Operation was considered to be useless. At the autopsy a hard mass was found around the upper portion of the trachea, evolving the œsophagus and cervical vessels on the right side, and infiltrating the trachea; as a certain surgical portion of the trachea was free from growth, a low tracheotomy could have been performed. Had this been done the patient might have been relieved from the intense suffering of progressive asphyxia which ended in death.

R. Norris Wolfenden.

Clark, Alfred.—*A Case of Absence of the Thymus Gland in an Infant.* "Lancet," Oct. 17, 1896.

THE child at birth was apparently well nourished and healthy, and continued to be so until six months old, in spite of being fed from a dirty bottle and otherwise neglected. About the sixth month swelling and coldness began in the hands and feet, and spread to the legs. The child was then found to be considerably swollen, and waxy in complexion; the heart and lung sounds were normal. There was no cyanosis; the fundi oculorum were normal; the bowels relaxed; the urine acid and without albumen. The swelling increased, and spread in spite of treatment, until the eyes were almost closed, and the limbs so distended with fluid as to feel like firmly stuffed cushions. Ecchymoses appeared in each supra-clavicular fossa, and the child died at the age of nine months. At the necropsy it was found that the thymus gland was entirely absent, and the position of the absent organ was not even marked by fibrous tissue. The case shows that absence of the thymus gland is compatible with fair health and normal development—at all events, for the first six months of life. There were no symptoms of acromegaly. The appetite remained good to the last. *StClair Thomson.*

Koeppe (Giessen).—*Sudden Death of a Healthy Child.* "Münchener Med. Woch.," 1896, No. 39.

AFTER the sudden death of a child the *post-mortem* examination showed hypertrophy of the thymus gland. The author found forty cases in literature in which sudden death of healthy children was caused by this anomaly. *Michael.*

Reinbach (Breslau).—*Results of Thymus Feeding in Goître.* "Grenzgebiete von Med. und Chir.," Bd. 1, Heft 1.

IN thirty cases of goître the thymus feeding was tried. The dose was twenty to thirty grammes of the gland three times a week, or tabloids of Burroughs, Wellcome, & Co. were used. In parenchymatous goîtres in young persons good results are obtained, but in cases of myxœdema the thymus had no effect. *Michael.*

EAR.

Alderton, H. A. (Brooklyn).—*The Operation of Mastoid Antrotomy for the Cure of Obstinate Purulent Median Otitis, with Description and Presentation of the Author's Anthrotome.* "Arch. of Otol.," July, 1896.

THE author has a great belief in the efficacy of drainage of the mastoid antrum in the cases described, and he recommends the use of a guarded perforator for making an opening into the antrum from outside. As he very truly observes, the bone on the exterior has a strong tendency to become densely sclerosed and thickened, while, unfortunately, no such process takes place in the inner boundaries of the cavity, but, on the contrary, more usually a rarefaction, so that the contained matter is

likely to find its way towards the brain, lateral sinus, etc., rather than towards the exterior. The prolonged and energetic chiselling required in the typical operation is, of course, a regrettable necessity, and he has devised a drill with a guard or guide attached to it, the latter being introduced through the meatus (after detachment of the auricle) into the antrum through the aditus. In this way he perforates straight down into the antrum and on to the guide. A shouldered silver drainage tube is introduced into the opening, and thorough cleansing and healing solutions are introduced. The guide has an inner rod which can be projected through the aditus by means of a lever. [This instrument is probably the most ingenious attempt at the realization of an ideal which most operators must have conceived, and in the typical anatomical condition would probably be entirely satisfactory. At the same time most operators have met with cases in which the middle fossæ of the skull, or the groove for the lateral sinus, or both, project so much that the use of a drill thus worked in the dark is fraught with danger and uncertainty. It would be interesting to know on how many skulls, whether living or dead, the instrument has been employed.—ED.] *Dundas Grant.*

Bacon, Gorham.—*A Case of Acute Otitis Media, followed by an Abscess in the Temporo-Sphenoidal Lobe. Operation. Death from Shock. Autopsy.* "Arch. of Otol.," July, 1896.

