

PART II.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Lectures on Obstetric Operations, including the Treatment of Hemorrhage, and forming a Guide to the Management of Difficult Labour.
By ROBERT BARNES, M.D., Lond., F.R.C.P. London: John Churchill and Sons. 1870. 8vo, pp. 526.

THESE lectures have been so frequently noticed in this Journal that it is almost unnecessary to enter on a formal review of them. We believe them to give the most explicit, definite, clear, and complete, and withal simple description of obstetric operations ever published in the English, or indeed in any other language; descriptions not projected from the inner consciousness, but the result of practical experience, guided by the closest study of principles, and the fullest apprehension of the obstacles to be met with, and the mechanism by which these are to be overcome. In their present form these lectures form an octavo volume of more than 500 pages. They treat of obstetric operations, of uterine hemorrhages, and of placenta previa.

The first lecture is introductory, and on the selection of instruments; then we have four on the use of the forceps, giving a very full account of the method of using this instrument. It is to be regretted that Dr. Barnes has not defined more accurately what he means by the terms "long" and "short" applied to forceps, for though there is an improvement since his attention was called to the subject by Dr. Beatty in the correspondence that took place when the lectures were first published, in the *Medical Times and Gazette*, there is still much uncertainty and obscurity in the use of these terms. Dr. Barnes adheres to his love for forceps with a second or pelvic curve, but in the excess of his enthusiasm refutes his own decision by the reasons he adduces in its support. The "objections to the single-curved forceps, short or long," stated at pp. 47-8-9, are so utterly without foundation, and have been so fully answered in this Journal and elsewhere, that it is not necessary to go into them again; and as Dr. Beatty has already remarked

the diagram given by Dr. Barnes (p. 48), to prove the superiority of the curved forceps, affords in itself the most conclusive reason why the straight forceps should always be preferred. This controversy, like many others, will probably never end. The fact is that either instrument will, in skilful hands, do all that ought to be done with a forceps, and the question as to which is the most easy of use and the safer, involves so much of the skill of the operator that it must always remain open, but few will, we opine, adopt the practice of an eminent teacher in Edinburgh who stated at the late meeting of the British Medical Association, at Newcastle, that he used the forceps with the curve directed backwards.

The division of forceps operations into "high," "middle," and "low," according as the head lies at the brim, in the cavity of the pelvis, or on the perineum, simplifies very much the consideration of the subject, and we regret that Dr. Barnes had not adopted it more decidedly, but he has described all the steps of the operation, and the various modifications necessary to meet particular circumstances so clearly that we are little inclined to find fault. We are glad to find the stereotyped rule that the ear must always be felt before the forceps is applied, boldly declared unnecessary. The other standing order that the head must be a certain number of hours without advancing before we dare to give relief, is not even deemed worthy of mention—a course in which we cannot fully concur, for it is so generally laid down by routine writers and in text-books, and is productive of so much mischief, that we would lose no opportunity of showing its danger. There is no statement in the book more true or more important than that with which the lecture on craniotomy terminates—"Properly speaking the mortality from the forceps is *nil*. Women die because the instrument is used too late." The use of ergot is by some looked on as safer than the forceps, and it is certainly more easy; but let us hear Dr. Barnes as to the advisability of using it, and let us in leaving this section of the book advise all who, from timidity or want of confidence in themselves, give ergot instead of delivering with the forceps, to study these lectures and make themselves familiar with this instrument.

"But when you have given ergot you are likely to be in the position of Frankenstein. You have evoked a power which you cannot control. Ergotism, like strychnism, will run its course. If it acts too long or too intensely, you cannot help it. The ergotic contraction of the uterus, when characteristically developed, resembles tetanus. Then, woe to the

mother if the cervix does not yield, if the pelvis is narrowed, if, in short, any obstacle should delay the passage of the child. And woe to the child itself if it be not quickly born. I very much prefer to use weapons that obey me, that will do as much, or even less, than I wish. I fear to use weapons that will do more."

Ten lectures are devoted to this operation of turning, embracing a very full account of the "spontaneous evolution" of Denman, and the spontaneous expulsion of Douglas; both terms are, however, taken exception to by Dr. Barnes. The process described by Denman is, he says, a true *version* or *turning*. All German, French, Italian, and Dutch authors apply to this process the term spontaneous "version," "*versio spontanea*." It might, Dr. Barnes says, be called natural version to distinguish it from artificial version effected by the hand of the obstetrician. All continental authors, he says, likewise call Douglas's process by the name "spontaneous evolution." The process being one of unfolding, as it were, of the doubled up fœtus, Dr. Barnes thinks it of great importance to bring one phraseology into harmony with that of our Continental brethren, and of still more importance to bring it into harmony with nature; and as he says it is clear the change should be made by us, he uses the term "version" for the process described by Denman, and "evolution" for that described by Douglas. Both processes are very fully described, and their mechanism explained by diagrams drawn by the author himself; and indeed the book is most copiously illustrated in this way, the drawings being most expressive, clear, and faithful. Having shown the accuracy of Denman's description of the facts, and described the mode in which version and evolution take place, Dr. Barnes proceeds to apply the knowledge of the mechanism of these processes to the practice of artificial version and evolution. After describing the various methods of turning, bi-polar turning of the head, by the breech and by the feet, an account is given of the management of certain difficult breech presentations, locked twins, dorsal displacements of the arm, double monsters, and of delivery in imitation of spontaneous evolution, by evisceration and decapitation. Turning in contracted pelvis is also considered and forcibly advocated, and in the following passage an attempt is made to define the extreme limit of pelvic contraction in which the operation would be justifiable:—

"Can we define with any precision the conditions as to degree of pelvic contraction that are compatible with the birth of a living child?

The question is not easy to answer; nor is it important to be able to answer it very precisely. The great fact upon which the justification of the operation rests is this: many children have been delivered by it alive, with safety to the mother. We know accurately only one element of the problem—namely, the degree of contraction of the pelvis. The other element, the relative size and hardness of the foetal skull, we can but estimate. *We must assume, in many cases, a standard head.* With this assumption the practical question is reduced to this: *What is the extreme limit of pelvic contraction justifying the attempt to deliver by turning?* In other words, this means: What is the narrowest pelvis that admits of the passage of a normal head? This is answered chiefly by experience. It is not to be answered by *à priori* reasoning like that urged by Dr. Fleetwood Churchill, who says, even in his last edition:—‘The bi-mastoid diameter in the six cases measured (by Dr. Simpson) varied from $2\frac{6}{8}$ to $3\frac{2}{8}$ inches, and a living child can pass through a pelvis of $3\frac{2}{8}$ inches antero-posterior diameter, with or without the forceps. With a pelvis of this size, then, the operation is unnecessary; and if the antero-posterior diameter be less than $2\frac{6}{8}$ inches, the operation would be impracticable. These, then, are the limits of the operation; for us to attempt to drag a child through a smaller space would be unjustifiable.’

“To this statement of the case serious objections may be taken. The proposition that a living child can pass through a pelvis with an antero-posterior diameter measuring $3\cdot25''$, with or without the forceps, can only be accepted with considerable qualifications. I claim to speak with the confidence drawn from large experience, when I say that a head of standard proportions and firmness will hardly ever pass a conjugate reduced to $3\cdot25''$ without the forceps, and very rarely indeed with the forceps—that is, alive. I might even extend the conjugate to $3\cdot50''$, and affirm the same thing. The compressive power of the forceps, unless very long sustained, is not great, rarely great enough to reduce a bi-parietal diameter of $4\cdot00''$ to $3\cdot50''$ without killing the child. My opinion, then, is, that a standard head, especially if it happen to be a female head, which is more compressible than a male one, *may be* drawn through a conjugate of $3''$, but not with much prospect of life; and that the proper range of the operation of turning is from $3\cdot25''$ to $3\cdot75''$, at the latter point coming into competition with the forceps. I believe no one advocates resort to turning when the conjugate measures less than $3''$.”

Craniotomy is the subject of the next lecture. Under this heading six methods of delivery are considered. 1. By the crotchet. 2. By turning of the perforation. 3. By craniotomy-forceps, by which, according to Dr. Barnes, a full-sized head may be delivered with

* “The Theory and Practice of Midwifery,” 1866.

safety to the mother, through a pelvis measuring even less than 2·00'' in the conjugate, provided that be 3·00'' in the transverse diameter, four by the cephalotribe. Of this instrument Dr. Barnes seems to have not yet attained a full knowledge; and though he shows in several places through the book a very high appreciation of its powers as lessening the number of cases where the Cæsarian section may be necessary, he proves that he does not yet know the full value of the instrument when he says that he doubts much whether cephalotripsy can carry the possibility of safe delivery at all beyond the point attained by the craniotomy-forceps. The assertion that the all-essential point is that the cephalotribe shall be able to compress and even break down the base of skull is further evidence of the same fact. The casts exhibited by Dr. Kidd at the Leeds meeting of the British Medical Association prove that the action of the instrument is to flatten and compress the vault of the cranium, and to turn the base of the skull edgeways, and not to break down the base. At page 309, Dr. Barnes gives a drawing of one of these casts which illustrates this very point, but, notwithstanding that one of the most interesting features in connexion with the casts is that they were taken from the heads exactly as they were delivered by the cephalotribe, and before the instrument was removed. Dr. Barnes has taken the rather strange liberty of substituting Dr. Braxton Hicks' cephalotribe for that of Dr. Kidd, and has thus made rather a fancy sketch of the drawing, but not, we are bound to say, without making full acknowledgement. We are very glad indeed to see Dr. Barnes enlisted among the advocates of cephalotripsy, and hope that what he says of it will give an impulse to the adoption of the operation. We believe that this will, before long, supersede all other plans of delivering the head after perforation, and that, in doing so, it will greatly diminish the mortality of labour when the pelvis is deformed. Three times Dr. Kidd has delivered with perfect safety one woman, the conjugate diameter of whose pelvis was little more than $1\frac{3}{4}$ inches. Dr. Braxton Hicks has applied it where there was not more space than $1\frac{3}{4}$, and in Dr. Barnes' own case, the conjugate diameter was only 1·50''. It will be seen from the following extract that, notwithstanding his love for curved instruments, Dr. Barnes' experience in this case has convinced him that his curve of the cephalotribe "should be very slight":—

"The Powers of the Cephalotribe.—The all-essential point is that it shall

be able to compress and even crush down the base of the skull. A secondary property which it is desirable to possess is that of holding during extraction. The crushing power can be attained in sufficient perfection, and with a gain in the facility of handling, if the instrument be made much less formidable in bulk than are most of the Continental cephalotribes. Three good modifications have been constructed here. Sir James Simpson's is the best known. He insists upon a pelvic curve in the blades as being less likely to slip than straight blades. Dr. Kidd's, of Dublin,* is the best type of a straight-bladed cephalotribe. Dr. Kidd insists strongly upon the advantages of long straight blades on the following three grounds:—First, straight blades admit better of the head being rotated whilst in the grasp; secondly, they are easier to introduce; and lastly, they hold more securely. Dr. Braxton Hicks has modified Sir James Simpson's cephalotribe, producing a very handy and efficient instrument. He preserves a moderate pelvic curve, and adapts a very convenient screw to the handles as a crushing power. I believe that to seize a head above the brim, as is necessarily the case where crushing is required, the blades should be curved; but this curve should be very slight, otherwise the inconvenience in rotating or shifting the relation of the instrument to the pelvis referred to by Dr. Kidd will be felt."

