It was of course too early to be over optimistic as to the eventual result, since there had been frequent purulent discharge from the scar, even after a long time and apparent recovery recurrence and rupture into the ventricule may occur.

Intra-Tracheal Thyroid.—A. HEINDL.

A boy, aged 11 years, for two or three years had suffered some increasing difficulty in breathing for which, a year ago, a sub-sternal portion of the thyroid gland had been removed. No relief, however, occurred; on the contrary the discomfort became slowly worse, so that even when resting there was stridor, whilst on the slightest exertion a severe attack of dyspnœa occurred. On admission to the hospital the larynx was found to be normal, but in the sub-glottic space on the right posterior wall there was a swelling, the size of an olive, which reduced the lumen of the trachea to a slit about 2 mm. wide.

Endoscopy confirmed this appearance and the tumour was found to be elastic and covered with normal epithelium.

A low tracheotomy was first performed and a portion was removed for examination and found to consist of thyroid tissue.

Fourteen days later the tracheotomy wound was enlarged upwards to the cricoid cartilage, and through this opening the tumour was removed. An uneventful convalescence followed and one month later the tracheotomy tube could be removed.

ABSTRACTS

EAR

Early Asymptomatic Acoustic Tumour. M. HARDY and S. J. CROWE. (*Archives of Surgery*, xxxii., 2, February, 1936.)

Since 1924, the authors have been collecting and examining temporal bones in order to correlate histological structure with *ante mortem* tests of hearing and vestibular function. Eight hundred pairs of temporal bones have been sectioned, and a detailed study of serial sections in two hundred and fifty unselected cases disclosed that in six there was an acoustic tumour which did not give rise to clinical symptoms. The tumours were so small and so deep in the internal auditory canal that they were overlooked at autopsy. The vestibular nerve was invaded by four of the tumours and the cochlear nerve by two.

Histologically, five of the tumours resembled the large tumours of the acoustic nerve or of the cerebello-pontine angle. An angeiomatous network of vessels invading the vestibular nerve was found

in three of the cases in which there were tumours, and in seven of the other cases. The lesions, both tumours and angeiomatous network were asymptomatic. Irritative symptoms are not caused by growths too small to cause compression of the contents of the internal auditory canal.

The paper is illustrated by eight microphotographs and seven excellent drawings.

DOUGLAS GUTHRIE.

The Clinical Aspect of Vertigo. EDWARD D. D. DAVIS. (*British Medical Journal,* July 6th, 1935.)

Vertigo arising from the ear has distinctive features which make its recognition easy and certain. A hundred cases of vertigo are classified according to their clinical ætiology.

The pathology is discussed. There were no cases associated with high blood pressure. Lumbar puncture has produced negative results. The majority of cases were given palliative treatment. The mastoid operations in cases of suppuration of the ear were very successful. The indications for the destruction of the labyrinth are the failure of palliative treatment, and a certain diagnosis that the vertigo arises from the ear.

R. R. SIMPSON.

LARYNX

Motion Picture Study of Laryngeal Lesions. FRANCIS E. LE JEUNE (New Orleans, Louisiana). (*Surgery, Gynæcology and Obstetrics,* lxii., 2A, February, 1936.)

The author draws attention to the advantages of motion pictures for demonstrating laryngeal lesions. The article is illustrated with some excellent photographs of laryngeal tumours. Six hundred feet of film in natural colour has been produced and this will be increased. An adequate exposure of the larynx for obtaining motion pictures is accomplished by suspension laryngoscopy following the technique of Lynch.

W. H. BRADBEER.

TONSIL AND PHARYNX

Combined one-stage closed method for the treatment of Pharyngeal Diverticula. THOMAS A. SHALLOW (Philadelphia, Pennsylvania). (*Surgery, Gynæcology and Obstetrics,* lxii., 3, March, 1936.)

The author reviews the history of the surgical treatment of pharyngeal diverticula. The two-stage operation was advocated and practised by C. H. Mayo in 1910, and in 1923 he reported

seventy-four cases with but three deaths. Lupke, in 1921 reported thirty-nine one-stage extirpations with two deaths. From his own experience the writer prefers the one-stage operation.

