

## Abstracts

general medicine; for instance, the importance of toxic conditions affecting the vestibular centres, and also in everyday phenomena, such as fainting, in which the labyrinth was involved. There were three main types of mechanism in the labyrinth: the saccule and the utricle in the central division, the cochlea in the anterior section, and in the posterior division and the semi-circular canals.

Dr. Dohlman had explained the crista mechanism. He (the President) wondered whether Dr. Dohlman suggested an explanation of the mechanisms by which the cochlear and macular stimuli operated.

SIR JAMES DUNDAS-GRANT said he had listened to these two communications with great interest. The counsels of perfection which Dr. Dohlman had offered ought to stimulate otologists to greater accuracy but, while these new methods were being perfected, he hoped those working in the specialty might still use their simpler methods. He (the speaker) was himself responsible for having invented a cold-air apparatus, the adoption of which had considerably increased, though, after hearing such a paper as that read to-day, one felt it must be regarded as a convenient rough-and-ready method. It enabled one to obtain a very fair estimate of the degree of sensitiveness of the vestibule. The galvanic method was simple and effective, and it certainly gave a great deal of information. One placed the anode on the ear to be tested, and the kathode on the back of the neck or other indifferent spot. The patient stood with toes and heels together, and then the current was turned on until there was a postural deviation towards the anode which was unmistakable but did not cause the patient inconvenience. He had had several cases of cerebellar-pontine angle tumour in which the loss of reaction revealed by simple galvanic testing was of the greatest confirmatory value.

## ABSTRACTS

### EAR

*An Objective Study of Auditory Fatigue.* WALTER HUGHSON and E. G. WITTING (Baltimore). (*Acta Oto-Laryngologica*, xxi., 4.)

The writers point out that true objective observations in the study of auditory fatigue can be made only when consciousness is removed from the response, as in general anæsthesia.

The Wever and Bray phenomenon and its further developments offer for the first time the opportunity to study fatigue in a special sense organ in an objective manner. By this means it is possible to make quantitative measurements not only of the stimulus applied but also of the response obtained. With regard to the terms initial intensity, overload, and fatigue, used throughout the experiments the authors explain that the term initial intensity represents a value of volume loud enough to cause response in nearly all animals, but not so low as to be regarded as an actual threshold value. The

## Abstracts

term overload is used to describe a phenomenon when with increasing intensity of stimulus the response obtained tends to become poorer, and, finally, the term fatigue is used to define the effect of stimuli of high intensity upon the ear resulting eventually in a failure to respond in a normal manner but with recovery after rest.

The article terminates with a precise statement of conclusions but a discussion is also given as follows :—

“ In reviewing briefly the facts detailed above it seems fairly obvious that the structures of the outer and middle ear may be divided into two distinct functional groups. First, those designed to conduct sound waves to the inner ear and, when necessary, enhance sounds of low intensity : second, those that have a protective rôle when the ear is exposed to sounds of too great intensity. In the first group are included of course the pinna, the external canal, the tympanic membrane and the ossicular chain, no one of which is essential but together form an ideal system for the perception of any reasonably intense sound stimulus. In the second group the intrinsic muscles must serve both in an individual or combined capacity as the principal protective mechanism of the ear. Further this protection is directed entirely toward the delicate structures of the inner ear, or to be more specific to the organ of Corti itself.

No evidence has been obtained in this objective study which would indicate a specific function for any individual structure. It is also felt that with the present method of investigation fatigue of the ear is never specific in nature so far as response to individual frequencies are concerned. Fatigue develops for all frequencies regardless of the stimulating frequency used or the length of time the stimulus is applied. In general it may be said that the tones lying between 250 and 2,000 d.v. when used as stimuli have a more profound effect than those either above or below this range. However at variance with generally accepted views this point may be, a considerable mass of experimental data would seem to warrant its acceptance. Except where specifically noted, the facts obtained in this series of approximately two hundred experiments seem to support the views of earlier investigators. The reported experimental observations detract in no way from previously accepted hypotheses so long as they are in general agreement.

H. V. FORSTER.

*A new plastic method for closing post-aural fistulae.*

I. T. DOROSCHENKO. (*Acta Oto-Laryngologica*, xxii., 1-2.)

Dissatisfied with existing operations for the closure of post-aural fistulae, the Author has devised the following method, which has proved successful in two cases.

