Ozæna and syphilitic lesions of the nose frequently affect the lachrymal apparatus, while tuberculosis of the lachrymal passages is almost entirely secondary to an ascending tuberculosis from the nasal mucosa. J. D. Lithgow.

Schlemmer, Fritz.—Partial Bilateral Occlusion of the Choanæ by a Congenital Retro-nasal Transverse Fold. "Monats. f. Ohrenheilk.," Year 46, No. 9.

The case occurred in a woman, aged forty-four, who had had four normal pregnancies and no miscarriages. She could not state when her troubles definitely commenced, but for the last four years or so she had suffered with chronic "colds," frequent attacks of "influenza," and some severe headache chiefly on the left side, with rheumatic pains in her limbs. During this period the nose had been "stopped up," but she had only now considered this of sufficient importance to seek advice.

Examination showed a condition of atrophic rhinitis with ozæna and muco-purulent secretion, more pronounced on the left side, on which the antrum was also implicated. An easy view was obtainable of the nasopharynx from the front, where an uneven, irregular band could be seen stretching across from one Eustachian cushion to the other. Posteriorly the choane were symmetrical and unobscured, except where the band crossed about their middle.

The origin of the condition was either congenital, the result of scleroma, or syphilitic. Against syphilis was the history and a negative Wassermann, and no support could be found to the view that it might be due to scleroma.

A Caldwell-Luc operation was performed on the left antrum, and the "band" removed with a conchotome and cold snare.

Histological examination revealed a tissue resembling adenoids, thickly beset with lymph-follicles, which thus very strongly suggested its probable congenital origin, since, as Chiari had pointed out, glandular tissue was never found in scar-formation.

The patient regained complete nasal respiration, and under treatment the crusting, etc., ceased. The author has been able to find only one report of a similar case.

Alex. R. Tweedie.

EAR.

Beck, J. C.—Contribution to the Pathology and Treatment of Otosclerosis. "Annals of Otol., Rhinol., and Laryngol.," xxi, p. 203.

Being much impressed by the similarity in the bony changes of osteomalacia and otosclerosis, the author has been using hyperdermic injections of adrenalin. The technique used is described. Eleven cases were experimented upon. In no advanced case was there any result as to hearing, but in one tinnitus ceased. Three cases, less advanced in type. improved in hearing. Macleod Yearsley.

Braun, A.—Deep Temporal Abscess. "Annals of Otol., Rhinol., and Laryngol.," xxi, p. 170.

Describes three cases of deep temporal abscess (under the temporal muscle), and discusses pathology and treatment. A good exposition of a little-described condition. Macleod Yearsley.

Sugár, Martin (Budapest).—The Works of the late Prof. Andreas Högyes on "The Nervous Mechanism of Associated Eye-movements." "Monats. f. Ohren.," Year 46, Nos. 6, 7, 8, 11 and 12.

Although many allusions to these investigations are to be found in German literature, the author considers the original report to be of so great interest and importance as to merit a verbatim translation from the Hungarian articles first published in the *Annals of the Budapest Academy* of Science in 1881. This account, which Sugár prefaces with a short biographical sketch, forms the only authorised German version of a most orderly, elaborate, and accurate report on the functions of the semicircular canals and associated nystagmus.

The story of the research and its results commences with a long introduction explanatory of the initial observations, which apparently induced Högyes to pursue his studies in this direction, and thus led up to his attempts to elucidate the origin and meaning of these phenomena by experimental research on animals. Reference is first made to the normal co-ordinate movements of the eyes in the varying positions of the head, and the relation of these movements to the various central nuclei. The observations and opinions of other writers thereon are carefully weighed and compared with his own, which he is thus able to support by the help of facts gleaned from his experiments.

These latter at first were directed towards the accurate observation of the results of rotation on rabbits, and it is somewhat surprising to find a most clear illustration of the mechanical device used for not only arrying this out, but also for accurately and graphically recording on a drum the resulting nystagmus, some charts of which are included. Most detailed notes were taken of both stimuli and their effects. Indeed so exhaustive and convincing is the whole work that one cannot help wondering how the knowledge of this research and its immense clinical importance took so long to become disseminated throughout the otolocical world.

