onset, with complete loss of function, it could not be pronounced a case of labyrinth suppuration. There must be typical signs of suppurative labyrinthitis. There was, with suppurative labyrinthitis, sudden, complete loss of hearing, loss of equilibrium, with negative findings by caloric tests, by galvanism, and by turning. Answering a question by Dr. Pierce concerning the method of differentiating between serous and suppurative labyrinthitis, the speaker said it was indeed difficult to make the differentiation early. Headache and fundus findings were guides. When present they suggested a suppurative type of labyrinthitis.

Dr. George L. Richards asked whether the discussion concerned the perilymph or endolymph channels, whether within or without the membranous labyrinth. It made a great difference.

Dr. Norval H. Pierce said the functional symptoms of serous and suppurative labyrinthitis were the same, and one condition could not be differentiated from the other. The only light thrown on the subject was that given by the meningeal complications. It was better not to operate until the meninge were involved.

Dr. Dench, in closing the discussion, said, in answer to Dr. Richards' question, the subject involved both the perilymph and the endolymph, and was within the bony capsule. It could not involve the endolymph without involving the perilymph. That was just the hair-splitting question the German school had raised. He could not agree with Dr. MacKenzie with reference to the treatment of circumscribed labyrinthitis. He believed it wise, in the presence of a fistulous tract, to go in with the curette where this could be done without breaking down Nature's barriers to the course of infection. He removed all necrosis with a small curette.

(*To be continued.*)

Abstracts.

LARYNX.

Cancer of the Larynx complicated with Laryngocele.—Smith, Harmon, The "Laryngoscope," August, 1915, p. 560.

Laryngocele ventricularis may be due to playing on wind instruments or to sudden explosions of air, as in coughing. Harmon Smith records a case of a male, aged thirty-seven, who suffered from hoarseness, with occasional loss of voice, for two years. At times there was dyspnœa. For one month he had suffered from pain radiating towards the ears. Laryngoscopy revealed a large tumour of the left ary-epiglottic fold which pushed the epiglottis to the opposite side and obscured the cavity of the larynx. The tumour also projected into the neck just beneath the hyoid bone and was of a cystic or fatty consistency. Smith punctured the swelling, when there was a sudden expulsion of gas, accompanied by a noise like that made by the bursting of a toy balloon. After this the tumour had entirely disappeared, not only in the larynx, but also in the neck. Further examination now showed a large mass involving both true cords, ventricular bands, and the anterior commissure. The laryngocele appeared to be secondary to this malignant invasion of the larynx. The patient's breath had a cancerous odour, and both cords were slightly fixed. One cord was ulcerated. (Wassermann reaction

negative: no signs of tuberculosis.) Subsequent examinations showed that the air sac had refilled. Operation on the larynx was advised, but the patient died suddenly, probably from suffocation due to œdema. There was no autopsy. *J. S. Fraser.*

Laryngostomy.—L. Mahler. "Nord. Tidskr. f. Oto. Rhino. Laryng.," Bd. 1, no. 1, p. 107.

Two cases reported. (1) A girl, aged seventeen, who had worn a tracheotomy tube for thirteen years. After many vain attempts to enable the patient to dispense with the tube, such as the introduction of Mikulicz's glass cannula, intubation, and so on, laryngostomy was tried, and with great success. The larynx was opened and its lumen dilated up by means of drainage tubes according to the method of Ferreri. After four months of this treatment it was found possible to leave off treatment with the tubes, and five months later the larynx was closed by Gluck's plastic operation. The result was excellent, the girl being able to speak with a strong resonant voice. (2) The second case was one of laryngeal papilloma in a boy, aged eight, in whom five attempts to get rid of the papilloma by endoscopic operation had failed. Laryngostomy was performed with the energetic removal of the growths and the mucous membrane, the cartilage being laid bare in some places. Twenty-five days after the operation the larynx was closed, and three months later no sign of any further recurrence could be found. The author is cautious in his expressions regarding the utility of laryngostomy, but he believes that it furnishes an operative method which may lead to further developments. *Dan McKenzie.*

Foreign Bodies in the Bronchi complicated by General Emphysema.—Lynch, Henry. The "Laryngoscope," August, 1915, p. 574.

