

(*p*) At the junction of (*f*) and (*g*) a fracture continues forwards and inwards through the posterior wall of the external auditory meatus, and has separated also the portions of the glenoid fossa along the line of the glasserian fissure; the zygoma was fractured one-half an inch from (anterior to) the tubercle for the external lateral ligament of the lower jaw.

(*q*) The body of the sphenoid was broken through by a vertical transverse fracture separating the anterior portion of the body and opening up the sphenoidal cells. The lesser wings were broken off on both sides. On the left side the fracture passed through the sphenoidal fissure; on the right side the fracture was more posterior, and passed through the great wing of the sphenoid.

(*r*) The facial bones were entirely separated from the skull, leaving a large gap in the skull. The lines of fracture separating this portion of the skull (that is, the boundaries of the gap) are as follows:

In the first place, the fracture described as *q* (*i.e.*, a vertical-transverse fracture through the body of the sphenoid) forms its posterior boundary; on the left side the fracture extends forwards through the sphenomaxillary and sphenoidal fissures, then along the line of union of the lesser wings of the sphenoid and the posterior margin of the orbital plate of the frontal on the left side. Then complete separation of the ethmoid bone, leaving the gap between the orbital plates of the frontal; then complete separation of the nasal bones from the frontal bone. On the right side a separation has taken place (like that on the left) between the orbital plate and the sphenoidal lesser wing; this continues through the temporal portion of the greater wing, to join the transverse fracture with which we commenced.

(*s*) A short fracture of seven-eighths an inch long passes inwards horizontally from (*a*); it begins in (*a*) three-quarters of an inch from the sagittal fracture. This fracture is more complete on the inner table, and reaches the sagittal suture completely on that surface of the bone.

Studying *the fractures at the base as a whole*, we find that there are five pieces of bone separated:

(1) The facial bones (leaving the gap described). This separated portion is again fractured into several pieces, which will be described separately.

(2) A piece of bone the integrity of which is preserved, including the greater portion of the body of the sphenoid and of its right greater wing; the lower portion of the right temporal carrying the root of the zygoma; the glenoid fossa; the external auditory meatus, and the anterior portion of the mastoid process—this fracture is crossed by fracture (*p*), but (*p*) is cracked, and the fragments do not seem to be completely separated; at all events, are not movable upon one another.

(3) The posterior portion of the right occipital condyle, plus the occipital jugular process.

(4) The left occipital condyle, the fracture bounding this having been described as (*m*).

(5) The petrous portion of the left temporal bone, the fracture bounding this having been described as (*l*).

NOTE.—The second piece of bone described above is bounded by the following fractures: