreous or light reddish line, sometimes nearly followed by a parallel fuscous or dark fuscous shade continued to apex of wing; subterminal obsolete or indicated by cloudy blackish margins on a patch above middle and a spot at anal angle only, rarely on whole of lower half; a hindmarginal





series of small blackish dots. Hindwings with hindmargin slightly rounded; colour and markings as in forewings, but first line and discal dot wholly absent, second line not followed by dark parallel line, subterminal almost always obsolete.

Sydney and Bathurst (2300 feet), New South Wales; Melbourne, Victoria; Georges Bay, Tasmania; Mount Lofty, South Australia; from August to February, rather common generally. Certainly very variable, but it is equally certain that the varieties all belong to the same species, every intermediate form being found.

## 22. METROCAMPA, Latr.

Face with slight projection of scales. Tongue developed. Palpi moderate, porrected, rough-scaled, terminal joint very short. Antennæ in ♂ bipectinated to apex, pectinations rather stout. Thorax not crested, somewhat hairy beneath. Femora glabrous; posterior tibiæ in ♂ dilated, containing tuft. Forewings in ♂ without fovea; 10 out of 11, anastomosing or connected with 9. Hindwings normal.

A small genus, but apparently of very wide range. The characters given above refer to the Australian species only; some of the others vary greatly in neurulation within the limits of the same species, and also vary in having the face quite smooth, and in the density of the hairiness of the thorax and femora.

Forewings with large discal spot..... 72. *glaucias*.

Forewings with ringed discal dot..... .... 73. *ada*.

### 72. *Metr. glaucias*, n.sp.

♂♀. 40-44 mm. Antennal pectinations of ♂ short, broad, obtuse (1). Forewings with hindmargin angularly projecting in middle, upper half subconcave, waved, lower half straight, oblique; light reddish-ochreous or brownish-ochreous, irrorated with black and fuscous or grey; first line sometimes indicated by three dark fuscous dots on veins; a rather large round dark fuscous or blackish-fuscous discal sometimes ocellated spot; second line straight, ill-defined, fuscous, from costa before apex to  $\frac{3}{5}$  of inner



margin, sometimes indicated only by dark fuscous dots on veins, posteriorly margined by a pale line. Hindwings with hindmargin rounded, waved; pale reddish-ochreous, suffusedly finely irrorated with grey or blackish-grey, less strongly towards base, the irroration forming an obscure darker sometimes dotted line, followed by a pale line from costa before apex to inner margin at  $\frac{2}{3}$ , almost straight.

Melbourne, Victoria; four specimens (*Coll.* Lucas).

### 73. *Metr. ada*, Butl.

(*Gynopteryx ada*, Butl., Ann. Mag. Nat. Hist. 1882, 91.)

♂ 30-31 mm. Antennal pectinations 3. Forewings with hindmargin obtusely angulated in middle on vein 4, upper half slightly concave, lower half straight; light ochreous, with a few scattered black scales, and traces of fuscous strigulæ; first line fuscous, curved, somewhat angulated above and below middle; a grey discal dot ringed with blackish, sometimes with one or two central whitish scales; second line rather dark fuscous, posteriorly sometimes edged with an ochreous-whitish line, nearly straight or somewhat sinuate, reaching costa close before apex. Hindwings with hindmargin rounded, unevenly waved, somewhat projecting angularly in middle on vein 4; pale ochreous, slightly fuscous-tinged, more whitish towards costa; second line faintly paler, obscurely margined on both sides with grey, running from costa before apex to middle of inner margin, slightly sinuate.

Sydney and Bathurst (2300 feet), New South Wales; in April, three specimens.

### 23. *PLANOLOCHA*, n.g.

Face with projecting tuft of scales. Tongue developed. Palpi moderate, subascending, rough-scaled, terminal joint short. Antennæ in ♂ subdentate, shortly ciliated. Thorax not crested, somewhat hairy beneath. Abdomen in ♂ with dense tuft of hairs on each side beneath at base. Femora glabrous; posterior tibiæ in ♂ dilated, containing tuft. Forewings in ♂ without fovea; 10 connected with 9. Hindwings normal.

Contains only the following endemic species.



74. *Plan. autoptis*, n.sp.

♂. 31 mm. Antennal ciliations  $\frac{1}{4}$ . Abdomen with pairs of dark fuscous dots on back of four basal segments, basal tufts mixed with blackish. Tuft of posterior legs black. Forewings with costa somewhat sinuate, hindmargin very obtusely angulated in middle, upper half somewhat concave, lower faintly sinuate; whitish-fuscous, mixed with whitish-ochreous, with a few scattered dark fuscous scales; costa dotted with dark fuscous; first line faintly darker, with darker fuscous dots on veins, angulated above and below middle, indented in middle; a rather large roundish dark reddish-brown discal spot, sometimes split up by a cruciform mark of groundcolour; second line represented by a nearly straight series of small blackish dots on veins from costa before apex to inner margin at  $\frac{2}{3}$ , partially preceded by reddish-brown dots or a faint suffusion, on inner margin terminating in a short streak. Hindwings with hindmargin rounded, unevenly waved; colour as in forewings; a blackish discal dot; a faint cloudy brown line beyond middle, and a row of black dots at  $\frac{3}{4}$ , converging and sometimes forming a reddish-brown spot on inner margin.

Melbourne, Victoria; two specimens taken by Dr. T. P. Lucas.

## 24. AMELORA, n.g.

Face more or less prominent, with tolerably appressed scales, sometimes forming a slight projection or strong conical tuft. Tongue developed. Palpi moderate, porrected, rough-scaled, terminal joint very short or moderate. Antennæ in ♂ bipectinated to apex. Thorax with moderate anterior subtriangular crest, rather hairy beneath or almost glabrous. Femora somewhat hairy beneath or glabrous; anterior tibiæ sometimes with apical hook, posterior tibiæ in ♂ dilated. Forewings in ♂ without fovea; 10 connected or anastomosing with 12 and 9, 11 rising out of 10 between connections. Hindwings normal.

An endemic genus, to which additions may be expected. There is some variation in structure, but the neuration is quite constant throughout. The thoracic crest is not strong, and is very liable



to denudation, so that it is a difficult character to observe ; but it is important, and undoubtedly proves the close relationship of this genus to the *Chlenias* group.

- |                                                               |                          |
|---------------------------------------------------------------|--------------------------|
| 1. Forewings with veins marked with black lines.....          | 83. <i>leucaniata</i> .  |
| Forewings with veins not marked with black lines.....         | 2.                       |
| 2. Forewings more or less reddish or ferruginous .....        | 3.                       |
| Forewings not reddish.....                                    | 5.                       |
| 3. Hindwings dark grey.....                                   | 80. <i>milvaria</i> .    |
| Hindwings light grey.....                                     | 4.                       |
| 4. Forewings with distinct lines; face strongly tufted.....   | 81. <i>catacris</i> .    |
| Forewings with lines obsolete; face hardly tufted.....        | 82. <i>arotraea</i> .    |
| 5. Forewings with hindmargin more or less bent in middle..... | 6.                       |
| Forewings with hindmargin rounded, not bent... ..             | 8.                       |
| 6. Forewings with large discal spot... ..                     | 77. <i>demistis</i> .    |
| Forewings with discal dot or none.....                        | 7.                       |
| 7. Forewings with first line twice angulated..                | 79. <i>australis</i> .   |
| Forewings with first line once angulated...                   | 75. <i>goniota</i> .     |
| 8. Forewings with large discal spot.....                      | 76. <i>sparsularia</i> . |
| Forewings with obsolete dot.....                              | 78. <i>amblopa</i> .     |

75. *Am. goniota*, n.sp.

♂. 24 mm. Face loosely scaled. Antennal pectinations 7. Forewings with hindmargin bowed, very obtusely angulated in middle on vein 4, upper half slightly concave; whitish-ochreous, with scattered fuscous and dark reddish-fuscous scales; lines slender, somewhat interrupted, dark reddish-brown; first rectangularly angulated slightly below middle; second waved,



somewhat irregular, slightly sinuate inwards above middle and more strongly outwards below middle; a faintly darker discal spot, almost obsolete; an incomplete hindmarginal series of dark fuscous dots. Hindwings with hindmargin rounded, slightly waved, almost bent in middle; very pale whitish-grey; a faint darker grey discal dot; second line grey, formed as in forewings, but very faint.

Mount Loffy, South Australia; one specimen received from Mr. E. Guest.

76. *Am. sparsularia*, Gn.

(*Panagra sparsularia*, Gn. X, 131, pl. XII, 4.)

♂. 28 mm. Face prominent, almost smooth. Antennal pectinations 6. Anterior tibiae with strong apical hook. Forewings with hindmargin gently rounded, slightly waved; pale fuscous, with faint darker strigulae, and some scattered black scales; a blackish dot towards base in middle; first line represented by three blackish dots on veins; a large blackish trapezoidal discal spot; second line formed by a series of blackish dots on veins, shortly sinuate inwards above middle and markedly outwards below middle; a hindmarginal series of blackish dots. Hindwings with hindmargin rounded, strongly waved; light grey; a small cloudy darker discal spot.

