

## DIPTERA.—By G. H. Verrall.

(Plate XIV.)

On comparing the Kerguelen Island Diptera with their nearest foreign allies, some are found to have retained the habits of the families to which they belong, and not to have departed in any way from their normal condition. These are they which frequent the denser portions of the herbage, and are efficiently sheltered by it even when the weather is at its worst, *e.g.*, the *Sciara* and the *Limnophyes*. A larger number, also remaining true to the habits of their kindred, are less protected from the cold than the forms before mentioned, being denizens of rocks and crevices; these have small rudimentary wings (one is apterous) and a fair amount of hair and bristles (the apterous species being the worst off in these respects). Another is likewise constant to the habits of its nearest relations; and in consequence it is more exposed to the rigours and vicissitudes of the climate than any of the other species, frequenting as it does the leaves of the Kerguelen Island cabbage (*Pringlea*); it is almost apterous, and its hair and bristles are of the most rudimentary description.

The Diptera of the Falkland Islands have their wings fully developed.

## MUSCIDÆ.

## § Calyptera.

## ANTHOMYINÆ.

*Homalomyia*, Bouché.*Homalomyia canicularis*, Linné.

*Musca canicularis*, Lin. F. S. 1761, No. 1841.

*Homalomyia canicularis*, Schiner, F. Aust. Dipt. 1862, i. 654, &c.

Hab. and Dist.—In the house at Observatory Bay; introduced. This species is attendant upon man in almost every part of the world.

## §§ Acalyptera.

## MICROPEZINÆ, Verrall.

*Calycopteryx*, Eaton, 1875.

Frons broad, slightly concave, produced at the base of the antennæ more than the width of the eye; bristles short, only two near the eye margin (as in *Calobata*), rather distant and outwardly ascending, two others near the hinder angle of the eye, of which the inner is the largest and ascends inwards, while the outer is very short and ascends outwards, also with a very short one on each side of the middle of the occipital margin projecting backwards, and with one prorect decumbent on

each side of the foremost ocellus. Antennæ with short minute hair, which along the back and apex of the second joint is sparsely intermixed with some coarser and more rigid; third joint scarcely longer than the second, its outer side subcircular, its inner side somewhat reniform, deeply umbilicate at the insertion of the funiculus, the arista glabrous, arising just beyond the summit of the dorsal half of the third joint (viewing the joint as a circle, it would be just within the second superior quadrant), and so distant from the base; in the dried insect the third joint through shrinking becomes slightly transverse, and the arista seems nearer to the tip; the basal joints of the arista are distinct but short. Proboscis stout; palpi subcylindrical, mandibles lanceolate, of moderate size. Thorax completely concrete with the scutellum; the transverse suture broad and ill-defined; disc minutely scabrous, with three short bristles transversely disposed on each side behind, apparently representing the long bristles that usually precede the scutellum, and with a solitary very short bristle on each side, a little in advance of the wings. Wings represented by a minute vesicle adnate to a smaller tubercle (tegula?); halteres extremely small, clavate. Legs without long bristles of any kind or spurs, excepting 3 or 4 at the apices of the coxæ, clothed with short dense appressed hairs, which become rather longer and somewhat spreading at the tips of the femora and tibiæ; hind tarsi long and slender, with the basal joint as long as the next three. Abdomen sessile, 6-jointed, exclusive of the genital segments; ovipositor considerably extended, jointed; penis when not in use folded down upon the underside of the genital segment between the rather small lateral appendices, the same segment likewise doubled forwards to fit into an excavated protuberance at the ventral apex of the antepenultimate segment.

The larvæ feed on decaying vegetable matter.

In the structure of the antennæ, the form of the frons, the sparsity and relative positions of the bristles of the same, the round bare eyes, the absence of vibrissæ, the condition of the proboscis and the palpi, the great length of the legs and the absence of the preapical spine of the posterior tibia, the length and slimness of the fusiform abdomen, and in the construction of the genital apparatus, the affinity between *Calycopteryx* and *Micropeza* is clearly displayed.

#### *Calycopteryx moseleyi*.

(Plate XIV., fig. 1 *a-e*.)

Eaton, Ent. Mo. Mag. 1875, xii. 59.

See also Thomson, Good Words, 1874, Nov., p. 750; Eaton, Proc. Roy. Soc. 1875, xxiii. 354; Moseley, Journ. Lin. Soc. Botany, 1876, xv. 54; Kidder, Bulletin U. S. Nat. Mus. 1876, iii., 51 and 52.