Lynch records two cases. (1) Boy, aged eight, was admitted with a diagnosis of laryngeal diphtheria. On examination extensive subcutaneous emphysema was found extending to the neck, face, chest, arms, hands, and the abdomen down to Poupart's ligament. There was slight exudate on the tonsils and the uvula had disappeared, but this was due to a recent tonsillotomy. Wheezing and cough were present. Antitoxin was given. Next day the symptoms had markedly progressed and intubation was performed, but did no good. The tube was at once removed, and thereafter a cast of membrane was coughed up. Direct laryngeal examination showed no exudate, but marked sub-glottic infiltration was present. Bronchoscopy revealed patches of membrane and ulceration in the trachea and right bronchus. Lynch was unable to ascertain the cause of the emphysema. The patient made a slow convalescence and suffered from cardiac weakness and paralysis of the palate. The cultures taken by the direct method were all positive. Case 2.—Boy, aged three, had a violent choking spell while eating carrot. The child's father administered first-aid by spanking and poked his fingers down the child's throat and removed a piece of carrot. After that the child was able to breathe. Paroxysmal attacks of coughing, however, continued, and four days later Lynch found the patient *in extremis*. Marked subcutaneous emphysema was present as in the first case. Direct laryngeal examination showed that the upper aperture of the larynx was swollen and glistening. A small bronchoscope was introduced to act as a guide for low tracheotomy, and also to give air.

On opening the trachea there was no expiratory cough. A 7 mm. tracheoscope was introduced, and a large piece of carrot pulp removed from the right bronchus before death. *Post-mortem.*—The superior mediastinum was emphysematous and the visceral pleuræ was covered with blebs, but there was no pneumothorax. The pericardial sac was ballooned with air. The trachea and main bronchi showed no emphysema, but there was a small piece of carrot pulp impacted in the branch to the right upper lobe: a portion of this lobe was collapsed. The branches to the middle and inferior lobe were not occluded, but these lobes were enormously emphysematous. The left main bronchus contained a small piece of the pulp, while the fourth and last piece of carrot was lodged in the branch to the left lower lobe, at which point there was a fairly well-defined abscess. Lynch suggests that some of the emphysematous blebs ruptured into the mediastinum and that the air thus got out into the connective tissue planes. *J. S. Fraser.*

NOSE.

The Innervation of the Nasal Chambers.—Brubaker, A. P. "Annals of Otology, etc.," xxv, 607.

A good exposition of the subject. The facts, taken collectively, show that the physiological conditions of the nasal chambers require for their maintenance a complex nerve mechanism; a mechanism which, however, may be easily impaired and rendered unstable by internal causes, whereupon it acts in an abnormal manner, and thus lays the foundation for the development of pathological states of longer or shorter duration.
Macleod Yearsley.

Vagotonia, apparently originating in the Nasal Accessory Sinuses.—Fetterolf, Geo. "Annals of Otology, etc.," xxv, 587.

Vagotonia is a condition of excitement or hypertonus of a group of nerves called the "extended vagus." This latter phrase is applied to a nerve series which includes not only the pneumogastric, but also a group of nerves with similar function. Antagonistic to the vagus group is the sympathetic, and there exists a condition thereof called sympatheticonia, which is a state of excitement or hypertonus of the sympathetic system.

The case, was a lad, aged twelve, and his condition dated from measles at seven. He suffered from profuse night sweats, coughing, sneezing, expectoration, and nasal discharge. Improvement ensued, when it was discovered that there was chronic suppuration of the left posterior ethmoidal and sphenoidal cells. *Macleod Yearsley.*

Suppuration of the Accessory Nasal Sinuses as a Possible Ætiologic Factor in Multiple Sclerosis.—Stark, H. H. "Annals of Otology, etc.," xxv, 710.

