## EAR.

Bowen, W. H.—Pneumococcal Otitis Media. "West London Med. Journ.," April, 1908.

The author states that the most favourable source for investigation of the typical pneumococcus is the pus from the pleural cavity in cases of empyema Films and cultures from the auditory meatus must be taken within the first week when there is a steady flow of pus outwards: after it begins to become stagnant in the meatus an infection takes place from outside. The author investigated over 100 cases in what is described as the three stages of childhood: (1) Pre-adenoid stage, up to eighteen months old; (2) adenoid stage; (3) the post-adenoid stage, which is in older people over fourteen years of age. The pneumococcus is the pathogenic organism found in all cases of acute suppuration of the middle ear. This organism may, in rare cases, infect the ear externally or through the blood stream, but usually it affects it through the Eustachian tube. The author states that the pneumococcus is found in the saliva, the crypts of the tonsil, the nose and the naso-pharynx in health; and it is generally some disturbing influence, such as a catarrh, or an operation for adenoids, or a submucous resection, which turns this simple organism into one of parasitic activity. Surgeons should, therefore, be most careful even in the simplest operations on the throat and nose to avoid shock, etc. Another explanation for otitis media in young children in the pre-adenoid stage is the habitual use of "comforters," which are often septic. The treatment for this form is to cleanse the mouth with glycerine and horacic acid. The pneumococcus may limit its pyogenic action to the middle ear or it may attack the mastoid antrum and the mastoid cells. The early diagnosis of this state is important, and such signs as a rise of temperature, profuse discharge, the disturbed general condition of the patient and pain or tenderness on pressure must be considered. treatment is to open up the cells freely and to procure good drainage until the virulence of the organism has been exhausted.

Andrew Wylie.

Dench, E. B. (New York).—Otitic Brain Abscess. "Amer. Journ. Med. Sci.," vol. exxxiv, No. 5.

In this paper Dr. Dench reports one case each of cerebellar and cerebral abscess, and gives an analysis of 102 cases of the first and 100 cases of the second, with reference to their symptoms, the route of infection, and the value of various methods of operative procedure. The author's case of cerebellar abscess occurred in a boy, aged thirteen. An acute exacerbation of a chronic suppuration led to the performance of the radical operation, in the course of which an epidural abscess was found over the sinus. On the fourth day after the operation the temperature rose to 104° F, and the patient became lethargic and stupid and complained of headache. There was no paralysis and the optic discs were normal. That a cerebellar abscess was a probable explanation was suggested by the situation of the extra-dural abscess found at the original operation. The cerebellum was, therefore, explored, and an abscess evacuated, but death occurred within twenty-four hours. Although there had been no evidence of intra-cranial suppuration until the fourth day after the first operation, the abscess had evidently been in existence for some consider-In the 102 cases of cerebellar abscess which the author analyses, the infection could be traced with about equal frequency from the lateral sinus and through the petrous portion of the temporal bone (internal auditory meatus and aquæductus cochleæ and vestibuli); other routes were rare. Of the symptoms, headache was present in 71 cases, vomiting in 54, vertigo in 30, optic neuritis in 34 of 71 examined, nystagmus in 17, and strabismus in 9. Recovery took place in 33 cases. The author holds that when the route of infection is unknown the cerebellum should be explored in front of the sinus, provided the latter does not come too far forward. A counter-opening behind the sinus is often a lyisable.

The case of cerebral abscess was that of a woman, aged forty-seven, who underwent the radical operation during an attack of acute mastoiditis. The progress was uneventful until one month after the operation, when there occurred a sudden rise of temperature to  $102 \cdot 5^{\circ}$  F., accompanied by aphasia. During the following week the temperature tended to fall, but the aphasia persisted and a high polymorphonuclear count was noted. About a fortnight later the sudden onset of severe headache together with a rise of the temperature to  $104^{\circ}$  F. led to immediate operation. A very large abscess was found in the left inferior frontal convolution and the island of Reil. The patient died. The abscess was evidently of old standing and had been re-infected during the attack of acute otitis.

In the 100 cases of cerebral abscess analysed by the author, by far the most common route of infection was through the tegmen tympani. Headache was present in 77 cases and vomiting in 44. Vertigo occurred in 32. Optic neuritis was found in 32 of 52 cases examined. Motor disturbance was present on the side opposite to the abscess in 15 cases, on the same side in 2 cases; 52 cases recovered after operation. The abscess should always, if possible, be opened along the avenue of infection, as here the subdural space has become obliterated and the risk of secondary meningitis and hernia cerebri are therefore small. If this cannot be done and the symptoms are not very urgent the dura may be opened and the margins of the wound closed with gauze packing. This will relieve tension and secure obliteration of the subdural space; the brain substance may be safely incised twenty-four hours later.

An extensive bibliography is given.

Thomas Guthrie.

