the natives on the West Coast, to realise the all but complete absence of interest on the part of the people in all that surrounds them. In fact, they seem not to bestow even a passing thought upon the phenomena that take place before their very eyes. It is true that their calculations of time are made in accordance with the increase and wane of the moon; they believe, however, that on each succeeding month an altogether new satellite is produced, although how, does not appear. The sun, according to their belief, performs a daily journey round the earth; stars in their courses watch over individuals for good or evil, and in respect to all other branches of knowledge their ideas are equally crude. Their knowledge of astronomy seems to begin and end with observing that, as they express themselves, “It is midnight; the southern cross begins to bend.” We trust that, as we are still to hold possession of the Gold Coast, that the next generation which reads of the efforts of Gordon and Wolseley and others, to preserve life in one of the most pestilential spots of the old world, will meet with more success than has as yet been granted.

**Works on Diseases of the Ear.**

1. As a history of the progress of knowledge in the department of surgery of which it treats, probably no more satisfactory book has been published in English than Dr. Roosa’s; and the same may be said of the account which that same author gives of aural surgery as at present practised in Germany, England, and America. The treatise gives evidence, not only of the most exhaustive reading on the subject in hand, but of very considerable personal experience of the practice of the leading aurists in Europe.

The first chapter consists of a brief outline of all that has been written on the anatomy and surgery of the ear from the time of Hippocrates up to 1869. The book is divided into four parts, which treat of the external, middle, and internal ear, and to this is added a good account of deaf-mutism.

The descriptive anatomy of each division of the ear embraces the researches recently made by German anatomists, and a similarly complete account is given of all the plans of treatment (including

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1. *A Practical Treatise on the Diseases of the Ear, including the Anatomy of the Organ.* By D. B. St. John Roosa, M.A., M.D., Professor of Diseases of the Eye and Ear in the University of the City of New York.

2. *Traité Théorique et Pratique des Maladies de l’Oreille et des Organes de l’Audition.* Par le Docteur J. P. Bonnafont. Deuxième édition, révue et augmentée.

3. *The Questions of Aural Surgery.* By James Hinton, Aural Surgeon to Guy’s Hospital.

4. *Lectures on Aural Catarrh; or, the Commonest Forms of Deafness and their Cure.* By Peter Allen, M.D., F.R.C.S. Edin., Aural Surgeon to St. Mary’s Hospital.
operative proceedings) which have from time to time been recommended by those who are in the front rank of German and English surgeons, viz. Gruber, Politzer, Weber, Tröltsch, and Hinton. The chapter on foreign bodies in the external meatus is especially deserving of notice, and it is pleasing to find that, when he comes to treat of those affections which form so large a proportion of the cases which come under the notice of aural surgeons, viz. diseases of the middle ear, Dr. Roosa has arrived at very decided views on the pathology of these affections. He divides them, as is now usual with most noteworthy writers, into non-suppurative and suppurative, but of the former of these two divisions he distinguishes two classes, the catarrhal and proliferous forms of inflammation. Of the catarrhal, Dr. Roosa says (p. 263)—

"I think we may assume, from the history of cases, that this form of disease is either a consequent of frequent attacks of acute catarrh of the middle ear, or that it occurs in people who have what we may call a catarrhal diathesis. The disease, therefore, unlike its companion, proliferous inflammation, is not at all insidious in its approach. The patient suffering from this disease, who consults us about his hearing, is usually aware there is an excess of secretion in his pharynx," &c.

Again (p. 268)—

"If we now turn to the picture of the subjective symptoms of what I term proliferous inflammation, we shall find them much less positive than those of the catarrhal form. Some of the patients have no subjective symptoms at all, except that of the loss of hearing, which is, of course, an objective symptom as well. They have no sore throat, no increase of the secretion of the pharynx or nostrils. . . . The origin of this form of aural trouble cannot be traced back to infantile earaches, frequent coryzas, or to naso-pharyngeal catarrh. It is a peculiarly insidious affection, one which is usually under full headway, and which essentially impairs the function of hearing long before the patient is aware that he has any affection of the ears."

