

PLATE I.

The external auditory meatus has been removed to show the tympanic membrane, facial and chorda tympani nerves and the mastoid cells and antrum.

[face p. 482

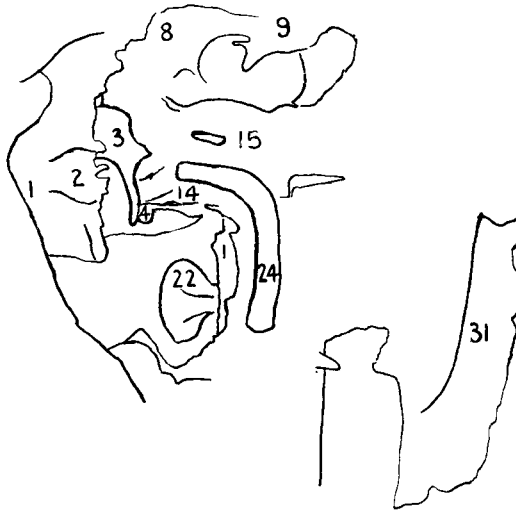
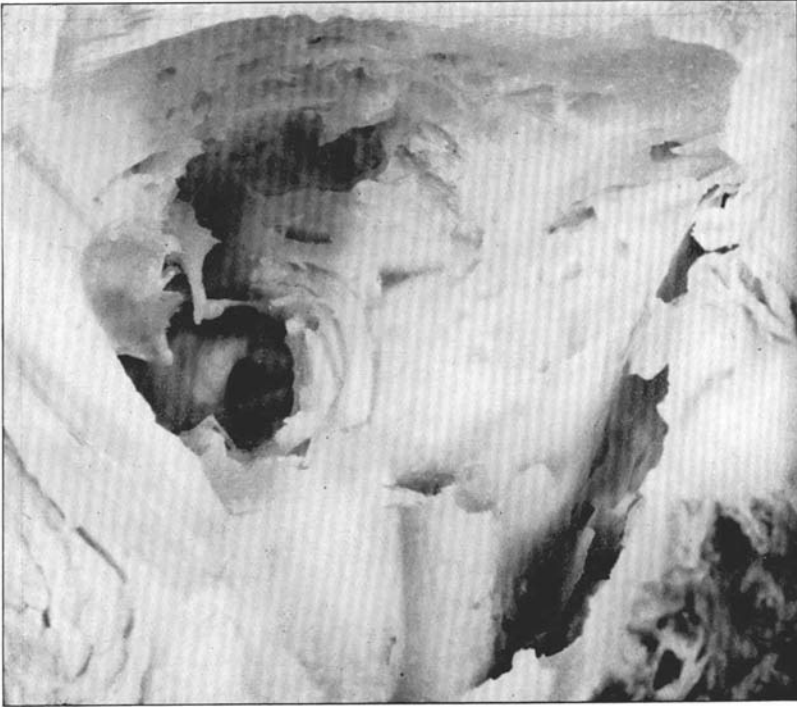


PLATE II.

The bony covering of the facial nerve has been removed to show the sheath of the nerve and its relations.

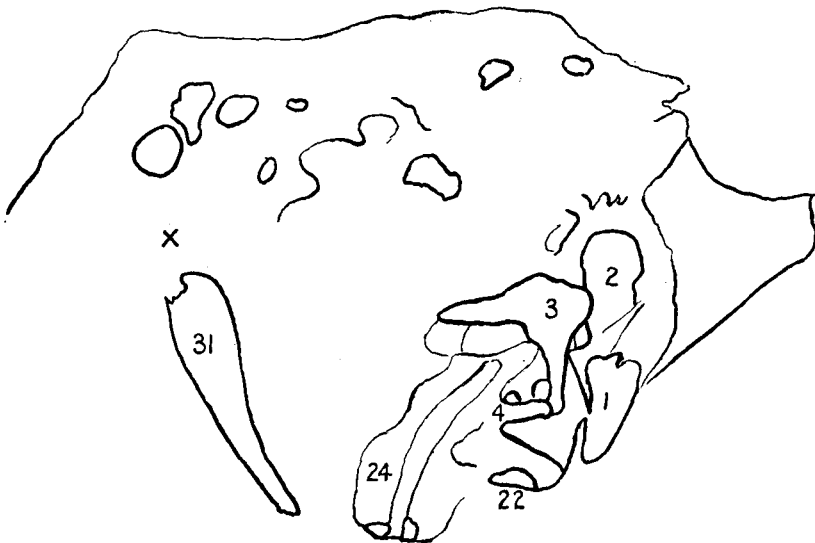
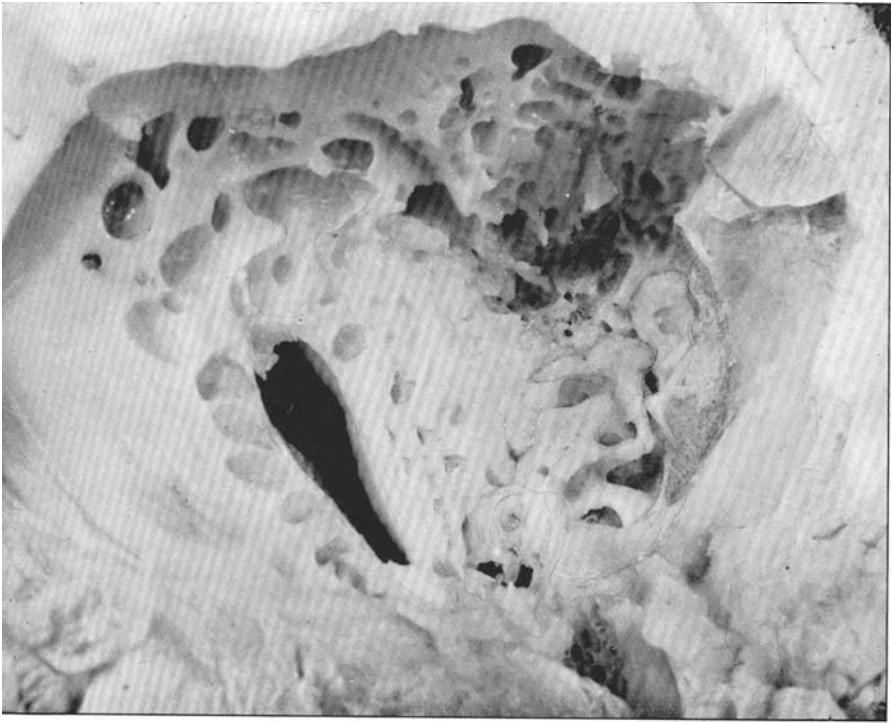


PLATE III.

The bone covering of the facial nerve has been removed to show the attachment of the sheath of the nerve to its bony covering and its relations to the jugular bulb and to the aditus.

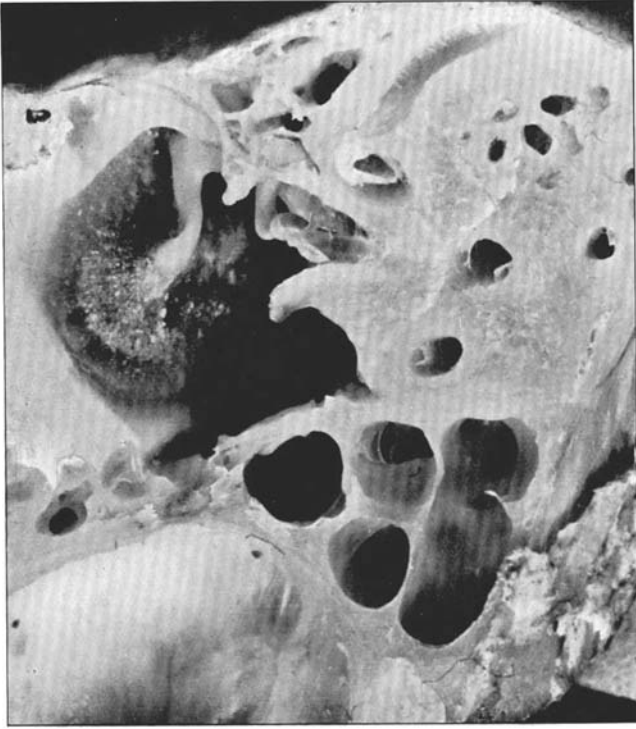


PLATE IV.

