REVIEWS OF BOOKS

Hygiène du Sourd. By A. Hautant and R. Caussé. Published by G. Doin et Cie. Paris. 12 fr.

The social aspect of deafness has not, perhaps, received the attention it deserves. And yet recent statistics published in the States have shown that there is a definite loss of hearing in 5-10 per cent. of the population. This figure indicates that the problem is not unimportant and the authors in this booklet are considering it from a point of view designed more for the practitioner and the deaf themselves rather than for the specialist. Deafness of the otosclerotic type appears to have loomed so much in the foreground that deafness due to rhino-pharyngeal conditions—although far more frequent—is often unrecognised. It is particularly in the recognition of this latter form of deafness that progress is likely to be made. This book should do much in disseminating amongst laymen an appreciation of the benefits to be derived from the removal of tonsils and adenoids in suitable cases. A considerable part of the book is devoted to a sympathetic consideration of the methods by which the life of the deaf can be made happier. The more practical points of aids to the hearing and lip reading are usefully discussed. This small book is likely not only to assist and in some measure to comfort the deaf, but should also play its part in educating the mind that in deafness, as in so many other morbid conditions, "prevention is better than cure".

M. Vlasto.

L'insuffisance Nasale Respiratoire et ses déterminations pathologiques. By M. Boloitte. Published by G. Doin et Cie. Paris. 20 fr.

This monograph of thirty odd pages is one of a series of "La pratique médicale illustrée" in which specialised medical subjects are dealt with by competent authors. The one under review outlines the anatomical and physiological principles of nasal breathing. There is a somewhat superficial account of the morbid conditions which interfere with nasal respiration and indications are given of the broad lines of treatment.

M. Vlasto.

Atlas of Otology. Vol. II. By Albert A. Gray. Published by Jackson & Wylie. Glasgow. £6 6s.

The publication of a second volume of Dr. Albert Gray's splendid Atlas of Otology is a literary event of the first class in the domain of scientific otology. The reputation of British
otologists in the medical world rests chiefly, perhaps, on their practical attainments. The quota of their contributions to the science of their subject, though by no means unimportant, bulks rather small in the vast literature dealing with the structure and functions of the ear, that has grown up in recent years. No man has done more to maintain the standing of British Otology in the scientific world than Dr. Albert Gray. The first volume of his Atlas appeared over eight years ago, and it has long taken its place as a standard work of reference, and is frequently quoted by continental and American writers as authoritative in questions concerning the anatomy and histology of the ear. The second volume fully maintains the high standard set by its predecessor. The work is one which no otologist can afford to neglect, and it will repay the most careful and detailed study. It is difficult to realise the amount of labour involved in the preparation and photographing of the beautiful specimens portrayed. The Atlas embodies the results of the study of a lifetime. An undertaking of this magnitude is not only immensely laborious, but is necessarily very costly. If one were to regard it as a financial venture, it would appear to be a very risky one. No one will make the mistake of so regarding it; consequently our obligation to the author is the greater.

It would be absurd to draw comparisons as to the relative merits of Retzius's great Atlas and those of the work under review, though in size and scope they obviously belong to the same class, and to some extent the modern Atlas must be regarded as a supplement, and an emendation of the older. Retzius's magnum opus was one of the foundation stones of otology, as it gave definite form to our conceptions of the structure of the ear, which, up to the time of its publication, had been somewhat nebulous, but the presentation of the subject was, of course, on an entirely different plan. Fifty years ago neither the technique of making anatomical and histological preparations, nor that of photographing them when made, was sufficiently advanced to allow of the illustrations being exact transcripts of nature. The drawings in the atlas were rather of the nature of composite pictures obtained by the study of numbers of specimens, each of which was individually imperfect. They were attempts to fix the "norm" of the parts represented, and were to some extent, interpretations of things seen, rather than true reproductions. The work was magnificently done, and has formed the basis of most textbook illustration ever since. The weight of its authority has, perhaps, lain somewhat heavy on the theories and controversies as to the physiology of the ear up to the present time. Better technique has naturally resulted in bringing to light some misinterpretations and inaccuracies, each of which has been the parent of much unfounded speculation.
Reviews of Books

