scalding or other form of mechanico-chemical irritation. In favour of this conclusion there are (1) the negative results of cultures taken from the fauces and the direct negative examination of the membrane coughed up; (2) the absence of any albumin in the urine; (3) the absence of any paralytic sequelæ; and (4) the fact that no history pointing to contagion could be obtained. Non-diphtheritic membranous laryngitis, contended for by many, amongst others by Fagge, denied by many others, and in any case regarded as a rare event, would seem to have been present here. In the next place the case is of interest on account of the speedy relief, obtained by intubation, of that troublesome condition which makes it sometimes so difficult to remove the tube after tracheotomy. It is not a question here of discussing the relative merits of intubation and tracheotomy, and the case is an instance simply of the value of intubation as a supplement to tracheotomy. Lastly, assuming the case to have been non-diphtheritic, we may note the complete harmlessness of 8,000 units of diphtheria antitoxin. StClair Thomson.

Wishart, Gibb.—Coin in Larynx; Tracheotomy; Recovery. "Canad. Lancet," October, 1898.

A foundryman, aged forty, who was holding a ten-cent piece between his teeth, accidentally drew it into his larynx. He was seen by the doctor eighteen hours after the accident. There was neither weakness nor dyspnœa. On examination, the coin was found lying on the anterior half of the vocal cords, held down by the ventricular bands above. All attempts at removal being ineffectual, local anæsthesia was produced by injecting Schliech's solution into the cellular tissue over the thyroid. The two upper rings of the trachea and the lower part of the cricoid were then severed, and the coin was successfully removed through the opening by means of curved forceps. The patient made a good recovery. Price-Brown.

EAR.

Barkau, A. (San Francisco).--('hronic Otitis Media Purutenta. Abscess in the Temporo-sphenoidal Lobe, followed by Purulent Leptomeningitis. Operation; Death. "Archives of Otology," vol. xxvi., No. 4.

In this case the symptoms had become very extreme before it came under the writer's care. (The temperature was higher and the pulse more rapid than usual in uncomplicated abscess.) The abscess was discovered and evacuated, but death occurred from purulent meningitis. Dundas Grant.

Biehl.—Cholesteatoma of the Middle Ear. "Wien. Klin. Rundsch.," No. 29, 1898.

Historical review on the genesis of cholesteatoma. R. Sachs.

Druault.—Sarcoma of the Internal Auditory Meatus. "Ann. des Mal. de l'Or.," August, 1898.

The patient, a girl of seventeen, developed at the age of ten facial palsy on the right side, together with headache. Under electrical 16-2

treatment the palsy diminished in degree, but never disappeared. Six years later the headaches returned, accompanied by vomiting and diplopia, and a few months later the limbs on the right side became partially paralyzed. On admission the diagnosis of cerebral tumour was at once made, all the usual symptoms being present, including choking of the optic discs on both sides. Hearing by bone-conduction was completely absent on the right side. The general pressure symptoms gradually increased, and the cerebral hemisphere on the right side was examined with negative result. At the autopsy a large pedunculated sarcoma, 4 or 5 centimetres in diameter, was found on the right posterior fossa. This had no connection with the surrounding parts except in the situation of the internal auditory meature. The tumour appeared to have its origin in this cavity, involving both the seventh and eighth nerves, but the labyrinth and middle ear were not The latter was in part cystic, and microinvaded by the growth. scopic examination showed the cyst formation to be due to "a kind of necrosis" of portions of tissue, which exhibited the characteristics of a fasciculated spindle-cell sarcoma. A microscopic examination of the brain was not made.

The author remarks that the original facial palsy was without doubt caused by the growth in the internal auditory meatus, which presumably had been of very slow growth, if, indeed, it did not for a time become quiescent. As the onset of the final and fatal attack was evidenced solely by the onset of general hemiplegia, a question is raised as to the presence of a second growth somewhere in the motor tract from the left hemisphere. Waggett.

Gottlieb, Dr. (Kiär).—A Guarded Chisel for the Ear. "Monatschrift für Ohrenheilkunde," August, 1898.

The chisel slides upon a guide, which is bent up at the end so as to guard the point. A strong handle is attached to the guide nearly at right angles.

The instrument is intended to be used for the removal of the outer wall of the attic, to expose the aditus ad antrum without injury to the facial or external semicircular canals. *William Lamb.*

Gradenigo.—Ophthalmoscopic Examination in the Diagnosis of Intracranial Complications of Suppurative Otitis. "Ann. des Mal. de l'Or.," December, 1898.

Gradenigo has examined the reports of some 630 cases of this kind, and regrets to find how small is the percentage in which an ophthalmoscopic examination is recorded, though such examination seems to have been more commonly made during the last two years.

It is needless to point out that the symptoms of intracranial complication are very frequently indecisive, and no one can afford in a doubtful case to dispense with any indications which the fundus oculi may present.

