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DR. O. F COOK'S 'SOCIAL ORGANIZATION AND BREED-ING HABITS OF THE COTTON-PROTECTING KELEP OF GUATEMALA.'

Some of the results of the continued work of the United States Department of Agriculture on the ponerine ant, Ectatomma tuberculatum Olivier, introduced into Texas for the purpose of aiding in the extermination of the cotton boll weevil, are given in this paper of fifty-five pages in advance of an illustrated bulletin or report on the same subject. Cook's paper can hardly be passed over without comment, since it displays so many misstatements of fact, such inadequate knowledge of the work that has been done on other species of ants, and such a wilderness of unkempt argument and speculation as to entitle it to high rank as an example of what a scientific essay should not be.

The burden or 'Leitmotiv' of the whole paper is properly sounded in the introduction, which is well worth quoting in its entirety:

In preceding reports treating of the kelep as an enemy of the cotton boll weevil the distinctness of its behavior from that of the true ants has been noted. To avoid in some measure the misapprehension likely to be caused by calling it an ant it seemed desirable to introduce with the insect its distinctive Indian name, kelep. In the minds of the natives of Guatemala, the kelep is not a kind of ant, but an independent animal not to be associated with ants. The more we learn about it the more this aboriginal opinion appears justified, not alone because the kelep is a beneficial insect, but because it has a different mode of existence and a different place in the economy of nature.

The popular classification of the social hymenoptera recognizes three types—the ants, the bees and

