

birds to the *Heliconiidæ*, which were referred to on the former occasion, and in Mr. Bates' paper in the *Linnean Transactions*.

Mr. T. Belt gave a detailed narration of his observations on this subject, and stated that not only were the perfect insects of *Heliconia* protected by their unpleasant odour, but that the larvæ also were rejected by fowls.

Mr. Stainton remarked that a curious instance of the dislike which birds seemed to have for certain insects had come under his observation some eighteen years previously. When he was attracting moths by light, he had often such numerous attendances that he had frequently captured fifty *Noctuæ*, or more, in a quarter of an hour; whatever came must be caught, or it was in the way, and, in order to ascertain most readily whether there was anything of value, Mr. Stainton adopted the plan of smothering the whole lot with the fumes of sulphur. When the operation had been performed, more than nine-tenths of the dead insects would probably be *Agrotis exclamationis*. He thus had a vast store of useless dead moths, which he disposed of by giving them to the poultry, the young turkeys particularly enjoying them in spite of their flavour of sulphur. On one occasion, amongst a number of *A. exclamationis*, there was one specimen of *Spilosoma Menthastri*, and though not one of the young turkeys rejected a single *A. exclamationis*, they each in succession took up the *S. Menthastri* and put it down again, and it was left, conspicuous as it was, on the ground. This insect, it was well known, had a peculiarly disagreeable odour.

Mr. J. J. Weir had frequently noticed that cage-birds refused the larvæ both of *Spilosoma Menthastri* and *S. lubricipeda*.

Prof. Westwood stated that a fluid of very disagreeable odour was emitted by those insects from behind the collar; this was probably similar to that ejected by many of the *Chrysomelidæ*. He inquired whether anything of the kind had been observed in the *Heliconiidæ*.

Mr. Bates said that one group of *Heliconiidæ* was furnished at the apex of the abdomen with a process from which, when the abdomen was pressed, a very disagreeable odour was exhaled; but he had never seen any fluid ejected.

Mr. McLachlan remarked, as bearing upon the theory of Natural Selection, that having recently been engaged in an examination of the British *Psocidæ*, in which family the generic or sectional characters were principally grounded on the neurulation, he had found occasional instances of aberration in the arrangement of the veins: these aberrations consisted in one wing of an insect which belonged to a particular genus or section assuming, entirely or partially, the neural characters of another genus or section; in no case, among several hundred examples, did he find neural variation which was strictly abnormal.

Dr. Sharp offered some criticisms on the theory advanced by Messrs. Bates and Wallace, and argued —

1st. That natural selection was a power of differentiation, and, although it was quite possible that a differentiating power might work so as to produce resemblances, it was at first sight improbable that it should do so; and more evidence was required of the truth of a paradox than of a truism.

2nd. It must be shown that animals possessing the so-called mimetic resemblances occurred far more frequently in company with one another than away from one another. But if this were shown, a single case of such resemblance between animals living in different localities would throw doubt on the theory, by suggesting that there was