Impressed with the similarity of the eye symptoms in accessory sinus suppuration and multiple sclerosis, the author was induced to look into the subject. The eye symptoms in multiple sclerosis are amblyopia, nerve involvement, muscle involvement, including nystagmus, changes in the pupil and field of vision. These are taken in order and examined in relation to suppurative sinusitis. The paper is inconclusive.
Macleod Yearsley.

Chronic Frontal Sinusitis, Sphenoiditis, Meningitis.—Imperatori, C. Johnstone. "Laryngoscope," 1915, p. 580.

Male, aged twenty-six, brass-worker, had suffered for many years from ozœna and tuberculosis of the left lung. A skiagram showed double frontal sinusitis, and the other accessory sinuses were also involved. A Killian operation was performed, and the sphenoidal ostium was enlarged. The patient remained well for four years, but after that suffered from severe headache. The anterior wall of the sphenoid sinus was now removed. Later the patient complained of nausea, vomiting, and dizziness. The track leading to the frontal sinus was dilated, but a second operation of the left frontal sinus had to be performed and the sphenoidal cavity curretted. Three days later the patient had diplopia followed by drowsiness. Temperature, 101° F. The patient suddenly became aphasic, and the right arm and right side of the face were paralysed. An exploratory operation was performed in the left temporal region, but nothing was found. The posterior wall of the left frontal sinus was then removed and the brain explored with negative results. After this the patient improved slightly, but later became comatose and died. *Autopsy.*—Dura mater thickened and adhering to brain. Basal meningitis present, especially in the region of the sphenoid, where there was an abscess. The bone, however, appeared healthy. No brain abscess. Bacteriological examination of the cerebro-spinal fluid showed a small bacillus resembling the influenza bacillus.

J. S. Fraser.

Goldstein, Max A.—Lipoma of the Maxillary Antrum. "Laryngoscope," 1915, p. 142.

Goldstein's patient was a man, aged forty-two, who complained of a foul-smelling suppurative condition in the left side of his nose. The maxillary antrum and the hard palate were involved. There was a history of syphilis with previous necrosis of the floor of the nose, and the patient complained of pain in the left nasal and frontal area. On examination the septum was deflected to the right and the nose was bathed in profuse, thick, greenish pus, which showed many bone particles. A probe could be passed into the left antrum through a fistula in the hard palate. When this was done, a soft and yielding tumour mass was met with. The radical operation on the left antrum was performed under local anæsthesia, and the cavity was found to be filled with a fatty tumour which was pinkish-white in colour and soft to the touch, but apparently had a well-marked capsule, which proved to be the lining membrane of the antrum. A large sequestrum was removed from the opening in the hard palate. Anti-luetic treatment was instituted, and the case did well. The opening in the hard palate was subsequently covered by a special plate. The pathological report stated that the cells of the growth were typical fat cells of the adult type. *J. S. Fraser.*

ŒSOPHAGUS.

Œsophageal Stricture.—Pritchard, Eric, and Baukart, A. S. B. "Proceedings of Royal Society of Medicine" Section, Disease in Children, November, 1916, p. 15.

The case reported is that of a boy, aged four, who was admitted to hospital for wasting. There was no history of swallowing corrosive, hot fluid, or foreign body. Six months before admission, the patient gradually lost his appetite, but was not sick after food. Four months before admission, he began vomiting a little every time after taking

solid food, but he never brought up the whole meal. The vomiting occurred at varying intervals after meals. He could keep down fluids and semi-solids. The attacks of vomiting became more frequent, sometimes twice after a meal and the amount vomited larger. The interval between taking food and the vomiting became shorter, and finally the vomiting always occurred either while taking food or immediately after taking it. Also, the whole meal was vomited. The patient was generally able to keep down small quantities of fluid.

X-ray report: There is an œsophageal stricture at the level of the fifth dorsal vertebra. It is very tight, only allowing fluids to pass slowly, and stopping bread and milk until regurgitation occurs. The gullet above is dilated to the level of the third thoracic vertebra by the retained food: above this point any added food is regurgitated. The channel of the stricture seems annular and smooth. No alteration in its size or intensity took place during ten minutes' observation.

