

ear-ache of children. For the thorough cleansing of the ear, the syringe is preferable to the douche, but unless the former be carefully used some distress and, at times, annoying vertigo are apt to be caused by the forcible entry of fluid through perforations into the tympanum. It is not unworthy of notice that pure warm water should, with few exceptions, be used, and the nozzle of the syringe should always be rather blunt-pointed, so as to avoid the risk of injuring the sensitive meatus; and the old glass or metal article should be discarded for the more handy bulbous form. A large hard-rubber or metal piston syringe is sometimes required for the removal of impacted wax; and a little device, that is sometimes essential to success (also in the use of the mirror), is the straightening of the meatus by traction upon the auricle. The value of *early* local depletion by leeching is now widely recognized, in aborting inflammation, subduing pain, &c.; and the congestion of the meatus and tympanum is most effectually relieved by applying the leeches just in front of, or within, the meatus.

As the physiological and pathological anatomy of the ear became better known, the old-time nomenclature of its diseases gave way to a simpler and more rational classification; which, somewhat abridged, is as follows:—

I. AFFECTIONS OF THE EXTERNAL EAR.*—Diffuse inflammation (*otitis externa*); circumscribed inflammation (*furuncle*); inspissated or impacted cerumen; eczema; polypi; vegetable fungous growths (*otitis parasitica*); foreign bodies.

II. AFFECTIONS OF THE MIDDLE EAR OR TYMPANUM.—Acute aural catarrh (*otitis media catarrhalis acuta*); chronic aural catarrh (*otitis media catarrhalis chronica*); acute suppurative inflammation (*otitis media purulenta acuta*); chronic suppurative inflammation (*otitis media purulenta chronica*)—the so-called “otorrhœa,”—with its complications or sequelæ, viz: polypi, exostoses, mastoid disease, curies and necrosis, paralysis, pyæmia, and cerebral abscess.

III. AFFECTIONS OF THE INTERNAL EAR OR LABYRINTH—*Otitis Interna*.—Hæmorrhagic, serous, plastic, and purulent *otitis interna*.

Affections of the external auditory meatus may generally be readily diagnosed with

the mirror. They are of less moment and of much less frequent occurrence than those of the tympanum, and are much more amenable to treatment. The meatus being mainly a bony canal, lined with periosteum and integument, richly supplied with nerves and vessels, and in close relation to important parts, the special indication is to abort inflammation by prompt and free local depletion, the use of the douche, scarification of the meatus; early incision of furuncles; sudorifics, anodynes, &c.

The accumulated experience of the profession conclusively shows that the safest and best mode of removing foreign bodies, inspissated cerumen, &c., from the meatus is by syringing with warm water—persistent and prolonged, if necessary, and with the affected side dependent;—and that forceps, probes, &c., should be used with great care, and generally only as a last resort, and then under illumination by the mirror.

A somewhat interesting feature is the recent recognition within the auditory meatus, of vegetable fungus or mould (*aspergillus*, commonly): tough, whitish or blackish flakes, so closely adherent to the meatus and *membrana tympani* as to necessitate the use of the forceps for their removal, together with subjective sensations of pain, tinnitus, and vertigo in an ear free from suppuration, are suspicious indications. The microscope decides the question. A cure is effected by the frequent removal of the fungus and the instillation of such parasitocides as alcohol, acid carbolie, calcium hypochlorite, hydrargyri perchloride, &c.

That much misconception has prevailed in regard to the pathology of disease of the middle ear, is shown by the established use of such misnomers as “ear-ache” and “otorrhœa.” Nowadays, the one is properly regarded as merely a graphic expression for a prominent symptom of acute inflammation, and the other but the sign of a more or less serious morbid process. The intimate relation between the naso-pharynx and the tympanum has fortunately become recognized, and it is no longer thought doubtful that pharyngitis is the most prolific source of ear disease. Tubal catarrh, catarrh of middle ear and hypertrophy and sclerosis of its lining membrane, rigidity of

* The external ear includes the auricle and external auditory meatus; the middle ear—the *cauum tympani* with its membrane, the mastoid cells, and eustachian tube; the internal ear—the vestibule, semi-circular canals, cochlea, and auditory nerve.