4. Delivery by the forceps-saw of Van Heuvel is next described, and then Dr. Barnes passes to the 5th method—that is, the use of the *ecraseur*, as described by himself, but which he has not yet had an opportunity of putting in actual practice. The head having been perforated and fixed against the brim by an assistant, the steps of the operation are as follows:—

"The crotchet is next passed into the hole made by the perforator, and held by an assistant so as to steady the head. A loop of strong steel wire is then formed large enough to encircle the head. The elasticity of the wire permits of the loop being compressed by the fingers so as to make it narrow enough to slip through the cervix uteri and the chink of the pelvic brim. The loop is thus guided over the crotchet to the left side of the uterus, where the occiput lies. The compression being removed, the loop springs open to form its original ring, which is guided over the occiput, embracing all the posterior segment of the head, as in Fig. 90. The screw is then tightened. Instantly, the wire is buried in the scalp; and here is manifested a singular advantage of this operation. The whole force of the necessary manœuvres is expended on the fœtus. . . .

"When the posterior segment of the head is seized in the wire-loop, a steady working of the screw cuts through the head in a few minutes. The loose segment is then removed by the craniotomy-forceps.

* See "*British Medical Journal*," October, 1867.

"In minor degrees of contraction, the removal of the occipital segment is enough to enable the rest of the head to be extracted by the craniotomy-forceps. But in the class of extreme cases in which this operation is especially useful, it is desirable still further to reduce the head, by taking off another section. This is best done by re-applying the loop over the anterior side of the head as seen in B, Fig. 90. The wire seizes under the lower jaw beyond the ear. When the screw is worked, the wire has to cut through the base of the skull, dividing the sphenoid bone. The segment thus made is removed by the craniotomy-forceps.

"The small part of the head still remaining attached to the trunk offers no obstacle. It is useful as a hold for traction. The craniotomy-forceps now seizes this firmly, and you proceed to deliver the trunk."

Cæsarian section is the next subject considered, and is justly looked upon as "the last refuge of stern necessity."

"I repeat," says Dr. Barnes, "with all the emphasis that conviction based upon experience dictates, that delivery by the natural passages, either by cephalotripsy, by the craniotomy-forceps, or by my new method of embryotomy, if the conjugate diameter measures 1·50", is perfectly practicable, and with a presumption of safety to the mother much greater than that attending the Cæsarian section."

We next come to a lecture on the induction of premature labour, in which the use of the elastic bags for dilating the os is fully described, and then we have lectures on hemorrhage and on placenta previa, which conclude the volume.

To attempt a full analysis of such a work as this, in the space at our command, would be useless. It embraces the whole range of operative midwifery; not only are the operations described, but also the principles on which it is founded. We regard the work as one of the most valuable contributions that has ever been given to obstetric medicine.

WORKS ON MATERIA MEDICA AND THERAPEUTICS.

1. *On the Present State of Therapeutics: with some Suggestions for placing it upon a more Scientific Basis.* By JAMES ROGERS, M.D. London: J. Churchill and Sons. 1870. 8vo. Pp. 232.
2. *Observations on Therapeutics and Disease.* By D. CAMPBELL BLACK, M.D. London: J. Churchill and Sons. 1870. Pp. 48.

3. *A Handbook of Therapeutics.* By SYDNEY RINGER, M.D. Small 8vo, p.p. 485. London: H. K. Lewis. 1869.
4. *The "Modified Examination" of the Pharmaceutical Society.* By F. HARWOOD LESCHER. Second Edition. Pp. 71. 1869.
5. *An Introduction to the Elements of Pharmacy, or the "Major and Minor Examinations."* A Guide to the principal points in Materia Medica, Botany, Chemistry, Pharmacy, Prescriptions, and Practical Dispensing. By F. HARWOOD LESCHER. London: Churchill. 1869. Pp. 199.
6. *On the Administration of Chloroform and Nitrous Oxide.* By C. SQUAREY, M.B. London: J. Walton. 1869. Pp. 44.
7. *Diaphoresis.* By CHARLES CLARK, M.A., Cantab., M.R.C.S.E. London. 1869. Pp. 16.

THE relation of practice to theory, of experience to reason, constitutes now, as it ever has been, the main question in medical science, and the improvement of therapeutics is admittedly the great end and aim of practical medicine. From the natural course of events and from the increased spread of the spirit of questioning, it has come to pass that a widespread distrust of our powers of guiding or controlling disease by drugs has arisen. At such a period of hesitation and doubt an honest and unbiassed statement of matters as they stand is primarily of great importance, and the labours of thoughtful men, such as Dr. Rogers, can scarcely fail to have their fruit in defining more clearly the true principles on which therapeutics depends. It is not one of the least merits of Dr. Rogers' singularly able and dispassionate work, that while he continues a member of the "old school," he is fully conversant with the tenets of its rival homœopathy, and has enjoyed unusual opportunities of watching the practical working of that system. He approaches its consideration in a fair and courteous spirit, openly acknowledges the faults or deficiencies of our present methods, and impartially examines the grounds, perhaps we should call them quicksands, on which our faith has hitherto rested. The origin of Dr. Rogers' essay dates from the commencement of his professional career, when he was much struck with the reported success of homœopathic treatment. Since that period some trustworthy reports have been furnished by physicians attached to homœopathic hospitals, which leave

no reasonable doubt about the large proportion of recoveries that occur in their practice. It is evident that the recoveries referred to in these reports must be ascribed either to the curative powers of the organism itself, or to that aided by the action of the drugs. A complete knowledge of the action of one of the two agents engaged in the cure of any case of disease in which medicine has been employed, would render it not very difficult to assign to the other its share in the production of it. Dr. Rogers sets himself to prove that they cannot be accounted for on the latter supposition, both by *à priori* reasoning, and by a comparison between the results afforded by the homœopathic and expectant treatment. We thus have reason to conclude that the recoveries were effected by the natural resources of the organism, and that the histories of cases treated homœopathically may, therefore, be considered as so many illustrations of the natural course of disease. Hence we can understand that the large proportion of recoveries which take place under homœopathic treatment may be a fact, although the principles of the doctrine are unfounded, and, in so far as the natural history of disease has been elucidated, "orthodox" medicine is a debtor to homœopathy. To follow Dr. Rogers fairly through his arguments would demand more space than is at our disposal, and we must refer our readers to the work itself, which deserves attentive study, as one of the landmarks in the present phase of therapeutics, a suggestive book, full of wise teaching for those who will learn.

The volume is divided into three parts; the first, occupying more than half the entire text, is mainly taken up with a searching inquiry into the supposed law of "*similia similibus curantur*." The examination of this fundamental homœopathic principle is carried out with great ability and irresistible logic, and the conclusions arrived at, drawn from experimental and natural evidence are more than justified by the data on which they rest.

To use the language of another writer, the "homœopathic doctrine offers the strangest assemblage of assertions devoid of all truth, audacious paradoxes, and flagrant contradictions; in a word, is a challenge to the credulity of mankind." Since the publication of Sir J. Simpson's striking computations regarding the actual amount of the infinitesimal doses or homœopathic dilutions any further proof of their absurdity is superfluous, and the dynamization hypothesis is even now abandoned by some of the abler homœopaths. The second part is devoted to a detailed comparison of the results obtained in the treatment of disease by medical men of

the old school, and by homœopathic practitioners. The tests selected are acute rheumatism, intermittent fever, cholera, typhus fever, and pneumonia; and though it might be questioned whether these are the best examples for that purpose, they are the only ones on which reliable statistics could be obtained. From such limited and imperfect data it is not pretended that a decisive conclusion can be arrived at regarding the comparative value of homœopathic and non-homœopathic treatment; still Dr. Rogers thinks that we may safely draw these two important conclusions:—1st, That in the diseases examined, with the exception of intermittent fever, the results of homœopathic treatment in hospitals have been about equal to the most satisfactory non-homœopathic; 2nd, that the results of homœopathic and non-homœopathic treatment, in which little or no medicine was employed, have been nearly the same; or, in other words, that drugs in the doses usually administered by homœopathic practitioners have not appeared to exercise any decided influence on the progress of disease. No doubt this opinion is not novel, and when so distinctly laid down is humiliating to our art, yet it is better to recognize at once how far we are from the light than to continue to grope on in darkness. It is too true that “as yet we have no system of therapeutics based on rational or well-established principles,” and no conscientious or intelligent medical man can ponder over the history of *Materia Medica* “without resolving to abandon the chaotic polypharmacy of the old school, and trying to ascertain by proper investigations what drugs really do accomplish in the cure of disease.”

