

Reviews and Notices of Books.

A Guide to the Operations on the Brain. By ALEC FRASER.
London: J. & A. Churchill. 1890.

BROCA'S discovery of the site of the faculty of articulate speech was first made public in 1861, and Ferrier's work on the Functions of the Brain was published in 1876. Many anatomists abroad and in this country have endeavoured to lay down rules for defining the situation of the more important fissures and convolutions. Foremost among our own countrymen have been Turner, Hare, Reid, Horsley, Thane, and Cunningham. The keystone of such work has hitherto been to define the position of the fissures of Rolando and of Silvius and of the convolutions that surround them.

The work before us is a fresh proof of the energy and thoroughness with which British anatomists are seeking to further the progress of surgery. Although professing itself to be a guide to operations on the brain, the plates are of such excellence and the dissections of such merit that no teacher of anatomy can afford to dispense with such a ready exposition of parts of the body which frequently vary, and concerning the relations of which much difference of opinion exists amongst writers.

The major part of the book consists of forty-two life-size plates in autotype, and this is preceded by a short but pregnant description of the mode in which the work has been accomplished, and of the serial dissections so far as they have been reproduced. There is no attempt to deal with the subject of localisation of function, but the method of demarcation is entirely different from that usually adopted in the text-books, in that the scalp is marked out by a series of tapes into sections with which the various areas of the brain are seen to correspond. This idea is probably a development of that of Heffler, who drew his outlines with different coloured pencils. The tapes are placed in longitudinal and transverse directions, according to a prescribed system. It is to be regretted that the measurement adopted has been by inches, and not according to the metrical system. By means of composite views, the lines of these tapes are shown on the skull and their relations to the parts of the brain exhibited in the succeeding plates remain. The author finds that the pinna varies so much in size and position that any result based on lines drawn from any part of it is of little value from a practical or any other point of view. The divisions of the convexity of the brain have, with certain minor additions, been marked according to the widely-accepted description of Ecker. The plates which show the external surface of the brain are, perhaps, the most worthy of study of the whole series, not only for the artistic manner in which they are produced, but also on account of the extreme care and minuteness with which the dissection of the parts of the cerebrum, cerebellum, and of the cranial, dorsal, and cervical nerves has been carried out, though the latter are even better shown in some of the later pictures. The reproductions of the dissections of the interior of the brain are unequal, but all are of the greatest interest, and many display variations in the disposition of parts which have not hitherto been accepted. The practical value of these plates is well exemplified by the series exhibiting the course and position of the posterior horn of the lateral ventricle and the thickness of the hemisphere between it and the bonethrough which it may be reached from a spot behind the pinna indicated by reference to the tapes. In describing the relations of the deeper-lying structures to the surface of the scalp, the author points out that although the keynote of his remarks is, that for normal heads after birth the position of any structure of importance in their cavities varies proportionately with the variations of the

circumference as given by the circumferential tapes of the respective heads, yet, as is mentioned later, when indicating the plates upon which the author would depend for guidance in opening the skull on account of lesions of various specified parts, that as the circumference of the heads illustrated varies from $20\frac{1}{2}$ to $23\frac{1}{2}$ inches, after shaving the scalp, this being the average variation of adult heads, the surgeon may dispense with the rule and select the plate where the measurements are nearest to that of the patient. Furthermore, the relations of the cranial sutures to the scalp surface, both in the adult and the child, are shown to be indicated exactly by the disposition of the tapes, as are also the relations of the middle meningeal and its branches with the dura mater, though the plate illustrating this point is not so distinct as are most of the others.

The series of plates which will probably be of the greatest practical value are the composites showing the relations of the external surface of the brain to the scalp. These are from every point of view, and were taken from eighteen different heads. All the relations of the various tapes, as can be seen at a glance at the several heads, are the same in the young and in the adult, and exhibit in a very striking manner the proportional relationships of the external surface of the brain in heads varying in circumference from $14\frac{1}{4}$ in. to $23\frac{1}{2}$ in.

