

brilliantly and beautifully colored with green and purple markings. Sometimes the enlargement of the facets is on the anterior portion and common to both sexes, as in the Asilidae. The larger number of flies have the eyes bare, or pubescent only when seen under high magnification. Very often, however, the whole or part of the eyes is covered with erect pile or hair, which always finds its greatest development in the male sex. The pilosity may be sparse or dense, short or long.

*Ocelli.* On the upper part of the head, between the compound eyes there are three simple, small eyes, present in most diptera, and called the ocelli. They are by no means constant among all the genera of some families, or even among all the species of some genera. They are usually situated in the form of a triangle whose apex is in front; sometimes they are located in a nearly straight line transversely, or, the middle one may be absent, and the other two situated one on each side close to the compound eyes.

*Antennae.* No other organs furnish so many or so important characters in the classification of the diptera as do the antennae or feelers, as they have been sometimes called. The number, shape, and arrangement of the joints offer, not only specific and generic characters, but in some cases family characters as well. Only in exceptional cases is the number less than three, and there may be as many as thirty-six, it is said. Through all the Cyclorrhapha the number three is constant, with the exception of the Phoridae, and the Pupipara. In the Nematocerous Orthorrhapha the number is usually from eight to sixteen, the first two of which form the *scape*, and which are always more or less differentiated from the remainder, which constitutes the *flagellum*. Osten Sacken has proposed to call those flies which have the antennae long and frequently bearing whorls of hairs, especially in the males, the *true* Nematocera, in distinction from the *anomalous* Nematocera, in which the antennae are shorter, destitute of whorls of hairs and with the joints pressed close together. Upon the antennal