A pigeon was bitten in the thigh by the same cobra at 4.37 p.m. 4.47.—The pigeon is drooping, and when he stands, it is on one leg, and then falls over again. 5.22.—Dead,—in 45 minutes. This was the ninth animal bitten by the cobra in rapid succession, and still it is apparently not quite exhausted.

A sixth fowl bitten in the thigh by the same cobra at 4.32 p.m. 4.35.—Crouching. 4.47.—Staggers. 5.45.—Lying down insensible. 6.5.—Dead,—in 93 minutes.

A seventh fowl bitten by the same cobra in the thigh at 4.34 p.m. 4.37.—Crouches. 4.47.—Seems sluggish, and limps. 27th June, 5.30 a.m.—Lying down, and eyes half closed; unable to walk, 28th June, 6 a.m.—Is recovering; walks sluggishly and limps, but is evidently regaining strength.

The object of this experiment was to test the extent of power possessed by the cobra. It destroyed one dog, six fowls, and a pigeon in rapid succession; but the intervals between the bite and the death of each were prolonged, showing the gradual diminution of power at each bite. The seventh fowl poisoned was only slightly so, and recovered.

The cobra was neither a very large nor a very vigorous one, and yet how deadly! Eight creatures destroyed by a rapid succession of bites. The experiment proves that the snake becomes weaker by biting, until quite exhausted.

Experiment No. 19.—A daboia was bitten by a fresh cobra (kalla beautilia) near the tail, sufficiently far from the viscera. The scales were previously scraped off. The snake bit fiercely and repeatedly at 4.54 p.m. 6 p.m.—No change. On the 28th June, at 6 a.m., there was no change.

The object of this experiment was to repeat the test of the influence of the cobra poison on the viper. The result tends to show that it is innocuous.

(To be continued.)

Part Second.

REVIEWS.

Lectures on Obstetric Operations, including the Treatment of Haemorrhage, and forming a Guide to the Management of Difficult Labour. By Robert Barnes, M.D., etc. London: John Churchill & Sons: 1870.

We have several books in the English language on operative midwifery, and several in other languages. Dr Playfair's volume on
obstetric operations is a handy and commendable work, and, with the exception of Barnes's treatise, the latest. Dr Barnes is more ambitious than any of his English predecessors, and more original in some senses. We have casually observed the appearance of all the substance of this book in weekly journals and otherwise, and have been gratified by the zeal of Dr Barnes, his cleverness, his literary power, his ingenuity. But Dr Barnes now puts his labours into a handsome octavo form; has reconsidered his flying sheets for the weekly journals, has published them in a mass; and we have now, as we are called upon, much pleasure in noticing this latest and most important addition to British obstetric literature.

We have read the whole work without tiring. It is, on the whole, well written. It is scarcely in the lecture style, although the occasional occurrence of the form of direct address shows that it is written really in the form of prelections to students.

We have a decided preference for the second half of the book—on the induction of labour, and on hæmorrhage. This part is far more accurate, scientifically regarded, than the first part; and, besides, the practical directions are more nearly in accordance with sound and standard therapeutics.

We may point out a remarkably able statement (p. 408) of the reasons for throwing overboard the treatment of placenta prævia by separation of the entire placenta; a statement which, while it presents nothing new to experienced and thoughtful observers, is a very good and practical account of why the treatment cannot be expected to gain confidence—of why it has gained no confidence. But, when we turn to further disquisition on the allied subjects, we find nothing equally good in favour of Barnes’s own method of separation of the placenta, not entirely, but from the orificial zone. This, however, is one of the author’s hobbies, and he may be excused for esteeming it more highly than other people. On the whole, we have scarcely a fault to find with Barnes’s account of the treatment of placenta prævia, if we just omit that part of it which he prizes most, separation from the cervical zone. The treatment, speaking generally, of labour complicated by placenta prævia remains where Rigby put it:—Deliver as soon as possible, and generally by turning. The real deficiency of this rule is observed in cases of hard and small os uteri. Then the rule is applicable theoretically, but it cannot be applied practically. The os is too small for immediate or timeous turning. Separation of the placenta from the cervical zone, the plan of Dr Barnes, is ingenious; that is all. Bipolarity of turning is mere trifling; there is no difficulty there. What is wanted is dilatation of the cervix. This is well pointed out by Barnes, and he has the merit of supplying us with one good means of effecting the desired object—his India-rubber dilators. But several authors, before Barnes, have felt and expressed the want, and described means of securing the object.

We have said that, scientifically, the last chapters of the book are
better than the first. But we find many points for criticism. Velamentous insertion of the cord is erroneously called velamentous placenta. The placental site and the cervix are said to be the sources of haemorrhage or flooding. The cervix is said to be a source, because it is flaccid and has been distended and bruised. This is a manifest error. Flooding proceeds from the placental site, not from the anatomical cervix however flabby or bruised. We find such a sentence as the following, which elicits only doubt and the question,—How do you know? "In the case of fundal attachment, the separation begins at the centre of the placenta, and extends to the circumference" (p. 440). The same doubt and question arise when we read of the foetus in certain cases. "It perishes of asphyxia, arising from the mother's loss of blood and collapse, and the partial or complete detachment of the placenta" (p. 438). The same doubt and question again, when we read of ergot (p. 437): "If absorbed, it is injurious by adding to the prostration." The expression of doubt passes into assertion of error, when we read that the site of the rent of the membranes proves the existence of placenta praevia. "This is," says our author, "afterwards proved by observing that the rent in the membranes is within an inch or two of the edge of the placenta" (p. 436). Has Dr Barnes never considered the production of a caul? Has he often observed the site of rupture in cases of placenta not praevia? We might cite other such questionable statements, given as if incontrovertible, and therefore prematurely made parts of a scientific argument.

