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THE PHYLOGENETIC DEVELOPMENT OF SUBAPTEROUS AND APTEROUS CASTES IN THE FORMICIDAE

By William Morton Wheeler

BUSSEY INSTITUTION, HARVARD UNIVERSITY

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It is generally admitted that each of the four groups of social insects—the social bees, social wasps, ants and termites—has had an independent phyletic origin and history and that the similarities in their habits are due to parallelism, or convergence, of which, indeed, they exhibit striking examples. In both the fertile and sterile females of social wasps and bees the wings show no signs of reduction, whereas these appendages are well-developed in the fertile females (females proper) of the great majority of ants, at least prior to fecundation, but are normally always absent in the sterile females, or workers. Paleontology proves that identical conditions have long existed in the Formicidae as a family, since they are clearly shown in the abundant and beautifully preserved ants of the Baltic amber from the Lower Oligocene Tertiary.[1]

Writers also agree that the ants must be descended from certain