With this physiological foundation Högyes then proceeded to perform various destructive lesions of the brain and cerebellum, and to note how the "normal" reactions then varied. His conclusions at this stage may requoted as an instance of the clear character of the work, and of how facts noted were marshalled as he progressed :

"1. The compensatory or passive associated eye-movements remain unaffected after destruction of (1) The optic nerves; (2) the cerebral demispheres and great basal ganglia; (3) the optic thalami; (4) the outerior portion of the corpora quadrigemina; (5) the spinal cord up to the level of the auditory nerves.

"2. They are completely lost under the following circumstances: (1) If the oculo-motor muscles or nerves are completely divided; (2) if a iestructive lesion is performed in the middle line between the middle of imanterior quadrigeminal bodies and the nuclei of the eighth nerves; (2) if the upper part of the floor of the fourth ventricle is divided in the middle-line; (4) if the eighth nerve on each side is divided; (5) if the enumbranous labyrinth on each side is divided.

"3. The eye-movements are affected more or less up to complete (-/sation by (1) division of one optic nerve; (2) extirpation of a h misphere, optic thalamus, and anterior part of the anterior corpora quadrigemina; (3) unilateral longitudinal and transverse division of the the floor of the fourth ventricle; (4) unilateral destruction of the membranous labyrinth or eighth nerve."

Next, the effect of various stimuli under artificial conditions were then investigated and summarised, and then the whole series of experiments having been passed in review, the first part of the paper terminates with the conclusions at which the author then arrives. These consist in a relation of the various anatomical parts, the integrity of which Högyes states is essential for the appearance or production of these "involuntary associated movements of the eyes," supported by detailed references to the results of his experimental research.

Two other parts follow in which further experimental work is described and deductions drawn therefrom. The article concludes with a diagrammatic scheme illustrating the source, route, and result of various stimuli.

In addition to the very large amount of time he must have spent in evolving the data on which his account is based, allusions to over forty works in Hungarian, French, Dutch, German and English bear ample testimony to Högyes' untiring efforts to unravel the intricacies of his subject.

To give an adequate abstract of such a work is impossible, and the attempt would be but a poor tribute to its value and the labour it represents. Although those interested in it may find nothing that now is not well known, still it is well worth reading if only from an historical point of view, nor can they help being astonished that a quarter of v century was to elapse before the clinical significance of these experiments came to be generally recognised—and that mainly through the agency of Bárány and the Vienna School. *A. R. Tweedie.*

Shambaugh, Geo. E.—On the Origin of Compensatory Tonus after Destruction of the Labyrinth. "Annals of Otology," etc., xxi. p. 697.

Compensatory impulses that develop after the destruction of a labyrinth and which restore the disturbed balance in equilibrium may have two sources. One is the compensatory increase in those tone impulses from the remaining labyrinth which direct nystagmus to the opposite side But it is clear that in most cases the restoration of equilibrium is accomplished by a compensatory tonus which, in part at least, is developed independent of the opposite labyrinth. Shambaugh cannot accept the view that automatic tonus centres exist in Deiter's nucleus. The restoration of the normal extra-labyrinthine tonus is not sufficient to restore the disturbed equilibrium due to unilateral loss of labyrinthine impulses. Its place must be supplied by the development of an additional tonus developed chiefly from the extra-labyrinthine impulses. It is only in cases of long-standing destruction of one labyrinth where the compensatory tonus from the remaining labyrinth supplants completely thicompensatory extra-labyrinth tonus.

The restoration of equilibrium which follows the destruction of both labyrinths is never a complete restoration of the normal equilibrium.

Macleod Yearsley.

PHARYNX.

Sigmund, Marx.—(" On Reflex Cough," etc.) Pharyngeal Cough and its Treatment. " Zeits, fur. Ohrenheilk.," vol. lxv, Part IV.

The writer records eight cases in which, by treatment directed to the tonsils, he was able to entirely relieve a distressing convulsive cough.