

one side of it (generally the right) is a deep groove, the **sagittal sulcus**, which lodges the hinder part of the superior sagittal sinus; to the margins of this sulcus the falx cerebri is attached. The lower division of the cruciate eminence is prominent, and is named the **internal occipital crest**; it bifurcates near the foramen magnum and gives attachment to the falx cerebelli; in the attached margin of this falx is the occipital sinus, which is sometimes duplicated. In the upper part of the internal occipital crest, a small depression is sometimes distinguishable; it is termed the **vermian fossa** since it is occupied by part of the vermis of the cerebellum. Transverse grooves, one on either side, extend from the internal occipital protuberance to the lateral angles of the bone; those grooves accommodate the transverse sinuses, and their prominent margins give attachment to the tentorium cerebelli. The groove on the right side is usually larger than that on the left, and is continuous with that for the superior sagittal sinus. Exceptions to this condition are, however, not infrequent; the left may be larger than the right or the two may be almost equal in size. The angle of union of the superior sagittal and transverse sinuses is named the **confluence of the sinuses** (*torcular Herophili*¹), and its position is indicated by a depression situated on one or other side of the protuberance.

Lateral Parts (*pars lateralis*).—The lateral parts are situated at the sides of the foramen magnum; on their under surfaces are the **condyles** for articulation with the superior facets of the atlas. The condyles are oval or reniform in shape, and their anterior extremities, directed forward and medialward, are closer together than their posterior, and encroach on the basilar portion of the bone; the posterior extremities extend back to the level of the middle of the foramen magnum. The articular surfaces of the condyles are convex from before backward and from side to side, and look downward and lateralward. To their margins are attached the capsules of the atlantoöccipital articulations, and on the medial side of each is a rough impression or tubercle for the alar ligament. At the base of either condyle the bone is tunnelled by a short canal, the **hypoglossal canal** (*anterior condyloid foramen*). This begins on the cranial surface of the bone immediately above the foramen magnum, and is directed lateralward and forward above the condyle. It may be partially or completely divided into two by a spicule of bone; it gives exit to the hypoglossal or twelfth cerebral nerve, and entrance to a meningeal branch of the ascending pharyngeal artery. Behind either condyle is a depression, the **condyloid fossa**, which receives the posterior margin of the superior facet of the atlas when the head is bent backward; the floor of this fossa is sometimes perforated by the **condyloid canal**, through which an emissary vein passes from the transverse sinus. Extending lateralward from the posterior half of the condyle is a quadrilateral plate of bone, the **jugular process**, excavated in front by the **jugular notch**, which, in the articulated skull, forms the posterior part of the jugular foramen. The jugular notch may be divided into two by a bony spicule, the **intra-jugular process**, which projects lateralward above the hypoglossal canal. The under surface of the jugular process is rough, and gives attachment to the Rectus capitis lateralis muscle and the lateral atlantoöccipital ligament; from this surface an eminence, the **paramastoid process**, sometimes projects downward, and may be of sufficient length to reach, and articulate with, the transverse process of the atlas. Laterally the jugular process presents a rough quadrilateral or triangular area which is joined to the jugular surface of the temporal bone by a plate of cartilage; after the age of twenty-five this plate tends to ossify.

The **upper surface** of the lateral part presents an oval eminence, the **jugular tubercle**, which overlies the hypoglossal canal and is sometimes crossed by an oblique groove for the glossopharyngeal, vagus, and accessory nerves. On the

¹ The columns of blood coming in different directions were supposed to be pressed together at this point (*torcular*, a wine press).