Imago. Atro-corvinus, clothed with a dense appressed very minute sub-olivaceous pubescence; the dorsum, notum, and frons with very minute scattered setulæ, which are very limited in number on the frons, but numerous on the other parts,

causing them to appear microscopically scabrous. Frons, oral parts, and the adjacent portion of the orbits of the eyes, coxæ, and venter luteous or orange yellow; wings and halteres testaceous; tarsi somewhat jecinoreus with stiff and moderate spreading testaceous hairs, anterior tibiæ with short testaceous hairs on their posterior surface. The ovipositor becomes flattened in drying; the ♂ lateral appendices are rounded and small; the penis for some distance is tubular and then suddenly expands into an open cup-like termination, whose edges are deeply, widely, and unevenly sinuated.

Long. corp. ♂ 8-9, ♀ 8-10·5 mm.

Hab.—Kerguelen Island, and (according to Mr. Moseley) Heard Island. The imago is very plentiful creeping over the leaves of *Pringlea antiscorbutica*; and its maggots abound in the decaying leaves accumulated at the base of the stem of the same plant. When these flies are alarmed they fold up their legs and drop down into the axils of the leaves, remaining motionless for some time before they again timidly unbend their legs and struggle to stand upon their feet. In snowy weather they appear to leave the head of the cabbage and retire to the rubbish on the ground round the base of the stem.

Mr. Moseley's statement that the insect deposits its eggs in the fluid which is caught at the bases of the leaves does not correspond with Mr. Eaton's observations.

Dr. Kidder mentioning "small scale-like bodies which Mr. Eaton supposed to represent the balancers ('halteribus brevibus et parvis')" in this insect, adds "Baron Osten Sacken, however, finds that these scales are really representatives of the wings."

Mr. Eaton suspects that the Baron failed to distinguish the halteres. Judging from the context, it is probable that the specimens examined by him were in fluid; and if this were the case, his oversight may be easily accounted for. Yet even in fluid they can be demonstrated without difficulty if the light be judiciously manipulated: in dried or living examples they are, however, seen to the best advantage.

The question raised by Mr. Moseley as to whether *Pringlea* flowers are frequented by *Calycopteryx* in sunshiny weather, may be answered in the negative. Mr. Eaton visited the plants at various times and at various hours of the day and night with a view to ascertain whether insects visited the inflorescence. He occasionally found *C. moseleyi* on the lower bracts of the spike, but the flowers appeared to be quite unattractive to the flies as well as to all other insects. Sir J. Hooker had invited his attention to the subject of insects visiting the flowers of plants indigenous to the island, irrespective of entomological considerations.

(Plate XIV., fig. 1.) *Calycopteryx moseleyi* (from side); *a* & *a*<sup>1</sup>, antennæ, from within and from without; *b*, proboscis; *x*, mandible; *c*, thorax and 1st segment of the abdomen, from above; *d*, wing and halter; *e*, appendices ♂.

## EPHYDRINÆ.

*Amalopteryx*, *Eaton*, 1875.

Head transverse, subquadrate, frons inclined, rather tumescent about the ocelli, bristles long, 2 ascending separately near the inner orbit, 2 suberect slightly divergent near the posterior orbit, and 2 proerect ascending and divergent by the foremost ocellus; epistoma very steep, below very prominent, widely convex and strongly bristled, above keeled in the middle with a concavity on each side; genæ large, bristled below; back of the head wide, descending below the eyes; antennæ short, second joint with spinulose bristles towards the apex; third joint circular compressed; arista very shortly pubescent; proboscis stout, the second joint of the stipes somewhat callous and pubescent beneath; palpi very short, subcylindrical; lamellæ deficient altogether. Thorax convex, well bristled; scutellum semi-elliptical, the four bristles long; wings almost as long as the abdomen, linear, with five simple longitudinal nervures, the subcosta becomes confluent with the costa at the transverse fold, the radial and cubital are united to the discoidal near its base, the radial also joins the costa just before the apex of the wing, the cubital joins the apical margin immediately behind the apex and is thickened towards its termination, the discoidal is confluent with the margin near the middle and thickens it near their junction, it is united to the apex of the thickened anal vein by the second transverse vein; halteres of moderate size, not very long, clavate; legs of moderate length, strong, without spines, the posterior femur somewhat thickened. Abdomen 5-jointed, ovate oblong; the apex in ♂ slightly obtuse, genitalia concealed, in ♀ produced into a short stout tooth-like ovipositor directed downwards and forwards.