The plates illustrating the central lobes and lateral ventricles and their relations to the scalp are less satisfactory than the majority of the series, but their practical utility is not diminished, since the relations of the island, the anterior horn of the lateral ventricle, the descending horn and the hippocampus major to the tapes and spaces can be seen at a glance, as well as those of the optic thalami, the caudate nuclei, and other parts in the lateral and third ventricle. The relations of the lower part of the lateral lobe of the cerebellum in the adult and in the child can be better appreciated from the system of demarcation here adopted than by any description, and these plates are of the most instructive value. By prolonging the median longitudinal tape to the lower part of the neck in the adult, and to the lumbar region in the child, a series of accurate guides are offered to the surgeon to reach every cranial and spinal nerve, of which the dissections are most carefully executed and beautifully shown. With regard to the plates themselves, which are reproduced from the negatives by some modification of the Collotype process, there is room for no comment but that of praise. The distinctness of detail and the expression of light and shadow leave nothing to be desired in almost every instance, and where these are deficient the fault was probably unavoidable, and lay in the negatives rather than in the reproductions. The photographs were taken from above with a camera having a draw of $4\frac{1}{2}$ ft., supported on a vertical pillar of special construction, which can be raised if needed to a height of $10\frac{1}{2}$ ft., so that the least distance between the lens and the object is 6 ft. After focussing with a No. 3 Waterhouse diaphragm, a special one is substituted, having a diameter of about one centimetre. It seems somewhat surprising that the author should have found it necessary to resort to this very elaborate mechanism to obtain his results. No pillar, however well constructed, can at such length be free from such vibration as must imperil the accuracy of outline, even in a long exposure such as is needed with so minute a stop, especially when the backs containing plates have to be changed. Again, the idea of making a different exposure for plates that have to be kept is contrary to the experience of all photographic artists, as there is no evidence of the continuing action of light upon the film; and even if this were

proved, a very slight experience should allow of its accurate correction during development. With regard to the lens adopted—a rapid rectilinear of 29 in. equivalent focus,—it would seem preferable, upon purely optical grounds, to use one of very much shorter focus, and to obtain the diagrams upon a $6\frac{1}{2} \times 4\frac{3}{4}$ plate, from which they could be enlarged to the required size. This would give a considerable saving in time as well as in expense. Nor need the matter of registration be one of difficulty if a simple process well known to photographers be adopted. These, however, are details which the author has had to consider before finally adopting the process by which his results have been obtained; and when it is considered that the work before us represents only a modicum of the labour which has been undertaken, and gives no account of the many and inevitable failures which have been encountered, we must admire the more the patience and energy which have been bestowed upon it. The opening sentence of the preface gives hope that this volume is but the prelude to others, and surgeons and anatomists will alike look earnestly for every fresh series of such accurate delineations of human anatomy.

A Manual and Atlas of Medical Ophthalmoscopy. By W. R. GOWERS, M.D., F.R.S., F.R.C.P. Third Edition, Revised throughout, with numerous additions and additional Illustrations. Edited with the assistance of MARCUS GUNN, M.B., F.R.C.S. London: J. & A. Churchill. 1890.

THE appearance of a third edition of this work testifies to its continued appreciation by the profession. The present volume has not been materially altered from the form in which the book originally appeared. The most noticeable change is the omission of the appendices devoted to the use of the ophthalmoscope and to the descriptions of clinical cases, and the substitution of a brief but useful and practical account of methods for sketching the fundus oculi. The whole work has been subjected to a revision sufficiently thorough to involve additions and alterations on almost every page and in almost every paragraph, and an endeavour has been made to embody in it whatever of real value has been added to our knowledge since the appearance of the last edition. Considerable development is noticeable in connexion with the accounts of tuberculosis, malignant disease, gout, retro-bulbar neuritis, and the congestion and neuritis in alcoholism. A fuller account is given of the effects of poisons, and a separate paragraph is devoted to bisulphide of carbon as the apparent cause of peri-neuritis. On account of this extension the text now occupies 298 pages instead of 256, but owing to the omissions previously mentioned the entire book has thirty-two pages less than the second edition, and is altogether more compact.

