The volume before us is the most recent systematic work on the subject in the English language. Mr Wells has been favourably known for several years as a contributor to the Ophthalmic Hospital Reports, and as the author of one or two minor works on particular branches of ophthalmology. His special rôle has hitherto been that of interpreter general of continental ophthalmic literature and practice to the British surgeon, and he is very well qualified for the task. Possessed of good abilities, and an extensive acquaintance with the writings and cliniques of the leading continental oculists, he has, at the same time, a happy knack of presenting his reader with the fruit of their labours in a much more agreeable form than most of his oracles themselves can do. His chapters are eminently readable. His style is clear and flowing. He can be short without over-condensing, and accurate without hair-splitting. These merits appear in a remarkable degree when he comes to treat of the more abstruse departments of his subject, and contrast favourably with the laboured obscurity which mars the writings of some greater authorities in the same line.

Mr Wells has yet another quality, in regard to which it would be well if he had more imitators. No one who reads his papers can be at a loss to know what is the author's own, and what is derived from others; and, if his repeated citations of a few distinguished names should at times provoke a smile, it must be admitted that he always errs on the side of honour and humility.

In undertaking to write a systematic treatise on the diseases of the eye, our author has certainly made a far more ambitious effort than any of those which he formerly essayed. So important are the changes which have recently occurred in this branch of medical science, and so vast is the literature which has sprung up of late years in connection with it, that it must be no easy matter to give a satisfactory compendium of the subject even within the compass of 700 odd pages large octavo.
REVIEWS.

The arrangement of the details, and the restriction of the several chapters to the due proportion which their relative importance demands, is also a difficult problem, and all the more so, because the literature of certain departments has quite outgrown that of others which more engage the attention of the practical oculist.

We regard Mr Wells as peculiarly qualified for the execution of such a task, both by the natural bent of his mind, and by the character of his previous avocations; and though we think that he might have given us more about some things, such as the commoner ophthalmiae, and less about others, we cannot deny to his work the merit of being a successful compilation.

It has often struck us as rather unfortunate for the profession, that a medical writer's *opus magnum* so frequently appears at a comparatively early stage of the author's professional career, and serves rather as his introduction to fame than as the record of his original research and matured experience. We imagine that even some standard works would have been of more practical value had their publication been delayed for ten or fifteen years; for there is a freshness and a personal interest attaching to the views and conclusions of an eminent man of large experience, which impress the memory and influence the practice of the reader far more strongly than a mere display of erudition, or a well arranged and cautiously balanced exposition of the opinions of others.

Every systematic treatise on a medical subject must consist, in large measure, of a compilation with a running commentary more or less explicitly advanced as such; and it is on this latter, and on its illustration from the author's experience, that the value of the book, as an original work, mainly depends. Looking at the treatise of Mr Wells from this point of view, we should have preferred a little more of Mr Soelberg Wells, though perhaps not less of Dr von Graefe. Mr Wells, though still a young man, has long occupied positions which must have given him an amount of experience in the treatment of eye disease, such as is rarely enjoyed at his time of life. His professional education, too, has been of such a kind as to place him in a most favourable position for capitalizing his experience from its very commencement. This being the case, we confess to a certain feeling of disappointment that he presents us with so little of original thought in connection with the topics which he discusses, and all the more so, because there are indications in his work that the defect proceeds from no want of natural capacity on the part
of the author. When he does come out in propria persona, his remarks are always worthy of attention, and bear internal evidence of sound original thinking based on genuine personal observation.

After an introduction giving preliminary explanations, Mr. Wells proceeds to discuss the diseases of the conjunctiva, including the commoner ophthalmiae and some of their results. We are doubtful whether this department of ophthalmology has made such satisfactory advances in recent times as some others, and are inclined to think that the greatly increased interest which has been taken of late years in some of the more abstruse branches of the study, has had the effect of retarding the progress of our knowledge in regard to those which are less fascinating. We have the impression, at least, that the present generation of oculists is in some danger of substituting a kind of quasi-scientific dogmatism founded on a local pathology, in the present state of our knowledge, is not mature enough for the purpose, for broader, though perhaps less definite, principles of treatment, which take more account of constitutional and functional indications. A perfectly satisfactory practical classification of the inflammatory diseases of the eye seems to be rather difficult of attainment, and most of those in vogue have more or less of a mixed character. The topical method of arrangement has generally been taken as the basis of the principal division of the subject; but, unfortunately, it often happens that different parts and textures are simultaneously involved in the same inflammatory process, and that the treatment becomes modified and complicated thereby. Hence various writers have been induced to recognize certain mixed ophthalmiae, placing them in a separate category in order to meet the practical exigencies of their professional readers.

Beer, and most of the writers in the earlier half of this century, impressed with the importance of constitutional diathesis as a predisposing cause of various ophthalmic affections, and as a circumstance often seriously affecting the progress and treatment of others, adopted the constitutional basis for their sub-classification. No doubt this system was carried much too far. It often happened that a local disease, presenting certain characters, was attributed by a sort of conventional fiction to a particular diathesis, simply with the view of putting a name upon it; sometimes the patient was treated for a constitutional malady which never existed; and cases now and then occurred, presenting plain enough indications for treatment, but defying human ingenuity to fit them into any of the approved categories. The system, however,
had this advantage, that cases were grouped together in accordance with it, which, though differing somewhat in respect of local details, and even in respect of the pathological processes occurring in their progress, still presented a general similarity in their leading features, in their therapeutical indications, and in their prognosis.

In accordance with the scientific tendencies of the present age, such vague and general notions of disease are all but discarded, and it is now the fashion to found our sub-classifications on the basis of pathological anatomy. This was almost inevitable, but, in the meantime, it has had the effect of introducing the conflicting views of histologists and pathologists into practical treatises, in a way which is very perplexing to the practitioner who consults them simply with a view to practice. Any one who wishes to see the modern system carried to perfection ought to read a ponderous volume published seven or eight years ago by Professor Pilz, who goes so minutely into the pathological details which he regards as pathognomonic of particular affections, that the reader rises from the perusal of his pages in doubt as to how he is to diagnose a disease of the eye without dissecting it under a microscope.

Another defect which may be traced to the same general tendencies, and from which the work of Mr Wells is not altogether free, consists in the rigid separation of the diseases of different textures, treated of in different chapters, without supplementary notices of what may be called the compound ophthalmiae. A young practitioner has to treat a case, in which, along with severe nocturnal pain around the orbit, there is moderately acute catarrhal conjunctivitis, ulceration or circumscribed infiltration of the cornea, iritis perhaps, and, it may be, a puriform deposit in the anterior chamber, with other symptoms which we need not specify in detail. He consults one of the older works, and he finds his case described with directions for its treatment—perchance rather too heroic treatment—under the head of catarrho-rheumatic ophthalmia. Very likely he learns some rather questionable doctrines about the pathogeny of the disease and about its primary seat; but he has got what he wants, and proceeds to treat the case—none the worse, perhaps, that he is afraid to venture on some of the remedies suggested by his author. If he applies himself to a book of the new school, he hunts up and down through conjunctivitis, and corneitis, and iritis, and many another -itis with which he has nothing to do, and comes to no definite conclusion after all, except that he has discovered a perfectly
unique combination of maladies, and that he will send some-thing about it to the Lancet, if, by good luck, the patient should happen to make a decent recovery.