Bathurst, New South Wales; Mount Loffy, South Australia; two specimens received from Mrs. Stephenson and Mr. E. Guest. This is the only species possessing the apical hook on the anterior tibiae.

77. *Am. demistis*, n.sp.

♂. 27-30 mm. Face prominent, loosely scaled beneath. Antennal pectinations 6. Forewings with apex rather prominent, hindmargin bowed, slightly bent in middle on vein 4; pale greyish-ochreous, strewn with light fuscous strigulae and some scattered black scales; lines very obscurely indicated with dark fuscous scales, tending to form dots on veins, first somewhat curved, second sinuate outwards below middle; a large roundish rather dark fuscous discal spot; a hindmarginal row of triangular



blackish dots. Hindwings rounded, unevenly waved; whitish-grey, more or less tinged with whitish-ochreous towards base, indistinctly strigulated with darker grey; a small cloudy darker grey discal spot, sometimes almost obsolete.

Mount Lofty, South Australia; two specimens received from Mr. E. Guest.

78. *Am. amblopa*, n.sp.

♂. 31-33 mm. Face prominent, with projecting scales. Antennal pectinations 5. Forewings with apex slightly prominent, hindmargin bowed, waved; light greyish-ochreous, closely strigulated or irrorated with light fuscous; costal edge clear pale ochreous; lines cloudy, somewhat darker, marked with blackish dots on veins, first somewhat curved, second slightly curved; a fuscous discal dot, almost obsolete. Hindwings with hindmargin somewhat rounded, strongly waved; whitish-grey, closely strigulated with darker grey; a large cloudy grey discal spot, darkest in centre; second line indistinct, somewhat curved, grey, marked with more or less defined blackish dots on veins.

Bathurst, New South Wales; Mount Lofty, South Australia; three specimens received from Mrs. Stephenson and Mr. E. Guest.

79. *Am. australis*, Ros.

(*Odontopera australis*, Ros., Ann. Mag. Nat. Hist. 1885, 428, pl. XI, 9.)

♂. 31 mm. Forewings with hindmargin rounded, little oblique, excavated between apex and vein 6, and less deeply between 6 and 4, beneath 4 waved; rather light fuscous, with a few scattered dark fuscous scales; first line slender, dark grey, ill-defined, broadly angulated outwards above and again below middle; a dark grey discal dot; second line slender, blackish, anteriorly shaded with grey, rather near and parallel to hindmargin throughout, but dentate on all veins. Hindwings with hindmargin rounded, waved; light fuscous-greyish; a faint slender darker waved line at  $\frac{3}{4}$  parallel to hindmargin.

Melbourne, Victoria; one specimen (*Coll.* Lucas).



80. *Am. milvaria*, Gn.

(*Scodiona milvaria*, Gn. X, 140, pl. VIII, 8.)

♂. 28. Face rather protuberant. Antennal pectinations 4. Forewings with apex slightly produced, hindmargin rounded, slightly oblique; dull flesh-colour, near costa and hindmargin sprinkled with dark grey; costal edge bright ferruginous; lines marked by dark reddish-fuscous dots on veins, first slightly curved, second rather near hindmargin, sinuate outwards near costa; a roundish cloudy dark grey discal spot. Hindwings with hindmargin waved, rounded; rather dark grey, lighter on anterior half; a cloudy dark grey roundish discal spot; an obscure curved postmedian series of darker dots; cilia dull flesh-colour.

Mount Lofty, South Australia; one specimen bred in March (*Coll.* Guest). Larva 10-legged; dark brownish-green, with numerous fine wavy black lines; a dorsal series of broad orange spots; a broad orange spiracular stripe; spiracles deeper orange; feeds on *Pultenaea* sp., in September. This account is communicated by Mr. Guest.

81. *Am. catacris*, n.sp.

♂. 26-28 mm. Face with strong projecting tuft of scales. Antennal pectinations 7. Forewings with hindmargin rounded; whitish-fuscous, suffusedly mixed with ferruginous, and strewn with darker fuscous strigulæ; lines cloudy, fuscous, marked with dark fuscous dots on veins; first curved or obtusely angulated in middle, second somewhat sinuate inwards above middle and on lower half; a small cloudy fuscous discal spot, darker in centre; cilia fuscous. Hindwings with hindmargin rounded, slightly waved on upper half; whitish-grey, with faint indications of darker strigulæ; a grey discal spot or dot; second line represented by a somewhat curved series of grey dots, sometimes almost obsolete; cilia ferruginous-tinged.

Mount Kosciusko (5800 feet), New South Wales; in January, locally common.



82. *Am. arotraea*, n.sp.

♂. 29 mm. Face loosely scaled. Antennal pectinations 7. Forewings with apex slightly prominent, hindmargin rounded; reddish-fuscous, appearing indistinctly strigulated, veins suffused with yellow-ochreous; costa strigulated with darker reddish-fuscous and white; lines obsolete. Hindwings with hindmargin rounded, slightly waved; whitish-grey, towards hindmargin indistinctly strigulated with darker and somewhat purplish-tinged; cilia light reddish-fuscous.

Melbourne, Victoria; one specimen received from Mr. G. H. Raynor.

83. *Am. leucaniata*, Gn.

(*Liodes leucaniata*, Gn. X, 120, pl. xviii, 3; *Chlenias vittuligera*, Walk. 1153.)

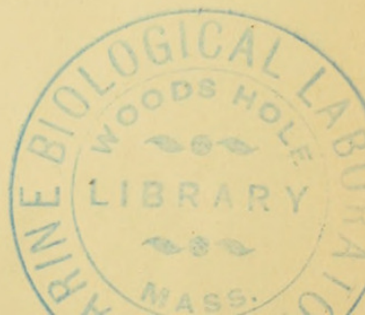
♂♀. 31-34 mm. Head whitish-yellow on crown, face light brownish-ochreous, with short projecting scales beneath. Antennal pectinations 7. Forewings with hindmargin rounded; light brown; veins marked with black lines, except those running to costa; interneural spaces between these lines marked each with a narrow white streak, terminating on hindmargin in a black dot. Hindwings with hindmargin rounded, slightly waved; pale brownish, somewhat darker posteriorly; posterior half marked with whitish-ochreous or whitish longitudinal streaks between veins.

Sydney, New South Wales; Mount Lofty, South Australia; three specimens received from Messrs. Guest and Raynor.

25. *NERITODES*, Gn.

Face smooth. Tongue developed. Palpi short, porrected, rough-scaled, terminal joint very short. Antennæ in ♂ subdentate, ciliated. Thorax not crested, glabrous beneath. Femora glabrous; posterior tibiæ in ♂ somewhat dilated. Forewings in ♂ with a large swollen scaled gland between cell and vein 1b towards base; 10 absent, 11 anastomosing with 12 and 9. Hindwings normal.

The single species is endemic.





84. *Ner. verrucata*, Gn.

(*Neritodes verrucata*, Gn. X, 119, pl. xxii, 8.)

♂♀. 29-32 mm. Antennal ciliations  $\frac{1}{3}$ . Forewings with hindmargin gently rounded; pale greyish-ochreous, more or less fuscous-tinged towards costa or generally, sometimes faintly reddish-tinged in disc, sometimes with scattered dark fuscous scales; second line nearly straight, hardly defined, fuscous, usually marked with dark fuscous dots on veins; a hindmarginal series of small blackish dots. Hindwings with hindmargin rounded; pale whitish-ochreous, more whitish towards costa, somewhat sprinkled with fuscous posteriorly; second line indicated on lower half by a curved series of faint grey dots.

Glen Innes (3500 feet), Sydney and Bathurst, (2300 feet), New South Wales; Melbourne, Victoria; Hobart, Tasmania; Mount Lofty and Port Lincoln, South Australia; from August to December, and in March and April, common, frequenting swampy ground.

26. *THALAINA*, Walk.

Face slightly prominent, with appressed scales. Tongue developed. Palpi short, porrected, rough-scaled, terminal joint very short. Antennæ in ♂ subdentate, shortly ciliated. Thorax not crested, densely hairy above and beneath. Femora glabrous; posterior tibiæ in ♂ rather dilated. Forewings in ♂ without fovea; 10 out of 9, 11 anastomosing or connected with 12 and sometimes with 10 also. Hindwings normal.

An endemic genus, of which all the species are strikingly handsome and conspicuous. Its affinities seem to have been very puzzling to some writers, but it belongs unquestionably to the *Chlenias* group of this family, perhaps approaching *Mnesampela* more nearly than any other Australian genus.

- |                                               |                        |
|-----------------------------------------------|------------------------|
| 1. Hindwings with a dark fuscous fascia.....  | 88. <i>angulosa</i> .  |
| Hindwings with a spot only or unmarked..      | 2.                     |
| 2. Markings of forewings yellowish-brown..... | 89. <i>inscripta</i> . |
| Markings of forewings orange.....             | 3.                     |



3. Forewings without transverse fascia ..... 85. *punctilinea*.  
 Forewings with transverse fascia..... 4.  
 4. Forewings with one fascia only..... 86. *selenaea*.  
 Forewings with second fascia and connecting  
 streak..... 87. *clara*.

