

of a number of separate lobes; a pair of connectives unite the cerebral ganglia with the ventral chain; the latter is composed of thirteen distinct pairs of ganglia, some of which bear unmistakable evidence of being the result of a fusion between several pairs of primitively distinct ganglia; this is particularly the case with the anterior of the ganglia, which are seen in longitudinal section to be composed of two fused ganglia. The eight following ganglia belong apparently to the thorax. Of these the three anterior¹ are separated from each other by considerably longer connectives than those which unite the posterior thoracic ganglia; the latter get closer and closer together (in correspondence with the diminished size of the segments to which they belong), and the last pair of thoracic ganglia are hardly separated from the fused ganglionic mass belonging to the abdomen; a careful examination of the latter, especially by the help of longitudinal sections, shows that it is in reality composed of six pairs of distinct ganglia, the last of which is considerably larger than the rest, inasmuch as it has to supply the telson as well as the last abdominal segment. The abdominal ganglia occupy only the first three segments of the abdomen.

In *Serolis neæra* the fusion of the posterior and of the anterior ganglia is even more marked.

In the cephalothorax there are three pairs of ganglia, of which the posterior is much the largest. This is united by a long connective with the next thoracic ganglia, which is situated at the posterior extremity of the second free thoracic segment; it is clear, however, that it belongs to the segment in front, since it was quite easy to trace the nerves passing forwards to this segment. The fourth thoracic ganglion is closely connected with the succeeding thoracic and the abdominal ganglia, the whole forming an elongated oval mass lying in the posterior thoracic and anterior ten abdominal segments; the demarcations between the four anterior pairs of ganglia could be recognised by the stout nerves given off on either side to their respective segments; of the posterior ganglia, however, it was impossible to discover how many there were; a vast number of nerve filaments take their origin on either side, and afford no indication of the number of ganglia, two of these passing in a direction parallel to the longitudinal axis of the body from the hinder end of the ventral chain are especially large; they supply the telson.

Eye.—With one exception—*Serolis antarctica*, which is perfectly blind—all the known species of *Serolis* are provided with a pair of eyes situated upon each side of the cephalic shield at about the middle of its antero-posterior diameter; the eye has usually a reniform outline, and in general aspect recalls that of the Trilobite, with which it has been compared; more rarely it is oval (*Serolis bromleyana*), and in *Serolis minuta* it is almost circular.

In all the shallow-water species the eye is relatively small, but very conspicuous from the abundant deposition of pigment; in all the deep-sea forms, with the exception of

¹ This is not clearly shown in the figure owing to an oversight.