The third and shortest, but certainly not the least valuable, part of Dr. Rogers' essay embodies some suggestions for placing therapeutics on a more scientific basis than it is at present. Recognizing the aid that physiology, pathology, and chemistry, especially the latter, have given, and may be expected to furnish to rational therapeutics, particular stress is rightly laid upon the importance of acquiring a true knowledge of the natural course of disease. It is undoubtedly of the most vital importance to estimate aright the natural tendency of the diseased organism to return, under favourable circumstances, to a healthy state; and it has been well said that “the wise physician treats the healing power of Nature as the sunflower the sun, he follows it till it becomes invisible.” But we think that Dr. Rogers attaches too great weight to the influence exerted by homœopathy upon regular practice, and has

scarcely allowed sufficiently for the impetus which has been given to the more general acknowledgment of the sanative powers of nature in these countries within the last few years by the improved state of physiological and pathological science. Few educated physicians believe now that they can curtail by drugs the course of most acute diseases which run a definite course and tend to spontaneous recovery. Yet, though such an idea is happily fast receding from practice, much still remains for the interference of art in meeting special symptoms, and controlling intercurrent complication. Since our ignorance of the curative resources of the organism, and of the healing powers of drugs have been, and still are the chief sources of error in therapeutics, and the chief obstacles to its improvement, it follows that the foundation stone for positive knowledge must be laid in more accurate investigations into the properties of drugs. This will be best carried out by carefully conducted trials on healthy individuals, checked by collateral trials on the lower animals, and on patients suffering from diseases whose diagnosis, general course, and variations are tolerably well known. In this way we would become acquainted with the special "sphere of action" of the most important drugs, and learn to mark the elective affinities which particular drugs have for certain organs or tissues. It is in this direction that we are probably to look for a solid basis for our future therapeutics. Hitherto it has been almost exclusively the custom to endeavour to acquire a knowledge of medicines by instituting trials with them in disease, a method which has borne little fruit in return for the labour bestowed upon it. To the homœopaths, and to Hahnemann in particular, before he was carried away by the delusion of infinitesimal doses, belongs the credit of actively pushing forward the proving of medicines on healthy individuals, recommended by Störck, Alexander, and Haller; and it is strange that, with the exception of Professor Jörg, the Allopathic Proving Society of Vienna, and Rademacher's pupils, no provings of worth have been made by non-homœopathic physicians. Within the last two years, indeed, Dr. J. Harley has shown the value of this mode of inquiry in his admirable work on the action of opium, belladonna, and hyoscyamus, and it is greatly to be desired that others should undertake similar researches. *Sine experientia vana omnis theoria, bella sit utcunque.*

The candour and impartiality of the author throughout the whole work are so remarkable that it seems ungracious to take exception to any of his positions. The growth of the essay seems to have

been gradual, and the conclusions arrived at are evidently the result of mature consideration. Yet we cannot but think that Dr. Rogers fails to appreciate sufficiently the positive advances which have been made within the last twenty years, both in the doctrines and art of therapeutics. We do not say that there is a foreshadowing of any broad and universal principle comparable in simplicity to the basal homœopathic dogma, nor is it probable that such will ever be found. But we could point to many important gains, both positive and negative, if the expression may be allowed, recently made by therapeutics. Certain injudicious or noxious lines of treatment have been abandoned, *e.g.*, excessive mercurialization, and if fewer remedies are now used we have gained in precision what we have lost in quantity. The rational application of chemical investigation into the nature and mode of action of drugs is already yielding promise of golden fruit; and as striking examples we can refer to Crum Brown and Fraser's important papers on the connexion between chemical constitution and physiological action, to the speculations of Broadbent, to the labours of Bence Jones and Richardson, to the production of apomorphia, and, lastly, to Liebreich's pregnant discovery of the therapeutical value of chloral, and its congeners, bromal and iodal. We could also instance the improved treatment of skin diseases consequent on a more accurate acquaintance with their pathology, *e.g.*, the parasitic affections, and the modern views as to the etiology and pathology of pulmonary phthisis will lead to a more hopeful view of that hitherto hopeless malady. Hypodermic injection is an aid for which we cannot be too grateful, and a discrimination between the effects and uses of the direct and induced electric currents has led to most important results in the treatment of such formidable diseases as epileptiform neuralgia, infantile paralysis, and progressive muscular atrophy.

For the rest we have nothing but unqualified praise for Dr. Rogers' book, and we cannot doubt that the principles advanced in it, being founded on reason, will be those which will ultimately prevail to the lasting advantage of medical science.

Of Dr. Black's pamphlet it is difficult to speak with equal satisfaction. In some respects it is clever, and his ideas tend in the right direction, but it seems as if his thoughts outran his powers of developing them; the reasoning does not keep pace with the premises laid down. Many grave exceptions could be taken to the author's chemistry, to his physiology, and to his pathological

principles; and he fails, we think, to lay a sound foundation for "a more rational classification of diseases and remedies." The author holds that the great desideratum in therapeutics is to make our remedial agents subserve to those chemical and physiological conditions which constitute life, and the chief merit of Dr. Black's observations lies in the recognition of this important principle.

Treatises on therapeutics are of two kinds. They may be written either for the purpose of unfolding a general theory of the action of medicines, or they may aim only at detailing the special applications of the principal medicines which have been sanctioned by experience.

Dr. Ringer's work is of the latter class, and it is essentially an epitome of empirical observations, partly collected from others, and largely added to by his own experience. Regarded from that point of view the book contains many valuable hints and practical rules as to treatment, and we would especially mark, as deserving of commendation, the articles on arsenic, alcohol, chloroform, belladonna, &c.

As it is especially intended for students and the junior members of the profession, we do not look for any elaborate scheme of classification, but every writer must adopt some scheme, and we cannot heartily endorse Dr. Ringer's choice of following Buchheim as his model. His arrangement is based upon the idea of associating together those substances which have a common mode of action, or contain some principle common to them all. So far, this is quite right; but we think that some more definite basis of primary grouping should be adopted, and in particular that of general and local remedies, under which the special families of medicines would appropriately come in.

We give the headings of the first few sections, which will show the arbitrary sequence of articles which the author has preserved in this book:—Oxygen, On the internal use of Water, Cold, Ice, Warm and Hot Baths, Peroxide of Hydrogen, Carbon, &c.; and again, further on, we have consecutively Senega, Benzoin, Anthelmintics, Poultices, Enemata.

If the effects of general influences—such as heat and cold—are discussed, why omit those of mineral waters, or of an agent of such admitted powers as electricity in its various forms? An introduction on the general therapeutics of diet, exercise, cold, heat, electricity, depletion, &c., would most fitly precede the more complex

study of the action of particular drugs, and without committing himself to any strict system of classification, some such groups as nervous and spinal stimulants, emetics and cathartics would have served to connect together medicines of analogous properties, which are at present scattered apparently at random throughout the pages.

The author, indeed, has, to a limited extent, availed himself of this principle in treating of "Purgative Salts," and of "Anthelmintics," and he would have avoided the needless multiplication of isolated sections on individual drugs by a little further extension in the same direction. It is, we believe, also of great importance in a work on pure therapeutics to indicate, so far as possible, the connexion between the physiological and therapeutical action of drugs, and on these points Dr. Ringer's work is not as full as could be wished.

We can only feel disappointed, after perusing the long catalogue of ills which a favourite remedy, bromide of potassium, for example, is said to cure, without any attempt being made to illustrate its *modus operandi*, or any account given of its physiological action beyond the barest summary.

Passing by the unequal attention which is paid to important drugs, we notice that sometimes when several articles are placed under one head, no care is taken to differentiate their uses and modes of administration. Thus, after reading that the bromides of potassium, sodium, and ammonium, "in their action on the body exhibit considerable differences," we naturally look for the development of this general statement. The whole of the article is occupied with a detailed account of the fifteen or sixteen applications of bromide of potassium; not a line is devoted to its congeners bromide of sodium, or bromide of ammonium.

Professedly founded on Buchheim's work, it seems throughout as if Dr. Ringer was hampered by his German model, and it would perhaps have been wiser if he had either contented himself with a simple translation, or had boldly planned an original work, and done his best to bring it up to the present state of knowledge by *digesting* what is really known of practical and theoretical therapeutics. This, we admit, would be a task of great difficulty, demanding patient labour and a well-balanced judgment, and we regret that while we give Dr. Ringer all credit for the numerous useful hints that crop up so abundantly, and gladly acknowledge the information we have received, we cannot say that a perusal of his work has

done much towards systematizing or defining our previous ideas as to the real uses of medicines.

Indeed, a student would probably be bewildered by the want of arrangement of the long array of medicinal uses of drugs, and by the careless and inaccurate mode of expression, and would, in not a few cases, be actually misled by statements for which we cannot but hold Dr. Ringer responsible.

We do not care to enter on the unwelcome task of adding to the list of errors which have been already pointed out by others, but we hope that when Dr. Ringer is called upon to prepare a second edition, he will endeavour to repair the sins of omission and commission, and strive to render his treatise an accurate exponent of modern ideas, and a more perfect reflex of the present stage of therapeutics.

Within a few months Mr. Lescher has produced two compilations intended for the special instruction of Pharmaceutical students, but the book first named is now incorporated with the larger "Elements of Pharmacy." Though this work will, no doubt, be of value to students preparing for the examinations of the Pharmaceutical Society, who will follow the author through the subdivisions of his tables, we cannot recommend it as a safe "guide" to students generally.

No artificial tabulation of facts, however ingenious, could possibly compress within 200 pages any satisfactory information on such an array of subjects as are indicated on the title page. Under Section V.—Prescriptions; occupying but 16 pages, we find four subdivisions, viz:—(1.) The Latin language; (2.) The form of a prescription, with examples; (3.) Prescriptions, unusual or erroneous; and (4.) Posology. It is absurd to suppose that even the rudiments of Latin "Etymology," "Syntax," and "Idiomatic Construction," can be taught in eight pages, and we cannot put much faith in the author's Latinity when we read such a sentence as "*Unguenta ulceribus utilis*," which is rendered "the ointment, useful for ulcers;" and again, "*affricetur unguenta brachiis*," "let the ointment be rubbed into the arms;" while "afraid of fever" is Latinized "*Timidus febris*." Under the section Chemistry, within 50 pages, the author undertakes to guide a student to the salient points in (1.) Physics and the Laws of Chemistry; (2.) Simple Analysis; (3.) The Tests for the Purity of the Principal Chemicals; (4.) The Detection of Poisons; (5.) The Characters of the Inorganic Chemicals in the Pharmacopœia.

Surely, such an attempt carries with it its own condemnation, and we cannot help distrusting the author's chemistry when he states that iodide of potassium is incompatible with "acids or metallic salts," because "decomposition would ensue owing to instability of the compounds," and that tincture of perchloride of iron gives with mucilage of acacia "Black Iron Tannate." A really good text book of *moderate* size is an immense boon to the student, but the concentration of mental food, like that of medicines, can be pushed to an injudicious extent.

This little book will prove a useful guide to students and novices in the administration of anæsthetics.

Mr. Squarey prefers Clover's apparatus for the inhalation of chloroform, and the Clover face-piece adapted to a Cattlin's bag connected with an iron cylinder containing the compressed gas for the administration of nitrous oxide.

As a point in favour of nitrous oxide it is worthy of mention that up to the present time only two fatal cases from the exhibition of this gas have been recorded, one of which was accidental, owing to suffocation by the gag used, while in America the gas has been given in nearly 30,000 cases, without, as yet, a fatal case.

It is not easy to imagine what Mr. Clark's object was in publishing this pamphlet. He admits that he has never seen a mixture of sp. æth. nitr., vin. ipecac., and ant. tart. "used or prescribed," and informs his readers that the discovery of this novel combination has cost him "much thought, reading, and observation in this country, on the continent, and in the southern regions of the world."

There is every probability of a literal fulfilment of the author's concluding wish, that his "little history, like water, may find its own level."

WALTER G. SMITH.