THE patient was a young man who had had no ear disease previous to the last eight weeks, when he became affected with acute suppuration in the left attic, the pus from which was evacuated by incision on several occasions with considerable relief. There was more or less persistent headache, and for the last three weeks loss of memory for objects and names of friends had been noted, but memory for events was good. His headache was severe, temperature 98·8, pulse full and slow, 56, respiration 16. Constipation was present. Brain abscess was suspected, but it was considered best to postpone exploration, the mastoid antrum being, however, opened without delay. This was found to contain granulations and a small amount of pus; no sinus in the roof of the middle ear could be discovered. The patient improved to some extent, but in about a week he had some mental disturbance, attacks of vomiting, and increased aphasia. The temperature had generally ranged from 97·8 to 99·6, but on the day when it was decided to operate the temperature was 100·6. A trephine hole was made with its centre 2·5 centimètres above the external auditory canal. An aspirating needle was introduced in different directions, but without result. The opening was then enlarged, and the needle was introduced in a direction backwards, inwards, and upwards, for three centimètres, when pus escaped. There was a fairly large abscess cavity without lining membrane. Half an ounce of pus was evacuated. About two hours later the patient died, apparently from shock. On a *post-mortem* examination, the outer third of the superior surface of the left petrous bone was discoloured, and presented a small opening communicating with the attic. Over this there was an aperture communicating with the brain, and an abscess in the posterior half of the third temporo-sphenoidal convolution, while the brain substance beneath the cortex behind the whole of the lower part of the temporo-sphenoidal lobe was found softened and streaked with blood. A reddish mass lying in the centre proved to be the capsule of an abscess which had probably ruptured. The writer points out the advisability in such cases of exposing the roof of the tympanum from the middle fossa at the time of the antral operation. *Dundas Grant.*

Cheatle, A. H. (London).—*The "Mastoid" Antrum a Part of the Middle Ear.* MR. CHEATLE pleads once more for the abolition of the term "mastoid" antrum, contending that the division of the petro-mastoid bone into the petrous and

the mastoid is (as all will agree with him) perfectly artificial. He advises the adoption of the excellent term, "tympanic antrum." [The abstractor recommended this in a comment on a paper in the "Lancet" of Dec. 3, 1892, in which Mr. Cheatle suggested the term "tympanic receptaculum" (*vide* JOURNAL OF LARYNGOLOGY, 1893, p. 105).] Mr. Cheatle illustrates his paper by some sketches, which support his contention very strongly. *Dundas Grant.*

Clark, L. Pierce.—*Prognosis of Insanity complicated by Hæmatoma Aurum.* "American Med. Surg. Bull.," Aug. 22, 1896.

A SHORT paper, first showing that this complication of insanity almost always implies a very grave prognosis. In the literature of the subject the author could find only five authentic cases in which recovery from insanity occurred when hæmatoma aurum was present. He then reports one case in which non-traumatic hæmatoma occurred in a man suffering from acute melancholia. He gradually recovered, and remained well five years later. *A. J. Hutchison.*

Denker, Alfred (Hagen).—*A Case of Otitic Sinus-Phlebitis and Metastatic Purulent Pleurisy cured by Operation.* "Monats. für Ohrenheilk.," Sept., 1896.

IN this case there had been an old-standing otorrhœa, which suddenly ceased, and the cessation was followed by rise of temperature, mental obfuscation, inactivity of the pupils, headache, and mastoid tenderness. The mastoid was opened, and was found to be deeply sclerosed, with a small antrum containing cheesy pus and granulation tissue. A careful search revealed an opening leading backwards from the cavity. Suspecting that infection of the sigmoid sinus might be the cause of the constitutional disturbance, this was exposed for an inch of its length, and found to be of a greyish colour, thickened, and non-pulsating. It was then slit up, and found to contain a firm, cheesy clot. "In order not to loosen any portion of it" the operator introduced with care a strip of iodoform gauze, and applied an antiseptic dressing. The patient improved for several days, when cough came on, and dulness on percussion was elicited, without marked bronchial breathing, extending from the spine of the left scapula downwards. The sensorium was clear, but the temperature rose to nearly 104° F., and puncture of the pleura confirmed the diagnosis of empyema. Resection of the sixth rib in the anterior axillary line permitted of the evacuation of more than a litre of fœtid pus. With slight fluctuations speedy recovery followed. The writer adds this to the other eighty cases already published, of which about one-half recovered.