No doubt Mr Wells does make remarks on the complica-tions which may be met with, and which may be apprehended before they have developed themselves; but these are more likely to be useful to the man who has already some practical experience of eye disease, than to the tyro; because they sometimes involve a reference to a more advanced part of the treatise. This fault is incidental to the plan of all systematic medical works, and cannot be entirely avoided; but it may be remedied in some degree, by presenting the reader with occasional comprehensive sketches illustrating the extension of morbid processes from one part to another, and the mutual interdependence of such processes going on in different parts simultaneously, instead of confining the description to the manifestations of disease in one part or tissue at a time. We think that our author might have attained this object more effectively than he has done; and we venture to suggest the introduction of a supplementary chapter on compound inflam-mations of the ocular textures in his next edition.

We fear that one effect of the present revulsion from the exaggerated views of a former generation with respect to the influence of diathesis on ocular disease, has been to bring constitutional and general treatment into unmerited contempt in certain quarters, and to cause too great a reliance on local measures and topical applications. We are glad to see that Mr Wells does not belong to this school. Without boring his readers with a farrago of drugs and prescriptions, he gives short and judicious directions as to the medical treatment to be adopted in the several diseases; and he has not been deterred from recommending some very valuable, but we fear very unfashionable remedies.

In his remarks on catarrhal ophthalmia, Mr Wells seems to reserve the application of astringents, such as nitrate of silver, even in weak solutions, for a comparatively advanced stage of the disease. We think that in cases where there is no ciliary neuralgia, and no indication of an inflammation of the deeper textures, there is great advantage in its early application, especially if there is a decided mucous discharge. A drop of a five grain solution and a dose of Epsom salts will often cut short an attack which may be of some duration if milder measures are resorted to at first. As to other astrin-gents, when there is much mucous discharge we prefer lotions containing chlorides in solution, which, from their detergent
properties, are less liable to cause coagulation of mucus, than tannin and sulphate of zinc. In his local treatment of the different varieties of purulent ophthalmia, we think that Mr Wells—like some of his continental friends—is far too meddlesome. The prudence of injecting a solution of alum and sulphate of zinc between the eyelids, “every 15 or 30 minutes during the day, and every two hours at night” is questionable; and it is perhaps as well that circumstances will generally render such assiduity impracticable.

In diphtheritic conjunctivitis—a very rare disease in this country—Mr Wells recommends rather active antiphlogistic treatment, leeching and mercury to the extent of salivation. We have seen more benefit in such cases from the exhibition of large doses of the sesquichloride of iron than from any other treatment.

The commonly received views as to granular ophthalmia have been considerably modified of late years, and the doctrine that the so-called granulations of trachoma are altered papillae is generally abandoned; but there is still some doubt about their true nature. We do not doubt that the follicles of Krause become enlarged at an early stage of the disease, but we do not believe that the true granulations are developed entirely from them, because the latter occur in situations in which the former are not known to exist, and because, even among what may be called vesicular granulations, we think that at least one other variety can be detected, which is at first distinguishable from the follicular. If the ultimate granulations are a neo-plastic formation, as some say, it is quite conceivable that they may form in, or about the base of, enlarged papillae, as well as independently of them; and it is a significant fact, that while trachoma may come on without the occurrence of exuberant papillary granulations, the papillary granulations, when not early and properly treated, are very commonly followed by the more obstinate form. Mixed granulations may occur in which we have enlargement of the papillae and development of granular bodies between them; but we also see mixed granulations in cases where, at an earlier stage, there were none but papillary ones, which are now shrinking. The rubbing in of powdered acetate of lead, where “the granulations are prominent and fleshy, being arranged in rows with deep furrows or chinks between them,” as recommended by our author, ought not to be resorted to without seeing that the corneal epithelium is free from roughness or abrasions, otherwise troublesome saturnine deposits will result. Granulations of this sort often consist,
we suspect, of enlarged and altered papillae, whether these have become the seat of a neoplasm or not.

The inflammations formerly included under the heads of pustular and scrofulous ophthalmia, are treated of by Mr Wells under the titles of phlyctenular ophthalmia among diseases of the conjunctiva, and phlyctenular conjunctivitis among those of the cornea. To these he devotes about a seventieth part of his book; which is rather short measure, considering the importance of the subject. It is rather an amusing illustration of the difficulty of separating things in books, which are intimately associated in nature, that Mr Wells seems to have had phlyctenular conjunctivitis running in his head when he wrote his remarks on phlyctenular conjunctivitis. So long as the cornea is not attacked, the disease is generally a very simple one, and easily treated, though liable to relapses; and a good deal of what is said about the symptoms and treatment of the latter variety might have been more appropriately included in the chapter devoted to the former. The propriety of using nitrate of silver solution, which Mr Wells seems to be afraid of, depends mainly on the relative predominance of catarrhal symptoms. When the disease takes the pustular form, with little or no photophobia, the nitrate of silver is often useful even when the catarrhal symptoms are relatively slight. If there is much photophobia and constitutional irritability, and if there are small phlyctenule just at the conjunctival limbus, the application must be resorted to with caution, if at all, even though the state of the tarsal conjunctiva might seem to indicate it, and though the proper corneal epithelium may be unaffected.

Among local applications, Mr Wells recommends calomel in fine powder, red and yellow oxide of mercury ointment, and chlorine water where catarrhal symptoms are prominent; and atropine drops are to be instilled three or four times a day. He also speaks favourably of compresses when there is much photophobia. We think that our author might have extended his remarks on the general treatment of both forms of the disease. They are good so far as they go.

We are surprised to find Mr Wells stating in the section on fascicular corneitis, which is closely allied to the phlyctenular, that while he saw many instances of it in Berlin, he only remembers having met with four pure cases in England, during the last eight years. It is certainly too common in this latitude.

In regard to diffuse corneitis, Mr Wells objects to its being regarded as essentially a syphilitic disease, although inherited syphilis is a frequent cause of it.
Passing on to diseases of the iris, we find that Mr Wells, though by no means an enemy to mercury, restricts its administra-
tion in iritis to those cases in which there is much effusion of lymph. There are forms, we think, even of serous iritis, in which certain mercurial preparations, such as the bichloride and biniodide are of great service. The bichloride, especially, may often be continued for a long time without producing any of the more disagreeable effects of mercury, while acting at the same time as a resorbent. In what was formerly called aquo-capsulitis, even calomel and opium may be employed at times to great advantage.

At page 151, he says—"It is erroneous, however, to speak of rheumatic iritis as a special form of the disease, for it has, in truth, no characteristic symptoms." Now we admit that different forms of iritis accompany rheuma-
tism, just as different forms may be associated with a syphilitic diathesis; and some of these have nothing about them which is specially characteristic of the diathesis. But there is a form of iritis which is recognized as specially syphilitic, usually occurring among the secondary symptoms, and perhaps never seen in a person free from the syphilitic taint. In like manner there is a peculiar form of serous iritis which we do not recollect to have ever seen except in elderly rheumatic patients, and which generally comes on in connection with a severe rheumatic attack. It was to this form, we suspect, that the name rheumatic iritis was originally applied.

Mr Wells lays much stress on the assiduous use of a strong solution of atropine, applied many times a day, in iritis. In other respects there is nothing in his treatment which calls for special remark.

At page 165, he denies that a fluid condition of the vitreous produces undulation of the iris. It is true that we may have undulation of the iris without a fluid condition of the vitreous, and that we may have a fluid condition of the vitreous without any undulation of the iris; yet we have good reason to suspect fluidity of the vitreous when the iris is tremulous if the lens is present and the anterior chamber is not abnormally deep. Whether the fluidity of the vitreous is the sole cause of the tremulousness, or a necessary condition of it, or merely a state commonly associated with other causes which produce a tremulous state of the lens and iris in these cases, does not much matter. The important point is, that, in view of a cataract operation, for instance, we may count pretty certainly on having to deal with a fluid vitreous if the iris is tremulous.
The chapters on irido-choroiditis, sympathetic ophthalmia, irido-cyclitis, and cyclitis are interesting and instructive; and though we may take exception to some of the statements in them, we think them well worthy of careful perusal. Sympathetic choroido-retinitis is referred to as a very rare affection discovered by von Graefe. It may be very seldom possible to diagnose it with the ophthalmoscope; that is to say, it may rarely occur without being associated with such a degree of iritis and turbidity of the media as make it impossible to see the fundus; but, judging by the subjective symptoms, we suspect it to be very commonly associated with every form of sympathetic ophthalmia.

Mr Wells strongly urges the removal of the injured eye early in the premonitory stage of the sympathetic seizure. At a later period there is comparatively little good to be expected from it even in the way of arresting the sympathetic affection. Sympathetic inflammation having once broken out—

"If the sight of the injured eye is lost, it should be at once removed, for even although this proceeding may not always stop the progress of the sympathetic disease, but only perhaps arrest it for a time, it will probably at least exert a favourable influence upon its course, from the removal of the primary source of irritation. But it will be different if some degree of sight still lingers in the injured eye, more especially if the sympathetic inflammation has already produced extensive injury, for then it must be borne in mind that in some similar cases the injured eye eventually proved of the most use to the patient, he having more sight in it than in the other." (pp. 203-4).

There is a class of cases which we occasionally meet with, in which the sympathetic seizure seems to have something of the nature of metastasis about it. The attack in the previously sound eye comes on very suddenly, and is coincident with a sudden abatement of the inflammation in the other, or the sound eye becomes somewhat more gradually implicated while the other amends. In these cases we should not now be disposed to remove the injured eye at all, for the operation seems to have the effect of accelerating the destruction of the eye secondarily affected, instead of improving its condition.

In all other cases, when the eye first affected is extensively injured, we agree with Mr Wells that it is best to remove it on the earliest appearance of sympathetic irritation in the other. If it is totally blind and painful to the touch, even though it may appear atrophied and quiet, it may be well to remove it without waiting for any symptoms of sympathetic irritation in the other.

In the section on cataract we have directions for the per-
formance of the different operations succinctly and clearly given. At p. 225, Mr. Wells says:

"Sometimes persons suffering from incipient senile cataract complain that they are getting myopic, requiring the aid of a concave glass in order to distinguish distant objects. The reason of this fact is somewhat doubtful, and can only be explained upon the supposition that there is some increase in the volume of the lens which gives it a higher refractive power."

In these cases of myopia acquired in connection with the formation of cataract, so far as we have been able to observe, the nucleus is generally the first part to become opaque, and its opacity is generally far advanced before cortical striæ approach the axis to any considerable degree. The cause of the myopia, which can be more satisfactorily ascertained to be true myopia before the nucleus itself has become truly opaque, is to be explained, not by an increase in the volume of the lens, but by an increase in the density of the nucleus relatively to that of the cortical substance.

We entirely agree with the following remark:—"It was formerly thought that senile cataract almost always commenced at the centre of the lens, and extended thence towards the margin. This opinion led to great mistakes, and caused incipient cataract to be often entirely overlooked."

The qualifying word "formerly" need hardly have been inserted, for we have seen the mistake, or at least statements from which nothing else could be naturally inferred, in a recent continental work of high repute. A mature senile cataract has almost always a firm nucleus, hence it is called a nuclear cataract from its distinctive feature; and it would seem to have been inferred by some people, as a matter of course, that the distinctive feature must be the first to declare itself. We think that cortical striæ near the margin of the lens can be detected in a majority of instances before we can observe any opacity of the nucleus distinctly manifest as such under the ophthalmoscope. However, patients with senile cataract seldom consult us until the disease has reached a stage in which opacities both of the cortical and nuclear substance can be easily seen.

Chapter VI. is on the use of the ophthalmoscope. Mr. Wells expresses the opinion that the examination in the erect image is far too much neglected in England; and this is quite true. The two methods ought both to be used in most instances. In various diseases of the optic nerve especially, delicate points can be made out in the examination of the erect image, which are very apt to escape observation in the inverted. This is not entirely due to the higher magnifying
power usually attained in the former method, but also somewhat to the mode of illumination, and to the greater facility with which the light may be made to play upon the fundus by slight movements of the instrument. Mr Wells remarks that glass plates have fallen into disuse as reflectors. This is also matter for regret, we think; because, though the use of such reflectors is a little difficult to acquire, they often enable one to dispense with the use of atropine in cases where it is impracticable to examine the eye in the erect image without it, by means of a common opaque reflector, on account of the greater contraction of the pupil, and brighter reflection from the cornea induced by the latter. In using glass plates, it is necessary to have a large source of light, otherwise the portion of the fundus which is illuminated will be much too small. The same remark applies in some degree to all homocentric ophthalmoscopes when used in the erect image. A small flame, which may be a very suitable source of light for examining the inverted image, will not answer the purpose in the direct method, unless such an instrument as that of Coccius or Zehender is employed. Perhaps the British neglect of the erect image in general, and of glass plates in particular, is connected with a disregard of this circumstance.

Mr Wells strongly recommends the ophthalmoscope of Coccius. Such instruments as those of Coccius and Zehender, when in good working order, give a far more satisfactory illumination for the examination of the erect image than any others known to us; but they are liable to become loose in the joints, and are then rather troublesome to manage.

At page 311, Mr Wells seems to assume that the "turning point" of the eye, by which we suppose he means the centre of rotation, is nearly coincident with the posterior pole of the lens; which is an exploded notion. The centre of rotation is considerably further back. The centre of curvature of the cornea is nearly in the situation indicated by Mr Wells; and an opacity seated a trifle in front of it, or just about the posterior pole of the lens, will preserve its apparent position relatively to the corneal reflection of the mirror when the eye is moved; but both move to a certain extent when the eye is moved, instead of remaining stationary, as Mr Wells asserts. An opacity in the vitreous, a certain distance behind the posterior pole of the lens, would have its virtual image still farther back in the centre of rotation of the eye; and this image would really remain stationary, though it would have an apparent motion with respect to the corneal reflection, if the observer's eye were to follow the latter.
After a short chapter on diseases of the vitreous, we pass on to diseases of the retina, optic nerve, and choroid. Space forbids us to enter upon a detailed criticism of these interesting chapters, but we can recommend them as containing an excellent summary of our present knowledge in a department of ophthalmology, which has advanced remarkably within the last eighteen years.

The succeeding chapter on Glaucoma enters fully into the modern views as to the nature and treatment of this disease. It seems to be almost identical with a brochure by the same author, which was reviewed in a former series of this Journal.

In the chapter on anomalies of refraction, Mr Wells falls into an error which is not uncommon, but which we are surprised to find in the writings of an author who has so long and so intelligently devoted special attention to this branch of the subject.

"As the rays which impinge upon a concave lens are rendered divergent by it, it follows that the further the glass is removed from the eye, the fewer peripheral rays will enter the latter, in consequence of which the retinal image is diminished in size and intensity. The reverse obtains in the case of convex glasses, for as they render the rays which impinge upon them more convergent, a greater number of peripheral rays will enter, the further (up to a certain point, of course), the convex glass is removed from it, the retinal image becoming at the same time larger and brighter." (p. 545.)

The fallacy of this reasoning was long ago pointed out by Helmholtz, who showed that the proportion between the area of the retinal image and the amount of light distributed to it remains unaltered by the use of lenses, and, consequently, that these have no effect in altering the apparent brightness of objects having a sensible angular magnitude.

The chapter on the affections of the muscles of the eye contains a good deal of matter which will be new to many British readers; and our author here exhibits his talent for divesting a somewhat puzzling and intricate, though not a very abstruse, subject of its perplexity. It ought to have been stated, in connection with the rules at page 549, for determining the position of the vertical meridian of the normal eye in its different movements, that the axes of the two eyes are supposed to be parallel, as in looking at a distant object.

The remainder of the work is devoted to the diseases of the lachrymal apparatus, the orbit, and the eyelids.

One or two of the woodcuts are rather coarsely executed, but the book has the advantage of containing a selection of excellent chromo-lithographs from Liebreich's celebrated

* The italics are our own.
ophthalmoscopic plates. The general get-up of the volume is unexceptionable.

We congratulate Mr Wells upon the success with which he has fulfilled his ideal, as represented in the preface, in producing "an English treatise on the diseases of the eye, which should embrace the modern doctrines and practice of the British and Foreign Schools of Ophthalmology." The new school of Ophthalmology may also be congratulated on having found an exponent who is neither a bigoted partisan of everything new, nor a scoffer at everything old.

II.—De la Kelotomie sans Réduction, Nouvelle Méthode Opératoire de la Hernie Estranglée. Par le Dr Marc Gerard. Paris, 1868. J. B. Baillère et fils. pp. 276.

The object of this treatise is to advocate, in all cases of strangulated hernia, the practice usually followed at present only in those in which the bowel is found to be gangrenous when the sac is opened, viz., to leave it unreduced.

Our author first proves, and that very satisfactorily, that herniotomy or kelotomy is followed by a high rate of mortality. This will not be denied by any one; but we would remark that the statistics in the work before us are, as usual, drawn from hospital practice solely, and that the results are therefore much more unfavourable than would be arrived at if we could get at the statistics of private practice in similar cases.

M. Gerard's next proposition is as follows:—

"Dans l'immense majorité des cas, l'opération doit être regardé comme la principale cause de ce insucces. Il convient des lors d'indiquer quelle part d'influence prend chacun des temps de la kelotomie dans la mortalité des opérés."

In the first of these sentences lies, in our opinion, the grand error of M. Gerard. The very opposite of his opinion is, we are convinced, entertained by most practical surgeons, viz., that the operation for strangulated hernia, as usually conducted, is not in itself a highly dangerous one.

It is from the previous effects of the strangulation and specially from the peritonitis already existing in nine-tenths of the cases when operated on, that their real danger arises. Hence, it is almost futile to inquire into the comparative gravity of the different steps of the operation as chief causes of danger to these patients; but even in this inquiry our author has gone curiously astray. If he had fixed upon the opening of the hernial sac as
the point of danger, he would have had many to agree with him in discountenancing it where it could be avoided; but when he states that the reduction of the uninjured bowel into the abdominal cavity is the chief cause of the mortality, we suspect he will find few followers. Still fewer would maintain that to leave the bowel exposed in the open sac,—the wound unstitched, and merely covered with fomentations of a decoction of marsh mallow—was likely to ward off the danger of the patient’s state.

We are given to understand that M. Gerard is a young man, only entering upon practice, and, therefore, we are rather inclined to smile at, than seriously to condemn the undue strength of his assertion that, in the operation for strangulated hernia, "la reduction de l’intestin est un manœuvre irrationelle et contraire aux lois de la prophylaxie des complications."

III.—A Dictionary of Materia Medica and Therapeutics. By Adolphe Wahltuch, M.D., L.R.C.P., &c., &c. pp. 482. London: Churchill, 1868.

This work has already been so universally condemned by the various medical periodicals, as to make any further remarks on its merits or rather demerits appear very much in the light of a slaying of the slain; but as the book has been sent, and as it seems to us not only in many aspects perfectly useless, but in the hands of a careless practitioner calculated to do considerable mischief, we feel impelled still to add to the list our tribute of condemnation.

In the introduction, Dr Wahltuch says "The book is simply one of reference for those whose time is valuable, and whose memory is overburdened;" afterwards adding that "the purpose of the work is to give a tabular arrangement of all drugs specified in the British Pharmacopoeia of 1867, each table being divided into six parts:—viz., 1st. Name of Synonyme, (the French, Italian, German, and Russian, being also added); 2nd. Character and Properties or Composition; 3d. Physiological effects and Therapeutics; 4th. Form and Doses; 5th. Preparations; 6th. Prescriptions." Now, we must confess that we are unable to perceive any advantage to be derived from perusal of a tabular arrangement of the Materia Medica, as with an accurate index there never can be experienced the slightest difficulty in obtaining any information that may be desired, from already existing works. Passing over the defects which exist under the heads "Character and Properties or Composition" and "Preparations," we are of
opinion that such an arrangement is decidedly bad and injurious. It tends to the exclusion of all those various and numerous circumstances which modify the dose and action of medicines, and very materially influence us in their administration; for example, *Nux Vomica* is simply said to be “used as a nervous stimulant in torpid or paralytic conditions of the motor or sensitive nerves, such as general paralysis, paraplegia, &c.,” no distinction whatever being made between those varieties of paralysis in which it has now been proven to be highly beneficial, and those in which it has, as certainly, been found to exercise an injurious and disastrous effect. Such a mere mechanical statement of the diseases in which a certain drug is administered is highly objectionable, tends strongly to empiricism, and paralyses all scientific research.