An incision is made throughout the whole length of the scar, parallel to the attachment of the pinna. The soft parts are raised

## Ear

both in front and behind, so as to expose the temporal fascia above and the tendon of the sterno-mastoid muscle below. The bone is made smooth and the margins of the wound are freshened. A strip of fascia lata, 7 cm. long and 2-3 cm. wide, is removed from the thigh and sutured with catgut in the wound, above to the temporal fascia and below to the sterno-mastoid tendon, so as to cover the depression in the bone. An incision for relief of tension is made 1 cm. behind the wound margin, and after separation of the soft parts between this incision and the wound, the latter is sutured. The cosmetic result, especially as regards the absence of depression is most satisfactory, and fascia lata has proved an excellent material for the purpose.

THOMAS GUTHRIE.

*The origin and operative treatment of extensive otogenous extra-dural abscesses.* T. GERMÁN. (*Acta Oto-Laryngologica*, xxii., 1-2.)

Large extra-dural abscesses due to ear disease can develop only where the dura is not closely adherent to the bone; they are therefore most common as a result of invasion of the cranial cavity through the roof of the tympanum and antrum and the wall of the sigmoid groove. A large abscess does not necessarily remain localized in the cranial fossa in which it originated, but may spread from the middle fossa to the anterior and posterior, and from the posterior to the middle. Owing to the firm attachment of the outer wall of the longitudinal sinus to the bone the abscess very seldom oversteps the middle line.

The largest abscesses occur when an originally acute bone inflammation, untreated by operation, passes into a subacute form, which may persist for months with few symptoms. This variety is associated especially with infection by the *streptococcus mucosus*.

The size of the abscess depends very much on conditions of drainage, the largest being found when escape of pus is hindered by such causes as intact tympanic membrane, inadequate or blocked perforation, or obstruction by polypus or by masses of cholesteatoma in the tympanum or aditus. In many cases the abscess cavity is not in actual continuity with the mastoid cell system.

In operating on these cases the diseased dura must be carefully examined for fistulae or hidden areas of necrosis; and the rule is that the whole extent of the bone covering the abscess must be removed until healthy dura is exposed in all directions. With large abscesses this entails the sacrifice of much bone, so that, after healing, a large area of the brain may remain covered only by soft parts. It was to prevent the disabilities attendant upon such a condition that Otto Mayer advised the use of osteoplastic flaps, but this adds much to the severity of the operation, and, when a subperiosteal abscess is present, fails owing to necrosis of the bone from lack of nourishment.

## Abstracts

The author, instead of laying bare the bone in the whole extent of the abscess, first deals thoroughly with the original source of the disease, namely the mastoid area, and then, through a separate skin incision, makes a wide opening in the bone at the highest and most distant point of the abscess, drainage being established through both openings. The remaining bone covering the abscess is seldom so diseased as to be incapable of recovery. He describes a case in which he employed this method with success.

THOMAS GUTHRIE.

*Deaf Automobile Drivers.* H. BURGER. (*Acta Oto-Laryngologica*, xxii., 1-2.)

In 1933 the Swiss Society of Nose, Throat and Ear Surgeons discussed the question of defective hearing in motor drivers, and accepted by a large majority the recommendations of Ulrich, who laid down certain degrees of hearing capacity as necessary for each of three different groups of drivers. Some of those present went even further and demanded normal hearing, although this, according to Bezold, would exclude one person in three.

At first sight there appear to be two indispensable requirements for a motor driver: (1) a certain degree of acuteness of hearing, and (2) ability to locate sound. As regards the latter it may be remarked that, although in the open country or in a quiet room, persons with two normal ears can locate sound accurately; in a noisy street, as experiment has shown, they become quite as incapable of doing so as those with unilateral deafness.

In Germany it is required that conversational voice must be heard at a distance of 5 metres. Yet it would surely be absurd to exclude by such a rule people with low tone deafness and paracusis Willisii, some of whom seem to hear better than a normal person in the noise of traffic. Moreover, as S. H. Mygind has shown, there are many very deaf people without paracusis, who hear automobile horns remarkably well, and need therefore be under no disability in this respect. Some deaf people indeed go so far as to assert that deafness causes no accidents and that a driver can in fact dispense with his hearing entirely. They claim that he will be all the more cautious, and they draw attention to the fact that the prohibition of the use of the horn during night hours in some countries has resulted in a decrease of accidents. The reflex from eye to foot, they say, is more rapid and effective in the absence of the distracting and exhausting element of noise.

