It was a severe operation, but relief came quickly and the man was much happier. There were no enlarged glands in the neck.

Carcinoma of Epiglottis.—Myles L. Formby.

Male, aged 57, complaining of slight difficulty in swallowing for past two months. Recently complained of pain in left ear. Teeth are in process of extraction. General health good—no cough. Wassermann reaction negative. Skiagram of chest showed no evidence of tuberculosis.

Projecting from the posterior surface of the epiglottis, near the base on the left side, is a rounded tumour, the size of a walnut, the upper surface of which is smooth and reddish, but no ulceration is visible. The tumour completely occludes a view of the larynx, except for the right arytenoid, which appears to be normal.

ABSTRACTS

EAR

Contributions to the knowledge of Mucosus Otitis. H. ROLLIN. (Arch. Ohr-, u.s.w., Heilk., 1933, cxxxvii., 333-50.)

The diagnosis of mucosus otitis should not be made on clinical grounds alone, but the organisms must be demonstrated in fresh smears and culture. The reaction which distinguishes the *streptococcus mucosus* from other capsulated organisms is the thionin stain described by Wittmaack.

Mucosus otitis is comparatively rare in children. Clinically it runs an entirely different course from the otitis caused by the *streptococcus hæmolyticus* in which the symptoms develop rapidly (red bulging tympanic membrane, profuse discharge, much pain), while mucosus otitis is characterized by a slow progress and few symptoms in the early stages (tympanic membrane hardly reddened, scanty discharge). If operation becomes necessary in hæmolyticus otitis, suppuration is found chiefly in the centre of the mastoid process and near the antrum; while in mucosus otitis the foci of suppuration are more often found at the periphery, with almost normal conditions near the antrum. Mucosus otitis seems to occur most frequently in individuals with normally developed pneumatic cells.

The critical period in *streptococcus hæmolyticus* otitis is the third week. In mucosus otitis complications occur round about the fifth week. In the author's experience no case of mucosus otitis has ever died from intracranial complications before the fifth

or sixth week. On the other hand, he has seen several cases in which a thorough operation on the mastoid was performed in the fifth-sixth week and yet the patients ultimately died from meningitis; in one case as long as six months later.

Barth demonstrated a case of mucosus otitis in which symptoms of labyrinthitis arose which were not due to an invasion of the labyrinth. The pneumatic cells around the inner ear had become affected by the disease process and the infection had ultimately reached the meninges $vi\hat{a}$ the internal auditory meatus. The irritation of the eighth cranial nerve had caused the symptoms of labyrinthitis.

The author reports on the *post mortem* findings of six fatal cases. In all these patients the symptoms of a rapidly spreading meningitis had begun quite suddenly, following an otitis which had seemed comparatively harmless. Further, in all of them the focus of suppuration which had caused the meningitis was situated near the upper ridge of the petrous bone in a group of pneumatic cells which are developed directly from the epitympanic recess.

The infection of *streptococcus mucosus* is characterized by a slow spread along the subepithelial tissue in the lining of the air cells. An out-lying cell—often belonging to the epitympanal group may get shut off from the neighbouring air-containing cells and the tympanic cavity. In such a cell the subepithelial tissue swells and there is a transudation of clear serous fluid into the cavity (see Section 3 in text). At this stage, on account of the swollen subepithelial layer, conditions are favourable for an infection by the *streptococcus mucosus* and for the formation of an outlying focus. The organisms first appear in the subepithelial layer and then penetrate into the interior of the cell (Section 2 in text).

In many cases the subepithelial spread will continue on to meningitis in spite of the most extensive operations (including labyrinthectomy). Clinically these conditions must be grouped with similar instances in which a rapidly fatal meningitis sets in as a complication of middle-ear suppuration caused by other organisms. No effective treatment has yet been discovered for these cases. I. A. KEEN.

How does genuine Cholesteatoma arise? K. WITTMAACK. (Arch. Ohr-, u.s.w., Heilk., 1933, CXXXVII., 306-32.)

