normal. On the 14th, the day after the neck wound was stitched, there was much discharge of a sero-sanguineous nature from the upper part of the wound, and this became frankly purulent the following day. The upper and lower stitches were again removed, and light packing was inserted. Thereafter healing was satisfactory, the upper and lower parts being allowed to granulate. The post-auricular wound had also been allowed to granulate, and was looking healthy. On February 27, when dismissed, the neck wound was healed over, and there was a small opening in the post-auricular wound. Subsequently the external auditory canal contracted, so that a further operation on the soft parts was found to be necessary. Now the canal is of normal width.

Dr. SYME said that the wound where the jugular is tied should not be immediately closed.

Dr. KERR LOVE explained that he had to syringe from the sinus to the neck and the wound had got septic, therefore he had to close it later. The case would have done better had the wound been left open. His rule was to tie the jugular first in all cases.

Abstracts.

NOSE.

Paget, Owen.—The Nose as a Safeguard against Disease. "Australasian Medical Gazette," April 18, 1914.

Paget regards the nose not only as a mechanical filter, and therefore a safeguard against dust, but also as a safeguard to the body against microbic invasion. The suggested method by which such action arises is that the nose draws in noxious bacteria; by destroying them and absorbing the toxins produced it raises the opsonic index of the body. The paper is too long and discursive to abstract the observations on which the theory is grounded. The foundation of this theory on these observations is not convincing. *A. J. Brady.*

Beebe, S. P., Ph.D., M.D. (New York).—The Relation of Pathologic Conditions in the Nose and Throat to the Origin and Treatment of Hyperthyroidism. "Journal of the American Medical Association," August 29, 1914.

Many observers have noted clinically the relation of thyroid disease to previous infections, and the writer of this paper has gone a step further in locating these infections in the nose and throat. According to Dr. Beebe, from 35 to 40 per cent. of patients suffering from hyperthyroidism between the ages of sixteen and twenty-four give a history of repeated attacks of acute tonsillitis, and many of them have a chronic pharyngitis and rhinitis with enlarged tonsils and adenoids, but not infrequently one or more of the accessory sinuses is infected, and it is by no means rare to find that a rapid enlargement of the thyroid, with characteristic symptoms of over-activity, has followed immediately after a particularly severe tonsillar infection. Such patients bear these infections badly, and every effort should be made to prevent them. When the patient's general condition will permit the tonsils should be enucleated, and the adenoids removed. The relief which follows the elimination of infection, whether in the sinuses, the naso-pharynx or

tonsil, is usually so prompt and effective that one has little doubt as to its causal relation to the over active thyroid, and it becomes at times more important to attend to the infected areas than to attempt direct action on the thyroid.

In conclusion, the author advises the careful examination of the nose and throat of every young patient with an enlarged thyroid, and also the investigation of the thyroid in every nose and throat case, as hyperthyroidism can be checked in such patients before any serious damage is done if the beginning is recognised. *Birkett (Rogers).*

NASO-PHARYNX AND ACCESSORY SINUSES.

Kelsey, A. L., and Brown, J. M.—Malignant Tumours of the Naso-pharynx, with Report of Cases. "Annals of Otology, etc.," vol. xxii, p. 1147.

Offers the following classification of naso-pharyngeal malignant tumours: Carcinoma (glandular and squamous). Sarcoma (round-, spindle-, giant-, and mixed-celled; fibro-sarcoma, osteo-sarcoma, chondro-sarcoma, myosarcoma). Endothelioma (lymphangio-endothelioma, hæmangio-endothelioma). Relative frequency from available reported cases is: Carcinoma, 30 per cent.; sarcoma, 60 per cent.; endothelioma, 10 per cent. Four cases are described. *Macleod Yearsley.*

Myles, R. J.—The Surgical Management of Diseases of the Frontal Sinus. "Annals of Otology, etc.," xxii, p. 807.

Advocates the following: (1) When the acute cases have unbearable, severe, and continuous pain in the sinus and above the eyes, attended with profound constitutional symptoms—fever, chills, and depression—we should proceed in a definite manner to relieve the pressure, if necessary by doing a submucous resection on an obstructive deflected septum and by removal of the anterior end of the middle turbinal, a part of the anterior ethmoidal cells, and the nasal process of the superior maxillary bone; and, if this fails, should make a small incision in the skin above the inner canthus and a small opening in the bone—a radical operation to follow a few weeks later if necessary. (2) Chronic cases should be treated by the external operation where there is evidence of bone necrosis, either with or without perforation; for neoplasm, especially of malignant nature; for meningeal symptoms which are probably due to sinus disease; for continued attacks of severe pain and discharge mixed with pus and decaying *débris*; and to satisfy patients who demand relief from recurring attacks of frontal sinusitis after failure to obtain relief by the internal operation. The Killian operation, combined with removal of the anterior ethmoidal cells and nasal process of the superior maxilla, has proved to be most satisfactory. *Macleod Yearsley.*

LARYNX.

Thomson, Sir StClair.—Three Years' Sanatorium Experience of Laryngeal Tuberculosis. "Brit. Med. Journ.," April 11, 1914.

The author, in an interesting paper, draws the following guarded conclusions:

(1) Even in the selected cases sent to the sanatorium the larynx was involved in 25·6 per cent.

(2) A considerable number of cases (102 out of 795) are sent to a sanatorium without their showing active tuberculosis.