We go to page 429, where we find a formal statement of doctrine in regard to placenta praevia, and here we find great deficiency in the precision which the mode of writing in propositions demands. Scarcely one of these propositions will endure rigid examination. In proposition 6, for example, necessarily and commonly are used as if interchangeable terms. Proposition 7, with the qualification "at the posterior part," is without a particle of foundation. Proposition 8 is in a like condition. Proposition 5 is the chief one; it is to the effect that it is the case, or, Barnes thinks, that detachment and flooding ought to stop when the praevia placenta is partially separated, the partial detachment being from the lower zone. But Dr Barnes nowhere proves that the bleeding does stop, the evidence that is desiderated. Besides, his physiological reason that it should stop, whatever that physiological reason may be, is almost certainly inconsistent with some of his physiological reasons against the complete detachment of the placenta. Further, he will find it difficult to prove his proposition 5, if he keeps in mind his therapeutical proposition 6 (p. 432); to which proposition also we do not assent.

Though these remarks are critically just and true, we must add that no one, whether practitioner or student, can read his chapters on haemorrhage without interest and benefit. Yet he will be amused to find, even in the best practical paragraphs, such advice
as to apply ice to the back of the neck in post-partum hæmorrhage!

The excellent section of the book, on induction of premature labour, is defaced by a passage which is inconsistent with the rest of it:—"That it is just as feasible to make an appointment at any distance from home to carry out at one sitting the induction of labour, as it is to cut for the stone" (p. 352).

We now come to the larger and first part of the book. It is on the great midwifery operations. We have already said that it is not so satisfactory as the rest. It is too ambitious in the practical parts. It is too dogmatic. In science it is very imperfect, and has many errors.

The excellent, and, in its own place, very valuable bipolar method is worked to death, both scientifically and practically. Our author praises the operative turning powers of old accoucheurs, and says we cannot equal them. The justice of this praise, that has been given by several recent authors, we much doubt. At present we only say, that such ascription of praise can scarcely be just, if the bipolar method of turning is so great a discovery as Barnes asks us to believe.

We divide obstetricians into two kinds: 1. Those who meet with few novelties or difficulties; 2. those who seem to meet with nothing but novelties and difficulties. These last are always telling extraordinary stories. Among these latter we are almost disposed to class Esterlé or D'Esterlé (Barnes is very fond of quoting Italians whom no one ever heard of, and who owe much to our author). If any one wants to see a poor Italian convicted of talking "at large," let him read pp. 174 and 175. Unfortunately for Lazzati, and perhaps even in some degree for Barnes, they are nearly in the position of Esterlé or D'Esterlé. This gentleman finds, during pregnancy, a large number of shoulder cases, and performs head-turning before labour. Collins, in above 16,000 cases of labour, had in all (without head-turning) only 40 cases of transverse presentation. Esterlé has observed the "frequent occurrence of spontaneous version in the eighth and ninth months of gestation." Where did Esterlé practise, and what does frequent mean here? Esterlé "observed that a large number of shoulder-presentations in the last two months, if left to themselves, were converted into natural presentations, either on the approach of labour or after the beginning of labour." Such is Esterlé's statement. It is at least intelligible. His account of the cause of the change of presentation is something or other; we cannot say it is intelligible. "The most efficient cause of spontaneous version," he says, "is the combined action of the movements of the foetus and of its gravity, the centre of gravity not being far from the head. The extension of the feet (!) must drive the breech away from the uterine wall as the feet strike it, and so the head is brought nearer to the brim." The plan of producing the desired change of position
is truly ridiculous. If, instead of it all (p. 175), it had just been directed gently to push the child into the right position, and hold it there, then we should have at least had sense instead of Esterlé's bombastic making of difficulty.

Dr Barnes has a great power with his pencil, and he illustrates his book freely by drawings, which are generally vigorous, and answer the purpose for which they are intended. But some are of doubtful accuracy; see p. 218. As a whole they are not so good as those of Churchill's manual.

We intended to enter upon the forceps chapters, which present many features that might easily be shown to be doubtful or erroneous. Some parts appear, indeed, to be contradictory to others.

We also wished to enter into details on Barnes's account of spontaneous evolution. Here he becomes quite enthusiastic, not only about the evolution, but also in defence of the worthy Denman, and he signally fails. He seems blind to the facts that Denman's cases are inconsistent with Denman's theory, and support Douglas, and that, while Denman's facts are consistent with Barnes's spontaneous evolution, his theory of the same cases is not adopted by Barnes. With the exception of the defence of Denman, Barnes's chapter is a piece of good obstetrical writing, well worthy of study.

No one denies that spontaneous version may occur. Denman describes it imperfectly; but Denman describes it as the regular mechanism of what Barnes calls spontaneous evolution, what Douglas calls spontaneous expulsion. The class of cases of shoulder-presentation, where the waters have been long discharged, and the shoulder is deep in the pelvis, which are spontaneously terminated, obey the mechanism described by Douglas as that of spontaneous expulsion—not that described by Denman as that of spontaneous evolution, which is the same thing. This is Denman's error. But Denman is not so far wrong as Barnes helps to make him, for Denman describes the mechanism not as he observed it, but as he fancied or presumed it might be.