The author distinguishes true cholesteatoma, an extremely rare tumour formation in the cranial bones; secondary cholesteatoma, a condition in which stratified epithelium has grown into the middle ear through a comparatively large perforation; "genuine" cholesteatoma which is an ingrowth of stratified epithelium through a small perforation in Shrapnell's membrane and further development in the attic, antrum and mastoid regions. The distinction

between the secondary and genuine forms seems artificial. When we speak of cholesteatoma clinically we always mean the "genuine" variety.

In this article Professor Wittmaack again describes his views on the pathology of cholesteatoma (vide the well-known monograph on normal and pathological pneumatization). He also answers certain criticisms of Albrecht and Steurer, who are unwilling to accept the pneumatization theory based on hyperplastic otitis in infancy. Cholesteatoma hardly ever occurs except in the presence of a sclerotic mastoid, i.e. a mastoid process in which the pneumatization process has failed to take place normally, and it is generally agreed now that the sclerotic mastoid is not secondary to the chronic middle-ear suppuration. In such cases Albrecht and Steurer prefer to speak of constitutional and probably inherited differences in the activity of the mucous membrane, rather than admit the existence of an external factor such as otitis of infancy.

In sections of cholesteatoma one frequently sees the remains of a high subepithelial layer, closely resembling the embryonic tissue which is found in the middle ear in early infancy. Two sections are illustrated in the text, one from a new-born baby and the other from a patient aged 20, both showing practically identical masses of embryonic tissue.

The starting point of cholesteatoma is the stratified epithelium covering Shrapnell's membrane and the first change is a sinking in of the epithelium. As the cholesteatoma develops there must always be an opening to the outside. This point has been proved over and over again in serial sections. A solid epithelial plug with no opening to the outside can never lead to cholesteatoma, because the stratum corneum does not develop unless there is access to the outer air.

Wittmaack agrees with Albrecht and Steurer that the presence of hyperplastic subepithelial tissue in the epitympanic recess near Shrapnell's membrane is necessary before a cholesteatoma can develop from the invaginated blind sac of stratified epithelium. The hyperplastic vascular tissue provides the stimulus for further invasion of stratified epithelium and the gradual development of typical cholesteatoma.

Another essential factor in the pathology of cholesteatoma, according to Professor Wittmaack, is the existence of a bridge of granulation and fibrous tissue across the middle ear, which completely shuts off the lower tympanic cavity and opening of the Eustachian tube from the attic and antrum regions. This "fibrous bridge" probably creates certain pressure differences in the upper cavities which favour the development of a cholesteatoma.

In the surgical treatment of cholesteatoma, the author advocates his so-called conservative radical mastoid operation. The bridge

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of fibrous tissue is carefully preserved and one avoids making a communication between the cholesteatoma cavity and the tympanum.

J. A. KEEN.

Does Septicamia caused by Osteophlebitis exist? H. J. KOBER. (Arch. Ohr-, u.s.w., Heilk., 1933, cxxxvii., 203-14.)

Septicæmia complicating a middle-ear and mastoid infection is usually preceded by a sinus thrombosis. Some otologists maintain that this is always the case. However, in otological literature there are many instances of generalized sepsis with rigors and metastases in which no trace of sinus thrombosis existed. In these cases one has assumed that small diploetic veins have become thrombosed and that the presence of these small thrombi was the reason why the infection had reached the general blood stream. This pathological condition was first described by Körner who called it "Osteophlebitissepsis". Wittmaack also supports the hypothesis of osteophlebitis, although a thrombosis of small diploetic veins has never been demonstrated histologically.

As regards generalized sepsis following a local infection in other parts of the body, e.g. after tonsillitis or in puerperal septicæmia, the author admits that thrombosis of small vessels can often be seen in sections of the tissues immediately surrounding the orginal focus. But these small thrombi must be looked upon as a defence reaction against the spread of the infection. They are just as frequently seen in cases in which the septic process has remained localized. In the same way, a thrombosis of small diploetic veins would be an unimportant factor in the pathology of septicæmia following an ear infection. Actually, an osteophlebitis in the mastoid bone has never been shown to exist, and very probably does not occur.