This genus resembles *Hecamede* in the depth of the back of the head, its round naked eyes, the carination of the upper part of the epistoma, the five-jointed abdomen, and the spinose bristles of the second joint of the antenna.

*Amalopteryx maritima*.

(Plate XIV., fig. 2.)

Eaton, Ent. Mo. Mag. 1875, xii. 58.

See also Thomson, Good Words, 1874 (Nov.), p. 750; Eaton, Proc. Roy. Soc. 1875, xxiii. 355; Kidder, Bulletin U. S. Nat. Mus. 1876, iii. 52.

Fulgineous, with legs and setæ deep black; body completely invested with an extremely minute very closely appressed fulgineous pubescence, and with numerous short fine appressed black hairs, which are very sparse on the frons; epistoma somewhat cærulescenti-griseus; antennæ dull black; wings pale nigrescent with piceous nervures, slightly spinulose along the costal and apical margins; pulvilli whitish.

Long. corp. ♂ 3, ♀ 4.5; al. ♀ 3 mm.

Hab.—Royal Sound; common near Thumb Peak and Observatory Bay, among grass and stones along the upper limits of the sea-shore, and also in cliffs where Cormorants and Rock-hopper Penguins build. It can jump but not fly.

Dr. Kidder remarks of these flies that “they do not appear to jump in any definite direction, but spring into the air, buzzing the small winglets with great activity, and seem to trust to chance for a spot on which to alight, tumbling over and over in the air. I never observed them jumping when undisturbed.” This gives an accurate idea of their performance.

It may be mentioned that the only known species of the nearest allied British genus *Hecamede* has somewhat similar habits, being found on fresh marine rejectamenta, and but seldom attempting to fly. *Amalopteryx* is apparently less strictly confined to the shore, being commonest among the grass bordering the beach and among the birds' nests in the cliffs.

(Plate XIV., fig. 2.) *Amalopteryx maritima* (from the side); *a*, antenna; *b*, proboscis (distended); *c*, wing; *d*, posterior leg.

#### **Apetenus, Eaton, 1875.**

Head roundly subquadrate, slightly transverse; eyes oval convex; epistoma carinate in the middle, somewhat retiring, about as long as wide, naked; upper lip prominent, mouth opening of moderate size; genæ deep and wide, concave below the eye, their peristomal edge rather prominent, slightly everted and strongly bristled, the vibrissæ are short, but one of the bristles below the eye is patent and rather long; back of the head deeper than the width of the eye, convex, bristly; occiput with 2 erect little bristles in the middle, and with 4 or 5 longer bristles on each side just behind the eye; frons convex, rather broad, with long bristles, slightly tumid about the ocelli, the inner orbits rather broad with 3 almost equidistant bristles, of which the foremost two ascend upwards and backwards, and the hind one ascends outwards, there are also 2 bristles widely and transversely divergent near the hinder angle of the eye, and 2 prorect beside the foremost ocellus; antennæ short, the second joint spineless but with a long erect dorsal bristle in the middle, the third joint subrotund, compressed, the arista arising near the base, bare, the basal joints distinct; proboscis short, stout; labial lobes short, broad and ciliated, stipes with a small tuft of bristles beneath; palpi short, clavate; mandibles squamiform, very minute. Thorax truncate behind, slightly convex in front; setæ long; scutellum small, semi-elliptical, with 4 long setæ; wings minute squamiform; halteres small; legs simple, densely pubescent, with setæ; ungues slightly curved, rather short; pulvilli distinct. Abdomen 5-jointed, hirsute, the first joint very long; the ♂ genitalia and the ♀ first joint of the ovipositor exposed.

The larvæ feed upon tide refuse and *Enteromorpha*.

This genus apparently has relationship to *Pelina* and *Parydra*; but its affinities are not quite satisfactorily determined.

*Apetenus litoralis*.

(Plate XIV., fig. 3.)

Eaton, Ent. Mo. Mag., 1875, xii. 58.

See also Eaton, Proc. Roy. Soc., 1875, xxiii., p. 354.

