

communicantes to the corresponding ganglia. The rami communicantes are of considerable length, and accompany the lumbar arteries around the sides of the bodies of the vertebræ, passing beneath the fibrous arches from which some of the fibers of the Psoas major arise.

Of the **branches of distribution**, some pass in front of the aorta, and join the aortic plexus; others descend in front of the common iliac arteries, and assist in forming the hypogastric plexus.

THE PELVIC PORTION OF THE SYMPATHETIC SYSTEM (PARS PELVINA S. SYMPATHICI).

The pelvic portion of each sympathetic trunk is situated in front of the sacrum, medial to the anterior sacral foramina. It consists of four or five small sacral ganglia, connected together by interganglionic cords, and continuous above with the abdominal portion. Below, the two pelvic sympathetic trunks converge, and end on the front of the coccyx in a small ganglion, the **ganglion impar**.

Gray rami communicantes pass from the ganglia to the sacral and coccygeal nerves. No white rami communicantes are given to this part of the gangliated cord, but the visceral branches which arise from the third and fourth, and sometimes from the second, sacral, and run directly to the pelvic plexuses, are regarded as white rami communicantes.

The **branches of distribution** communicate on the front of the sacrum with the corresponding branches from the opposite side; some, from the first two ganglia, pass to join the pelvic plexus, and others form a plexus, which accompanies the middle sacral artery and sends filaments to the **glomus coccygeum** (*coccygeal body*).

THE GREAT PLEXUSES OF THE SYMPATHETIC SYSTEM.

The great plexuses of the sympathetic are aggregations of nerves and ganglia, situated in the thoracic, abdominal, and pelvic cavities, and named the **cardiac**, **celiac**, and **hypogastric plexuses**. They consist not only of sympathetic fibers derived from the ganglia, but of fibers from the medulla spinalis, which are conveyed through the white rami communicantes. From the plexuses branches are given to the thoracic, abdominal, and pelvic viscera.

The Cardiac Plexus (Plexus Cardiacus) (Fig. 838).

The **cardiac plexus** is situated at the base of the heart, and is divided into a **superficial part**, which lies in the concavity of the aortic arch, and a **deep part**, between the aortic arch and the trachea. The two parts are, however, closely connected.

The **superficial part of the cardiac plexus** lies beneath the arch of the aorta, in front of the right pulmonary artery. It is formed by the superior cardiac branch of the left sympathetic and the lower superior cervical cardiac branch of the left vagus. A small ganglion, the **cardiac ganglion of Wrisberg**, is occasionally found connected with these nerves at their point of junction. This ganglion, when present, is situated immediately beneath the arch of the aorta, on the right side of the ligamentum arteriosum. The superficial part of the cardiac plexus gives branches (*a*) to the deep part of the plexus; (*b*) to the anterior coronary plexus; and (*c*) to the left anterior pulmonary plexus.

The **deep part of the cardiac plexus** is situated in front of the bifurcation of the trachea, above the point of division of the pulmonary artery, and behind the aortic arch. It is formed by the cardiac nerves derived from the cervical ganglia of the sympathetic, and the cardiac branches of the vagus and recurrent nerves. The only cardiac nerves which do not enter into the formation of the deep part