Dundas Grant.

Donaldson, E.—*Movement of the Membrana Tympani with Respiration.* "Lancet," Oct. 10, 1896.

FINDING no reference to this subject in the text books the following case is recorded:—A woman, aged twenty-five years, complained that her left ear had now and then during two months felt as if stuffed with cotton-wool. Her voice seemed not to "escape through her left ear" when the full feeling was present. She could hear a watch at forty inches. There was no tinnitus. On examination a small part of the membrana tympani, in the region of Wilde's spot, moved in and out, keeping time with respiration. The movement occurred only during nasal respiration, and stopped when she breathed through the mouth. Eleven days after her first visit she said that the sensation as if her ear was "stuffed" was gone for the present, and on examination no movement of the membrane was found during respiration. From this it is concluded that (1) the whole of the membrana tympani, or a part of it, may move during respiration through the nose; (2) the

movement may be present one day and absent the next; and (3) it occurs when the Eustachian tube is unduly open, patulous, and when the membrane is in part or wholly atrophic and flaccid. *StClair Thomson.*

Fridenbergh, Percy H. (New York).—*Hygienic Principles in the Prevention of Ear Disease.* "Med. News," Aug. 8, 1896.

THE article first refers to the destruction of micro-organisms, pathogenic and otherwise, in the healthy naso-pharynx, by phagocytosis, mutual antagonism, etc., and goes on to point out that the commonest path of aural infection is through the Eustachian tube opening into the naso-pharynx, and insists on proper antisepsis of the mouth, throat, etc., by means of gargles, mouth washes, sprays, etc., especially when any morbid change is taking place. The author draws attention to the importance of removing any possible nidus for pathogenic organisms, such as diseased tonsils, decayed teeth, etc., and concludes by enumerating the various applications he has found of service in the treatment of aural inflammations.

StGeorge Reid.

Kenefick, Thos. A.—*Ménière's Disease.* "Med. Record," July 25, 1896.

MR. J., about forty-five years of age, robust and healthy in appearance, by profession an architect, had lived a regular, sober, but very hard working life. No history of syphilis or other disease. He was wakened up one night by an attack of violent vomiting, accompanied by persistent giddiness, and by noises and marked deafness in the right ear. Examined next morning he was found in excellent general condition, right membrana tympani slightly congested. Vomiting and dizziness continued some hours, then ceased, but were renewed by every attempt to sit up or to turn. Finally vomiting yielded to small doses of ipecac., but deafness and giddiness persisted. There were also present several symptoms of perverted vision. He saw by his bedside the slanting roof of a conservatory on which sat a glazier rapidly fitting in panes of glass, which as rapidly fell through. In the afternoon this scene was replaced by the figure of a woman dressed in brilliant red. At first small, the figure gradually increased to about one hundred feet high, and was surrounded by multitudes of active little mice. These disturbances vanished towards evening, and but for the dizziness patient seemed quite comfortable. The vomiting ceased. In about two weeks the deafness and giddiness began to improve, and in six weeks patient was able, with the help of a friend, to reach his office. Treatment at first was by large doses of quinine, and later iodide and bromide of potash, but with no marked results. Galvanism seemed to be beneficial. Recovery was complete. *A. J. Hutchison.*

Lake, R. (London).—*A New Method of dealing with the External Meatus in Operations on the Mastoid.* "Arch. of Otol.," July, 1896.

THE chief novelty in this method is the ingenious idea of removing the cartilage of the posterior half of the cylinder of the meatus, thereby depriving it of its resilience, and preserving the skin of that half of the meatus with which to make a flap to cover the floor of the artificial cavity. *Dundas Grant.*

Lannois.—*Acute Catarrhal Median Otitis and Microbes.* "Ann. des Mal. de l'Oreille," June, 1896.