On the other hand Gray's atlas is a reproduction of facts. It is not so comprehensive as that of Retzius, as its pictures are not composite, and it would require an impossible number of actual photographs to cover the same ground. Nor can it be so epoch-making, seeing that the science of otology is now so far advanced that there is no longer a question of laying foundation-stones. The photographs are transcripts of nature, their value is permanent, and the facts they represent can always be cited with confidence. The definite outlines of Retzius's drawings of the scala media and organ of Corti, which have been copied into all the textbooks, have proved misleading, especially in their bearing on the theory of hearing. Take, for instance, the tectorial membrane, which is shown as a fibrous structure projecting stiffly from the limbus above the plateau of Corti. This misrepresentation has given rise to numerous unfounded theories as to the part played by this structure. It has been regarded by some as the actual exciting agent of the sense elements of the cochlea, and even as a resonating mechanism. Figs 5, 8, and 30 serve to correct this view. The bulk of the membrane is structureless and gelatinous. It is closely attached to the upper surface of the organ of Corti. It shrinks enormously on fixation, so that it pulls away from its attachments, and its position as seen in microscopic sections is largely a matter of chance, as may be seen by comparing Figs. 40 and 41. None of the illustrations shows any trace of the "reticular membrane", so definitely figured in Retzius, and which Gray believes to be an artefact. Figs. 13 and 14 are of particular interest as they show the basilar membrane from an unusual aspect. The sections are cut perpendicularly to the axis of the cochlea. The beautifully regular parallel transverse fibres of this structure, the existence of which has been denied by some anatomists, are shown very distinctly. There is no indication of an elastic subarcuate zone, which figured largely in Wrightson's theory of the working of the cochlea. These figures also show the continuity of the basilar fibres with those of the spiral ligament, and the approximately parallel arrangement of the bundles of the latter. Figs. 24 and 30 show the relations of the stapes to the oval window. When the stapedius is contracted the anterior margin of the footplate is drawn outwards, and the posterior one swings inwards towards the vestibule, but to a much smaller extent. All these points have important bearings on the interpretation of the mechanism of the ear. They are cited as examples, and many others could be picked out if space permitted. Enough has been said to show what a valuable mine of facts is embodied in the volume.

The pathological conditions illustrated include: Infection of the labyrinth in cases of meningitis, deaf mutism, the condition

793
Reviews of Books

of the fibres of the intrinsic muscles, and of those of the cochlear nerve, and of cells of the spiral ganglion in cases of long continued deafness, and the coincidence of foci of otosclerosis, with degenerations of the cochlear nerve. In each of these sections the preparations figured throw some light on obscure conditions, or at least raise interesting problems for further investigation. Bearing on the last section there is a series of three consecutive cases (one reported elsewhere) in which the nerve degeneration was due to a tumour of the eighth nerve. The odds against such a "triple event" must be enormous, supposing it to be the result of pure coincidence. It looks as though Dr. Gray has given a valuable clue to the aetiology of that most puzzling of diseases, otosclerosis, and one well worth following up.

No fault can be found with the fabric of the volume. The reproduction of the photographs is excellent. The descriptions in the letterpress are admirably clear and concise. The introductory paragraphs prefacing each section are brief, but very much to the point. Everything controversial has been left out. The points of interest are noted without their implications being discussed. A feature of this, as of the preceding volume, is the stereoscopic photographs of those specimens which require to be viewed in three dimensions. A simple and effective stereoscope is provided with each volume.

G. Wilkinson.

Malignant Tumours of the Maxillo-Ethmoidal Region. A Clinical Study with special reference to the Treatment with Electrosurgery and Irradiation. By L. Georg Ohngren. Published by Mercators Tryckeri, Aktiebolag, Helsingfors.

It is not an easy matter to write a monograph on any subject and the difficulty is increased when the subject is a surgical one. Too often the author is so anxious to present the particular aspect with which he is concerned that he omits to give an adequate historical presentation or to indicate the various directions in which progress has already taken place.

In this book Dr. Ohngren avoids most successfully all the numerous pitfalls and presents to his readers a most admirable and illuminating exposition of the methods of investigation and treatment of the tumours of the maxillo-ethmoidal region that was first suggested by Professor Gunnar Holmgren and the technique of which was elaborated in his Clinic.

The book begins with a statement of the problem and a detailed account of the methods which have been employed by surgeons in other countries to deal with it, the various advances which have been made, and the reasons why alterations in technique have shown