Imago. Black, with very black bristles, and with a dense microscopically minute cinerescence: mouth pale, eyes piceous; wings nigrescent, oblong, slightly emarginate near the apex, pubescent, setulose along the costa and at the apex, halteres pale testaceous or, like the pulvilli, whitish; legs hairy, the tibiæ externally with dense spreading setulæ, and at the apex internally often with some testaceous pubescence. Abdomen with a pale cinereous spiracular line; beneath pale with a longitudinal median black stripe, which is divided into two spots at the second segment, and in the ♀ is continued as a black line along the proximal and the apical joints of the ovipositor; eggs pale ochraceous; the appendices of the male comprise a pair of arcuate finger-like connivent processes slightly pectinate towards the apex beneath, and a much shorter exterior pair of broadly triangular or ovate convex incurved flaps which enclose the others, there are besides a pair of very short linear and obtuse superior appendices.

Long. corp. ♂ ♀ 4.5—5 mm.

Hab.—Royal Sound and Swain's Bay, common amongst shore refuse. The pale grey larvæ were found amongst *Enteromorpha*.

(Plate XIV., fig. 3.) *Apetenus litoralis* (from the side). *a*, antenna; *b*, proboscis; *x*, mandible; *c*, wing; *d*, posterior leg; *e*, genitalia ♂.

BORBORINÆ.

*Anatalanta*, Eaton, 1875.

Head somewhat rounded; the epistoma retreating rapidly and deeply below the antennæ curves out again to the produced mouth border, its limits are distinctly circumscribed by a fine line; upper lip slightly projecting, the mouth opening very large; peristoma rather bristly with the large vibrissa inserted at some little distance from the margin, genæ broader than the eyes are deep; back of the head inflated, more than half as wide as deep; eyes prominent, small, round; frons broad, with 2 very short little bristles near one another on the inner orbit ascending outwards, 2 longer widely divergent ascending as usual near the hinder angle of the eye, and 2 short prorect and slightly divergent near the foremost ocellus; antennæ short, rather distant at their insertion, second joint with two dorsal setæ near the apex, third joint roundly reniform, somewhat deeper than

long, arista bare, very long, with distinct and slender basal joints, inserted nearly midway between the proximal and distal edges of the joint; proboscis short and stout, the stipes very thick, hairy beneath, palpi slender clavate with rather compressed apices, mandibles small acute. Mesothorax truncate before and behind, with scarcely any slope from the disc anteriorly, and without a trace of the suture; wings utterly wanting; one long bristle at the side about the middle just behind where the suture should be, one just above the position that would be occupied by the base of the wing, one behind it nearer the scutellum, and one on the disk just before the scutellum, on each side. Scutellum transverse, with the hinder angles well defined, and with 4 long almost equidistant setæ. Halteres totally absent. Legs slender and rather long without bristles excepting on the coxæ and about the apex of the intermediate and posterior tibiæ; hind tarsus with the first joint dilated, more than half as long as the second joint, which is also slightly dilated and is almost as long as the remaining three taken together; the thickened joints are densely pubescent beneath; abdomen 6-jointed, flattened, in ♂ oval, in ♀ broadly ovate and obtuse, the basal joint as long as the next two together, the bristles all very minute; genitalia concealed.

Larva carnivorous, and probably also capable of thriving upon putrescent vegetable substances.

This genus comes very near *Borborus*, and especially to the subgenus *Apterina* of Macquart, in the condition of the hind tarsus and other salient characteristics. It differs from it in the form of the palpi, in having no trace of either the wings or the halteres, and in the thorax being conspicuously narrow and small in comparison with the head and abdomen.

*Anatalanta aptera.*

(Plate XIV., fig. 4.)

Eaton, Ent. Mo. Mag. 1875, xii. 59.

See also Eaton, Proc. Roy. Soc. 1875, xxiii. 354; Moseley, Journ. Lin. Soc. Botany, 1876, xv. 54 (apterous fly as large as a house fly); Kidder, Bulletin U. S. Nat. Mus. 1876, iii. 52.

Imago closely invested with a black dense microscopically minute down; eyes and legs piceous, femora nigrescent above; mesothorax, legs, and abdomen with rather minute, crowded, more or less appressed, very black coarse hairs, which give to the dorsum of the mesothorax a peculiar falsely rugose appearance; they are less obvious on the frons and more sparsely scattered; the thickened joints of the posterior tarsi have a dense yellowish pubescence beneath, and the intermediate tibiæ have one or two spine-like setæ near their apex.

The larvæ are found in dead birds.

Hab.—Kerguelen Island, generally distributed near the sea. This species was

common under stones along the landward border of the shores of Observatory Bay, and also on dead birds in many places.