He has observed that pharyngeal diverticula arise from one of three areas.

1. Most commonly above the cricopharyngeus muscle usually on the left side.

2. In some 35 per cent. of cases the seat of origin was between the lower border of the cricopharyngeus and the upper border of the œsophagus. Through this space pass the inferior laryngeal nerve, the inferior thyroid artery, and a bundle of lymphatics. This anatomical fact explains the occasional occurrence of hoarseness as a symptom of pharyngeal diverticulum. The inferior thyroid artery may cross the fundus of the sac giving the X-ray picture a notched appearance.

3. Infrequently a diverticulum may occur through the lower part of the inferior constrictor muscle in connection with a perforating branch of the inferior thyroid artery.

In a series of seventy-six one-stage operations there were two deaths, one from uræmia and the other from pneumonia and atelectasis. No cases were complicated by mediastinitis. Recurrence of the sac occurred in two patients, both were cured by a subsequent operation. The average age of the patients was fifty-nine, the oldest being seventy-five and the youngest forty. Eighty-four per cent. were males.

The surgeon should not attempt the one-stage operation unless he has the aid of an œsophagoscopist. The œsophagoscope transilluminates the sac and greatly facilitates its successful dissection. During the repair of the pharynx the instrument is in the œsophagus and obviates the risk of a stricture.

The operation is fully described and illustrated.

W. H. BRADBEER.

Hypertrophic Cricopharyngeal Stenosis. W. L. WATSON and F. W. BANCROFT. (*Surgery, Gynæcology and Obstetrics*, lxii., 3, March, 1936.)

The upper and lower ends of the œsophagus are normally in a state of tonic closure and the usual cause of benign spastic dysphagia is some neuromuscular dysfunction. The cricopharyngeus muscle is supplied by the glosso-pharyngeal and vagus nerves which, with some fibres of the cervical sympathetic, form the pharyngeal plexus. Sensory or psychical stimuli may cause spasm and hypertonicity of the muscle and may, as in the case reported, lead to hypertrophy of its fibre to such an extent as to produce a post-cricoid tumour.

Abstracts

The case observed by the writers was a woman, aged 49 years, who had noticed a " thyroid " enlargement for six years and had been subject to intermittent dysphagia for one year. For six months she had limited her diet to fluid or soft foods. There was a soft, diffuse swelling in the mid-line of the neck at the level of the thyroid isthmus. The pharynx and larynx were normal and there was no enlargement of cervical glands. Œsophagoscopy showed an obstruction of the upper end of the œsophagus where the lumen was narrow and the mucosa puckered. A 7 mm. bougie was passed with difficulty under direct vision.

Radiography suggested that the stenosis was due to an enlarged thyroid pressing upon the œsophagus.

Operation was carried out and after considerable dissection it was decided that the tumour was inoperable. A longitudinal incision was made in the left lateral border of the tumour down to the mucous membrane. On section it was 1 cm. in thickness and of cartilaginous consistency. Microscopical examination showed fibrosis and degeneration of the muscle fibres but no tumour cells and no inflammatory reaction. Convalescence was slow but the ultimate result was satisfactory. The swelling disappeared and the patient was able to swallow without difficulty.

The findings, operation and result closely resemble the condition described by Rammstedt in reporting his operation for congenital pyloric stenosis. Dilatation by bougies would obviously have been of no value and so far as the writers are aware, the operation they describe has not been previously attempted.

The paper is illustrated by eight figures.

DOUGLAS GUTHRIE.

ŒSOPHAGUS AND ENDOSCOPY

The present position of the treatment of Cancer of the Œsophagus. JEAN GUISEZ. (*Bulletin de Laryngo-Broncho-Œsophagoscopie*, January, 1936.)

A great many methods for the treatment of cancer of the œsophagus have been described in recent years and it is therefore very useful to have a résumé of present knowledge and experience. The author begins with the palliative methods and shows that intubation is preferable to gastrostomy on account of the " water hunger " that the latter procedure fails to overcome. Turning to surgical measures he describes the excision of growths in the cervical portion and points out the various difficulties that may be encountered.