The inner tympanic wall has been removed, the bone being divided just internal to the level of the facial nerve.

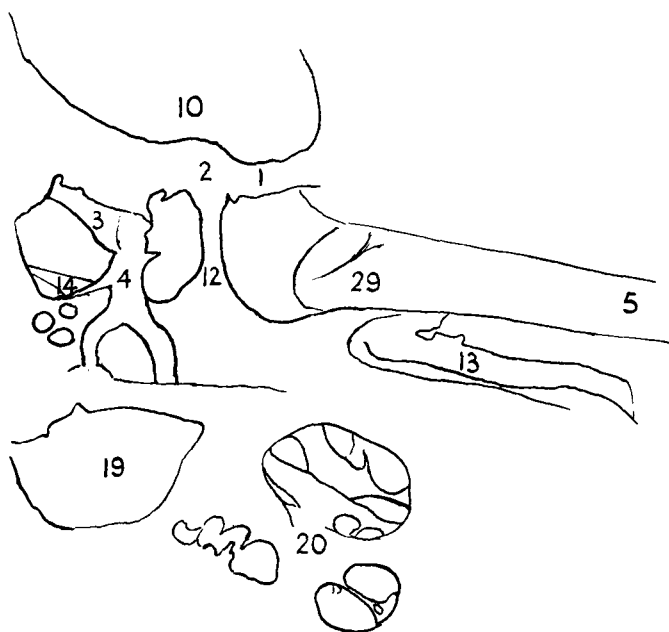


PLATE V.

The lower portion of the middle ear has been removed so as to expose the structures which lie above the level of the lower margin of the oval window.

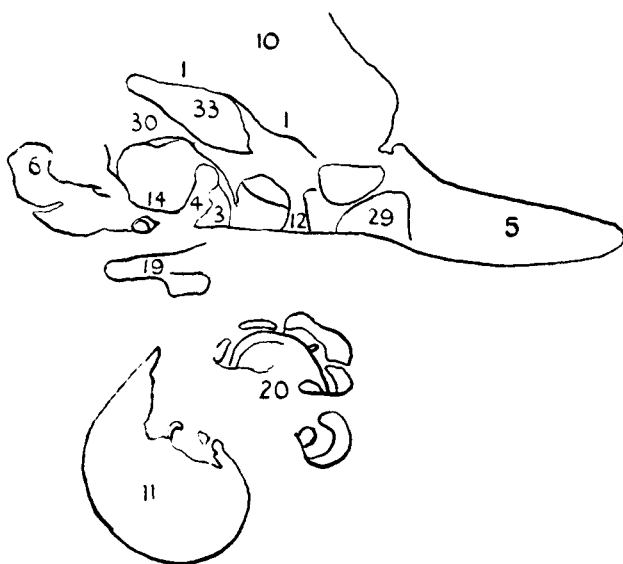


PLATE VI.

The lower portion of the middle ear has been removed so as to expose the structures which lie above the level of the lower margin of the oval window.

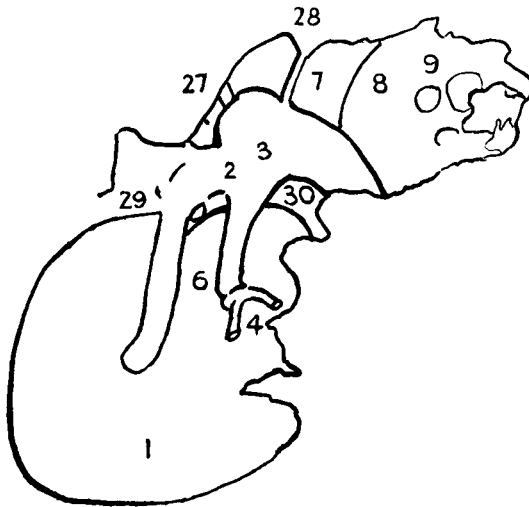
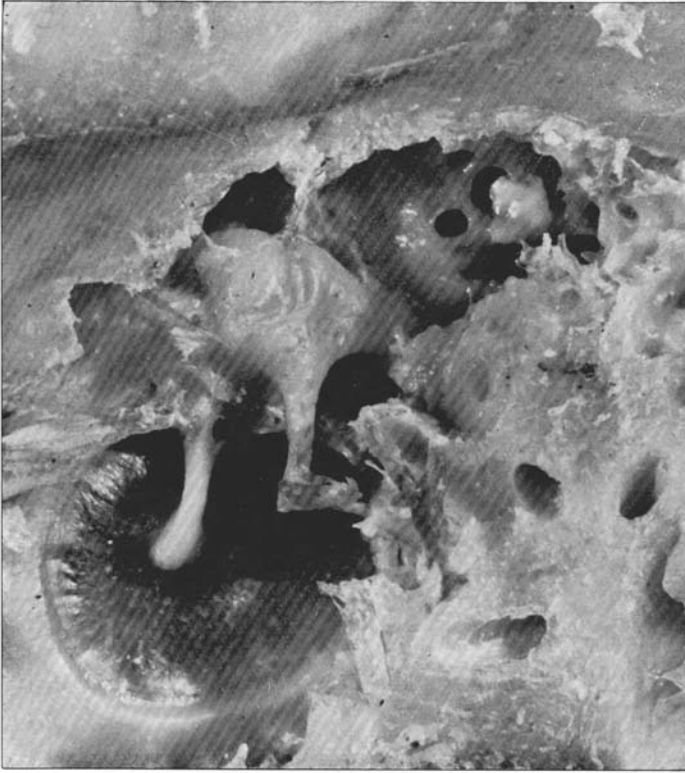


PLATE VII.

The inner tympanic wall has been removed so as to expose the folds of Trötsch.

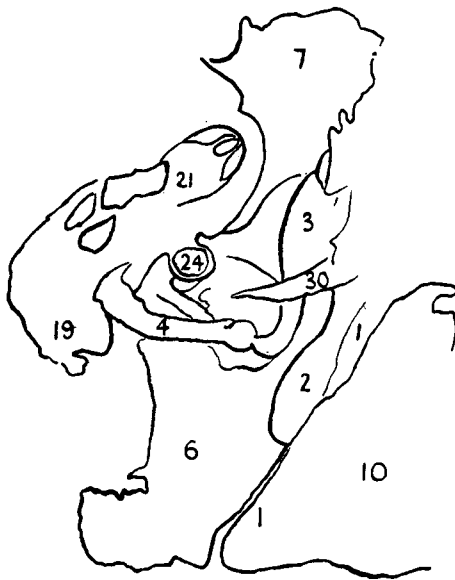


PLATE VIII.

The posterior portion of the middle ear has been removed so as to expose the structures which lie in front of the posterior margin of the oval window.

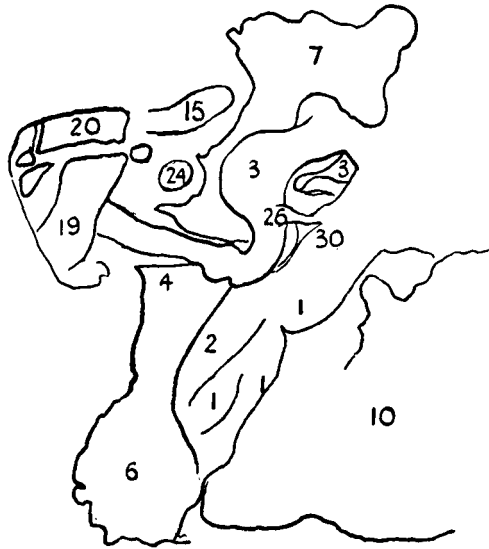


PLATE IX.

The posterior portion of the middle ear has been removed so as to expose the structures which lie in front of the posterior margin of the oval window.