The argument is carried further, and the whole subject of the pathology of sinus thrombosis is discussed in an interesting manner with description of cases and full references. The author suggests that the terms "pyæmia", "septicopyæmia" and "septicæmia" should be abandoned and that our classification be limited to two conditions, viz. "sepsis" (i.e. generalized sepsis) with or without metastases.

Very likely too much importance is being attached to sinus thrombosis as a pathological factor connecting otitis and generalized sepsis. The mere fact that a mural thrombus is found does not prove that the invasion of the blood stream took place at that point. The thrombus may simply be a local response to injury of the endothelium due to prolonged contact of a collection of pus on the outside.

Uffenorde reported two interesting cases of generalized infection in which a simple mastoid operation produced improvement at first. Then septic temperatures and rigors began again; a second operation showed absolutely normal sinuses. In both cases the jugular vein was tied as a concession to present-day teaching, in in the author's opinion quite unnecessarily.

After tying the jugular vein organisms can still reach the general blood stream in the direction of the transverse sinuses. It is probable that in the future surgeons will tend to tie the jugular vein less and less frequently.

J. A. KEEN.

On Fissures in the Bony Labyrinth. G. KELEMEN. (Arch. Ohr., u.s.w., Heilk., 1933, cxxxvii., 36-49.)

It appears that non-traumatic fissures occur in the bony capsule of the inner ear and that there are two main groups of these: (1) Fissures around the lumen of the semicircular canals. (2) Fissures near the round window. Since O. Mayer formulated his theory of the origin of otosclerosis special attention is being paid to these microscopic findings.

The author examined fourteen temporal bones in serial sections cut in the horizontal plane. The specimens were obtained from cases of accidental death, mostly with fractured base. Nevertheless, Kelemen is satisfied that the fissures which he describes have nothing to do with the *ante-mortem* trauma.

The most commonly found fissure is a split in the bony capsule connecting the recess of the round window and the ampulla of the sagittal canal (see illustrations in text). It was seen in five specimens out of fourteen. By a very careful analysis of the microscopic appearances the author seems to prove that this fissure is not the result of trauma; neither is it an artifact, nor is it simply a bony canal due to the presence of a blood vessel running horizontally at that level. He agrees with Mayer in believing that these fissures are due to some strain, possibly connected with intracranial pressure, which acts on the labyrinth capsule during life.

J. A. KEEN.

Bilateral Acute External Otitis due to Bacillus Pyocyaneus. R. H. BETTINGTON. (The Medical Journal of Australia, January 6th, 1934.)

The author describes the case of a man aged 27, who had just landed in Sydney from a three months cruise in the East. Ten days before arrival he suffered from acute pain in the right ear with redness and swelling of the external canal. The pain became

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intense and the temperature rose to 100°. Treatment by glycerine and carbolic drops was beneficial, but the left ear became affected on the third day. On the sixth day the right ear was again painful, the swelling and inflammation returned, and there was ædema over the mastoid process. Radiant heat gave some relief and the condition gradually improved, but on the ninth day the left ear again flared up, the canal becoming swollen and tender, with watery discharge. Swabs from both ears yielded a pure culture of *bacillus pyocyaneus* and a vaccine prepared from this was used in graduated doses. The condition then improved rapidly and within six weeks was almost cured, leaving normal drums and no defect of hearing in either ear.

DOUGLAS GUTHRIE.

Studies of Eye-Reactions during Turning. W. KLESTADT and L. LILL. (Acta Oto-Laryngologica, xix., fasc. 2.)

The study of nystagmus during rotation is of especial importance for investigation of the vestibular apparatus, because it approaches most nearly to physiological stimulation. We are hampered, however, in this study by the difficulty that the nystagmus observed during rotation is not entirely of vestibular origin, as the eye movements may be partly (I) optical (optokinetic), (2) due to neck-muscle reflexes, if the head is not firmly fixed in relation to the trunk, and (3) due to inertia of the eyeball. The last may be neglected as of no practical importance, and the neckmuscle reflexes may be discounted by adequate fixation of the head and trunk. The optical element, however, is of much more importance and is less easy to exclude, so that the vestibular component of the nystagmus may be observed in isolation. In order to achieve this it is essential that the examination shall take place in the dark, and that, as palpation is unsatisfactory, the eye movements shall be visible to the observer. With this object in view the authors lit up the pupils of the eyes by means of a bright transillumination lamp in the mouth, and were able to observe the eye movements during and after rotation in a completely dark room, and to prove that optical nystagmus could be satisfactorily excluded by this means.