(Plate XIV., fig. 4.) *Anatalanta aptera* ( $\delta$  from the side), 4' ( $\text{♀}$  from above). *a*, *a*<sup>1</sup>, antennæ from within and from without; *b*, proboscis; *x*, mandibles; *c*, legs, *c*<sup>1</sup>, anterior; *c*<sup>2</sup>, intermediate; *c*<sup>3</sup>, posterior leg.

### NEMOCERA.

#### MYCETOPHILIDÆ.

#### SCIARINÆ.

#### Sciara.

Sp. — ?

A single female *Sciara* probably indigenous to the island, was taken on a window at "Flamsteed House," Observatory Bay, on the 4th of January 1875. It would be absurd to describe it.

#### CECIDOMYIDÆ.

#### LESTREMINÆ.

#### *Limnophyes*, *Eaton*, 1875.

Imago; head small, ovately triangular; eyes roundly oval, hardly reniform; ocelli absent; antennæ divergently proect, filiform, 6-jointed, with sparse verticils of spreading hairs, the basal joint very stout, the second much smaller than the first, but yet slightly thicker than the remaining joints, which are of even width, the apical joint as long as the preceding two together; mouth short, the margin hairy, palpi 4-jointed. Thorax robust, above arched anteriorly and produced like a hood over the head, its contour viewed from above is somewhat ovate, and it has about four longitudinal rows of short fine sparse hairs ascending upwards and inwards; scutellum moderately large, prominent, semicircular or roundly subquadrate. Wings oblong, suddenly constricted at the base, rather straight along the costa, the apex almost parabolic, margins ciliated; 4 longitudinal veins (Nos. 1, 3, 4, and 5); No. 1 very short, becoming obsolescent in the marginal area; No. 3 extending beyond the middle of the costa; No. 4 deeply forked, united by a cross-veinlet to No. 3 just beyond the point of furcation, its upper branch like No. 3 accompanied by a slight crease in the membrane; No. 5 rather deeply forked, the furcation acute, similarly accompanied by a crease which follows its lower branch; this last vein is succeeded by one or two longitudinal folds simulating additional nervures. Halteres large. Legs slender, with fine short hairs; tibiæ almost scabrous, with a minute spine at the apex interiorly; the first tarsal joint much longer than the next. Abdomen slender, 8-jointed, with a few fine hairs above; ovipositor formed of two very short lamellæ.

Larva not observed.



Allied to *Campylomyza*, but differing in the neuration of the wings, and in the deficiency of ocelli.

In the original diagnosis it was stated that the number of joints in the palpi and abdomen were respectively five and seven. It appears to be more correct to regard them as being four and eight jointed. The antennal joints are likely to vary in number with the sex, and to be more numerous in the male than in the female.

***Limnophyes pusillus*.**

(Plate XIV., fig. 5.)

Eaton, Ent. Mo. Mag. 1875, xii. 60.

See also Eaton, Proc. Roy. Soc. 1875, xxiii. 354; Moseley, Journ. Lin. Soc. Botany, 1876, xv. 54 ("winged gnat"); Kidder, Bulletin U. S. Nat. Mus., 1876, iii. 52 ("small gnat").

Imago.—Head and thorax lutescent, eyes black, antennæ griseous with the basal joint pale; mesothorax with a large lanceolate black dorsal spot in the middle, anteriorly ochreous at the sides above, the mesosternum nigrescent, and the wings almost imperceptibly cinerous; legs griseous with the coxæ whitish. Abdomen dull virescenti-griseous, with the last three segments nigrescent beneath.

Long. ♀ 1 mm.

Hab.—Royal Sound, abundant. Especially plentiful on moss in boggy places, and in windows. It flies freely in calm sunny weather.

(Plate XIV., fig. 5.) *Limnophyes pusillus* (from the side.)

*a*, antenna; *b*, palpus and mouth (compressed); *c*, head and thorax (from the side).

CHIRONOMIDÆ.

