Mr. Smith exhibited the at present unique specimen of Tropideres sepicola, *Herbst*, taken in August last, by Mr. F. Plant, in Budden Wood, Leicestershire, and now presented by him to the British Museum.

Mr. Janson exhibited a specimen of Myrmedonia cognata, *Märk.*, being the third indigenous example hitherto recorded, taken by Mr. E. Shepherd in a nest of Formica fuliginosa; a pair of Atemeles emarginatus which he had taken *in copulâ*, and observed that he had not been able to detect any external sexual distinction; and a pair of Ampedus subcarinatus captured a few days since.

Mr. Bond exhibited specimens of Mixodia Hawkerana bred from sea spurge, and the pupa-cases from which they emerged.

Mr. Hawker also exhibited specimens of the Mixodia, and the shoots of the sea spurge in which the insects had assumed the pupa state.

Mr. Robinson exhibited a drawing of the larva of Polyommatus Artaxerxes feeding on Helianthemum vulgare.

Mr. Janson made some observations on Mr. Smith's remarks on Bledius hispidus, *Parfitt*, with reference to which subject Mr. Westwood denied that he had, as stated, informed Mr. Parfitt that this species was new to Science.

Mr. Newman communicated the following:—

A Word on the Pseudogynous Lepidoptera.

"The attention of entomologists has lately been directed to a phenomenon, which, under a severe scrutiny, seems to have arisen from the questionable position of an exception into the importance of a normal law. I allude to Agamogenesis. I have now to invite attention to what might be termed a compensating or balancing phenomenon,—a phenomenon which, instead of providing an unlooked-for multiplication of life, seems to dry up the source of life. This phenomenon is Pseudogynism, or the occurrence of false or unproductive females. It is very familiar to the breeders of domestic cattle, by whom such false females are called free martins. All attempts to overcome their sterility having of course been unsuccessful, they have been abandoned, and the beasts have been at once fattened for the butcher. I think entomologists have not hitherto recorded the existence of the same free martinism, or pseudogynism, among moths; it is nevertheless a fact that it exists to a very great extent, more than half the individuals of certain species proving sterile females. The first observation I made on this subject was in 1846, on an autumnal-disclosed specimen of Orthosia instabilis, the abdomen of which was opened, with a view of ascertaining the state of the eggs on the occasion of this unwonted first appearance on the stage of life. Eggs there were none; the abdomen was a hollow cylinder, without any trace whatever of an ovary, or indeed of any portion of the ordinary contents. The next observation was made on an example of Sphinx Convolvuli taken the same year. The captor slit open the abdomen longitudinally, from the anus to the insertion of the legs, intending to remove the contents prior to drying the insect for the cabinet. In this case also the abdomen was perfectly empty. My notes on this subject were laid by, but not forgotten, until 1851, when I received a notice from the South of France respecting Deilephila Celerio, which that year appeared in profusion in the months of September and October, the report stating that all the females were barren. This of course

afforded more food for reflection, and in 1852 I sacrificed a number of Sphinx Ligustri and our of three species of Smerinthus, thinking to find and investigate a similar phenomenon. In this I was disappointed: all the specimens were summer-disclosed, and all had the ovaries distended with mature eggs. I was now inclined to assume that the previously observed facts were accidental or exceptional, and not to be recorded as the results of any universally operating law; but, last autumn, that is the autumn of 1856, the subject was again brought before me by the examination of recently disclosed females of Acherontia Atropos, which proved perfectly sterile. Now, as I knew there was a summer disclosure of this insect, giving rise, among the raw recruits of our science, as in the case of hybernating Rhamni, to a double-brooded hypothesis, I could not but be struck with a phenomenon that began to assume the weight and importance of a fixed law. It appeared, on comparing and arranging a series of observed facts, 1st, that certain Lepidoptera had two periods of disclosure, the æstival and the autumnal; that the summer batch, produced while the leaves were in full vigour and afforded abundant food for the larvæ, was fruitful; the autumnal brood, disclosed when the leaves were about to fall, was barren. The autumnal brood seems only to occur in cases where the number of the specimens has been much larger than usual, and when the species, if multiplied by uniform and ordinary fecundity, would either more than exhaust the usual food-plant, and would therefore starve, or would seek other food, and thus defoliate our vegetation. The phenomenon, therefore, if reduceable to a law, is yet another proof of that 'wisdom of God in creation' which was the favourite theme of our greatest English naturalist, and the illustration of which is the cherished object of every right-minded teacher at the present day. Before offering these remarks to the Entomological Society I thought I would submit the facts to the scrutiny of a second entomologist; and for this purpose I selected the 'Lepidopterologiæ Princeps' at once, thus passing by, not only the *habitués* of what might be called our 'Circumlocution Office,' but also those really hard-working investigators of truth, our Wollastons, our Douglases and our Powers. Mr. Doubleday's experience, I am happy to say, exactly coincides with my own. The following extract from his letter contains irresistible evidence of the prevalence of my facts:—'The first pupa,' Mr. Doubleday writes, 'that I ever possessed of Acherontia Atropos produced a female moth, in July, and was full of eggs. In 1846 I had a number of larvæ of the same species; these became pupæ at the usual time, and eight or ten moths were produced at the end of September or beginning of October; ALL the females were barren, their abdomens being quite hollow. Most of the female Convolvuli that I took the same year [it was the great Convolvuli year] were barren, but I took one or two which laid eggs; not one of the eggs, however, hatched. I believe the females of some species are mostly barren when disclosed in the autumn; but where there are two distinct broods of a species, a vernal and autumnal brood, both are fertile. I believe that all species occasionally produce barren females.'"

Mr. F. Smith read the following extract from a letter addressed to him by Mr. R. T. Grant, from Canada West (Orillia):—

Letter from Mr. R. T. Grant, West Canada.

"The first insects make their appearance about the middle of April, on the blossoms of the sallows, which are very plentiful here, and swarm with insects of all orders, even before the snow has disappeared. Fancy the ground covered with snow