

Dr. PHILLIPS, in reply, said he had had some X-ray pictures taken, but they are of no assistance beyond the antrum, for the reason that in young infants there are no mastoid-cells. He believed success in these cases is due to the through-and-through drainage, just as described in the paper. He had distinctly stated that it was a simple mastoid operation. The comparison with Heath's operation was interesting. The cases in which Heath gets favourable results are those in which he does the simple mastoid operation; those in which he gets unfavourable results are those which require radical mastoid operation.

Abstracts.

NOSE.

Paget, Owen F.—Adenoids as the Parents of the Incapable Nose. "Australasian Medical Gazette," January 31, 1914.

Paget has found adenoids as common, if not more so, in the perfectly dry atmosphere of Western Australia as in the damp one of London. It is difficult to find factors common in London and Western Australia. The only three apparent are, bottle-feeding of babies; the large use of patent foods; Western Australian mothers believe in soft food for children. Constant sucking of a rubber nipple brings about a Bier's suction effect in the naso-pharynx. The nature of the food given leads to deficient lime-salts in the bones, the soft bones being subject to atmospheric pressure from without. A partial vacuum being created by the constant sucking, displacement takes place. *A J. Brady.*

Bonnier, Pierre (Paris).—Hæmorrhoids and Bulbar Tonicity. "Archiv. Internat. de Laryngol., d'Otolog., et Rhinolog.," July-August, 1913.

Among the disorders of the bulbar regulating centres, which as a whole constitute what one calls arthritism, hæmorrhoidal crises, be it by their paroxysmal character or by the facility of their alternation with other manifestations arising from the neighbouring bulbar centres, clearly affirm their nuclear origin. The centres of the hæmorrhoidal region in the bulb occupy the inferior part of the column of the digestive centres. These centres are in association through the fifth cranial nerve with certain areas on the nasal mucosa of the inferior turbinate. "The point corresponding to the hæmorrhoidal centres in the nose is situated behind the genital segment, and below the utero-vesical segment and the sciatic point. This region of the head of the inferior turbinate allows us by slight cauterisation to favourably influence amenorrhœa, dysmenorrhœa, leucorrhœa, gonorrhœa, impotence, genital excitation, the internal secretions necessary to growth, the general tonicity, and to that aggregate of moral and physical tonicities to which we have popularly given the physiological name of virility, arterial tension, and the anatomical and physiological state of the urinary apparatus.

Higher up, one reaches the sensitive bundle for the chiasma. Here one can cause the disappearance of sciatica and lumbago. The centres of rectal and anal tonicity with the tenesmus, incontinence, prolapse, anal catarrh, dystrophy of the venous walls, hæmorrhoids, fissures, perverse innervations of the motor and the sensory centres of this apparatus are found in the bulb at the foot of the centre for the trigeminal fibres, which

arise from this nasal point. The awakening of these centres causes the disappearance of troubles even of remote onset arising from their derangement. Bonnier gives notes of some twenty-one diverse cases of the aforementioned disorders, in which cauterisation of these nasal areas has produced favourable results.

J. D. Lithgow.

Paget, Owen.—**A Simple Suggestion for the Prevention of Pneumonokoniosis, Pulmonary Tuberculosis, and Allied Disorders.** "Australasian Medical Gazette," December 20, 1913.

The nose is the filter of the lungs. Proper filtration stands for the abolition of pneumokoniosis and allied disorders. It should cause an enormous diminution in pulmonary tuberculosis, pneumonia, influenza, etc. Operatives in mines and factories will not suffer from their occupations. The form of nasal obstruction here discussed is not due to adenoids or to any intra-nasal growths or deformities. It is due to the lateral cartilages of the nose being pressed by positive air-pressure against the septum. The levator muscles of the *alæ* have become atrophied by disease. As remedies we have—(1) education of the nasal muscles, which can only be done with children in their school drill. (2) Operation. On no account should any operation on the interior of the nose be done. A buried suture attaching the cartilage to the nasal bone is all that is required. (3) The use of silver nasal props or supports.

A. J. Brady.

Ritchie, Delman.—**An Unusual Case of Osteoma of the Superior Maxilla** "Laryngoscope," February, 1913.

The patient, an adult male, had had complete nasal stenosis for seventeen years. Two previous operations had been performed, one through the natural passages and the other by an incision in the left side of the nose, which had left a discharging sinus near the left inner canthus. Examination showed the nose to be completely filled on both sides with a bony mass, which also filled the naso-pharynx and pushed the left eye upwards and outwards, producing diplopia. An exostosis of ivory hardness was removed piecemeal through an incision down the left side of the nose with an extension below the left orbit. The mass was the size of a fist, had extended into both antra, caused practically complete disappearance of the septum and most of the ethmoidal cells.