THOMAS GUTHRIE.

The Relation between Cholesteatoma and Cholesterinæmia. PROFESSOR B. SIMONETTA. (Bollettino delle Mallatie dell'Orecchio della Gola e del Naso, October, 1933.)

The author recalls that there are many theories as to the formation of cholesteatoma. A certain amount of attention has been given to the cholesterin content of the blood in these cases.

Bernovits of Budapest has reported that in the normal blood the cholesterin content was between 0.130 and 0.170 per cent., in three cases of chronic otitis without cholesteatoma it lay between 0.126 and 0.152 per cent. In two cases with a slight degree of cholesteatoma it lay between 0.148 and 0.186 per cent. whilst in five cases with massive cholesteatoma the figures were 0.200-0.262 per cent. In two cases, however, with massive necrosis of bone but without cholesteatoma, the figures were 0.200-0.268 per In four of these cases Bernovits found that the cholesterin cent. content returned to normal after operation. He is of opinion that the hypercholesterinæmia is a result of the cholesteatoma and not a cause of it. Reito, in whose department Bernovits worked, carried this investigation further and in twenty-eight cases found that most of the cases agreed with the findings of Bernovits and also confirmed that after operation on the ear the figures returned to within normal limits in from seven to sixty days.

Peroni examined the blood of fifteen cases and found only two in whom the cholesterin content was augmented.

These authors arrived at their results by chemical examination of the blood but Professor Simonetta has devised a method of estimating the cholesterinæmia by a skin reaction. He makes an intradermic inoculation of colloidal cholesterin. An infiltration appears in three to four days; if it has completely disappeared in six days the test is said to be negative, if it lasts till the seventh or eighth day it is said to be positive, and if it lasts more than eight days it is said to be doubly positive.

In eleven men, with eight cases of well established cholesteatoma there was a positive reaction in four: in nineteen women with ten definite cases of cholesteatoma there was a positive result in twelve. The cholesterinæmia in the women, besides being more frequent, was also found to be more marked.

There appears to be a parallelism between the occurrence of cholesteatoma and the condition of hypercholesterinæmia, but it is not constant. Cholesteatoma is certainly not caused by a change in the cholesterin content of the blood and it is not clear that it affects the metabolic exchanges of cholesterin.

F. C. Ormerod.

TONSIL AND PHARYNX.

Inferior Peritonsillar Abscess. E. ESCAT. (Les Annales d'Oto-Laryngologie, October, 1933.)

Although we are all familiar with phlegmonous collections of the upper pole of the tonsil, those occurring in connection with the inferior pole are very little known. The author has only come

across three of these cases, and these are reported in detail. There are certain features of this condition which should be emphasized: (I) The initial dysphagia, which is localized to the lower tonsillar pole, is markedly severe; pain is referred to the ear and sleep becomes impossible. (2) The swelling is strictly limited to the lower pole of the tonsil between the fold of His and the lower third of the anterior pillar. (3) There is a definite tendency for the inflammatory œdema to spread to the laryngeal region. Indeed, one may ask oneself whether some of those obscure cases of acute œdema of the larynx arising from some unknown cause may not have originated in this fashion. (4) Pyrexia is not a feature. (5) The evolution of the abscess is rapid so that evacuation may result in about three days. (6) Diagnosis is facilitated by digital pressure.

The treatment of this condition is surgical. The abscess is opened either, as recommended by Moure, with the electro-cautery knife, or, as preferred by the author, with the sharp pointed hook. His method of operation is shown in an illustration.

M. VLASTO.

Cancer of the Sinus Pyriformis. J. DUCUING and I. DUCUING. (Les Annales d'Oto-Laryngologie, October, 1933.)