A Manual of Instruction for Attendants on Sick and Wounded in War. By Staff Assistant-Surgeon A. MOFFITT. Published under the sanction of the "National Society for Aid to the Sick and Wounded." London: Griffin and Co., 10, Stationers' Hall Court. Pp. 113.

A BOOK written with the above philanthropic purpose should be leniently dealt with by the critic, but, with a view to the avoidance

of similar errors in any other manuals of the kind which may be brought out, we cannot avoid calling attention to the totally unsuitable character of much of the contents, of the waste of money incurred in publishing what cannot be of the slightest use to those for whom this book purports to be intended.

The work before us is entitled a manual of instruction for attendants on sick and wounded, or, in other words, for such as are to act as orderlies and nurses; and yet nearly one-fifth of it is devoted to "the anatomy of the human body," of which the following extracts are ordinary specimens, viz.:—*Osseous System*.—"Cranium, the skull. The cranium is made up of eight pieces, intimately united together, and forming a strong bony case for the protection of the brain. In front is the frontal bone; behind is the occipital bone; at the sides are the two temporal bones; above and at the sides are the parietal bones; and forming the base are the sphenoid and ethmoid bones."

"*The Muscles of the Body*.—The muscles constitute the flesh or lean part of meat. Muscles are divided into two classes, striped or unstriped—the former obey the will, and are called voluntary, the latter are not subject to the will, and are called involuntary;" and thus, with "the heart and blood vessels," and the nervous system, the latter of which commences with this information for the nurse, the nervous system is divisible into two chief portions, a centre and periphery, and then branches off into the cerebro-spinal and sympathetic system. As an offset to this depth of learning, however, a skeleton is given which may be of use; but, it would be more so were "radius and ulna" styled bones of the forearm; and "carpal bones" denominated bones of the wrist.

The chapters on "bandages and bandaging," "the dressing of sores, wounds, and injuries," and "the carriage of sick and wounded," are more to the purpose; but these too should be more definite and explicit, to afford correct useful information. Thus, speaking of lint, the author says, "it is a soft linen woven material, with a nap on one side," thus leaving the attendant to believe that the making of it, if wanting, is out of his power, whereas the best and most useful lint, because it is capable of being torn into thin strips, which the patent lint is not, is hand-made, produced merely by raising, with the blade of a dessert or dinner knife held vertically, a pile upon the surface of old linen stretched smoothly upon a very firmly and evenly stuffed pillow.

The directions given in a manual of this kind should, in our

opinion, be so explicit that the attendant can act under their guidance, and afford the wounded sufficient and real aid. "To secure fractures," we are told, that when bones of the extremities are broken, "splints of some kind should be employed to fix them, and prevent movement. If this be not done great suffering is caused to the patient during transport, and the injury may be so aggravated as to lessen considerably the chances of recovery. Two sets of splints, furnished with pads and straps might be made to answer as a temporary measure for the purpose, and should be carried attached to each stretcher." What the material is of which these splints are composed is not stated, but a foot note says "field transport splints," recommended by the author for use in the British army. In this style is much of the text written. Whilst pointing out the errors in this little book, there is still that in its pages which is valuable, and the directions as to the removal of wounded men, with the modes in which the bearers should conduct the transport so as to avoid the infliction of further injury during their carriage to the rear, are most useful, practical, and distinct. Had its whole contents been equally well given, it would have been a useful book; and by revision may still be made so.

Atlas of Ophthalmoscopy; representing the Normal and Pathological Conditions of the Fundus Oculi, as seen with the Ophthalmoscope; composed of 12 Chromo-lithographic Plates, containing 59 Figures drawn from Nature, and accompanied by an Explanatory Text. By Dr. R. LIEBREICH, the text translated by H. ROSBOROUGH SWANZY. Second Edition (enlarged and revised). London: John Churchill & Sons, New Burlington-street. Berlin: August Hirschwald, 68, Unter den Linden. Paris: Germer Baillière, Rue de l'Ecole de Médecine, 17. 1870.

THE original edition of this magnificent work is so well and so universally known that we need but draw attention to the alterations in this new edition now before us: the work is reduced in size, principally by curtailing the white margin of the plates, for, with the exception of Plate I., which has been reduced, all the plates are the same size as, and with the exception of Plates I., VI., IX., and XI., are identical with the originals. Plate I., representing the normal fundus oculi, has been coloured and the lining in it omitted—welcome alterations; Figures 2 and 3 on

Plate VI., have been judiciously replaced by an excellent figure of disseminate choroiditis ; a very useful figure of hemorrhagic retinitis has been substituted for Figure 3, Plate IX. Figure 1, Plate XI., has been curtailed so as to make room for three new figures explanatory of changes in the optic disc consequent on intracranial causes, retinitis, and on retro-ocular affection of the nerve.

In addition to the reduction in size the author states in his preface that "considerable sacrifice has not been spared in order by reducing the price by nearly one-half to make this work accessible to a larger circle of practitioners and students."

The original edition was in parallel columns of German and French; the edition now before us is altogether in English, for which we are indebted to Mr. Swanzy, of Dublin, who has executed his portion of the work in a most able and creditable manner. Both as a scientific work and as a triumph of lithographic art this Atlas stands pre-eminent; any praise we could bestow on it would be feeble and fall far short of its merits; the circumstance of this splendid work emanating in part from a Dublin practitioner renders it doubly welcome to us.

1. *A Manual of Clinical Medicine and Physical Diagnosis.* By THOMAS HAWKES TANNER, M.D., F.L.S. The Second Edition. Revised and Enlarged by TILBURY FOX, M.D., Lond. London: Henry Renshaw. 1869. Fcap. 8vo, pp. 355.
2. *The Student's Guide to Medical Diagnosis.* By SAMUEL FENWICK, M.D., Assistant Physician to the London Hospital. London: John Churchill and Sons. 1869. Fcap. 8vo, pp. 176.
3. *Auscultation and Percussion; together with the other Methods of Physical Examination of the Chest.* By SAMUEL GEE, M.D., Fellow of the Royal College of Physicians, London; Assistant Physician to St. Bartholomew's Hospital. London: James Walton. 1870. Small 8vo, pp. 299.

DR. TANNER'S Manual of Clinical Medicine and Physical Diagnosis appears as a second edition, under the editorship of Dr. Tilbury Fox; it has undergone considerable enlargement, and contains much matter useful to the student and busy practitioner, and so arranged that they can easily find the information they seek.

Such a book as Dr. Fenwick's was needed, and we believe his

Students' Guide to Medical Diagnosis supplies the want; his method is admirably adapted for training the student to recognize disease. Take diseases of the stomach for instance; he gives first a short statement of the morbid anatomy of that organ, then of the physical signs which tell us about it, then he divides its disorders into acute and chronic; in connexion with the former he takes the symptom vomiting, and in connexion with the latter the presence or absence of pain, and he helps the student starting from these symptoms, to spell out the diagnosis. It is of the nature of such a work as this that it must leave many questions unnoticed, but it is eminently calculated to make a student observe for himself and think for himself, and if he once does so education in the true sense of the word has commenced.

We heartily commend Dr. Gee's Auscultation and Percussion; it is not a book which any man will care for except he wishes really to master the subject of which it treats, but those who do will find in it, devoid of all superfluity of words, a thorough exposition of the physical examination of the chest. Let us add, moreover, that the author has carefully given credit to the various honest workers, living and dead, to whose industry and genius the present generation owes its knowledge.

Quantitative Chemical Analysis. By DR. C. R. FRESSENIUS. Fifth Edition. Edited by A. VACHER. London: John Churchill and Sons. 1869. 8vo, pp. 377.

Qualitative Chemical Analysis. By DR. FRESSENIUS. Seventh Edition. Edited by A. VACHER. London: Churchill and Sons. 1870. 8vo, pp. 264.

THESE books constitute the best guides to the study of analytical chemistry in the English language. The author is admittedly the most distinguished chemical analyst in the world—that is, so far as the *modus operandi* of the science is concerned. Both works have been almost wholly re-written; and, as compared with the last edition, they are greatly compressed, owing to an entirely new and more convenient arrangement of matter. The student will find the present form of these books very convenient; although the practising chemist may regret the elimination from the quantitative works of many of the special schemes of analyses which the former edition included.

Lectures on Surgical Pathology, delivered at the Royal College of Surgeons of England. By JAMES PAGET, F.R.S., D.C.L., Oxon; Sergeant-Surgeon Extraordinary to Her Majesty the Queen, &c., &c. Third Edition. Revised and Edited by WILLIAM TURNER, M.B., Lond.; Professor of Anatomy in the University of Edinburgh. London: Longman, Green, and Co. 1870. 8vo, pp. 850.

THIS edition of Mr. Paget's Lectures on Surgical Pathology has been revised by himself from the clinical point of view, and by Professor Turner from the pathological, and is little likely therefore to lose the position it has so long held as the best exposition we possess of surgical pathology. A man who enjoys among his professional brethren the unsurpassed reputation of Mr. Paget, for experience, sobriety of judgment, honesty and candour, is little likely to have time on his hands for other than clinical work, and he was fortunate in securing the co-operation of Professor Turner, whose practical acquaintance with minute anatomy, normal and pathological, is so well known.

Hand-Book of Physiology. By WILLIAM SENHOUSE KIRKES, M.D. Seventh Edition. Edited by W. MORRANT BAKER, F.R.C.S.; Lecturer on Physiology at St. Bartholomew's Hospital. London: James Walton. Small 8vo, pp. 838.

THE present edition of Kirkes's Hand-Book of Physiology has been called for so soon after the appearance of the previous one, that, as the editor informs us, there were not many important additions to our knowledge to be noticed; but the number of illustrations has been increased, and alterations have been made in the arrangement of the matter which render the work even better deserving than it formerly was of its position as *The Students' Physiology par excellence*.

The Baths and Wells of Europe, their Action and Uses; with Hints on Change of Air and Diet Cures. By JOHN MACPHERSON, M.D. London: Macmillan and Co. Small 8vo, pp. 336.

THIS is a little book, considering how extensive are the subjects of which it treats; marvellously little if we judge of their magnitude

by the ponderous volumes which our French and German confreres devote to their consideration, but it is an excellent little book; it contains all most of us wish to know about the baths and wells of Europe, and a certain amount of information respecting them is now-a-days necessary to every practitioner. We have read what Dr. Macpherson says of several of the springs with which we are personally acquainted, and we can vouch for the accuracy of his accounts of them.

Traité des Maladies des Yeux. Première Partie. Par X. GALEZOWSKI, Docteur en Médecine de la Faculté de Paris; Lauréate de la même Faculté; Professor Libre d'Ophthalmologie à l'École Pratique de la Faculté de Paris. Paris: J. B. Baillière et Fils. 1870. 8vo, pp. 464.

