Although the greater number of insects have four wings, there are many, such as the common house fly, and the gnat, which have only two. These compose the order *Diptera*, (Fig. 162.) In these insects we meet with two organs, consisting of cylindrical filaments, terminated by a clubbed extremity; one arising from each side of the thorax (as seen in the above figure,) in the situation in which the second pair of wings originate in those insects which have four wings.

capable of being separated. The point, P, is directed a little upwards, and is a little curved: the barbs, seen still more highly magnified at Q, are about six in number, and are placed on the under surface, and their points directed backwards. At the base of the sting, E, there is a semicircular dilatation apparently intended to prevent the instrument from being thrust too far out of the sheath (shown separately at V,) in which it moves: it has also a long tendon, to which the muscles are attached. It is between these plates, when approximated, that the poison flows from the orifice of the somewhat dilated extremity of the poison duct, D, which comes from the anterior part of the poison bag, B. This bag is of an oval shape, and is not the organ which secretes the poison, but merely a receptacle for containing it; for it is conveyed into this bladder by means of a long convoluted vessel, C, which receives it from the secreting organs, S. These organs consist of two somewhat dilated vessels resembling *cæca*, but which have each a slender secretory vessel extending from them. The sting moves in a tubular sheath, V; which is open at its base, and along its upper surface, as far as the part where the sting is prevented from being thrust out any farther. The muscles which move the sheath are distinct from those of the sting, and are attached to an elongated and curved part on each side of its base, and to an arched and moveable part which is apparently articulated with it. Swammerdam has delineated these parts as cæca in his dissection of the common hive bee, but has not noticed the secretory vessels. The sting of the hive bee resembles that of the *Anthophora retusa*."