tracheae and tracheoles which supply the developing thoracic flight muscles. The first of these anastomoses is very much broader in diameter and unites the two dorsal trunks posteriorly to the origin of the lateral trunks.

The two pairs of trunks of each side are connected by four tracheae. The

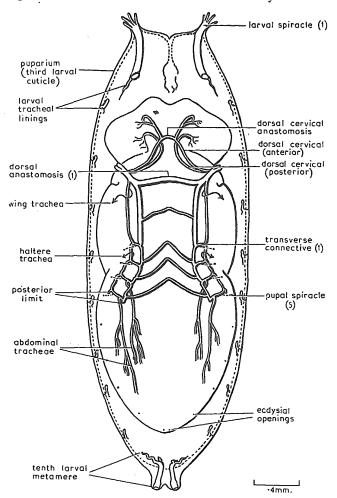


Fig. 2. Drosophila: the pupal tracheal system. Dorsal view. Semi-diagrammatic.

first arises from the dorsal trunk posteriorly to the origin of the second dorsal anastomosis. The succeeding connectives arise between the origins of successive dorsal anastomoses. This arrangement immediately recalls an identical arrangement between the anterior dorsal anastomoses and the transverse connectives of the larval system.

From each of the lateral trunks, immediately posterior to their origin, a trachea arises which passes ventrally. It first gives off a trachea to the first $\frac{2421.1}{\kappa}$