or extraction of foreign bodies, for which we had previously used ten to twenty per cent. cocaine.

Eucaine is also indicated in certain cases of dysphagia with cancer of the œsophagus, in which the results of bougie examination and œsophagoscopy are inconsistent with the severity of the dysphagia. We saw several cases where a bougie of six millimètres passed easily, while fluids could not be swallowed. This symptom is due to spasm, caused by irritation of food on an abnormally sensitive œsophagus, a supposition which is confirmed, as such patients can swallow after injections of morphia. The effects of morphia injections are often immediate, but frequently they are only to be obtained by ever-increasing doses, which add to the loss of strength by causing loss of appetite. In such cases we had good results from eucaine. We used a three per cent. solution in an ebony syringe constructed by Prof. Rosenheim, which allowed direct application to be made. One patient, who before could not swallow fluids, was able, after an injection, to swallow a beefsteak and potatoes without difficulty. This patient quickly learned to make the injection himself, and never showed toxic symptoms, although he used an injection of two grammes three to four times a day for weeks. In other cases we succeeded, by injections daily, or twice daily, in allaying the spasm, and allowing solid food to be enjoyed. *Guild.*

Beuthen, Herrman.—*Œsophagotomy for a Foreign Body.* "Munch. Med. Woch.," April 19, 1898.

An idiot, twenty-nine, swallowed the lower part of a pipe made of horn. It was 6·5 cm. long, 4 cm. broad, 1·8 cm. thick. Removal from above, as well as insertion of an œsophageal bougie, failed. Œsophagotomy was, therefore, done on the left side. The foreign body had got impacted 4 cm. beneath the edge of the sternum, and was removed. Rectal feeding for two days. He was dismissed cured in a month. *Guild.*

THYROID.

Sutcliff, E. Harvey.—*An Extraordinarily Acute Case of Graves's Disease.* "Lancet," March 12, 1898.

In this case the disease ran an unusually rapid course, as the patient lived just three months after the symptoms first made themselves apparent. The most important and obstinate symptom was vomiting and distressing retching at even the sight of food. *StClair Thomson.*

EAR.

Bezold, Prof. (Munich).—*The Position of the Consonants in the Tone Series.* "Arch. of Otol.," Oct., 1897.

The consonants most frequently extinguished in deaf mutes are M, N, L, and K. Their proper tones are very low-pitched, and the lower part of the scale as tested with the continuous tone range is the part most frequently lost in the subjects of deaf-mutism. In a case in which, on the other hand, the defect was confined to the upper half of the range, the only consonants heard (apart from P, T, and R, which are rarely lost) were L and N. K may be heard if the loss of the lower half

range does not extend above e^2 (according to Wolf its tone-limits are d^2 and d^3). The consonant F lies between $f\sharp^4$ and g^4, S between e and Galton 3·5, Sh between $c\sharp^4$ and e^5. P, T, and R are almost invariably heard by deaf mutes.

Dundas Grant.

Bronner, Adolph.—*Extradural Cerebral Abscess of Aural Origin with Thrombosis of the Lateral Sinus, in which the Sinus was not opened; Operation; Recovery.* "Lancet," April 2, 1898.

WHEN seen the patient was partially comatose. The neck was slightly stiff on the affected side. The temperature was 101° F., and the pulse was 65. The optic discs were congested. The mastoid antrum was opened and was found to be only slightly diseased. The attic, however, was full of granulation and fœtid pus. The basilar groove was laid open with the chisel, and a fair quantity of pus escaped. This, however, was not very offensive. The dura mater was grey and thickened. The lateral sinus was hard and evidently thrombosed. As there were no urgent symptoms and the thrombus was possibly non-septic, it was not punctured or opened. On the third day the pulse and temperature were nearly normal, and on the fifth day the outer wound was closed and the parts dressed through the external meatus. The patient made an uninterrupted recovery.

This case seems to be interesting from several points of view. The gravity of the symptoms pointed to some serious intracranial lesion, apparently to cerebral abscess. There can be no doubt that there was thrombosis of the lateral sinus, and during the operation the question naturally arose whether one should explore and if necessary open up the sinus. It is customary to explore the sinus whenever it has been exposed, but this procedure seems to be contrary to the most elementary rules of surgery. No surgeon would think lightly of exploring a vein which was surrounded by septic material in any other part of the body. It certainly is a remarkable fact that the healthy lateral sinus is so frequently opened in these cases and without many fatal or even bad resuts. It was impossible in this case to know if the thrombus was septic or not, and he therefore abstained from exploring it. Had he known it to be septic he would not have opened it up unless there had been any signs of septic poisoning or of pyæmia. If any of these symptoms had been present he would have first tied the jugular vein and then removed the thrombus and the diseased walls of the sinus as far as possible. The outer wound was left open for several days, so that the parts and symptoms could be carefully watched, and so that any further operative interference could, if necessary, have been readily carried out.

StClair Thomson.

Guttman, J. (New York).—*A Case of Bezold Mastoiditis with Extension to the Posterior Part of the Neck.* "Arch. of Otol.," February, 1898.