Recovery was uneventful, and three months later there was no recurrence.

A. J. Wright.

LARYNX AND TRACHEA.

Menzel, K. M. (Vienna).—**On the Question of Displacement of the Larynx and Trachea due to Changes in the Thoracic Organs.** "Archiv. für Laryngol.," vol. xxviii, Part I.

The writer describes a case of bronchial carcinoma of the left lung, in which, by a combination of contraction and tumour-formation, there resulted an unusual variety of displacement of the larynx and trachea. While the trachea, especially its lower end, was drawn over to the left side, the larynx was not only displaced towards the right side, but pushed upward toward the hyoid bone, and rotated on its long axis somewhat to the left.

Experimental researches carried out on the dead body showed that moderate displacement of the lower end of the trachea affected the trachea

alone, the larynx remaining in its normal position in the mid-line. Marked displacement affected the larynx only to a slight degree, and in such a way that its long axis assumed a somewhat oblique direction, and the plane passing through the upper margins of the thyroid cartilage came to be inclined at a greater or less angle to the horizontal. It was, however, not found possible to reproduce experimentally a dislocation of the larynx across the mid-line towards the side opposite to that to which the lower end of the trachea was displaced, that is, the variety of dislocation present in the case reported. In order to produce such a displacement it seems to be necessary that the trachea be displaced laterally and pushed upward, and that its walls possess a considerable degree of rigidity, such as the trachea of the dead body, owing to loss of muscular tonus and collapse of blood-vessels, does not possess. The *post-mortem* examination in the writer's case showed that, owing to the considerable development of tumour masses in the upper lobe of the left lung, the trachea had been pushed upward and to the right as though it were being thrust out of the thorax.

The author, on anatomical grounds, regards a dislocation of the larynx towards the opposite side as impossible in a case of uncomplicated aortic aneurysm, such as that reported by Curschmann. He also questions the possibility of a variety of displacement described by Curschmann as occurring in certain other cases, in which the laryngo-tracheal tube as a whole is said to be drawn or pushed to one side in such a way that its axis runs parallel with the mid-line. The author never succeeded in producing experimentally such a displacement, and regards it as inconsistent with the mode of attachment of the laryngo-tracheal tube.

Thomas Guthrie.

THYROID GLAND.

Pern, S.—Some Congenital Abnormalities of the Thyroid Gland
"Australian Med. Journ.," June 21, 1913.

Pern states that heredity has an enormous influence in the production of thyro-toxic goitre. A marked diversity of type occurs, from typical Graves's disease to thyroid insufficiency. In a few generations of goitre some of the children are born with degenerative goitres, or even become cretins. A deficiency of lime in the system is largely productive of the symptoms of thyro-toxic goitres of the type found in Graves's disease, the administration of calc. lact. has a most beneficial effect. For the degenerative type thyroid extract is the remedy.

A. J. Brady.

EAR.

Frey, Hugo.—A Contribution to the Anatomy of the Temporal Bone.
"Archiv. f. Ohrenheilk.," Bd. lxxiii.

The author confines himself chiefly to a minute consideration of the sutural relations which exist between the squamous portion and the rest of the temporal bone, and endeavours to simplify as well as add to the existing nomenclature used in the descriptive anatomy of this bone. His investigations are based on a study of the anatomy of the temporal bone (1) of an infant, (2) of a youth, and (3) of an adult. He has also derived help from a temporal bone in his possession, the squamous portion of

which can be disarticulated from the rest of the bone without artificial means. The conclusions arrived at may be briefly summarised as follows: Extending downwards from the linea temporalis there is a more or less triangular portion of the squama which is applied to the facies mastoidea of the petrous bone and helps in the formation of the mastoid process—the appendix mastoideus squamæ.

The facies mastoidea of the petrous bone is continued towards the aditus ad antrum as a triangular field which forms the substructure of the posterior wall of the external auditory meatus. It ends internally in a small tuberosity—the tuberculum antri.

A more or less pronounced vessel groove runs across the processus articularis—sulcus articularis.

The pars squamosa is united to the pars petrosa by a squamous suture. Its visible edges may be called fissuræ petrosquamosæ and have the following subdivisions: From the incisura parietalis to the internal angle between the petrosum and squamosum F. petrosquamosa interna. From this point to the medial end of the F. tympanosquamosa (lateral end of pars fissura tegmen tympani)—F. petrosquamosa externa anterior.