85. *Thal. punctilinea*, Walk.

(*Thalaina punctilinea*, Walk. Suppl. 288.)

♀. 51 mm. Head deep ferruginous-orange, face blackish, becoming whitish beneath. Thorax white, anterior margin broadly pale brownish, with a small orange spot on each shoulder. Forewings with apex very slightly prominent, hindmargin rounded, slightly waved; 11 anastomosing with 12 only; silvery-white; a deep ferruginous-orange streak along basal fifth of costa, margined beneath by a black dot at base; a few black and orange scales on inner margin towards middle: cilia deep ferruginous-orange, becoming white towards anal angle. Hindwings with hindmargin rounded, waved; white; a small irregular grey spot towards apex. Undersurface of hindwings white, with a large round apical blotch, of which upper half is deep orange except towards hindmargin, where it is light purplish-grey, lower half black.

Melbourne, Victoria; also in Tasmania; two specimens. This may possibly be a variety of the following species, but as no connecting forms have occurred, it is desirable to keep them separate at present.

86. *Thal. selenaea*, Dbld.

(*Callimorpha selenaea*, Dbld., Eyre's Disc. Austr. I, 437, pl. v, 3; *Absyrtes magnificaria*, Chen., Hist. Nat. Pap. 5, Gn. X, 226; *Thalaina klenaea*, Walk. Bomb. 660; *T. australiaria*, HS., Exot. 333.)

♀. 45-52 mm. Head deep ferruginous-orange, face blackish. Forewings with apex slightly prominent, hindmargin rounded, slightly waved; 11 anastomosing with 12 only; silvery-white; a deep ferruginous-orange streak along basal fifth of costa, sometimes



continued to reach fascia; a straight narrow deep ferruginous-orange fascia, edged with black except near costa, running from costa before  $\frac{2}{5}$  to anal angle, which it hardly reaches, posterior margin forming a projection outwards in middle; some orange and black scales on inner margin towards middle, or sometimes an orange black-margined streak along inner margin from near base to anal angle: cilia orange, becoming white towards anal angle. Hindwings with hindmargin rounded, waved; sometimes a small grey spot towards apex. Undersurface of hindwings white, with a large round subapical blotch, of which upper half is deep orange, lower half black.

Sydney, New South Wales; Melbourne, Victoria; three specimens.

87. *Thal. clara*, Walk.

(*Thalaina clara*, Walk. Bomb. 660.)

♂♀. 34-36 mm. Head deep ferruginous-orange, forehead dark fuscous, face white. Antennal ciliations of ♂  $\frac{1}{6}$ . Thorax white, anterior margin sometimes fuscous, shoulders with a small orange spot. Forewings with apex slightly prominent, hindmargin strongly bowed, slightly waved; 11 anastomosing with 12 and 10; silvery-white; markings deep ferruginous-orange, strongly edged with black; a narrow streak along costa from base to first fascia; a streak along inner margin from near base to anal angle; a straight narrow fascia running from costa before  $\frac{2}{5}$  to anal angle, meeting dorsal streak; a second similar fascia from  $\frac{4}{5}$  of costa to middle of hindmargin; a longitudinal nearly straight streak connecting first fascia above middle with lower extremity of second fascia; a blackish hindmarginal line: cilia orange, terminal half grey-whitish. Hindwings with hindmargin rounded, upper half waved; white; a moderate or rather large irregular blackish-grey subapical blotch. Undersurface white, with a large subapical blotch, of which upper half is deep orange suffusedly margined with dark fuscous, lower half black.

Bathurst (2300 feet) and Sydney, New South Wales; Melbourne, Victoria; from April to June, six specimens. The larva feeds on *Acacia decurrens*. The imago flies in winter, is retired



in habits, and usually taken at lamps; characteristics probably shared by all the species of the genus.

88. *Thal. angulosa*, Walk.

(*Thalaina angulosa*, Walk. Suppl. 289.)

♀. 48 mm. Head orange, face whitish. Thorax white, anteriorly ochreous-tinged, with an orange spot on shoulders. Forewings silvery-white; markings orange, black-margined; a moderate streak from base along costa, thence straight to middle of inner margin; a streak from middle of this to anal angle, meeting apex of a dorsal streak from near base, and another from costa at  $\frac{3}{4}$  (its anterior angle produced) to apex of median streak: cilia orange. Hindwings white; a moderate dark fuscous fascia from costa near apex to anal angle, much dilated above middle, where it touches hindmargin with three projections. Under-surface of hindwings with same markings, but upper half of dilation orange.

Adelaide, South Australia; one specimen (*Coll.* Lucas).

89. *Thal. inscripta*, Walk.

(*Thalaina inscripta*, Walk. Bomb. 661; *T. principaria*, HS. Exot. 446, Gn. X, 227.)

♂♀. 36-38 mm. Head white, crown mixed with greyish-ochreous. Antennal ciliations of ♂  $\frac{1}{6}$ . Forewings with apex slightly prominent, hindmargin bowed, slightly waved; 11 anastomosing with 12 and 10; silvery-white; markings light yellowish-brown, edged with dark fuscous; a streak along basal fourth of costa; a streak along inner margin from near base to anal angle, and sometimes a broader streak along submedian fold from before middle, confluent posteriorly with this and with first fascia; a narrow nearly straight or somewhat irregular fascia from or near costa about  $\frac{2}{5}$  to anal angle; an irregular variable streak running from this fascia above middle to middle of hindmargin, sometimes interrupted before junction with second fascia; second fascia obtusely angulated inwards near costa, running from costa at  $\frac{5}{6}$  to meet longitudinal median streak before hindmargin;



an oblique apical mark, two oval spots on hindmargin above middle, upper often confluent with apical mark, and two others below middle: cilia white, partially spotted with brown. Hindwings with hindmargin rounded, somewhat waved; white; a moderate suboval or irregular blackish-grey subapical spot. Undersurface of hindwings white with a black subapical blotch.

Bathurst (2300 feet), New South Wales; also in Tasmania; in April, three specimens.

### 27. MNESAMPELA, n.g.

Face obtusely prominent, with short projecting scales. Tongue developed. Palpi moderate, subascending, rough-scaled, terminal joint very short. Antennæ in ♂ filiform, minutely ciliated, or subpectinated, pectinations broad or lamelliform, clavate. Thorax not crested, densely hairy above and beneath. Femora hairy beneath; posterior tibiæ in ♂ dilated, containing tuft. Forewings in ♂ without fovea; 10 out of 9. Hindwings normal.

Includes only the Australian species. In this instance the differences in antennal structure are certainly specific only; in all other respects the species, especially the first three, are very closely allied, and cannot be generically separated; *M. lenaea* forms an intermediate gradation between the simple and pectinated forms of antenna.

- |                                                                         |                       |
|-------------------------------------------------------------------------|-----------------------|
| 1. Hindmargin of forewings strongly bowed,<br>almost bent.....          | 2.                    |
| Hindmargin of forewings moderately and<br>evenly bowed .....            | 93. <i>fucata</i> .   |
| 2. Hindwings clear ochreous-yellow .....                                | 92. <i>privata</i> .  |
| Hindwings not yellow.....                                               | 3.                    |
| 3. Forewings with median dorsal spot of black<br>and white scales ..... | 90. <i>comarcha</i> . |
| Forewings without spot of black and white<br>scales.....                | 91. <i>lenaea</i> .   |

### 90. *Mnes. comarcha*, n.sp.

♂. 39 mm. Frontal prominence broad-conical. Antennæ with short broad clavate pectinations (2). Forewings with apex



prominent, hindmargin strongly bowed so as to be almost bent on vein 5; light brown-reddish, scantily irregularly irrorated with short blackish-grey strigulæ, median and subterminal bands somewhat paler and whitish-tinged, latter terminating in a whitish costal blotch; lines obscurely indicated by confluence of irroration; median slightly curved, on lower half mixed with white and black scales, terminating in a dilated spot on inner margin; second tolerably parallel to hindmargin; a moderate discal dot: cilia dark reddish-brown, obscurely spotted with blackish, tips white. Hindwings with hindmargin rounded, waved; ochreous-whitish, thinly sprinkled with short grey strigulæ; a grey discal dot; a rather broad light reddish hindmarginal band, more closely irrorated with grey strigulæ; cilia dark grey, spotted with blackish, tips white.

Melbourne and Warragul, Victoria; two specimens (*Coll. Lucas*).

91. *Mnes. lenaea*, n.sp.

♂♀. 38-40 mm. Antennæ in ♂ with short lamelliform broadly clavate pectinations (1). Forewings with apex prominent, hindmargin strongly bowed so as to be almost bent on vein 5; pale ashy-grey, slightly purplish-tinged, with scattered blackish scales, apex more whitish-tinged, in ♀ suffused with ochreous on basal half and towards inner margin, scales on this area more or less raised so as to appear strigulated with lighter and darker; median shade and second line parallel, thick, cloudy, ill-defined, in ♂ fuscous, in ♀ ochreous, somewhat curved, bent above middle, slightly sinuate below middle; a large obscure darker fuscous discal dot, placed on median shade: cilia dark ochreous-brown, tips whitish. Hindwings with hindmargin unevenly rounded, strongly waved; dull whitish or whitish-ochreous, strewn with grey strigulæ or dots, posterior half distinctly purplish-tinged; a large cloudy dark grey discal dot.