A Treatise on the Diseases of the Eye. First Part. By X. GALEZOWSKI, Doctor of Medicine of the Faculty of Paris, &c.

FEW, if any, of the several branches of medical science have outstripped or even equalled the marvellous advances achieved during the present century as regards the Diagnosis, Pathology, Etiology and Treatment of the various Diseases of the Eye; and as to the optical defects of that organ it may be safely stated that it is only within the last ten years that we have acquired anything like an accurate knowledge of the different anomalies of accommodation and refraction.

The growing interest exhibited in the study of Ophthalmology within the last few years has naturally led to an increased demand for works relating to the eye, and in consequence a proportionately increasing supply. Taken as a whole they bear a character of singular excellence, which the present work fully sustains. The discovery of the ophthalmoscope, no doubt, in a great measure accounts for the marked interest ophthalmology has excited during the last twenty years, and it promises fair to become universal as the various phenomena in the vast field of intra-ocular diseases become more connected and better understood.

The author of the treatise now lying before us is already well known as a writer on ophthalmology, especially in connexion with the diagnosis of cerebral disease, by means of the ophthalmoscope;*

* Étude Ophthalmoscopique sur les Altérations du Nerf Optique et sur les Maladies cérébrales dont elles dépendent. Par X. Galezowski. Paris, 1866.

the present work will doubtless add to an already well-earned reputation, and cannot fail to cause the enrolment of his name amongst those who are esteemed as the leaders and masters of modern ophthalmology.

We regret that time and space will only permit our taking a very hasty glance at the present work. We hope, however, to be able to point out some of the most striking and suggestive portions, and especially those which contain the opinions of the author upon subjects viewed from the standpoint of his own individual experience and research.

The work is divided into two parts, the first of which treats of the diseases of the eyelids, lacrymal passages, conjunctiva, cornea, sclerotic and crystalline lens, and is the subject of the present review. The second part, which is promised next year, will be devoted to the ophthalmoscope, diseases of the vitreous, optic nerve, retina, choroid, muscles of the eye, orbit, refraction and accommodation, forensic and hygienic medicine, and in addition an atlas of 20 chromolithographic plates. From this it will be seen that none of the subjects which ought to be included in a complete treatise on diseases of the eye have been neglected, and that due care has been bestowed on their proper order and arrangement. The work is admirably illustrated, if we except a few of the microscopical drawings.

What specially strikes us on a first glance at the work, is the large portion devoted to the description of the several diseases of the eyelids, and the great importance attached by the author to the affections of the lacrymal passages; an importance which cannot be overrated, more especially when we find those subjects so frequently treated in a cursory manner in works on diseases of the eye. Therefore we regard the author's oft-repeated injunction, as to the careful examination of the condition of the lacrymal passages when treating the various diseases of the conjunctiva, eyelids, cornea, &c., as one of great value, and demanding our serious attention.

The first five chapters, which are devoted to the consideration of the different diseases of the eyelids, are preceded by a short and succinct description of the anatomy, development, and physiology of the parts concerned. The same plan is adopted throughout the rest of the volume when treating of the diseases of the other parts of the eye; so that the whole serves not only as a ready book of reference, but also as a complete vade-mecum for the student and practitioner.

We shall now take a very hasty glance at some points which

strike us as possessing novelty and interest, as well as practical importance.

Blepharitis stands at the head of the list of diseases affecting the eyelids. The author recognizes two forms. 1. Furfuraceous blepharitis or pityriasis. 2. Glandular or bulbous blepharitis. In the first form it is merely the surface of the skin and points of exit of the cilia, which are affected; in the second it is either the sebaceous follicles or the hair bulbs which are attacked; in fact, this latter form generally follows as a natural consequence of the neglect of treatment of the first.

In this affection the lacrymal puncta are frequently found displaced, or constricted, and obstructions of the lacrymal canals very often produce blepharitis. Indeed so frequently is this the case, the author states, that of 150 cases of blepharitis which he has treated within the last two years, 60 were due to alterations in the lacrymal passages; he accordingly lays great stress on the importance of a careful examination into their condition, as part of the treatment of blepharitis.

The author's opinion as to the starting point of the inflammation which produces hordeolum is, that it is in one of the sebaceous glands, connected with the hair bulbs, and not in the subcutaneous cellular tissue, as is generally supposed. He grounds this opinion on the statement of Richet, as to the primary seat of furunculus being in the hair follicles.

Among tumours of the eyelids, we find a description of syphilitic gummous tumours, termed syphiloma by Ch. Robin. Those tumours are developed either in the subcutaneous cellular tissue, or in the orbicularis. Bouisson has found this affection in one of oculomotor muscles; but, up to the present, it has not been noticed as occurring in the eyelids. These tumours belong to the tertiary stage of syphilis. Dr. Galezowski gives two cases; one in which the tumour was situated at the internal part of the inferior eyelid, the other in which it was close to the lacrymal sac.

The treatment recommended is large and increasing doses of iodide of potassium, and the application of the tincture of iodine to the tumour.

In the article on trichiasis and distichiasis we find mention of three different operations for the radical cure of partial trichiasis.

1. The excision of a small fold of skin quite close to the border of the eyelid, as proposed by Desmarres père. 2. The plan adopted by the author, which consists in the extirpation of the hair follicles.

This is effected by introducing a fine chalazion hook between the inner and outer margins of the palpebral border, so as to include the portion containing the inverted cilia, which is then dissected out. The edges of the conjunctiva and skin being now brought together heal rapidly by first intention. 3. The operation proposed by Vacca Berlinghieri, which consists in dissecting up a flap containing the inverted cilia, to the extent of about two millimetres, each of the cilia being then excised and the flap replaced.

None of these methods appear to us equal in ingenuity and neatness to that recommended by Herzenstein;^a namely, the subcutaneous introduction of a silk thread between the cilia and the openings of the meibomian ducts; this is subsequently allowed to cut its way out. We have found this operation most efficacious in cases of partial distichiasis.

For general trichiasis an operation proposed by Anagnostakis is favourably spoken of; it is performed in the following manner: An excision is made parallel with, and about three millimetres from the palpebral border. The upward edge of the wound is now drawn upwards by an assistant, while the surgeon seizes with a forceps the muscular layer covering the tarsus, and excises it with a scissors. Three or four silk sutures are next introduced through the lower lip of the incision, then through the fibro-cellular layer covering the cartilage, in the place from which the muscular fibres have been removed, and finally tied.

The operation of extirpation of the portion of the eyelid containing the faulty cilia, an operation termed "scalping" in this country, is one which in our opinion should be banished from surgery, save in most exceptionable cases. It is horribly disfiguring, and not alone that, but the cilia which are evidently intended as a natural protection against glare and dust being removed, the eye becomes inflamed and irritated, and the edges of the lids contracting and hardening (tylosis) rub against the cornea and produce a condition of chronic vascular pannus. We do not make these remarks unadvisedly, but as the result of our own personal observation of these cases, and we are glad to find our opinion endorsed by Wecker.

Arlt's transplantation operation and Graefe's modification are duly noticed.

In the several operations for ectropion the author states that temporary occlusion of the eyelids (blepharorrhaphic) after an

^a Archiv. für Ophthalmologie : Bd. xii., p. 76.

operation, is considered by Mirault, Nélaton, and Richet as essential to its success.

One of the most interesting and remarkable sections in the work is that devoted to the diseases of the lacrymal passages. Dr. Galezowski adopts the theory of Bérard, elaborated by Richet, as to the manner in which the mechanism of excretion of the tears is carried on.

“According to Richet, he says, the valve with which the inferior extremity of the nasal canal is provided, allows a free passage to liquids in the downward direction, but prevents the introduction of air or liquids from below. In fact every one is aware that when they make the effort to blow their nose, air easily enters the cavity of the tympanum, but does not punctrate into the lacrymal sac.

“When the walls of the sac are separated by the action of the anterior lacrymal muscle, there is a tendency to the formation of a vacuum in its cavity, and the nasal canal is firmly closed; the tears will then be drawn through the lacrymal puncta.”

In addition to this Dr. Galezowski conceives that the act of respiration tends to produce a vacuum in the nasal canal, which, acting as a second force, draws away the tears accumulated in the lacrymal sac, and not from the surface of the conjunctiva, as Sédillot supposed, into its channel. In this manner the sac is emptied, and the tears flow through the nasal canal into the nasal fossa.

This theory, however ingenious and plausible, does not, we think, stand the test of a very critical examination. Time forbids our entering on the question now, but to those who are interested in the subject we would recommend the perusal of a very remarkable letter, addressed by Dr. Giraud-Tenlon to Dr. Delgado Jugo, (Madrid), originally published in a Spanish journal, *El Pabellon Medico*, and subsequently in *Les Annales d'Oculistique*,¹ in which this subject is treated in a masterly manner, and the ingenious theory advanced, that the mechanism of the excretion of the tears is effected by capillary attraction. We are surprised to find no allusion to this letter in the present work.

Dr. Galezowski has evidently bestowed special attention to the various diseases and affections of the lacrymal passages, and the result is, that the portion of the work devoted to them, forms a most valuable treatise on this too often neglected subject.

He speaks strongly in favour of Bowman's operation of slitting

¹ *Annales d'Oculistique*. T. lxii. 5-6. Nov. et Dec. 1869.

up the canaliculi, and the subsequent introduction of the probe into the nasal canal, in cases of obstruction, inflammation, catarrh, &c., of the sac and canal. We find some very practical remarks on catheterism of the nasal canal. "In cases," he says, "where false passages and blind fistulæ, together with caries of the bones exist, it becomes necessary to allow a sound of small calibre to remain in for some time. For this purpose I have had small sounds made in the form of a crook (*sondes à crosse*), which I leave in for twenty-four or forty-eight hours. Every day I remove the sound, clean it, and reintroduce it. In this manner the canal is quickly re-established and each new introduction is accomplished without difficulty."

An article headed lacrymal conjunctivitis gives an account of a form of conjunctivitis first described by the author in two papers published in the *Gazette des Hôpitaux*,^a a translation of which also appeared in this journal.^b

Lacrymal conjunctivitis is simply an irritation and inflammation of the conjunctiva, produced by the retention of the tears in the conjunctival sac, owing to some obstruction of the lacrymal or nasal canals. The symptoms are generally well marked, though frequently mistaken for those belonging to other affections. For instance, it is not at all uncommon to see this form of conjunctivitis set down as due to granular lids; the mistake arising from the appearance presented by the engorged follicular and acinous glands.

"I have, more than once," says Dr. Galezowski. "seen very eminent ophthalmologists mistake these engorged glands for granulations, and aggravate the malady by repeated cauterizations."