We are introduced to the subject by a short historical survey, followed by a more detailed account of the anatomy of the region. Cancer in the sinus pyriformis is the most frequent of all cancers in the hypo-pharynx. It is only rarely seen in women and most patients have passed their fiftieth year. The commonest early symptom is dysphagia and in their order of frequency the other commonest initial symptoms are glandular enlargements, vocal and respiratory troubles, cough, throat irritation, reflex earache and sialorrhea. The prognosis of the affection is extremely gloomy, and the authors have had 100 per cent. mortality in the cases under The treatment of the condition is discussed, and the their care. removal of the growth by surgery is regarded as quite hopeless. In the authors' cases even treatment by physical methods has only added a short period of survival. M. VLASTO.

NOSE AND ACCESSORY SINUSES

Nasal Allergy. FRANCISCO HARTUNG. (Revista Oto-Laringologica de S. Paulo, 1933, i., 464.)

The author summarizes his conclusions as follows: According to the modern conceptions, vasomotor rhinitis may be classified among allergic conditions, which depend very often on disturbances of nutritional balance; this means it is possible to correlate many disease-syndromes with troubles of acid-alkaline equilibrium of the

Nose and Accessory Sinuses

blood. Apparently in some such cases we have found a rapid test for judging the condition of the blood in changes of the mucosa of the nasal septum. Carbohydrates and proteins are acid-ash producers, in the blood, while foods ripened by the sun in general are alkaline-ash producers. An excessive acid-ash diet gives a "nutritional disaster" syndrome of fatigue, irritability, anorexia, daytime listlessness, constipation and dry skin. The septum under these conditions is crimson red. Patients subsisting on an excessively alkaline diet exhibit allergic symptoms and are subject to colds, hav fever and asthma. Vasomotor rhinitis is the expression of a blood alkalosis and is characterized by a pale septum, resulting apparently from the effect of the blood on capillary permeability. The author made nine observations with this in view, modifying the diet of patients suffering from vasomotor rhinitis according to Jarvis's ideas. All the patients had used an excessive alkalineash diet, so he gave foods that produced acid-ash. It is not yet possible to give the definite results because many of his patients are still under observation, but he can show that one patient is completely free of the symptoms, without colds, sneezing, watery discharge and nasal obstruction, and that the nasal septum has now its normal colour. Another one, notwithstanding a certain improvement, has still some discharge from the nose. Five others are also better but not enough time has yet passed to come to a final conclusion. Finally, two others have not yet shown any modification of their symptoms. He promises a further report on these experiments at a later stage.

F. W. WATKYN-THOMAS.

Diagnosis and Treatment of Primary Malignant Neoplasms of the Maxillary Sinus. KARL MUSSER HOUSER. (Archives of Otolaryngology, 1933, xviii., 5.)

Malignant tumours of the maxillary sinus are rare. Ewing reported that of 1892 cases of malignant growths only 2.5 per cent. were of nasal origin. The early diagnosis is unfortunately a difficult matter. The advanced lesion offers little hope of cure, but the early growth can frequently be eradicated, and its early recognition, therefore, is of great importance. The initial symptom is pain, which varies greatly in intensity and is too often regarded as neuralgia, so that the patient is allowed to drift without further investigation. Radiography is more helpful than any other method of diagnosis, but an absolute diagnosis cannot be obtained without opening the antrum by the Caldwell-Luc operation under local anæsthesia and securing a specimen for biopsy. The writer advocates this method strongly, as it carries a very slight risk and the surgeon need not feel chagrined if, in his honest effort at diagnosis, he occasionally finds no growth in a suspected case.

As regards treatment, Roentgen and radium therapy in adequate doses offer the most hope of cure. Twenty-one cases are summarized in the present paper. Nineteen were carcinomas and two sarcomas. Males and females were equally affected. The treatment depended upon the condition of the lesion, six cases were surgically inoperable but all the patients were treated with X-rays and radium. Excision of the upper jaw was practised in three cases, but all three died from recurrence within a year. In ten cases radical operation was limited to the maxillary sinus, and in three of the cases diathermy was used at the operation.

DOUGLAS GUTHRIE.

Pseudo-Tuberculous Types of Nasal Syphilis. A. AUBIN. (Les Annales d'Oto-Laryngologie, October, 1933.)