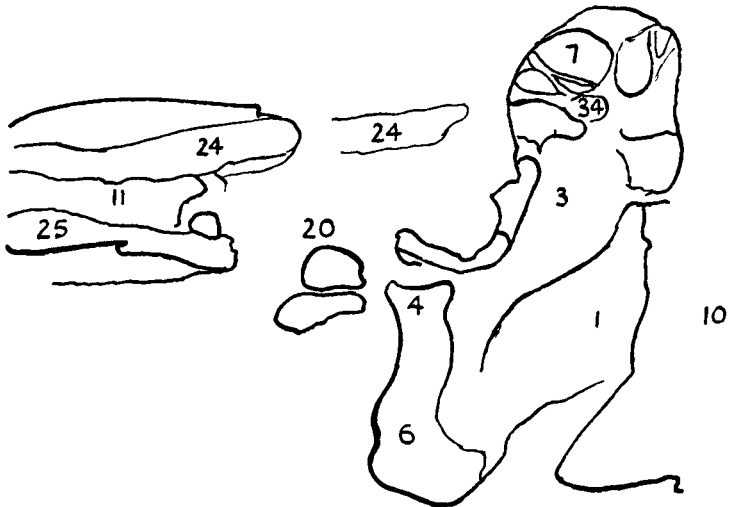


PLATE X.

The posterior portion of the middle ear has been removed so as to expose the structures lying in front of the posterior margin of the oval window in an ear, the seat of former inflammation.

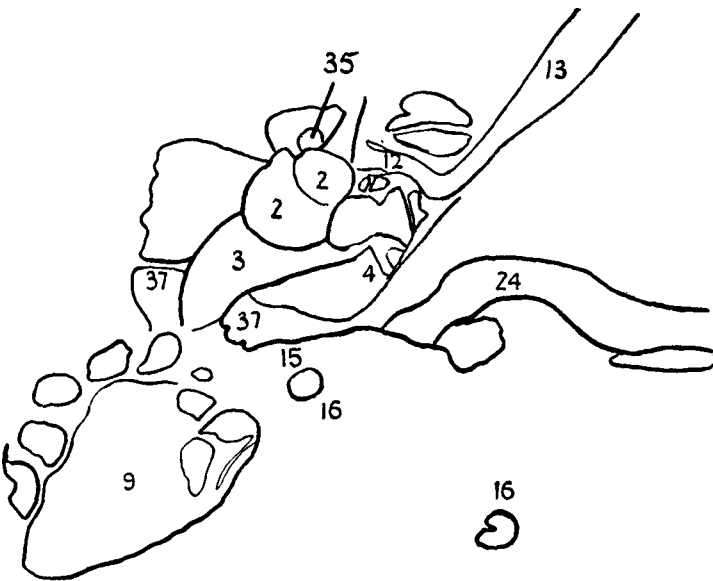
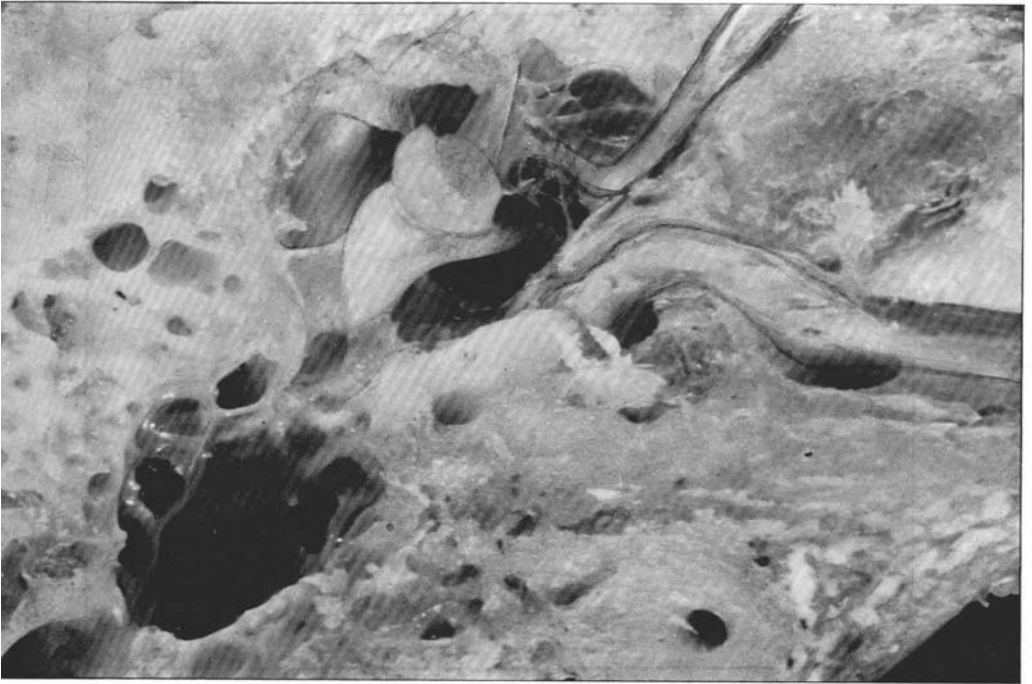


PLATE XI.

The roof of the middle ear, aditus and antrum has been removed so as to expose the structures.

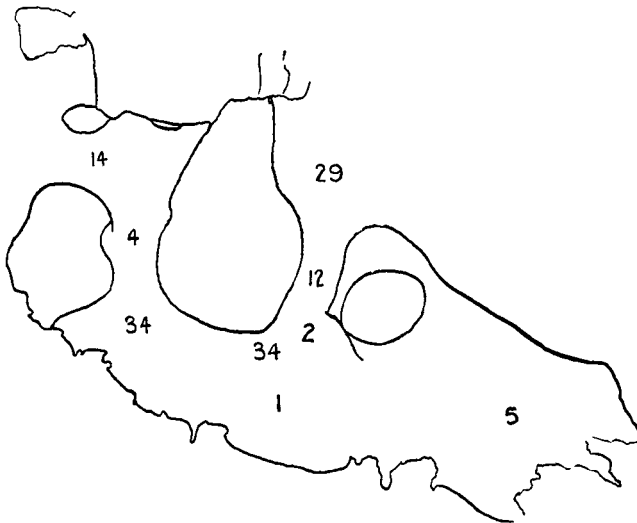
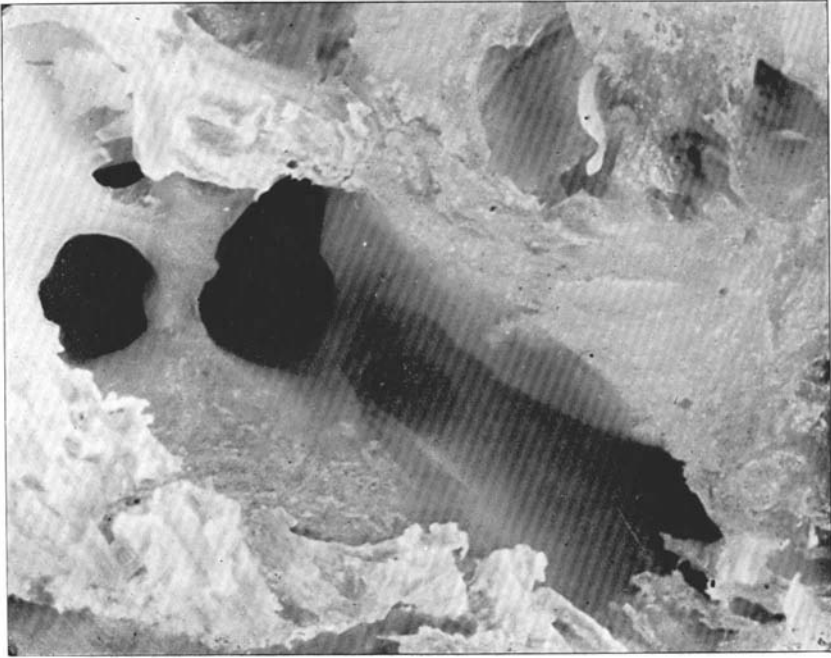


PLATE XII.

