

forms, and observations made by myself on one species in the last year seem to favor his opinion.

Such alternations stated without doubt for Hymenoptera and some Hemiptera, and probable by analogy for some Diptera, will certainly not fail to occur in other orders, and are probable in some Lepidoptera heterocera.

A paper by Mr. P. Cameron, in the *Scottish Naturalist* for April, 1878, the substance of which is incorporated and fully approved in the President's Address to the Entomological Society of London, arrives at conclusions entirely unfavorable to Dr. Adler's memoir. To corroborate my views about the memoir I wish to give a few statements.

Dr. Adler gives the facts upon the discovery "of the Parthenogenesis of *Rhodites rosae*" on ten pages, about two-thirds of the first part of his memoir.

In May, 1872, *Rh. rosae* in large numbers was observed; some few males appeared, which were put, together with several females, in the breeding cabinet; but no copulation was observed. For further experiment were chosen females appearing later, of which, by careful observation, it was certain that none of them had been with any male. Those females were put on bushes of *Rosa canina* on May 10th—12 wasps, May 13th—16 wasps, May 26th—10 wasps, June 2nd—6 wasps; together, 44 wasps. Of those 26 wasps were observed in the act of oviposition, and the twigs were marked with a thread around each. The first formation of a gall was observed June 5th, and in all only nine twigs formed galls; giving the positive result that unimpregnated eggs had developed. The experiment was tried again for the purpose of having surer results by repetition and to investigate why the first experiment was without result in so many cases. In 1874 there were put, June 22nd, on rose bushes 8 wasps, 4 of which were observed in oviposition, none producing galls; June 23rd, of 10 wasps, 4 observed in oviposition, 2 producing galls; June 27th, of 12 wasps, 5 were observed in oviposition, producing 3 galls.

Of the 13 wasps observed in the act of oviposition, 4 were dissected, and the receptaculum seminis stated to be entirely empty (without spermatozoa). Every one of the wasps spoken of was carefully observed and not lost sight of till the wasp had begun the oviposition, in which act some persevered for more than 24 hours. Of course observation was not followed through this whole time, but every few hours it was again observed