The last chapters on which we shall make a few remarks are devoted to turning. None show Dr Barnes's literary powers, his generous impulses, his ingenuity, and his obstetric knowledge, to better effect. We strongly recommend their perusal to that class of readers who have devoted some time to the thorough study of obstetrics, and who have enjoyed as much experience at least as is

1 It has amused the reviewer, after writing the above remarks, to find them tally exactly with Denman's own explanation and semi-admission of his being mistaken in his theory of spontaneous evolution. In a letter on this subject, Denman says—"The fact is a distinct question; the manner of the evolution another. For the former I am not any longer answerable. It stands on another testimony; but I certainly have remained responsible for the explanation of the manner, and to defend this I am not very solicitous. Yet I may observe that my explanation is not given in positive terms, beginning with 'I presume,' leaving it as an opinion for future proof or disapprobation. If there be an error in the explanation, others may also err in their opinion."
necessary to have made them feel the difficulties of a few difficult cases. Such cannot read them without advantage. Yet here, as elsewhere, in regard to this book, we feel that we cannot criticize without our objections to some parts or points coming strongly forward. We may say, for instance, that we do not approve of Barnes's advice to seize a knee instead of a foot or feet in turning, nor of his advice to seize the farthest knee in difficult turning. This last advice he supports with great ingenuity; but it is the ingenuity of a special pleader. It would be easy, if one had the literary power of our author, to make as good an argumentative display in favour of seizing the near knee. The question is to be settled not by reasoning, which cannot reach the whole circumstances and make them available, but by practice; and we recommend practitioners to seize the near limb.

The chapters on turning contain much that is not necessary. For example, we have a discussion as to the cause of the position of the foetus in utero, which might have been unobjectionable (though not necessary) if it had not been so very imperfect, and we believe misleading. The statements of mechanism, whether of cranial or shoulder presentations, are much better.

Dr Barnes, of course, treats the great question, old and still young, of turning in contracted pelvis, its scope and its position in relation to the long forceps operation in the same or similar circumstances. This is one of the most important and one of the most difficult questions in midwifery, and very much has yet to be done ere it can be settled. Dr Barnes contributes his words and experience, and goes in favour of turning, not to the rejection of the long forceps, but giving delivery by turning the higher place as a more powerful means of delivery applicable to many cases in which the forceps may be used; but also applicable to a class of cases in which the forceps is not available, on account of the great contraction of the brim. We are averse to expressing dogmatically any opinion on this subject; only, we may say, that it is our impression that the current of soundest obstetrical judgment is at present running in favour of the forceps rather than of turning. To Dr Barnes's chapters on this great topic one objection is, that they are behind the day. He might have, with much advantage, omitted to read and study a great deal, to which he has not only paid attention, but to which he has called the attention of his readers. At the same time, he has omitted to notice much that is essential to the advance of the subject to a new stage. Such a sentence as the following tells a great deal—"And surely," says Dr Barnes, "no one can doubt that the traction-power, and, therefore, the compressing power, acquired by pulling on the legs and trunk, is infinitely greater than can be exerted by the strongest forceps" (p. 280). There is here an extreme neglect of attainable exactness in introducing the word "infinitely," and an extreme neglect of the proper mode of searching for truth in this question. To use the word
infinitely is very wrong, when we positively know that the difference between the two powers is not many pounds. To use this word is very wrong, when, instead of such infinite or indefinite talk, we can measure and state definitely. To use this word is very misleading, when we know that the power required to pull the child to pieces is not great. But, above all, the whole sentence is wrong in theory and practice; for while the power by pulling the child is limited by the strength of the neck, and the limit is easily reached, the power of the forceps can be indefinitely increased, and, at least, so as to exceed the strength of the child's neck. All this has been already well demonstrated by various authors. If they had not shown it, it would be the first thing they have to do, if they wish to give this great question of turning an impulse. In the same manner, it is mere idleness to talk of the shape of the head, its wedge-like construction, the comparative ease of compressing it, and making it collapse by traction from below. All this is, as we have said, mere trifling, when the question (if it has not already been) may be easily and finally settled, not by ingenious talk, but by the method of observation and experiment—a method which has done much for midwifery, and is destined to do very much more, not only in discovering truth, but also in destroying error. We fear that the settlement of this point by actual experiment does not accord with the notions of Barnes and others founded on very imperfect investigations and ingenious hypotheses. A few foetuses, a couple of blocks, and a forceps, are all that is required, and that have been used for the experiments.

The Pathology and Therapeutics of Mental Diseases. By J. L. C. Schroeder van der Kolk, Professor of Physiology in the University of Utrecht. Translated from the German by James T. Rudall, F.R.C.S. Ireland. London: John Churchill & Sons: 1870.

It is refreshing to take up a treatise on insanity which does not commence with a long dissertation on metaphysics. No doubt, it must be a great temptation to authors of such books to air their ideas on this subject, and probably it may be of interest to the metaphysician to read the lucubrations of men who have had under observation morbid mental manifestations, but to the student of medicine it is of far greater service to have before him a book containing more substantial food; this he will find in the first part of Schroeder van der Kolk's book now before us. This great physiologist has brought to bear on the pathology of mental disease his own vast stores of knowledge, and collated with them the results of the observations and experiments of other foreign authors in a fair and inquiring spirit, and has succeeded in building up a theory which we humbly conceive will stand the test of time.
The author is necessarily a materialist—a physiologist cannot be otherwise—but he is a materialist of the right sort. He inculcates fully the connexion of mind with matter, and their mutual reaction, but he insists most strongly on the existence of a higher and utterly immaterial essence in the human constitution.

