BRITISH ENTOMOLOGY;

BEING

ILLUSTRATIONS AND DESCRIPTIONS

OF

THE GENERA OF INSECTS

FOUND IN

GREAT BRITAIN AND IRELAND:

CONTAINING

COLOURED FIGURES FROM NATURE

OF THE MOST RARE AND BEAUTIFUL SPECIES.

AND IN MANY INSTANCES

OF THE PLANTS UPON WHICH THEY ARE FOUND.

BY JOHN CURTIS, F.L.S.

HONORARY MEMBER OF THE ANHMOLEAN SOCIETY OF OXFORD,
OF THE IMPERIAL AND ROYAL ACADEMY OF FLORENCE,
OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, ETC.

VOL. III.

DERMAPTERA. DICTYOPTERA. ORTHOPTERA. STREPSIPTERA. HYMENOPTERA, PART I.

LONDON:

PRINTED FOR THE AUTHOR,
AND SOLD BY

E. ELLIS AND CO., 92 GREAT RUSSELL STREET, BLOOMSBURY; SIMPKIN AND MARSHALL, STATIONERS' COURT; AND J. B. BAILLIERE, 219 REGENT STREET.

1823-1840.





IBALIA CULTELLATOR.

Orber Hymenoptera. Fam. Diplolepidæ Lat.

Type of the Genus, Ichneumon Cultellator Fab.

IBALIA Lat., Ill., Curt.—Ichneumon. Ophion, Banchus Fab.—Cynips Jur.—Sagaris Panz.

Antennæ straight, inserted in the centre of the face between the eyes, approximating, filiform, composed of 15 joints in the male; third joint bent, clavate, emarginate on the external edge (1.); a little clavate and 13-jointed in the female $(1.\,$ $^\circ$ $_\circ$ 1), second joint very small. Labrum corneous, minute, transverse, arcuated before, emarginate in the centre. Lat.

Mandibles thick, nearly quadrate, tridentate on the internal side in one mandible and bidentate in the other, apical tooth most acute, in-

ferior broad, truncate. (3.)

Maxillæ very broad in the middle, terminal lobe broad at the apex, slightly bilobed, ciliated: Palpi short, pubescent, 5-jointed, first and fourth joints small, second and fifth large, elongate-obtrigonate, rounded at the apex. (4.)

Mentum pear-shaped. (5. a.) Palpi short, hairy, 3-jointed, terminal joint equal in length to the other two. (b.) Lip small, concave,

nearly circular. (c.)

Head transverse, as broad as the thorax, concave behind, Ocelli 3. Thorax elongate-ovate, flat, slightly compressed. Scutellum subquadrate, bituberculate. Abdomen attached by a very short petiole, very much compressed, knife-shaped, being very sharp on the under side, with a puncture or spiracle on each side of the last joint; composed of 6 joints, of nearly equal size, very much arched in the male. (7.) 5th and 6th joints the largest in the female with 2 clongated laminæ, between which a capillary oviduct passes, and is curved over the back. (6.) Superior wings with no decided stigma, costal nerve very distinct, one marginal cell, linear-lanceolate; 3 submarginal cells, first small, oblong, second extremely minute, third large, complete; inferior wings with a nerve branched near the extremity, four anterior feet short and slender: coxe of posterior legs large; thighs short, robust; tibiæ very long, first joint of tarsus very long, second small, produced into a spine on the external side (8. a.), third and fourth small, fifth longer, slender (8† hinder leg of male): tarsi 5-jointed, terminated by pulvilli, and claws.

The dissections of the mouth were made from a female, of which the labrum was lost; the ovipositor was represented too short, in the 1st edition, from

the specimen being imperfect.

Cultellator Fab.—Curt. Guide, Gen. 563. 1.

Black, hairy, rugose, head and thorax striated transversely, the latter with the margin of the collar elevated, and three longitudinal grooves down the back. Abdomen bright ochraceous, shining. Legs black or fuscous, hinder thighs tinged with chestnut colour. Wings pale yellowish-fuscous: nervures strong and dark.

In the Author's Cabinet.

The genus *Ibalia* contains at present, I believe, no other species than *Cultellator*, and was never known to inhabit Britain until the male represented in the plate was captured flying in a garden at Bungay, Suffolk, by Mr. W. H. C. Edwards, justly celebrated for his masterly engravings and knowledge of the fine arts. It is also found in Germany and the South of France. M. Latreille found it in the environs of Brive, in a wood of old Horn-beams, vaulting round some of the trees, in the month of May: M. Foudras also takes it near Lyons. The economy and habits of this genus are supposed to be similar to the rest of the family, forming galls upon

The eccentric structure of the third joint of the antennæ in the male at once shows that *Ibalia* belongs to the *Diplolepidæ**, of which family it is the largest species; the second submarginal cell is so minute, that it is scarcely discernible through a lens; the hinder legs in both sexes are very powerful, and exceedingly disproportioned to the body and other legs, which are remarkably small. *Ibalia* is nearly allied to *Cynips* (pl. 688), but it is readily distinguished by the length of the abdomen and the neuration of the wings. The singular spine on the second joint of the hinder tarsi of both sexes, as well as the puncture or spiracle on the side of the abdomen, has hitherto, I believe, escaped the observation of

It may be here observed, that the mandibles are often not counterparts of each other, the shape being adapted to their close contact when at rest; other parts of the mouth are also sometimes irregularly formed. The student must not be misled by these exceptions, which are most frequent in the *Hymenoptera*, occasionally in the *Coleoptera*, and probably all the *Mandibulatæ*.

The plant figured is Stellaria media, Common Chickweed.

^{*} This family ought to have been called Cynipidæ, but having adopted Latreille's term, it has been thought better to retain it through the work to prevent confusion.