THE patient was the subject of chronic suppuration of the left ear of eight years' duration. Three weeks before the present attack he got a severe cold, and the otorrhœa had become more profuse, and a swelling extending along the side of the neck developed behind his left ear. The narrator recognized this as a case of Bezold's mastoiditis, and got consent to operate. The antrum was very small, filled with granulation tissue, and only reached after chiselling fifteen millimètres through intensely hard bone. The cells were then opened down to the tip of the mastoid, where the spaces were much larger, and on perforating the inner wall the operator evacuated a collection of pus. The probe could be passed through this opening into a large abscess cavity, into which a counter opening was made, and packing with gauze was effected. The patient was discharged from the hospital two weeks after the operation, but three days later a phlegmon formed in the right hand, which required a local operation, but rapidly got well.

The writer draws attention to Knapp's enumeration of the outlets which inflammatory products in the mastoid may make for themselves: (*a*) On the mesial side of the tip extending down the neck along the sterno-cleido mastoid muscle; (*b*) through the posterior wall of the external auditory meatus, discharging through a fistula into that canal or into the tympanum; (*c*) into the cranial cavity, producing extradural abscess, thrombosis of the sinus, or abscess of the cerebrum or cerebellum. The writer insists on the necessity of performing the typical mastoid operation in these cases, and not merely opening the abscess in its lower part.

Dundas Grant.

Jollye, F. W.—*A Case of Internal Ear Deafness following Mumps treated with Pilocarpin: Recovery.* "Arch. of Otol.," Feb., 1898.

THE patient was a girl aged thirteen and a half years, who, when just convalescent from mumps, was attacked with giddiness, after getting out of bed in the morning, with such severity as to cause her to fall down. She had no feeling of nausea, and did not complain of earache or deafness, but was found to be unable to hear the watch close to the right ear, or to hear the tuning-fork by air or bone conduction. For a few days she was treated with hot fomentations, counter-irritation, and bromide and antipyrin, calomel purge and "Politzerization." For a few weeks the giddiness improved very slightly, but the deafness remained absolute on the right side. It was then determined to try subcutaneous injections of pilocarpin, beginning with one twenty-fourth of a grain, and gradually increasing daily till after twelve days she was having one-fifth of a grain. This dose was continued every day for another week, when, for the first time, the watch was audible on the mastoid, and the patient was able to stand alone, although afraid to walk. For a fortnight she took a mixture containing one-third of a grain of sulphate of quinine, with a quarter of a grain of nitrate of pilocarpin, three times a day. Distinct improvement in her hearing then took place. The pilocarpin was left off, and the quinine continued for another six weeks. At the end of this time she could hear the watch two or three inches away from the ear, and was able to walk round the room with very little difficulty.

A few months later she could go out alone, and when she was examined again in a year and a half the hearing was found to be perfect on both sides.

Dundas Grant.

Low, Harold.—*A Case of Scarlet Fever complicated with Acute Suppurative Otitis Media and Acute Hæmorrhagic Septicæmia treated by Antistreptococcic Serum; Recovery.* "Lancet," March 19, 1898.

A GIRL, aged six, was seized with scarlatina. On the fourth day of the rash, pain in the left ear was complained of, and the next day there was some discharge from the ear. Three days afterwards the mastoid antrum was opened by Mr. Ballance in the usual way, and pus welled out at the first touch of the gouge. The tympanic cavity itself was carefully avoided. A drainage tube was inserted, and the wound was closed. The temperature fell one degree, but two days afterwards the child vomited, and was lethargic and drowsy. Four days after the opening of the antrum Mr. Ballance saw the patient, and agreed that her condition was due to general septicæmic infection, and not to localized intracranial inflammation. Treatment by antistreptococcic serum was therefore instituted. Although in a very grave condition at one time, the patient recovered. Convalescence was interrupted by an attack of purpura. The discharge from both ears ceased. [No report of condition of membranæ.—*Rep.*]

Broth cultures of the patient's blood showed the presence of virulent streptococci.

The following remarks are added by Mr. Ballance :—"This case shows what can be done by perseverance and unremitting attention. The opening of the mastoid antrum was undertaken with the view not only of relieving pain, and of giving unhindered exit to pent-up pus, but also in the hope of saving the delicate structures of the tympanum from complete destruction. On May 23rd the child's condition was exceedingly grave. The absence of paresis, optic neuritis, and cerebral vomiting, negatived the presence of localized or diffused intracranial inflammation. Moreover, the general septic condition did not seem to depend on infection from the temporal bone, which a suitably planned operation on the lateral sinus and jugular vein might arrest. The high fever, rapid pulse, rapid respiration, jaundice, drowsiness, incontinence of urine, distension of the abdomen, fœtid diarrhœa, and later the hæmorrhages, made for the diagnosis of general acute scarlatinal septicæmia. The child would certainly have died if anti-streptococcic serum had not been employed, and the injections continued even when life was ebbing away. The serum steadied the temperature, improved the pulse and respiration, cleared the mind, moistened the tongue, and postponed the fatal issue of the acute stage of the illness which was imminent. In acute septic infection every effort should be made to tide over the acute stage, for the prognosis of chronic septicæmia and pyæmia is good. The hæmorrhages had nothing to do with the serum treatment, but were due to blood changes arising out of the acute septic process. The hæmorrhagic condition was treated by chloride of calcium, and with fresh milk and fruit ; in fact, in the manner which yields the best results in scurvy and scurvy rickets." *StClair Thomson.*

Ludewig (Hamburg).—*Surgical Treatment of Chronic Otorrhœa.* "Deutschen Medicinischen Wochenschrift," April 28, 1898. Congress of the German Surgical Society, Berlin, April, 1898.

