whilst high-lying forest lands, Alpine valleys, and sea air all have their uses and advantages. For dryness Jurasz recommends iodide of potassium, and, when paræsthesia is marked, bromides, valerian, arsenic, and the like are indicated.

The author then insists that far too little attention is paid to the psychical element in throat cases, and, consequently, in their treatment. That man will be most successful in treating chronic throat cases who, while employing correct treatment, can gain his patient's confidence in himself and his methods-who, in short, employs intentionally or unintentionally a certain amount of "suggestion." Arthur J. Hutchison.

(To be continued.)

Manley, T. H. (New York) .- Cancer of the Larynx. "Medical Times and Register," May 9, 1896.

Referring to a case of laryngeal ulceration, supposed to be malignant, where the larynx and three rings of the trachea had been removed, the patient dying three hours afterwards, the author sums up against such operative procedure in these cases, believing that it is generally fatal, gives little relief, and no certainty of eradicating the disease. On the other hand, he points out the great success of the operation of tracheotomy in relieving pain and prolonging life, which, combined with palliative treatment, he considers the only rational procedure.

StGeorge Reid.

EAR.

Bezold, F. (Munich).—The Hearing Power in Cases of Bilateral Atresia of the Auditory Canal with Rudimentary Auricle. "Arch. of Otol.," Vol. XXV., No. 2.

In two cases examined by the writer there was diminished air conduction for low tones, marked "negative" Rinné, and increase of bone conduction for all forks. These results coincide with those obtained by others, and from the point of view of functional testing localize the defect as in the conducting apparatus, and more suggestive of anchylosis of the stapes than of simple meatal obstruction. This is confirmed by the results of thirteen autopsies collated by Joel and three by

Bonmer.—Variation of the Patellar Reflex in Certain Labyrinthine Affections. "Semaine Med.," No. 3, Jan., 1896.

THE author notes an augmentation of the knee reflex in a large number of patients affected with marked labyrinthine insufficiency. He has seen diminution and even suppression in cases of auricular inflammation. The mode of appearance of these reflexes suggests that this direct action is in reality only the marked variation of an interference of a dynamogenic character. Lacoarret (Waggett).

Burnett, C. A. (Philadelphia). - Chronic Tympanic Vertigo. "Philad. Polycl.," May 2, 1896.

THE author believes that paroxysmal chronic tympanic vertigo is a late symptom of chronic catarrhal middle ear disease, being preceded by tinnitus and increasing deafness, and accompanied by failing health, leading to the true cause of the disease often being overlooked, and, when diagnosed, to be mistaken for internal ear rather than middle ear mischief. He reminds us of the symptoms present in epilepsy and cerebellar disease, not found in this; he points out that the chronic catarrh of the tympanum leads to a sclerotic change in the mucous membrane,

a retraction of the membrana tympani and the chain of ossicles, with impaction of the stapes in the fenestra ovalis; further, that the membrane of the fenestra rotunda being also thickened by the catarrhal process, and more or less immovable, the column of labyrinthine fluid is compressed and causes vertigo by irritation of the terminal fibres of the auditory nerves. He believes that the paroxysmal character of the vertigo is caused by variations in the degree of impaction of the stapes, due to changes in the atmosphere, catarrh of the nasopharynx, failing health, etc. The author advises removal of the incus as the only efficient method of relieving the impaction of the stapes.

StGeorge Reid.

Courtade.—Mastoiditis, with Sero-Mucous Effusion; Evacuation by Compression in the Air of the Auditory Meatus. "Ann. des Mal. de l'Oreille," Feb., 1896.

The author relates two cases in detail, from which he draws the following conclusions. In certain acute suppurative median otitis the mastoid apophysis participates in the inflammatory process and is filled with sero-mucous liquid. This mastoiditis with effusion does not give rise to any general or local symptoms as marked as suppurative mastoiditis. Evacuation of the liquid may be successfully obtained in certain cases by simple compression of the air in the auditory meatus with Siegel's speculum.

R. Norris Wolfenden.

Coyne, Cannien.—The Histology of the Organ of Corti. "Journ. d'Anat. et Phys.," May, June, 1895.