Bathurst (2300 feet), New South Wales; Melbourne, Victoria; Mount Lofty, South Australia; in March, three specimens.



92. *Mnes. privata*, Gn.

(*Idiodes privata*, Gn. IX, 41, pl. xiv, 4.)

♂♀. 40-43 mm. Antennæ in ♂ filiform, ciliations  $\frac{1}{8}$ . Forewings with apex prominent, hindmargin waved, strongly bowed so as to be almost bent on vein 5; light ochreous, with short scattered grey strigulæ and a few blackish scales; basal half more brownish or reddish-tinged, with somewhat raised scales; median shade rather broad, cloudy, light reddish-fuscous, forming obtuse angles outwards above and below middle, inwards in middle and above inner margin; a cloudy dark grey discal dot beyond this; second line formed by a cloudy hardly darker ochreous shade, slightly curved above middle. Hindwings with hindmargin unevenly rounded, strongly waved; deep ochreous-yellow, somewhat deeper and more ochreous towards hindmargin; a few dark grey scales towards hindmargin; a dark grey discal dot, sometimes indistinct; cilia dark ochreous-fuscous, tips whitish.

Sydney, New South Wales; Melbourne, Victoria; Mount Lofty, South Australia; in March, four specimens.

93. *Mnes. fucata*, Feld.

(*Chlenias fucata*, Feld. pl. cxxiv, 11.)

♂♀. 57-74 mm. Head and thorax light ochreous-orange, rosy-tinged, thorax with a small fuscous central spot. Antennæ in ♂ with lamellate pectinations (3). Forewings with apex somewhat prominent, hindmargin moderately bowed; in ♂ pale yellowish-ochreous, in ♀ reddish-ochreous; numerous scattered rather dark purplish-fuscous dots or small strigulæ, more purplish in ♂; a larger dark fuscous dot at base near inner margin, and another in disc towards base; a small roundish dark fuscous discal spot, its centre deep ferruginous. Hindwings with hindmargin rounded, waved; in ♂ ochreous-whitish, in ♀ pale yellow-ochreous, becoming whitish-yellowish towards base; rarely apex broadly suffused with fulvous and irrorated with dark grey; cilia pale ochreous-yellowish.

Sydney, New South Wales; Melbourne, Victoria; Mount Lofty, South Australia; in May, three specimens.



## 28. CRIOMACHA, n.g.

Face with strong truncate-conical projection. Tongue developed. Palpi moderate, subascending, rough-scaled, terminal joint moderate. Antennæ in ♂ bipectinated throughout. Thorax with central triangular crest on back, densely hairy beneath. Femora hairy beneath; anterior tibiæ in both sexes with horny apical hook above, posterior tibiæ in ♂ not dilated. Forewings in ♂ without fovea; 10 out of 9, 11 sometimes connected with 12. Restricted to the single Australian species.

94. *Criom. belidearia*, Feld.

(*Chlenias belidearia*, Feld. pl. CXXIV, 9.)

♂♀. 47-57 mm. Antennal pectinations in ♂ 6. Forewings with apex slightly prominent, hindmargin rather strongly bowed, waved; in ♂ deep brown-red, with scattered dark purple-fuscous scales, in ♀ light brownish-ochreous mixed or suffused with light brown-reddish, with scattered short dark grey strigulæ; a somewhat darker suffusion towards inner margin; first line cloudy, blackish, dentate, slightly bent in middle, or more usually reduced to a dark fuscous dot in disc and an oblique mark on inner margin; a dark purple-fuscous transverse discal dot; second line cloudy, blackish, dentate, nearly straight, dilated on costa, or more usually reduced to a series of dark fuscous dots on veins. Hindwings with hindmargin unevenly rounded, waved; light fuscous or pale whitish-ochreous, towards costa more whitish, with a broad suffused purple-fuscous or reddish-grey hindmarginal band; veins sometimes suffused with pale reddish.

Melbourne, Victoria; Mount Lofty, South Australia; in May; four specimens received from Mr. E. Guest.

## 29. STATHMORRHOPA, n.g.

Face somewhat prominent, with short projecting scales. Tongue developed. Palpi moderate, subascending, rough-scaled, terminal joint short. Antennæ in ♂ bipectinated throughout. Thorax with triangular central crest, beneath densely hairy. Femora densely hairy beneath, posterior tibiæ in ♂ not dilated. Fore-



wings in ♂ without fovea; 10 out of 9, 11 anastomosing or connected with 12 and 10. Hindwings with veins 3 and 4 often from a point.

Contains only the following; a stout and heavily built insect.

95. *Stath. beggaria*, Gn.

(*Chlenias beggaria*, Gn. X, 238, pl. xiv, 2; ? *C. porphyrinaria*, ib. 237.)

♂♀. 50-57 mm. Antennal pectinations of ♂ 4. Forewings suboblong, apex slightly prominent, hindmargin rather strongly bowed, waved, surface in ♀ slightly wrinkled transversely; fuscous, irrorated with darker fuscous between veins; veins sometimes slightly reddish-tinged; a small ill-defined cloudy dark fuscous discal spot. Hindwings with hindmargin unevenly rounded, waved; whitish-fuscous, in ♂ more whitish, especially towards costa and base; sometimes a dark grey transverse discal mark; a broad suffused rather dark fuscous hindmarginal band, narrowed towards anal angle.

Sydney, New South Wales; Warragul, Victoria; Mount Lofty, South Australia; in May, six specimens, usually taken at rest on tree-trunks or fences. I have not seen a specimen which would agree with the description of *porphyrinaria*, and am still uncertain whether this name represents a local form or distinct species.

30. CONOSARA, n.g.

Face with conical projection of scales. Tongue developed. Palpi long, porrected, rough-scaled, terminal joint moderate. Antennæ in ♂ bipectinated to apex. Thorax with double crest at posterior extremity, beneath hairy. Femora hairy beneath; posterior tibiæ in ♂ rather dilated. Forewings in ♂ without fovea; 10 out of 9 near base. Hindwings normal.

Endemic; a development of *Chlenias*.

96. *Con. castanea*, n.sp.

♂. 36 mm. Antennal pectinations 5. Forewings elongate-triangular, hindmargin bowed; rather light reddish-ochreous-



brown, with scattered dark fuscous scales, especially along costa; a streak along submedian fold irrorated with whitish; first and second lines obscurely pale, with a few whitish scales, becoming whitish on submedian fold, dentate, rather nearly approximated on submedian fold, where they are connected by a dark fuscous suffusion; a blackish discal dot; subterminal slender, whitish, dentate, interrupted, forming a white spot on submedian fold: cilia fuscous. Hindwings with hindmargin rounded, sinuate on upper half; fuscous-whitish, tinged with reddish-ochreous, more strongly posteriorly; a pale cloudy waved subterminal line, preceded by a cloudy light fuscous shade.

Tasmania (?); one specimen, received from Mr. A. Simson.

### 31. MICTODOCA, n.g.

Face with appressed scales. Tongue developed. Palpi moderately long, porrected, with long rough scales, terminal joint rather short, filiform. Antennæ in ♂ bipectinated to apex. Thorax not crested (?), hairy beneath. Femora hairy beneath; posterior tibiae in ♂ not dilated. Forewings in ♂ without fovea; 10 connected or anastomosing with 11 and 9. Hindwings normal.

Only the one species is known.

### 97. *Mict. toxenta*, n.sp.

♂. 34 mm. Forewings with hindmargin bowed; oblique; light fuscous, in disc and towards base somewhat suffused with ochreous-brown; a short oblique black streak from base of costa, and a second less marked near beyond it; first line ill-defined, blackish, thrice very sharply dentate, nearly preceded by a similar roughly parallel line; veins here and there faintly marked with blackish; second line somewhat curved, shortly dentate, blackish, followed by a faint whitish line expanding into an irregular spot above middle, crossing and partially obscuring second line; subterminal thick, obscurely paler, partially whitish, running from apex to  $\frac{3}{4}$  of inner margin, twice sinuate inwards, preceded by an irregular ochreous-brown shade, cut by four black streaks on veins above



middle; an interrupted black hindmarginal line: cilia grey-whitish, barred with fuscous, with a cloudy fuscous line. Hindwings with hindmargin rounded; pale greyish-fuscous, becoming darker posteriorly.

Newcastle, New South Wales; one specimen (Australian Museum).

### 32. CHLENIAS, Gn.

Face shortly rough-scaled or with projection of scales, or forming a rounded flattened prominence, or with long horny projecting plate. Tongue developed. Palpi moderate, porrected, rough-scaled, terminal joint moderate. Antennæ in ♂ bipectinated throughout. Thorax with anterior triangular crest, beneath densely hairy. Femora hairy beneath; posterior tibiæ in ♂ not dilated. Forewings in ♂ without fovea; 10 connected or anastomosing with 9. Hindwings normal.