The driving ability of a deaf person depends very much on his psychical condition; whether, that is, he is active, energetic and alert, or whether, like many deaf people, he is dull, depressed and timid. It is certainly a mistake to attempt to lay down hard and fast rules as to the requisite degree of hearing capacity, while

## Ear

neglecting the much more important psychical qualities. Many people with very defective hearing make excellent drivers, just as many children with poor hearing do well in ordinary schools, while others, who hear no worse, must be educated in special schools.

The author would, however, dissuade the deaf from choosing motor driving as an occupation, both because future legislation may exclude them, and because they will inevitably have difficulty in finding work. He agrees with Ulrich that they should, at any rate, not be employed as drivers of public vehicles.

THOMAS GUTHRIE.

*Acute Nephritis occurring in Acute Suppuration of the Middle Ear*  
DR. AKIRA KODAMA (Yokohama). (*Oto-Rhino-Laryngologia*, viii., 7, page 601.)

A boy, aged eight, complained of pain and discharge from the left ear, with a high temperature. The left drum membrane bulged above and behind and was perforated. There was profuse discharge of thick muco-pus, the pathogenic organism being staphylococcus aureus. On the fifth day œdema came on in the legs in spite of strict diet and limitation of drinking. On the seventh day there was hæmaturia with erythrocytes, leucocytes and epithelial as well as granular casts. In view of the increasing œdema of the eyelids and the deterioration in the condition of the ear, a mastoid operation was carried out. On the thirteenth day after this intervention the albumen disappeared from the urine and the œdema subsided.

JAMES DUNDAS-GRANT.

*A new proceeding for anæsthetizing the tympanic membrane.*  
DR. KANAE TANAKA (Kôbe). (*Oto-Rhino-Laryngologia*, viii., 6, page 504.)

The author observed that the postero-superior part of the drum was somewhat thinner and less sensitive than the rest. He, therefore, endeavoured to anæsthetize the membrane by injection at that spot. One or two drops of a 5 % solution of cocaine with a small addition of adrenalin was injected by means of a thin needle 5 cm. long, into the tympanic cavity.

JAMES DUNDAS-GRANT.

*The treatment of suppurative middle-ear cholesteatoma.* PROFESSOR  
DR. ALEXANDER REJTÖ. (*M Schr. für Ohrenheilk*, May, 1935.)

The attention which the author has paid to this particular subject and his reports thereon are already well known. The present article rehearses some of his previous opinions as to the ætiology of the lesion and is devoted to the palliative measures which he has found most successful in those cases in which operation is either declined, or for other reasons is considered inapplicable, or,

## Abstracts

in dealing with operation cavities in which this development subsequently occurs.

He emphasizes the futility of attempting to deal with this condition by the use of either aqueous lotions or  $H_2O_2$ , which he states not only fail in control but even assist towards yet further development.

His own method consists in the use of carbon tetrachloride (some 5 c.cm. being injected into the middle ear by means of an attic syringe).

This causes no discomfort except a slight feeling of burning, which patients easily tolerate, and is thus preferable to the use of chloroform, which otherwise is a more suitable agent for dissolving the cholesteatomatous mass, but is associated with such severe discomfort that its use is not possible. The carbon tetrachloride in large doses is poisonous, but in the small quantity used for the treatment of cholesteatoma this question does not arise, since it cannot be inhaled from the ear and it is usually easy to avoid its passage *viâ* the Eustachian tube into the throat, whilst if by any chance a small amount should reach the pharynx by this route, the only effect on the patient is the unpleasant taste.

It is important to use a sample entirely free from impurities.

ALEX. R. TWEEDIE.

### LARYNX AND TRACHEA

*Experimental tuberculosis of the respiratory passages.* T. MILSCHTEIN and P. POUGATSCHE, Leningrad. (*Acta Oto-Laryngologica*, xxi., 4.)

Many authors doubt the existence of primitive laryngeal tuberculosis, though Freudenthal believes that it does take place. The mode of laryngeal infection also provides the opportunity for different points of view and the opinions of various authors are given. Direct infection of a mucosa damaged by cough may take place from organisms in the sputum, though some believe this may happen through an intact epithelium.

The secreting glands may offer a portal for attack, and the lymphatics and the blood stream (apart from miliary tuberculosis) may bring the infection to the larynx. Finally, there is the idea of Ricker who believes that certain vasomotor disturbances may be a predisposing cause of invasion. It is this view of the importance of the nervous system which the writers of this article have had in mind during their experimental work, which is divided into two parts :

(1) Experimental tuberculous infections of the respiratory organs by the path of contact and by the blood stream route.