The F. petrosquamosa ext. post. (pars meatus) begins where the tympanic edge of the squama is applied to the prominentia epitympanica (Spee) and extends to the apex of the appendix mastoidea squamæ. The pars mastoidea of this fissure extends from the latter point to the incisura parietalis. The latter is identical with what is known as the F. mastoideosquamosa. The pars tympanica unites with the pars fissuræ tegm. tympani, and is only separated from it latterly to a small extent by the F. petrotympanica (F. Glasseri). The outer part of its anterior limb unites with the pars squamosa, F. tympanosquamosa ant. (otherwise known as the F. tympanosquamosa). The upper edge of the posterior wall of the pars tympanica forms, by applying itself to the squama, the F. tympanosquamosa post. (at present known as F. tympanomastoidea). This fissure, however, corresponds in part with the pars meatus of the F. petrosquamosa externa post., which should always be implied when the former is mentioned, the name F. tympanosquamosa being sufficient without any addition to designate the above-mentioned F. tympanosquamosa ant. To fully appreciate this work it would be necessary to read the original article and consult the accompanying figures.

J. B. Horjan.

Law, Fred. M.—Radiography as an aid in the Diagnosis of Mastoid Disease. “Annals of Otology, etc.,” xxii, p. 635.

In a short paper the author demonstrates that a radiograph of the mastoid will show—the size and extent of the mastoid cells; the presence of pathological material; sometimes the presence of sclerosis; the presence of cholesteatoma; the approximate size and position of the lateral sinus and emissary vein.

Macleod Yearsley.

Stewart, Wm. H.—Radiographic Findings Illustrating the Anatomic Development of the Mastoid Bone. “Annals of Otology, etc.,” xxii, p. 678.

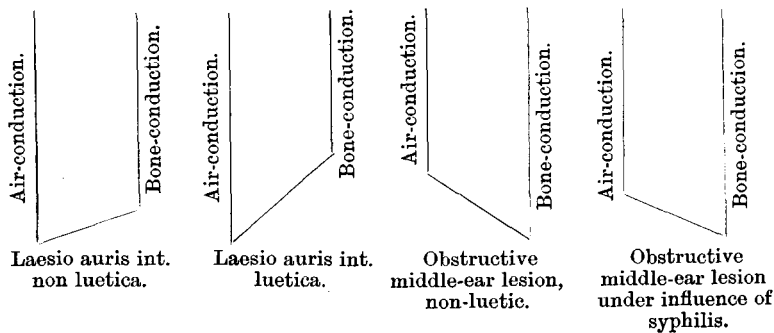
The results of Stewart's investigations have been partially successful in demonstrating—(1) that we frequently have distinct and well-formed pneumatic cells as early as two years. (2) That there is a wide variance in the character, location, and extent of the mastoid cells under ten years. (3) That given six children of any age, say five years, no two will have

mastoids alike. (4) That the generally accepted view that the cells are of the same character on both sides is not true in all cases—the authors' experience with the normal will show that while the majority have a great similarity on both sides, in about 15 per cent. there is considerable variance in the character. (5) That the mastoid cells of the pneumatic type may extend into the occipital bone back of the sigmoid portion of the lateral sinus; into the squamous portion of the temporal; and above the external auditory canal to the root of the zygoma. (6) That with a fairly intelligent child the radiographic examination will clearly show the character and location of the mastoid cells in their relation to the lateral sinus, the external auditory canal and the tegmen tympani. The paper is illustrated by nine plates. *Macleod Yearsley.*

Beck, Oscar.—Bone-conduction in Syphilis. "Monats. f. Ohrenh.," Year 47, No. 8.

This is a readable and concise article on certain phenomena which have been observed and investigated by the author.

Beck has noted that it is very common to find the bone-conduction much shortened in syphilis during the "secondary" period of the disease. A table is published illustrating this point by comparative observation on both luetic and non-luetic aural lesions taken without selection, and he graphically records his findings by the following diagrams.



Two cases reported are most striking. A young girl came to the clinic complaining of fever, headache, and pain in the ear of some days' duration. Membrana tympani red and swollen and postero-superior quadrant bulging; other details obscured. Weber to the affected side, where also the range for speech was much reduced: Air-conduction almost normal, and bone-conduction certainly not lengthened. Diagnosis made: Otitis media suppurativa acuta, most probably luetic. Syphilis was admitted and Wassermann proved positive. The fact that with an acute middle-ear lesion the bone-conduction was not lengthened was one of the main reasons for giving this diagnosis. Beck contends that a shortening of bone-conduction must have existed in this ear before the onset of the middle-ear affection, and that the lengthening of bone-conduction due to middle-ear involvement had in this case made a really shortened bone-conduction appear as normal.

An engineer was sent to him for examination of the ears prior to an injection of salvarsan—a primary lesion had been diagnosed on the finding of spirochaetes. Wassermann, however, was negative, and no glandular or other signs could be detected. Since the bone-conduction on each side was much reduced with otherwise normal ears Beck regarded the case as

one in which general infection had already taken place, although this was not the view of the dermatologist who had sent the patient. The man was treated with salvarsan and mercury for half a year without any symptom appearing, but the bone-conduction remained shortened, and very soon a papular eruption appeared on the lips and tonsils. The Wassermann now gave a positive result. Beck has never found salvarsan and mercury cause an alteration in this shortened bone-conduction.

It is not easy to determine the solution of this symptom. At first he had supposed it to be in relation to the blood-pressure, but this was found inaccurate. He thinks, however, there is good reason to suppose that it is associated with an increased pressure of the cerebro-spinal fluid, and has noted that, with the exception of one case, the effect on the shortening—*i. e.* restoration—of bone-conduction could be demonstrated some three hours after the removal of, on the average, six cubic centimetres of fluid. He suggests that this rise of pressure in the cerebro-spinal fluid may also account for the increase in the skin and tendon-reflexes which occurs in connection with syphilitic exanthemata; although it is further remarkable that the amount of the shortening of bone-conduction will at times vary on the two sides in the same patient, as the following case illustrated: A housemaid, aged twenty-five, with a positive Wassermann reaction and a history of primary affection three weeks previously. The membranam tympani and middle ear were normal on each side, but the bone-conduction, as estimated by the electrical tuning-fork devised by Urbantschitsch, was about twice as long on the left side compared with the right. The reflexes on the left side were markedly increased. In this patient, therefore, the decreased bone-conduction on the right side—that is, the side on which the intracranial pressure was greater according to this hypothesis—was associated with an exaggeration of the reflexes on the contralateral side, a circumstance that would tend to support this theory of the causal relation of raised pressure within the skull and shortening of bone-conduction.

The electrical tuning-fork alluded to is an instrument which has apparently already been demonstrated in Vienna, and which enables the amount of bone-conduction to be accurately compared and recorded.

Alex. R. Tweedie.

MISCELLANEOUS.

Harmer, Douglas.—The Treatment of Inflammatory Conditions in the Upper Air-Passages by Vaccines. "Proc. Roy. Soc. Med.," March, 1914, Med. Sect., p. 103.

From a discussion on "Vaccines from the Standpoint of the Physician." The author finds that some people are very sensitive, and reactions, both general and local, are more frequent than is generally supposed. The introduction of sensitised vaccines enables large doses to be given, which are necessary in the more acute infections. In acute streptococcus infection doses of 100, 500, and 1000 million can be given on three succeeding days. Good results are got in cases of acute streptococcus infection. The pneumococcal cases are disappointing, perhaps because of the varying strains of pneumococci; also the pneumococci are difficult to sensitise.

Colds, pharyngitis and laryngitis are usually due to combined infection with pneumococcus and catarrhalis or pneumococcus and influenza.

In fourteen cases treated with influenza and pneumococcus vaccine, definite improvement was noted in eight, and in fifteen cases treated with pneumococcus and catarrhalis, improvement was got in eleven.

In chronic sinusitis streptococcus and Friedländer vaccines gave good results; pneumococcus, influenza, staphylococcus, and coliform organisms were valueless. Two cases of sinus suppuration treated with sensitised streptococcus vaccine are mentioned. The first was cured with three injections after suffering from purulent discharge from the antro- and fronto-ethmoidal cells for many years. The second, suffering from pansinusitis, had had repeated operations on her septum and nasal sinuses; after two doses the discharge was very much lessened.

Friedländer vaccine was of no curative value in fourteen cases of atrophic rhinitis treated for varying periods.

The results of immunising vaccines before operation to avoid high temperature, septic wounds, etc., have been good.

The author then draws attention to the dangers of vaccines. Some patients are very susceptible to influenza vaccines, which are often very depressing. He knows of no case which was made permanently worse by inoculation.

Raymond Vérel.

Jouty, Antoine.—**Hypertrophy of the Thymus Glands in a Child, two and a half years old; Thymectomy, Suppurative Mediastinitis, Recovery.** "Annales des Mal. de l'Oreille, du Larynx, du Nez, et du Pharynx," vol. xxxix, No. 7.