As restricted, the genus is at present confined to Australia. The variations in structure of the forehead are certainly specific only, the species being very closely allied in all other respects; they are in fact very easily confused together. They are retired in habit, and rarely met with except at lamps.

- |                                               |                            |
|-----------------------------------------------|----------------------------|
| 1. Face with long horny projecting plate..... | 98. <i>arietaria</i> .     |
| Face without horny plate.....                 | 2.                         |
| 2. Forewings with strong black dorsal streak  | 99. <i>melanoxysta</i> .   |
| Forewings without black dorsal streak....     | 3.                         |
| 3. Face with broad rounded prominence.....    | 100. <i>umbraticaria</i> . |
| Face without prominence.....                  | 4.                         |
| 4. Head and thorax wholly black.....          | 103. <i>seminigra</i> .    |
| Head and thorax not wholly black.....         | 5.                         |
| 5. Wings with hindmargin dentate.....         | 104. <i>carburaria</i> .   |
| Wings with hindmargin not dentate.....        | 6.                         |
| 6. Thorax ochreous or brownish-tinged .....   | 101. <i>banksiaria</i> .   |
| Thorax not ochreous or brownish-tinged..      | 102. <i>zonaea</i> .       |



98. *Chlen. arietaria*, Gn.

(*Chlenias arietaria*, Gn. X, 239; *Chemerina cuneifera*, Walk. 1155; *Ciampa defixella*, ib. Cr. 180; *Chlenias crambaria*, Feld. pl. CXXXIII, 12.)

♂♀. 33-38 mm. Face with long horny projecting median plate, angularly emarginate at extremity, and a horny ridge on lower margin. Antennal pectinations in ♂ 8. Abdomen clothed with shining brownish-ochreous scales towards base. Forewings very elongate-triangular, narrower in ♀, hindmargin obliquely rounded; light fuscous, mixed with dark fuscous and whitish, posteriorly and on subcostal and dorsal streaks often suffused with pale ochreous; veins more or less marked with white in disc; spaces between veins and within cell marked with blackish streaks except towards costa, these streaks sometimes more or less wholly obsolete; lines dentate, dark fuscous, confused and incomplete, first angulated in middle, second nearly straight; subterminal slender, white, dentate. Hindwings with hindmargin sinuate-rounded; grey-whitish, towards hindmargin more greyish-tinged.

Newcastle, Sydney, and Bathurst (2300 feet), New South Wales; Melbourne, Victoria; Adelaide, South Australia; in April and May, rather common. The variety with the black streaks suppressed has at first sight a distinct appearance, but all the intermediate forms occur.

99. *Chlen. melanoxysta*, n.sp.

♀. 35 mm. Head and thorax light reddish; face rather protuberant, pale ochreous; thorax with some blackish-grey scales. Forewings elongate-triangular, hindmargin bowed, oblique, slightly waved; pale ochreous-brownish, irrorated with fuscous; a costal streak, and parts of veins, irrorated with dark red; numerous scattered cloudy blackish-grey dots; first line obsolete; second line cloudy, fuscous, very indistinct, hardly curved; subterminal indicated by cloudy fuscous indistinct anterior margin, marked with blackish-grey above middle and on a dot at  $\frac{3}{4}$  from costa; a strong black dorsal streak from  $\frac{1}{5}$  to anal



angle. Hindwings with hindmargin rounded, unevenly waved; whitish-grey, on posterior half rather thickly irrorated with dark grey.

Balaclava, South Australia; one specimen (*Coll. Guest*), taken in April.

100. *Chlen. umbraticaria*, Gn.

(*Chlenias umbraticaria*, Gn. X, 240.)

♂♀. 41-43 mm. Face broadly rounded-prominent. Antennal pectinations in ♂ 6. Forewings elongate-triangular, more elongate in ♀, hindmargin bowed, rather strongly oblique, waved; light fuscous, densely irrorated with white; median and submedian folds and posterior interneural spaces marked with fine black longitudinal lines; first and second lines and median shade cloudy, darker fuscous, sometimes nearly obsolete, closely approximated on lower half, first strongly curved, median angulated but hardly traceable, second somewhat curved on upper half, waved. Hindwings with hindmargin unevenly rounded, sinuate above middle; fuscous-whitish, with a broad grey hindmarginal band.

Melbourne, Victoria; Mount Lofty, South Australia; in March two specimens. From the following species, to which it is very similar, it may be distinguished both by the frontal prominence, and by the distinctly whitish hindwings.

101. *Chlen. banksiaria*, Le G.

(*Chlenias banksiaria*, Le G., Rev. Zool. 1841, 257, Gn. X, 239; *C. auctaria*, Gn. X, 239, pl. xiv, 1; *C. indecisata*, Walk. 1153.)

♂♀. 38-42 mm. Face flat. Antennal pectinations in ♂ 6. Thorax ochreous-brownish mixed with grey-whitish, with an anterior suffused dark fuscous band. Forewings elongate-triangular, more elongate in ♀, hindmargin obliquely bowed, waved; light fuscous, more or less partially suffused with ochreous, and irregularly irrorated with dark fuscous and whitish; sometimes scattered black scales and partial black streaks between veins; first line obscure, whitish, posteriorly partially edged with blackish and dark ochreous-fuscous, somewhat irregular, strongly curved,



sometimes almost obsolete; median shade slender, cloudy, dark fuscous, angulated outwards beneath costa and in middle, inwards above and below middle, in ♀ sometimes obsolete; second line whitish, cloudy, shortly dentate, anteriorly edged with dark fuscous, upper half somewhat curved outwards, lower somewhat sinuate inwards; a more marked ochreous suffusion beyond this above middle and above inner margin. Hindwings with hindmargin unevenly rounded, sinuate above middle; pale fuscous, becoming darker posteriorly.

Sydney, New South Wales; Melbourne, Victoria; Mount Lofty, South Australia; from March to July, rather common.

102. *Chlen. zonaea*, n.sp.

♂♀. 37-39 mm. Face flat. Antennal pectinations in ♂ 6. Thorax blackish-fuscous mixed with whitish. Forewings very elongate-triangular, handmargin obliquely bowed, waved; fuscous, densely irrorated with white and in ♀ with black; veins partially marked with black except posteriorly, where there are more or less marked black interneural streaks instead; a small white mark at base; first and second lines and median shade cloudy, dark fuscous, evenly curved, first in ♂ partially preceded by a white suffusion, second in ♂ followed by a cloudy white subdentate line; a dark fuscous spot in ♂ beyond this above middle, surmounted by a slight pale ochreous suffusion, and another above inner margin; subterminal indicated by whitish dots on veins, in ♀ obsolete. Hindwings with hindmargin unevenly rounded, sinuate above middle; fuscous, becoming whitish-fuscous towards base; sometimes an obscure darker transverse discal mark.

Melbourne, Victoria; Mount Lofty, South Australia; from March to June, five specimens. Larva 10-legged, longitudinally banded as follows; a dorsal orange stripe, then four wavy black lines with bluish-white interspaces, then a broad pale yellow stripe, then four more black lines, the three last interrupted and space between them yellowish-white, then a broad black line, below this yellowish with four purple wavy lines; spiracles orange; head yellowish: feeds on *Aster axillaris*, in August and September.



103. *Chlen. seminigra*, Ros.

(*Chlenias seminigra*, Ros., Ann. Mag. Nat. Hist. 1885, 430.)

♂♀. 44-46 mm. Head and thorax black; face flat. Antennal pectinations in ♂ very long. Forewings very elongate-triangular, hindmargin bowed, oblique, not waved; rather dark brown; wholly suffused with dark fuscous except a rather broad hindmarginal band which is partially suffused with dark fuscous towards anal angle; costa sometimes rather broadly ochreous-brown; second line sometimes perceptible, dentate, parallel to hindmargin. Hindwings with hindmargin unevenly rounded, sinuate above middle; very pale whitish-fuscous, hindmargin slightly brownish-tinged; a dark fuscous transverse discal mark.

Warragul, Victoria; two specimens.

104. *Chlen. carburaria*, Gn.

(*Chlenias carburaria*, Gn. X, 238.)

♂♀. 38 mm. Thorax dark brown, collar cinnamon-brown, edged with black. Forewings with hindmargin dentate; dark brown suffused with black; first line black, angulated acutely inwards in middle and outwards on submedian fold; second line black, angulated. Hindwings with hindmargin dentate; fuscous, becoming whitish towards base.

I have not seen any specimens identifiable with this description, which is a modified interpretation of that given by Guénée; but it appears likely to be truly referable to this genus, and is certainly distinct from those given above. Stress must be laid on the dentate hindmargin.

## 33. SMYRIODES, Gn.

Face with short projecting scales. Tongue developed. Palpi rather short, porrected, rough-scaled, terminal joint moderate. Antennæ in ♂ bipectinated to apex. Thorax with small anterior triangular and posterior transverse crests, beneath very densely hairy. Femora densely hairy beneath; posterior tibiæ in ♂



slightly dilated. Forewings in ♂ without fovea; 10 connected with 12 and 9, 11 out of 10 between connections. Hindwings normal.

Contains the following species only.

105. *Smyr. aplectaria*, Gn.