This is peculiarly evident in the section in which he speaks of the action of the cells in the cortical substance (p. 13). He instances the result of certain influences which accelerate or retard the circulation in the brain, and so modify or excite the action of the cells, producing mental phenomena involuntarily to the ego. He says, "But, we may ask, does not this theory lead to the grossest materialism, and will not our mind through it be degraded to the level of a mere cell life? By no means. By that interpretation, during which I have, as much as possible, truly followed the course of nature, the independence of the individuality of the mind remains, according to my opinion, in the clearest way secured. For, during the time in which those confused and intricate images pass before our mind, we may at will firmly retain one of them, so as further to embellish it quite according to our liking. That proves, then, that a still higher faculty is active in us, which can receive and perceive those impressions, but is also at the same time in a state independently to interfere and to govern the orderless mass. We have a telegraph office, but at the same time also a telegraphist who voluntarily and independently exerts influence. The involuntary delineation of those images is an organic operation of the brain: we feel that the images are presented to us, that they are not our own individuality, and that they exist as objects outside of us. Our will, on the contrary, belongs to our individuality; it is not product of the body, but of the mind; it is subject. The materialist will compare us to a telegraph office without a telegraphist, to an automaton who only blindly acts, without order, without will, without understanding and judgment—to an uninterrupted dreamer, who cannot perceive his own dream. Free will belongs to the higher individuality, it is an attribute of the soul."  

The first part of this book cannot be too strongly recommended to the student of Cerebral Anatomy and Physiology. It tersely yet clearly puts forward all that was known at the period of its composition, and what has since been produced only tends to support its theories. They require deep study and careful consideration; they are too elaborate to bear compression—inequity to their importance would result. The sections treating on the action of the cells in the cortical substance, and on the influence of the circulation in the production of morbid mental manifestations, are eminently suggestive. The general principles laid down will enable the reader to approach the mysterious puzzle of cerebral pathology, guided by a very bright physiological beacon. In reviewing the latter half of this work, we are desirous of

1 Italics are our own.
showing how far the author has advanced beyond others in the most important subject of classification of diseases in which mental symptoms are predominant; how far he has succeeded, and how far he has failed.

Skæ, in his address to the Medico-Psychological Association in 1863, entered a strong protest against the old psychical classification, and suggested a system of nomenclature which is gaining ground daily. It cannot be considered perfect, nor indeed did its author claim for it the attribute; it consists of the arrangement of mental disorders in their natural orders or families, grouped in accordance with the natural history of each. The fault of this system is, that natural orders were sought to be formed before primary grand divisions, founded on pathology, were established. Skæ began from below; our author, as we will show, has begun from above.

Griesinger took high ground when he proposed to consider all diseases of the nervous system as "one inseparable whole, of which the so-called mental diseases only embrace a certain moderate proportion." In the enunciation of this axiom, a great step was gained; and had its author been spared to work out his theory, we might by this time have had a definite system before us.

Maudsley's classification is an elaboration of the old psychical system; it will never stand. Van der Kolk has begun at the beginning, and has stopped there. But he has made his mark in commencing a system. He divides so-called mental disorders into two great divisions—viz., the idiopathic, those that originate within the brain itself; and the sympathetic, those which are caused by disturbance in the general system, acting secondarily on the brain. This much he has done, and, in so doing, has only suggested a scheme which remains for future thinkers to elaborate. He is content with two great classes, which he says "serve all considerations in a therapeutical point of view." Here we cannot follow him; for, if under idiopathic insanity he classes idiocy, traumatic insanity, epilepsy, general paralysis, and congenital insanity; and if under sympathetic he groups insanity resulting from masturbation, childbirth, intestinal irritation, or alcohol, it is difficult to conceive how the two classes can serve as guides for therapeutical treatment, when we reflect how widely separated is the etiology of the constituent elements. Nor do we think that this author has gone far enough in the establishment of grand classes. There are certain diseases, such as epilepsy and general paralysis, which arise idiopathically and sympathetically in different cases, but which, whatever their origin, must be accepted as distinct pathological entities, and classed by themselves. What we now want is, that the theories of Skæ, Griesinger, and Van der Kolk should be amalgamated; that the clinical differentiation of the first, the broad generalization of the second, and the physiological deductions of the third, should be made to act one on the other by
some mind which can explicate the truth presented to it from these three points of view.

It cannot be said that the latter half of this book is of any value to the student. The opinions of its author are of great interest to the physician, whose experience will enable him to gather many valuable hints from accurately recorded cases; but with the exception of the one point we have noted, no such importance attaches to the latter part as is contained in the former.

That the translator’s work has been done with a very servile adherence to the idiom of the language of the original, is easily seen by reference to the passage quoted above, also by such sentences as these:—“The hereupon following corpora quadrigemina are very large.” “Still further forward, at the root of the olfactory nerve, must then the perception of smell take place.” The revision of proof must also have been very imperfect, when we meet with “premises” twice in one page, and the ridiculous misprint of “flores amicae” for “flores arnicae” left uncorrected.

We are still in want of a text-book on mental diseases; for all practical purposes the work of Tuke and Bucknill is the best extant, but even it is behind the time.

---

RECENT WORKS ON DISEASES OF THE EYE.

(Second notice.)

1. Treatise on Diseases of the Eye, including the Anatomy of the Organ. By Carl Stellwag von Carion, M.D., etc. Translated from the third German edition, and edited by Charles E. Hackley, M.D., etc., and D. B. St John Roosa, M.D., etc.; with an Appendix by the Editors. London: Robert Hardwicke: 1868. Pp. 774.

