landmark for measurements, and from it a curved line (the temporal crest) runs back crossing the coronal suture to reach the parietal bone (Pa, fig. 2); as it runs back this line divides into two. Below the crossing of the temporal crest the coronal suture is less serrated than above, and here it becomes obliterated first. The quadrilateral outline of the parietal bone is seen as well as its articulations; above it touches its fellow of the opposite side; in front, the frontal (Fr); below the great wing of the sphenoid or alisphenoid (As), the squamous part of the temporal or squamosal (Sq) and the mastoid part of the temporal (MT), while behind it articulates with the supra-occipital (SO), through the lambdoid suture *(ls).* All four angles of the parietal are points of special interest; the antero- superior angle or *bregma* has been already noticed, and it will be seen to lie nearly above the ear opening or *external auditory meatus* in the temporal bone *(em).* The antero-inferior angle where the frontal, parietal and alisphenoid meet is the *pterion* and is the site of an occasional Wormian bone *(epipteric).* The posterior superior angle is the lambda and will be better seen on the norma occipitalis, while the posterior inferior angle, where the parietal, supra-occipital, and mastoid temporal bones meet, is known as the *asterion* and marks the lateral sinus within the cranium. A little above and behind the middle of the parietal bone, and just above the superior temporal crest, is the *parietal eminence* where ossification starts. The *squamous part of the temporal* bone overlaps the parietal at the *squamous suture*, while from its lower part the *zygomatic process* projects forward to articulate with the malar. At the root of this process is the *glenoid cavity* where the condyle of the lower jaw articulates, and just behind this the *external auditory meatus* is seen *(em).* Behind this again the mastoid temporal is prolonged down into a nipple-shaped swelling, the *mastoid process* (MT), con­taining air cells and only found in the adult human skull, while just in front of the external auditory meatus is the *styloid process* (St), connected with the hyoid bone by the stylo-hyoid ligament (dotted). In the side view of the face the nasal and maxillary bones are seen, and from this point of view it will be noticed that just below the nasal aperture the maxillae, where they join, are produced forward into a little spur, *the anterior nasal spine,* which is a purely human characteristic. At the side of the maxilla the *malar or jugal* (Ma) bone is placed, and its lozenge-shaped outline is apparent; it forms the anterior part of the zygomatic arch. When the mandible is disarticulated and removed the posterior part of the maxilla is seen, and behind it the *external pterygoid plate* of the sphenoid. Between these two bones there is a vertical slit-like opening into a cave, the *spheno-maxillary fossa,* which communicates with the orbit through the *spheno maxillary fissure,* with the nasal cavity through the *spheno-palatine foramen,* with the cranial cavity through *the foramen rotundum,* and with the mouth through the *posterior palatine canal,* as well as having other smaller openings.

The side view of the *mandible* or lower jaw shows the body, already seen from in front, and the ramus projecting up from the back part of it at an angle of from 110° to 120° in the adult. Before the teeth come and after they are lost the angle is greater. The point just above *ch* (fig. 2) is known as the *angle of the jaw.* At the upper part of the ramus arc two projections; the most anterior is the *coronoid process* for the attachment of the temporal muscle, while posteriorly is the *condyle* which articulates with the glenoid cavity of the temporal bone.

The Skull from behind *(norma occipitalis)* (fig. 3). From this point of view the posterior ends of the parietal bones (PP), with the sagittal suture between them, arc seen. Below these comes the *supra-occipital bone* (fig. 3, O) separated from them by the *lambdoid suture* which is deeply ser­rated and a frequent site of Wormian bones. Where the sagittal and lambdoid sutures meet is the *lambda* (L), and here a small Wormian bone is sometimes found, called the *preinter parietal.* In the mid line about a hand’s breadth (2¾-3 in.) below the lambda is a prominence, the *external occipital protuberance* or *inion,* for the attachment of the *ligamentum nuchae,* while running out on each side from this are the *superior curved lines* which attach muscles of the neck.