In spite of the more widely extended use of the ophthalmoscope, with part of which former editions of this work may be credited, observations relating to the appearance of the fundus oculi in disease are still scattered and infrequent, and a complete account of the various changes is more than can be reasonably expected at the present time. The volume affords a ready means of reference, and forms a valuable compendium of such knowledge as we already possess on the subject. The microscopic figures that were represented on photo-lithographic plates in preceding editions, have been re-engraved as phototype blocks, and though they have lost somewhat in size, sharpness, and shade contrast in the transference, they undoubtedly are more conveniently placed in the text of the work in connexion with the subjects to which they refer. Other ophthalmoscopic figures prepared in the same way have also been added, noticeably sketches illustrating septic emboli and hæmorrhages in ulcerative endocarditis. The coloured plates have been judiciously left as in former editions. Admirably executed and taken from

well-selected cases, they convey an excellent idea of the pathological appearances. The adoption of mono-chrome in the majority of them serves to concentrate the attention on the form and light and shade effects, and secures a more exact representation of delicate pathological appearances than can be obtained by chromo-lithography. The last edition is certainly an advance on the previous ones, and the book fills a useful place in medical literature.

THE LATE DR. MATTHEWS DUNCAN.

IN beginning his course of clinical lectures on Jan. 29th, at St. Bartholomew's Hospital, Dr. Champneys referred to his predecessor, Dr. Matthews Duncan, in the following terms:—

Gentlemen,—The same thought is probably occupying the minds of all of us to-day—the thought that a voice to which most of you have listened with pleasure and with great profit for many years no longer fills this theatre; that a presence embodying the dignity and the learning which was characteristic of its owner has disappeared from among us for ever. This would, in some sense, have been the position under any circumstances, for to each of your teachers, and to me in my turn, must come the time of retirement, when, in the words of the old Roman poet Ennius, he

“Senio confectu’ quiescit.”

And yet how different are the circumstances from what we might have hoped and should have chosen for him. A man of less indomitable will would perhaps have taken warning earlier, would have sought relief from some of the duties which were his greatest pleasure, as they were also his most engrossing work. But he would not yield; he struggled on in harness till, as you all know, and some of you saw, he broke down in the act of instructing you, and after a vain effort to tide over the few weeks which remained of last summer session he left the country of his adoption—to die. This great hospital has lost, the profession has lost, the country has lost, the world has lost—how much can I say? But you and I have also lost in a special way, for had his absence to-day been due merely to his inevitable retirement, it would have been my endeavour to try to prevent that retirement from being absolute; it would have been my endeavour to persuade him to come among us from time to time and to give us lectures, which I should have delighted to hear side by side with you, and which his great learning and rich experience would have made, I feel sure, no unpleasant task for him. But *dis aliter visum*, and that dream is over. But besides this I have lost a kind and dear friend, from whom I might have learnt very much regarding the management of this great department, the changes which have taken place during my absence of ten years, and the prospects of the future. These I must learn without this help. Gentlemen, I stand before you as a stranger, and yet the kindness which I have experienced on my return seems to forbid me to use such a term. Standing as I do in the place of the greatest obstetrician of our time, I ask you to continue to me the goodwill which I know from him that you never failed to show, and, as a motto for us all, I would say, “May the spirit of James Matthews Duncan preside over all our meetings.”

THE CITY OF LONDON TRUSS SOCIETY.—The annual report of this Society was submitted to the governors at a meeting in Finsbury-square last week. The committee recorded the fact that the income of the Society had been fairly maintained. The total receipts for the twelvemonth amounted to £4698. The expenditure was £5030. The committee acknowledged the aid of the late Lord Mayor in presiding at the annual festival. The accounts which accompanied the report showed that, inclusive of the loan by the bankers, the balance in hand at the close of the year was £785. Mr. J. W. Long expressed regret that the committee had been obliged to recommend the sale of a further portion of the invested funds, but this had become necessary since they, as in the case of many other institutions, had been dispensing in the form of charity more than had actually been received.