

anterior corpus quadrigeminum and another in occipital region. *Right middle and inner ear.*—Results of tubercular disease.

(i) *Tumour involving Auditory Nerve.*—Female, aged twenty-five; was mentally dull and bed-ridden for many months before death; face very expressionless; patient was blind, and had double optic neuritis. Death from coma. *Post-mortem.*—The outer or cranial surface of the dura, over almost its entire extent, was covered with small pedunculated tumours about the size of canary seed. On removal of the dura the inner surface of the cranial bones appeared as if deeply marked by smallpox. In the region of the right internal auditory meatus and cerebello-pontine angle there was a tumour mass about the size of a walnut which pressed the pons, medulla, and cerebellum towards the left side. Right ear demonstrated.

(j) *Cerebello-pontine Angle Tumour.*—Female, aged seventy-five. Complained of giddiness and deafness of five years' duration, also of noises in left ear. Patient could not walk without assistance; almost complete deafness; well-marked arteriosclerosis. *Functional examination.*—C32 and C64 not heard by either ear. C128-C1024 heard faintly by right ear but not by left. C2048 not heard by either ear. Schwabach shortened markedly. Galton whistle not heard. During her stay in hospital giddiness improved for a time, but got worse again. One year later headache developed and deafness became complete. Before death right arm, leg, and face became paralysed. *Post-mortem.*—Tumour of eighth nerve on right side eroding internal meatus. (Subsequent microscopic examination of left ear showed spontaneous cure of labyrinthitis, but this was not demonstrated). Right ear and tumour demonstrated.

(To be continued.)

Abstracts.

PHARYNX.

Capps, Joseph A. (Chicago).—Epidemic Streptococcus Sore Throat. "Journ. Amer. Med. Assoc.," September 16, 1913.

A review of the three epidemics in Boston, Baltimore, and Chicago, in which over 12,000 people were affected. In all three cities a peculiar type of hæmolytic capsulated streptococcus was secured from the throat cultures, or the peritoneal exudate of fatal cases, and the infection was traced definitely to a single milk supply. The source of the milk contamination was: (1) Streptococcus in the mixed milk at the collecting plant or farm; (2) mastitis in cows, from whose udders streptococcus is directly obtained; (3) streptococcus sore throat in the milkers; or (4) streptococcus sore throat in other employees who handle the milk. Pasteurisation is strongly advised as the most radical and simplest way of ending the malady. *Birkett (Rogers).*

Levinstein, Oswald (Berlin).—A Contribution to the Pathology of Diseases of the Mucous Membrane of the Mouth and Pharynx. "Zeitschr. f. Laryngol.," Bd. vi, Heft 2.

The writer records a case of stomato-pharyngitis ulcerosa disseminata (Frese). The patient was a male, aged thirty-six, who had suffered from attacks of ulceration of the mouth for five years. The ulceration was

accompanied by burning pain and the healing process took a long time, during which other ulcers formed. The general health of the patient, however, remained good. On examination, Levinstein found a sharply cut ulcer on one anterior faucial pillar. The ulcer was about the size of a five-pfennig piece and had a greyish base and red edges; scars of old ulcers could be seen on the inner surface of the cheeks and on the soft palate. The patient's teeth were good and there was no fœtor of the breath. Treatment with peroxide of hydrogen, anæsthesin and phenol tablets. Three weeks later the ulcer had healed, but a similar one had appeared on the opposite anterior pillar. A smear from the ulcer showed bacilli and cocci, but no spirochætæ or fusiform organisms. The Wassermann reaction was negative. Microscopic sections of the ulcer showed that the epithelium was penetrated and the submucous tissue invaded. Levinstein states that stomato-pharyngitis ulcerosa disseminata must be distinguished from aphthous stomatitis, in which only the epithelium is affected; also from herpes, pemphigus, erythema exudativum multiforme, syphilis and tuberculosis. Herpes has a different clinical course; pemphigus, erythema multiforme and syphilis are all accompanied by skin eruptions. Levinstein treated his patient with gargles containing peroxide of hydrogen and insufflations of anæsthesin. Calcium chloride was administered internally.

In the same paper Levinstein records a case of eczema of the cheeks and pharynx in a patient who suffered from chronic eczema of the skin. For three years the patient had suffered from pain in the mouth associated with the formation of red spots and small ulcers which became covered with a false membrane. The author states that erythema multiforme (for which eczema of the mouth may be mistaken) is more acute and accompanied by more intense hyperæmia. *J. S. Fraser.*

NOSE.

Hill, Leonard, and Muecke, Francis F.—Colds in the Head. "Lancet," May 10, 1913.

An investigation into the influence of warm confined atmospheres on the mucous membrane of the nose and throat. The mucosa becomes turgid with blood and tissue lymph and covered with thick secretion, airway being narrowed, especially if the septum is deflected. On passing into a cold atmosphere, the mucosa pales, but remains swollen with tissue lymph. This process seems likely to increase liability to infection. The authors believe that colds are due to the massive direct transmission of bacteria in warmed confined atmospheres, followed by exposure to cold, moist outer air. The danger is diminished by keeping the air moving. The authors also find that convection heat flushes and swells the nasal mucous membrane, whilst radiant heat causes sweating of the skin and does not affect the nose. *Macleod Yearsley.*

Ingersoll, J. M.—The Morphologic Changes in the Nose and Face due to the Development of the Brain. "Annals of Otology, etc.," xxi, p. 557.

