

the royal blood to entitle him to the throne, or, if his lineage be too strong, had we not better establish a democracy of insects and, by the suffrages of tortured animal life, relegate this buzzing busybody to his proper sphere?

Seriously, however, I am led to inquire whether there is not strong reason why we should make an effort to avoid the expression of lineal rank in groups of animals. The most specialized are often degraded in many respects, and there is no basis for the expression of rank except their phylogeny, and the higher groups of insects are certainly not connected in any lineal series, but represent divergent, or in some cases, perhaps, nearly parallel branches from some common ancestral form or group of connected forms. To place any one group as the head of a lineal series is to give an expression that is not present in nature.

Lists of insects may have to be written in a lineal order, but can we not emphasize more strongly the point that this order is not an expression of natural relationship?

Mr. Smith thought that the line of argument adopted by Messrs. Aldrich and Townsend was inconclusive, and that the article referred to carried with it its own refutation. He thought Mr. Osborn was correct in that the orders should be placed parallel, but that groups or families were more highly developed in some orders than in others. Mere specialization is never a test of rank in itself, and any line of argument that places the Hippoboscidae at the head of the insects as the highest in rank, is simply unworthy of attention, since it omits the intellectual or nervous development as a factor.

The Secretary read the following paper:—

THE LIFE-HISTORY OF THE NORTHERN MOLE-CRICKET— *GRYLLOTALPA BOREALIS*.

BY E. W. DORAN, PH. D., COLLEGE PARK, MD.

Although this is a common insect in many parts of the United States, it is not generally found in great numbers in any locality, and, notwithstanding its general distribution, the various stages of the insect seem not to have been described or figured.

While I am not yet able to clear up all the points in its history, I have studied the insect in all its stages, though I have not reared it from the egg to maturity, on account of the time required for it to develop—in all probability three years.