

the Australian Continent; from one-fourth to one-third of the Coleoptera appeared to be species new to Science.

Mr. Bond sent for exhibition the following Lepidopterous Larvæ, admirably preserved by Mr. T. Baker, of Cambridge:—*Papilio Machaon* in four different stages of growth, *Vanessa Io*, *Arctia caja*, *Odonestis potatoria*, *Gastropacha quercifolia*, *Porthesia auriflua*, and *Cucullia Verbasci*.

Prof. Westwood remarked that Mr. Baker's preparations rivalled those of Dresden in beauty: he had been informed that the method adopted at Dresden was to squeeze out the intestines through a hole made near the anal extremity of the larva, then to insert a fine straw, and blow the skin out, after which it was placed in a glass vase, which was itself placed in a tin vessel and held over a lamp, by which the larva-skin was quickly dried. The small larvæ, as those of the *Tineæ*, were put alive into the hot bottle, baked until they swelled to the proper extent and dried, and were then pinned with all their contents inside.

Mr. D. Sharp exhibited a specimen of *Coccinella labialis*, taken a week previously at Herne Bay.

Mr. Janson expressed an opinion that *C. labialis* was only a variety of the common *C. 7-punctata*.

Mr. Waring exhibited two males and a female of *Lithostege nivearia*, taken in Suffolk; and a male specimen of *Sterrhæa sacraria*, taken at Banstead Downs: both these rare *Geometræ* had been captured by Mr. Bouchard.

Mr. Stainton entered at length into some interesting details respecting the characters of the mines of numerous genera of leaf-mining *Tineæ*, and exhibited the result of his observations by means of a table, in the different columns of which the principal and distinguishing peculiarities of each genus were shown.

Papers read.

Mr. Walker communicated a paper entitled "Characters of undescribed Lepidoptera:" the species described belonged to the three Heterocerous families of the *Castniidæ*, *Agaristidæ* and *Zygænidæ*, and were most of them in the collection of the British Museum.

Prof. Westwood read some "Descriptions of new Species of Longicorn Beetles:" some of the species described belonged to Mr. Semper, of Altona, and were principally from the Manillas; the other descriptions were drawn up from specimens in the Oxford Museum.

The Secretary read the Introductory Remarks to Major Parry's "Catalogue of Lucanoid Coleoptera; with Descriptions and Figures of new and interesting Species."

Arising out of some remarks by Major Parry on the extraordinary mandibular development of the *Lucanidæ*, and a suggestion that the intermediate form of male, more nearly resembling the female, so constantly found in this group of insects, might possibly be neuters, an interesting conversation took place. Mr. Bates inquired whether the generative organs of these so-called small or intermediate males had ever been properly examined, and referred to Mr. Pascoe's explanation of similar phenomena among the Longicorns, by what was termed "dimorphism." Prof. Westwood said that the suggestion that these were neuter forms was not new, but had been made by Kirby and Spence in their 'Introduction to Entomology;' he himself had never examined the organs of generation of these particular forms, but intermediate male forms

seemed to occur in almost all the cornuted beetles, and also in those with long antennæ. Mr. Pascoe said that his notion had been that the second form was probably the produce of a second brood, born or reared under different circumstances from the original brood. Mr. Bates replied that, in the Copridæ, the two forms certainly occurred in the same brood; he had once thought that the variation of the mandibles and antennæ was owing to the absence of any precise function which those organs had to fulfil, by reason of which absence there was nothing to limit or give the character of fixedness to the amount of variation. Mr. Janson thought it was settled that the function of the mandibles of the Lucanidæ was to break or bruise the bark of trees, with a view to the sustenance of the insect. Mr. Jekel replied that the females, without the development of mandibles, had to do that as much as the males with the large development. The President referred to the case of certain bees which were unmistakeably males, and possessed appendages in the form of horns, as *e.g.* the male of *Osmia cornuta*. Mr. Bates inquired whether the males of the Lucani (*L. Cervus*, for instance) fought with one another, and used their mandibles as weapons of offence, like deer, which amongst the Mammalia might be considered to correspond with the horned beetles amongst insects. Prof. Westwood said that males of *Trichiosoma* had been found fighting together, with their mandibles locked. Mr. Bates concluded that, fundamentally, horns were excrescences of the male organization, and that it was an afterthought of Nature to make them subserve any particular function.

October 5, 1863.

F. P. PASCOE, Esq., V.P., in the chair.

Donations to the Library.

The following donations were announced, and thanks returned to the respective donors:—‘The Journal of the Royal Agricultural Society of England,’ Vol. xxiv. Part 2; presented by the Society. ‘Sitzungsberichte der Königl. bayer. Akademie der Wissenschaften zu München,’ 1863, I. Heft. 3; by the Academy. ‘The Intellectual Observer,’ No. 21; by the Publishers. ‘On the Development of Chloëon (Ephemera) dimidiatum,’ Part 1; ‘On the Development of Lonchoptera,’ by John Lubbock, Esq., F.R.S., F.L.S., F.Z.S.; by the Author. ‘Exotic Butterflies,’ No. 48; by W. W. Saunders, Esq. ‘The Zoologist’ for October; by the Editor. ‘The Journal of the Society of Arts’ for September; by the Society. ‘The Farm and Garden,’ Vol. ii. No. 22; Vol. iii. Nos. 25, 26, 27, 28 and 29; by C. A. Wilson, Esq., Corr. Memb. Ent. Soc. ‘The Athenæum’ for September; by the Editor. ‘The Reader’ for September; by the Editor.

Exhibitions, &c.

Prof. Westwood supplemented the account he had given at the last Meeting of the method pursued at Dresden in the preservation of larvæ, by stating that the larva-skin was not first blown out and afterwards placed in a glass vase over a lamp, but the skin was first placed within the vase and blown whilst actually suspended over the lamp, by which means the rapidity of the skin’s drying was much increased; it was done with a small tube or blow-pipe fixed at the end of a bladder, which was held under the arm or between the knees, so as to leave the hands at liberty; and the straw which was