***Halirytus*, Eaton, 1875.**

Imago ♀—Head suborbicular, palpi very short, 2-jointed; antennæ divergent 6-jointed, the basal joint very large, nearly orbicular, the next four much smaller, submoniliform, the apical joint oval, about as long as the preceding two together, the basal joint has one rather short, and a few still shorter bristles near its middle, and the apical joint has a short bristle on one side, and a finer hair on the other side near its base, and some extremely minute pubescence, which is hardly discernible even under the microscope; genæ each with one minute bristle below the eye; epistoma scutiform; eyes suborbicular, protuberant, close to their upper orbit behind are three short bristles, the hinder two of which are near together; ocelli absent. Mesonotum somewhat cucullate, being strongly arched in front and projecting forwards above the head; scutellum semi-elliptical, prominent, with a transverse line of minute erect bristles; metanotum very transverse, exceedingly short; the spiracles on each side of the mesothorax are very prominent; wings rudimentary,

somewhat narrowly obovate, reaching to the apex of the first abdominal segment; halteres small, clavate and slender; legs very long, the posterior tibiæ not thickened nor spurred, the proximal joints of tarsi very long, ungues and pulvilli very small. Abdomen with 7 dorsal and 6 ventral segments (exclusive of the base supporting the valves of the ovipositor), subcylindrical; ovipositor pointed obliquely downwards, composed of a stout basal joint terminated by a pair of acute short lanceolate lamellæ enclosing a smaller pair of spicules. Male unknown.

The larva probably feeds on *Enteromorpha*.

This genus is akin to *Corynoneura*, from which it is separated by its 2-jointed palpi, the comparative nakedness of its antennæ, its entire eyes, the spurless tibiæ of which the hind pair is not thickened, and perhaps the number of abdominal segments. If the portion reckoned above as the base of the ovipositor be regarded as a segment, then there is no difference between these genera in that last particular. All the known species of *Corynoneura* are extremely minute. In the original diagnosis the number of the segments was said to be five; they were enumerated from below, and the proximal segment was taken to be metathoracic.

#### **Halirytus amphibius.**

(Plate XIV., fig. 6.)

Eaton, Ent. Mo. Mag. 1875, xii. 60.

See also Eaton, Proc. Roy. Soc. 1875, xxiii. 354. ("Another seems to be a degraded member of the Tipulidæ," as limited in Westw. Introd.) Possibly also Mr. Moseley's "apterous gnat (*Culex*)" belongs here; Moseley, Journ. Lin. Soc. Botany, 1876, xv. 54.

Imago. Black above, virescenti-griseous beneath and at the sides of the thorax; head virescenti-griseous, with eyes and labrum black, antennæ pale cinereous; wings and halteres opaque, whitish; legs virescenti-griseous, with scattered minute black hairs; abdominal segments above, each with a fine transverse black line at the base, whose extremities are produced obliquely backwards and downwards for a short distance on each side, the tips of the segments narrowly whitish; beneath the tips of the segments are pale, the remaining dark portion of each segment is enclosed by a black line, and stippled with pale dots (at the insertion of minute hairs), and in the middle of their bases some segments have two diverging black lines, others have black stripes; the base of the ovipositor is black, its ventral portion is scutiform with the apiculus bifid, and anteriorly is punctulated like the previous ventral segments; the laminæ of the ovipositor are testaceous.

Long. corp. ♀ 4—5 mm.

Hab.—Royal Sound and Swain's Bay, at the verge of the tide, creeping over *Enteromorpha* and Mussels exposed by the recess of the sea, and walking upon the

surface of puddles and tide-pools. Near Observatory Bay the fly was common upon some small isolated rocks which were always submerged at high water. The adults in that locality must spend a large portion of their lives under water, and hence the species was named *H. amphibius*. All of them were females; none were actually seen beneath the surface. Probably whenever the water has retired sufficiently from the top of the rocks, all the flies hurry up from below to take an airing.

It is rather likely that the males have fully developed wings, and are able to fly.

Plate XIV., fig. 6, *Halirytus amphibius* (from the side): *a*, antennæ; *b*, legs—*b*<sup>1</sup>, anterior; *b*<sup>2</sup>, intermediate; *b*<sup>3</sup>, posterior.

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NEUROPTERA.—*By the Rev. A. E. Eaton.*

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[PSOCIDÆ.