In the first of these forms the pathological appearances are, according to Dr. Roosa—

1. Collections of mucus distending the cavity of the tympanum.
2. Thickened mucous membrane.
3. Filling up the cavity by lymph.

In the second—1. Connective-tissue formations in the cavity of the tympanum. 2. The mucous membrane of the tube covered by dense fibrous tissue. 3. Hypertrophy of the bony walls of the tube. Hypertrophies of bone, exostoses, and ankyloses in the tympanic cavity. It is needless to add that, in the more serious form of disease of the middle ear, treatment is not likely to prove of such value as it does in the catarrhal variety.
Weber's operation of division of the tensor tympani; Politzer's and Lucae's of incision of the posterior folds of the tympanic membrane; Hinton's incision of the membrane for the removal of mucus, are each carefully described, and the views of the author on the propriety of these modes of treatment are given as follows:

"I. Paracentesis, or incision of the drum-membrane in chronic non-suppurative inflammation, is by no means a dangerous or painful procedure.

"II. Its chief value is in furnishing a means of treating the lining of the middle ear.

"III. It may properly be performed in cases of chronic proliferous inflammation, that are still advancing in spite of local treatment, through the Eustachian tube.

"IV. Division of the tendon of the tensor tympani and division of the adhesions existing between the membrana tympani and the walls of the cavity of the tympanum, are operations that deserve a trial in cases of chronic inflammation of the middle ear, with symptoms of increased auricular pressure, not relieved by a fair use of the ordinary means."

From the obviously extended practice of Dr. Roosa it would have been gratifying to find mention of more personal experience in connection with operations for diseased conditions of the middle ear; but enough has been said to show that no one greatly interested in the subject of aural surgery can afford to omit the reading of a treatise, on the general merits of which there cannot be two opinions.

2. From the long established position of M. Bonnafont as an aural surgeon, another edition of his work on diseases of the ear almost demands perusal by those who take an interest in the rapidly advancing knowledge in this class of diseases; and, furthermore, the book may, we presume, be considered as at least one of the principal representatives in literature of French surgery in connection with the ear. Without further preface, it may be said at once that, comparing it with the recent exhaustive handling of the subject by Drs. Joseph Gruber and Adam Politzer, of Vienna, it falls very far short, both as a "theoretical and practical treatise."

There are certain methods of examination and treatment which, when once they are made common property, so manifestly commend themselves for simplicity and good effects, that they receive almost universal adoption by earnest workers. Such are Dr. von Tröltzsch's method of illumination for the examination of the tympanic membrane, and Politzer's method for inflation for the middle ear. In the work before us the first is not referred to, and the second has received but scanty recognition.

To those who are interested in the early literature of aural surgery the references in the first few chapters will be found to be full of
information; and if half the space that is in this way employed were taken up with some account of what has been lately written in Germany and this country, M. Bonnafont would have provided a treatise more serviceable as a guide for reference in cases of difficulty. On the subject of foreign bodies in the external auditory meatus a number of cases are cited, which, besides being interesting and instructive, show that the author is possessed of a very large experience; but on this subject there are a number of elaborate instruments described and figured, the utility of which seems questionable where more simple measures are at command, and, certainly, in the hands of the inexperienced these instruments might prove the reverse of useful. For harmlessness, ingenuity, and simplicity, the plan proposed by Dr. Lowenberg, in a short paper published some time ago, is worth the whole chapter. It cannot be too often urged that in the case of a foreign body in the external auditory meatus, excepting when a stream of light is reflected, and so the whole passage illuminated, no attempts at removal beyond syringing should be made, as the offending body is harmless when compared with the injury which so frequently follows the introduction of instruments when unattended by effective illumination.