(*Smyriodes aplectaria*, Gn. IX, 223, pl. xx, 1; *Nisista notodontaria*, Walk. 294; *Vunga delineata*, ib. Suppl. 453.)

♂. 33-40 mm. Antennal pectinations 6. Forewings elongate-triangular, hindmargin bowed, dentate; light fuscous, partially ochreous-tinged, indistinctly strigulated with darker; a fine blackish transverse line near base, angulated beneath costa; a round blackish suffusion on lower half between this and first line; first line slender, blackish, somewhat irregular, curved; median shade cloudy, blackish, ill-marked, rectangularly angulated outwards above middle and sinuate inwards below middle; second line slender, blackish, running from costa beyond middle to  $\frac{2}{3}$  of inner margin, angulated outwards beneath costa and above middle, sinuate inwards between angulations and on lower half; subterminal irregular, cloudy, pale, more whitish at extremities, anteriorly more or less distinctly margined with dark fuscous suffusion, marked with two or three short black streaks between veins above middle; a short oblique blackish-fuscous streak from apex; a fine black hindmarginal line. Hindwings with hindmargin rounded, subdentate; fuscous-grey, becoming whitish-grey towards base; an indistinct slender irregular darker line beyond middle; subterminal faintly paler.

Mount Lofty, South Australia; also from Tasmania; in May, three specimens. Larva 10-legged; apple-green; dorsal light crimson; spiracular pale yellow; spiracles orange-yellow, black-centred: feeds on a prickly species of *Pultenaea*. It has been bred by Mr. E. Guest, to whom I am indebted for this information.

34. GASTRINA, Gn.

Face with slightly projecting scales. Tongue developed. Palpi moderate, subascending, rough-scaled, terminal joint short. An-



tennæ in ♂ bipectinated, apex simple. Thorax with posterior crest, densely hairy beneath. Abdomen with strong dorsal crests. Femora glabrous; posterior tibiæ in ♂ strongly dilated, containing tuft, outer apical spur very short, thick. Forewings in ♂ without fovea; 10 out of 9, connected again with 9. Hindwings normal.

Only the one species is known.

106. *Gastr. cristaria*, Gn.

(*Gastrina cristaria*, Gn. IX, 224, pl. v, 4; *Praxis illapsa*, Walk. Noct. 1088; *Hypochroma velutinata*, ib. Geom. 442; *Passa latifasciata*, ib. Suppl. 1563.)

♂. 33 mm. Antennal pectinations 3. Forewings elongate-triangular, hindmargin bowed, subdentate; light brownish-ochreous, with scattered dark brown strigulæ and blackish scales; basal area ochreous-brown, becoming black on inner margin, except at base, which is whitish; first line blackish, gently curved, anteriorly edged with whitish-ochreous; median shade cloudy, rather dark fuscous, nearly straight; space between first line and median shade ochreous-brown, becoming darker towards inner margin; second line black, running from beyond  $\frac{2}{3}$  of costa to  $\frac{3}{5}$  of inner margin, forming a strong rounded projection outwards above middle, somewhat sinuate inwards above this, and more strongly on lower half, where it is confluent with median shade; subterminal faintly paler, more distinct towards costa, anteriorly margined by a broad yellow-ochreous suffusion, marked with a blackish suffusion above middle; a short oblique dark fuscous subapical streak. Hindwings with hindmargin rounded, dentate; whitish-ochreous, slightly brownish-tinged, towards costa whitish; median line slender, grey, somewhat sinuate; second dark fuscous, obtusely angulated in middle, followed by a whitish line, beyond which is a moderate fuscous band; terminal space irrorated with fuscous, with coppery-golden reflections.

Sydney, New South Wales; in June and October, two specimens.



## 35. STIBAROMA, n.g.

Face slightly prominent, with short projecting scales. Tongue developed. Palpi moderate, ascending, rough-scaled, terminal joint very short. Antennæ in ♂ bipectinated, apex simple. Thorax with slight central crest, densely hairy beneath. Femora hairy beneath, posterior tibiæ in ♂ not dilated. Forewings in ♂ without fovea; 10 connected with 9. Hindwings with veins 3 and 4 from a point.

Formed to include the following species.

107. *Stib. melanotoxa*, n.sp.

♂♀. 38-43 mm. Head and thorax dark grey irrorated with whitish. Antennal pectinations of ♂ 4. Forewings elongate-triangular, hindmargin somewhat waved, hardly oblique, nearly straight, rounded beneath; fuscous-grey, irrorated with white, with scattered black scales; veins marked by fine black lines; sometimes a short black transverse line from costa near base; first line black, curved, or twice angularly dentate outwards, variable; median shade dark fuscous or black, angulated in middle, sinuate inwards on lower half; second line black, from beyond  $\frac{2}{3}$  of costa to  $\frac{4}{5}$  of inner margin, angulated in middle, sinuate inwards on lower half; subterminal cloudy, whitish, dentate on upper half, suffusedly margined with darker fuscous, more broadly anteriorly; a sharp black hindmarginal line: cilia grey-whitish, with two grey lines, and barred with grey. Hindwings with hindmargin rounded, unevenly waved; in ♂ whitish, in ♀ grey; a broad dark grey hindmarginal band, its anterior edge straight, so that it is narrowed to a point at anal angle; in ♀ a dark grey discal dot and slender postmedian line; a black hindmarginal line; cilia whitish, spotted with dark grey on veins.

Wimmera district, Victoria; Mount Lofty, South Australia; received from Mr. E. Guest and Dr. Lucas; four specimens. The species varies in the intensity of marking and in the form of the lines; the variability of the first line in particular is singularly great. Larva 10-legged; yellowish-green; dorsal purplish-brown; lateral pale yellow; head greenish-orange; feeds on



*Eucalyptus* sp. (white gum). It has been bred by Mr. Guest, who sent me the foregoing information.

36. DRYMOPTILA, n.g.

Face with appressed scales. Tongue developed. Palpi moderate, porrected, shortly rough-scaled, terminal joint short. Antennæ in ♂ filiform, shortly ciliated. Thorax with dense posterior crest, somewhat hairy beneath. Femora glabrous. Forewings in ♂ without fovea; 10 and 11 separate. Hindwings normal.

Founded on the following species; allied to *Stibaroma*.

108. *Drym. temenitis*, n.sp.

♂. 26 mm. Forewings elongate-triangular, costa strongly arched near base, slightly sinuate in middle, hindmargin rather obliquely rounded, waved; grey, slightly brownish-tinged, with faint darker strigulations; first line black, well-marked, running from  $\frac{1}{5}$  of costa to  $\frac{1}{3}$  of inner margin, hardly curved, preceding space more brownish; a darker discal dot; second line black, well-defined, running from  $\frac{4}{5}$  of costa to before anal angle, somewhat curved inwards, sinuate outwards above middle, followed by a pale line, beyond which the terminal area is wholly suffused with brownish-ochreous, except a pale irregular dentate subterminal line; an oblique blackish apical dash, and a shorter one beneath its anterior extremity; a black hindmarginal line: cilia light grey. Hindwings with hindmargin rounded, unevenly waved; grey, paler towards base; a somewhat darker interrupted postmedian line; a dark grey hindmarginal line; cilia grey-whitish.

Mount Lofty, South Australia; in April, one specimen (*Coll. Guest*).

37. PARALAEA, n.g.

Face with projection of scales. Tongue developed. Palpi moderate, porrected, with long dense projecting scales, terminal joint short. Antennæ in ♂ bipectinated, apex simple. Thorax with triangular anterior and bifid posterior crests, beneath densely



hairy. Femora hairy beneath; posterior tibiae in ♂ not dilated. Forewings in ♂ without fovea; 10 out of 9, sometimes anastomosing again with 9, 11 anastomosing with 12 and 10. Hindwings with veins 3 and 4 from a point or stalked.

The single species is West Australian.

109. *Par. promacha*, n.sp.

♂♀, 26-29 mm. Antennal pectinations of ♂ 3. Forewings very elongate-triangular, costa abruptly arched near base, thence straight, hindmargin somewhat oblique, crenulate, obtusely angulated in middle; pale fuscous-grey, partially ochreous-tinged, with scattered dark fuscous scales; costa strigulated with dark fuscous; a straight blackish line near base, externally suffused with ochreous; first line fuscous, sometimes marked with blackish, from  $\frac{1}{5}$  of costa to  $\frac{2}{5}$  of inner margin, angulated in middle and near inner margin; median shade fuscous, angulated in middle; a blackish discal dot beyond this; second line from  $\frac{3}{4}$  of costa to  $\frac{3}{4}$  of inner margin, angulated parallel to hindmargin, grey-whitish, margined by two much interrupted fine dark fuscous lines, posterior mixed with reddish-fuscous; a more or less distinct darker grey suffused streak along submedian fold from first line to subterminal, and another above middle from median shade to subterminal line; subterminal faint, whitish, running from apex to anal angle, subdentate; a fine black interrupted hindmarginal line. Hindwings with hindmargin forming an acute triangular projection in middle, upper half irregularly crenate, lower half straight; grey-whitish; a dark grey discal dot; second line slender, grey, rather irregular; a grey hindmarginal band, including an obscure whitish subterminal line; a fine black hindmarginal line. Under-surface of hindwings with markings more blackish and defined, anterior margin of subterminal line forming an elongate-oval transverse blackish-fuscous blotch on upper half and a small spot at anal angle.