## Larynx and Trachea

(2) To determine the degree of participation of the nervous system in the development of these infections.

Rabbits were used in the experiments. In the control animals an emulsion of attenuated tubercle bacilli was introduced into the auricular vein. When examined at autopsy all these control animals were found to be infected with pulmonary tuberculosis.

With regard to the experiments by surface contact the emulsion was applied to the larynx through a tracheotomy opening. For the blood stream method the emulsion was injected into that part of the carotid artery giving forth the superior thyroid artery, the main vessel being controlled above and below this section. In certain animals the superior laryngeal nerves were also divided and in others cerebrospinal fluid was drawn off by suboccipital puncture. As a result of these experiments the writers conclude that tuberculous infection by contact results in a malignant type of disease and secondary lesions may possibly take place. Further, although to-day hæmatogenous tuberculosis is believed to be a more malignant variety of infection, it is thought that this idea may need to be verified. The lesions of blood stream infection may remain latent until encouraged to break out after functional disturbances of muscles and nerves.

In these experiments where contact infection of the larynx was attempted after division of the superior laryngeal nerves no infection took place. The resulting hyperæmia is thought to have acted as a barrier, a conclusion of some importance when considering the advisability in the human being of surgical division of these nerves.

The article concludes with a bibliography and several photographs of findings at autopsy.

H. V. FORSTER.

*Tracheal hæmorrhages.* HENRY GARNIER. (*Les Annales d'Oto-Laryngologie*, March, 1935.)

Although etymologically the word " hæmoptysis " connotes the spitting of blood, it is usual to reserve this term for cases in which the source of the bleeding is the respiratory tract and in particular that part of the tract below the glottis. After a brief historical sketch of the subject, the author gives a classified list of all those morbid conditions—apart from pulmonary tuberculosis—which may give rise to hæmoptysis : (1) Trauma ; such as fractured ribs, foreign bodies and gas poisoning. (2) Cardiac disease ; mitral stenosis, high blood pressure and rupture of an aneurysm. (3) Diseases of the blood ; hæmophilia, purpura, leukæmia and hæmorrhagic septicæmia. (4) Non-tuberculous lung conditions ; pneumonia, malignant disease, hydatid cyst, etc. (5) Tracheal ; it is the study of this group to which the paper is devoted.

After another brief historical sketch of this condition the author proceeds to a description of the symptomatology. The

## Abstracts

patient is usually in good health and the blood, which varies in quantity, is shining, non-ærated, pure and dissolves in water. The hæmoptysis may last during the day and for some following days and then may cease for several months. Other characteristics are described in the paper. No other physical signs can be found. Diagnosis is effected by direct inspection of the tracheal lesion. There are many different kinds of lesion that have been noted : Sometimes there is no localized condition, but the whole of the tracheal mucosa is hyperæmic and bleeds on the slightest trauma. Other forms of lesion are described in the text. The ætiology of this condition is obscure, but the author discusses the various explanations that have been suggested in explanation of this spontaneous tracheal hæmorrhage. An account of the treatment is given ; the prognosis in these cases is very favourable.

M. VLASTO.

### NOSE AND ACCESSORY SINUSES

*Metastatic carcinoma of the nasal septum.* E. RUTTIN. (*Acta Oto-Laryngologica*, xxii., 1-2.)

Two cases are reported of metastatic squamous epithelioma of the nasal septum. Certainly in one, and probably in both, the growth began in the membranous septum. In one of the cases the primary growth was in the pyriform fossa and had been treated two years previously with X-rays by Coutard's method ; the autopsy showed in addition to the disease in the pyriform fossa, two necrotic carcinomatous infiltrations in the œsophagus and numerous metastases in the pleura and lungs. In the other case the original disease was a carcinoma of the mediastinum with pulmonary metastases.

Metastatic tumours of the nasal septum are rare. It may be supposed that a metastatic deposit in the lungs has perforated and entered some small artery and has reached the membranous septum by way of the external carotid and the arteria labialis superior. Less probable seems retrograde transport by veins, and still more unlikely by lymphatics, since the lymphatic network of the front of the nose is more or less isolated.

Primary carcinoma of the septum is met with in a similar situation that is, at the junction of skin and mucous membrane, but is generally of slow growth and for long affects one side only, while the metastatic form is situated in the substance of the membranous septum and extends laterally in both directions.

THOMAS GUTHRIE.

*An unusual infection of the antrum, of dental origin.* E. C. N. STRONG and I. B. BARCLAY. (*Lancet*, 1935, ii., 132.)