2. A Treatise on Diseases of the Eye. By J. Søelberg Wells, Professor of Ophthalmology in King’s College, London, etc. London: John Churchill & Sons: 1869. Pp. 741.

3. A Manual of the Diseases of the Eye. By C. Macnamara, Surgeon to the Calcutta Ophthalmic Hospital, etc. London: John Churchill & Sons: 1868. Pp. 570.

The first work on our list is in all respects a typically German treatise, being a most elaborate compendium of what has been written by German authors on diseases of the eye, and also embracing most of the important facts which have been added by workers in other countries. Most subjects are treated of at great length, the minutest points being carefully detailed, and, as almost necessarily occurs under such circumstances, there is a considerable amount of repetition. What, however, we have most to complain of,
is an utter want of conciseness and clearness in our author's descriptions. Instead of proceeding at once to the essential point, he indulges in ever so much wordy generalization, which, from its very long-windedness, and often obscurity, serves rather to mystify than to render what follows the least degree clearer. To these disadvantages must be added those which unavoidably attend a translation, the author's meaning, in difficult or obscure passages, being seldom rendered more distinct by being subjected to a translator's analysis. The arrangement of the work, too, is capable of much improvement; diseases closely allied to one another, and often dependent upon each other, being considered under different sections. Although the views of most authors on the various subjects are given (and excellent tables of references appended to each chapter), Von Carion indicates, in most cases, very decidedly what his own opinions are. In the preface, he states that he has avoided any allusion to his own writings in the text, which we found to be the case, but which we cannot help considering a subject of regret, as detracting from the completeness of the work. When, however, he goes on to remark, that those who are familiar with the literature of ophthalmology will find many deviations when the citations of this work are compared with those of some other modern writings, and attributes this to having kept himself "strictly within the bounds of historical truth, and disdained to injure or advance the interests of any persons or schools by any misplacement of authorities," we feel bound to point out that this is not in all respects correct; for while, as regards Continental authorities, his references may be perfectly accurate, he throughout his work very much overlooks what has been written and done in this country. Thus, as regards the Calabar bean, while, under the list of authorities, the papers of Professor Christison and Drs T. R. Fraser, Argyll Robertson, and G. Harley, and Messrs Bowman and Soelberg Wells, find a place in the text, Graefe is given as almost the only authority for the effects produced by it on the eye, while in reality they were, with few exceptions, first detailed by Drs Fraser and Robertson. On anaemic exophthalmos, too, we do not find the slightest reference to Graves or Begbie, both of whom were among the very earliest (if not the earliest) to describe the symptoms of this compound disease. These illustrations may suffice, but we may here further refer to some omissions of importance, which we incidentally noticed, and which lead us to question the completeness of his vaunted information. We have looked in vain for the slightest reference to Desmarres's operation for pterygium, Teale's operation for symblepharon, the use of a seton for the cure of trichiasis, Stokes's method of treating granular conjunctiva by a compressor; and while, in describing operations on the eyelids, frequent reference is made to the troublesome hemorrhage that accompanies them, all allusion to Snellen's forceps, whereby this may be effectually prevented, is omitted.

We have considered it necessary to point out these defects, in the
hope that in any future edition they may be remedied, and English opthalmic literature, in particular, be more recognised. We, however, most heartily acknowledge that Von Carion's work will always be a standard one in ophthalmology, and that it is one of the most useful works of reference that an oculist can possess. On many points we are inclined to differ from the author, in particular as regards the non-existence of a dilatator pupillae muscle, the inutility of the Calabar bean in paralysis of the accommodation and in mydriasis, in the causation of ophthalmia neonatorum by bright light, and the too limited commendation of nitrate of silver as a local application in purulent ophthalmia.

Thanks are also due to the painstaking American surgeons who have translated this extensive work. It is said that the late Emperor of Russia forbade, during the Crimean war, the teaching of the English language in his dominions, and directed that the American language should be taught instead. We have hitherto been at a loss to understand his distinction; but since reading this translation our difficulties have disappeared, for it certainly is not English in spelling, and is often doubtfully English in grammar; but we suppose it is good American.

We have had much pleasure in studying the work of Mr Soelberg Wells, embodying, as it does, all the most recent investigations, both home and foreign, and in particular because the author appreciates and expounds, on most points, the views of Professor Von Graefe, which on further investigation have, in almost every instance, proved to be correct. In most of his descriptions, Mr Wells is clear and precise, and above all, as regards treatment, gives distinct directions as to the means which have proved most beneficial in his own hands. In this respect the work before us is of much more service to the general practitioner than those heavy compilations which, in giving every person's views, too often neglect to specify those which are most in accordance with the author's opinions or in general acceptance. When he does quote the opinions of others, we would recommend references to be more frequently given; for while we have never found him fail to make the author's meaning distinct, we have repeatedly wished to make further acquaintance with the papers from which he quotes.

Mr Wells has limited himself entirely to a consideration of the diseases to which the eye and its appendages are liable, without sketching the anatomy and physiology of the different parts, as is the case in many treatises on ophthalmic surgery. To the majority of readers this is no loss, as information on these points is not generally much sought after by the busy practitioner; while, for a clear comprehension of most of the diseased conditions of the eye, a moderate general knowledge of the anatomy and physiology of the organ suffices. We must, however, except from this statement, paralytic and other affections of the muscles and abnormal condi-
tions of the refraction and accommodation of the eye, and we are glad to observe that on these very points Mr Wells has departed from his general rule, and prefixed a short anatomical and physiological resumé. In his description of ophthalmoscopic affections, Mr Wells enters pretty fully into the microscopic appearances presented by the diseased tissues and the pathological views of Continental authors. This, we think, might, with advantage (especially in the case of the different forms of retinitis), be considerably curtailed. Having thus expressed our views regarding the general character of the book, let us notice a few points which we have marked for special consideration.