Clinical experience has shown the inaccuracy of the usual descriptions of nasal syphilis, whether it be nasal gumma or nasal syphiloma. The condition is confused with what should be termed an "ulcero-tuberculous tertiary syphilide". There are two forms of this condition: The lupoid and the ulcero-tuberculous pseudolupoid. The typical gumma is a wash-leathery ulcer with a punched out appearance, with clear cut margins and an infiltrated This clinical picture is but rarely seen because the surrounding. ulceration resembles that associated with lupus, except with this one important difference; namely, that the evolution of the ulcer is far more rapid: it can be counted in days instead of months. In the lupoid form, the symptomatology is exactly the same as that of lupus. There is a minute description of clinical points which should confirm the syphilitic nature of the ulceration.

We are given an account of the histo-pathology of these lesions. M. VLASTO.

The Relations between the Pharynx, the Sphenoidal Sinus and the Pituitary Fossa. PROFESSORS PIAZZA and DOTT. MONTELONE. (Bollettino delle Matlattie dell'Orecchio, della Gola e del Naso, August, 1933.)

The authors have investigated the heads of ninety-seven individuals of ages varying from one day to eighty-five years. They found that in the heads of children of three years and under, and in several of five years of age there was no pneumatization of the body of the sphenoid bone, in fact the sphenoidal sinus was not formed at that age and the roof of the naso-pharynx and the floor and anterior wall of the sella turcica were formed by the thick mass of the body of the sphenoid. This mass consisted of very spongy bone, the blood and lymphatic supply of which was in free communication with the vessels of the sella turcica and of the nasopharynx. In $12\frac{1}{2}$ per cent. of cases the cranio-pharyngeal canal was open.

Endoscopy

Above the age of thirty the sphenoidal sinus was invariably present, the cranio-pharyngeal canal very rarely $(\mathbf{r} \text{ in } 38)$ and the naso-pharynx was relatively greater in the sagittal and lateral diameters than the antero-posterior. In the case of the smaller sphenoidal sinuses, when restricted to the pre-sphenoid, the sella turcica and the naso-pharynx were still separated by bone only in the posterior parts, but in the more common condition of the large sphenoidal sinus these two spaces were entirely separated by the sphenoidal sinus.

In the case of the large sphenoidal sinus, one wall was as a rule much thinner than the others and this condition occurs most often in the superior wall. In several cases there was only a thickness of 0.3 mm. of bone between the sella turcica and the sphenoidal sinus.

The authors propose to continue their investigations on a further hundred skulls.

F. C. Ormerod.

ENDOSCOPY

Extraction of Foreign Bodies from the Esophagus by Esophagotomy. J. M. SOBOL. (Les Annales d'Oto-Laryngologie, October, 1933.)

Although the large majority of foreign bodies impacted in the cesophagus can be removed by endoscopy, there are always some cases in which removal by an external incision offers less danger to the patient's life. Dentures and bones are the foreign bodies most likely to defy removal "*per vias naturales*". We are presented with the minute details of five such cases. Of these, four made a good recovery, although the after effects of the operations often caused anxiety. The author stresses that where there is an emphysema of the neck or if the saliva is tinged with blood, removal with the endoscope is contra-indicated. There is a bibliography.

M. VLASTO.

Malignant Primary Tumours of the Trachea. J. E. BARATOUX. (Les Annales d'Oto-Laryngologie, November, 1933.)

We are first given details of a personal case of the author's which was treated by Coutard deep radiotherapy with complete relief of the symptoms and regression of the growth over a period of seven months up to date. There follows an interesting and complete account of the subject from a historical, statistical, clinical and pathological viewpoint. A point of capital importance is the extreme indolence of the growth, which has been found to involve at least a third of the tracheal calibre before the onset of symptoms. The commonest initial symptom is progressive *dyspnæa*. At the same time the respiratory rate is not increased.

Cough, blood stained expectoration and alteration of the voice are later symptoms. The last is usually due to a recurrent nerve palsy.

