

Direction of the Spinal Nerve Roots.—The roots of the first cervical ascend slightly to reach the interval between the atlas and the occipital bone. The roots of the second and third nerves pass horizontally outwards; that of the fourth passes obliquely downwards and outwards, while the remaining roots proceed, with increased degrees of obliquity, to their respective foramina.

Landmarks.—The spine measures, from the atlas to the tip of the coccyx, on an average, about twenty-eight inches, of which, the cervical portion is five inches; the dorsal, eleven inches; the lumbar, seven inches, and the sacrum and coccyx, five inches. Viewed in profile, the spinal column presents *four curves*, a cervical, convex anteriorly; a thoracic, concave; a lumbar, convex, and a pelvic, concave. The *spinal cord*, which may be regarded as consisting of thirty-one segments, placed, one on top of the other, like a pile of checkers, measures only seventeen or eighteen inches in length, so that, the spinal canal is nine or ten inches longer than the spinal cord. The spinal cord extends from the foramen magnum to about the lower part of the body of the first lumbar vertebra, the remaining space of the canal being occupied by nerves (the cauda equina), and by the filum terminale, *i.e.*, the prolongation downwards of the pia mater, which contains a very slight amount of nervous tissue. The *cervical enlargement* of the cord, caused by the large size of the nerves given off to supply the arms, extends from the third cervical vertebra to the second dorsal, and is at its maximum at the level of the sixth cervical vertebra; whereas, the lumbar enlargement commences at the level of the ninth dorsal and reaches its maximum at the level of the twelfth dorsal, from which point it diminishes gradually. Each segment of the spinal cord is connected with a pair of nerves, and not only acts as a conductor for the