ABSTRACTS.

Abstracts Editor—W. Douglas Harmer, 9, Park Crescent, London, W. 1.

Authors of Original Communications on Oto-laryngology in other Journals are invited to send a copy, or two reprints, to the Journal of Laryngology. *If they are willing, at the same time, to submit their own abstract (in English, French, Italian or German) it will be welcomed.*

EAR.

Location of the Lateral Sinus and Mastoid Antrum from External Markings.—Prentiss. "Annals of Otology, etc.," March, 1918, p. 116.

Prentiss states that the position of the lateral sinus may be gauged by determining the position of the supramastoid crest—*i. e.* third root of the zygoma. If this crest runs obliquely upwards the sinus is well posterior to the field of approach to the antrum, and a horizontally placed crest indicates that the sinus is close to the field of operation.

The external auditory meatus may run in from the cortex at a very oblique angle or at a right angle. In the first case it keeps away from the sinus. In the second case it approaches the sinus.

The antrum is in a plane horizontal with the attic, and therefore is above but posterior to the upper wall of the external auditory meatus. This relation does not vary. What does vary is the depth of the middle cerebral fossa. The supramastoid crest varies in its position to the external opening of the external auditory canal. It may run backwards well above this canal or run backwards just tangent to the canal. In the first case the cone of approach may be made with little likelihood of exposing the meninges. In the second case the approach must be made well below the crest and even in the horizontal plane of the meatus. The apex of the cone of approach, however, must always point upwards to reach the antrum, which is above but posterior to the meatus. If we went horizontally inwards we would miss the antrum, but hit the vertical part of the seventh cranial nerve. The depth of the antrum may be determined by ascertaining the depth of the meatus. The distance to the antrum cannot exceed the depth of the meatus, as the middle ear approaches the cortex as it passes backwards. *J. S. Fraser.*

The Value of X-ray Examination in Mastoiditis.—Dixon. "Ann. of Otol., Rhinol. and Laryngol.," December, 1917, p. 986.

Dixon records several illustrative cases: (1) Acute suppurative otitis media (left). A clear pneumatic mastoid was found on the right side. The left mastoid was a "hazy to cloudy" pneumatic, but there was no evidence of breaking down. Dixon reported: "Not operative at present." The case cleared up without operative interference. (2) Complained of earache (left) soon after sea-bathing. Had a large clear pneumatic mastoid on the right side. Sinus about the usual position. Left side had apparently also been of pneumatic type, but it was thoroughly disorganised. There was no question as to its being an operative case, and it was thought that a large perisinus abscess and probably an epidural would be found. Operation showed a perisinus abscess at the knee and a sinus covered with granulations. Six other cases are recorded, in all

of which the operative findings confirmed the reading of the X-ray plate sent by Dixon. In several instances the infecting organism was the *Streptococcus mucosus capsulatus*. *J. S. Fraser.*

Indications for the Mastoid Operation in Acute Otitis Media.—Dench. "Journ. Amer. Med. Assoc.," September 15, 1917, p. 878.

Dench reminds us that the mastoid is simply one part of the middle ear, and every case of acute middle-ear inflammation is really a mastoiditis. A middle ear acutely inflamed and properly drained by free incision of the drum membrane recovers spontaneously. If drainage, either on account of the severity of the inflammatory process, the particular topography of the mastoid in the individual case, or the extreme virulence of the infecting organism, is insufficient, then a mastoid operation is indicated—that is, it is necessary to drain the middle ear through a posterior incision rather than by an incision through the drum membrane. *Indications.*—If, after free incision of the drum membrane, *pain* in the ear persists for from twenty-four to forty-eight hours, and is sufficient to require the administration of an opiate, we have a sufficient indication for opening the mastoid. In such cases the mastoiditis is of the hæmorrhagic variety and the mastoid cells are extensively developed. *Temperature.*—The temperature is apt to be more elevated in infants and young children than in adults. A persistent high temperature or a remittent temperature with exacerbations calls for exploration. Many cases run an afebrile course. Absence of temperature is no contra-indication to operation. *Local tenderness.*—The mastoid may be exquisitely tender within twelve hours after the inception of an acute otitis. This early tenderness is not an indication for operation. The situation of the tenderness depends on the particular topography of the mastoid in the individual case. Many of these cases recover without operation. After tympanic drainage has been established tenderness will gradually disappear. Antrum tenderness is a much more valuable sign. Recurrent tenderness is a very significant sign, and ordinarily indicates an involvement of the mastoid, which will be relieved only by posterior drainage. *Otoscopic examination.*—Narrowing of the canal at the fundus—that is, a persistent bulging of the upper and posterior portion of the drum membrane, together with a sinking of the corresponding adjacent meatal walls—is an almost pathognomonic indication for operation. *Bacteriologic examination.*—It is advisable to make a smear of the aural discharge. A *Streptococcus capsulatus* infection must be watched with exceeding care. No such case should be considered safe until the middle ear has returned to a perfectly normal condition. Many cases came to operation from two to six months after the drum membrane had healed. The amount of *discharge* or sudden cessation with the signs indicative of interference with drainage are indications for immediate operation. *Duration.*—A very profuse discharge persisting for more than three weeks after incision of the drum membrane is also an indication for operative interference. *Persistence of aural symptoms.*—After all discharge has ceased the patient comes complaining of certain indefinite symptoms, such as headache, malaise, loss of flesh. The hearing is ordinarily much impaired, the ear feels full, and there may be some slight disturbance of equilibrium. These are frequently cases of *Streptococcus capsulatus* infection. Dench recommends an exploratory operation, and has never failed to evacuate pus from the mastoid. Repeated incisions of the drum membrane must be condemned, as they simply relieve temporarily the