In other respects, however, the book is very imperfect. It is really painful to perceive in a work, professedly to a certain extent linguistic, so many grammatical mistakes in Latin. Among many other flagrant errors under the head Prescriptions, we find “*Folice*” and “*Spiriti*” occurring almost persistently throughout the work as the genitive; *pulvis*, *pulveris*, *sulphas*, *sulphatis*, are used indifferently where the genitive is required; while such directions as “*ut fiat pilula xxx*,” “*cum mellis*,” &c., are frequently met with. Possibly a number of these may justly be ascribed to the printer, but still they evince much carelessness on the part of the Editor.

Regarding the prescriptions themselves, many of them are quite worthless and inconsistent, and in not a few instances we would be grieved to think that “the busy practitioner” found it necessary to resort to any such formulae. We were startled to come upon the following given as being useful in intestinal obstruction:—

R. *Hydrargyri*... ... ... ... ... ... ... ... $f.3vi.$
S. To be given, followed by *Oleum Olivae*, ... ... ... ... ... ... ... ... $f.3ss.$

We fancied that this prescription had fallen into disuse with the “eye of newt and toe of frog” of mediæval leeches.

The therapeutical classification of drugs at the end of the book does not in any respect differ from those ordinarily in use. The careful arrangement of the various synonymes of the drugs will, no doubt, be valuable to those desirous of consulting foreign authors; while the tables of comparative weights, measures, and doses, are worthy of reference.

Dr Wahltuch is evidently possessed of energy and perseverance, and we cannot but feel considerable regret that he should have expended so much time, anxiety, and labour, in the production of a work which will be of so little real value to the profession.
Of late years much has been done towards the elevation and the education of the imbecile. The country generally has been canvassed, the sympathy of the public excited; large sums have thus been raised and applied for this benevolent purpose; while the Commissioners in Lunacy are said to be making every exertion to have some provision made for the idiot. In England, as far as voluntary efforts are concerned, the subject has been pushed with greater vigour and success than elsewhere, and it is a satisfaction to the friends of the cause to know that they are not treading any dark or uncertain path, for the history of Earlswood and other Institutions has shown that the condition of the idiot can be as much improved as any of the other classes, for whose relief so many Institutions are now in existence. The problem is how to call forth intelligence, and that that can be done is shewn by the reports of such establishments. Idiots unable to feel attachment or manifest affection have become affectionate, and manifested an interest and taken pleasure in a variety of things. They have become handicraftsmen, taken a pride in farming, and in the charge of animals. The value of their labour is worth thousands a-year. Through the instrumentality of the Earlswood Asylum not only have idiots been returned to society, but a miserable class of our fellow-creatures have been converted into a large, thriving, Christian community.

At the present moment we are just at that initiatory stage, where lunatic asylums were, a few years ago, when they were not recognised by the State, or funds provided for their maintenance, and their resources were all dependent on the benevolence of the few. Superintendents of idiot asylums have the same difficulties with which to contend as had the superintendents of lunatic asylums, and with this difference, that institutions for the idiot demand a more expensive management, and require a staff of teachers which are not desiderated in the lunatic. They have to contend with Boards who know nothing of the principle or rules on which idiots are educated; who look only to the matter of expense, and disregarding everything their superintendent has to say as to the laws on which his work must be done, they are continually placing obstacles in his path, and creating discord and strife where all should be harmony and peace.

America has the honour of having been the first to offer State aid to such institutions, and it is to be hoped that in this country, before long, those who are active in urging forward legislative measures will feel the prime importance of the interests of those who are
least able to take care of themselves, that a question of this sort shall be taken in hand by Government, and that it shall be left to fall on the property of the country at large, to do something to relieve the idiot, and to secure him from the dangers to which he is exposed when left at large. In the northern counties of England alone, there are said to be 50,000 imbeciles, and we know that in Scotland we have at least 2000. For these something must be done. Of all the trials to which humanity is subject, there can be no greater trial to a parent than the realization of the presence in his home of an idiot child, a child who, at first, was received with all affection, and nursed with anxious care and solicitude, but who, in course of time, became a confirmed and helpless idiot. Until the State shall feel that it is bound to make provision for these helpless ones, it is the duty of every individual to help on the movement and befriend the cause.

The idiot has generally been classed with the lunatic, but the difference is great. The lunatic is a person whose intellect is disordered and disturbed, but the idiot comes into life with an undeveloped mind, with an imperfect organization; they do not require medical treatment so much as training and education. As regards Scotch idiots, with whom we have to do, the Scotch Commissioners in Lunacy thus express themselves in one of the reports:

"There can be no doubt that, apart altogether from the question of improvement by training, there is a great want in Scotland of an establishment specially adapted for the reception of young idiots, where they would be removed from the neglect and cruel usage they too frequently experience at home, or from the contaminating influence of association with the adult lunatics in asylums, whose eccentricities and degraded habits they are prone to copy, and from whom they frequently experience maltreatment. A refuge of this kind, to give it no higher name, would prove a valuable boon, not only to the children themselves, but also to their families."

The profession at large are quite of this opinion, and they state that it is the worst thing possible to place an idiot in a lunatic asylum in its present condition. Hence the necessity for the movement.

With these preliminary observations we observe that several books have already appeared on the subject and treatment of idiocy, the last of which is that by Seguin, on "The Treatment of Idiocy by the Physiological Method," the book to which at the present moment we wish to direct attention.

It is written with great epigrammatic clearness, sufficiency of force, philosophic aim, and thorough insight, though in a medical point of view we think it in many ways deficient. The highest
authority on this subject in England has stated to us that it offers too much, and that much of what it offers cannot be done.

It is divided into four parts. 1st. Idiocy; 2nd. Physiological Training; 3rd. Moral Treatment; and 4th. The Institution, with an Appendix of Cases.

We put aside the part on the Institution, as that must vary in different countries, according to the means at the superintendent’s disposal, and his medical and individual proclivities; and we only observe that in this country the general opinion is that the Institution should not be small. The forms of idiocy are excessively varied. They must not all be mixed together, they must be classified, and that can only be done in a large asylum with various rooms and apartments.

Putting aside this part, then, we take the first part on idiocy, which, to a medical man, ought in many respects to be the most important, the most readable, and in its general outlines the most interesting. In this book, we regret to say, it is not so.

Starting from the definition that, “Idiocy is a specific infirmity of the cranio-spinal axis, produced by deficiency of nutrition in utero, and in neo-nati,” he observes, “It incapacitates mostly the functions which give rise to the reflex, instinctive, and conscious phenomena of life; consequently, the idiot moves, feels, understands, wills, but imperfectly; does nothing, thinks of nothing, cares for nothing (extreme cases), he is a minor legally irresponsible; isolated, without associations: a soul shut up in imperfect organs; an innocent.”