Af. Forselles, Arthur (Helsingfors).—On Early Diagnosis and Operation in Empyema of the Mastoid Process in Acute Supportative Median Otitis. Leipzig, 1906.

In his monograph on acute middle-ear suppuration and the early detection of involvement of the mastoid cavities Af. Forselles recommends the estimation of the specific gravity of the discharge by Hammerschlag's chloroform and benzol method. In general he considers that a specific gravity of 1045 or upwards indicates the necessity for the mastoid operation.

Dundas Grant.

Knapp. A. (New York).—A Fatal Case of Sinus Thrombosis after Chronic Purulent Otitis Complicated with Cholesteatoma, Illustrating an Unusual Variety of Infection. "Arch. of Otol.," December, 1907.

There was some delay before operation was permitted. In spite of thorough operation on the sinus, followed in two days by ligation of the jugular, pneumonia supervened with increasing cyanosis, dyspnæa, and tracheal râles ending in death. The infective agent belonged to the proteus-aërogenes group. The author thinks the jugular should have

been ligated at the first operation. The patient was the subject of kyphosis, which was an unfavourable circumstance. Dundas Grant.

Hunt, J. R. (New York).—Otalgia Considered as an Affection of the Seventh Cranial Nerve. "Arch. of Otol.," December, 1907.

The "sensory" portion of this nerve consists of the pars intermedia, the geniculate ganglion, and the greater and lesser superficial nerves communicating with the tympanic plexus of the glosso-pharyngeal by means of the great and small deep petrosal nerves. Sensory fibres are also found in the facial nerve proper in the Fallopian canal, and the nerve of Wrisberg is connected with the auditory nerve proper by several fine filaments. There are thus sensory connections with the internal ear, the tympanic mucous membrane and the external ear. Otalgia confined to these regions is attributable to a lesion of the nerve in question. If the glosso-pharyngeal was the nerve implicated, there would be pain in the throat as well. As to otalgia in general, it is often reflex, occasionally bilateral, very rarely crossed. Otalgia may be secondary to an organic lesion of the nerve or its ganglion, herpetic. It also occurs in tabes, but idiopathic otalgia, which is rare, has been attributed to scarlet fever, malaria, influenza, lead, trauma, and exposure to cold. A "point douloreux" is occasionally present in front of the antitragus.

Dundas Grant.

Tandler, J. (Vienna).—The Operative Exposure of the Bulb of the Jugular Vein. "Monats. für Ohrenheilk.," Year XLI, No. 12.

The writer supplements the late Grunert's description of this procedure, from which his own differs in a few respects. Presuming that the radical mastoid operation has been performed and the sigmoid sinus laid bare, the jugular vein has to be exposed in the neck. During this step the accessory nerve has to be sought for, as in two thirds of all cases it crosses over the vein from within outwards (ventral course), although in one third it passes under it (dorsal course) as ordinarily described. The mastoid incision is then continued into the cervical one and the parotid is drawn gently forwards. The stylo-mastoid foramen is then identified with the finger and the facial nerve exposed and kept in sight. The tip of the mastoid process is chiselled off and is turned backwards along with the attached sterno-mastoid. The posterior belly of the digastric is next detached from the bone and turned forwards and the occipital artery is tied in two places and cut. The jugular vein is now dissected up to the jugular foramen, the border of which can be felt with the finger. A short muscle, the rectus capitis lateralis, is then detached with the periosteum and the lateral margin of the foramen jugulare is thereby laid bare. The bone is then chiselled away from the sigmoid sinus (previously exposed), and the jugular bulb can be seen and slit up. The accessory nerve in many cases anastomoses freely with the cervical nerves in the sterno-mastoid and trapezius, but it does not always do so, and, therefore, it is important to preserve it, remembering that it often Passes over the vein and not (as usually described) behind it.

Dundas Grant.

Halasz, H. (Miskolcz).—The Value of Negative Pressure (Suction) in Oto-Rhinology. "Monats. für Ohrenheilk.," December, 1907.

The author praises Sondermann's suction apparatus in the treatment of acute suppuration of the middle ear, believing that its use has enabled

him to avoid opening the mastoid cells. He finds it useful in the diagnosis of both acute and chronic forms of nasal sinusitis and in the treatment of the acute forms, as also in ozena and atrophic rhinitis.

Dundas Grant.

Shambaugh, G. E. (Chicago).—The Origin of the Cells Found in the Deeper Layer of the Stria Vascularis. "Arch. of Otol.," vol. xxxvi, No. 3.

A single row of epithelium is first found along the outer wall of the cochlear duct, separated by a distinct basement membrane from the underlying connective tissue. Next a broad reticular layer forms beneath the surface layer of epithelium, the basement membrane disappears and the blood-vessels of the reticulum are formed. In the adult the band is narrower, protoplasmic processes from the surface layer of the epithelium have penetrated the entire stria and the reticulum has been completely obliterated. The cells forming the reticulum are derived in part from the surface layer of epithelium and in part from the underlying connective tissue. The stria vascularis represents a true vascular epithelium. The article is illustrated by beautiful microscopical drawings.