Although the growth can sometimes be seen with the laryngeal mirror, the diagnosis is clinched by direct inspection. The author points out how frequently the growth shows up by radiography. Discussing the treatment, the author stresses the danger of tracheotomy. Many cases of sudden death from hæmorrhage have been reported. Although a few cases of surgical ablation of the affected area have been recorded, this heroic treatment seldom succeeds. Radiotheraphy has proved disappointing, and deep radio-therapy appears to offer the only hope of growth regression.

M. VLASTO.

MISCELLANEOUS

The Susceptibility of Hæmolytic Staphylococci to Bacteriophage. FELIX d'HERELLE and M. L. RAKIETEN. (Jour. A.M.A., April 1st, 1933.)

During the past two years the writers have tested polyvalent staphylococcus bacteriophages on 121 strains of staphylococci isolated from individuals with carbuncles, furuncles, sinusitis, osteomyelitis and staphylococcal septicæmia. Seven of these strains of staphylococci, all non-hæmolytic, were not susceptible to any of the "-phages" used against them. These strains of bacteria were isolated from long standing cases of furunculosis, sinusitis and osteomyelitis. Seventy-one of the strains produced hæmolysis of rabbit, guinea-pig or human blood when they were cultivated on Savita agar to which 4 per cent. blood had been added. The chances of success with "-phage" therapy are much better in cases of acute infection than in cases of long standing chronic infection.

The writers conclude that hæmolytic staphylococci are particularly susceptible to bacteriophage and that resistant strains of staphylococci are generally of the non-hæmolytic type.

ANGUS A. CAMPBELL.

A Peculiar Form of Hyperplasia of the Mucous Membrane of the Upper Respiratory Tract. H. B. ORTON. (Archives of Otolaryngology, 1933, xviii., 6.)

Chronic hyperplasia of the mucous membranes of the nose, pharynx and larynx is a rare condition of unknown ætiology. Cases have been reported by Semon, Brown Kelly, Logan Turner and others, but the total number which the present writer has discovered in literature amounts to only seven cases. To this number he adds one case of his own and one of Perry Goldsmith, reporting the two cases fully in the present paper. The condition appears

Miscellaneous

to be more common in the female sex, but there is no history of heredity. Slight discomfort in the throat appears to be the only symptom and on examination there is a smooth and uniform soft swelling of palate, uvula, faucial pillars, epiglottis and arytenoid cartilages. In making a diagnosis, rhinoscleroma, syphilis, tuberculosis and angeio-neurotic cedema must be excluded. Treatment is entirely symptomatic. The paper is illustrated by eight figures, including five micro-photographs.

DOUGLAS GUTHRIE.

On the Symptomatology of the Soft Palate and its Diagnostic Significance. O. SCHÄUFELE. (Arch. Ohr-, u.s.w., Heilk., 1933, cxxxvii., 50-67.)

It has been claimed that inspection of the soft palate is extremely valuable in the diagnosis of many conditions in general medicine. The soft palate may appear congested, pale, atrophied, yellowish in colour, etc., and such signs are said to be useful in the differential diagnosis of duodenal and pyloric ulcer, in phthisis, carcinoma of the colon, cholecystitis and many other diseases.

In order to test these claims the author studied the soft palate appearances in 450 in-patients. All sorts of conditions were represented in this series and the findings are tabulated in the article. He was unable to confirm the claims advanced by Neuda and other physicians, and concludes that the soft palate signs have no special diagnostic significance.

J. A. KEEN.

The Mechanism of Specific Desensitization in Hay Fever. D. HARLEY. (Lancet, 1933, ii., 1469.)

The author gives his results from ten cases, due to the grasses which were treated with massive doses of Timothy pollen extract (max. dose 100,000 units). He describes the technique and advantages of the "prick" method of skin-testing and the selfinoculation method of treatment. The amount of reagin (idioceptor) in the serum of the untreated case was proportional to the skin sensitivity, which sensitivity was diminished and finally abolished by treatment, the amount of reagin (idioceptor) in the serum being diminished by treatment. Complete relief from symptoms was obtained in all cases. Desensitization by injection of the specific allergen (idiotoxin) is discussed and shown to be the result of neutralization of reagin (idioceptor).

MACLEOD YEARSLEY.