After merely glancing at our ignorance of the modus operandi of deficiency of nutrition in utero, he proceeds to point out that the circumstances which favour the production of idiocy are endemic, hereditary, parental, and accidental. “Idiocy is endemic only as connected with some forms of cretinism. It is considered hereditary, where there have been cases of idiocy, or of insanity in the preceding or collateral generations. It is called parental when referred to certain conditions of the father or mother.” Here we have the causes enumerated, and we direct particular attention to a popular cause, namely, conception from the spermatozoa of a drunken father:—

“She may have been underfed in poverty herself, or through previous generations; or so miserably enervated by music, perfumes, savors, pictures, books, theatres, associations, that a precocious liveliness has outgrown her motherly capabilities, as forcing converts the pistils and stamens of flowers into beautiful, fruitful petals. She, being pregnant, has used for exclusive food unnutritious substances, such as pickles, dainties, lemons, tea, brandies, &c.; or vomited all real food soon after ingestion. She has conceived at a time when spermatozoa have encountered noxious fluids of venereal or menstrual origin, or have been altered in their vitality previous to their
emission by drunkenness, etc. She is often passive under the causes of impressions, depressions, shocks, privations, exertions, abuses, excesses, altering the nutrition of the unborn or newborn child."

He then gives causes for accidental idiocy, but among them we do not find the frequent and common one of falls and blows on the head. "Accidental idiocy, after birth, is caused by unnutritious diet, want of insolation, and of other hygienic requisites; by hydrocephalus, measles, hooping-cough, intermittent fever." At this stage, noting that idiocy is more frequently met with epilepsy and chorea, less with paralysis and contractures, and pointing out that from these diseases it receives a deleterious influence, he divides it into the following different forms:—

"Idiocy is called profound where the ganglia are altered, and superficial when the peripheral termini of contractility and sensation only seem to be affected. It is called organic when the organs are sensibly altered, and functional when our imperfect instruments and observation do not permit us to trace the organic lesion as we do the functional disorder. It is called sthenic when it gives the child nervous impulses without object; and asthenic when it leaves him without them when they are wanted for some object. Other divisions may be devised, but as they bear on the psychological symptoms exclusively, and repose more on degrees than on differences, they are more apt to disclose the ingenuity of their framers than to prove new and beneficial."

Then, of course, follows the pathology of the subject divided into organic and physiological. He remarks, "Though idiocy does not stamp children with any particular shape of the bodily state, be it the effect of unequal nutrition, of want of normal activity, or of will in the gathering up of the limbs to the body to form the various attitudes, the great majority of idiots seem to be not so much ill-shaped as ill-proportioned."

Passing from the consideration of size of head to that of shape, we find that we may have all sorts of forms among the heads of idiots.

"Idiocy presents mostly the following deformities:—Heads flattened anteriorly or posteriorly, or circularly compressed to a cone, which tends upwards or backwards; flattened at the sides or at the top, very low or very high, as if crowned by a stony table, or bilobed by a depression running along the coronal suture, or with both parietal eminences greatly exaggerated, or the vertex expanded like a balloon, whose neck would be represented by the compressed forehead and lower lateral bones, reposeing on a diminutive face. These deformities are the principal, but many idiots do not present any of them, whilst they are found among people who practise them, not to incapacitate their children, but to make their heads correspond to some desired type by a sort of plastic orthophreny." . . .

"Reserving the exceptions, any deviation from the Caucasian type among our children, in respect to harmony of proportions, must be looked upon a priori, as representing some anomaly in their faculties, and any imperfection in the mode of union of the segments of the skull cannot fail to enlighten the etiology and pathology of our subject."
Before closing his observations on this head, he draws attention to the difficult and frequent attempt to form a diagnosis of an idiot immediately after birth. To the general practitioner, to whom the task is oftenest assigned, his observations may be welcome.

"The only thing which could tempt us to form a diagnosis when the child is just born is the often monstrous shape exhibited by the head. But it is so difficult to appreciate what part of it is due to transitory compressions from manoeuvres or instruments, and the head is endowed with such a power of reaction and self-modulation against these transient deformities, that we had better let it receive its own finishing touch before venturing on the expression of a judgment on its unfinished state."

And he further points out that the physician has rarely an opportunity of seeing the child otherwise than nursing or sleeping, and of noticing the various symptoms of idiocy. At this stage he enters upon the field of the functions of organic life, which he states are generally below the normal standard, the respiration is not deep, the pulse without resistance, appetite often anormal, though not voracious, excretions not dissimilar from ours, sebaceous matter as different from ours as ours from those of the various coloured races, or from those emitted in most diseases.

He then takes up the functions of organic life, and describes at some length contractility, with its various abnormalities and differences on each side of the body, causing incapacity of walking, andprehending objects; or, if it does exist, inducing more or less disordered, mechanical, spasmodic, or automatic movements. "Turning of the body in walking, or in the sitting posture," he says, "is characteristic of the disorders of contractility; besides, it is no doubt connected with some defect of the central nervous organs." On this subject Seguin is quite at home, and in times past considerable merit was awarded to him for his description of these facts. He narrates various anomalies of sensibility, more or less allied to dulness, exaltation, or other perversions of touch, supporting them by individual cases, and ends by stating that sensibility proper is dull in idiots, who are benumbed by cold and less affected by heat, but much prostrated by the atmospheric modifications of a thunderstorm.

In the descriptions of idiots, and of their various abnormalities, it may be stated that we find no mention made of the anomalies by which asylum physicians of this country at once recognise a congenital idiot. Nothing is said of the flattened incisor teeth, of the arched palate, of the non-descent of the testicles; and of the various abnormalities which affect the median line of body. In the part on the Institution, in describing the duties of the Superintendent, he allots to him the following work:—"The
functions of organic life are analyzed; heat, respiration, circulation, blood, urine, saliva, sweat, faeces, are submitted to the tests of the new senses of observation, and comparison created by the use of chemical reagents, the microscope, the thermometer, the stethoscope, spirometer, dynamometer." But no results of the application of such instruments are included in his work, and nothing is stated as to the vital phenomena of idiocy. Even the condition of the urine of idiots is not given, and this is one of the easiest and most applicable of the subjects he mentions. It has been stated that dments and idiots pass a less than average quantity of phosphoric acid in their urine. We do not believe this, and refer to a paper published in the British and Foreign Medico-Chirurgical Review for April, 1868, in which it is shown that in none of the cases did it fall below the minimum, of which several were congenital idiots, and in two, who could not speak, it exceeded the average quantity according to body weight. The same observation might be made as regards the thermometer, namely the absence of results. No doubt it is true that in the limbs, where there is generally deficient circulation, a lower than normal temperature may be obtained; yet, if the thermometer be introduced into the rectum, it will show that the temperature of the body generally is not lower than that of health. But on these different subjects a wide field is still open to investigators. Following up the same subject of omissions, we find no mention or discussion of intermarriage; at least, there is but a mention in which he says cretinism is due to "locality and intermarriage." The subject is not further referred to. On this matter, Dr Down of Earlswood has written a paper, in which he compares his own results with those of Dr Howe. That American physician finds that in the progeny of 17 cases of intermarriage, more than 46 per cent. were idiotic. Dr Down, in this country, on the contrary finds that in 20 marriages of blood relations, only little more than 18 per cent. of the children were idiots. He states, however, that Dr Mitchell, working from a similar point of view, in the Highlands of Scotland, found that more than every sixth idiot born in wedlock was the child of cousins. On this point, Dr Down observes:—