M. Bonnafont attaches more importance than is usually accorded (at least since Mr. Toynbee’s time) to the condition of the tympanic membrane as producing deafness, the precise cause for this (except in the instances of marked bulging in parts, relaxation, and perforations) being now generally estimated as due to the morbid conditions in the cavity of the tympanum.

Throughout the book the cases are well reported, and are evidently selected from a very large number at hand, so they will be found useful for reference. This, and the almost elaborate accounts of the writings of those who have preceded M. Bonnafont, tend to make the treatise, perhaps, of greater literary than practical value.

3. In ‘The Questions of Aural Surgery’ Mr. Hinton gives the results of his experience in the treatment of diseases of the ear, in language so well chosen that, apart from the value which the book possesses for those working at the subject, it will compare very favorably with the medical literature of the day. From the beginning to the end the author is addressing the earnest workers of aural surgery, and he presupposes a certain degree of knowledge in his readers. This he states in the preface, as follows:

“I have felt it the less necessary to go into every detail of the subject, because of the recent publication of other works, of which such details must be a repetition; as, for example, the translation I have had the pleasure of making of Dr. von Tröltsch, ‘On the Surgical Affections of the Ear,’ and Professor Helmholz’s ‘Treatise on the Mechanism of the Ossicula,’ for the Sydenham Society, and Mr.
Dalby’s ‘Lectures on Diseases of the Ear,’ which give an excellent outline of the subject. I may refer also to a very complete work, easily accessible in this country—Dr. St. John Roosa’s ‘Treatise on Diseases of the Ear.’

Throughout the book, in relating cases, reference is made to a series of beautifully executed water-colour drawings (lately published), which represent the morbid conditions of the tympanic membrane.

It would occupy too much space to do full justice to all that Mr. Hinton has to say; but the following points which are touched upon are, perhaps, among the most noteworthy. All degrees of change from health in the appearances presented by the tympanic membrane are carefully noticed. Anomalies in lustre and curvature, thickening, bulging, thinning, appearances of bubbles seen through the membrane, discolorations, both of which latter shift with the movements of the patient’s head, and are due to secretion in the tympanic cavity; collapse of the membrane, bladdery protrusions, chalky deposits, and perforations. In long-standing catarrh the thinnings of the membrane are observed (he says) in the posterior and superior part, and are due to the pressure exerted by masses of dense secretion:

“I have certainly seen more bulgings of the membrane from collections of mucus in this part than in any other, and it seems to me that it is due to its entanglement in that position owing to the presence of the chain of ossicles; and we cannot but feel how probable it is that mucus that had collected in this position, becoming dense and dry, should give rise to increasing deafness after all appearances connected with increased secretion had passed away.”

The statements of other observers, that the conduction of sound is interfered with less by changes which have taken place in the membrane than in the cavity behind the membrane is verified as follows:

“In states of perfect hearing the membrane may present considerable varieties of appearance, differing greatly in hue, in transparency, and sometimes presenting even dense masses of chalky deposit, and occupying a considerable portion of its surface. In one instance of not only perfect hearing, but acute musical sensibility, in a child, there existed a solid rod of bone, running from the short process of the malleus to the posterior wall of the tympanum, apparently a malformation of the bone.”

Again—

“Cretaceous deposits are quite frequent, even in healthy membranes; they may coexist with perfect and even with acute hearing;” and “It would seem that the peculiar structure of the membrane has less to do with the transmission of vibrations than it might be natural to suppose.”

For the treatment of the simple cases which so frequently come under the notice of an aural surgeon, Mr. Hinton recommends those plans which are most generally adopted. Thus, varying degrees of
obstruction of the Eustachian tube are treated with Politzer's inflation, or the air-douche through the catheter, and astringent solutions to the faucial orifices of the tubes; and when the tympanum shares the condition of the tube, fluid solutions injected through the catheter; when the secretion from the lining membrane is in excess, a weak solution of the sulphate of zinc; and when the dry stage has been reached, alkaline solutions. When, however, obstruction of the tubes is not overcome by ordinary means, he is in the habit of using laminaria bougies through the catheter, and in his hands this treatment has been followed by very good results. The practice of making an incision into the tympanic membrane for the better evacuation of mucus retained in the tympanic cavity has been in other places fully discussed, and so we find a brief repetition of the indications for the operation, with the additions which an enlarged experience has suggested.