LUDEWIG recommends the extraction of malleus and incus for the cure of chronic middle ear suppuration rather than the usual treatment by extensive opening of the tympanic cavity from the meatus. It is only contra-indicated in caries of the temporal bone with cholesteatomata. He recommends it especially to overcome the effects of old suppuration, where the fibres of the auditory nerve are atrophied by the pressure of indrawn fixed ossicles. He reports the results of the first hundred out of two hundred and fifty extractions which have been long enough under observation. Cure was obtained in eighty cases ; failure in eight ; the rest are unknown. Hearing was considerably improved in seventy-five. *Guild.*

Whiting, F. (New York).—*A Contribution to the Symptomatology and Treatment of Pyæmic Sinus Thrombosis, based upon Three Successfully Operated Cases.* "Arch. of Otol.," Feb., 1898.

THE writer gives a short history of the development of knowledge with regard to the treatment of pyæmic thrombosis of the lateral sinus, derived particularly from the compendious works of Hessler and Körner on the subject. He describes the various factors in the etiology, pathology, and diagnosis. He discusses the question of when to operate, quoting the two apparently contradictory views of Korner and Hessler : the former advising operation as soon as the diagnosis of sinus thrombosis has been made ; the latter stating that "when puncturing the sinus with an aspirating needle shows that a simple clot is present, operation is not indicated, but repeated daily punctures should be made, and the contents of the aspirating needle carefully examined microscopically for pus and micro-organisms. The failure to find these is to be accepted as proof that the clot is benign and will undergo constructive organization, while the discovery of bacteria in the contents of the aspirator is indication for operation." Thus he deprecates

undue haste in opening the sinus. It need hardly be said that the writer inclines to the former view. The histories of three successful cases are given in considerable detail. In one, he was disposed to think that the immediate cause of the thrombosis was the curetting of granulations in the tympanum. In the same case visible and tangible pulsation of the sinus walls was present, in spite of the fact that the lumen was firmly distended with clot. Pulsation is therefore no proof that the sinus is healthy. Another case afforded an illustration of the value of Gerhardt's sign, namely, a decided increase in the amount of blood passing through the external jugular vein of the unaffected side. In two of the cases there was severe vomiting, in spite of the fact that there was no meningitis.

The indications for ligature of the jugular vein in thrombosis of the sigmoid sinus are summarized by the writer as follows :—

"*First.*—The indications which justify an operator in tying the jugular before exposing the sinus should be very decided and as follows :—A. The existence of chronic otorrhœa. B. Pronounced manifestations of pyo-septicæmia, high fever, sudden remissions, and repeated rigors. C. Metastases. D. Griesinger's symptom, occipital œdema. E. Œdema of eyelids of corresponding side. F. Tenderness along the course of the jugular in the neck, and perhaps the cord-like ceeling of the infected vein. G. Beginning neuro-retinitis. A majority of these symptoms should be present.

"*Second.*—The indications for ligature after exposing the sinus and recognizing the thrombosis, but before opening it :—A. The presence of a clot extending well down into the bulb, and disintegrated in its lower portion (as indicated by aspirator), associated with distinct pyæmic symptoms, although metastases are absent. B. The display by the sinus of respiratory movements would render probable the admission of aerial embolism to the heart unless the vein were first tied.

"*Third.*—Indications for ligation after exposing and opening the sinus :—A. The presence of a large thrombus, extending down into the bulb, and having undergone purulent liquefaction in the deep bulbous portion, which may not have been diagnosed until the sinus was extensively opened ; the curetting deeply in the neck under such conditions is fraught with imminent risk to the patient unless the vein is tied. B. Inability to re-establish the circulation from below, whether the clot has or has not disintegrated, and whether or not there has been tenderness in the neck. C. Inability to re-establish the circulation from either direction has aroused some discussion as to the advisability of ligating both jugulars."

Dundas Grant.

Zwaardemaker (Utrecht). —*An Initial Symptom of Sclerosis.* "Arch. of Otol.," Oct., 1897.

THIS is a displacement of the upper tone-limit upwards to the extent of one, two, or more half-tones beyond the normal. It may remain stationary for some years and gradually contract again or become displaced downwards. This is, of course, accompanied by a raising of the lower tone-limit, and there is, as it were, a dislocation upwards of the whole range of hearing. *Dundas Grant.*