The introductory chapter on the modes of examining the eye, etc., is well worthy of attentive perusal, as most of the points there alluded to are of great importance, and some of them much neglected in general practice. We would particularly direct attention to the mode of ascertaining the acuteness of vision and the extent of the field of vision, and his explanation of the different varieties of double images.

The chapters on diseases of the external coats of the eye are in all respects good and trustworthy, and the treatment recommended is in accordance with the most approved modern doctrines. We would, however, enter our protest against the use of a syringe for cleansing the eye affected with purulent ophthalmia. Most authors apparently approve of this proceeding; but it is self-evident that it is attended with great danger at once to the patient, to the surgeon, and to the nurse. To the patient, because if the cornea be ulcerated, as is very often the case, perforation may be induced by the pressure of the nozzle of the syringe against the eye; to the surgeon and nurse, because in syringing out the contagious matter a little may be propelled into their eyes. In all cases of this disease, the eyes may be safely and efficiently cleaned by the use of small pieces of lint, soft rag, or cotton wool.

The chapter on chronic granulations is particularly good; but Mr Wells errs in attributing the employment of inoculation for the cure of pannus to Piringer, as in this he was preceded by Dr Henry Walker, who recommended it in 1811.

While allowing that inherited syphilis is one cause of diffuse corneitis, as has been most ably pointed out by Mr Jonathan Hutchinson, Mr Wells, very correctly we think, points out that this form of keratitis may occur in persons quite free from syphilitic taint, and who present none of the characteristic signs of inherited specific disease. He, therefore, objects to the term "syphilitic corneitis;" but here we disagree, for just as one variety of iritis is termed syphilitic, because, although it cannot be discriminated with certainty by the character of the inflammation from other forms, it still is certainly dependent upon the syphilitic poison; so in like manner we may here adopt the term syphilitic keratitis (or corneitis) to indicate that in many cases the disease is dependent upon or connected with inherited syphilitic taint.
The different operations for cataract which are in general use at the present time are clearly described, and the indications for the employment of each pointed out. Mr Wells is greatly in favour of Von Graefe's modified linear extraction in cases of hard cataract, and condemns inclination (which he very shortly describes) in toto. We think that inclination may still be judiciously performed in a few exceptional cases, where the patient is very old and feeble, and extraction specially contraindicated, and therefore is deserving of a place among the recognised operations for cataract. Mr Wells speaks more favourably of the operation by suction than we are inclined to do. We are decidedly of the opinion that the fewer instruments that are introduced into the eye for the removal of cataract, the better the result; and when we have so satisfactory an operation, though slow, as division for soft cataract in young patients, we consider it a temptation of Providence to employ a suction curette simply with the view of effecting a more rapid cure.

Mr Wells devotes a space corresponding to their importance to those deep-seated affections for the recognition of which the use of the ophthalmoscope is imperative. The chapter on amblyopia is, in particular, worthy of commendation. Under affections of the choroid, tubercular deposits are carefully described, and a case narrated which came under the author's own observation. We are of opinion that, in doubtful cases of acute tuberculosis, an ophthalmoscopic examination may often determine the nature of the disease; and it should not be forgotten that to Mr Wells we are indebted for having directed the attention of the profession in this country to this important subject. In cases where local bloodletting is indicated, the use of Heurteloupe's artificial leech is recommended.

The profession have long been familiar with Mr Wells's account of Von Graefe's elaborate investigations into the normal action and diseased conditions of the muscles of the eye. These he has reproduced in a condensed form in the treatise before us. We noticed, however, one slip which requires correction. In describing the double images which occur when the inferior rectus is paralyzed, he states that the pseudo-image lies above the image seen by the healthy eye, whereas the opposite is the case. We can also speak favourably of his description of the anomalies of refraction and accommodation, which gives shortly the views which Donders has so fully expounded in his standard work.

The text is illustrated by numerous woodcuts, and, with Liebreich's sanction, several ophthalmoscopic plates are excellently reproduced from his magnificent atlas.

We have no hesitation in recommending this treatise, as, on the whole, of all English works on the subject, the one best adapted to the wants of the general practitioner.

Mr Macnamara's work is one of Churchill's manuals, and is
stated in the preface to contain almost verbatim the course of lectures he delivered to the students of the Medical College, Calcutta, during the session of 1867. Mr Macnamara's experience is mainly derived from a study of ophthalmic affections in the persons of natives of India, and the chief value of his work, in our opinion, consists in his description of several affections almost peculiar to a warm agueish climate, and of others which are modified by such surroundings.

We can speak with unqualified approbation of the arrangement of the book, and specially commend the use of marginal headings, whereby we can with great facility find information upon any particular point. We only wish voluminous authors, more especially German, would follow this excellent example: what a weariness of the mind would it not often save their unfortunate readers!