WHILE many observers have discovered various micro-organisms in secretion of acute catarrhal otitis, Scheibe, of Munich, has made numerous bacteriological studies upon median otitis, with the result that he found no micro-organisms present. Lannois has thought, in these contradictions, that new researches would be of interest. He has made cultures twelve times with the liquid drawn from

six patients suffering from catarrhal median otitis. Five times the cultures were fertile, and seven times sterile. How can these contradictory results be explained? If the middle ear encloses microbes in its normal condition, their occurrence in secretions of catarrhal otitis would lose all importance. He refers to his previous work, which shows that the middle ear is a closed cavity and aseptic. In an acute coryza or an angina, pathogenic microbes enter the tympanum in too great a number to be destroyed. They determine an inflammation with exudation, and the more easily as the same bacterial invasion has irritated the Eustachian tube, and led to its more or less complete obstruction. There is a veritable otitis, and not merely a simple effusion *ex vacuo*, and if a culture is made after paracentesis it is sure to reveal various staphylococci, streptococci, etc. But if the organism is resistant, if the bactericidal action of the secretion is exerted on the invading microbes, or if these are but little active, the pathogenic agents disappear after a few days, and cultures remain sterile. This view is supported by the author's experiments, cultures being positive when the paracentesis was made at the commencement of the affection, and negative at a later period; and it also explains why, when the catarrhal effusion is not absorbed, it may persist without change for weeks or months; why patients may be catheterized with impunity, even in the vitiated air of consultation rooms; and why paracentesis, even without proper antiseptic precaution, so seldom leads to purulent transformation. We cannot establish any pathogenic difference between acute catarrhal and acute purulent otitis; the same microbes determine both conditions, and it is merely a question of resistance of the organism. *R. Norris Wolfenden.*

Lannois.—*The Normal Middle Ear and Microbes.* "Ann. des Mal. de l'Oreille et du Lar.," May, 1896.

THE author has made bacteriological experiments upon dogs and rabbits. These naturally cannot be conducted upon the living human subject, and upon the cadaver would be useless. The experiments were conducted with every possible precaution, and six tubes inoculated from two dogs gave no cultures. Eleven similar tubes inoculated from rabbits remained absolutely sterile. There are, therefore, no microbes in the middle ear, and analogy would lead to the same conclusion with regard to the human subject. The reasons for this asepsis are found in the action of the nasal cavities in arresting and destroying microbes; possibly the tympanic mucous membrane enjoys the same properties. *R. Norris Wolfenden.*

Lautenbach, Louis J. (Philadelphia).—*Phono and Pneumo-Massage in Suppurative Disease of the Ear.* "The Med. and Surg. Reporter," July 18, 1896.

IN otorrhœa, wet cleansing serves to wash out most of the discharge, but allows some, together with the residual liquid, to remain. This diluted discharge is probably more irritating than the original, and excites increased secretion and inflammatory action. Dry cleansing, as usually pursued, can never remove all the suppuration, as the middle-ear cavity cannot be thoroughly reached in this manner.

To remove these discharges the author uses his pneumo-massage instruments (which are not described here), together with wet or dry cleansing. He first treats the ear according to the present methods, and when he considers it fairly clean he uses an exhaust apparatus, with a pressure of from two ounces to four pounds per square inch, for from three to ten minutes, employing about 300 exhausts per minute. He then thoroughly cleanses the ear with cotton, and if suspicious of suppuration being still present he again applies the exhaust pump. After thus cleansing the ear he uses drying and stimulating preparations in the usual manner. Often in simple cases, after cleansing the ear, he lightly plugs with cotton, and uses no other treatment.

By this massage method he often succeeds in reducing the infiltration and inflammation, and, when used daily, in preventing the formation of bands and adhesions. Further, the procedure may be employed to break up ankyloses, stretch and cause absorption of bands, rupture adhesions, reduce thickenings and growths of the mucous membrane, and relieve pressure on the internal ear.

Phono-massage is used to stimulate the internal ear when from either pressure or disease its nerve endings are unresponsive. *A. B. Kelly.*

Milligan, W. (Manchester).—*Two Cases of Sarcoma of the Middle Ear.* "Arch. of Otol.," July, 1896.