The floor of the middle ear which has been the site of inflammation has been removed so as to expose the structures which lie above the level of the lower margin of the oval window.

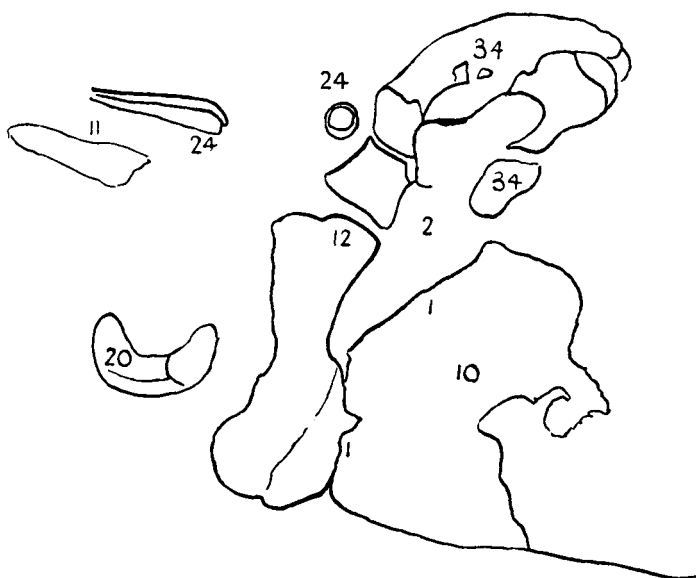


PLATE XIII.

The posterior portion of the middle ear, the seat of former inflammation, has been removed so as to expose the structures which lie in front of the tendon of the tensor tympani.

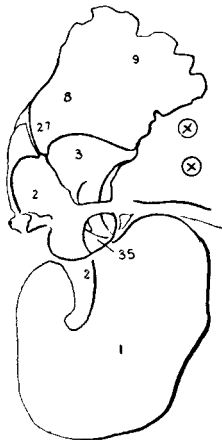
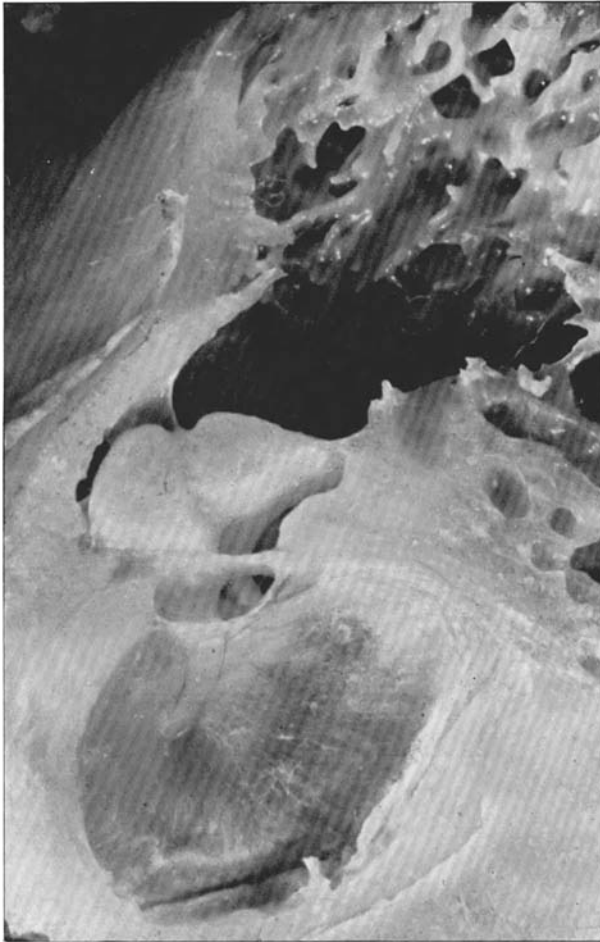


PLATE XIV.

The external auditory meatus, outer attic wall, and Shrapnell's membrane have been removed.



PLATE XV.

The posterior part of a middle ear has been removed so as to show the structures which lie in front of the processus cochleariformis.

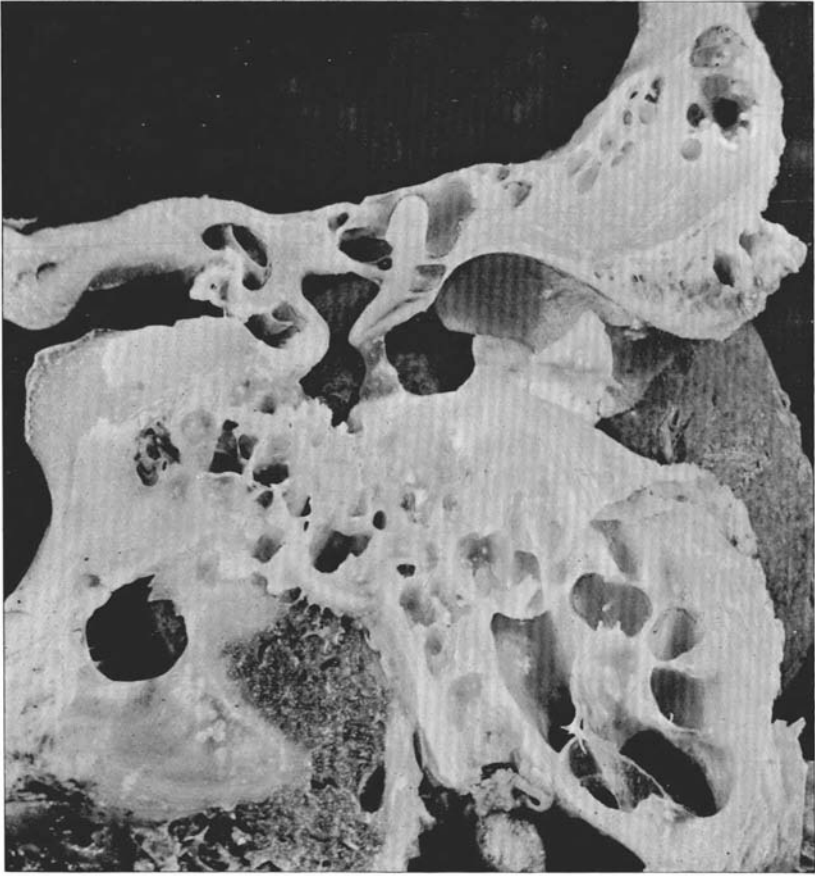


PLATE XVI.

A vertical section through the middle ear at the level of the tendon of the tensor tympani.

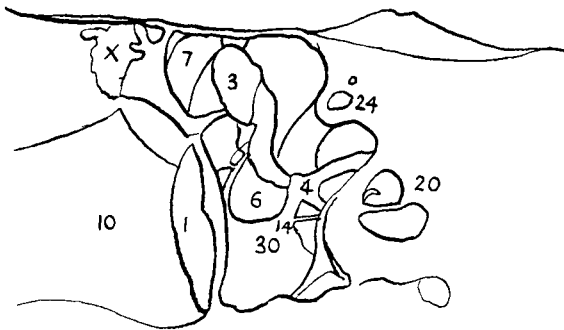
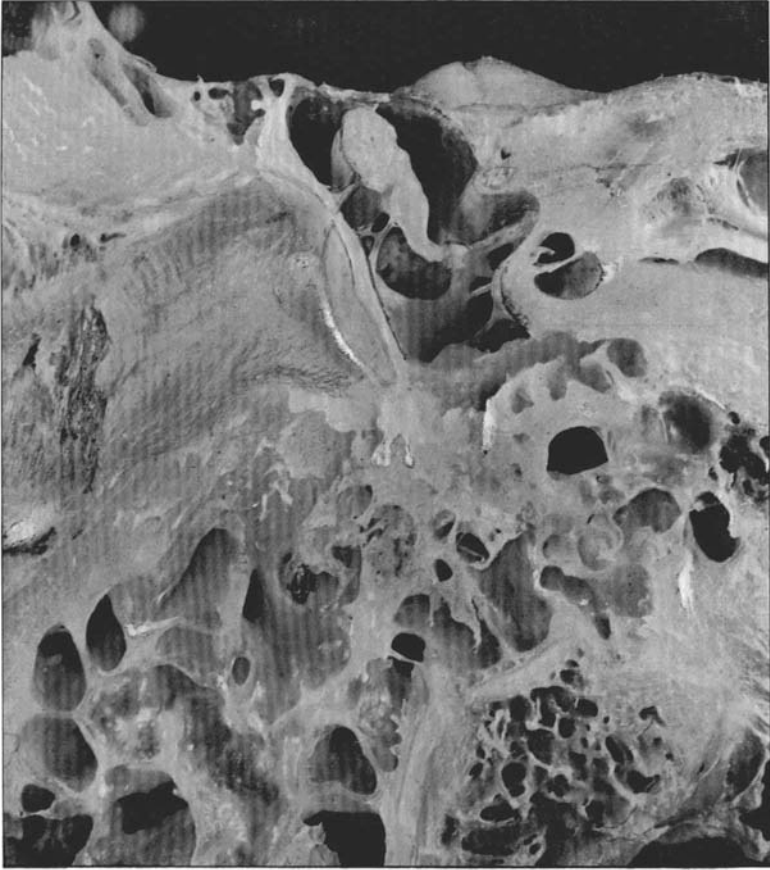