"My own remarks conclusively show that in England at least, every fourteenth idiot only is the child of cousins. But can it be as certainly shown that the relationship, per se, is the cause of the idiocy? I think not, and the analysis I have made clearly shows that in the vast majority of such, so great in fact that it may almost be said to be universal, other causes were operating which were merely intensified by the relationship. Had the same care been exercised in the selection of relations, as is displayed by the breeder of race horses, vastly different results might have ensued; or were the practice of the coloured races of North America in force, of destroying all the weak, rachitic, and diseased children, the intermarriage
of cousins would not have displayed the facts which I have published. Consanguinity has doubtless the power of aggravating any morbid tendency, as I believe it has, of perfecting any good quality. Any statistics on the marriage of relations are of doubtful value, unless they give the life history of the progenitors. Wherever a similar investigation is made, I believe it will be found, as in the subjects of my own inquiry, that consanguinity is only one of the functions, and not the most important one in the production of deterioration. If our advice be sought, it will be our duty to enquire into other elements which are less on the surface, but which have equal or even greater potentiality for evil."

The reviewer can only state that the statistics at his command have been very small, but they accord with those of Dr Down. On this part of his subject, Seguin closes with an eloquent, though perhaps exaggerated peroration, in which he discourses of the improvement which can be effected on the idiot, of his affectionate moral disposition, and of the evils and danger to which he is generally exposed by criminal legislation. As regards the improvement and general amelioration, he says:

"Idiots have been improved, educated, and even cured; not one in a thousand has been entirely refractory to treatment; not one in a hundred who has not been made more happy and healthy; more than 30 per cent. have been taught to conform to social and moral law, and rendered capable of order, of good feeling, and of working like the third of man; more than 40 per cent. have become capable of the ordinary transactions of life, under friendly control, of understanding moral and social abstractions, of working like two-thirds of a man; and 25 to 30 per cent. come nearer and nearer the standard of manhood, till some of them will defy the scrutiny of good judges when compared with ordinary young men and women."

And Dr Down, in an equally pertinent but perhaps less exaggerated passage states that:

"10 per cent. become self-supporting; 30 per cent. become so far improved as to cease to use up a sane life in their care, and become contributors to the common stock; and the remainder, all but 6 per cent., are invariably improved in their habits, and become greatly lessened burdens on their families and society."

Such are the results of the task before society.

The portion of the book on physiological training is replete with ideas of the highest moment, ideas so ingenious as to appear the outbloom of genius, which might, and indeed ought to have, the widest extension. He observes, that "exclusive memory exercises do not actually improve idiots, rather the reverse, they impede their future progress. Better one thing thoroughly known than a hundred only remembered. Teaching so many facts is not so fruitful as teaching how to find the relations between a single one and its natural properties and connections." He further proceeds—"When teaching a new object we must not too often put our point forward, but, on the contrary, put it
behind something well known, as a corollary to what was previously acquired by unavoidable deduction, and, of course, if we let the child feel that the ground is new, he will recoil; if we do not, he will think himself in the old one, and go ahead without increased diffidence.” Then come the axioms—

“\(\text{We must teach every day the nearest thing to that which each child knows or can know.}\)"

“\(\text{We must never confide to automatic memory what can be learned by comparison, nor teach a thing without its natural correlations and generalizations; otherwise we give a false or incomplete idea or none, but a dry notion with a name; what enters the mind alone dies in it alone; loneliness does not germinate anything.}\)"

“The contact of two perceptions produces an idea; the contact of a perception with an idea produces a deductive idea, the contact of two or more ideas with each other gives rise to both induction and deduction, and ideas of an abstract order.”

And in this system, so simple, natural, and yet philosophical, he gives supreme distinction to the moral forces, to the forces which call into activity and act upon the will, and through it develop all that exists. In this he is supreme, the first and best of teachers. Recognising, as he does, the power and moral force of love, he proceeds to show that the idiot must not be driven to learn, but coaxed, pleased, and drawn to his tasks by kindliness and gaiety.

“We must not forget to create gaiety and mirth several times a day; happiness is an object as much, nay more than progress, and children will not be sick if they laugh.”

“We must not begin the day’s work as a duty, but like a pleasure, with walks, sports, music, and end it in the same manner, so that if we have not made them perfectly happy through our daily routine, we can send them to bed cheerful.”

In this system of instruction he particularly insists upon good nutrition, “which is to be attended to closely, if we do not want to see them or part of them decay,” and strict medical attention to the hands and feet in winter, the eyes, and abdominal organs.

In the exposition of the system into which these observations are interspersed, he starts with the definition that

“Man, being a unit, is artificially analysed, for study’s sake, into three prominent vital expressions—activity, intelligence, and will. We consider the idiot as a man infirm in the expression of his trinity; and we understand the method of training idiots or mankind, as the philosophic agency by which the unity of manhood can be reached as far as practicable in our day, through the trinary analysis.

“According to the trinitarian hypothesis, we shall have to educate the activity, the intelligence, and the will, three functions of the unit man—not three qualities antagonistic one to the other. We shall have to educate
them not with a serial object in view, but with a sense of their unity in the one being.

"Activity, besides its unconscious or organic functions, divides into contractility and sensibility, with their specific tendencies; Intelligence branches into many sub-functions; and Will into its protean expressions, from love to hatred.

"The predominance of any of these functions constitutes a disease; their perversion leads to insanity; their notable deficiency at birth constitutes idiocy, afterwards imbecility, later yet dementia. Physiological education, including hygienic and moral training, restores the harmony of the functions in the young, as far as practicable separating their contractility, to restore them practically in their unity.

"This is the psycho-physiological principle of the method."

In this system, the abnormalities of activity, divided into contractility and sensibility, are corrected by gymnastics, which stand first, and take precedence over the lessons of the school-room; and deservedly so, for it has been established by experience that the true way to rouse the mind of an imbecile is to begin with the bodily functions. They are used to correct the various irregularities of the muscular system, incapacity of walking, standing, moving, inefficiency of the fingers, the swinging gait peculiar to idiocy, and the abnormal symptoms of sensibility.

"The first want of people, or of an individual, is strength acquired by proper training of their muscular system. Of all the incapacities of idiocy, none are so striking and none so detrimental as those which affect motion and locomotion, their direct effect being to prevent the development of force, their secondary result to prevent the reaching of any instrument of knowledge."

Then are described the various instruments and modes by which locomotion and properprehension are obtained, which may be said to be peculiar to the Institution, and of little interest or value to the general reader.

We extract the following sentence in order to show how this system of gymnastics, or education of the muscular system, is bound up with that of the other departments, Intelligence and Will.

"Here, for instance, it is impossible to take hold of the muscular apparatus without acting on the nerves, bones, &c., as it is equally impossible to command these special instruments of activity without exercising besides, a reflex action, on the intellect and the will."