The Skull from below *(norma basalis)* (fig. 4). Starting from in front, the *superior alveolar arcade* with the teeth sockets is seen. This in a European skull approaches a semicircle, but in lower races the sides become more parallel ; this is known as a *hypsilaid arcade.* Within the arcade is the *hard palate* formed by the maxillae in front (fig. 4, *m),* and the palate bones *(p)* behind. At the front of the median suture between the maxillae is the *anterior palatine canal* which, if it is looked into closely, will be seen to lead into four small foramina, two antero-posterior known as *Scarpa's foramina,* for the naso-palatine nerves, and two lateral called *Stensen's foramina* for small arteries and the re­mains of the mouth opening of Jacobson’s organ (see Olfactory System). In young skulls a suture runs outward from the anterior palatine canal to between the lateral incisor and canine sockets, and sometimes another runs from the same place to between the central and lateral incisor teeth.

At each postero-lateral angle of the palate arc the posterior palatine canals for the descending palatine nerves. The posterior mar­gin of the hard palate is a free edge which forms the lower boundary of the *pos­terior nasal apertures* or *choanae* and attaches the soft palate (see Pharynx). Be­hind the alveolar arcade on each side are the *external* and *internal pterygoid plates* of the sphenoid; the external is a muscular process for the attachment of the pterygoid muscles, while the internal ends below in the hook-like hamular process which is directed backward and outward. Dividing the posterior nasal aperture into two is the vertical hind edge of the *vomer* (v), which articulates above with the body of the sphenoid (basi-sphenoid), and just behind this the sphenoid is united by bone with the basioccipital *(b),* though up to twenty years of age there is a synchrondrosis (see Joints) called the *basilar suture)* between them. It is therefore very easy to tell an adult’s skull from that of a young person. Passing back in the mid line the *foramen magnum (f)* is seen, through which pass the spinal cord and its membranes, the vertebral arteries and the spinal accessory nerves. A little in front of this is a small tubercle, the *pharyngeal spine,* to which the constrictors of the pharynx are attached. On each side of the fora­men magnum and in front of its mid transverse diameter arc the condyles *(c),* which articulate with the atlas, while just above these are the *anterior condylar foramina,* one on each side, for the exit of the hypoglossal nerves.

External to the pterygoid plates the base of the skull is formed by the ali-sphenoid, which projects backward into a point, *the spine of the sphenoid,* and just in front of this is the small *foramen spinosum* for the passage of the middle meningeal artery. In front and a little internal to the foramen spinosum is a larger opening, the *foramen ovale,* through which the third division of the fifth nerve leaves the skull. Into the re-entering angle between the ali-sphenoid and basi-occipital is fitted the *petrotes part of the temporal,* which, however, does not quite fill the gap but leaves a space on each side of the site of the basilar suture to be closed in by fibro-cartilage, and this is known as the *middle lacerated foramen.* On the lower surface of the petrous bone is the round opening of the *carotid canal* through which the internal carotid artery and its accompanying sympathetic nerves pass into the skull, while more externally the *styloid process* projects downward and forward and is more or less ensheathed at its root by the rampart-like ridge of the *vaginal process.* Between the styloid process and the occipital condyle lies the *jugular* or *posterior lacerated foramen* through which pass the lateral and inferior petrosal sinuses, and the glosso-pharyngeal, vagus and spinal accessory nerves. The bone which bounds this foramen behind, and which bears the posterior two-thirds of the occipital condyle, is the *ex-occipital* part of the occipital. A little behind and external to the styloid process is the tip of the mastoid process, just internal to which is the deep antero-posterior groove for the digastric muscle, and internal to that another slighter groove for the occipital artery. Behind the styloid process and between it and the mastoid is the stylo-mastoid foramen through which the facial nerve passes, while in front of the process the glenoid cavity can be seen in its entirety, bounded in front by the *eminentia articularis* and divided into an anterior articular part and a posterior *tympanic plate* by the *Glaserian fissure.* Just internal to the glenoid cavity is the opening of the bony *Eustachian tube.*

The posterior part of the norma basalis behind the foramen magnum is formed by the *supra-occipital* part of the occipital bone, so that all the four parts of the bone, which are separate up to the third year, help in the formation of that large opening. Between the foramen magnum and the external occipital protuberance and superior curved line already noticed, the bone attaches the deep muscles of the neck.

The Interior of the *C*ranium. If the roof of the skull be sawn off the interior or cerebral surface of both the vault and the base