*Rhyopsocus eclipticus*, *Hagen.*

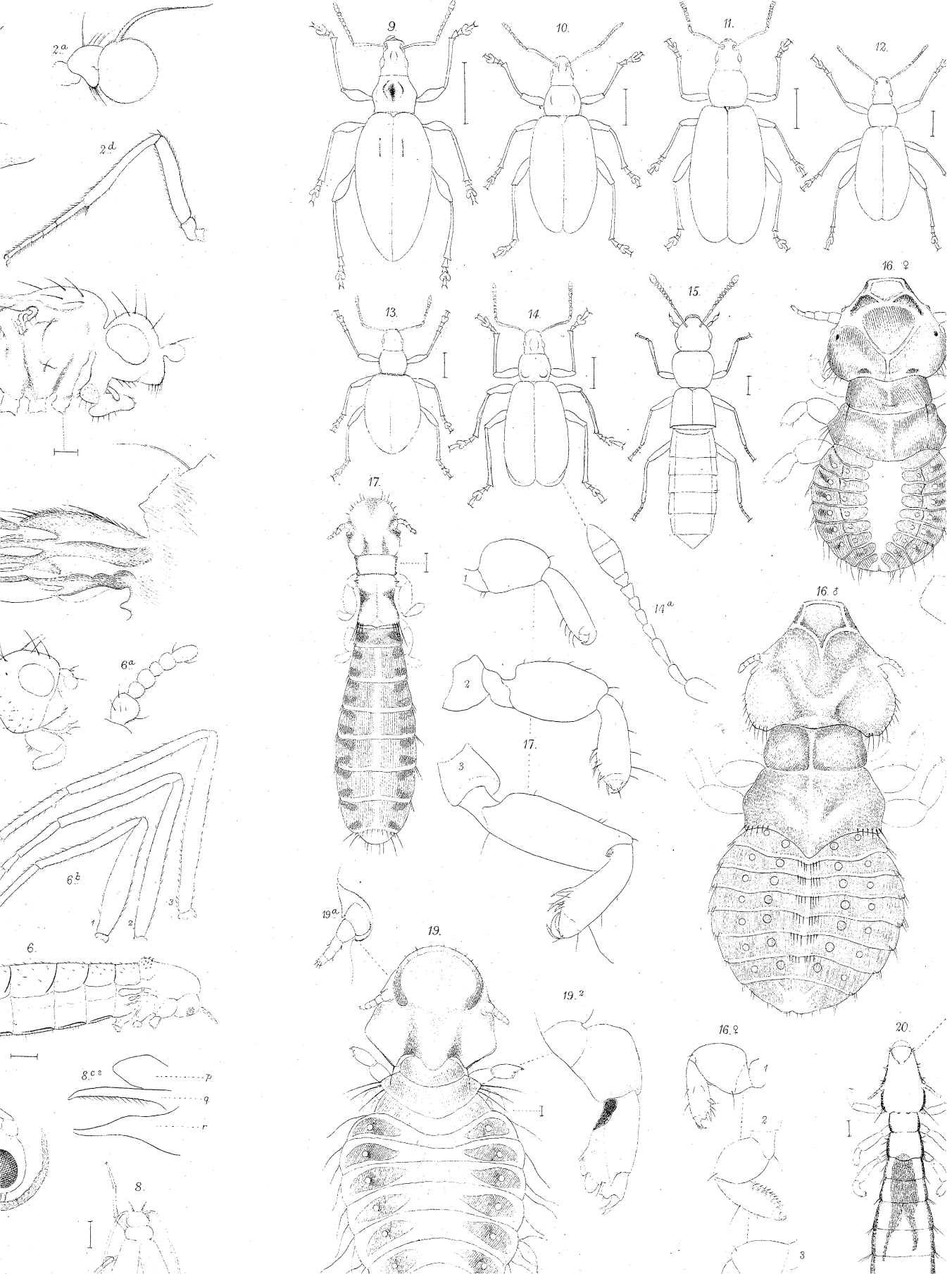
Bulletin U. S. Nat. Mus., 1876, iii. 52—57.

