

tioned was the only case in which treatment proved unavailing. The other three were all benefited by a modified Weir-Mitchell treatment. In none of them was an operation deemed advisable.

The paper by Dr. MacDonald, a much more elaborate one, is introduced by drawing attention to the fact that hyperthyroidism, exophthalmic goitre, Parry's, Graves's and Basedow's are all identical diseases.

He lays particular stress upon the value of early diagnosis, and that tachycardia and tremor may point to the existence of the disease before goitre or exophthalmia are noticeable. In all cases thyroid change must have taken place, ushering in heart acceleration as the first symptom, the three other prominent symptoms coming on in varied order.

In connection with exophthalmos, the writer considers Stellwag's sign, staring without winking, as particularly important, as it is among the first to appear. The signs of Dalrymple, von Graefe and Moebius are also mentioned.

In speaking of the goitre, three distinct varieties are dwelt upon: (1) The small hard nodular gland; (2) the soft pulsating gland; (3) the simple goitre with changes in scattered areas. As to the ætiological factors of hyperthyroidism, what specially induces the extra secretion of the gland, whether it arises from without or within, are still unknown.

In treatment the writer considers medical methods to be on the whole unsatisfactory, and relief by surgical operation as especially desirable in properly selected cases. Wölfler's plan of ligation of the superior thyroid arteries is highly commended in cases in which the goitre and eye symptoms are not prominent. In these it may produce a permanent cure. Also, in long standing cases, in which the patient is very ill, where heart changes have occurred, where the thyroid arteries present a thrill, and the condition of the patient is such as to forbid a more formidable operation, tying of the thyroids may promote comfort and prolong life.

In all other cases where surgery is demanded at all ablation of the gland becomes imperative. The seriousness of the operation the writer fully realises, and in connection therewith impresses upon the reader the importance of two things: the one, the absolute necessity of leaving the parathyroid bodies intact; the other, that all exophthalmic cases must be drained.

*Price-Brown.*

## EAR.

**White, Francis W.**—**Myalgia with or without Otitis.** "Annals of Otol., Rhinol., and Laryngol.," vol. xxi, p. 346.

Deals with pain and tenderness about the sterno-mastoid, trapezius, and muscles about the ear. This myalgia may be due to faulty metabolism, rheumatic tendency, faulty innervation, blood conditions, cold, neurasthenia. The muscles involved may show tender areas on palpation. The author describes twelve cases in which a positive diagnosis of myalgia was made. Most of them appeared to be rheumatic.

*Macleod Yearsley.*

**Frey, Hugo.**—**The Physiological Importance of the Malleo-incudal Articulation.** "Archiv für die ges. Physiologie," Bd. cxxxix.

Fairly conclusive evidence is brought forward both on anatomical and physiological grounds that the malleo-incudal joint should be looked upon as a fixed one, and that Helmholtz was wrong in his theory that the bones interlocked and moved in unison only when the head of the hammer

rotated outwards, but allowed a slight play of movement between the ossicles when rotating in the opposite direction. The examination of this joint in a great many species of animals and almost all varieties of mammals has shown that in a great many with good hearing the joint is ankylosed. In order that the tympanic membrane may transmit its vibrations entire to the labyrinth it is necessary that the malleus and incus should act in complete unison without any loss of energy. The author demonstrates clearly by means of diagrams that Helmholtz erred in comparing the joint between the two ossicles to the lock-joint of a watch-key. Such a joint can only functionate properly when the axis of rotation passes through the middle of the joint in such a way that the teeth lie at opposite sides of its circumference, and not when it passes below both teeth as is the case in the joint in question. On this account the malleus and incus must move in unison, even apart from their anatomical connections, both on internal and external rotation. The contention that a movement between the ossicles is necessary as a protective arrangement in cases of sudden increase of the intra-tympanic pressure is disproved by the fact that in such cases the same pressure acts in a counter-direction on the foot-plate of the stapes; further protection to the labyrinth is afforded by the various intra-tympanic ligaments. As further evidence against Helmholtz's theory, it is pointed out that his experiments were conducted upon anatomical specimens, the integrity of which could not be verified, that the sounds employed to stimulate the parts were of abnormal intensity and sufficient in themselves to injure the very delicate structures under examination—at least sufficiently to hinder them from responding in a true physiological manner.