The author does not hesitate to affirm, as the result of his personal experience, that the ocular lesion is sometimes the only pathognomonic sign of the commencement of some intracranial extension of aural disease, a sign all the more valuable as it is met with frequently even in that class of complication which must be considered as the expression of the primary invasion of inflammation from the ear to the cranial cavity, namely, extradural abscess. The ocular lesions described vary from simple congestion of the papilla to stasis and optic neuritis. April, 1899.]

They are, as a rule, bilateral, but generally more marked on the affected side. They rapidly pass off when the cranial mischief has been relieved, and, indeed, this fact furnishes the best evidence of the success of an operation.

The author maintains that papillitis is never observed in cases of suppuration confined to the middle ear and mastoid, and that it is a certain indication of intracranial invasion, an opinion which will not be accepted in all quarters.

On the other hand, it is by no means a constant sign, even in any special category of cases, and it is only observed in a certain percentage of instances and at certain periods of the disease. At present we can only affirm that a relationship of cause and effect exists between the cranial disease and the papillitis; what is the nature of the exact etiological tie is a question which has still to be answered. Of the 635 cases (including 74 personal cases), an ophthalmoscopic report is forthcoming in 172. Papillitis is noted as present in 90 cases, or $52\cdot3$ per cent. of those examined.

Uncomplicated extradural abscess (for the most part about the sinus): out of 39 cases, 16, or 41 per cent., showed papillitis.

Septic thrombosis of sinus, simple or complicated with extradural pus: 31 out of 52, or 59.6 per cent.

Cerebral abscess, simple or complicated with sinus thrombosis: 18 out of 34, or 57.9 per cent.

Cerebellar abscess, simple or complicated with sinus thrombosis: 12 out of 20, or 60 per cent.

Leptomeningitis, simple or complicated with sinus thrombosis: 13 out of 27, or 48.9 per cent.

Total: 90 out of 172, or 52.3 per cent.

Papillitis is therefore most frequent in connection with cerebellar abscess and septic thrombosis (about 60 per cent.), less frequent in cerebral abscess and leptomeningitis, and least so in extradural abscess (41 per cent.). Two sources of error must be borne in mind in reading these statistics. The total number is not a very large one, and some smaller series have given somewhat different results. Again, it is impossible to determine in a complicated case whether the papillitis is caused, to take an instance, by the sinus thrombosis or coincident extradural abscess in a given case, for we know that either is capable of causing the phenomenon. Two facts of importance, however, stand out clear from these figures :

(a) Papillitis is present in about half of the cases taken together.

(b) Papillitis occurs in a large minority of cases of extradural suppuration, a condition which, as a rule, gives rise to no very clear signs or symptoms, and of which the papillitis is the sole diagnostic manifestation in many cases.

At present we are in the dark as to the exact mechanism of the ocular complication. In nearly half of the cases, and among them some of the most marked and serious cases, the sign is absent, while it appears in a prominent degree in some cases of the slightest gravity. Optic papillitis furnishes us with no information as to the seat or character of the intracranial disease. The disappearance, however, of the phenomenon is a certain indication of the efficacious result of operative interference.

The author calls for a routine examination of the fundus in all cases of acute and chronic middle-ear suppuration. In the great majority the result will be negative, but here and there a positive result will permit of an early diagnosis, and the application of successful treatment.

Kaufmann, D. (Vienna).—A Case of Homolateral Acute Affection of the Auditory, Facial, and Trigeminal Nerves. "Archives of Otology," vol. xxvi., No. 4.

The patient, a healthy man aged thirty-four, became acutely ill, with malaise, feverishness, and headache, followed by herpes on the left cheek, and later by vertigo with recurring vomiting. This continued, and after a few days there ensued paralysis of the left side of the face, tinnitus, total deafness of the left ear, and loss of taste in the left half of the tongue. The tuning-fork tests indicated nerve deafness on the left side. Whispering was only heard close to the ear, and equally well when the meatus was closed. Air- and boneconduction were worst for high-pitched tones. Under rest, iodide of sodium, and subcutaneous injections of pilocarpine, gradual improvement took place, and practical recovery as far as regards the facial paralysis and other symptoms, except the hearing, which remained for the whisper at $\frac{1}{4}$ metre, and for ordinary speech at 2 to 3 metres.

The simultaneous involvement of the other nerves localizes the affection of the auditory nerve as further inside the cranium than the petrous bone, and the mode of onset indicates an inflammation. This neuritis is probably rheumatic, as the writer thought he could exclude tumour, aneurism, hæmorrhage, meningitis, and syphilis.

Dundas Grant.

Körner, O. (Rostock). — On Tympanic Neuralgia in connection with Abscess of the Tongue. Report of a Case. "Archives of Otology," vol. xxvi., No. 4.