Albany, West Australia; in September and October, five specimens.



## 38. NEOTERISTIS, n.g.

Face with projection of scales. Tongue developed. Palpi very long, straight, porrected, rough-scaled, terminal joint moderate. Antennæ in ♂—(?) Thorax not crested (?), densely hairy beneath. Femora smooth. Forewings with veins 10 and 11 separate. Hindwings normal.

Although the ♂ is unknown, I am unable to include this species in any other genus, but in superficial appearance it most nearly approaches the preceding; the unusually long palpi made it easy of recognition, otherwise I should not have ventured to describe it.

110. *Neot. paraphanes*, n.sp.

♀. 34 mm. Palpi four times width of eye. Forewings very elongate-triangular, almost oblong, costa abruptly arched near base, where it is roughened with projecting scales, hindmargin oblique, strongly bowed so as to be almost bent on vein 4; light fuscous-grey, much suffused with white, with scattered dark fuscous scales; first line fuscous, from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of inner margin, curved and almost bent in middle; median shade cloudy, dark fuscous, irregularly dentate; second line hardly traceable; subterminal indicated by suffused subdentate cloudy rather dark fuscous anterior margin; an interrupted dark fuscous hindmarginal line: cilia white, with a few dark fuscous scales. Hindwings with hindmargin unevenly rounded, rather deeply sinuate above middle; pale whitish-fuscous, somewhat darker posteriorly; a faintly indicated paler subterminal line, distinctly whitish on costa, preceded by a somewhat darker suffusion.

Deloraine, Tasmania; in November, one specimen.

## 39. MOCHLOTONA, n.g.

Faced with appressed scales. Tongue developed. Palpi moderate, subascending, rough-scaled, terminal joint rather short, cylindrical. Antennæ in ♂—(?). Thorax not crested (?), densely hairy beneath. Femora hairy beneath. Forewings with vein 10 connected with 9, 11 connected with 12 and 10. Hindwings normal.



Of this genus also the ♂ is unknown ; but it appears to differ from its nearest allies in neurulation too markedly to be united with them.

111. *Mochl. phasmatias*, n.sp.

♀. 64 mm. Head and thorax white, with a few black scales. Forewings very elongate-triangular, hindmargin somewhat obliquely rounded, waved ; white, with a few scattered black and fuscous scales, especially towards costa anteriorly ; a small reddish-ochreous discal spot ; some reddish-ochreous scales indicating three obscure very imperfect lines, hardly traceable, first from  $\frac{1}{3}$  of costa to  $\frac{2}{3}$  of inner margin, second from  $\frac{2}{3}$  of costa to  $\frac{2}{3}$  of inner margin, curved outwards on upper half, third subterminal : cilia white, with a series of blackish semilunate marks between veins. Hindwings whitish, with a very broad blackish-grey hindmarginal band ; cilia white.

Warragul, Victoria ; one specimen (*Coll.* Lucas).

APPENDIX.

The following names, nominally or actually referable to species of the family, have not been included above, for various reasons as explained.

112. *Epione incaria*, Gn. IX, 97. I cannot identify this at all.

113. *Ellopiia cumularia*, Gn. IX, 133, pl. v, 5 I have seen nothing like this, and doubt if it is really Australian.

114. *Tetracis cachexiata*, Gn. IX, 142. Unidentified ; perhaps not Australian.

115. *Crocallis newmannaria*, Gn. IX, 169. Unidentified ; probably allied to the *Chlenias* group.

116. *Tephrosia bispinaria*, Gn. IX, 266. Probably a *Selidosema* ; unidentified.

117. *Fidonia amitaria*, Gn. X, 155. Very likely only a form of the European *atomaria*, judging from the description ; the Australian locality is doubtless an error.



118. *Zerene devinctaria*, Gn. X, 222, pl. VIII, 3. I have no doubt that this is another error of locality; the species appears to be identical with the American *catenaria*.

119. *Chlenias galearia*, Gn. X, 238. Unidentified; but the description is very vague.

120. *Tephrosia exesaria*, Gn. IX, 270. Unidentified.

In order to conclude the *Geometrina*, I add here the single Australian species of the *Desmobathridae*. I may mention that the *Strophidiadae*, which I once included in the *Geometrina*, are truly referable, as I am now satisfied, to the *Bombycina*. The order of the five families of *Geometrina*, to show their mutual relations, should be as follows: 1, *Hydriomenidae*; 2, *Monocteniadae*; 3, *Desmobathridae*; 4, *Geometridae*; 5, *Selidosemidae*.

#### DESMOBATHRIDAE.

Ocelli and maxillary palpi usually obsolete. Forewings with vein 5 rising midway between 4 and 6, parallel, 7 and 8 rising out of 9. Hindwings with frenulum developed; vein 1c absent, 5 well-developed, parallel to 4, 8 connected to cell by a bar towards base.

A small but widely distributed family.

#### 40. ZANCLOPTERYX, HS.

Face smooth. Tongue developed. Palpi moderate, porrected, shortly rough-scaled, terminal joint short. Antennæ  $\frac{5}{6}$ , in ♂ serrate, ciliated with fascicles of long cilia. Thorax glabrous beneath. Femora glabrous; posterior tibiae in ♂ dilated, without median spurs. Forewings with vein 10 absent, 11 running into 12. Hindwings with veins 6 and 7 stalked.

A small genus, perhaps Indo-Malayan by origin, but straggling into other regions.

#### 121. *Zancl. permensata*, Walk.

(*Zanclopteryx permensata*, Walk. 1619.)

♂. 19 mm. Head and thorax white. Antennal ciliations 4. Forewings with apex acute; somewhat produced, hindmargin



gently bowed, slightly waved; prismatic white, thinly scaled; costa finely dotted with dark fuscous; lines indicated by series of dark fuscous dots on veins, first somewhat curved, second from  $\frac{5}{6}$  of costa to  $\frac{2}{3}$  of inner margin, sinuate outwards in middle; a round black discal dot; some fuscous scales indicating subterminal line; a hindmarginal series of black dots: cilia white. Hindwings with hindmargin rounded, hardly waved; colour and markings as in forewings (except costal dots), but first line absent, second line strongly angulated in middle.

Queensland; one specimen received from Dr. T. P. Lucas.

#### INDEX OF GENERA.

Amelora, n.g.....	24.	Mictodoca, n.g.....	31.
Aporoctena, n.g.....	11.	Mnesampela, n.g.....	27.
Chlenias, Gn.....	32.	Mochlotona, n.g.....	39.
Conosara, n.g.....	30.	Neoteristis, n.g.....	38.
Cosymbia, Hb.....	6.	Neritodes, Gn.....	25.
Criomacha, n.g.....	28.	Osteodes, Gn.....	4.
Deilinia, Hb.....	17.	Paralaea, n.g.....	37.
Diastictis, Hb.....	2.	Planolocha, n.g.....	23.
Discalma, n.g.....	5.	Proboloptera, n.g.....	20.
Drymoptila, n.g.....	36.	Psilosticha, n.g. ....	13.
Ectropis, Hb.....	14.	Rhinodia, Gn.....	19.
Epicompsa, n.g.....	1.	Scardamia, Gn.....	18.
Gastrina, Gn.....	34.	Scioglyptis, n.g.....	7.
Hybernia, Latr.....	12.	Selidosema, Hb.....	8.
Hyposidra, Gn.....	3.	Smyriodes, Gn.....	33.
Idiodes, Gn.....	21.	Stathmorrhopa, n.g.....	29.
Lomographa, Hb. ....	16.	Stibaroma, n.g.....	35.
Lophodes, Gn.....	9.	Thalaina, Walk.....	26.
Melanodes, Gn.....	10.	Tigridoptera, HS.....	15.
Metrocampa, Latr.....	22.	Zanclopteryx, HS.....	40.



## INDEX OF SPECIES.

The numbers refer to those prefixed to each species in order. Names printed in italics are synonyms.