(3) In middle-class patients the sex proportion is nearly equal (females 28·3 per cent., males 24·0 per cent.).

(4) Laryngeal tuberculosis occurs much more frequently (13·7 per cent.) in early favourable cases than is generally recognised.

(5) In more decided cases this proportion is doubled (27·1 per cent.) and in advanced cases trebled (40·8 per cent.).

(6) The complication markedly decreases the expectation of life among consumptives.

(7) It deserves more regard than it has hitherto commanded as a factor in prognosis.

(8) It may not infrequently be present without complaint or voice change. Hence:

(9) The larynx should be carefully inspected in every case of pulmonary tuberculosis.

(10) Improvement in lung and larynx frequently, but not necessarily, progresses *pari passu*.

(11) In certain cases larynx improves and lung retrogrades. The converse is rare.

(12) Arrest of laryngeal tuberculosis can be effected in a sanatorium in 20·7 per cent. of all cases.

(13) Limited and slight laryngeal lesions may become arrested spontaneously with sanatorium treatment.

(14) The galvano-cautery is the best weapon for local treatment. Indicated in 20·22 per cent. of 178 cases, it completed cures in 41·60 per cent. of cases in which it was used.

(15) Satisfactory results have not been secured by any methods outside a sanatorium.

(16) Sanatorium treatment is at present the first and most valuable method for arresting laryngeal tuberculosis.

(17) Local measures are much more promising under sanatorium conditions.

(18) At present, in many cases, diagnosis is too long delayed, or the patient sent to a sanatorium too late. Hence:

(19) Early diagnosis and prompt sanatorium treatment is urged.

Macleod Yearsley.

EAR.

Lake, Richard.—Remarks on the So-called Re-education of the Deaf. "The Lancet," vol. clxxxv, p. 1449.

The author has found re-education of the deaf almost useless in acquired deafness of adults. It is most useful in congenital deafness, even should this be total, and it is also of value in acquired deafness of childhood, when this is not due to any destructive lesion of the internal ear. *Macleod Yearsley.*

Kreidl, Alois.—A Note on the Subsidiary Acoustic Tracts. "Monats. f. Ohrenh.," Year 48, No. 1.

Although a good deal is known as to the route and connections of the cochlear nerves with the nuclei and cortical centres of the contralateral side, no certain experimental evidence has been furnished, according to the author, that connections with the homolateral side existed. This question has occupied his attention for some years past, and he has lately had the

opportunity of investigating it incidentally whilst carrying out research work on the respiratory centres.

It was necessary in these experiments—dogs were used—to split the medulla lengthways, and after their recovery it was possible to test the hearing. When the animals had been killed at varying intervals sections stained by Marchi's method afforded other histological data. The following is an abstract of the writer's conclusions:

In spite of this lesion, experimentally performed, the sensation of hearing undoubtedly remained. According to this, therefore, it is possible to state that this perception is unaffected by the median severance of both the ventral and dorsal portions of the decussation of the acoustic tracts.

Similar experiments were undertaken on apes, with a like result.

The author suggests that all that this investigation demonstrates is the functional connections of the acoustic paths on the homolateral side, but does not dispute their association with the opposite side; the proportional destination of hearing impulses under normal conditions is a matter that must be left for future further investigation.

Alex. R. Tweedie.

REVIEWS.

Text-Book of Local Anæsthesia for Students and Practitioners. By Prof. Dr. Georg Hirschel, Heidelberg, with an Introductory Preface by Prof. Dr. Wilms. Translated by Ronald E. S. Krohn, M.D. Lond. London: John Bale, Sons and Danielsson, Ltd., 1914.

This small, but well-turned-out book gives a fairly compendious and accurate account of the methods of inducing local anæsthesia in the various regions of the body, and to the English-speaking general surgeon ought to prove of great value, particularly in view of the methodical progress which local anæsthesia seems to be making on the Continent. The author tells us, for example, that in the Heidelberg Surgical Clinic, during 1906, 85 per cent. of the operations were performed under general anæsthesia, and 11·4 per cent. under local. In 1911 the numbers respectively were 52 per cent. and 42 per cent.

To the oto-laryngologist, however, we fear the book will prove to be rather disappointing, since the amount of space devoted to the operations on the throat, nose, and ear is necessarily very limited, and the various surgical procedures are rather too summarily handled.

The translator, in his preface, warns us that he has (unfortunately, we think) adopted the new Basel anatomical nomenclature, but surely even that terminological revolution has not substituted the term "internal ear" for middle ear (p. 74).

Dan McKenzie.

BOOKS RECEIVED.

Disease of the Nose, Throat and Ear. By *William Lincoln Ballenger, M.D.* Price 28*s.* net. London: Henry Kimpton, and Glasgow, 1914.

Lehrbuch der Osophagoskopie. By *Prof. Dr. Hugo Starck.* Price 8 *mks.* and 9 *mks.* Würzburg: Curt Kabitzsch, 1914.

Die Syphilis der Unschuldigen. By *Prof. Dr. P. H. Gerber.* Price 50 *pfg.* Würzburg: Curt Kabitzsch, 1914.

Pharmacopœia of the Hospital for Diseases of the Throat. Edited by *Charles A. Parker* and *T. Jefferson Faulder.* Price 2*s.* 6*d.* net. London: J. and A. Churchill, 1914.