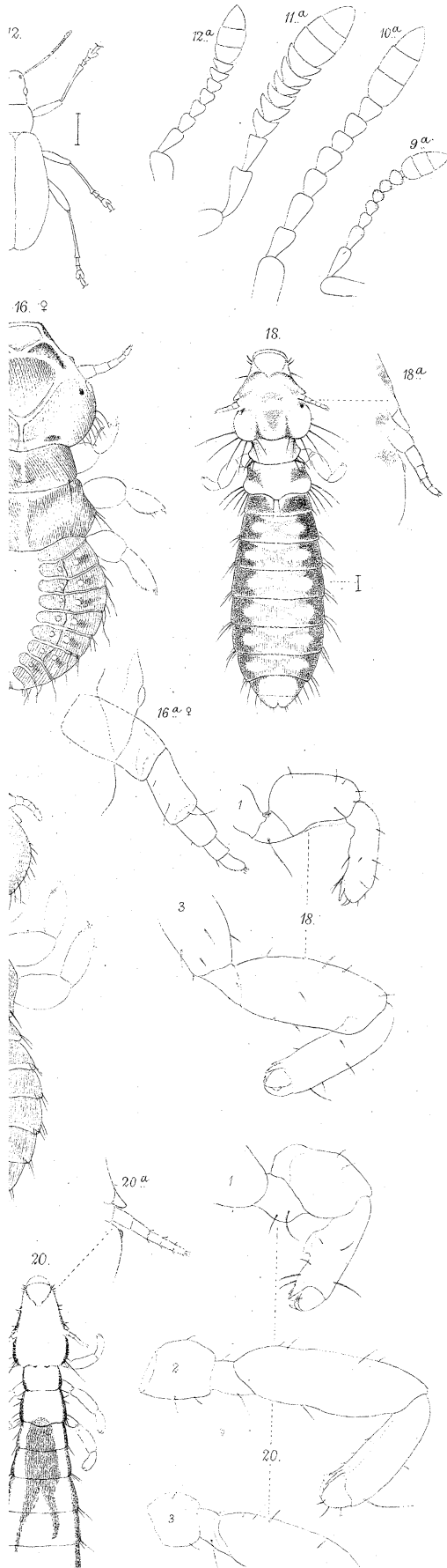
The true Neuroptera of Kerguelen Island are as plentiful as the snakes of Iceland; and it is doubtful whether there is any representative of this order indigenous to it, unless the *Mallophaga*, which *must* be placed somewhere, are reckoned as members of it. For the species of the *Psocidæ* cited above, described from a single example taken at Molloy Point, and mounted on glass in balsam as a microscopic object, is of uncertain nationality, and may have accompanied the American Transit of Venus Expedition from Washington. Dr. Kidder (loc. cit.), recording its apprehension “on October 17, within doors,” remarks, “Shortly before “ its capture some instrument-boxes, brought from Washington, and containing a “ quantity of packing straw, had been unpacked in the same room; a circumstance “ rendering the habitat of the insect very doubtful at the time.”]

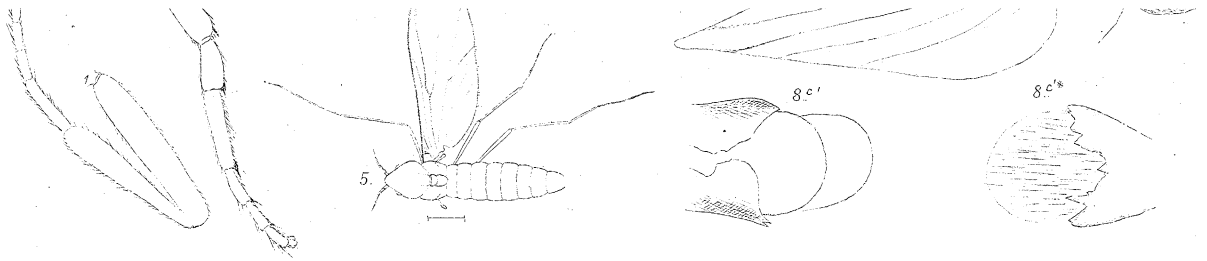
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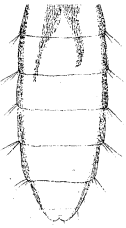
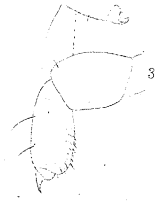
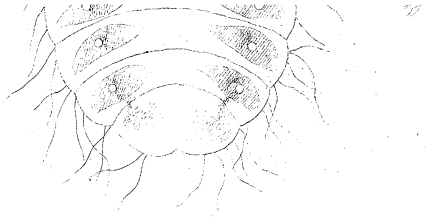
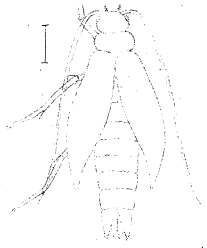
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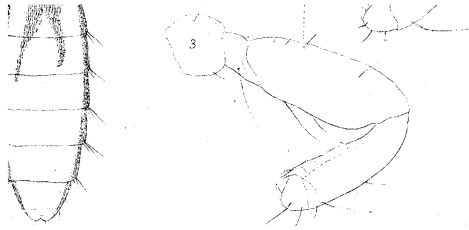




*C. O. Waterhouse, A. E. Eaton, & E. Carter del.*







W. West & Co. sc.