A striking example of this came under our own observation a short time ago. The patient, after six months' attendance on an ophthalmic surgeon, who daily cauterized and scarified the lids, which resulted in the production of well-marked ptosis of the affected eye, was quite restored in a few weeks, the treatment being chiefly directed to the curing of an obstruction of the lacrymal passages.

The article on granular conjunctivitis is replete with interest. The author adopts a threefold division of granulations, based on the elements which compose them; he divides them into,

^a Essai sur la conjunctivite lacrymale, &c. (*Gazette des Hôpitaux*, 1868, p. 433).

^b Lacrymal conjunctivitis (*The Dublin Quarterly Journal of Medical Science*, Nov., 1869, p. 675).

1, papillary granulations; 2, vesicular granulations; 3, follicular granulations. This division resembles that adopted by Stellwag von Carion, except that instead of vesicular granulations he recognized a form which he terms mixed trachoma. This Dr. Galezowski rejects on the ground that it does not represent a distinct variety.

He also rejects the theory that the granulations are a neo-plastic formation similar to tubercle; but on the other hand he regards with more favour the hypothesis of their parasitic origin. He is firmly convinced as to their contagiousness. "In my opinion," he says, "it is now amply demonstrated that direct contagion is the most frequent, I might even say the only cause of the appearance of the malady.

"Conjunctival granulations are, in fact, most contagious, and in order to contract granular ophthalmia it merely suffices to wipe the eyes with a piece of linen, or to wash them with water, previously made use of by a person infected.

"The inoculation of blennorrhagic or leucorrhœic matter may also produce granulations, and frequently soiled linen impregnated with this secretion easily transmits this affection to the eyes. It is thus, we may explain the frequent occurrence of granular lids amongst washerwomen. I have remarked that more than a third of the patients attending my clinique for granular lids, are engaged in this employment. It is accounted for by the fact that they wipe their eyes with the soiled linen, on which there are, frequently, spots of blennorrhagic matter, and it is thus the matter inoculates the eyes and produces either acute ophthalmia, or chronic granulations."

In speaking of the treatment special attention is drawn to the importance of examining the state of the lacrymal passages.

"I have often," says the author, "effected a marked improvement by merely treating the obstructed and inflamed lacrymal passages."

In the treatment of the different forms of keratitis, especially phlyctenular and suppurative keratitis, the insufflation of calomel and the application of the yellow oxide of mercury, as soon as the first inflammatory symptoms have subsided, are highly recommended. It is a matter of surprise to us that they are not more frequently employed in this country, we are so convinced of their efficacy. In suppurative keratitis, when the inflammation and redness are very considerable, Dr. Galezowski states he is in the habit of prescribing the alternate instillation of solutions of Calabar bean and atropine. "The first of these," he says, "dilates the vessels, the second contracts them. In virtue of the combined action of both these agents, the vascularization diminishes."

The same treatment is recommended in cases of sclerotitis.

Though adopting a very extensive classification of the various forms of iritis, the author tacitly admits the impossibility of diagnosing, with any degree of accuracy, the forms termed blennorrhagic, gouty, rheumatic, &c. He points out, however, certain peculiarities which may, possibly, prove of some assistance in forming a correct diagnosis.

In the last chapter which is devoted to the treatment of cataract, the author speaks most favourably of von Graefe's linear peripheral extraction; by the bye, we are surprised to find it designated by the original title "modified" (*modifiée*), which, as is well known, the late lamented author abandoned more than a year ago.^a Dr. Galezowski sums up the results he has obtained from this operation as follows:—

"Of thirty-five cases, twenty-six have been completely successful, either from the first, or after an operation for secondary cataract. One eye was totally destroyed by suppuration; and two by irido-choroiditis; in four cases iritis or irido-choroiditis occurred, but without serious consequences; the sight, in fact, may be restored, and in one of these cases I performed a second iridectomy."

The author describes an operation he has introduced, and which he terms, *méthode combinée*; it consists first of all in one, or several lacerations of the anterior capsuli, the object being to produce a softening of the lens substance. As soon as this is effected he performs either a simple or combined linear extraction.^b The cases for which he considers this modified operation suited, and the conditions most favourable for its performance, are summed up as follows:—

"1. Cataracts formed by opacity of the antero-posterior cortical layers, the nucleus remaining transparent.

"2. Soft, incomplete, cataracts, without a nucleus, and either in process of formation or arrested in their evolution.

"3. This operation should not be performed on persons over forty or forty-five years of age. Beyond this age the nucleus becomes too dense to undergo softening.

"4. Traumatic cataracts which do not contain a foreign body; otherwise the latter may be displaced during the laceration, and lead to serious consequences.

^a Vide Archiv. für Ophthalmologie. B. xiv. 3, 1868.

^b If we do not mistake Soelberg Wells mentions a similar mode of operation as having been successfully practised and much advocated by Bowman.

"5. Adherent cataracts, accompanied by iritis or irido-choroiditis should not be operated on by this method.

"6. The corneal incision should neither be too near, nor too far from the scleral border. It should generally be made about three millimetres from the external border."

Dr. Galezowski concludes with some general considerations on the operation for cataract and the method to be chosen. The volume closes with an article on dislocation of the lens.

In conclusion, we heartily congratulate Dr. Galezowski on the genuine success of his undertaking, and we cordially recommend his work to the attention of our confrères, feeling confident that they will find in it all the requirements of a practical treatise on diseases of the eye.

Guide to the Royal Zoological Gardens, Phoenix Park. By Dr. CHARLES A. CAMERON, Prof. in Royal College of Surgeons, &c. Sixth Edition. Dublin: Robert C. Gerrard. 1870. Pp. 47.

As this Guide is intended for ordinary visitors to the gardens, scientific phraseology is avoided as far as possible; reference is, however, briefly made to the structure of the various families, and to the principles of classification, and the work is altogether written in such a way as is eminently calculated to help those who use it intelligently to enjoy what they see, and to produce in them a taste for natural history.

WORKS ON PHTHISIS, AND ON CHANGE OF CLIMATE IN ITS TREATMENT.

1. *Clinical Lectures on Pulmonary Consumption.* By FELIX VON NIEMEYER, M.D., Professor of Clinical Medicine in the University of Tübingen. Translated by J. C. BÄUMLER, M.D. New Sydenham Society.
2. *The Published Writings of the late THOMAS ADDISON, M.D.* Edited by Dr. WILKS and Dr. DALDY. Article IV.—On the Pathology of Phthisis. New Sydenham Society.
3. *St. George's Hospital Reports.* Vol. IV., Art. X.—The Causes of Pulmonary Consumption. By C. THEODORE WILLIAMS, M.D.
4. *Fondements et Organisation de la Climatologie Médicale.* Par M. le Docteur ED. CARRIÈRE, Lauréat de l'Institut. Paris: J. B. Baillière et Fils.

5. *The Climatic Treatment of Consumption and Chronic Lung Diseases.* By JOHN C. THOROWGOOD, M.D., Lond. London: H. K. Lewis.
6. *Winter and Spring on the Shores of the Mediterranean.* By J. HENRY BENNET, M.D. Fourth Edition. London: John Churchill and Sons.
7. *The Climate of the South of France.* By CHARLES THEODORE WILLIAMS, M.A., M.D., Oxon. Second Edition. London: Longmans, Green & Co.
8. *Mentone and San Remo.* By EDWIN LEE, M.D. Second Edition. London: W. J. Adams.
9. *De l'Influence du Climat d'Arcachon dans quelques Maladies de la Poitrine.* Par le Docteur G. HAMEAU, Bordeaux.
10. *A Season at St. Moritz.* By J. BURNEY YEO, M.B., Lond. London: Longmans, Green & Co.
11. *Medico-Chirurgical Transactions.* Vol. LII., Art. XII.—On the Treatment of Phthisis by Prolonged Residence in Elevated Regions. By HERMANN WEBER, M.D.
12. *Egypt and the Nile considered as a Winter Resort for Pulmonary and other Invalids.* By JOHN PATTERSON, M.D., Egyptian Medical Service. London: John Churchill and Sons.
13. *The Climate and Resources of Madeira, as regarding chiefly the Necessities of Consumption and the Welfare of Invalids.* By M. C. GRABHAM, M.D., &c. London: John Churchill & Sons.

AT this season many a physician is called upon to decide whether some patient, suffering from pulmonary consumption, will winter at his home or will seek a residence elsewhere, during the cold months. On the propriety of such a measure, and on the whole subject of change of climate for the phthisical, there is considerable difference of opinion. On the one hand it is easy to point to young persons who presented the symptoms from which experience has taught us to predict an unfavourable termination, but who, nevertheless, after a change of climate, have been restored to apparent health; and, on the other, there are not a few families whose members, as they grow up, have, one after another, fallen victims to consumption—in which one hears how those of them who were carried, at great cost and inconvenience, to some distant abode, succumbed to the disease much more rapidly than those who

remained among the friends and comforts of home. Three members of a family, of ample means, in the North of Ireland, were, one after another, attacked with phthisis, the first was carried to the Nile and lived from the commencement of the disease eight months, the second sought refuge at Malaga and lived two years, the third remained at home and lived eight years. The measure is therefore one which no physician will lightly recommend, and the great number of works which have lately reached us, whose object is to aid him in arriving at a decision, leads us to a consideration of the entire subject. First, for notice, we have placed the translation, which has just appeared, of Professor Niemeyer's Lectures, one of the many valuable continental works for the possession of which in English we are indebted to the New Sydenham Society. The views of this distinguished physician have gained a very considerable acceptance with some of those most competent to judge of their correctness, and we refer to them now because we are convinced that his observations will enable us to understand why, in some cases of consumption, benefit, and in others only injury, has resulted from a change of climate. A complete account of the recent researches on the pathology of phthisis will be found in Professor Cuming's last report on medicine in this journal, and a lucid exposition of the generally received doctrine as to the nature of tubercle, also written by him, in the number for August, 1868. We will, therefore, on the present occasion, allude but briefly to the pathological part of the subject. The term tubercle, as now used by most advanced pathologists, is restricted to the hard, homogeneous, gray, or vitreous-looking bodies, in size seldom larger, and often smaller, than number four shot, which are found on the membranes of the brain, on the serous covering of the intestines, scattered through the lungs of *a certain proportion* of consumptive persons, and in various parts of the body, in the disease known as acute tuberculosis.* With the object of determining the mode of origin and development and the true nature of these tubercles, many laborious investigations have been undertaken, an account of which will be found in Professor Cuming's papers. What concerns us now is that while the presence of these tubercles unquestionably indicates a wide-spread contamination of the system, against which, in the present state of our art, we cannot hope to contend successfully, it is an error to suppose that they are present in the early

