

"frons" so usual in the "Emerald" larvae. I would also ask attention to the subanal organ whose presence I first noticed in the larva of *I. lactearia*. My material fell short of my requirements, and I was, therefore, unable to follow the larval development further, much to my regret.

I feel that I owe some sort of apology for the poorness of my remarks. I have perhaps given more attention of late to other matters, and I find that I have most certainly got out of touch with fine microscopical details. Working, as I have been for months with objectives of small enlargement, has more or less unfitted me for minute investigations.

EXPLANATION OF PLATE. IODIS CHRYSOPRASARIA, ESP.

- I. The larva newly emerged.
 - a. Tactile hairs on 1st and 2nd thoracic segments.
 - b. Tactile hairs on 6th and 7th abdominal segments.
 - c. Bifid front of 1st thoracic segment.
- II. 1st abdominal segment.
- III. Larva further developed, but in same stadium.
 - f. Bifid front of 1st thoracic segment modified.
 - j. Sub-anal organ.
- IV. Bifid head of newly emerged larva further enlarged.
 - d. The frontal projection.
 - e. The complexion or countenance.
- V. The egg.
- VI. The egg sculpturing.
- VII. Series of eggs.
 - g. Emergence holes.
- VIII. Eggs hatching.
 - h. Dead egg.
 - i. Larva emerging, more advanced.

GLANURES MYRMECOLOGIQUES.

By H. DONISTHORPE, F.Z.S., F.R.E.S., etc.

(Concluded from p. 28.)

MYRMIICINAE—TRIBE CREMATOGASTRINI.

Crematogaster, Lund, *Ann. Sci. Nat.*, **23**, 132 (1831), is given by De Dalla Torre, *Cat. Hym.*, 7 (*Formicidae*), 79 (1893), as *Crematogaster*. Lund, however, did not spell it with two s's; therefore *Crematogaster* is correct. F. Smith, *Cat. Hym. Brit. Mus.*, **6**, 134 (1858), gives it correctly, as does Emery, *Ann. Soc. Ent. Belg.*, **56**, 272 (1912): *Gen. Ins.*, **174B**, 127 (1922). Emery (1922 *l.c.*) gives the type of *Crematogaster* as *Formica acuta*, F., because Lund was writing about species from Brazil; but as Bingham had definitely cited *C. scutellaris*, Oliv., as the type, *Faun. Brit. Ind. Hym.*, **2**, 124 (1903), that species must stand.

TRIBE LEPTOTHORACINI.

Myrmammophilus, Menozzi, *Atti. Soc. Nat. Mat.* (6), 3, 32 (1924). Modena, 1925. Subgenus of *Leptothorax*. The reference to this subgenus is not given as such in the *Zoological Record* (1925), nor is it mentioned at all in Neave, *Nomenclator Zoologicus* (1940).

DOLICHODERINAE—TRIBE TAPINOMINI.

Tapinoma erraticum, Latr., subsp. *ambiguum*, Emery, "Revision des espèces paléarctiques du genre *Tapinoma*," *Rev. Suisse Zool.*, 32, 57 (1925), rests on the characters of the male ant, for Emery states that the only differences between it and the typical form in the worker and female are the smaller size, especially in the ♀. Concerning the ♂ he writes as follows:—"Le caractère le plus remarquable de cette sous espèce réside dans la lame sous-génitale, qui est large du point qu'elle apparaît, dans la vue dorsale de l'armure génitale, latéralement à la squamula; l'échancrure de cette lame est large, évasée et séparé des lobes latéraux étroits et arrondis comme chez *nigerrimum*. L'armure génitale est faite d'ailleurs à peu près comme chez le type d'*erraticum*; le stipes est un peu plus petit et moins courbé. Longueur = 4 mm. à 4 mm., 5." One of the localities he mentions for this ant is—"Sud de l'Angleterre (Donisthorpe) ♂," and he adds it is probable that a small ♂ and ♀, given to him by Crawley, also belong to this same form. This subspecies, therefore, must be added to the British list. I gave him males from the New Forest.