PLATE XVII.

The anterior part of the middle ear has been removed so as to expose the structures which lie behind the promontory.



PLATE XVIII.

The bone has been divided through the aditus so as to show the structures lying in this vertical plane.

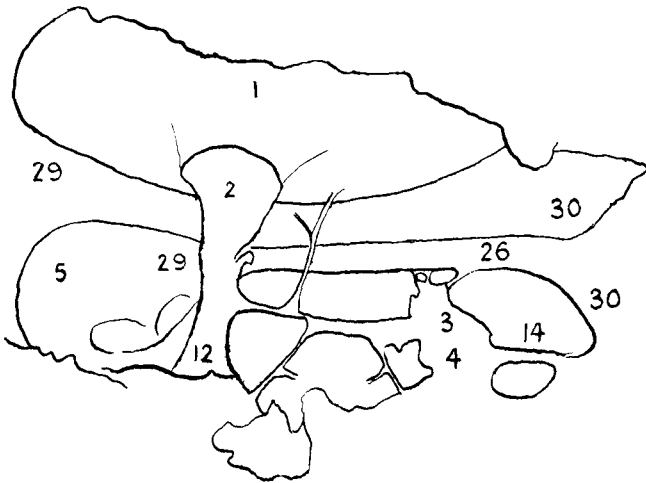
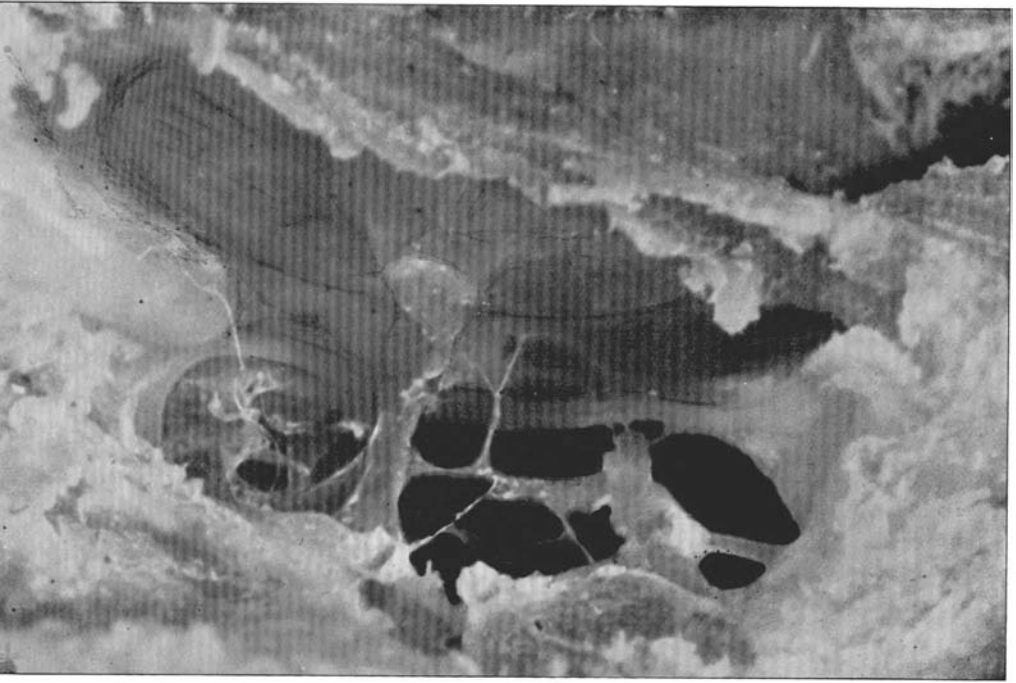


PLATE XIX.

The floor of the middle ear has been removed so as to show the structures seen when looking upwards into the middle ear.

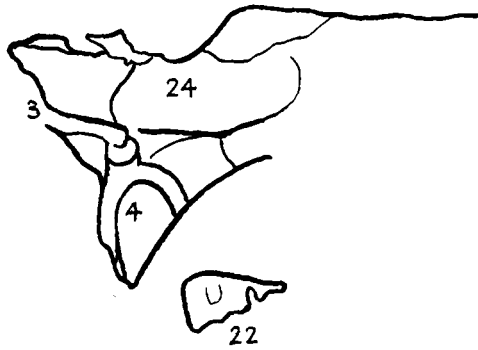


PLATE XX.

The middle ear has been divided obliquely at the level of the round window so as to show the structures lying above and behind this.

ABSTRACTS

EAR

Disproportionate Shortening of Bone-Conduction. A Statistical and Clinical Study. ANTONIO CIOCCO (Baltimore.) (*Acta Oto-Laryngologica*, xxii., 4.)

The phenomenon known as Wanner's symptom is studied in this work. Wanner and Budden had observed in a series of patients that, while the whispered voice was perceived at nine metres or more and with the upper tone limit unaltered, the hearing by bone-conduction for the a¹ (435 d.v.) tuning fork was reduced by four to six seconds.

They concluded that disproportionate shortening of bone-conduction is due to organic changes of the skull or its contents but the finding of shortened bone-conduction associated with normal air-conduction has never been widely accepted as a diagnostic sign of these changes. This phenomenon has attained importance as being pathognomonic of syphilis, though all authors who have observed a high percentage of syphilitics with disproportionate shortening of bone-conduction and who, therefore, regard the phenomenon as pathognomonic of the disease, appear to have failed to report comparable observations on non-syphilitics.

In the author's summary and discussion of the work he concludes that there is no association between the degree of impairment of bone-conduction and the following conditions—sex, race, history of otitis media, otoscopic appearance of tympanic membrane, tinnitus, vertigo, syphilis, cardiovascular diseases, malignant tumours, diseases of the gastro-intestinal tract, trigeminal neuralgia, cerebral or cerebellar tumours, a previous history of pneumonia, diphtheria, scarlet fever, or typhoid fever.

Of special interest in view of the controversial literature on the subject is the lack of correlation of shortened bone-conduction with syphilis.

Finally he comes to the conclusion from his statistical analysis of a larger number of the population than has been previously studied by any author that age is the only clinical factor associated with disproportionate shortening of bone-conduction.

H. V. FORSTER.

Gangrene of the Ear in Raynaud's Disease. L. FINDEISEN (Budapest). (*Acta Oto-Laryngologica*, xxiii., 2.)

The case of a man aged forty-eight whose ears were symmetrically attacked by the symptoms described by Raynaud in 1862 is

Abstracts

related. The right ear suffered slightly, the left severely, and this is shown in a photograph. Considerable sloughing of the left auricle followed.

The author discusses the differential diagnosis from hæmatoma auris, in which loss of tissue does not follow and also from a number of conditions in which actual gangrene involving this ear has been recorded.

