

dition, with defective respiratory movements, are the chief causes of nodular laryngitis. Suitable constitutional treatment and exercises in breathing generally cure the case without local treatment.

Anthony McCall.

Rivière and Vincent.—*Tracheal Injection.* "La Médecine Moderne," No. 2, 1901.

In chest cases the authors point out that this method of treatment saves the stomach from irritation. This idea is not a recent one; it was first used by Garel in 1888, and exploited by Louis Dor in 1890. More recently M. Mendel has studied the question, and believes that by following the curve of the base of the tongue and injecting on inspiration a laryngoscope is not necessary. The substances used were menthol, cinnamon, eucalyptus, etc., and the best results were gained in the cases suffering from tuberculous disease.

Bronchitics generally objected, and no opinion can be formed as to its efficacy in such cases. The excipient used was oil; water caused cough, and glycerine was not used, for fear of hæmorrhage (experiments on rabbits having shown such results).

Anthony McCall.

Trautmann, Gottfried.—*New Sterile Laryngeal Mirror.* "Münchener Medicinische Wochenschrift," No. 25, 1901.

This paper describes the various forms of laryngeal mirrors which have been invented capable of being disinfected. The author's is composed of three parts, which can be taken asunder. The mirror can be obtained from Beck and Plazotta, Munich.

Guild.

E A R.

Brandegge, W. P. (New York).—*Tympanic Vertigo due to Obstruction within the Eustachian Tube.* "Arch. of Otol.," vol. xxx., No. 3.

The writer considers tympanic vertigo really a labyrinthine disease, although the removable cause is stricture of the Eustachian tube. The best way of restoring the patency is, to his mind, electrolysis, following the method devised by Ducloux of New York. He narrates numerous cases in which vertigo was due entirely to tubal occlusion, the results speaking very highly for the method of treatment which he employs. (The reviewer has found dilatation of the tube by means of Weber-Liel's intratympanic catheter most efficacious, acting on the principle of "vital" instead of electrolytic dilatation.—D. G.)

Dundas Grant.

Connal.—*Furunculosis of the External Auditory Canal.* "Glasgow Medical Journal," July, 1901.

This paper gives the differential diagnosis, pathology and treatment of furunculosis. Early incision is recommended. One case of coincident hyperæmia of the labyrinth is described, where deafness was permanent. The paper is illustrated with five photographs. There were 2½ per cent. of cases of furuncle in the Glasgow Ear Hospital in 5,653 cases. In 70 per cent. it was the sole lesion, in the others it was associated with notably chronic purulent inflammation of the middle ear, less frequently with ceruminous collections and eczema.

Guild.

Frutiger, A. (Basel).—*Functional Significance of the Round Window.*
"Arch. of Otol.," vol. xxx., No. 3.

Normally, the author considers that the round window plays a very small direct part in audition; it may, however, be of use for the hearing of the higher tones of the scale. In disease, when the lower tone limit is much reduced (as in cases of stapedio-vestibular arthritis), hearing for bass tones can be improved by applying a tampon to the membrane of the round window. The physiological use of the round window under normal conditions is, in all probability (chiefly in conjunction with the two aqueducts), to regulate the variations in tension of the labyrinthine fluids, as in case of wave movement produced in the labyrinthine fluids, or oscillations of the chain of ossicles produced by tones or by direct or indirect force, thus protecting the delicate structures of the labyrinth from the effects of loud sounds or from physical shock.

(No doubt, also, the yielding of the round window diminishes the effect of such sudden stimuli of the vestibular nerve as might give rise to vertigo, and its healthy condition is probably one of the essentials for easy equilibrium.—D. G.) *Dundas Grant.*

Hopkins, G. W.—*Superheated Air in the Therapeutics of Chronic Catarrhal Otitis Media.* "Med. Record," June 1, 1901.

The author has found the employment of superheated air useful in cases of chronic dry catarrhal otitis media. The method he advocates is as follows: The ear is thoroughly cleansed with alcohol for several days before the treatment is begun. The patient is seated upon a comfortable chair, and the external meatus is packed with narrow strips of dry gauze, and a large pad of dry gauze is placed over the ear. The ear is then covered with a canvas-sleeve hot-air conductor, and a current of hot air is sent into the canal at a temperature of 400° F. This high temperature is, as a rule, easily borne, although headache may result. A dose of codeine, as a rule, however, relieves the headache promptly. Following the hot-air treatment, the Eustachian tube is inflated with a warm stimulating vapour from a nebulizer, whilst vibratory massage with a nebulizer is also employed. Treatment is applied on alternate days for several weeks.

The method is contra-indicated in cases of (1) arterio-sclerosis; (2) serous effusion into the tympanum; (3) perforations.

The gauze packing within and over the ear takes up all moisture as rapidly as formed, preventing any burning of the skin, and making the application of very high temperatures easy and without discomfort.