The authors describe the case of a boy of 15, in whom an antral suppuration of unusual interest occurred, in that it (1) arose from a



## Nose and Accessory Sinuses

central incisor, (2) the apex of which was septic and root-filled—both unusual conditions. Whether the root-filling had, in passing through the apex, spread the infection, or whether there was a pre-existing antral infection before the dental treatment, is doubtful ; but the fact that the condition subsided with the extraction of the tooth followed by antral lavage shows that the two were correlated. It was, indeed, a direct extension from the tooth socket to the antral floor. Three radiographs illustrate the case.

MACLEOD YEARSLEY.

*A method of measuring the airway of the nose.* SIR LEONARD HILL.  
(*Lancet*, 1935, i., 70.)

The writer describes the research which was undertaken at the instance of the Medical Research Council. Into one nostril a nipple-shaped tube is inserted so as to fit the nasal opening in air-tight fashion. A glass tube, with rubber nipple, answers the purpose ; the orifice cut in the end of the nipple should be about 5 mm. in diameter. This tube is connected with a water manometer, the other end of the manometer tube being connected to a tambour set to write on a drum. A record of the manometric excursions produced by breathing is taken first from one nostril and then from the other. When the breathing is through a partially obstructed nostril the excursion will be greater because of the greater pull of the expanding lungs on the nostril with the recording tube. The excursion of breathing through the normal nostril can be made equal to that of the obstructed one by narrowing the external opening of the former. This is done by inserting into it a very short length of nipple-shaped tube. Curves are given of various results with and without heating of the air and exercise. Apparently the method of measuring and recording the nasal airway is useful in some cases of asthma and after operative measures for the relief of obstruction.

MACLEOD YEARSLEY.

*A giant teratoma in the right nasal cavity.* DR. YUMIKICHI NAKATA,  
Shizuoka. (*Oto-Rhino-Laryngologia*, viii., 7, page 605.)

In an infant, who had been born by means of forceps, a tumour of the size of a fist, with a hard pedicle of the thickness of the thumb, protruded from the right side of the nasal septum. It was removed by operation ; it measured 9 by 8 cm. and was covered with a dark red membrane. On the medial side of the pedicle there was a structure containing two teeth and in the pedicle itself there were hairs and two cysts resembling eyes. Microscopically there were structures belonging to skin and to oral, tracheal and bronchial mucous membrane. Here and there were found elements of bony and cartilaginous tissue.

JAMES DUNDAS-GRANT.

# Abstracts

## TONSILS

*The tonsil and adenoid operation.* D. F. A. NEILSON. (*Lancet*, 1935, i., 1,387.)

The author considers that, for the following reasons, the usual order of removal of the tonsils before the adenoids should be reversed: (1) The adenoids are removed with the faucial pillars intact and there is no danger of tearing or damaging them. (2) Adenoids removed, the nasopharyngeal plug arrests hæmorrhage and there is actually less loss of blood than if the bleeding is allowed to stop by clotting. (3) It is an advantage that at the end of the adenoid and tonsil operation, after the removal of the pharyngeal plug, the child can be at once put to bed with less risk of a blood clot forming in the deep pharynx. (4) The method of removing adenoids while the patient is coming round from the anæsthetic is strongly to be deprecated.

MACLEOD YEARSLEY.

*Chronic tonsillitis and the thyroid gland.* L. ZOLTÁN. (*Acta Oto-Laryngologica*, xxii., 1-2.)

One of the many questions regarding the physiology and pathology of the faucial tonsils is whether there exists a hormonal or other connection between their function and that of the thyroid gland? Numerous observations seem to show (1) that patients with exophthalmic goitre are improved or cured by removal of unhealthy tonsils, and (2) that attacks of tonsillitis are sometimes followed by inflammatory diseases of the thyroid gland and by goitre, both of which are effectively treated by tonsillectomy.

The author investigated, both before and after operation, thirty-three patients with chronically inflamed tonsils, paying special attention to their history, neck measurement, complete blood picture, basal metabolism, and sensitiveness to adrenalin and thyroid extract. His results indicated that the influence of tonsil disease on the gland is not of a hormonal but of an infective—metastatic nature, and they confirmed the reports of previous observers as to the favourable effect of tonsillectomy in patients suffering from various forms of thyroid gland disease.

THOMAS GUTHRIE.

*Treatment of septicæmia due to adenoid infection by forcible nasopharyngeal palpation.* ROBERT RENDU, LYONS. (*Les Annales d'Oto Laryngologie*, April, 1935.)