The ætiology of Raynaud's gangrene is unknown. Suggestions for treatment are given but periarterial sympathectomy of the vessels supplying the ear or ganglionectomy are considered to be purely theoretical considerations.

H. V. FORSTER.

Brain and Lung Abscesses and Benign Spontaneous Pneumothorax as Complications of Otitis Media. P. R. ALLISON, F. A. HELLIER and G. S. SEED. (*Lancet*, 1936, i., 100.)

The authors describe the case of a man, aged 22, Left otorrhœa three months. Increased discharge and pain six days; no intracranial symptoms. Temperature 98·4° F., pulse 84, respirations 24, slight headache. Foul discharge from left ear coming from large posterior perforation. Leucocytosis 23,150. Coliform bacilli, *B. proteus* and diphtheroid organisms found and isolated. Central nervous system and fundus oculi were normal. He had a rigor on the first night in hospital. Diagnosis: acute mastoiditis and lateral sinus thrombosis. A Schwartze operation was at once performed, and necrosed bone and foul pus were found in the mastoid cavity. The sinus wall was sloughy locally, but with a normal-looking sinus beyond. Sinus excised: clot removed: free bleeding from torcular end. There was a large extradural abscess in the middle cerebral fossa, with a fistulous track through the dura-mater from a temporo-sphenoidal abscess. For ten days the temperature ranged from 97° F. to 105° F. Fourteen days after the operation the lung abscess occurred; this was opened and drained. Intermittent fever and rigors followed. The empyema cavity was explored, followed by ligature of the internal jugular vein. After this operation, the temperature and pulse became normal. The bronchial fistula was treated by cauterization with silver nitrate. The empyema cavity became obliterated and the patient was sent to a convalescent home. Four months later a left pneumothorax occurred; re-expansion of the lung was established eight weeks later. Three months after this recovery was complete and the man was back at work.

MACLEOD YEARSLEY.

On the Question of Lesions of the Ear in Leprosy. J. M. BURAKOW. (*Arch. Ohr-, u.s.w., Heilk.*, 1936, cxli., 74-85.)

The author is consultant laryngologist to a leper institute in South Russia. Apparently lepers hardly ever complain of ear

Ear

symptoms, although symptoms referred to the nose, throat and larynx are very frequent.

Among 188 patients there were only three cases with chronic middle-ear suppuration and in these cases the ear discharge had ante-dated the onset of lepra signs.

In the tuberous forms of leprosy the pinna is often affected ; in common with other skin lesions. There are many illustrations in the text of the typical appearances and deformities of the outer ear. The lesions affect the helix and, more particularly, the lobule, but the concha and the external auditory meatus are practically never involved.

In the patients with chronic middle-ear suppuration lepra bacilli could not be discovered in the pus. The middle-ear and Eustachian tubes are practically never attacked by the lepra bacilli and nerve deafness does not occur. On testing the otolith reactions the author found an excessive irritability of the reflexes associated with the sympathetic system. This is said to be due to a direct infection of the sympathetic ganglia by the leprosy bacilli.

J. A. KEEN.

Pathology of Paralysis of the Abductor Nerve of Otitic Origin.

DR. E. POGANY. (*Les Annales d'Oto-Laryngologie*, January, 1936.)

From clinical observations, results of pathological anatomy, and experiments on animals, the author concludes that paralysis of the abductor nerve is caused by an œdema which is produced by thrombosis of some sinus. The œdema is finally due to an interruption of the cavernous sinus floor, whether the thrombosis occurs in the superior petrosal sinus or the inferior petrosal sinus (the latter moreover having been shown to have several communications with the veins of the tympanic cavity). In the same way is explained the affections of the other cranial nerves, particularly the Vth, VIth and VIIIth, which sometimes accompany the paralysis of the sixth.

The writer's rules of procedure in treating these cases are as follows :

(1) In the case of abductor paralysis following an acute otitis, if the discharge of pus is sufficient, if there is no definite mastoiditis, if radiography does not prove it, and if there is no more than the usual elevation of temperature, then waiting is justifiable and the therapy is conservative.

(2) If there are positive symptoms of mastoiditis, whatever may be the result of the local and radiographic examination, and especially if the patient has any fever, surgical intervention is indicated, and, if it is possible, the whole of the cellular system of the mastoid, especially the zygomatic cells and those above the tympanum, should be removed.

Abstracts

(3) In the case of paralysis of the abductor nerve arising after an antrotomy, an inspection of the wound must be made after the radical exposure. Moreover if there is much fever, a lumbar puncture must be done as well as an examination of the blood, and a skiagram of the petrous bone. If the lumbar puncture raises suspicions of meningeal irritation, if the blood examination is positive, and if the radiograph demonstrates a lesion of the pyramid, then it is absolutely necessary to open the tegmen tympani, and the perilyabyrinthine cells. Even if the result of the operation is negative the majority of cases would heal, probably because the operation influences the pathological condition of the apex of the pyramid.

L. GRAHAM BROWN.

NOSE AND ACCESSORY SINUSES

The Surgical Treatment of Chronic Frontal Sinusitis. A. MOULONGUET and J. P. DEMALDENT. (*Les Annales d'Oto-Laryngologie*, January, 1936.)

The principle underlying the technique of the operation described in this article is the opening of both frontal sinuses by the external route by the removal of the nasal segment of the floor. Although this operation finds its chief justification when both sinuses are the seat of infection, yet the authors recommend it even in chronic unilateral cases. They assert that the risk of infecting a non-infected sinus is non-existent, and that they have on many occasions been surprised to find that a sinus which on clinical and radiographic interpretation had been thought to be healthy, was the seat of suppuration. In giving a short historical sketch of the surgery of the frontal sinuses, the authors recall the fact that one of the earliest pioneers of this branch of surgery, Ogston, included the exposure of both frontal sinuses in the technique of his operation. The operation itself is described in considerable detail with the help of illustrations. The approach to the sinus follows the usual lines but the further steps involving the exposure of the opposite sinus and ethmoidal region appear to be very complicated and reference will have to be made to the text. It is admitted that the operation can be safely performed only when the frontal sinuses are well developed.

M. VLASTO.

TONSIL AND PHARYNX

Papillomatous Hypertrophies of the Tonsil. H. BURGER (Amsterdam). (*Acta Oto-Laryngologica*, xxiii., 2.)

This work concerns three cases of papillomatous hypertrophy of the tonsils. In one of the cases not only the palatine tonsil but the

Tonsil and Pharynx

lingual tonsil was also involved. This patient was treated by electro-coagulation, the other two by removal of the tonsils. In all these cases the microscope did not reveal any trace of malignancy. Professor Burger reviews the medical literature on the subject and reproduces figures found in the works of various authors.

[Translation of Author's Abstract.]

H. V. FORSTER.

Malignant Growths of the Epipharynx. S. SALINGER and S. J. PEARLMAN. (*Archives of Oto-Laryngology*, xxiii., 2, February, 1936.)

The literature is full of contradictions in the terminology of nasopharyngeal growths. The tumours fall into three groups—carcinomas, sarcomas and endotheliomas, but the subdivisions are numerous and add to the confusion in classification. The frequency of each variety is very differently stated in the experience of most writers. The lack of agreement is so great that in the papers of nine authors one finds the percentage of carcinoma varying from 35 to 86, of sarcoma from 8 to 65 and of endothelioma from 0 to 18.

In their careful study of twenty-four cases the present writers found that the great majority (75 per cent.) could be definitely classified as transitional-celled carcinomas. They believe that many cases reported as endothelioma were in reality transitional-celled carcinomas or lympho-epitheliomas, but it is questionable whether a sharp distinction may be drawn between those two types of growth. Both originate in the transitional epithelium in the neighbourhood of the lymphoid tissues and the amount of lymphocytic infiltration depends upon the abundance or scarcity of lymphoid tissue in the patient. In 300 tumours of the tonsil and nasopharynx, Ewing found that only 6·3 per cent. were lympho-epitheliomas. Sarcoma is rare in the epipharynx; in the present series there was only one definite case.