W. Milligan.

Keller.—*Newer Pathological Investigations in so-called Middle-ear Sclerosis.* "Münchener Medicinische Wochenschrift," No. 30, 1901.

In the greater number of cases of chronic dry middle-ear catarrh the only macroscopic appearance is osseous ankylosis, between the stapes and fenestra ovalis. Formerly this was thought to be due to a chronic periosteal process; later investigations by Politzer, Bezold, Liebermann, have shown that the process consists in a metamorphosis of the compact osseous labyrinth capsule into spongy bone, in which the periosteum takes no part. This process is not limited to the fenestra ovalis, although this is its favourite seat, but is found distributed in small

definite spots all over the labyrinthine capsule. It commences in the Haversian canals, which are widened out towards the labyrinth, and are filled with blood and lymph vessels along with cells, which as osteoblasts produce absorption of bone in the form of Howship's lacunæ, as osteoblasts cause the formation of new spongy bone. The course is throughout chronic, often lasting a lifetime. He refers the nature of this peculiar affection to the supposition of Liebermann that it probably consists in an additional development of osseous points in the preformed cartilaginous labyrinthine capsule, and mentions the slight prospect of any effectual therapeutical treatment. *Guild.*

Pyle, Edwin W. (Jersey City).—*A Correlation of One Hundred Successive Mastoid Operations.* "Arch. of Otol.," vol. xxx., No. 3.

Forty-eight were in children, fifty-two in adults. The former furnished three times as many acute cases as the adults; the latter, on the other hand, three times as many chronic cases as the children. The forty-five acute cases furnished 33 per cent. of the intracranial complications, mostly in children, with recoveries in all; the fifty-five chronic cases furnished 66 per cent. of the intracranial complications, four dying. Peculiar to children were thirty-four subperiosteal accumulations, twenty-five cortical perforations, and nine cases in which pus had escaped through the Rivinian fissure only; while three subperiosteal fluctuations beneath the temporal fascia, seven Stäcke, four Bezold, and two brain-abscess operations, were peculiar to adults. There were five cases of sinus thrombosis, occurring in one adult, two adolescents, and two children; twenty-two extradural abscesses, six in children, following exanthemata, and sixteen in adults, due to chronic influences. The unreliability of symptoms was illustrated in several cases: thus, in four a discharge from the external meatus seemed so profuse as to be more than the tympanic surface could secrete, and yet the operation revealed no source of supply in the antrum or mastoid cells. Again, in three cases there was no tenderness over the tip of the mastoid, and yet the tip-cell only was filled with pus. In nine cases there was no discharge of pus from the canal. In one of these pain, tenderness, and œdema indicated operation, which revealed an epidural abscess and a Bezold's perforation; in another hemicrania and inability to sleep were noteworthy symptoms, and operation disclosed extensive necrosis of the groove and a perisinuous abscess; in another the cicatricial membrana tympani was retracted, the short process prominent, with tenderness and fluctuation over the mastoid, requiring a radical operation to remove cholesteatomatous products. In a case of acute disease which had only lasted twelve days the groove for the sinus was carious to a large extent; there were abundant extradural granulations, and the mastoid process was one broken-down mass. On the other hand, in a case with mastoid tenderness, a history of chronic discharge, three chills, temperature ranging from 102 to subnormal, with stupor, there were found on operation no pus, no sinus complication, and no brain abscess, everything being negative and a good recovery taking place.

Regarding the sinus, the groove was found in four cases to approach to within from $\frac{1}{8}$ inch to $\frac{1}{4}$ inch of the posterior wall of the meatus, while in two the entrance to the antrum was found only by going up over the groove. Alarming respiratory movements of the sinus were observed in one case, and although this symptom is supposed to indicate the presence of a clot between the point of aspiration and the

torcula, or the admission of aerial embolism, the sinus had in this case not been wounded, and there was no subsequent history to indicate the presence of any clot. Four cases out of five of phlebotic thrombosis verified the observation that when the sinus is surrounded by foul pus a venous clot may be anticipated.

Several cases seemed to show that a quieting down of the symptoms under cold was not lasting. In two cases in which operation disclosed an extensive osteoporosis, with perisinuous granulations, there had been little or no fever, the only signs being a tenderness in the post-cervical region in one case, and in another continued hemicrania, with mastoid œdema and cerebellar tenderness.

Among other elements in the treatment, the writer speaks very highly of irrigation with hot sterilized water, using from 1 to 2 quarts at a time by means of a douche sufficiently elevated to give pressure. When this was used subsequent to the dressing period, soft granulations disappeared, and dermatization took place rapidly. He notes particularly that in one radical operation, complicated with a recurring foul cholesteatoma, irrigation as above described secured most gratifying results, after a long series of patient experimentations with other measures. (Our readers may recollect a very vigorous advocacy of irrigation made by Mr. Faulder White.—D. G.) *Dundas Grant.*

Richards, W. G. *A Case of Cerebellar Abscess; Operation; Recovery.*
"Arch. of Otol.," vol. xxx., No. 3.

