with rapid increase during the last three months. The bones, as well as the soft parts, are involved in the uniform enlargement, which now amounts to a deformity. No suggestion of an angeiomatous, lipomatous, or other obvious lesion. History of maggots in nose one year ago.

Mr. WHALE: I saw the case a year or more ago, when the mother said maggots were coming out of the nose. I gave an anæsthetic, expecting to find a bead or insect there, but found nothing amiss. I am sure that at that time there was no enlargement of the nose; this must have occurred since.

Pharyngo-laryngeal Carcinoma.—William Hill.—Male, aged forty-nine, with epithelioma of the pharyngo-laryngeal party wall, fullness of the right pyrifossa, and a secondary mass in the right side of the neck. Shown to elicit opinions as to whether the condition is within the limits of radical operative removal.

[Members were agreed that the disease was too advanced for any but palliative measures—*e. g.*, radium or diathermy.]

Epithelioma of Epiglottis.—William Hill.—This man was exhibited at the Section in March, 1914. The epiglottis was subsequently removed through a large endoscope as thoroughly as possible. The case is now shown to demonstrate the excellent palliative result obtained, although there are now signs of recrudescence of the growth, which had been microscopically proved to be an epithelioma.

Ulceration of Pharynx.—George W. Badgerow.—Mrs. O——, sent to me at the Throat Hospital, Golden Square, in June, 1915. She complained of pain on swallowing. On examination, a white membrane was noticed on the pharyngeal wall and epiglottis; on removal of the membrane the surface was very red and bleeding. On the epiglottis ulceration was noticed in places. The condition remains the same; it does not seem to get worse or better.

Mr. TILLEY: I should not be surprised if the appearances were found to be of factitious origin.

Dr. JOBSON HORNE: If the condition in the pharynx and right ary-epiglottic fold be due to disease, then, in my opinion, the disease is tuberculosis. I have not, however, met with a case of tuberculous ulceration of the pharynx in which tuberculosis of the lungs has not been definitely established.

Dr. H. J. BANKS DAVIS: It looks as if the patient had drunk corrosive fluid or boiling water. I remember a nurse in a hospital who was supposed to have periodical attacks of diphtheria; and whenever she wanted to get away she touched her tonsils with caustic, which produced a diphtheritic appearance.

Abstracts.

PHARYNX.

Schoolman, N.—The Bipolar Origin of the Faucial Tonsil. "The Laryngoscope," 1915, p. 338.

Male, thirty-six years, had diphtheria and scarlatina in childhood. On the right side the tonsil fossa is occupied by two tonsillar masses which are completely separated by a deep, transverse recess. A large

lymphoid mass is situated at the pharyngeal aspect of the posterior pillar, and is apparently a continuation of the upper tonsil. On the left side the conditions are similar.

Schoolman admits that his patient had a severe throat infection in childhood, and that the peculiar appearance may be the result of an extensive necrosis. On the other hand, it is difficult to believe that ulceration could have split both tonsils in half. Further, the space is free from cicatricial tissue or adhesions. For these reasons the writer holds that the conditions are due to congenital anomaly.

Gruenwald found that in the third month of fœtal life folds appear in the second branchial arch, which gradually enclose a part of the second branchial cleft, which soon becomes the seat of tonsillar formations. The enclosed area is marked off by a transverse septum into an upper portion (fossa tonsillaris) and a lower portion (sinus tonsillaris). In these two areas tonsillar growths appear. About the sixth month the two tonsillar masses approach each other. The space between the upper tonsil and the palatal arch is the recessus palatinus, and the one between the upper and lower tonsil masses is the recessus intertonsillaris. Histologically the lower tonsil resembles the thymus gland. This fœtal condition is sometimes met with in early childhood, but later is obscured, because (1) the upper and lower tonsil masses merge into each other, (2) the transverse septum is obliterated, and (3) the lower tonsil tends to involute. One often finds, however, in submerged tonsils a transverse band of mucous membrane (plica transversa) marking the place of the original dividing line. Viewed in this light, the present case may be considered as an instance of persistence of embryological formations.

J. S. Fraser.

Hudson-Makuen, G.—The Relation of the Lymphoid Tissue in the Upper Respiratory Tract to the Voice. "The Laryngoscope," 1915, p. 46.

This short article is a plea for conservatism in tonsillar surgery especially in singers. The author holds that every child should be regarded as a possible singer. He admits, however, that degenerated tonsils are injurious to the voice because they cause congestion, and, further, that abnormalities which are deleterious to a patient's general health, are also deleterious to the voice. Extra-capsular tonsillectomy should only be performed "when the damage to the pharynx and the individual threatens to become greater by leaving it undone."

J. S. Fraser.

NOSE.