THE membrane of Corti consists of three portions: internal, middle, and external. It is made up of three superposed layers, which may be clearly made out in radial sections. The inferior and superior layers are narrow and dense. The middle layer is thicker and clear, and is traversed by fibrille. In a section cut perpendicularly to these fibrille, a reticulum forming polygonal spaces is made out. The partitions join at the angles of the network, and are thickened throughout the whole length of the line of junction.

The hairs and cellules of the organ of Corti are continued in the spaces. The membrane has two insertions; (1) internal, on the protuberance of Huschke; (2) external

It is morphologically comparable to the cupula terminalis. The reticular membrane is considered by the authors to be the inferior layer of the membrana tectoria,

**Lacoarret* (Waggett).

Danziger, Fritz (Beuthen, O.S.).—On the Treatment and Causes of Unitateral Chronic Ear Catarrh. "Therapeut. Monats.," June, 1896.

This paper deals with suppurative of this media arising in connection with disease of the nose or naso-pharynx. Several cases are quoted in which obstinate of orrhoas that had resisted other treatment were easily cured, either by treating the nose or naso-pharynx alone, or by that combined with some simple treatment of the ear. The author concludes as follows:—(1) The otorrhoa is mostly unilateral because the nose or naso-pharynx is seldom affected equally on both sides. (2) The disease varies in intensity with every alteration in the region of the upper respiratory tract (colds, etc.). (3) Caries or widespread destruction of the petrous bone has never been observed by the author. (4) Hearing power is not so much affected as in otorrhoas from other causes—provided it is not left for years without suitable treatment. The prognosis is better than in almost any other car disease, because, the throat and nose having been treated, the ear gets well almost of itself.

Arthur J. Hutchison.

Dench, E. B.—Neoplasms of the Ear. New York Eye and Ear Infirmary Report, January, 1896.

THE author gives full details of several cases of new growth in and about the ear which have come under his observation during the past twelve months. They are five in all. (1) Sarcoma above the tragus. (2) Large exostosis. (3) Ulcerating papilloma. (4) Fibro-sarcoma of the middle ear. (5) Round-celled sarcoma of ear. The first three cases call for no comment, except that in the exostosis case it was necessary to throw forward the concha and meatus in order to attack it successfully. The fourth occurred in a man of sixty, who gave the following history. He had been totally deaf for eighteen months with the right ear, and had facial paralysis for twelve months and slight pain for a few weeks. A bright red growth was found occluding the meatus on that side, which readily bled. Examined further under ether the growth was found too extensive to remove through the meatus, so the external ear and meatus were thrown forward in the usual way, and as much as possible of the growth removed with a curette. A Stacke operation was now proceeded with, and much carious bone was subsequently removed, including the remains of the ossicles, together with more growth. The tegmen tympani was destroyed, and the dura involved. The patient made a good recovery, with material improvement in hearing and a marked lessening of the facial paralysis, and eight months after there was no return of the growth. The patient in case five was a boy of ten; the history was very unsatisfactory. He presented an extensive ulceration of the auricle, with exuberant granulations; he had already been under specific treatment with but slight result. There was general adenitis. The whole ear and part of the external meatus were removed, only the skin on the posterior surface of the auricle being saved; a large portion of the parotid gland was also removed, as were its posterior lobe and the affected cervical glands. The wound, which could not be entirely closed, healed by granulation; the patient made a good recovery, his health improving in a very satisfactory way. The external meatus, however, became occluded during cicatrization.

Denker, A. (Hagen).—A Case of Epithelioma of the Cartilaginous and Cutaneous Meatus and Auricle. "Arch. of Otol," Vol. XXV., No. 2.

This commenced as a wart in the meatus, which recurred after removal, and after a year was thoroughly scraped away. Soon, however, the floor of the meatus became affected, and in spite of another clearance the greater portion of the meatus became filled with fungating granulations, and a nodule appeared on the antihelix, which microscopical examination proved to be epitheliomatous. The auricle and meatus were completely removed by means of the knife and sharp spoon, the healthy membrana tympani being left untouched. The large gap left was diminished by means of a sliding flap at the upper part, and the edges were brought together below, after being loosened by a liberating incision. The spaces left were covered by means of Thiersch's skin-grafts. Granulations which formed in the meatus looked suspicious, but were proved not to be malignant, and healing took place without narrowing of the passage.