A boy, aged six and a half years, had had a discharge from his left ear since he was four months old, and had measles eleven months before coming under observation. His present illness had begun seven days before admission, with pain in the left ear and cessation of the discharge, his temperature having varied during the week between 100° and 102°. He was in poor condition, drowsy, and lay curled up on his right side, with his head firmly rotated and bent over to the left side. There was no discharge from the ear, but slight tenderness over the mastoid process. Under warm irrigations the temperature and pain decreased during the next few days, when a macerated earwig was washed out of the meatus, and the discharge became more abundant. He became worse; his temperature rose to 102.4° F. on one evening, and next morning fell to 97° F., never again rising above 98.4°. He remained fretful and drowsy, and got gradually thinner, and when he lay in bed kept his knees drawn up and his eyes wide open, the upper lids not falling as low as the upper edge of the cornea, the pulse being normal and slight photophobia present. Later he had a difficulty in grasping an object or in touching the tip of his nose with the index-finger of either hand; the pulse began to intermit one beat in five. The writer therefore decided to operate, and, by means of an exploring syringe thrust through the dura mater about one inch and a half into the cerebellum, was able to withdraw 2 drachms of "laudable" pus. He then incised the dura mater, inserting an indiarubber tube $\frac{1}{2}$ inch in diameter; the tube was made to emerge from a hole made for it in the skin flap, and then the flap was sewn in position with silkworm gut. Rapid recovery took place. (The author was fortunate in being able to withdraw pus by means of an exploring syringe. The disease in this most gratifying case would appear to have formed at the time of the evening rise of temperature, and was, therefore, acute rather than chronic.—D. G.) *Dundas Grant.*

Swain, Henry L., (New Haven, Conn.).—*A Case of Tuberculosis of the Ear, with Autopsy.* "Arch. of Otol.," vol. xxx., No. 3.

The patient, a man aged thirty-seven, had a discharge from the left ear for six months. (There is no mention that he had pain at the onset of the disease, which was attributed to cold.) Later there was pain in the ear and on the side of the head. There was evidence of crepitation in the right lung, and a purulent discharge from a sinus in the left testicle, obviously tuberculous. The author attributed the diseases to secondary general infection from the testicle, and abstained from operation on the petrous bone. The patient died from inanition, and on post-mortem examination there was found extensive tuberculous disease of the petrous bone, but with a considerable fibroid thickening on the upper surface, protecting the cerebral membranes from infection. This confirmed him in the justness of his decision to avoid operation, which would probably have opened the way for infection of these structures. (It will be remembered that Professor Politzer discountenances operation for tuberculous disease of the petrous bone coming on in the course of a well-established pulmonary tuberculosis, whereas he advises operation when signs of pulmonary tuberculosis develop in the course of a long-standing suppurative inflammation of the middle ear.—D. G.)

Dundas Grant.

THERAPEUTICS.

Gleason, E. B.—*Nitrate of Silver and other Salts of Silver in the Treatment of Inflammation of the Mucous Membrane of the Upper Respiratory Tract.* "Therapeutic Gazette," March 15, 1901.

When a solution of nitrate of silver is painted on a mucous surface it is decomposed, and organic compounds are formed. These are further decomposed, with the final result of the formation of argentic oxide. Nitrate of silver is an irritant; the organic compounds, however, are sedative. Whether the irritant or sedative effects of nitrate of silver predominate depends largely on the character of the epithelial layer of the mucous membrane to which it is applied. If a 60-grain solution be applied to the posterior wall of the pharynx it is extremely irritating, but if applied to an inflamed tonsil it is followed by great relief and comfort. Such a solution applied twice or thrice daily for two or three days will in a large proportion of cases abort a phlegmonous tonsillitis, and will be equally successful in follicular tonsillitis if the crypts are first freed of pseudo-membrane by applying a solution of peroxide of hydrogen.

Middlemass Hunt.

Somers, Lewis S.—*The Use of Suprarenal Extract in Diseases of the Middle Ear.* "Therapeutic Gazette," December 15, 1900.

Somers finds the following solution of suprarenal extract the most suitable for use in middle-ear disease: Suprarenal gr. xx, phenic acid gr. ii, β eucaïne hydrochlorate gr. v, aqua dest. ζ ii. Phenic acid alone in this amount will preserve the solution for several months, but this action is greatly enhanced by the eucaïne. He recommends the above solution as a hæmostatic and anæsthetic in aural operations, such as removal of granulations, or in operative procedures in the tympanic membrane. When granulations are present in the canal or