

and tympanic muscles; posteriorly are the mastoid cells, anteriorly the Eustachian tube; the brain lies on its roof,—which, by the way, is often so thin as to be a mere skylight, with the dura mater for a curtain,—its inner wall is in contact with the labyrinth and the internal carotid artery, and its floor rests upon the arch formed for the internal jugular, while the mastoid cells are in close proximity to the lateral sinus; and the bony walls of both the tympanum and cells are traversed by blood-vessels, which form ready channels for transmitting purulent infection to the jugular vein and lateral sinus, &c.

The various morbid conditions to be found are as follows:—The drum-head partly or wholly lost by ulceration, with caries or necrosis of one or more ossicles or ankylosis; the mucous membrane of the tympanum vascular and granular or studded with polypoid granulations; bunches of granulations due to and hiding a localized necrosis or caries; the meatus plugged by a polypus, around which is oozing thin foetid pus the more solid part of which is retained in the tympanum as a putrid, cheesy mass; necrosis of some part of the bony wall and sinuses leading to diseased cells; sub-periosteal thickening of the external meatus (exostosis); and in some cases periostitis of the mastoid, caries, necrosis, fistula, &c. Implication of the mastoid is a grave and not uncommon complication of disease of the middle ear: pain, tenderness, and swelling, at once indicate external periostitis, while frequent and painful exacerbations occurring in the course of a suppuration of long standing, or deep-seated pain which does not succumb to leeching, &c., point to internal periostitis, caries, &c.

The significance of *otitis media purulenta*, in one aspect, is shown in the record* of seventy-five cases of cerebral abscess, by Drs. Gull and Sutton, of which twenty-five, or about thirty-three per cent., were directly traceable to chronic suppurative processes in the middle ear—a higher percentage than from any other cause. Roosa, in his valuable work on the ear, tabulates forty cases in which death ensued from secondary meningitis, pyæmia, and cerebral abscess, caused by ear disease. But no tables can convey the disability resulting from the loss of hearing—a dead weight in the race of life—with its reflex effects on mental development and material success.

(To be continued.)

* Reynolds's System of Medicine

Formularies.

TINCTURE OF PHOSPHORUS.—Dr. Emerson, N.Y.

Phosphorus	6 centigrammes.
Absolute Alcohol	10 grammes.
Glycerine	24 “
Alcohol (at 90°)	4 “
Essence of Peppermint . .	2 “

Dissolve the phosphorus in the absolute alcohol and glycerine, and flavour with the alcohol and essence of mint. Solution is complete, and the liquid remains perfectly clear. This preparation is employed in two-gramme doses every three or four hours, in the treatment of neuralgias.—*Trans. Am. Neurol. Assoc.*

RUSSIAN DROPS.—Niemeyer.

Æthereal Tinct of Valerian	8 grammes.
Wine of Ipecac	4 “
Laudanum (Sydenham) . .	1 gr. 30 centigs.
Essence of Peppermint . . .	5 drops. Mix.

This remedy is recommended to allay the obstinate vomiting of cholera. Ice internally, with Seltzer water, and Bordeaux or Champagne wine.—*L'Union Medicale.*

SEDATIVE CLYSTER.—Aran.

Chloroform	1 to 2 grammes.
Pulverized Gum Arabic . .	8 grammes.
Yolk of Egg	No. 1.
Water	125 grammes.

An enema, designed to allay the painful element of various affections, such as hepatic and nephritic colic, cystitis, etc. The water may be replaced by an infusion of chamomile, or a decoction of poppies.—*L'Union Medicale.*

ANTIRHEUMATIC DRAUGHT.—N. Gueneau de Mussey.

Salicylic Acid	5 grammes.
Bicarbonate of Soda	3 “
Julep gommeux	120 “

Make a draught, of which a tablespoonful will be given every three hours in acute articular rheumatism. The pains usually become less acute when the patient has taken two or three doses.—*L'Union Medicale.*

OINTMENT FOR ECZEMA.—O. Will.

Salicylic Acid	2 to 4 grammes.
Axungia	30 grammes. Mix.

This ointment is recommended in the eczematous affections of the head and face, and has been very successful in a large number of cases.—*L'Union Medicale.*