FORMICINAE—TRIBE LASIINI.

Chthonolasius, Ruzsky, *Kas. Zap. Vet. Inst.*, 29, 630, 633 (1912), is spelt incorrectly by Emery, *Gen. Ins.*, 183, 228, 231 (1925), as *Chthonolasius* by adding a second h, which was not used by Ruzsky. Emery also gives the reference as *Arch. f. Naturg.*, 79, 59 (1913), and states that Ruzsky did not cite a type for this subgenus of *Lasius*; giving *L. umbratus*, Nyl., as type. In the reference given by us, however, Ruzsky distinctly cites *L. flavus*, De G., as type; which must stand.

TRIBE FORMICINI.

Adformica, Lomnicki, *Polsk. Pismo ent.*, 3, 164 (1925), founded the subgenus "*Adformica*" for the species of *Formica* in which the head is excised posteriorly in the worker, female, and male. He did not, however, cite either as type, but he had overlooked the fact that Müller, *Bol. Soc. Adriat. Sci. Nat.*, 28, 133 (1923), had already founded a subgenus *Coptoformica* for the same two ants—*F. exsecta*, Nyl., and *F. pressilabris*, Nyl., but he also did not cite a type. I cited *F. exsecta*, Nyl., *Brit. Ants*, 2nd Edition, 316 (1927), as the type of *Adformica*, Lomnicki, but as that subgenus falls into the synonymy, I now propose *F. exsecta*, Nyl., as the type of *Coptoformica*, Müller, by present designation.

TRIBE CAMPONOTINI.

In 1926 Wasykiewicz gave the name of *barbatus* to a subspecies of *Camponotus*:—*Camponotus (Myrmentoma) fallax*, Nyl., subsp. *barbatus*, Wasyk., *Trans. Tomsk. St. Univ.*, 71, 118 (1926); but Menozzi had already given the same name to a species of *Camponotus* in 1925:—

Camponotus (Myrmotarsus) barbatus, Menoz., *Atti. Soc. Mat. Nat. Modena* (6), 4, 94 (1925).

As Wasykiewicz's name sinks, I propose the name of *barbiger* nom. nov. for this subspecies.

DIPTERA—SYRPHIDAE.

Microdon: M. H. Maneval, *Bull. Soc. Ent. France*, 42, 67 (1937), says that the myrmecophilous larvae of these flies live at the expense of the plant-lice cultivated by the ants. This, however, is quite incorrect for, as pointed out by Wheeler, *Nat. Acad. Sci.*, 10, 244 (1924), "The nature of the food of the *Microdon* larvae in the ants' nests was for a long time problematic till Donisthorpe [*Ent. Record*, 24, 36 (1912)] succeeded in proving that the British species, *M. mutabilis*, which lives with ants of the genera *Formica*, *Lasius*, or *Myrmica*, is a scavenger and feeds on the minute pellets expelled by its hosts from their infrabuccal pockets."

I reared a very young larva of this fly in a colony of *Formica fusca* housed in a "Janet" plaster nest. It became full grown, hibernated during the winter, pupated at the end of April, and emerged in May, having lived in the observation nest for just over twelve months. I pointed out that it was quite clear that the food of the larva consisted of the droppings and pellets ("Boulettes de nettoyage") of the ants. See "Guests of British Ants," 126 (1927).

Entomological Department, Brit. Mus. (Nat. Hist.), 10.ii.41.

LOOKING FORWARD.

BY AN OLD MOTH-HUNTER.

January 19th. Two days ago the barometer, after standing high for several days, due to an east wind which brought twenty degrees of frost at night, fell to 29.2, and it began to snow. It has been snowing ever since. Snowing heavily and incessantly. The hills, which rise steeply to 1750 feet about the house, are blotted out and I might be living on an ice-floe. The lane down to the village two miles away is impassable, for it is sunk below the level of the fields and the snow has now topped the hedges. There is no telephone; I am cut off from the world—or should be were it not for a strange voice which remarks, at monotonously regular intervals, "This is the B.B.C. home service."