In treating of the various disorders of the senses, which he says are "not the mind, far less the soul," but only the "doors through which the mind issues and enters," he draws attention to first, the class of wants, and second, the class of wonders, and points out that idiots do not seem to possess natural curiosity, "mother of the beautiful and of all progress," which urges to the learning of all these objects; but he remarks in another place—
"The teacher can excite it in him. In order to accomplish this, the idiot must receive a course of treatment similar to that which developed the primitive nations. The glorious effulgence of the light, the gloomy shadows of the darkness, the striking contrasts of colours, the infinite variety of forms, the smoothness or hardiness of substances, the sounds and the pauses of music, the eloquent harmonies of human gesture, look, and speech, these are the powerful agents of their transition from physiologi- cal to mental education. Away, then, with books. Give us the Assyrian and Jewish mode of instruction. The representative signs of thought were painted, engraved, sculptured, in deepness or in relief, sensible to the eye and to the touch; the tables of the Mosaic law appear in the midst of thunder, and of the lightning’s flash; in the same way the symbols in which is concealed the modern mind, should appear to the idiot under these historic and powerful forms, so that seeing and feeling all at once, he will understand.” . . . . "Our instruments of teaching must be those which go directly to the point. In view of that necessity we must use objects, pictures, photographs, cards, patterns, figures, ware, clay, scissors, compasses, glasses, pencils, collars, even books."

In the consideration of the disorders of audition which may be organic or intellectual, music, so well known in the education of the idiot, receives its due and prominent place.

It is unnecessary to enter at any length into the education of other senses, of the visual organs for instance, into the teaching of colours by various devices, into the object lessons, or even the teaching of the alphabet by letters used as toys, in iron, wood, cards, &c. But the system is the same throughout, demanding great patience, love, and command of temper.

Throughout this system of instruction the moral training is inextricably blended, presiding over the gymnastic as well as the intellectual portion. In nothing is this better shown than in the gymnastic exercises, where the child, after having gained the power of proper prehension, is taught to work by movements of personal imitation. Undoubtedly this is the noblest part of the idiot’s education, the lesson taught in lunatic asylums, and handed down to them by the old Monks of Spain, who said, "We cure almost all our lunatics, except the nobles, who would think themselves dishonoured by working with their hands." It is the lesson which ought to be taught to all idiots, but in which, we regret to say, our Scotch Institutions are sadly deficient.

We shall not touch upon other recommendations in this part of the book, punishments and recompences, caresses, and authority, the excursions, walks, sports, theatrical representations, and feast days, and times; but we shall sum up our observations by the following sentence:—

"The men who pretend to treat idiocy with latent erudition, even genius, may find the appreciation of their Utopianism in these words of St Paul:—‘Though I speak with the tongue of angels, and have not charity, I am become as sounding brass, or a tinkling cymbal; and though I have the gift of prophecy, and understand all mysteries, and all knowledge, and though I have all faith, so that I could remove mountains and have not charity, I am nothing.’"
V.—A Manual of Operative Surgery for the Use of Senior Students, House-Surgeons, and Junior Practitioners. Illustrated. By Joseph Bell, F.R.C.S., Ed., &c., &c. 2nd Ed., pp. 288. Edinburgh, 1869.

We could hardly desire a better guide for the student operating on the dead body than this Manual of Surgical Operations. At the same time, we regret that Mr Bell should be silent on many points which are preliminary to all such practice. The beginner, without special warning, is as likely to cut towards a flap of skin which he is raising as away from it; as likely to turn the concave side of the bone-pliers towards the part of the bone which he is leaving as towards that which he is removing; as likely to direct the edge of the knife, in transfixing a limb, somewhat towards the base of his flap as somewhat towards the bone. A short introductory chapter on such matters as these would find a more appropriate place in the work, considering its aim, than descriptions of such rare operations as ligature of the abdominal aorta, of the internal iliac, of the innominate and of the first and second parts of the subclavian, or the performance of gastrotomy and oesophagotomy.

The first three chapters treat respectively of ligature of arteries, amputations, and excision of joints. Operations on particular regions (such as the cranium and scalp, the eyes, lips, nose, jaws, &c.) are discussed in the succeeding nine chapters, while the thirteenth and last describes tenotomy in wry-neck and club-foot.

It is remarkable how very seldom Syme's amputation at the ankle is properly described. Even in the last edition of a work so generally consulted as Mr Erichsen's "Science and Art of Surgery," we are told that the first incision is made by cutting "from the anterior part of one malleolus downwards and backwards across the plantar aspect of the heel to a corresponding point in the opposite malleolus." This is perfectly erroneous. Mr Bell's account of the operation, although necessarily short, is very excellent. Here is his description of the same incision:

"The foot being held at a right angle to the leg, the point of a straight bistoury, with a pretty strong blade, should be entered just below the centre of the external malleolus, and then carried right across the integuments of the sole, in a straight line (or in the case of a prominent heel, slightly backwards), to a point at the same level on the opposite side. This incision should reach boldly through all the tissues down to the bone."

This, we need scarcely remark, is a very different procedure from cutting from malleolus to malleolus. Mr Bell notices the advantages to be derived from dressing this and other stumps antiseptically. Whoever so dresses them will have no need, of course, to provide for the escape of discharge by "a longitudinal
slit in the flap,” or “to keep the flaps quite apart for some days, by stuffing the wound with lint, and aiming only at secondary union by granulations,” as Mr Bell advises should be done where much suppuration is expected.

After removal of the female breast, he recommends the dressing of “a folded towel laid over the wound.” Surely this is as much a case for antiseptic dressing as any amputation, especially when, as he tells us must sometimes happen, a raw surface has been left exposed. In speaking of this operation, he says:—

“In operating for malignant disease, the one paramount consideration is that all the disease be excised, however curious, inconvenient, or awkward, even insufficient, the flaps may look. Partial excisions are worse than useless.”

This is true, but we wish he had also stated that the whole breast should be always removed, however limited the disease may happen to be. This is a point of very great importance, and yet not always insisted upon.

Want of space prevents our noticing more of the contents of the work, but we have no hesitation in recommending it as the best text-book on the subject. Much of it is written for the guidance of the house-surgeon and junior practitioner, and they will be at all times safe to rely on its advice. We cannot help saying in conclusion that the book owes much to Mr Syme’s teaching. Almost every page reflects it, and there is scarcely a chapter to the value of which it does not add. This debt Mr Bell is nowhere slow to acknowledge, and he appropriately dedicates the volume to the surgeon from whom his inspiration is derived.

Clinical Record.

I.—CASES OF NASAL DIPHTHERIA.

Reported by Robert Scott Orr, M.D.

Case 1.—An infant, aged 7 months, was attacked on the 16th of January, 1869, with what, at first sight, appeared to be a catarrhal affection of the nostrils. A profuse discharge of greenish straw coloured fluid issued from both nostrils. So copious was this discharge that it evidently gave the infant very great annoyance. It produced a constant snivelling and restlessness, and was at first accompanied with pretty high fever. Soon, the discharge