tension within the tympano-mastoid space. *Impairment of hearing.*—Whenever we find a persistent profound impairment of function this is in itself an important indication for operative interference. *Involvement of the static labyrinth.*—Vertigo and spontaneous nystagmus—usually toward the diseased side, more rarely toward the opposite side—usually mean extensive infiltration of the bony structures surrounding the labyrinthine capsule and call for operative interference. *Meningeal symptoms.*—Localised headache usually indicates an extradural abscess. Severe general headache is a much more dangerous symptom. Spinal puncture helps us in diagnosis in these cases. Fluid under pressure, with an excess of globulins and a failure to reduce Fehling's solution, is not necessarily an indication of general meningitis. These signs are an imperative indication for a complete mastoid operation and also for the exposure of a large area of dura about the mastoid wound. *Röntgenoscopy* is of great value in obscure cases. Dench has never failed to find pus in the location shown in the röntgenogram. The value of röntgenograms in the earlier cases is perhaps not so evident. Cases of acute otitis show a cloudy mastoid within the first ten days.

J. S. Fraser.

Application of the Carrel Method in Acute Mastoiditis.—G. Mahn. "New York Med. Journ.," May 26, 1917.

The author recommends careful removal of all diseased tissues, followed by irrigation of wound, meatus and operative field with Dakin's solution and suture of the upper three-fourths of the wound, *i. e.* leaving an opening of 3 cm. below. Through this opening a drain is introduced of the calibre of a goose quill and 15 cm. long, closed at its extremity with a silk ligature, but perforated with small openings throughout the embedded portion. Before introduction the drain is covered with a small gauze compress folded back along it like a paper filter. The end of the drain must not reach the bottom of the wound. Outside are placed, above and below the drain, two additional small pleated gauze compresses, and covering these more gauze and wads of cotton, held by a slightly elastic bandage. The drain is fastened to the dressing with a sterile safety-pin, and is purposely held kinked at this point with another bandage to cut off communication of the wound with the external air. Every two hours one or two teaspoonfuls of Dakin's solution are run into the wound under a pressure of 60 to 80 cm. Subsequent daily dressing consists in cleansing the margins, and, if necessary, the open wound with Dakin's solution, taking all possible aseptic precautions. The meatus should likewise be washed out until the discharge ceases. At each dressing a little discharge should be aseptically collected at the entrance of and within the wound, and examined on slides after drying and staining with 1 in 1000 phenolthionin solution. When, in a few days, but one bacterium on the average is to be noted in a whole microscopic field, the patient's general and local condition meanwhile remaining satisfactory, the rest of the wound may be closed with aluminium bronze sutures, inserted as deeply as possible. Immediately before this the operation field should have been carefully cleansed with ether and alcohol and the interior of the wound washed out with Dakin's solution. Any remaining dead space is filled by an appropriate pressure dressing. In the author's cases suture was possible after from two to fifteen days of sterilisation. Complete healing was thus obtained in about one-third the time required with ordinary dressings. *J. S. Fraser.*

Post-operative Treatment of Mastoiditis by the Carrel-Dakin Method.—**P. Moure and E. Sorrel.** "Rev. de Laryng., d'Otol., et de Rhinol.," October 30, 1917.

The surrounding skin must be protected against irritation by sterile vaseline, paraffin, or other greasy substance. Irrigation should begin two hours after operation, and be repeated every two hours. The dressings should be changed at least every second day. As a sequela of irrigation, even with cold solution, labyrinthine irritation has, in the writer's experience, never occurred. The unpleasantness caused by occasional penetration of liquid through the Eustachian tube is only transitory. A bacteriological control is kept by the systematic enumeration of organisms collected in a drop of pus in a platinum loop. If the microbic count rises during treatment an intracranial complication may be suspected; the authors quote a case where this application of the method led to the discovery of a cerebral abscess. An arbitrary figure of one micro-organism to every two microscopic fields is given as indicating that healing is well under way. As a means of checking post-operative progress the microbic count is more informative than a leucocyte count, which should, however, in all cases supplement the former at regular intervals. The Carrel-Dakin treatment in a majority of cases aborts the period of cicatrisation and leaves a much smaller scar; the dressings are painless. *J. S. Fraser.*

CORRESPONDENCE.

To the Editor of THE JOURNAL OF LARYNGOLOGY, RHINOLOGY, AND OTOLOGY.

SIR,—In order to avoid misunderstanding, I write to inform you and the subscribers to the JOURNAL that I have resigned my Fellowship of the Royal Society of Medicine and consequently the Presidency of its Laryngological Section, for the reason that I consider the Society to have acted with reprehensible disregard for the national interests and national sentiment in retaining upon its list the names representative of German medicine.

I am, Sir,
Yours very truly,
E. B. WAGGETT.

LONDON;
July 15, 1920.

BOOKS RECEIVED.

Plastic Surgery of the Face, based on Selected Cases of War Injuries of the Face, including Burns, with Original Illustrations. By *H. D. Gillies, C.B.E., F.R.C.S.*, Major, R.A.M.C., with a chapter on **The Prosthetic Problems of Plastic Surgery,** by *Capt. W. Kelsey Fry, M.C., R.A.M.C.*, and **Remarks on Anæsthesia,** by *Capt. R. Wade, R.A.M.C.* London: Henry Frowde & Hodder & Stoughton, 1920. Price £3 3*s.* net.

L'Anæsthésie Locale et Régionale en Oto-Rhino-Laryngologie. Par les *Docteurs Georges Canuyt* et *J. Rozier.* Préface du *Professeur Moure.* Librairie Octave Doin (Gaston Doin, Editeur), 8, Place de l'Odéon, Paris, 1920.