Goodale, J. L.—Pollen Therapy in Hay Fever. "Annals of Otology," xxiv, p. 269; and **Hays, H.—Experiments with Autoserum in the Treatment of Hay Fever. The Relation of Anaphylaxis and Eosinophilia to Hay Fever. A General Survey of New Methods of Treatment.** *Ibid.*, p. 287.

It is advisable to consider these two papers together. Goodale's conclusions are that serobiologic methods have shown phylogenetic relationship of the different plant orders and families. The application of these discoveries to the treatment of hay fever by injection of plant proteids promises to assist in the selection of the specific material required for a given case.

Definite reactions are elicited in hay fever by the pollen of the exciting plants when brought into contact with an abrasion of the skin. The intensity of these skin manifestations may be sensibly diminished by the repeated parenteral administration of the proteids in question. Coincident with diminution in the skin reactions seems to occur an increased tolerance of the exposed mucous membranes to the pollens of the plants employed. Pollen therapy in hay fever may be regarded at the present time as a promising method of treatment, but its value and the permanence of its results remain still to be definitely established.

Hays, as a result of the encouraging reports in the treatment of various persistent and chronic dermatoses by autoserum, which led Gottheil to think it worth while applying similar treatment in hay fever, began a series of experiments upon similar lines. His methods and results are recorded in the second paper, in which he gives details of seven cases, mentioning five others. Each was given two or more injections of from 5 to 15 c.cm. of serum. In every instance the treatment was a failure. *Macleod Yearsley.*

ŒSOPHAGUS.

Chamberlin, W. B.—Removal of an Open Safety-pin from the Œsophagus under Suspension. "The Laryngoscope," 1915, p. 18.

The writer claims, after a careful review of the literature, that this is the first case in which an open safety-pin has been removed from the œsophagus (*sic*) by the suspension method. Child, aged eleven months, had swallowed the pin an hour before. A radiogram showed the pin at the upper end of the œsophagus [in the hypopharynx (Abstractor)]. The catch of the pin lay to the child's right, while the point was directed to the left. The catch was grasped with forceps and pushed to the left, thus rotating the pin. The shaft of the pin was now grasped with a second pair of forceps, and complete rotation accomplished. The pin was then grasped by the eye and removed. The case illustrates the advantage of having both hands free to operate, as in the suspension method.

J. S. Fraser.

EAR.

Scruton, Wm. A.—Accidental Injuries of the Sigmoid Sinus inflicted in Simple Mastoidectomy. "Annals of Otology," xxiv, p. 310.

Four cases are reported, three of which developed septic thrombosis, two of which ended fatally. The author concludes that accidental injury of the wall of the sigmoid sinus primarily would appear to be of no great consequence unless infection gains entrance to the protective clot. Therefore, more than usual antiseptic treatment of the mastoid cavity in such cases is imperative. *Macleod Yearsley.*

Smith, MacCuen.—The End Results of the Radical Mastoid Operation. "The Laryngoscope," 1915, p. 332.

The first *bonâ fide* mastoid operation was performed in 1858, and reported by von Trölsch in 1861. Schwartze, in 1885, advised opening the mastoid for the cure of chronic suppuration. In 1889 Küster proposed chiselling away the back wall of the meatus, converting the external auditory canal, mastoid antrum and cells and tympanum into

one cavity. In 1891 Stacke published his new method for opening the mastoid for the relief of chronic suppuration.

MacCuen Smith has only operated on cases that have utterly failed to respond to persistent non-operative treatment and in urgent cases. In a large percentage of these chronic cases the middle fossa is found to be unusually low, the sinus in some instances being so far forward as to occupy (*sic*) the greater part of the antrum; hence the advantage of a radiogram. The writer has sent letters to 334 patients, of whom about two-thirds responded. Some of the patients had not been treated since they ceased their hospital visits. Smith thinks that about *three months* would seem to be a fair average for after-treatment in hospital cases. Unfortunately he does not give detailed figures of his results; he says that complete cessation of all discharge is obtained in about 80 per cent. of cases treated as hospital out-patients, while in private work the percentage is ninety, or better. The time of repair is lessened materially by the use of skin-grafting. He has never seen an intra-cranial complication develop after a radical operation has been performed: The largest percentage of the cases by far were between the ages of twenty and thirty. The degree of hearing depends on the condition of the tympanic wall, more particularly on *whether the round or oval windows have been disturbed during the operation.* [Italics abstractor.] The hearing of the average case should be as good after as before operation. In 30 per cent. of cases the hearing was better after operation, in 50 per cent. it was the same, and in 20 per cent. it was worse. In the 334 cases there were 8 of post-operative facial paralysis. [The writer does not say at what period after operation the paralysis appeared.—Abstractor.]. Of the eight cases four recovered, two almost recovered, and two improved only slightly.