This was a case of tympanic neuralgia of the ear, due to an abscess in the tongue. The pain was increased when pressure was exercised on the hyoid bone, and disappeared entirely when the abscess broke. Professor Körner has repeatedly observed the increase of pain in the ear in case of tympanic neuralgia from carious teeth, on pressure in the hyoid region, and he considers this a diagnostic symptom.

Dundas Grant.

Körner, O. (Rostock).—I. A Case of Chloroma of both Temporal Bones, of both Lateral Sinuses, and of both Orbits, simulating an Otitic Phlebitis of the Cavernous Sinus. II. The Literature on the Chloroma of the Temporal Bone and of the Ear. "Archives of Otology," vol. xxvi., No. 3.

The patient was a child six years of age, who became hard of hearing and complained of headache of increasing severity. There was double exophthalmous paralyses of both abducent nerves, distension of the cutaneous veins of the forehead, swelling of the temporal regions, and bilateral choked disc. Both drumheads bulged and were of a pale grayish-yellow colour, and odourless pus escaped on paracentesis. The temperature, which was high, was not lowered by the operation. As there was swelling of the left mastoid, this was opened, but the cells appeared normal. Death took place in four months' time. On post-mortem examination the cause of the symptoms was assigned to certain greenish tumours existing in the walls of the lateral sinuses. The study of the literature of the subject showed that this rare tumour was always multiple, and generally in children or in young adults. The temporal groove is a place of predilection; the chloroma then develops from the periosteum or in the substance of the muscle. A report of the literature, containing ten references, is appended.

Dundas Grant.

Kretschmann (Magdeburg Medical Society).—Tubercular Disease of the Ear. "Münchener Medicinische Wochenschrift," No. 1, 1899.

He distinguishes three types of tubercular disease of the middle ear. In the first, in an early stage, there are miliary tubercles on the tympanic membrane; when these disintegrate numerous perforations, which rapidly become confluent, are caused, and lead to total destruction of the membrane. The tympanic mucous membrane is thickened, of a yellowish-red colour, and shows ulceration. There is no pain; it occurs in advanced tuberculosis. The second type occurs in individuals in whom the general disease is not so advanced. There is deafness, Granulations quickly grow through the otorrhœa, but no pain. perforation; they fill up the tympanic cavity and accessory spaces, the tympanic membrane is destroyed, the ossicles are exfoliated, and they break through into the labyrinth or cranial cavity. Erosion of the internal carotid or jugular vein, and facial paralysis, may result. The third form occurs after chronic otorrhœa. It is characterized by a necrotic circumscribed spot on the labyrinth wall; it has the appearance of a fibrinous layer, although it is a change in the tissue, in which tubercle bacilli are found. The probe reveals bare bone. The process may remain long stationary; gradually granulations form, which shrivel and lead to epithelial growth on the diseased surface. This last form occurs in individuals who show signs of tuberculosis of a chronic nature. Infection occurs by the circulation or by the Eustachian tube. Diagnosis is made by finding Koch's bacillus, the clinical appearance, or by microscopic examination. Treatment must be both local and general. In early stage iodoform or balsam of Peru, then application of caustics; if these fail, then the middle-ear cavities must be opened up. Guild.

Kümmel, W. (Breslau).—Notes on the Pathology of Intracranial Complications in Ear Disease. "Archives of Otology," vol. xxvi., No. 4.

The writer narrates on account of their instructive nature a series of cases of which all except one ended fatally, in spite of the fact that the focus of disease was reached and removed. Case 1 was one of recurrent otitis media, in which paracentesis was repeatedly performed. On mastoid operation the parts appeared practically normal till the antrum was opened, when on the floor of this there was found a small opening leading towards the middle line. Further chiselling laid open a large abscess cavity near the apex of the petrous bone, internal to the sinus. This extradural abscess is believed by Kümmel to have had its seat in the endolymphatic sac. Recovery ensued. In the second case the symptoms led to the operative evacuation of a temporo-sphenoidal abscess, but without saving life. On post-mortem examination a second abscess was found immediately behind the first. Dundas Grant.

Ménière.—Mastoiditis of Bezold. Operation; Cure with Intact Membrane and Normal Hearing. "Arch. Intern. de Lar., O., R.," September-October, 1898.

The patient, a lady of thirty-eight, was first seen several weeks after an acute attack of purulent otitis following influenza. There was a perforation in the anterior superior quadrant, and profuse discharge, but pain had been slight and only occasional. Under antiseptic treatment, enlargement of perforation, tubal injections, etc., the middle-ear trouble almost cleared up. Pain, however, returned, and this was located 3 or 4 centimetres behind the point of the mastoid. There was some swelling, and pressure here caused a crackling noise to be heard in the ear. Operation was performed, and a carious focus was found low down in the apophysis, and from this a fistulous track was traced The recovery was uneventful. up to the antrum. As the middle ear responded so well to treatment, it is presumed that the mastoid trouble commenced in the early stages, before free drainage was established by enlargement of the perforation. Waggett.