THE first case was that of a female, aged sixty-three, in whose external meatus there was a fleshy-looking growth of uncertain duration, with frequent attacks of spontaneous hæmorrhage. There was extensive caries of the surrounding bone, facial paralysis, and absence of sense of taste on the side of the tongue. A small portion was removed for microscopical examination, which showed it to be an angio-sarcoma. There was considerable hæmorrhage, only arrested by means of the galvano-cautery point. The second case was that of a girl, aged eighteen, who had from earliest infancy suffered from suppuration from the middle ear. The meatus was blocked by a fleshy-looking substance, there was deep-seated caries, and the tissues over the mastoid process and in front of the meatus were puffy and œdematous. The removal of as much of the growth as possible was carried out under chloroform after detachment of the auricle, but it was found to arise from the inner wall of the tympanum, and recurrence, as was expected, subsequently took place. The growth was a fairly vascular myxo-sarcoma. Excellent microscopic illustrations are appended. *Dundas Grant.*

Milligan, W. (Manchester).—*A Case of Temporo-Sphenoidal Abscess secondary to Acute Left-sided Suppurative Middle Ear Disease; Operation; Acute Hernia Cerebri; Death.* "Arch. of Otol.," July, 1896.

DR. MILLIGAN was called in after treatment had been carried out for three months in vain, for the relief of pain following an acute median otitis. He found in addition to the pain great mental apathy, marked sensory and slight motor aphasia, ptosis, left-sided mydriasis, and facial paralysis, temperature 98·8° F., and pulse 66. Trephining was performed, and a temporo-sphenoidal abscess found and evacuated. The patient gradually improved for about six weeks, when hernia cerebri appeared, and, in spite of exploration, death took place from basal meningitis. There was no erosion of the tegmen, and no suppuration in the mastoid cavities. Extension appears to have been by the lymphatics.

Dundas Grant.

Ostmann (Marburg).—*On Simulation of Deafness and Failure to Recognize Diseased Condition of the Hearing Apparatus.* "Monats. für Ohrenheilk.," Sept., 1896.

THE writer considers that there is no "instrument" of value in the diagnosis of simulated deafness to compare with a complete knowledge of diseased conditions of the hearing organs, and that without this all the recognized classical methods may lead to error and injustice. In his experience (twelve years) as a military surgeon he has found genuine simulation to be extremely rare. He points out the danger of being misled into a diagnosis of simulation if our tests give an unexpected or unusual result. Thus, he quotes the case of a man who received a blow rupturing the membrane, and as the result of injudicious syringing had a suppurative otitis. In this case the patient asserted that the vibratory tuning-fork on the vertex was heard in the uninjured ear. This unexpected result of Weber's test

might be ascribed by the examiner to intentional misstatement on the part of the patient, especially if the latter was a soldier and the examiner was suspicious of malingering. In reality, in the case quoted, the inflammatory disturbance had affected the internal ear, and the further use of his otological knowledge enabled the writer to verify the truthfulness of the man's statements. Again he warns us against confusing intentional simulation and a form of unintentional simulation, as when an individual with traumatic rupture of the membrane has the conviction that with such an injury he cannot and never will be able to hear. (We might almost describe this as auto-suggestion). To put the patient down as a malingerer, to be punished instead of being encouraged by the cheering assurances of eventual restoration, would be unjust and erroneous. The writer insists on the danger of a bias towards the diagnosis of simulation, and on the need for knowledge of mankind, and experience. A minute acquaintance with otological diagnosis ranks above all other means for the detection of simulation. *Dundas Grant.*

Pooley, Thomas R.—*On the Value of the Ophthalmoscope as an Aid to the Diagnosis of Cerebral Disease in Purulent Affections of the Middle Ear.* "Med. Record," Aug. 15, 1896.

THIS paper commences with the quotation of three cases reported by Dr. Andrews in 1883, in which the great value of the ophthalmoscope as an aid to diagnosis in such cases was demonstrated. The summaries of these three cases are :

1. Otitis med. purul. chronic. ; abscess of middle lobe of cerebrum ; double optic neuritis ; death.

2. Otitis med. purul. chronic. ; optic neuritis ; phlebitis of right lateral sinus ; meningitis of convexity ; death.

3. Otitis med. purul. chronic. ; meningitis ; optic neuritis ; recovery.

Next is quoted the report of a case by J. Kipp. Otitis med. purul. *acuta ;* double optic neuritis ; no swelling or spontaneous pain in mastoid ; opening of mastoid cells by Schwartze's method ; rapid subsidence of optic neuritis ; recovery.