Dundas Grant

Hubbell, Alvin A. (Buffalo).—Report of a Case of Otitic Brain Abscess, with Remarks on Diagnosis. "Buffalo Med. Journ.," May, 1896.

A MAN, aged twenty, had complained for some time of headache, loss of appetite, and nausea. The left ear had discharged since he was six years of age. For three days he had had severe pain in the left ear and left side of the head. Upon examination a polypus was found nearly filling the left auditory canal, and there

was also a considerable offensive discharge from this car. There was no swelling or tenderness over the mastoid.

On the following day the greater part of the polypus was removed. Two days later the meatus was somewhat swollen and painful, and the feetid discharge continued. The head symptoms had become more pronounced, and the patient seemed dull and restless. The pulse was sixty; respiration ten; temperature ninety-seven; and the pupils reacted slowly to light. An ice bag was applied to the side of the head and around the ear. The next day the pain in the head and ear was worse: opiates were prescribed. On the sixth day after admission he had a convulsion. On the seventh, another convulsion: pulse thirty-two, respiration four or five. Stimulants were freely given, and counter-irritation applied to back of neck. Vomiting. Delirium. On the eighth day, coma and death.

At the post-mortom examination the convexity of the brain showed signs of recent acute fibrinous lepto-meningitis. The same condition existed in a marked degree at the base. Moderately firm adhesion-fixed the temporo-sphenoidal lobe on the left side to the upper border of the petrous portion of the temporal bone. Opposite the adhesion there was a cavity in the temporo-sphenoidal lobe as large as a walnut, lined by greyish necrotic tissue, and containing pus. This cavity was connected with the middle ear by two or three distinct openings through the roof of the latter.

The paper terminates with remarks on the frequency and diagnosis of cerebral abscess.

A. B. Kelly.

Mandelstamm.—A Case of Acute Median Otitis with Mastoid Complications cured without Surgical Intervention. "Ann. des Mal. de l'Oreille," March, 1896.

In the author's case inflammation of the mastoid apophysis was already evident at the initial period of the inflammation of the tympanum before pus was formed. Pulsations of some point of the tympanic membrane, often observed at the commencement of an acute median otitis, do not always prove the existence of a perforation. Pulsation only indicates the spot where perforation is produced in case of spontaneous rupture of the membrane; it is due to hypertemia and pulsation of the vessels of the tympunum across a membrane relaxed by inflammation. In the author's case the pulsating spot corresponded exactly to an old cleatrix. Paracentesis must not be practised indiscriminately in all cases of acute inflammation of the tympanum. It is indicated always when rupture of the membrane is imminent, or where there are dangerous inflammatory symptoms or intense pain. It has a special indication in infants. At the commencement of acute median otitis it is essential before everything to remember the possibility of cure without surgical intervention. The same rule of conduct should be observed in acute inflammation of the mastoid apophysis. Too early intervention is as bad as waiting too long. The precise moment to interfere is an impossibility to lay down as a rule. R. Nerris Wolfenden.

Planat.—Ménière's Symptoms in Young Subjects. "Thèse de Lyon," 1894-5. In the first chapter the author rapidly details the principal features of Ménière's disease in the adult, and passes directly on to his theme. From the sixteen observations which form the subject of the second chapter it appears that, speaking generally, the malady may (1) be engrafted on to an infective condition (scarlatina, measles, typhoid, pneumonia); (2) be consecutive to head injuries; (3) or attack a subject in apparently good health.

He has met with several patients who had adenoids, coryza, or pharyngitis. The etiology of the disease is evident in the observations. As to the pathology

many difficulties arise. The rarity of Ménière's symptoms in children and young adolescents is to be explained by the presence of communication between the labyrinth and the cavities in its neighbourhood.

With regard to diagnosis, epilepsy in its many forms might lead to the belief that the malady with which we are dealing was present, and the same may be said of Friedreich's disease. Treatment should be the same as in the adult. Bromides and iodides are to be employed in conjunction with inflation by the Eustachian tube. Revulsives may be used at the same time.

Prognosis varies with the etiological course which gave rise to the trouble. It is very grave if the disease complicates an acute infectious condition, but good if it arises during health.

**Lacoarret* (Waggett).

Raugé, Paul. - Otitis and Mastoiditis. "Bull. Méd.," June 24, 1896.