Smith does not recall a single death occurring in his own practice which could not be attributed to an intra-cranial complication already present before operation. He holds that ossiculectomy and the various methods of treating or closing the Eustachian tube will, at times, bring about a cessation of discharge, but this can only be anticipated when the tympanic cavity or the tube is the site of the disease, and not the mastoid process. *J. S. Fraser.*

MISCELLANEOUS.

Carmody, T. E.—Oral Tuberculosis. "Annals of Otology," xxiv, p. 193.

Reports 17 cases in full, and abstracts in tabular form 534 cases, with 661 lesions, distributed as follows: Tonsil, 48; pharynx, 51; palate, 97; upper jaw, 48; lower jaw, 36; cheeks, 16; tongue, 277; lips, 48; location not specified, 40. The paper, which is profusely illustrated with colour and other plates, forms a useful *résumé* of its subject, and requires to be read in its entirety. *Macleod Yearsley.*

Russell, L. Cecil (New York City).—Streptococcus viridans in its relation to Infections of the Upper Respiratory Tract. "Laryngoscope," 1915, p. 97.

Cecil adopts Schottmüller's classification of the streptococci: (1) *Streptococcus hæmolyticus*; (2) *Streptococcus viridans* (*mitior*); (3) *Streptococcus mucosus.* The *S. hæmolyticus* is associated with suppurative or phlegmonous inflammations, while the *S. viridans* causes the milder catarrhal processes. The *S. viridans* is a very small gram-

positive diplococcus which grows in pairs or short chains. On glucose blood-agar surface colonies show as minute rounded grey dots with a narrow halo of green. *S. viridans* is associated almost exclusively with chronic infective endocarditis, but Cecil maintains that it should be thought of as an inhabitant of the mouth and respiratory tract, as it can be isolated from practically every normal mouth and throat and is more abundant than the *S. hæmolyticus*, the *S. mucosus*, or the strepto-pneumococcus. Of the eighty-nine cases observed by Cecil, fifty showed a predominance of *S. viridans*, while next to this came the closely related pneumococcus, which, including the *S. mucosus*, was predominant in 20 per cent. The *S. hæmolyticus* came third, 6 per cent. The remaining 17 per cent. was divided between *B. influenzæ*, *M. catarrhalis*, *B. Friedländer*, staphylococci, etc. According to Cecil, staphylococci play a very insignificant *rôle* in infections of the upper respiratory tract.

Cultures were obtained as follows from the tonsil: A sterile platinum wire was inserted as deep as possible into one of the crypts, and the material removed was spread over the surface of blood agar plates with a sterile glass rod. Out of *twenty-one cases of tonsillitis* the *S. viridans* was present in sixteen, sometimes in pure culture. Cases of acute tonsillitis, in which the *S. viridans* was predominant, were usually mild, whereas in cases of scarlet fever or quinzy the *S. hæmolyticus* was usually present. In acute tonsillitis associated with rheumatic fever (five cases) the *S. viridans* was a predominant organism, and in one case was present in pure culture. Rosenow has recently cultivated from the joints in rheumatic fever streptococci resembling the *S. viridans*: this organism is probably identical with Poynton and Pane's *Streptococcus rheumaticus*. In one case of chronic tonsillitis and arthritis, in which the *S. viridans* was predominant, the tonsils were removed and the joints immediately began to improve. In some instances Cecil observed a combination of pyorrhœa and tonsillitis with arthritis.

Goadby has examined ninety-three cases of *pyorrhœa* and found a streptococcus in fifty-five and a staphylococcus in sixty-three. Cecil has examined *twelve cases of pyorrhœa* and obtained an abundant growth of *S. viridans* in every case. Several of the cases showed arthritis, nephritis, and one endocarditis. *Nasal Cavities*: Cultures from the nose in the acute stage of coryza are often sterile, but later on various organisms are present. In 1894 Cantley described the *B. septus*, and his observations were confirmed by White and Walter. Allan holds that the complaint is due to a streptococcus, while Tunnicliffe has described a small spirochæte both in acute and chronic coryza. Schottmüller frequently found the *S. viridans* in pure culture in acute and chronic rhinitis. Cecil has examined fourteen cases and found the *S. viridans* in five. He holds that *coryza due to the S. viridans nearly always starts in the throat* and extends upwards or downwards, or both. A vaccine of the organism was very effective in one case. *Nasal Accessory Sinuses*: Cecil reports on nine cases of sinusitis, and in three he found the *S. viridans* predominant. *Middle-ear Affections* are rarely due to the *S. viridans*; only one out of thirteen cases studied by Cecil. *Bronchitis*: Fourteen cases studied, in eight of which the *S. viridans* was predominant or present in pure culture. Vaccines of the organism were successful. *J. S. Fraser.*