Mr Macnamara also deserves praise for his description and representations of the appearance presented on ophthalmoscopic examination of the eyes of the natives of India, both healthy and pathological. The recent views of home and Continental ophthalmologists are by no means overlooked; and as regards treatment, the author condemns unhesitatingly the antiphlogistic measures formerly so much employed in inflammatory affections, and appears to harbour a particular aversion to calomel and leeches. This manual must not be looked upon merely as a text-book in which an outline of the generally adopted views of the different affections is given; for, on some subjects, peculiar doctrines are advocated, quite opposed to those maintained by most oculists of the present day. In glancing through the work we noted one or two points for comment. In his short preliminary chapter on the anatomy of the eye, he mentions that the lens is more convex in front than behind, and is composed of a numerous series of fibres of a peculiar form, and probably of a contractile nature. It is well known that the anterior surface of the lens is less convex than the posterior; and the theory that the lens is muscular in structure, although propounded a century and a half ago, and maintained by John Hunter, Young, and others, has remained unsupported by any good proof; while the fact that the application of electricity to a lens immediately after removal from a living eye does not induce any alteration in form, suffices, in our opinion, to overturn such a view. Mr Macnamara, however, has made recent investigations into the minute anatomy of the primitive muscular fibre, and also of the fibres of the lens, and from the structural analogy which appeared to exist between them, convinced himself of the muscular nature of the latter. He also maintains that he has traced nerves over the capsule of the lens. In his investigations he placed the lens and capsule after removal in glycerine for a month, and a suitable portion being then carefully detached, was examined under a one-fiftieth or one-seventieth of an inch object-glass. Examinations conducted under such circumstances are necessarily open to numerous
fallacies. Holding these views, Mr Macnamara naturally ascribes the act of accommodation, not to the ciliary muscle, but to a contraction in the lens itself. In his description of the disorders of the accommodation, however, we were amused to observe that he assumes "that the ciliary muscle is the active agent in altering the curvature of the lens, because this is the commonly received doctrine on the subject."

In treating of the "examination of the eye," Jaeger’s test-types are stated to be those commonly employed, and a series of test-types corresponding to Jaeger’s are appended; but in the chapter on disorders of accommodation and refraction, Snellen’s types are described, and are those invariably referred to. We trust that in the second edition Jaeger’s types may be replaced by Snellen’s, which are unquestionably the better. For ophthalmoscopic examination, the author prefers sunlight to that of a lamp, an assistant being sent out "into the sun" with a mirror, from which the rays of light can be reflected through an open door or window into the room. We have had no experience of this method, which is certainly not suited to this climate, and, in consideration for his patient’s eyes, we are glad to learn that his examinations are not prolonged. Our author is fond of sunlight, and mentions that it may be employed for oblique illumination. We warn our readers against subjecting the delicate cornea to the concentrated rays of the sun—a proceeding which would at once startle their patient and reflect little credit on the surgeon’s judgment.

The descriptions of purulent and granular conjunctivitis are very good, and the treatment recommended, in our opinion, judicious; we would, however, suggest that it is not by any means necessary, except in the case of extreme restlessness and irritability on the part of our patient, to have recourse to chloroform for the purpose of examination, which is by him recommended to be invariably done. It must be borne in mind that sickness and vomiting not unfrequently occur after its administration, and that this would subject an eye with extensive ulceration of the cornea to more danger than a careful examination without chloroform. The doses of opium recommended are much larger than we are accustomed to order in this country. In granular conjunctivitis it is recommended that, if the patient be in pain, a grain of opium should be given three times a day, and should the disease gain ground, we must increase the quantity of opium to two grains three times a day.

In the treatment of iritis, after mentioning how mercury may be administered, the following footnote is appended:—"It will probably be asked upon what principles I advance the above system of treatment? I can only answer that I am not responsible for it; it is the treatment advocated by almost all the leading surgeons of the day, and I think I am bound therefore to promulgate it. In my own practice I seldom, if ever, give mercury in instances of iritis, believing that cases which recover while it is being given
would get equally well without it, and that those doing badly would do so in spite of it. After the most careful consideration, I hold that mercury is neither antiplastic nor antisyphilitic, but that in certain secondary and hereditary cases of syphilis it exercises a favourable influence on the diseased tissues.’ The last portion of the note entirely invalidates what precedes it. No one at the present day, it is to be hoped, would think of giving mercury in all cases of iritis indiscriminately, while few who have had much experience in the treatment of eye diseases will deny the benefit to be derived from mercury in many instances. From the preface of the Manual, however, we learn that the author thinks he has not found it necessary to use a leech, or to give a grain of calomel, to his patients in the Calcutta Ophthalmic Hospital during the last year, although he had a daily average of some fifty indoor patients.

Among ophthalmoscopic affections we find described what the author terms melanemia of the retina—a condition presenting very much the appearance of retinitis pigmentosa, but occurring during intermittent fever, and attended by, or rather dependent upon, the presence of small masses of pigment in the blood. As this is, as far as we are aware, a hitherto undescribed affection, we extract the case which is cited as an example:—

“Biddoo, a labourer by occupation, aged thirty-five, applied for relief at the Ophthalmic Hospital on the 19th May 1864. He is a well-built, strong-looking man, rather anemic, but states that, with the exception of attacks of fever, he has always enjoyed good health. About six months previously, being in a very malarious part of the country, he was seized with remittent fever; prior to this his eyesight was perfectly good. He underwent great privations, and six days after the fever came on he found his sight growing dim; he had no pain in the eyes, nor was there any photophobia, but from that time till his admission the field of vision gradually contracted, and he could then only just see to grope his way about the room.