"A most exaggerated feeling," he says, "prevails respecting the danger of making incisions in the membrane, which is curious when we consider how freely the cornea is operated upon. It is difficult to keep the cut open for so long as four days."

That distinct benefit is often gained in appropriate cases of catarrh of the middle ear by operative proceedings on the tympanic membrane has of late years been abundantly proved on the authority of the chief aurists of the day—Gruber, Politzer, Schwartze, Troltsch, and others; so that Mr. Hinton in the above sentence only confirms the experience of others.

On the structure of aural polypi the reader is referred to the account given by Mr. Dalby of these growths, and the complete destruction of the surface from which they spring is urgently insisted upon. To ensure this, the frequently repeated application of chloroacetic acid is recommended after the polypus has been removed, and but scant mention is made of any other plan of treatment, and this obviously, as he has found no occasion for other methods, his own succeeding so well.

On the subject of nervous affections of the auditory apparatus there are many cases reported, which are of great clinical interest; but in the way of treatment for these disorders no new light has been thrown, so far as we can gather from the author's remarks; and he confirms the observations of those who met at the last conference of aural surgeons at Dresden, as to the small value of electricity as a remedial agent.

In conclusion, we may congratulate Mr. Hinton upon having, in his own words, made it "plainly appear that, so far from disease of the ear being a barren or unattractive field, it is one full of promise."

1 'Guy's Hospital Reports.'
4. The first edition of Mr. Allen's book appeared in 1871, and was noticed at some length in the October number (1872) of this Review. The chief additions to the second edition are two illustrations (one of Brunton's ear speculum, and another of the mode of using the Eustachian catheter), the introduction of the somewhat wordy term "psophometer," applied to the piece of india-rubber tube which connects the ear of the patient and surgeon in examination of the Eustachian tubes and tympanum, and a more complete discussion of Mr. Hinton's operation of incision of the tympanic membrane. With reference to this latter, the author, in the first edition, confined himself to remarking that it "had been extensively, and in some instances very rashly, adopted in London," and that he himself "had witnessed cases in which its evil results had been conspicuous, and permanent deafness with difficulty averted."

In the second edition the propriety of making an incision into the tympanic membrane in cases of accumulation of mucus in the adjoining cavity is more frankly dealt with, but the subject is finally dismissed as follows:

"After very careful and repeated perusal of Mr. Hinton's reports of successful cases of incision of the membrana tympani, as well as the unsuccessful one related by him, I am firmly convinced the whole of them could have been equally benefited, and the tympanum cleared of the accumulations in other ways than by incision."

Enviable as may be the power of arriving at an opinion without the necessity of examining the patient, with our at present limited knowledge, we shall prefer an account by the surgeon who has seen the cases to that of one who has not had such opportunities.

Happily, just now, our best medical literature is noticeable by the absence of anything approaching the sensational; but we here find, in the instances of relieving obstruction of the Eustachian tube, "The expression of joy by some patients that have been successfully operated upon is almost rapturous; a new world is, as it were, being opened to them by the instantaneous restoration of hearing." A similar "world," we presume, is opened by many surgical proceedings which give relief, such as the restoration of sight, the emptying of a distended bladder, and so on; but it is not usual to describe these effects in such glowing language—at least, such a style of writing will commend itself to the public rather than to those of the profession who seek for information.

Proctor's Practical Pharmacy. Practical pharmacy is treated of in this volume in a novel and somewhat attractive style. Twenty-

1 Guy's Hospital Reports, 1869.'
2 Lectures on Practical Pharmacy. By Barnard S. Proctor. London, 1873.