Growths of the thoracic œsophagus are then dealt with and the two methods of approach (mediastinal route and transpleural

route) are described. The possibilities of success by the latter route according to the technique of Sauerbruck and Bauer are considered and the various modifications suggested by various other surgeons are considered. It is realized that the results are not very encouraging and that there are only seven or eight cases in which any reasonable period of survival after operation is recorded.

A long section of the paper is devoted to radium therapy. The author gives details of his own method of applying the radium to the growth in which twelve to fourteen doses of six to seven hours are spread over fifteen to eighteen days. The radium is applied in three tubes arranged end to end in a gum elastic carrier. The earlier applications are carried out endoscopically to make certain that the radium is in the middle of the growth. The author was able to give notes of nineteen cases that have lived for more than five years after radium treatment. The article concludes with some remarks on the early signs of œsophageal carcinoma and the opinion is expressed that if cases were sent for treatment earlier much better results might be looked for. There is no mention of deep X-ray therapy. WALTER HOWARTH.

MISCELLANEOUS

Medical Diathermy. JOHN S. COULTER (Chicago). (*Jour. A.M.A.*, January 18th, 1936, cvi., 3.)

This article has been authorized for publication by the Council on Physical Therapy of the American Medical Association and, while the bulk of the article deals with medical and surgical conditions, a part of it is devoted to the discussion of medical diathermy in otolaryngology.

Medical diathermy is defined as the production of heat in the body tissues for therapeutic purposes by high frequency currents. These currents are insufficient in amount to produce temperatures high enough to destroy body tissues or impair their functions. The currents are applied locally by three methods: (1) with contact metal electrodes, (2) with a high frequency alternating electric field, (3) with a high frequency electromagnetic field.

The use of diathermy is contraindicated before the rupture of the drum and, after incision, is of little benefit. For acute mastoiditis medical diathermy is mentioned only to be condemned. Little or no benefit follows its use in chronic sinusitis, chronic middle-ear suppuration, adhesive otitis media, otosclerosis, labyrinthine deafness or tinnitus aurium. Medical diathermy may relieve the pain in herpes but must be used with great care where intra-ocular disease, especially glaucoma, is present. No satisfactory electrode has yet been devised.

It is contraindicated in acute inflammatory processes, where there is a tendency to hæmorrhage, over areas in which the sensation of heat has been impaired, in malignant growths and in diseases or injuries where simpler methods of applying external heat give satisfactory results.

There is no demonstrable selective thermal action *in vivo*, no specific biological or bactericidal action that may be attributed to short-wave diathermy. To date the effects produced can be readily explained only on the basis of the generation of heat.

ANGUS A. CAMPBELL.

REVIEWS OF BOOKS

Recent Advances in Laryngology and Otology. By R. SCOTT STEVENSON. J. & A. Churchill, Ltd.

The Recent Advances series fulfils a very useful purpose in making available to many the contemporary thought and movements in the special subjects. The success of a volume depends to a large extent on the skill of the author in choosing his subjects and selecting his authorities. The author of this volume has chosen his subjects skilfully and has spent much time and energy in compiling an excellent and full bibliography on these subjects. He has thus produced an interesting book of great value to specialists and to candidates for the D.L.O.

The modern medical student reading for his finals has many large books which he must read. The author of this book shows that he is rather out of touch with the medical student by remarking in his preface : " To Medical Students the book may be of interest, but they should read it only in conjunction with the standard textbooks of laryngology and otology." Mr. Scott Stevenson is demanding far too high a standard of industry in the medical student.

The tonsil question is fairly stated and authors with varying points of view are quoted. The conclusion arrived at is that no one has yet shown any harmful results from a well-performed tonsillectomy.

The value of radium and X-rays in the treatment of the upper air- and food-passages is surveyed and a full list of references given. Carcinoma of the œsophagus is more fully discussed and the inevitable conclusion, that there is as yet no satisfactory treatment, is drawn.

The trend of modern opinion in the treatment of tuberculosis of the larynx is shown in a good chapter on this subject. Endoscopic methods are rather fully considered and this section will be