January 17, 1912, a child was seen by the author suffering from noisy dyspnoea. The mother gave the following history: Three months previously he became hoarse and shortly afterwards developed a croupy cough with spasms resembling pertussis. During deglutition fluids frequently passed the wrong way, but not so solids. Dyspnoea set in and had been almost continual since. Now the child was sometimes awakened in a state of suffocation. General health good. Nothing of note in the family or personal history. There was evidence of a well-developed collateral circulation at the upper part of the thorax. Breathing was attended with inspiratory stridor and slight parietal recession. No cyanosis. Indirect laryngoscopy was impossible. The direct method by Killian's tube-spatula revealed contraction of the adductors and tensors of the cords.

As the condition of the patient became threatening, tracheotomy was performed without further investigation. Breathing became free directly the cannula was introduced. The dyspnoea was therefore ascribed to glottic spasm, probably the result of enlarged tracheo-bronchial glands. Some days subsequently dyspnoea recurred, but it was expiratory as well as inspiratory; slight at first, it went on increasing until on the twelfth day the condition of the patient became alarming. Inferior tracheo-bronchoscopy was attempted but failed, for as soon as the tube was introduced a suffocative attack came on even after preliminary swabbing with cocaine. The author now considered an enlarged thymus might be responsible for the trouble. During the tracheotomy he remembered having seen a piece of gland-like tissue come into view during an expiratory effort, which at the time was supposed to be an enlarged lymphatic gland; this might have been the upper pole of the thymus. On deeply palpating the supra-sternal fossa with the index finger resistance was felt. Thymectomy was now performed under local anæsthesia. The gland removed, the child breathed normally. The cervico-thoracic wound was sutured and the tracheal tube retained for safety. On the following days, though breathing freely, the patient continued to cough and expel

large quantities of mucus through the cannula and tracheal wound. The cervico-thoracic wound became infected, necessitating immediate removal of the sutures. At each expiratory effort pus welled up from the retro-sternal space. Suppurative mediastinitis had been set up. To facilitate drainage the child was placed in an inclined position, and irrigations with peroxide of hydrogen were carried out with a glass tube, six times daily. Suppuration gradually subsided and ceased after twelve days. The operation wound closed well. The tracheotomy tube was worn two months longer and then withdrawn. The writer observes that this case is interesting in that it clearly demonstrates the mechanism of dyspnoea during the evolution of thymus hypertrophy. Dyspnoea was primarily due to glottic spasm induced by irritation of the recurrent nerves, and later to tracheal compression. In this case it would have been preferable to have removed the thymus gland at once without a preliminary tracheotomy. Mediastinal infection would thus have been avoided.

H. Clayton Fox.

Wachter, H. (Erlangen).—A Case of Multiple Plasmacytoma of the Upper Air-passages. "Archiv. für Laryngol.," vol. xxviii, Part 1.

The patient, a woman, aged forty-eight, had suffered at intervals during a period of ten years from hoarseness and nasal obstruction due to a number of separate tumour-masses situated at various points in the upper air-passages. The growths were found in both nasal cavities, on the posterior surface of the soft palate, on the left Eustachian cushion, and on the left ventricular band. They displayed a marked tendency to recur after removal, but never exceeded a cherry in size. All the tumours were covered by normal mucous membrane, showed no tendency to break down, or to form metastases. They consisted of masses of plasma-cells, the great majority of which possessed one excentrically situated nucleus and a basophile granular protoplasm. The cells were embedded in a regular connective-tissue stroma with rectangular meshes.

The patient's general health remained unaffected and the lymphatic and hæmatopoietic systems showed no departure from the normal.

Two somewhat similar cases have been reported by Birt and von Werdt.

Thomas Guthrie.

REVIEWS.

The Catarrhal and Suppurative Diseases of the Accessory Sinuses of the Nose. By ROSS HALL SKILLERN, M.D. Philadelphia and London: J. B. Lippincott Company. Price 18s. net.

This painstaking work on the nasal sinuses in health and disease is well worth studying. But the student must prepare to wrestle, at times, with the author's meaning, especially in the anatomical descriptions. The following citation, for example, is not modelled with the precision of the "Gray's Anatomy" of our youth. "The ostium of the [sphenoidal] sinus is situated in the nasal portion of the wall, usually in the upper third and seldom *below the median line* (Fig. 223). Whether it lies close to the nasal septum appears to depend largely upon the depth of the sphenothmoidal recess, as the deeper the recess the further *away from the median line* it seems to find its location." (Italics ours.) There is no