There are two types of distortions of the ants also resulting from flattening. The most obvious of these is the increase in the width of the specimen which takes place as the latter is pressed flat. The effect of this, of course, is to give the insect a more robust appearance than was characteristic of the ant when alive. Apparently the intensity of this pressure was very great, for the chitin of the head of many specimens is distinctly cracked just in front of the posterior angles, as in the holotype specimen of *Formica cockerelli*, sp. nov. (Plate **4**, fig. 3). This splitting of the chitin occurs in precisely the same place, if a recent ant is pressed flat, and since it is always followed by a collapse of the entire head, which consequently becomes much broader, the presence or absence of the splitting indicates the degree of flattening which has taken place and provides a means of determining the original shape of the head. The second type of distortion is less evident, but equally noteworthy. It will be observed in most of the photographs of the Florissant species that the eyes are more remote from the lateral margins of the head than they are in the majority of living species. This is not a morphological peculiarity of the extinct species, but is merely due to the flattening of the head, and can be duplicated in recent forms by applying the necessary amount of pressure.

The application of a dilute solution of damar to the fossil has been found to improve the visibility of the insects nearly a hundred per cent. Many structures, especially the antennal segments and the veins of the wing, which could not otherwise be discerned in some specimens, become very distinct by the use of this medium. The resin hardens in a few hours, thus serving to protect the fossil from dust or scratches, and even from the cracking caused by the changes of atmospheric conditions. The hardened damar can easily be removed if desired, by soaking the specimen in xylol for a few days and then washing it for an equivalent time in absolute alcohol.

The Florissant ants are the only ones from American deposits which are sufficiently well preserved to permit determination of the generic affinities. Even the Green River shales, which have yielded a great number of splendidly preserved insects of other groups, have not produced a single satisfactory ant. My observations of the European fossil ants lead me to the conclusion also that those of Florissant are far better preserved than those of any other known deposit, excepting, of course, the Baltic amber. I have never seen a Radoboj or Oeningen ant with the eyes, antennae, or clypeus preserved, and very few of those described by Heer from those two localities show such details, as do the many of the Florissant specimens.