Dundas Grant.

Urbantschitsch, V. (Vienna) — Speech and Writing Disturbances, and Pareses of the Upper and Lower Extremities determined by the Sensory Nerves of the Middle Ear. "Monats. für Ohrenheilk." Year XLI, No. 7.

These were found to disappear in one case after operative treatment of a cholesteatoma. In another case they were excited by plugging one of the nostrils. The writer refers to his text-book for a discussion of the reflex nerve-paths.

Dundas Grant.

Richards, John D. (New York).—Mastoiditis occurring in Diabetic Subjects. with Report of Cases. "Arch. of Otol.," vol. xxxvi, Nos. 1 and 2.

The writer includes only cases in which in addition to sugar in the urine there are well-marked general symptoms and the clinical picture of diabetes mellitus. The prognosis in these is very unfavourable whereas in those with transient glycosuria, or glycosuria following the anæsthetic. or in the young without clinical symptoms proper, on the other hand very favourable. The two classes of cases should be carefully distinguished. In one case there was some degree of aphasia. The pupil on the diseased side was relatively dilated. Mastoid operation revealed extensive disintegration of bone. A few days later coma and death followed. Autopsy revealed meningitis, general sinus thrombosis and subcortical cerebral hæmorrhage. The writer at first attributed the aphasia to epidural abscess, but after death to the cerebral hæmorrhage. From the symptoms the case simulated one of temporo-sphenoidal abscess. In three other cases operated on by the writer recovery took place. seen five other cases. He notes certain peculiarities in mastoiditis in diabetics. The acute of other usually requires several repetitions of paracentesis. The mastoid symptoms and the post-operative progress are The good effect of proper diet and codeine was marked in two cases. Death occurred in six out of the nine cases, and, as a rule, in diabetic coma a few days after the operation. Chloroform seemed on the whole preferable to ether as an anæsthetic in these cases. Success depends largely on rapidity of operation, as well as on very free removal

of bone so as to expose the dura extensively. No stitches should be introduced. Dyspnæa is the most unfavourable symptom, the amount of the sugar being of little prognostic importance.

Dundas Grant.

Burger, H. (Amsterdam).—A Case of Ménière's Disease, Depending on an Inflammation of the Nasal Accessory Sinuses. "La Presse Otolaryngol. Belge," February, 1908.

An account of a case of unilateral labyrinthine and middle-ear deafness, accompanied by severe attacks of vertigo, nausea, and tinnitus, in which treatment of a suppurating maxillary antrum by the radical operation was followed by a cessation of the vertiginous crises.

The author does not confine the term "Ménière's disease" to cases in which there is hæmorrhage into the labyrinth, but considers that it should be used for all cases in which there are attacks of vertigo, with vomiting or nausea, tinnitus and deafness.

Chichele Nourse.

## MISCELLANEOUS.

Sommerville, D. (London).—Treatment of Syphilis with Mergal—a Modern Preparation of Mercury. "Folia Therapeutica," January, 1908.

This is a mercuric cholate which can be administered by the mouth, and is tolerated in doses sufficiently large to carry out an energetic treatment. It is administered in capsules each containing  $\frac{3}{4}$  gr. of mercuric cholate and  $1\frac{1}{2}$  gr. of albuminate of tannin (Greeff & Co., London). These capsules may be used daily in an ordinary case for periods of from eight to twelve weeks, but for the first five or six days it is recommended to restrict the number to one thrice daily, though most may start off with twice that quantity. Syphilides of the skin and mucous membrane disappear after four or five weeks' treatment. During its administration the patient must lead a healthy life and avoid any food likely to cause irritation of the digestive organs.

Dundas Grant.

- v. Brunn and others (Tubingen).—On Recent Endeavours to Improve and Simplify the Disinfection of the Skin. "Münch med. Woch.," March 17, 1908.
- v. Brunn recommends chiefly pure 90 per cent. alcohol. Bulow spoke well of Heusner's iodine-benzine method, the iodine being easily removed afterwards by means of thio-sulphate of sodium, also of the permanganate method. v. Brunn had given up the iodine-benzine, also a gummy coating known as chirosoter.

  Dundas Grant.
- Groedel (Nauheim), and Horn (Erlangen).—On Instantaneous Röntgen Photography with the Apparatuses at present Available. "Münch. med. Woch.," March 17, 1908.

The original article alone can be of use to radiographers. Three radiograms of the thorax illustrating the process accompany the article.

Dundas Grant.

Wiesner (Aschaffenburg). — Fulguration by the De Keating Hart Method. "Münch med. Woch.," March 17, 1908.

The current is taken from the resonator of a high-frequency resonator and the electrode is formed by a wire passing through the distal half of an insulated holder through which also a stream of carbon dioxide, from a