* Modern doctrine does not deny that these bodies may become cheesy, soft, and yellow, but so may many other morbid structures during their decay.

stages of any but a few exceptional cases of pulmonary consumption. It has long been known that in a certain proportion of those who, with condensations and cavities within their lungs, wasted and sweated, and were called cases of phthisis, the morbid change was really set a going by the inhalation of particles of fine dust, by the retention within the air cells of extravasated blood, by fibroid or syphilitic deposits, or occurred as the sequel of pneumonia; but in the vast majority the process was looked upon as the result of tubercular growths, an opinion which caused physicians to undertake, with little hope, the management of such cases, and more particularly to attach but a secondary importance to treatment directed against inflammatory processes in the lungs, except where these were severe and gave rise to distressing symptoms; according to Niemeyer, however, inflammation, characterized rather by persistence, and, if subdued, by liability to return, than by intensity, is the process to which, in the great majority of cases of consumption, the condensation and excavation are due; and this inflammation is not, as a rule, dependent on the irritation of tubercles, but has been initiated by exposure to cold, and has in most cases as a necessary condition to its existence, a certain vulnerability or unhealthiness of the system—an unhealthiness which may be congenital or acquired, and which, if congenital, is intensified by, and if acquired, has originated in influences which “hinder or disturb the normal development and maintenance of the organism.” If, as Niemeyer maintains, the majority of cases of phthisis arise in this manner, it is evident that with the exception of such treatment as the accidents and complications of the disease may require, the remedial measures which are good in consumption will form themselves into two groups, those which subdue the existing inflammation, or, when once it has been subdued, protect the patient against its return, and those which build up and strengthen the system. The value of change of climate, the subject now more immediately under consideration, lies in this, that it may be made to fulfil both indications. Have tubercles, then, no connexion with consumption? They have, according to Niemeyer, no necessary or invariable connexion. In the bodies of many phthisical persons they are not present at all, but in a certain number they are, and when they are, there are two ways in which they may be related to the phthisical change, that is to the cheesy formations, the induration and the excavation of the pulmonary parenchyma, which constitute the *invariable* anatomical alterations in consumption.

In a few exceptional cases, they are present from the outset. The induration and excavation are the results of an inflammation set a-going by the tubercles. In the great majority, however, they are secondary, a consequence of the cheesy formations. For an account of the way in which cheesy deposits may determine an eruption of tubercles, our readers must refer to the papers already mentioned, or to Niemeyer's work.

In relation, however, to the subject now before us, the rôle of change of climate in the treatment of pulmonary consumption, the clinical aspect of the question assumes the utmost importance, for in cases of tuberculous consumption, whether they were tuberculous from the outset or have become so, hope of benefit from change of climate is out of the question, and to our minds the most valuable passages in Niemeyer's Lectures are those in which he treats of the diagnosis of tuberculous as distinguished from ordinary phthisis.

"The development of tubercles in phthisical lungs may take place in so latent a manner that it cannot be diagnosed, or, at all events, not with absolute certainty. In many other cases, on the contrary, especially in those in which the lungs become the seat of very numerous tubercles, and in which the tuberculosis extends to the other organs also, the diagnosis does not present any difficulty. When we find a patient who is suffering from pulmonary phthisis becoming very short of breath, without any extension of the dulness over his thorax ; when the pyrexia continues, in spite of the most careful treatment, and when the remittent fever becomes a continuous one ; when diarrhœa takes the place of a tendency to constipation which may have existed before ; when to the other symptoms hoarseness or aphonia, or the well-known signs of an affection of the membranes at the base of the brain, supervene, then we may assume with perfect confidence that in the case before us a tuberculosis has associated itself with the phthisis. The cerebral symptoms in the young, in whom tuberculosis has a special tendency to attack the membranes of the brain, and in older persons the symptoms on the part of the intestines and the larynx, furnish the chief points for the diagnosis.

"That form, lastly, under which a *primary tubercular phthisis* commences and takes its course, is essentially different from those hitherto considered, and is mostly so characteristic that the diagnosis of this not very frequent form of phthisis is, as a rule, easy. In the first place the prodromal catarrh is absent. The pyrexia and the 'consumption' do not begin only at the time when the patients expectorate profuse muco-purulent sputa, but, on the contrary, the eruption of tubercles, especially if very intense, occurs with a considerable elevation

of temperature, and with a rapid consumption of the body by a high pyrexia. If we hear from a patient that he has only commenced to cough and to expectorate, after having for weeks past rapidly become feeble, pale and thin, we must suspect him to suffer from a tubercular phthisis. This suspicion gains further ground if the patient is unusually short-breathed, and if the physical examination of the chest yields at first negative results. Later on the percussion sound may, by subsequent pneumonic processes, become dull, the respiratory murmur bronchial, the *râles* consonant, but in some cases only do the infiltrations of the lungs become so extensive as in those forms of pulmonary phthisis previously considered. At an early period the tone of the voice and of the cough generally becomes hoarse, and when the tubercular affection of the larynx is considerable and spreads rapidly, the well-known painful symptoms of laryngeal phthisis come on. The signs of intestinal tuberculosis, and of intestinal tubercular phthisis, are not as a rule, long in making their appearance. The consumption is increased by abundant diarrhœa, the abdomen becomes tender on pressure, &c. The disease rarely lasts more than a few months. Most of the patients succumb even at an earlier period."

"A tedious and troublesome cough with but little expectoration, which, not containing much formed material, corresponds to the 'sputum crutum' of the ancient, and to the 'purely mucous sputum' of the more modern authors, is most suspicious. *Cæteris paribus*, there is reason to fear that we have to deal, not with a pneumonic process, but with a *tuberculosis* of the bronchial mucous membrane and of the alveoli; and we can confirm every word of *Canstatt's*, 'that it is a very critical symptom, and one which strongly arouses the suspicion of a tuberculosis, when obstinate cough and pyrexia are accompanied by sputa which for a long time keep the crude character, like those of acute bronchitis.'"

Second on our list we have placed Dr. Addison's paper on the Pathology of Phthisis. We do so in justice to his memory, and because his faithful descriptions will amply repay the perusal, even of those who are familiar with more recent contributions to our knowledge. At a time when physicians were possessed with the idea that phthisis was invariably tubercular, he persistently enunciated views very similar to those of Niemeyer. Reproached for devoting himself to pathological investigations to the exclusion of more practical studies, he was really making discoveries which, if they had been properly appreciated, would have helped to place the treatment of phthisis on a rational basis.

Excluding, then, altogether from consideration tuberculous cases, we come to the more immediate subject of our present review—the

object of change of climate in consumption, the influence it may be expected to exert, and the rules to be observed in recommending it. Those who hold the most opposite views as to the pathology of the disease, as well as those who have never troubled themselves much about its nature, but merely observed it at the bed-side, agree in the opinion that the more phthisical patients eat, and the better they digest their food, the greater prospect is there of an indefinite postponement of death, and even of something which, except for the permanent destruction of a portion of lung, may be considered recovery. Further, most of us know that, setting aside some very exceptionally constituted individuals, who are able to get on wonderfully well without leaving their house for months at a time, the great majority of people, and above all, of people at the age when phthisis is most common, cannot eat, nor digest, nor thrive, without daily exercise in the fresh air; at the same time we know that the diseased lungs of the consumptive are so sensitive that, during much of our winter, they must, in most parts of Great Britain and Ireland, remain cooped up inside their houses. We want, then, to find a place where the climate is so mild that, for several hours on most days during the winter, they may, without risk, go into the fresh air. Side by side with this, however, let us put another fact which few who have seen anything of consumption can doubt, namely, that those who are suffering from that complaint, when we have hot weather in summer and autumn, and, above all, if we have hot and moist weather, go down the hill fast—their cough may not be so troublesome as in winter, but they eat less and digest with greater difficulty, and grow weaker and thinner, and sweat more, and sink towards the grave with infinitely greater rapidity than in the cold season. The problem, then, in each individual case is to find a winter residence as dry and as cold as the lungs will bear. Whenever an extreme susceptibility of the diseased organ necessitates us to select a locality where there is much heat and moisture we are making a movement in which the chances are we will soon be out-flanked, and from this position our patient must move as soon as we have secured reasonable alleviation of the local distress. This conclusion, to which a consideration of the phenomena of pulmonary consumption naturally leads, is certainly supported by experience, without which, in any therapeutic question, *à priori* conclusions are not worth much. Dr. Thorowgood devotes a considerable portion of his very useful volume to this point, arguing that since consumption is common in very warm places, and

specially rife where the soil is damp, heat and moisture are not (as some seem to think) to be desired in a winter resort for the phthisical. Three years ago, in our notice of Dr. Fuller's excellent work on *Disease of the Lungs*, we drew attention to this subject, and those who have the largest practice among persons whose circumstances enable them to try various climates are, we think, pretty unanimous in their condemnation of some of the health resorts which formerly were commended. "My experience," said Dr. Gull to a patient about whom Dr. Weber consulted him, "with regard to the warmer health resorts is great; but it is, unfortunately, not favourable."^a With this general principle, then, we set out—when a consumptive leaves his ordinary residence in this country to seek, either in a more sheltered situation in Britain or abroad, a better place in which to winter, he should not seek a warmer one than his lung absolutely needs. Beyond this the problem, for its solution, requires a study of details, and these details naturally arrange themselves into two groups—those connected with the sick man whose case is under consideration, and those connected with the localities among which our selection is to lie.

First, as concerns the invalid, the completeness of the remission in the course of the disease is probably the most important point. In few cases of consumption does the disease keep steadily going on, and in those in which it does, change is hardly to be thought of. It is during a lull in the progress of the malady that change is to be sought, and the more perfect the lull, the more thoroughly inflammatory action has ceased, the more perfect the disappearance of the evening fever, the less is the danger of injury, the greater is the hope of benefit from quitting home, and the more freedom may the physician exercise in the choice of a locality. Next in importance is the degree of susceptibility to intercurrent inflammations. Some phthisical patients have no great tendency to catch cold, while others, on the least exposure, get a localized bronchitis, or pleurisy, or pneumonia; the former may go to the comparatively cold and dry, and on that account more valuable, health resorts; the latter must seek those which are warm, and in which the air is moderately moist. There is, too, in some an extreme irritability of the bronchial tract, which causes distressing cough, occurring with a frequency and severity out of all proportion to the amount of expectoration to be brought up, and often ending in

^a The most rapid phthisical disorganization of the lung we ever saw occurred in a gentleman who arrived in Calcutta just as excavation was commencing in one apex.

the loss, through vomiting, of the food which has been taken, to such persons, also, the warmer and moister climates are necessary.