A concise paper, describing the brain and nose in fishes, amphibians, reptiles, birds, and mammals. The tremendous development of the human brain carries it forward so that it extends over the nasal cavity and changes the facial angle. The nose, instead of being anterior to the brain, lies almost directly under it, and the cribriform plate forms the

roof of the nose in man, whereas in most other vertebrate it forms the posterior boundary. The olfactory organ in apes, and especially in man, is a decidedly degenerated structure. The author might have extended his paper a little to demonstrate the result of these changes upon the growth of the septum nasi and their possible influence upon the formation of deviations.

Macleod Yearsley.

LARYNX.

Cisler, Prof. (Prague).—Disturbances of the Voice and Articulation, caused by Atropine Poisoning. "Zeitschr. f. Laryngol.," Bd. vi, Heft 3.

The author states that the dryness of the throat caused by atropine is due to paralysis of the endings of the peripheral secretory nerves. Atropine also produces dilatation of the pupil, burning feeling and thirst, difficulty in swallowing, hoarseness, and a tendency to vomit. Later there is aphonia and aphagia—the attempt to drink water brings on cramp of the swallowing muscles. Finally headache, giddiness, dulness of sensibility, hallucinations and loss of consciousness supervene. The cramp of the adductor muscles of the larynx is due to the fact that in the cerebral cortex the adductor centres dominate the abductor centres; this, of course, is the opposite of the conditions which obtain in the medulla. The writer comes to the conclusion that the disturbances of voice and articulation caused by atropine poisoning are due not only to the dryness of the mucous membrane, but also to cramp of the muscles which close the glottis.

J. S. Fraser.

Packard, F. R.—Carcinoma of the Larynx removed by Thyrotomy. "Annals of Otology, etc.," xxi, p. 408.

Male, aged fifty. Symptoms of a year's duration; choking, husky voice, and dry cough. No pain. Microscopical examination of a removed portion showed it to be carcinoma. Thyrotomy, after tracheotomy. Growth enucleated and found to be attached on right side of inner surface of thyroid cartilage. Size of a very large walnut. Operation on February 18, 1911; no recurrence, May 2, 1912.

Macleod Yearsley.

EAR.

Lewin, Leo. (St. Petersburg).—Concerning Congenital Atresia of the External Meatus with Microtia and their Surgical Treatment. "Monats. f. Ohrenheilk.," Year 47, No. 7.

A summary of the views and experience of various authors on this anomaly introduces the story of a girl, aged fifteen, whose hearing her elder sister implored Lewin to improve.

On both sides the auricle was rudimentary and no trace of a meatus was to be discovered. Soft palate normal in form and movement. The openings of the Eustachian tubes could be seen on posterior rhinoscopy; that on the right was normal but on the left side it was obviously underdeveloped. Inflation was fairly easy but was accompanied by an undoubtedly greater noise on the right side. The bougie passed 30 mm. on the right side but only 16 mm. on the left, and that with difficulty.

		<i>Functional Tests.</i>		
Right.				Left.
Ad. conch.	.	Watch	.	Ad. conch.
Not heard	.	Whisper	.	Not heard.
1.5	.	Conversation	.	1.0.
Not heard	.	C ₁₁ - C ₁	.	Not heard.
Shortened	.	C ₂ - C ₃	.	Shortened.
Normal	.	Galton	.	Normal.
Neg.	.	Rinne	.	Neg.
		Weber	.	>
Lengthened	.	Bone-conduction	.	Lengthened.

Vestibular apparatus completely normal.

An X-ray picture was taken with a catheter and metal sound passed into the tubes, demonstrating the fact that no tympanic cavity probably existed (a good print of this accompanies the text, though unfortunately inverted by mistake). This, however, Lewin did not accept as absolute proof, and after careful consideration of the whole question determined to operate on the better (right) ear. Great difficulty was experienced in deciding the situation of the antrum as no landmarks appeared on reflection of the skin, and the site for approach had to be located from the relation of the proc. zygomat. After some careful excavation a minute antrum was discovered, "the size of a pea," lined with normal mucous membrane. The eminence corresponding to the external horizontal canal and the aditus could also be demonstrated, but no tympanic cavity or ossicles could be found. This, therefore, brought the operation to an end and the wound was closed.

The subsequent result to the functional tests showed much improvement, and the range for conversation was now doubled, viz. 3 metres. Lewin summarises his advice as follows :

(1) The inner ear must be proved to be intact in order to expect any improvement in hearing from operative procedures on cases of congenital atresia of the outer meatus.

(2) If in such cases in addition the middle ear is deformed a slight improvement in hearing may obtain should one be successful in constructing a route up to the labyrinth wall.

(3) Operative treatment of cases of atresia where the tympanic cavity is normal affords a far better measure of success.

(4) The cosmetic result of operation is most satisfactory, as an opening is established in the usual position. *Alex. R. Tweedie.*

REVIEW.

Diseases of the Nose, Throat and Ear. By FRANCIS R. PACKARD, M.D.
 Second edition. Pp. xvi + 377. Illustrated. Philadelphia and London: J. B. Lippincott Company. Price 15s. net.

This work has run through a first edition in a relatively short space of time. The general arrangement, some excellent illustrations, as well as the printing, are worthy of praise, though we feel that several of the illustrations are unlikely to serve a useful purpose, e.g. a figure showing eleven instruments set out as instruments for a "tonsillotomy."

In some cases the information afforded is lamentably deficient; for instance, the whole chapter on laryngeal neuroses occupies but three pages, in fact we can best illustrate the limitations of the text-book by citing at length (except for the sixteen lines on treatment) the entire section on