

NOSE.

Three regions : Vestibulum nasi, pars respiratoria, and pars olfactoria.

The *vestibulum* comprises the part just within the nostrils, and surrounded by the cartilages. The membrane covering it is an extension of the skin, which gradually merges into the mucous layer. The epithelium is squamous.

The *respiratory portion* comprises the greater part of the fossæ, except the upper region. The mucosa, known as the Schneiderian membrane, is composed of ciliated epithelium placed upon a connective tissue stratum, which forms a periosteum for the nasal bones. In the fossæ it is thick, and presents mucous glands, with numerous blood-vessels, arranged, according to some writers, as an erectile tissue. In the sinuses it is thinner.

The *olfactory portion*, confined to the roof, upper part of the septum and the superior turbinated bones, has a light yellow-brown color. The membrane is made up of a connective tissue matrix, covered with two sorts of epithelium, one the *olfactory cells*, elongated structures, with fine cilia on the surface, which are connected below with terminal filaments of the olfactory nerve. In mammals the cilia are absent. The other variety are ordinary columnar cells. These cells are best studied in the newt or frog, after immersion of the head, with the nostrils slit up, in Müller's fluid. Numerous pigment granules, and some pigment cells exist in this part. Bowman's glands, tubular in structure, are seen throughout the thickness of the mucosa.