“I found the tension of both eyeballs natural, the pupils dilated, but there was no external indication of disease. On examining the patient’s eyes with the ophthalmoscope, I discovered the optic discs of both to be of normal size and colour. The vessels of the retina were much contracted, and at the outer part of it a number of elongated black spots were noticed. Some of the black lines appeared to be the smaller branches of the arteries, which had been plugged with pigmented matter. In many places, however, it was impossible to trace the atrophied vessels up to the point at which they had become occluded, whereas, in other branches, small deposits of pigment could be detected actually filling up the vessels.

“Besides these pigmented deposits, there were a number of faint dark markings observed in the substance of the retina itself, which seemed to me to arise from a stained condition of its nervous tissue, consequent on the previous circulation of pigmented matter in the capillaries, the larger masses having been subsequently stopped in the smallest branches of the arteries. The fundus of the eye was of a dusky-red colour in this case, and there were no hemorrhagic spots to be seen on its surface.

“The patient had not been in the hospital long before other cases of a precisely similar nature presented themselves for treatment; not that these are a common class of cases, but, as so often happens in hospital practice, a certain form of disease appears at times to have a run, and then to disappear for weeks and months together. However, these cases coming one after another, and each of them having a similar story to tell, of blindness supervening on
repeated attacks of remittent fever, led me to think that the changes noticed in the eye must have arisen from the same cause, and one closely connected, in some way or other, with malarial influences.

"Shortly after Biddoo came under my care he was attacked with fever, and during a remission on the 9th of June, I opened a vein in his arm, and drew off a small quantity of blood; a portion of it was at once placed under the microscope, and I quote the appearances it presented in the words of the Professor of Chemistry. He says, 'Four or five or even more pigment cells or masses could always be seen at one time in the field of the microscope. The cells generally resembled the white corpuscles of the blood, but contained many black granules. Some of these cells were considerably larger, and of an oval shape. Together with the cells, irregularly-shaped masses of pigmentary matter were to be seen in the field of the microscope.' If we compare this description with that given by Frerichs, and with his representation of pigmentary matter from the portal vein, we shall find them to be very much alike."

In extraction of cataract, Mr Macnamara recommends the administration of chloroform. With restless patients the operation may thus no doubt be often more satisfactorily performed, but the advantage so obtained is more than counterbalanced by the obstinate sickness which not unfrequently follows. It is only in the most exceptional cases that we would think of employing it. Iridectomy, which most surgeons now consider of such advantage, both in facilitating the exit of the lens, and diminishing the subsequent risk of inflammation, is viewed unfavourably by our author. He generally operates by scoop-extraction, without the removal of a portion of iris.

We regret that we cannot recommend this Manual as in all respects a safe or trustworthy guide, but at the same time are happy to admit that it contains much information that may prove serviceable to surgeons in India. We hope that a second improved edition may soon appear.

The Essentials of Bandaging; including the Management of Fractures and Dislocations, with Directions for using other Surgical Apparatus. Illustrated by 122 Engravings on Wood. By Berkeley Hill, M.B. Lond., F.R.C.S., Instructor in Bandaging in University College; Assistant-Surgeon to University College Hospital; and Surgeon to Out-Patients at the Lock Hospital. Second Edition, revised and enlarged. London: James Walton: 1869.

We have much pleasure in noticing the second edition of this excellent little Manual, the first edition of which was pretty fully criticised in these pages on its appearance upwards of two years ago. We have now very little to add to our previous criticisms. The bulk of the work remains unchanged. Here and there we notice additions to the text. One very useful method of rapidly and simply applying a plaster protection to fractures, is that de-
vised by Mr Moffitt, and described in the Army Medical Reports for 1865, and Mr Hill has wisely, we think, inserted a pretty full account of it and a woodcut (pp. 88, 89). In describing the modes of reduction of dislocations of the hip, we observe that Mr Hill has made no change in his remarks in the first edition regarding the manipulation methods, which then and now he seems to regard with less favour than some other surgeons do. The chapter on Catheters and Bougies is much enlarged and improved. It now includes an account of the method (first, we believe, introduced by Dr Gouley) of treating a very narrow stricture by the use of numerous filiform bougies. There is one evidence of careless correction of proofs—a sentence repeated verbatim (in pp. 130 and 135), which may be corrected in a third edition.

A figure and description of Dr Horace Swete’s cheap ambulance is given in this edition. It seems a very simple, useful, and cheap machine. Lister’s method of dressing wounds with carbolic acid, and the details given, are made out up to the date of publication. More recent changes in the method may have made some of the description already antiquated, but the principle seems thoroughly understood.

The administration of chloroform is described and still illustrated by the hideously-misleading picture of the operator with his bag-pipe giving chloroform to an old gentleman, who is sitting bolt upright, while the operator feels his pulse with an expression of great interest. This is followed by a full account of the methods of carrying on artificial respiration called by the names of Marshall Hall and Sylvester; the old gentleman, however, is not the sufferer, as he might have been expected to be.

An appendix of 16 pages is added to this edition, giving lists of the various instruments and appliances needed by the surgeon for most of the more important and ordinary operations of surgery. These may be useful to some surgeons, but are rather carelessly got up, being sometimes redundant and sometimes deficient. For example, it might be supposed that, as a general rule for most operations of surgery, sponges, water, and towels are needed, and chloroform may almost be presupposed as probably necessary. These essentials are repeated in nearly every one. Indeed, for Amussat’s operation, p. 205, we require two sets of sponges; while for Cesaean section sponges are unnecessary, and we must be content with either flannel or cotton-wool. It is difficult also to understand how such a list can be supposed to be a suitable addition to a work entitled “The Essentials of Bandaging.”