<i>absorpta</i> , Walk.....	47.	<i>beggaria</i> , Gn.....	95.
<i>acaciaria</i> , Boisd.....	40.	<i>belidearia</i> , Feld.....	94.
<i>ada</i> , Butl.....	73.	<i>bispinaria</i> , Gn.....	116.
<i>adelphodes</i> , n.sp.....	31.	<i>bitaeniaria</i> , Le G.....	39.
<i>adustaria</i> , Walk.....	8.	<i>boreophilaria</i> , Gn.....	46.
<i>aganopa</i> , n.sp.....	30.	<i>cachexiata</i> , Gn.....	114.
<i>agoraea</i> , n.sp.....	27.	<i>camelaria</i> , Gn.....	54.
<i>agrealesaria</i> , Walk.....	4.	<i>canescaria</i> , Gn.....	20.
<i>alienaria</i> , Walk.....	40.	<i>capnota</i> , n.sp.....	23.
<i>allogata</i> , Feld.....	68.	<i>carburaria</i> , Gn.....	104.
<i>amblopa</i> , n.sp.....	78.	<i>castanea</i> , n.sp.....	96.
<i>amitaria</i> , Gn.....	117.	<i>catacris</i> , n.sp.....	81.
<i>amphiclina</i> , n.sp.....	14.	<i>cheleuta</i> , n.sp.....	13.
<i>angulosa</i> , Walk.....	88.	<i>chrysolina</i> , n.sp.....	67.
<i>anthracitaria</i> , Gn.....	44.	<i>clara</i> , Walk.....	87.
<i>apamaria</i> , Walk.....	2.	<i>clarissa</i> , Butl.....	9.
<i>apicata</i> , Gn.....	71.	<i>cognata</i> , Walk.....	24.
<i>aplectaria</i> , Gn.....	105.	<i>comarcha</i> , n.sp.....	90.
<i>argalea</i> , n.sp.....	49.	<i>conductaria</i> , Walk.....	71.
<i>argoplaca</i> , n.sp.....	38.	<i>corvus</i> , Walk.....	44.
<i>arietaria</i> , Gn.....	98.	<i>crambaria</i> , Feld.....	98.
<i>arotraea</i> , n.sp.....	82.	<i>cremnias</i> , n.sp.....	65.
<i>attacta</i> , Walk.....	47.	<i>cristaria</i> , Gn.....	106.
<i>attenta</i> , Walk.....	34.	<i>cumularia</i> , Gn.....	113.
<i>attributa</i> , Walk.....	29.	<i>cuneifera</i> , Walk.....	98.
<i>auctaria</i> , Gn.....	101.	<i>curtaria</i> , Walk.....	18.
<i>australiaria</i> , Gn.....	2.	<i>decertaria</i> , Walk.....	29.
<i>australiaria</i> , HS.....	86.	<i>defixella</i> , Walk.....	98.
<i>australis</i> , Feld.....	4.	<i>delineata</i> , Walk.....	105.
<i>australis</i> , Ros.....	79.	<i>demistis</i> , n.sp.....	77.
<i>autoptis</i> , n.sp.....	74.	<i>despicata</i> , Walk.....	33.
<i>banksiaria</i> , Le G.....	101.	<i>destinataria</i> , Gn.....	34.



<i>devinctaria</i> , Gn.....	118.	<i>indecisata</i> , Walk.....	101.
<i>diffusata</i> , Walk.....	4.	<i>indirecta</i> , Walk.....	34.
<i>disperdita</i> , Walk.....	28.	<i>indocilisaria</i> , Walk.....	46.
<i>displicata</i> , Walk.....	40.	<i>inductaria</i> , Walk.....	71.
<i>disposita</i> , Walk.....	51.	<i>infixaria</i> , Walk.....	2.
<i>disrupta</i> , Walk.....	12.	<i>infusata</i> , Walk.....	4.
<i>dissonata</i> , Walk.....	53.	<i>inscripta</i> , Walk.....	89.
<i>eccentritis</i> , n.sp.....	60.	<i>inspirata</i> , Gn.....	71.
<i>embolias</i> , n.sp.....	69.	<i>integraria</i> , Walk.....	47.
<i>epistictis</i> , Meyr.....	42.	<i>introducta</i> , Walk.....	71.
<i>erebina</i> , Walk.....	39.	<i>irrorata</i> , Butl.....	61.
<i>eremias</i> , n.sp.....	15.	<i>isocyma</i> , n.sp.....	59.
<i>euboliaria</i> , Walk.....	37.	<i>isombra</i> , n.sp.....	50.
<i>excursaria</i> , Gn.....	29.	<i>janiaria</i> , Gn.....	4.
<i>excursaria</i> , Walk.....	12.	<i>jucundaria</i> , Walk.....	68.
<i>exesaria</i> , Gn.....	120.	<i>klenaea</i> , Walk.....	86.
<i>exfusaria</i> , Walk.....	6.	<i>latifasciata</i> , Walk.....	106.
<i>exportaria</i> , Gn.....	29.	<i>lenaea</i> , n.sp.....	91.
<i>exprimataria</i> , Walk.....	22.	<i>leptodesma</i> , n.sp.....	25.
<i>exsuperata</i> , Walk.....	51.	<i>leucaniata</i> , Gn.....	83.
<i>externaria</i> , Walk.....	19.	<i>leucoplecta</i> , n.sp.....	26.
<i>ferritinctaria</i> , Walk.....	5.	<i>lithinopa</i> , n.sp.....	10.
<i>fractaria</i> , Gn.....	53.	<i>lithodora</i> , n.sp.....	64.
<i>fractata</i> , Walk.....	37.	<i>luxaria</i> , Gn.....	28.
<i>frontaria</i> , Walk.....	2.	<i>lyciaria</i> , Gn.....	21.
<i>fucata</i> , Feld.....	93.	<i>mactaria</i> , Gn.....	47.
<i>galearia</i> , Gn.....	119.	<i>magnificaria</i> , Chen.....	86.
<i>gelidaria</i> , Walk.....	40.	<i>margaritis</i> , n.sp.....	3.
<i>glaucias</i> , n.sp.....	72.	<i>mariana</i> , White.....	55.
<i>goniota</i> , n.sp.....	75.	<i>matutinata</i> , Walk.....	56.
<i>gratularia</i> , Walk.....	2, 17.	<i>melanotoxa</i> , n.sp.....	107.
<i>hemeropa</i> , n.sp.....	11.	<i>melanoxysta</i> , n.sp.....	99.
<i>illapsa</i> , Walk.....	106.	<i>milvaria</i> , Gn.....	80.
<i>illustraria</i> , Walk.....	41.	<i>mitigata</i> , Gn.....	71.
<i>impressaria</i> , Walk.....	62.	<i>mundifera</i> , Walk.....	12.
<i>incaria</i> , Gn.....	112.	<i>newmannaria</i> , Gn.....	115.



<i>nigraria</i> , Feld.....	53.	<i>rostraria</i> , Gn.....	68.
<i>normata</i> , Walk.....	6.	<i>rotundata</i> , Butl.....	57.
<i>notodontaria</i> , Walk.....	105.	<i>rupicolor</i> , Butl.....	7.
<i>ochthadia</i> , n.sp.....	66.	<i>scierodes</i> , n.sp.....	45.
<i>oenias</i> , n.sp... ..	63.	<i>selenaea</i> , Dbld.....	86.
<i>pallidiscaria</i> , Walk.....	32.	<i>seminigra</i> , Ros.....	103.
<i>panagraria</i> , Walk.....	2.	<i>semitata</i> , Walk.....	21.
<i>paraphanes</i> , n.sp.....	110.	<i>siculoides</i> , Walk.....	71.
<i>penthearia</i> , Gn.....	8.	<i>silicaria</i> , Gn.....	12.
<i>perfectaria</i> , Walk.....	36.	<i>sinistraria</i> , Gn.....	43.
<i>permensata</i> , Walk.....	121.	<i>sparsularia</i> , Gn.....	76.
<i>phasmatias</i> , n.sp.....	111.	<i>spodina</i> , n.sp.....	58.
<i>phibalopteraria</i> , Gn.....	29.	<i>suasaria</i> , Gn.....	17.
<i>poecilaria</i> , Gn.....	21.	<i>subtinctaria</i> , Walk.....	52.
<i>porphyrinaria</i> , Gn.....	95.	<i>temenitis</i> , n.sp.....	108.
<i>porrectaria</i> , Walk.....	2.	<i>thermaea</i> , n.sp.....	16.
<i>primaria</i> , Walk. ....	70.	<i>toxauta</i> , n.sp.....	97.
<i>principaria</i> , HS.....	89.	<i>umbraticaria</i> , Gn.....	100.
<i>pristis</i> , n.sp.....	48.	<i>undiferaria</i> , Walk.....	68.
<i>privata</i> , Gn.....	92.	<i>vagara</i> , Walk.....	34.
<i>procurata</i> , Walk.....	5.	<i>velutinaria</i> , Walk.....	54.
<i>promacha</i> , n.sp.....	109.	<i>velutinata</i> , Walk.....	106.
<i>propinquaria</i> , Walk.....	17.	<i>verrucata</i> , Gn.....	84.
<i>proposita</i> , Walk.....	17.	<i>vestita</i> , Walk.....	29.
<i>punctiger</i> , Feld.....	71.	<i>xanthocrossa</i> , n.sp.....	1.
<i>punctilinea</i> , Walk.....	85.	<i>zalissaria</i> , Walk.....	71.
<i>rectaria</i> , Walk.....	61.	<i>zascia</i> , n.sp.....	35.
<i>remotaria</i> , Walk.....	2.	<i>zonaea</i> , n.sp.....	102.
<i>rinata</i> , Gn.....	71.		

*Note.*—It may be interesting and instructive to show the characters of Walker's work by the analysis of his descriptions of those species included in this family; he named 76 species as distinct, of which only 23 are tenable, the remaining 53, or over 70 per cent., being synonyms: and he founded on them nine new genera, of which only one (which he referred to the *Bombycina*) is tenable.





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