The earliest symptom may be a painless and extensive enlargement of the cervical lymphatic glands, a condition resembling lympho-sarcoma of Hodgkin's disease, and the primary focus is often so small as to be overlooked. In the majority of cases the site is the lateral wall in the region of the Eustachian tube, which accounts for the preponderance of symptoms referable to the ear or to branches of the Vth nerve, deafness, tinnitus and localized pain. Pain in the forehead, eye, cheek or teeth is present in one-half of the cases and enlarged glands are noted in 80 per cent. of cases. The appearance of any symptoms referable to any of the cranial nerves other than the Vth indicates an extension through the basal foramina and a hopeless prognosis.

In a small group of cases the growth is of such bulk as to produce nasal obstruction and impaired mobility of the palate. Treatment

Abstracts

is entirely radio-therapeutic, the dosage of radium being the maximum compatible with the integrity of the surrounding tissues.

The paper is illustrated by twenty-one microphotographs.

DOUGLAS GUTHRIE.

ŒSOPHAGUS AND ENDOSCOPY

Surgical Treatment of Carcinoma of the Thoracic Œsophagus.

E. S. J. KING. (*The Medical Journal of Australia*, xxiii., 12, March 21st, 1936.)

Although carcinoma of the thoracic œsophagus is generally regarded as a hopeless condition, a few successes have been reported as a result of surgical intervention. Altogether five cases have been successfully treated by surgery. Carcinoma of the œsophagus is fairly common; it was sixth in frequency among 489 carcinomata which were the cause of death as recorded in 3,600 consecutive *post mortem* examinations at the Royal Melbourne Hospital.

During 1935 the writer saw twenty-five cases. In the majority the disease was far advanced, but in five cases œsophagectomy was performed, with three deaths and two recoveries.

Earlier diagnosis is much to be desired. Dysphagia is really a late symptom and follows the premonitory symptom of substernal discomfort and intermittent obstruction to deglutition. Food may appear to stick until washed down with a little fluid. Such symptoms in a patient over forty should be regarded with suspicion. X-ray examination is invaluable but a negative report is of no significance. Œsophagoscopy demands great care and in doubtful cases a piece of tissue should be removed and subjected to microscopic examination, remembering that too much importance should not be attached to a negative report.

The operative technique is that introduced by Torek in his original case (1913), and since employed by Eggers of New York. Approach is by an intercostal incision along the seventh interspace, with division of the vertebral ends of the fourth to seventh ribs. The œsophagus, dissected out of the mediastinum, is cut across at its lower end and the lower portion inverted into the stomach. The upper end is then approached by an incision in the neck and separated down to the mediastinal portion. The upper end is anchored to the skin and the portion containing the tumour is removed. The risks are shock, pleural infection, mediastinitis and pneumonia. The first of these is overcome by operating in two stages. Drainage of the pleural cavity is essential and infection is partly obviated by protection of the cut edge of the œsophagus. Mediastinitis is the most serious complication. The selection of suitable cases for operation depends upon the general condition of

Œsophagus and Endoscopy

the patient. There is no age-limit but the writer estimates the expectation of life from the longevity of the patient's parents. If the parents have lived long lives, the case is more suitable for operation. Terek's patient underwent operation at the age of 67 and died at the age of 80. In general unless the patient, if he recovers from the operation, will live for, say, ten years, the risk of the procedure is not justified.

As regards the formation of a new œsophagus, this is a difficult procedure requiring a number of operations and certain surgeons believe that it is hardly justifiable. The attitude of the patient should be the deciding factor.

DOUGLAS GUTHRIE.

Œsophagitis: A Clinical Study. P. P. VINSON and H. R. BUTT.
(*Journ. of the Amer. Med. Assoc.*, cvi., 12, March 22nd, 1936.)

Although œsophagitis is the commonest disease of the œsophagus little has been written on the subject. The present investigators found the condition in 7 per cent. of 3,032 necropsies, but a clinical diagnosis is unusual. Œsophagitis is frequently associated with intra-abdominal infections such as cholecystitis, appendicitis and duodenal ulcer and is favoured by conditions which cause frequent vomiting or in which gastric intubation is necessary. The most common symptom is a burning sensation in the thorax, localized in the back or at the lower third of the sternum, and resembling the pain of peptic ulcer. Hæmatemesis is also common in cases presenting acute ulceration; dysphagia from œsophageal spasm is a less frequent complaint. When the three symptoms, sub-sternal pain, hæmatemesis and dysphagia are present the diagnosis of œsophagitis should be considered, especially if the symptoms follow the use of the stomach tube. According to Jackson, œsophagoscopy is indicated in every case. X-ray examination shows no variation from the normal. As regards treatment, the writers recommend the use of a soft diet, of olive oil, of tincture of belladonna and of sedatives for the pain.

DOUGLAS GUTHRIE.

Is it an Advantage to make use of Kirmisson's hook for the Extraction of Coins from the Œsophagus? A. I. KOLOMITSHENKO (Kiev).
(*Acta Oto-Laryngologica*, xxiii., 2.)

The author mentions that Professor Kharchak of Kiev had used Kirmisson's hook for the extraction of coins from the œsophagus in thirty-four cases since 1930 and that he himself had removed four coins in two years with the same instrument, whereas before 1930 occasional difficulties had been experienced with the method of removal through the œsophagoscope. Coins remaining in the

Abstracts

gullet for nine to twenty-one days have been removed with Kirmisson's hook, which, because of the flexibility of its shaft and the design of the distal end, he believes to be a very safe instrument. The following is a translation of the author's conclusions.

I. In the removal of foreign bodies from the œsophagus each method has particular indications.

II. So-called blind methods may be employed only for coins and rounded and smooth foreign bodies.

III. Kirmisson's hook is especially the method of choice even when the coin has remained in the gullet for a long time.

IV. Kirmisson's hook is contra-indicated as are other blind methods in the case of rough edged foreign bodies.

H. V. FORSTER.

A Case of Pulsion Diverticulum of the Œsophagus treated by Resection of the Pouch and by Extra-mucosal Œsophagotomy. A. AUBIN.
(*Les Annales d'Oto-Laryngologie*, February, 1936.)

Although many surgeons have reported immediate successes after resection of an œsophageal pouch, the fact remains that the majority of these diverticula recur frequently before the lapse of a year. These recurrences are not difficult to understand because the removal of the diverticulum does not do away with the causative factors of the diverticulum which are as follows: (1) an anatomical weakness, (2) pressure of the alimentary bolus, (3) the resistance of the œsophageal lumen.

Surgical interference has limited itself in the past to dealing with the removal of the pouch and has neglected the factor of the resistant musculature. Although the author does not claim to have originated the idea, he insists—and the results quoted appear to justify this view—that section of the muscular fibres distal to the pouch is a necessary step in order to avoid recurrence after excision of the sac.

The operative technique of excision of an œsophageal pouch is described in detail and the step of division of the œsophageal muscle receives particular attention. As is usual abroad, local anæsthesia is recommended. There appears to be more justification in this case than in some others, because at a later stage in the operation, the voluntary effort of deglutition may assist in identifying the pouch. Resection of the pouch rather than diverticulopexy is advised and the author is convinced that the advantages of one-stage excision do not compensate for the great risk of infection involved.

We are given a detailed description of a case which had been operated upon by the author fourteen months previously. The result appears to be entirely satisfactory.

M. VLASTO.

Miscellaneous

MISCELLANEOUS

The Signs of Glosso-pharyngeal Paralysis. RAOUL CAUSSÉ. (*Les Annales d'Oto-Laryngologie*, January, 1936.)