This is a paper showing how the anatomical division of the middle ear into two cavities or sets of cavities, separated from each other incompletely by the aditus, has gradually been given up, till now the tympanum, aditus, and mastoid antrum and cells are regarded as forming one complicated cavity. Up till quite recent years the surgeon and the otologist in dealing with this cavity kept strictly to the region considered by each his proper sphere of action, the surgeon restricting his interference to a Wilde's incision (always without success) and an occasional trephining of the mastoid, which, however, never went farther than the antrum. On the other hand the otologist approached the cavity through the meatus, his most daring operations being curettement of the attic or removal of the ossicles. The aditus remained a neutral territory untouched by either operator. The change from this state of affairs was due to both surgeons and otologists attempting to get more thoroughly at the true source of the disease; they soon found that there could be no partition of the ground, but the whole group of cells, etc., had to be regarded and treated as one single diseased cavity. Only after this did any true knowledge of the processes of otorrheea arise.

Mastoiditis is probably never primary, but always follows a tympanitis. Even those cases described by Lubet-Barbon at the Société Française d'Otologie et de Laryngologie, if carefully enquired into, will generally be found to have some history or marks pointing to a previous tympanitis.

The otologist or surgeon nowadays who undertakes the treatment of an otorrhoea of some standing considers the tympanum merely the entrance to deeper seated parts which he will almost invariably have to attack.

In many respects mastoid abscess and empyema of the antrum maxillare resemble each other. Till quite recently known only in their acute stage, or when they showed on the surface—therefore comparatively rare diseases—they now are known to be very common, and to be the causes of what previously were intractable diseases, viz., chronic purulent nasal discharge and chronic otorrhœa. And as the causes of these are similar, viz., disease of accessory cavities, so ought the treatment to be. There should be as little hesitation about exploring the mastoid in a case of chronic otorrhœa as there is about exploring the accessory cavities in a case of chronic purulent rhinitis.

Atthur J. Hutchison.

(This paper has already been noticed in the Journal by Dundas Grant.)

Scheibe, A. (Munich).—A Contribution to the Diagnosis and Treatment of Cholesteatoma in Otitis Media Purulenta Chronica. "Arch. of Otol.," Vol. XXV., No. 2.

THE author confirms Bezold's opinion that cholesteatoma does not occur in cases in which the perforation of the membrana tympani is central with free edges. On the other hand, he holds that it is always present if the perforation borders on the

wall of the aditus—in the postero-superior border—or if, being central, its margin is attached to the inner wall of the tympanum. In the central cases the extension of epidermization is ascertained by inspection; in the marginal ones the intratympanic syringe has to be used one or more times, for the extrusion of epidermic masses, the meatus being previously carefully cleaned.

Out of forty-five cases, thirty-eight were treated by direct injection and insufflation, eighteen being cured. Gompertz's results, showing thirty-six cures in forty-nine cases under this treatment, are quoted. In the absence of urgent symptoms, he urges the use of this treatment after the removal of granulations, and, only if the passage to the aditus be too narrow, of the malleus as well. Persistence of feetor is considered an indication for resection of the posterior wall of the meatus. In case of urgent symptoms, Siebenmann's chiselling operation is advised. [The removal of the ossicles is not advocated, and probably should be absolutely avoided if there is preservation of any useful degree of heaving power in the ear.—Ed.]

Stern, L. (Metz).—Contributions to the Bacteriology of Otitis Media Purulenta. "Arch. of Otol," Vol. XXV., No. 2.

THE author, with Zaufal, finds no marked relation between certain bacteria and special forms of purulent median otitis. On the other hand, three different phases of the disease may be noted which have more or less definite bacteriological peculiarities, as follows:—(1) The primary or early acute phase, with profuse purulent non-foetid discharge, in which cocci-e.g., staphylococcus pyogenes albuspredominate; (2) the later phase, with profuse feetid muco-purulent discharge, in which rods greatly surpass cocci in number; (3) the last, in which there is a scanty fætid crusting or cheesy discharge, showing bacilli of all varieties and practically no cocci. In a few cases of otitis media purulenta phthisica tubercle bacilli were found. These investigations were confined to patients who had not been under treatment, and whose meatuses had not been contaminated with oil or other matter. The material was conveyed from the ear to sterilized water, by means of a sterilized wire, or occasionally, where the discharge was very scanty, the ear was filled with sterilized water. Cover glass preparations were made by means of a swab, one being stained with aniline water gentian violet, or carbolic fuchsine. Dundas Grant. the other by Gram's method.

