therefore, it will be well to take the external, middle, and internal divisions of the organ seriatim.

The pinna itself, it must be remembered, is practically nothing but a moulding of the skin surface, and, as such, is governed by the rules which pertain to the general cutaneous system. Its liability to injury, to frost-bite, and to the various diseases which affect the skin are practically all the troubles which need concern us here.

Frost-bite is especially liable to occur in the auricle, because it is one of what may be described as the "fag-ends" of the circulation. It scarcely needs mention, save to impress the reader with the necessity for *slow* thawing.

The wearing of *earrings* is a barbarous habit which seems to be speedily falling into disuse. Amongst the lower grades of society, however, it is still practised on account of the silly superstition that it is a remedy for sore eyes. For this reason it is especially prevalent among sailors, a profession notoriously superstitious and one in which old beliefs seem to suffer a particularly hard and difficult death. The danger of piercing the ears with infected or septic needles is too obvious to need much emphasis here. Serious abscess or even septicæmia may result. Base metal or heavy earrings also may cause keloid from their irritation, or may tear completely through the lobule.

Another injury which must be noticed is othematoma, which, putting aside the variety so common in asylums and regarding the true etiology of which there is still some difference of opinion, is most commonly due to sparring, football, and similar sports. The resulting deformity is often considerable, and prevention, by the wearing of protective pads, should always, as far as possible, be recommended. Owing to the facility with which othæmatoma makes its appearance in the insane, it should never be forgotten that its onset may be a forerunner of as yet undeveloped mental trouble.

Occasionally, pain in the auricle is complained of by persons in whom nothing abnormal can be found. This is usually due to pressure from lying upon the ear during sleep, and can be easily prevented by the nocturnal wearing of pneumatic ear cushions.

Another important hygienic point to be mentioned when discussing the pinna is that poultices should never be applied over it, as they may result in severe perichondritis, and may thereby even cause necrosis of the auricular cartilage. When it is necessary to apply heat to the ear it can best be done by means of *dry* hot flannels or wool.

It will be seen by these remarks that there is very little which is special about the hygiene of the auricle. When, however, the external auditory meatus is considered, the matter is somewhat different. This canal forms a skin-like pocket, over an inch in depth, with the membrana tympani at

its inner end, and its walls liberally supplied with hairs and glands. Its shape is especially adapted, by its curves and narrowings, to two ends—the collection of sound-waves and the exclusion of foreign bodies. Its most important anatomical points are the narrow *isthmus of the meatus* at the junction of its bony and cartilaginous divisions and the acute *sinus of the meatus* which its floor forms with the inclination of the membrana tympani. At the former point large foreign bodies may become wedged, and in the latter smaller bodies, such as shot or small beads, may fall and lodge.

Before dealing with accumulations of cerumen and the lodgment of foreign bodies, a few words as to the ceruminous glands and their normal secretion will not be out of place. These glands are modified. sweat glands, and secrete a thin, yellowish fluid, which, as it dries, thickens into a yellow paste and unites with dead epithelial cells, tending to dry and fall outwards. Since these glands are only in the outer two-thirds of the meatus, no wax forms on or near the tympanic membrane, and any found there usually owes its presence to some meddlesome interference. All epithelial surfaces are constantly shedding the dried dead cells of the superficial layer, and, as such might easily interfere with the functions of the drum-head, Nature has provided for such a contingency by making the cells covering the centre of the membrane grow faster than those at the periphery. The latter are thus pushed before the former on the adjacent wall before they are thrown off. The cerumen unites with the dead, cast-off cells, and the two together are gradually worked towards the opening. Movements of the jaw act upon the cartilaginous part of the canal and furnish sufficient power to move quite large flakes outwards, so that a healthy ear should never show more than enough wax to make the short hairs of the meatus slightly sticky, and the owner of the ear should not be conscious of the escape of wax.

(To be continued.)

PROGRESS AT CHARING CROSS HOSPITAL.

The Royal Fancy Ball which is to be held at the Albert Hall on July 9th for the benefit of Charing Cross Hospital seems likely to be a great success. Princess Louise (Duchess of Argyll), who is the President, is taking an active interest in the arrangements, and has secured the co-operation of personal friends who will bring parties. The hospital has of recent years effected many muchneeded improvements, and with a Matron of Miss Heather-Bigg's personal charm and professional capacity, anxious to make her own department as efficient as possible, there is every prospect of future usefulness for the hospital, provided the public will generously support it.