Although speaking bacteriologically, septicæmia is understood to imply that organisms have penetrated into the blood stream, it is a recognized fact that blood culture in these cases is usually negative. Thus defined, we can recognize two clinical forms of adenoiditis in children with the clinical manifestations of septicæmia:

# Tonsils

(1) The acute and more frequent form, which lasts four to eight days, (2) The more prolonged form (two to four weeks) with irregular pyrexia and cervical adenitis. It is to the second of these two forms that this form of treatment is most applicable. The first successful result was published in 1925, that is to say at a time when it was regarded as criminal to operate on tonsils and adenoids during the acute stage. Since then our viewpoint has changed and the author feels that the many good results that have been reported will be listened to with a greater measure of respect. The technique of the operation is as follows: "after making a surprise introduction of the index finger behind the soft palate into the naso-pharynx, the adenoid mass is crushed from before backwards and from side to side. The manœuvre lasts from three to five seconds". The therapeutic effect, often dramatic, is assumed to be due to the emptying of a number of tiny encysted abscesses, thus putting an end to the conflict between the white cells and the invading germs. Many cases are quoted in support of this therapeutic measure. In certain cases in which a paracentesis has been carried out in a child and there is a continuance of the pyrexia and where the possibility of an extension of infection of the mastoid has been feared, a simple naso-pharyngeal palpation has effected a cure.

M. VLASTO.

*The occurrence of eosinophile cells in the secretion of the nasal cavities, accessory sinuses and tonsils.* P. KALLÓS. (*Acta Oto-Laryngologica*, xxii., 1-2.)

The presence of increased numbers of eosinophile cells in the blood and bronchial secretion in allergic asthma has long been known, and has given rise to the idea that an excess of these cells in the secretion of the nasal cavities and accessory sinuses in cases of chronic catarrh and of polyposis may be an indication that the disease is of allergic origin.

The author examined the eosinophile cell content of the secretion in 120 cases of this kind, and also, at the suggestion of Professor Bárány, of the tonsil secretion in patients with joint and muscular rheumatism.

Although his investigation is still incomplete, he has thought it well to make this preliminary report in view of the recent publication of similar researches by Hansel, whose results exactly correspond with his own.

He finds that (1) in chronic catarrh of the nasal and of the accessory cavities the secretion often contains a large number of polynuclear eosinophile cells (10-50%); (2) the same is also true of the secretion in cases with polypus, and histological examination of the latter shows an eosinophile infiltration. It was found possible,

## Abstracts

besides, to confirm the allergic nature of some of these cases by discovering the specific allergen or by the Proteose skin reaction; (3) in the secretion expressed from the tonsils of patients with articular or muscular rheumatism there was often a definite increase and even a preponderance of eosinophile cells, while such cells were not present in the tonsil secretion of persons free from rheumatism and other allergic diseases. This was verified by microscopic examination of the tonsils after removal.

While the presence of a local eosinophilia suggests that a disease is of allergic origin, it is not at present possible to explain the phenomenon. The frequent excess of eosinophile cells in the tonsil secretion of rheumatic persons is remarkable, and raises the question whether this may be regarded as an additional proof of local infection from the tonsils as a cause of chronic rheumatic conditions.

THOMAS GUTHRIE.

*Diphtheria combined with Vincent's angina.* DR. ITSUO IWATA, Omachi. (*Oto-Rhino-Laryngologia*, viii., 7, page 634.)

Clinical and bacteriological examination showed Vincent's angina and diphtheria. Treatment with diphtheria anti-toxin and neoarsaminol was followed by recovery in ten days.

JAMES DUNDAS-GRANT.

### MISCELLANEOUS

*Emergency blood transfusion in oto-laryngology.* G. CANUYT. (*Les Annales d'Oto-Laryngologie*, March, 1935.)

Although this article is the substance of a lecture delivered before the French Society of Oto-Rhino-Laryngology, it must be accepted as a digest of a book by the same author which has recently been published. The main points elaborated by the author are as follows: (1) Blood transfusion should be carried out too early rather than too late. (2) There should be a number of blood transfusion centres for the use of hospitals and private clinics. Every operator should not only know how to carry out a transfusion but he should be in a position to carry it out immediately. To make this possible, every doctor, student and nurse should know his particular blood grouping. Indeed, it would be wise if every individual knew to which group he or she belonged. This knowledge would be useful both in times of peace and in war.

M. VLASTO.