*J. B. Horgan.*

**Yearsley, Macleod.**—**The Classification of Deaf Children.** "Brit. Journ. Child. Dis.," November, 1911, p. 481.

The author's scheme of classification includes "every child who shows any sign of loss of hearing, be it ever so great or ever so small." He divides deaf children into four groups—the slightly deaf, the semi-deaf, the very deaf, and the defective deaf. The slightly deaf he subdivides into (1) the very slightly deaf, which includes children who hear the whispered voice at a distance of not less than 3 ft., and (2) the hard of hearing, who hear spoken speech more than 4 ft. from the ear. The "very slightly deaf" need only be placed in the front desks of an ordinary hearing class, while for "the hard of hearing" Yearsley advocates the establishment of special classes held in hearing schools, but in charge of visiting teachers of the deaf. In the second group the semi-deaf are included in those whose acuity for spoken speech is 4 ft. or less, but who have more than vowel hearing or hearing for very loud speech close to the ear. These are divided into (1) better cases and (2) worse cases. The former include those of good mentality, fair residual hearing, and natural or residual speech, and should be taught as permanent units of special classes under teachers of the deaf. The "worst cases" of the semi-deaf and the next group—the very deaf—must be educated in a special school for the deaf, where, after each child has received individual study, re-classification can take place so that those showing progress under the oral system may have every chance of developing by that method, while those who are proved failures at oralism may, as soon as possible, be in a sense segregated and taught by the manual system. A third group, lying between these two extremes, may take advantage of both systems. Mr.

Yearsley emphasises and re-emphasises the vital importance of close individual study of each child so that he may, by proper placing, be developed along the lines most suited to his hearing and mental powers.

The last division—the defective deaf (blind or mentally defective)—is not discussed beyond an expression of strong approval of a proposal to place this class under segregation and permanently to care for them.

*Author's abstract.*

### MISCELLANEOUS.

**Freudenthal, Wolff.**—**Second Report on the Therapeutic Value of Radium in Malignant Tumours of the Upper Air-tract.** “*Annals of Otol., Rhinol., and Laryngol.*,” vol. xxi, p. 334.

The author gives a short account of the further history of ten cases described in the first report (*Annals of Otology*, March, 1911, abstracted *JOURNAL OF LARYNGOLOGY, RHINOLOGY, AND OTOTOLOGY*, vol. xxvi, p. 611), and gives a further twelve cases. Three of the former ten cases are still without recurrence and in good health, and two of the new ones are “so much improved that they might be pronounced cured.”

*Macleod Yearsley.*

**Joachim, O.**—**Non-Poisonous Anæsthesia of Mucous Membranes.** “*New Orleans Med. and Surg. Journ.*,” October, 1912.

In order to avoid the risks of general anæsthesia the author strongly recommends that operations on the nasal passages, pharynx, etc., should be done under local anæsthesia. The best drugs for this purpose are alypin, and novocaine combined with adrenalin. Novocaine possesses only one tenth and alypin only one fourth the toxicity of cocaine and, moreover, solutions of the two former drugs may be sterilised by boiling without destruction of any of their properties. The solutions recommended are (1) 20 per cent. solution of alypin to which is added one fifth in volume of 1 : 1000 adrenalin solution. (2) Four drachms of 2 per cent. novocaine solution to which is added fifteen drops 1 : 1000 adrenalin solution.

The solutions require a delay of six to eight minutes after injection before commencing to operate. The injection should be made whenever possible into and around the nerve-trunk supplying the part.

The Caldwell-Luc operation, operations on the frontal sinus, and even mastoid operations may be undertaken with this method of local anæsthesia.

*Knowles Renshaw.*

### REVIEWS.

*De l'Enrouement chez les Chanteurs (Hoarseness in Singers).* By Dr. HENRI LAVIELLE (Bordeaux). Pp. 122. Bordeaux: Imprimerie Moderne, A. Destout, Aîné & Cie., 1912.

IN this brochure the writer commences with a consideration of the normal singing voice, and particularly the anatomy and physiology of the organs concerned, so far as necessary for an understanding of their action in singing. In general his account of the matter is in accordance with the views of the best recognised authorities, and most notably Prof.