Examination with œsophagoscope: A full-sized bougie was passed down the œsophagus as far as the stricture. After much difficulty a No. 8 gum elastic catheter was passed through the stricture. This was gripped so tightly that it was very difficult to withdraw it.

Since the last œsophagoscopy the boy has been able to take semi-solid food, a thing which he could not do before. *Archer Ryland.*

EAR.

Spontaneous Cure of Unrecognised Sinus Thrombosis accidentally discovered during operation.—Day, E. W. The "Laryngoscope," November, 1915, p. 757.

Day holds that there is a far greater number of cases of sinus thrombosis from aural infections than is generally supposed. He believes that if the clot in the sinus does not break down and discharge freely into the general circulation we do not get the classical symptoms—hectic temperature, rigors, and sweating. Day classifies his forty-five cases of sinus thrombosis into three general groups: (1) Those in which the septic material is drained directly into the veins or aspirated into the opposite sinus (thirty-six). (2) Those in which the distal ends of the clot remain firm and become organised, the centre breaking down and draining through a rupture of the sinus wall (three in number). (3) Those in which the entire clot becomes organised and sterile with obliteration of the sinus (six). Group 2. In all three cases in the second group there was a perforation of the posterior wall of the mastoid cavity over the sinus. The rupture of the sinus took place at this point and the contents discharged into the necrotic mastoid cavity. The symptoms were not distinctive or severe, but resembled those of a mastoiditis with an epidural abscess. All made an uneventful recovery. Group 3. In all of the six cases belonging to Group 3 the diagnosis was made on the operating table and was not previously suspected. Day remarked that he will never know how many have passed unrecognised.

Case 1.—Male, aged fifty-two, had had several attacks of acute middle-ear suppuration. In March, 1910, he had another attack complicating influenza. The patient complained of frequent attacks of giddiness and occasional vomiting, but there was no history of fever, chills, or sweating. The ear discharged for one month only, but the patient complained thereafter of headaches which increased in severity. He became irritable and had hallucinations. On examination the drumhead was intact but injected, and there was tenderness half an inch below and

behind the mastoid antrum. A radiograph showed the affected (right) mastoid to be opaque. At the operation Day found that the mastoid was sclerotic, but there was no pus or necrosis. The sinus was yellow in colour and normal in size but obliterated by firm fibrous tissue, removal of which was attended with only partial success. Healing was rapid; the headaches and hallucinations disappeared. CASE 2.—A middle-aged male suffered from acute suppurative otitis media after measles. Two months later the ear was still discharging (pneumococcus on culture). No fever or chills. Operation showed a large mastoid filled with granulations and pus. There was a perisinus abscess over the upper knee but no granulations on the sinus. Sinus opened and found to be filled with a firm clot. Microscopic examination showed that this was becoming organised; no organisms were found in it. CASE 3.—Female, aged twenty-two, suffered from recurring discharge from the right ear for sixteen years. September 1, 1914: Acute pain in right ear. Patient feeling chilly; temperature 101° to 104° F.; headache and delirium for one week. Headaches then disappeared, but on three occasions the patient became cyanosed for two or three hours. The irregular temperature lasted four or five weeks and there was tenderness along the anterior border of the sterno-mastoid. Day only saw the case December 18, 1914. Middle-ear cavity filled with granulations and foul pus. Radical mastoid operation showed that Nature had performed a "Stacke" operation, while the posterior mastoid wall was absent and the sinus was covered with granulations. When uncovered the sinus was seen to be yellowish, hard, and tense. A small exploratory incision showed it to be totally occluded with organised tissue. The operation cavity was completely dry in five weeks. CASE 5.—Boy, aged seven, had suffered from middle-ear suppuration from infancy. Patient admitted for an acute exacerbation with large swelling behind the ear April 7, 1915. At operation the mastoid was necrotic and the cavity contained much cholesteatoma. Necrosed bone over sinus removed. Sigmoid sinus yellowish and firm. Exploratory incision showed complete obliteration.