Photiadès and Gabrietidès.—Fractured Base, with Deafness, Tinnitus, Vertigo, and Exophthalmos. "Ann. des Mal. de l'Or.," August, 1898.

A well-reported case of fractured base, seen some months after the accident, with unilateral symptoms, as mentioned in the title, which developed immediately after the injury. The intense tinnitus could be controlled temporarily by the galvanic current. Waggett.

Ramsay, Herbert M.—Case of Pyæmia treated with Injections of Antistreptococcic Serum. "Lancet," October 22, 1898.

A girl with measles developed fever and discharge from one ear. The anterior and inferior part of the membrane was perforated. In spite of treatment the general symptoms increased, the temperature rose to 105.4° , and there was pain over the tip of the mastoid, but no tenderness over the mastoid cells. The "mastoid cells" were opened; nothing was found there except some muco-purulent secretion, but not sufficient to account for the high temperature, so no attempt was made to open up the tympanum. The skull was then opened, but the dura mater did not bulge, and the lateral sinus was evidently not occluded, and the wound was therefore closed. Restlessness, rigors, pneumonia, and an abscess in the wrist, supervened. Streptococci were found in the blood. Injections of anti-streptococcic serum were then given, and the patient recovered.

The interest in this case lies in the great improvement manifested in the patient's condition after the serum treatment was commenced. The temperature did not fall, though the average altogether was lower than before the injection, but the continued high temperature was accounted for by the presence of the abscess in the buttock. When this was evacuated the temperature almost immediately fell to normal. In spite of the temperature being high, the patient's general condition improved markedly. From the time the injections were commenced she slept better, took her nourishment better, and was altogether more natural. The wrist cleared up, her pulse improved, and she was brighter and better, whereas before she seemed in an almost hopeless state. This improvement was shown to be due to the anti-streptococcic serum treatment, as when for two days the injections were discontinued (from 8.30 a.m. on March 22 till 6.30 p.m. on March 24) she was manifestly not so well, and she improved again with the recommencement of the injections. Another point of interest is the complete disappearance of the organisms from the blood within twelve days of the commencement of the treatment. It is also interesting to note that streptococci were demonstrated in the blood and anti-streptococcic serum was used, as some cases of failure when anti-streptococcic serum has been tried may have been due to the organisms not having been streptococci. Altogether 205 c.c. of serum were injected.

StClair Thomson.

Rudolph and Bezold (Munich).—Pathological Changes of the Middle Ear in Measles. Report of Eighteen Autopsies. "Archives of Otology," vol. xxvi., No. 4.

Tobeitz's statistics are brought forward, showing that out of ninetyfive cases of measles thirty-three ran an uncomplicated course, forty were complicated but terminated in recovery, and twenty-two died. All but three of the fatal cases revealed positive signs of middle-ear The writers' investigations concerned eighteen fatal suppuration. cases; they showed that at a very early stage there was a mucopurulent exudation in the tympanum, even though the Eustachian tube was comparatively unaffected; these facts supporting the view of Tobeitz of the middle-ear affection as a primary trouble, and not simply an extension from the naso-pharynx. Perforation was comparatively rare. The bacterial examination revealed, as a rule, the streptococcus such as is found in the destructive suppurative otitis occurring in scarlet fever and other infectious disorders. The mildness of the otitis in measles is therefore to be attributed to the less degree of diminution of the resistant power, and not to a difference in the micro-organism. Professor Bezold's examination of 1,807 school children showed that the percentage of defective hearing was not higher in those who had had measles, so that the prognosis is, on the whole, favourable.

[This observation is remarkable when contrasted with the frequency with which measles was given as a cause of deaf-mutism in Dr. Love's statistics —D. G.] Dundas Grant.

SIXTH INTERNATIONAL OTOLOGICAL CONGRESS, 1899.

THIS Congress is to be held in London from August 8 to 12, under the presidency of Dr. Urban Pritchard.

The British Organization Committee, which numbers over seventy members from Great Britain and the Colonies, has Mr. A. E. Cumberbatch for its Treasurer and Mr. Cresswell Baber for Secretary-General. It has also appointed the following subcommittees—viz.:

1.	Reception :	Vice-Chairman, Mr. Field.
		Hon. Secretary, Mr. R. Lake.
2.	Excursion :	Vice-Chairman, Dr. Dundas Grant.
		Hon. Secretary, Mr. P. Macleod Yearsley.
3,	Dinner :	Vice-Chairman, Mr. Mark Hovell.
		Hon. Secretary, Mr. L. A. Lawrence.