hearing; the vestibule and semi-circular canals, which also contain a specialized epithelium connected with static and dynamic equilibrium.

The labyrinth is situated in the petrous portion of the temporal bone. To its inside is the temporo-sphenoidal lobe of the cerebrum, covered by the meninges of the middle cranial fossa; behind is the cerebellum, covered by the meninges of the posterior fossa. The dome of the jugular fossa is directly below the vestibule and posterior semi-circular canal. The internal carotid artery lies directly in front and below the cochlea. On the inner side, lies the fundus of the internal auditory canal, with its meningeal prolongation, and so bringing the subarachnoid space in intimate relation with the modiolus of the cochlea. The vestibule is an ovoidal space, with the following dimensions: 1-5 in. x 1-5 in. x 1-8 in. In its roof, posterior wall and floor are the openings for the semicircular canals, while in front and externally is the first turn of the cochlea. The outer wall of the vestibule corresponds to the promontory on the inner wall of the middle ear, the tympanic part of the Fallopian canal and the two foramina, namely, ovale and rotundum.

Facial Nerve.—After the facial nerve leaves the fundus of the internal auditory meatus, it passes outwards and slightly forwards for 1-8 inch. Here it has an enlargement on it, called the geniculate ganglion. From this point, it passes backwards and downwards at right angles to the first part, and at an angle of 15 degrees with the horizon. This second part of the nerve is about 1-2 in. long. The middle portion of this part of the aqueduct is visible in the middle ear. Often this portion of the canal is incomplete, thus exposing the nerve in the tympanum. Below the nerve at this juncture is the foramen ovale; above it is situated the ampullae of the external and superior semicircular canals; to its inner side is the vestibule. The last 1-8 in. of this second portion of the facial nerve is buried in the posterior wall of the tympanum, and is just above and behind the pyramid from which emerges the stapedius muscle. The third part of the nerve passes downwards and a little outwards and backwards, making an angle of 120 degrees with the second part of the nerve. The third part of the nerve is in relation to the deepest part of the posterior meatal wall. The nerve leaves the skull at the stylo-mastoid foramen.

Pathology.—The vestibule is the seat of the greatest pathological activity. Infection takes place in two principal points, namely, the foramen ovale, and from an erosion in the external semicircular canal, as it lies in the inner wall of the aditus.