Day holds that nine atypical cases of sinus thrombosis (Groups 2 and 3) out of forty-five (20 per cent.) would seem to justify the conclusion that absence of the classical symptoms does not justify the assumption that there is no thrombosis. In 13·5 per cent. of the cases Nature had effected a cure. *J. S. Fraser.*

Ear Affections and Diabetes.—Zimmermann, Chas. "Annals of Otology, etc.," xxv, 637.

Contains a useful bibliography and short reports of six cases. Although no ear disease is peculiar to diabetes, there can be no doubt that the latter has an unfavourable influence on the course and healing of ear affections, imparting to them a certain anatomical and clinical character. With regard to operative measures, its presence demands the most serious consideration. On the other hand, ear diseases may induce glycosuria. *Macleod Yearsley.*

Septic Thrombosis of the Jugular Bulb, with Repeated Formation of Septic Thrombi in the Sigmoid and Lateral Sinuses, with Reference to the Literature on Involvement of the Torcular Herophili in such Cases.—Page, J. R. "Annals of Otology, etc.," xxv, 595.

Case of a child, aged twelve. The chief interest in the paper is in the reference to the literature. *Macleod Yearsley.*

MISCELLANEOUS.

The Diagnosis and Management of Vasomotor Disturbances of the Upper Air Passages.—**J. L. Goodale.** "Annals of Otology, etc.," xxv, 527.

In a large proportion of these cases the disturbing element is the entrance of a foreign proteid into the system, either through the respiratory or gastro-intestinal mucous membranes. Foreign proteids may also develop in or upon the mucous membranes through autolysis of pathogenic or saprophytic bacteria. The application of the skin test to these conditions is of diagnostic value when employed with a recognition of the phylogenetic relationships of animals and plants as determined by studies in serobiology.

Proteid for testing should be prepared from the keratin and sera of domestic animals, pollen of the chief causes of hay fever, various articles of food, and from various bacteria which invade the respiratory tract.

When the skin reactions have been determined, management of cases will depend largely on the relative preponderance of the local reactions to the clinical history. Septic foci should be removed. Vaccine therapy is likely in such anaphylactic cases to be more accurately guided than in the ordinary individual.

The results already accomplished have led the author to the conclusion that we possess in the intelligent application of the skin test a very definite aid in the diagnosis and consequent management of cases of vasomotor disturbances of the upper air passages, although we are as yet only at the entrance of this field of work. *Macleod Yearsley.*

OBITUARY NOTICE.

PROF. FERDINANDO MASSEI, NAPLES.

Born July 25, 1847. *Died March* 7, 1917.

IN the death of Massei, of Naples, Italian laryngology has lost its *doyen* and all who knew him have lost a dear and charming friend. For some of the following notes of his career we are indebted to a notice by Dr. Grazzi in the *Bollettino delle Malattie dell'Orecchio*, etc.

Ferdinando Massei came of a good family in Naples, where he was born, studied, and qualified. In the year 1868 he started a *Wanderjahr* through Europe and was much impressed with the importance of laryngology, which was then in its infancy. He decided to devote himself to it, and therefore followed the clinics of Mandl and Waldenburg in Germany, Fauvel in Paris, and Morell Mackenzie in London. Returning to Naples at the end of 1869 he commenced practising in the speciality he had selected, opening a free dispensary for diseases of the nose and throat, and he soon attracted numerous doctors and students. A few years later the University recognised his course of lectures. In 1882 he was made Liber Docent, and from that year until the day of his death at the age of seventy he taught regularly, and, in a letter in February last, he laments that his clinic was so crowded. He was made Professor in 1902.

After the death of Prof. Cozzolino, the Chairs of Otology and Laryngology were united, and at my last visit to Naples, a few years ago, I found Massei very satisfied in having, at last, a well-equipped clinic.