The middle and hind legs are inserted together at the sides of the posterior end of the thorax, but the hind legs are inserted above the middle legs, and their acetabula extend a little further back than the middle acetabula (Pl. I. fig. 8, 3 $\gamma$ ). The middle acetabula, which occupy the lower posterior hind angles of the thorax, are, viewed from the side, cylindrical, and a little broader than long. Above they are covered by the hind acetabula. Viewed from below they are cylindrical, joined on the inner side by the concave hind margin of the mesosternum, which is continued nearly to the apex of each acetabulum. The opening is nearly circular, and looks backwards. On the outer side of the middle line below is a suture or slit of greater or less length.

The hind acetabula occupy the upper posterior angles of the thorax, and are cylindrical, longer than, but not so stout as, the middle acetabula, behind which they extend for about half their length, reaching to the apex of the middle coxæ. The posterior half of the acetabulum is slightly hollowed below, where it impinges on the middle coxa.

Between the middle and hind acetabula is a deep narrow longitudinal furrow, anteriorly forked, the branches being less deeply impressed. The upper branch is the longer, and goes upwards and a little forwards, and marks the base of the acetabulum. The lower and shorter branch runs forwards and a little downwards, and is formed for part of its length by the slit-like opening of the mesothoracic spiracle. In willerstorffi the slit of this spiracle is about '2 mm. long; and in sericeus '16 mm. The opening of the acetabulum is circular, and looks backwards and a little inwards, the free ends of the acetabula being nearer together than their bases.

Lying on the inside of the hind acetabulum is a narrow, almost parallel-sided plate, rather longer than the acetabulum, pointed in front and truncate behind; and divided from the acetabulum on the outer side and from the thorax and abdomen on the inner side by deep narrow furrows. The surface of the plate is not horizontal, but usually slopes more or less steeply to the inside, so that the outer edge is on a level with the upper surface of the hind acetabulum. In some cases, however, the slope is reversed, more especially in gravid females. Posteriorly the plate reaches beyond the end of the hind margin of the thorax, and the transverse impression or suture between the thorax and abdomen is continued across it. The situation of the smaller posterior part of the plate thus marked off varies a little in the sexes, and even in some of the species. In the male it is usually opposite the first free abdominal segment, and more rarely opposite (e.g., in Halobates sericeus) the second free segment, which is its usual position in the female. the latter this part of the plate is also smaller and more detached. Beyond this detached portion traces of similar plates may be seen at the sides of the basal free abdominal segments. It is evident, therefore, that the plate and its continuation are formed by the pleura (or epimera) of the thorax and abdomen. By some writers this plate has been described as the rudiments of the elytra and wings; and as these organs in insects are expansions of the sides or pleura of the thorax, this view is in a limited sense correct. As Halobates, however,