This article is largely based on the evidence adduced after section of the nerve at an operation. These sections were nearly all carried out to abolish pain over the path of distribution of the nerve and a list of thirty-nine of these cases is published. In the majority of the cases, the nerve was sectioned extracranially, in which case the area supplied by Jacobson's nerve, i.e. the mucosa of the Eustachian tube and the tympanic cavity would be unaffected. Stress is laid on the technical difficulty of carrying out the nerve section without injury to the neighbouring nerves; and the fact that these nerves are so easily damaged must be borne in mind in considering the effects of a pure IXth nerve lesion. The effects of nerve division are studied from the gustatory, sensory, motor, secretory and vasomotor points of view. It would appear that the cardinal rôle of the glosso-pharyngeal nerve is to supply gustatory fibres to the posterior third of the tongue. This, of course, is the generally accepted opinion. The effect of section of the nerve on the sensorium is so variable and indefinite that one wonders if the nerve really has any proper function in this respect. The motor effects are very slight and, in many cases, none have been noted. The author, however, calls attention to a slight deviation of the soft palate during a state of rest.

M. VLASTO.

Sinus Sepsis and Mental Disorder. RONALD E. JOWETT. (*Journal of Mental Science*, January, 1936.)

A series of 500 routine cases of mental disease has been examined. Nasal sinus infection has been proved in 7.6 per cent. This percentage is compared with a similar one found in a similar series of cases, using similar criteria (Clarke and McCowan). It shows only a slight difference. In a control series of 184 mentally normal individuals the incidence of nasal sinus suppuration over the same three-year period was found to be not less than 5 per cent. Pioneer workers in this field claimed a high incidence of sinus disease in mental disorder, and their work is shortly discussed in the paper. Although later workers have found a lower incidence of sinus disease in mental hospitals than was at first claimed, an incidence of up to 10 per cent. infection demands investigations and treatment on grounds of general and possible local pathology. The writer considers that before conclusions can be drawn from *post mortem* pathological material collected in mental hospitals, the great incidence of sinus infection at some period of life in all individuals must be considered. No reliable information about the residua of past infection in the sinuses of people dying outside mental hospitals

Abstracts

is at present available. Further, in the tabulation of specimens showing sinus disease in mental hospital cases, the effect which the disease causing death might have upon the condition of the accessory sinuses must be carefully considered.

[Author's Abstract.]

Medical Aspects of Aviation. A. C. SMITH. (*Archives of Otolaryngology*, xxiii., 2, February, 1936.)

Since aviation came into being thirty-two years ago, medicine has aided its progress in many ways. The medical aspect of aviation is not merely concerned with the treatment of injuries. Equally important are such matters as the selection of the pilot, the prevention and cure of maladies peculiar to aviators, and the problems of public health related to aviation. In selecting a pilot, age is the first consideration. The optimum age for learning is 16 to 24 years. Until the age of 35 the pilot is fit for active combatant duty; from then until 45 he is suited for observation or general passenger work and after 45 his usefulness rapidly declines.

General physical examination should include the response of the heart to effort, the reaction time for various visual stimuli, and the re-breathing test for cardio-respiratory stability. The last-mentioned depends upon the results noted during re-breathing into a tank containing 52 litres of air. The reactions are noted during the test and, at its conclusion, the percentage of oxygen is ascertained. Some candidates can continue to re-breathe a mixture containing only 5 per cent. of oxygen, corresponding to an altitude of 30,000 feet; others become totally inefficient with half this amount.

Of no less importance is a psychological examination, as aviation naturally demands a fair degree of nervous stability. There is still some difference of opinion as to whether the ear or the eye is the more important; probably the eye is the more valuable. With regard to the ear functions, equilibration is more important to the pilot than hearing. But although the vestibular sensations are valuable, they are not infallible and have been responsible for many a fatal crash. For that reason the pilot must be trained to be guided by his instruments rather than by his own sense of direction. In a fog, a pilot, losing his sense of direction, may go into a spin to the left. He may then, guided by joint and muscle sense, feel that something is wrong and attempt to right the plane. In doing so, he experiences a sensation of vertigo to the right. To correct this he over-controls to the left and goes into another spin and eventually all sense of direction is lost and he crashes. By means of instruments the pilot may know through his sense of vision the exact position and angle of his plane, and his safety in flying depends upon the correct use of such instruments. Anoxæmia or incomplete

Miscellaneous

oxygenation of the blood affects many pilots at an altitude over 15,000 feet. The symptoms are depression, inattention, loss of muscular control and of judgment and, finally, unconsciousness. At a higher altitude there is little wind and the plane may travel faster but a sufficient supply of oxygen must be carried for the pilot and passengers. Carbon monoxide poisoning may result from the presence of engine exhaust gases in the cockpit and sometimes causes fatalities. The presence of the gas and its amount may now be detected by the aid of an instrument.

A painful affection of the ear, arising from tubo-tympanic congestion consequent upon a rapid descent, is not uncommon. The symptoms are caused by a partial vacuum in the tympanic cavity and consist in intense earache, deafness, vertigo and headache. Inflation gives relief but the symptoms may persist for twelve to twenty-four hours.

The excessive noise of the plane may be detrimental to hearing, and gradually increasing deafness occurs in many pilots. Occlusion of the meatus by plugs of rubber or wax serve to deaden the noise but their presence may give rise to otitis externa.

The transfer of epidemic or contagious diseases by aeroplane has become a vital problem. It has been found that infected mosquitoes may readily be transported into new territory by this means, even on a flight of many hours. It is advisable that aeroplanes and air-ports should be systematically inspected so as to reduce to a minimum the transmission of infection.

DOUGLAS GUTHRIE.

Acute Suppurative Thyroiditis. R. COOPE and L. FINDLAY. (*Lancet*, 1936, i., 1172.)

The authors describe this rare case in a woman of 53 who had a long-standing adenomatous goitre. The inflammation developed five or six days after the onset of a Type II pneumococcal pneumonia; Type II pneumococci were isolated from the blood, and were also grown from the pus obtained from the thyroid abscess. The patient recovered.

MACLEOD YEARSLEY.

So-called "Mixed Tumours" of the Salivary and other Cervico-facial Glandular Formations. ROGER LEROUX and JEAN LEROUX-ROBERT. (*Les Annales d'Oto-Laryngologie*, February, 1936.)

The following conclusion can be drawn from the anatomopathological and clinical studies which are embodied in this article: these "mixed tumours" are epithelial in origin and can be placed in the group of epitheliomata of the glandular parenchyma. This

Abstracts

conclusion is based on the following observations: (1) The histological characteristics of these tumours are not, as is commonly supposed, derived from multiple neoplastic foci but are true epithelial tumours which assume their characteristic appearance by virtue of their effect on the glandular stroma and *vice versa*; (2) the clinical characteristics and natural history of these tumours approximate to the epitheliomata by their tendency to recurrence and in more than 50 per cent. of cases, by their tendency towards metastases.

When the "mixed tumour" is present in a salivary gland, the whole gland with the contained tumour should be removed. In the particular case of a tumour of the parotid gland, total parotidectomy should be carried out with the preservation of the temporo-facial branch of the VIIth nerve.

M. VLASTO.

The Symptomatology of Thrombophlebitis of the Vertebral Vein.
S. UNTERBERGER. (*Arch. Ohr-, u.s.w., Heilk.*, 1936, cxli., 20-4.)

In a patient with a generalized infection of tonsillar origin, the jugular vein and several thrombosed tributaries from the throat region had been resected. In spite of the operation rigors and spikes of temperature continued and the following three signs developed a few days later: (1) a *torticollis* with the head bent to the diseased side; (2) an *extreme sensitiveness* of the skin of the neck to touch on the affected side with (3) pain on deep pressure over the cervical vertebrae, also on the diseased side.

These three signs are said to be absolutely characteristic of a thrombophlebitis of the vertebral vein on one side, due to irritation of the cervical nerves near their exits. The diagnosis was confirmed by the *post mortem* examination.

There is a short anatomical discussion with a clear diagram in the text, showing how the roots of the cervical nerves are completely surrounded by a network of veins both in front and behind the vertebral artery. In such a case one might attempt to tie the vertebral vein in the lower part of the neck before it joins the innominate vein. Such an operation is rather a formidable undertaking as it necessitates a temporary resection of the clavicle.

In the differential diagnosis the only other condition which can lead to irritation of the cervical nerves is a meningitis of the posterior fossa. However, the signs of meningeal irritation are usually bilateral, also the temperature chart is of a different type.

J. A. KEEN.