Supplies? I have plenty of tobacco. I have the wherewithal to refresh the inner man several times a day and to give him a grateful feeling amidst things last thing at night. The cows are munching contentedly in their byre. We killed a pig not so long ago. From the kitchen department comes the scent of freshly-baked bread. The churn was busy this morning long before dawn. But I cannot go to the village for my weekly ration of margarine: I shall have to eat butter instead, perhaps for weeks on end. Such is war.

Like many another I have been driven far afield. Fate has set me down, *nolens volens*, in a country like that of my birth but utterly unlike my habitat of fifty years. Entomologically it is, for me, *terra incognita*. Indeed, I cannot find that an entomologist has ever "worked" this particular part of our island: the aged librarian in

the nearest town has never heard of such a being. The textbooks ignore it. What, then, shall I find here in the way of moths when spring and summer come?

Polia chi is, I know, as common as a barndoor fowl, for a boxful was sent to me, in Hertfordshire, last summer. *Socia* was found, in autumn, roosting high up in the chink of an oak. *Trepida*—*trepida* of all moths—occurred in the shape of a full-fed larva beneath an oak hard by the front door, after a torrential downpour. And who, before, ever heard of *trepida* at his very doorstep? These things, sent to me by a forerunner (gifted with such eyesight as can spot a sleeping *socia* in a chink of oak-bark ten feet from the ground) have set me wondering. What else shall I find if Fate keeps me prisoner for spring and summer in such a wonderland?

There is no poplar nor aspen, but much alder, sallow and willow. Ash grows everywhere, in the valleys and up on the hills. Hazel is the chief hedgerow plant, hawthorn being almost uncommon and blackthorn rare. Oaks, ancient oaks, are still unfelled, with plenty of beech and an occasional elm. Higher, on the hills, there are birches, both trees and bushes, and, of course, heather and bilberry. Scots pine and larch are now the chief forest trees in a land that once was famous for its oaks.

It is, of course, the birches that will claim my first attention in the spring. Moonlight aiding me I shall, I am sure, gather *tincta* larvae from them and, later, ova of both *dromedarius* and *dictaeoides*. And I shall find the wee larvae of *papilionaria*, awakening from their long winter sleep, no matter how cunningly camouflaged they may be. I may even find *versicolora*—no, not the silly little moth that most of us still call *strigilis*, but the great, the noble, the handsome Glory of Kent, as old Moses Harris delightedly dubbed it. For these birches on the hillsides are sturdy bushes five and six feet high, such as *versicolor* likes. They are sprinkled among the bilberry and bracken which add ochre, brown and purple tints to the grey limestone of the crags. Surely *versicolor* must be here.

In April, too, perhaps even at the end of March if the Gods are benign, I shall find *flavicornis* perched at all sorts of angles on twigs and bark and dead bracken stems. *Parthenias* would not be out of place in such a spot, and if indeed he be here I shall need no net: I shall try again, as I have tried so often in the past, to box him as he sits, his wings a-pent like a sleeping *thaumas* (but right way up), on a twig within easy reach. For it is one of my ambitions to box a roosting *parthenias*. He has eyes all over his wings, and in his tail, too, I think: one inch is the nearest I have ever come to him with a box. Like a hare in her form he watches me approach, notes the stealthy movements of my hands, eyes the nearing box, measuring its distance with critical eye, and then, just as I am about to cry *Got him!* he takes the words out of my mouth and sideslips off his perch in the twinkling of an eye. *Notha* is just the same; a family trait I suppose. But *notha* will not be here: aspens are non-existent.

Perhaps the birches will also provide me with Pebble Hooktips; for *falcataria* hits it off well with *parthenias* and indeed rivals the Orange Underwing in its dislike of pill-boxes—when it condescends to fly low. Happily its larva is easy to find and often prefers ridiculously small