Werhovsky, B. (St. Petersburg).—Examination of the Duration of Hearing throughout the Musical Scale in Diseases of the Internal and Middle Ear. "Arch. of Otol.," Vol. XXV., No. 2.

THESE investigations were carried on by means of nine tuning-forks: A2, A1, A, a, a^{r} , a^{s} , f^{s} , c^{4} , f^{s} sharp⁴, all being used for air conduction, but A, a, and a^{r} only for bone conduction, the highest and lowest being for obvious reasons unsuitable for that method of testing. The charts of percentage of hearing power for the various forks are given in twenty-seven cases, eleven of sclerosis of the middle ear, fourteen of pure nerve-deafness, and one each of traumatic rupture of the membrana tympani and of the combination of nerve deafness with the residua of suppurative otitis. This solid and laborious contribution (like that of Alderton's, formerly analyzed in the JOURNAL OF LARYNGOLOGY, Vol. IX. p. 298) is of the utmost value, and is encouraging inasmuch as it confirms, instead of upsetting, the views which we have helped to popularize. The diminution of hearing for low tones (raising of lower tone-limit) characteristic of disease of the conducting apparatus is well shown in cases in which the diagnosis is supported by all the other received In nerve deafness the general rule for a gradual diminution of hearing for the higher tones, more marked as they rise in pitch, is well exemplified, but the fact that there are more frequent deviations from this rule than in that for obstructive deafness is also well brought out. In the case of combined nerve deafness and residua of suppurative otitis, the curve inclining downwards at each end of the scale is most striking. In cases of sclerosis, increase of bone conduction for all three forks was generally found, and for the lower more than the higher; but in the severer cases this difference was increased, so that for the higher there was actually diminished bone conduction.

Dundas Grant.

REVIEWS.

Archives of Clinical Skiagraphy. No. 2, Vol. I. June, 1896. By Sydney Rowland, B.A. Rebman Publishing Company.

In this number there are six skiagrams, each briefly explained. Thus, the first (Plate VII.) is a case of hypertrophic osteo-sclerosis of the fibula under Mr. Clutton, and after follows a short dissertation on the difference between bone sarcomata and bony hypertrophies; but we doubt whether in an ossifying sarcoma of a round bone there would be transparency in its central part, as here stated. This would probably only occur in medullary sarcomata. The next, a revolver bullet in the palm, shows the very structure of the bone. Plates IX. and X. are of a fractured femur, the fracture extending into the joint. Plates XI. and XII. are most interesting deformities of the hands and feet. Page 23 is occupied with answers to correspondents. We entirely endorse our previous high opinion of the work Mr. Rowland is doing, and look forward to continued success in future numbers.

Handbuch der Laryngologie und Rhinologie. Teransgegeben von Dr. PAUL HEVMANN, Privatdocent au der Universität Berlin. I Lieferung, I. Band. Wien: Hölder, 1896. ("Manual of Laryngology and Rhinology." Edited by Dr. Paul Heymann. Part I, Vol. I.)

This is the first part of an encyclopædic work on diseases of the throat and nose, the appearance of which has been awaited with interest by all laryngologists. When completed, in a little over a year, it will extend to three volumes, dealing with diseases of the larynx and trachea, the pharynx, and the nose respectively. In carrying out this work the editor has had the assistance of over forty colleagues, including most of the well-known laryngologists of Austria and Germany, as well as a few from other European countries. The purpose of the work is to bring together the results obtained by observers in all parts of the world, so as to present a complete review of the present position of our knowledge in regard to the diseases in question. The enormous increase in the literature of the subject within the last ten years has made it impossible for a single author to undertake such a task; hence the need to adopt the co-operative method.

The part before us contains a very interesting and readable review of the history of laryngology and rhinology by the editor, and the beginning of an exhaustive article on the anatomy of the larynx and trachea from the pen of Professor Zuckerkandl. If the promise of this first number