The author then reports his own case. Patient aged twelve ; had had otorrhœa for years, Wilde's incision having been performed six years ago. On admission, pain and swelling over mastoid ; slight discharge of pus from external canal ; high temperature. Wilde's incision performed : temperature fell and pain disappeared. Next day, rise of temperature and return of pain. Schwartze's mastoid operation performed : pus, granulations, etc., removed ; a considerable amount of dura exposed. As the discharge from the external auditory canal was slight, the membrana tympani was perforated ; this was followed by the onset of chills, with high temperature, 104·5° F. Later came severe pains in head, contracted pupils, choked disc (left side). Still later complete blindness of right eye ; ophthalmoscopic examination at first *nil*, but afterwards slight venous hyperæmia (right) and violent choked disc (left). Two days thereafter paralysis of right side ; coma lasting about twenty-four hours ; death The autopsy revealed abscess in left occipital lobe, extensive sinus thrombosis of the left side, and widespread stinking purulent meningitis.

The author thinks that otologists do not pay sufficient attention to the eyes. The condition of the fundus often confirms a diagnosis of intracranial disease arrived at from other symptoms, and sometimes is the only symptom. If optic neuritis is found, the diagnosis of extension to the brain is certain, no matter whether other evidence exists or not. In the same way, if, after operation, the optic neuritis diminishes and disappears, one knows that the intracranial complication is doing likewise. Unfortunately optic neuritis aids neither in locating the intracranial disease nor in diagnosing its nature ; it may be present in abscess of cerebrum, in

abscess of cerebellum, in meningitis, and in thrombosis. Marked optic neuritis alone occurring in a case of chronic otorrhœa is sufficient indication for opening the mastoid; and even when there is only slight œdema of the optic disc, the author thinks, with Andrews, that the mastoid operation should be performed. The existence of optic neuritis as an indication for an exploratory opening into the cranial cavity can be considered only in connection with other symptoms. "So far as it goes, however, it serves to make the presence of intracranial disease "more certain." *A. J. Hutchison.*

REVIEWS.

Schrotter.—*Vorlesungen über die Krankheiten der Luftröhre.* ("Lectures on the Diseases of the Trachea.") By Prof. SCHRÖTTER, of Vienna. With fifty-three illustrations. 1896. Wilhelm Braumüller, Vienna and Leipzig.

THIS book, consisting of 195 pages, contains seventeen lectures on the diseases of the trachea and bronchi. It forms the second volume of Prof. Schrötter's lectures, the first being his well-known systematic work on the diseases of the larynx, of which the second edition appeared in 1893.

The first lecture deals with the anatomy and the known congenital malformations of the trachea; the second describes minutely the best mode of performing tracheoscopy, very much as has been done by Türck and by Morell Mackenzie, though, perhaps, less frequently put into intentional practice by laryngoscopists in general. The perusal of this work may lead to a beneficial change in this respect. Great stress is laid on the necessity in all cases for the straightening of the spinal column during the examination, and, in some, for rotation of the head on the trunk through an angle of 90 degrees. The writer gives a reserved opinion with regard to Kirstein's method of autoscopy, of which he recommends further use, while strongly convinced, as Kirstein himself frankly admits, that it can never take the place of the reflected light as usually employed. The various diseased conditions which the trachea presents are then individually described, including anæmia, hyperæmia, hæmorrhage, acute inflammation, chronic inflammation (with occasional distension of glands or of atrophied portions of the tracheal wall); also the various inflammations accompanying specific infective diseases—tuberculosis, lupus, leprosy, scleroma, syphilis, and others. The description of the bridges of mucous membrane left over the undermining syphilitic ulcers, and the symptoms produced by the entanglement of collections of secretion under these, are graphically described. Injuries and foreign bodies form the subject of another lecture. Prominence is given to the reduction in the mortality of cases of foreign bodies in the trachea from 41·2 per cent. before 1886 to 30 per cent. after this date, namely, the time of the introduction of laryngoscopy.

A very large amount of space (pages 96 to 145) is naturally devoted to the subject of tracheal stenosis, which is treated of in three lectures. The