

The room that attracted my attention most, after seeing the collection, was the room used for the students or pupils as they are called, and where all the mounting, spreading, packing takes place as well as addressing boxes, and shipping insects ordered from every quarter of the world.

It is like a bee-hive and no one has time for idling here. One student is taking out specimens from papers and envelopes, another sorting and laying aside any that are difficult to determine (these are afterwards handed over to an experienced hand for determination). The third pupil is placing specimens in relaxing jars and glasses of wet sand. The fourth and fifth are mounting and spreading and often patching and mending broken specimens. The packing and shipping is done in the most orderly and business-like manner, and by dusk everything is finished for the day.

I noticed an improvement upon our relaxing tins and jars which may be worth mentioning. Glass covers are used and the advantage is obvious, as one can see the specimens through the glass. They are very much the shape of the glass dishes kept at the railway stations in the restaurants for sandwiches, etc.

The spreading is done rather differently from what I have seen in England and the United States in that very short pins are used for fastening down strips of paper over the wings, and forceps are used entirely (and never the thumb and forefinger) for tightening down the pins. Twenty specimens is considered a good hour's work of the smaller species and more of the larger ones can be satisfactorily mounted and spread by a good pupil.

Dr. Staudinger is engaged upon a gigantic work upon the Paleo-Arctic Fauna, which he is most anxious to finish.

At Berlin I saw Alex. Bau's collection and went twice to call upon Mr. Howarth but was not successful in my endeavours to meet him or to examine his fine collection. In Berlin I met Prof. Ramsay Wright, of the Toronto University, who was hard at work at Prof. Koch's laboratories. He very kindly took me to several places of great interest to a naturalist.

Arrived at London, I first went to see Mr. Henley Grose-Smith's collection of diurnals only. He had nearly doubled his collection since I last saw it in 1882. A splendid addition of new things had just been added, collected by Mr. Woodford, in the Solomon Islands. This collector underwent great hardships and evidenced his pluck by living for 18 months amongst the worst cannibals that are known in the islands of the Southern Pacific Ocean. Mr. Woodford's collection has been of great assistance to scientists interested in the insects of these southern climes.

Mr. Grose-Smith furnished me with a letter to Mr. Kirby, at the South Kensington branch of the British Museum, and no one could have been kinder than was Mr. Kirby. Always busy, he seems to be able to find a little time to devote to collectors who come to see the collections. He went through the *Coliadæ* with me and helped to clear up a number of doubtful species which I had upon my mind.

Last of all, I visited the Insect House, at the Zoological Gardens, in Regent's Park, and saw the breeding cages. A large number of North American diurnals, and all our large moths are to be seen here in their different stages of metamorphoses.

Europe, Asia and Africa are also well represented in this respect, and one is always sure to find something new and interesting to repay a visit to Mr. Bartlett's Insect House, at the "Zoo."

A MICROSCOPICAL EXAMINATION OF AN UNEXPANDED WING OF CALLOSAMIA PROMETHEA.

BY J. ALSTON MOFFAT, CURATOR, ENTOMOLOGICAL SOCIETY OF ONTARIO.

In the July No. of that ably conducted and instructive English magazine, *The Entomologist's Record*, the subject of wing expansion is discussed in its various aspects. Amongst those taking part in it, Dr. Buckell remarks that, "as to expansion: the unexpanded wing is a miniature of the expanded. Newman, at p. 14 of *British Butterflies* quotes from Kirby and Spence to the effect that the two membranes of which the wing is

composed are, in as well as longitudinal roscopists? If so considering the method for making an attainment of a number of moths, therefore: And secondly, although willing services of I had four *Samia* New York. In the pupa. I soft that it would I called the attention subject and read that I should state here to take notes of wings and correct them to verify. But Kirby and Spence. In view of expansion and development composed of two membranes between them. The nervures, contribute to the pupa, and the question do not touch and corrugated into longitudinal, and so much thicker than tubes, and being in for the nervures the membranes attached takes place, the expansion the action of the at observations made. We commenced operation hard; when broken body, smooth and the indication of where object, but worthless. At what stage of the

We next took investigation. The wing coloured and appeared three-eighths of an inch part; which possible

The first surface longitudinal, the membrane erect, yet the ornamental corrugations were distinct, applied to the be more correct. The front edge had time.

Longitudinally ity of a fan; they