Then, the sort of gastric disturbance present is to be considered, that which is indicated by a pale and slightly furred tongue, want of appetite, and feeling of distressing fulness after food, will be benefitted by the climates we have put towards the top of the list, page 364, while that kind of dyspepsia in which the tongue is red, and there is thirst and pain after food, will oblige us to select climates such as those on page 365.

To the condition of the nervous system some French and English writers attach considerable weight in determining their selection of a winter residence for the consumptive. We cannot say that we have ourselves noticed among the phthysical any marked tendency either to an unusually mobile or unusually torpid habit in the nervous centres, and we are inclined to think that in the greater or less liability to the symptoms we have enumerated will be found more definite indications for our guidance. It is, however, true that the air of such places as Nice has a tendency to render those accustomed to our moister climate sleepless, and where we have to do with persons who have naturally a restlessness and want of composure about them, this circumstance would lead us to send them in preference to Hyeres or to Pau. Likewise must we take into consideration the habits and tastes of the sick person, and the amount he can without serious inconvenience spend, for we may rest well assured that a consumptive will not thrive where he has nothing to interest and amuse him, nor be benefitted by a change which costs so much as to embarrass him.

Secondly, we have to consider a few details about the localities, and about them our most useful information is derived from the experience of their effects on those who have tried them. The effect upon the appetite is the first thing to be ascertained. Practically the answers we receive on this point inform us whether the invalid was able on most days to be in the open air without suffering an aggravation of his cough. If, in addition to a favourable report in this respect, we ascertain that the place afforded such a dietary as the consumptive should have, and if we discover that those who were not specially fortunate in their companions, nor in having "resources within themselves," did not nevertheless find time hang heavily on their hands, we may conclude that the locality under consideration is to be recommended to consumptive persons whose disease assumes the character of our experimental case.

Winter Residences more or less suitable for the Consumptive in proportion as the local disease is stationary and fever absent but appetite wanting, digestion imperfect and strength feeble.

| Mean Winter Temperature | In United Kingdom | Abroad | Observations |
|-------------------------|-------------------|-----------|--|
| 13·47 | ... | Montreal, | In virtue of its extreme dryness and comparative calmness, the air of Eastern Canada suits admirably consumptive persons, presenting typically the conditions indicated in the margin during December, January, February, and March, after which they must leave before thaw commences. |
| 39·91 | Clifton, | Norway, | Suitable under same conditions as Montreal. |
| 40·00 | St. Leonards, | ... | |
| 40·60 | Cheltenham, | ... | |
| | Dundrum, | ... | |
| | Ballybrack, | ... | |
| | Sutton, | ... | |
| 41·89 | Ventnor, | ... | |
| 44·1 | Queenstown, | ... | Affording excellent accommodation, presenting abundant objects of interest to the invalid, and having a higher temperature than the English towns in the same class, Queenstown is highly to be commended. |
| | Summercove, | ... | A little village within Kinsale Bay; invalids who have wintered at Queenstown may try it for a short time in spring, when Queenstown by reason of its exposure to the East is unsafe; apartments sufficiently good to satisfy many could be obtained; it is open, however, to two great objections, there is nothing to interest an invalid and the walks (within the sheltered area) are too limited. |
| | ... | Montreux, | For consumptives who require only shelter and air a little warmer than at home, Montreux, on the Lake of Geneva, can be confidently recommended; accommodation during winter is good and not costly; there is sufficient amusement, and during the summer they may go to Chateau d'Oex, which is 2,900 feet above the sea. |
| 47·8 | ... | Nice, | Unsafe for most consumptives on account of its windiness and liability to sudden changes of temperature. |
| 48 | ... | Cannes, | |
| 48·5 | ... | Mentone, | |
| 49·1 | ... | San Remo, | |
| 56 | ... | Malaga, | The climate of Malaga is admirable, but the food and accommodation so bad that at present it is not to be recommended. |
| 62 | ... | Cairo, | |

A Selection of Winter Residences for the Phthisical. Mean Winter Temperature of Dublin, 42° Fahr.—Continued.

Winter Residences more or less necessary for the Consumptive in proportion to the incompleteness of the fall and the liability to irritative cough, hemoptysis, and intercurrent inflammations.

| Mean Winter Temperature | In United Kingdom | Abroad | Observations |
|-------------------------|-------------------|--------------------|---|
| | Rostrevor, | ... | Beautifully situated, sheltered, affording good accommodation, and sufficient variety of walks and drives, Rostrevor may occasionally be selected for a winter residence, but it is not dry nor warm enough for most consumptives. |
| 40·00 | Mallow, | | } Relaxing. |
| 42·38 | Hastings, | ... | |
| 44·00 | Bournemouth, | ... | |
| 44·00 | Torquay, | ... | |
| | Penzance, | ... | |
| | ... | Biarritz, | Excellent accommodation, which during winter is comparatively cheap. |
| 42·8 | ... | Pau, | Affords abundant means of recreation. Special feature stillness of air. |
| 47·3 | ... | Arcachon, | |
| 53·1 | ... | Hyerès, | |
| | | Palermo, | Probably one of the best climates for cases of the type described in margin; recent accounts speak of accommodation as being very good. |
| 55·0 | ... | Algiers, | |
| 72·50 | ... | Cape of Good Hope, | December, January, and February are the summer months at the Cape, and invalids whose chest symptoms are troublesome except when they are breathing a very warm air, will find Wynberg or one of the other suburbs of Cape Town less relaxing than some places whose temperature is lower, for which reason we place the Cape above Madeira and Alexandria. |
| 60·60 | ... | Madeira, | |
| 62·00 | ... | Alexandria, | The mean annual temperature of Alexandria is below that of Cairo, but during the months of November, December, and January there seems little difference in that respect; in Cairo, however, the air is very dry, whereas in Alexandria it is loaded with moisture. |

This mode of investigating the subject is not imposing, but the information it will afford us is of infinitely greater value than that derived from a study of tables of mean temperature and barometric readings. To it we must be careful to add a knowledge of the general healthiness or unhealthiness of the place. On the continent of Europe we should ever be on our guard against towns where enteric fever prevails; where it is endemic new arrivals are specially obnoxious to its attack, and many are the victims which it finds among the consumptive and their travelling companions.^a In cases in which the disease is at all advanced, it of course becomes a matter of the first importance that the winter residence we recommend should be comparatively easy of access, and of hardly less moment is it that there should be within a reasonable distance some cooler spot to which the invalid can be carried when the summer heat begins. We have known this want painfully felt at Arcachon, where even the summer town, as the part next the sea is called, is much too hot for a consumptive during July and August.

In the table, pages 364-5, we have arranged a number of the more celebrated winter residences abroad and some of those at home, which, though less renowned, are of more importance to us from their greater accessibility, and we have placed them according to the principle that those which, by virtue of their comparative coldness and dryness,^b are truly invigorating, should be at the top of the list; while those which, by virtue of their comparative warmth and moisture, are soothing and necessarily more or less relaxing, should go to the bottom. Where we should send any particular case will depend on a consideration of the individual peculiarities already mentioned, but *cæteris paribus*, the higher in the list we can keep the greater the prospect of permanent benefit.

Those who wish information about Madeira will find what they want, together with a good many disparaging reflections on Mentone, in Dr. Grabham's *Climate and Resources of Madeira*. We have no doubt his account of the history, the social aspect, and the meteorology is correct, and we believe that some cases of chronic laryngeal and bronchial affections would find the air particularly soothing, but in his estimate of the general hygienic advantages of

^a We feel bound specially to protest against permitting persons to go to Naples during the decade (15 to 25), when they are most likely to catch enteric fever.

^b The degree of coldness of the air which consumptive lungs will bear depends on its purity and stillness; thus a temperature which would be hazardous at Nice would be perfectly safe at Pau.

the island, and specially in his recommendation of it for the phthisical, we cannot concur. Against us we have no mean authorities, Clark and Chambers (whose assertion, when he treats of climates for the consumptive, "Madeira is the best," Dr. Grabham has with singular negligence omitted to quote), but in support of us, to refer to no other experiences, we have that of the Brompton twenty, in itself almost conclusive.

The claims of Egypt as a health resort have recently been the subject of controversy between Dr. Henry Bennett and Dr. Robinson, of this city. The position accorded to Lower Egypt (Alexandria and the Delta) in our table, most of those who understand the subject would, we think, readily pronounce the proper one, and much as life on the Nile or at Thebes has been praised, we have difficulty in believing that any physician who had ever been there could think of recommending such a residence; to a few people in this land the costliness of the enterprise would be a matter of no moment, and if a consumptive, who belonged to this class, had the protection of a friend who was a match for dragomen skilled in all the ways, Asiatic and European, by which travellers can be victimized, he might secure an excellent table on the Nile and he could bring a physician with him, but he could only protect himself from changes of temperature, which are sudden and great, by shutting himself up in his cabin, and, in no place with which we are acquainted is home-sickness more likely to overtake a man than during the monotony of a Dahabiah journey, he would, of course, have an opportunity every few days of seeing temples and tombs unequalled in antiquity and in magnitude, but he must generally expose himself to a powerful sun to reach them, and to the chilliness of a vault, if he enter them, and, after all, most of our patients belong to that large class of human beings for whom the comparatively common place sights and incidents of a European watering-place would possess greater attraction than the monuments of a by-gone greatness.

We are not disposed, however, to give an unfavourable opinion of life in Cairo itself.* The sea voyage to Alexandria in one of the

* Some months ago Mrs. Appleton called upon us; this lady purposes establishing a Sanatorium at Cairo, and if she is heartily supported by even a few of the physicians whose names are affixed to her circular, her Sanatorium will not want occupants. At the time she was in this country she was unable to say the part of Cairo in which the apartments she had secured were situated; if she has chosen a suitable position, and brings to the management of her enterprise energy and tact it should succeed, and we hope, for the sake of invalids, it will.

magnificent steamers of the Peninsular and Oriental Company, or in one of the Liverpool traders, would be in itself beneficial, but an invalid should never go there unless he is prepared to spend more money than is required for a comfortable residence in Europe, nor without, at least, one friend prepared to fight for him and get him what he wants in a city where one is more at the mercy of hotel-keepers, and where hotel-keepers have less mercy for invalids than in any place with which we are acquainted. So protected, however, he can get fairly good food and accommodation even for an invalid, he will have plenty to amuse him; if the comparatively dry air of Cairo suits him, he can run over by rail to the top of the Red Sea, and spend a week or two at Suez,* where, provided his friend is still at his elbow, he will be well lodged and fed, and after spending November and December in Cairo or Suez, if strength has returned, and cough is not troublesome, and if he is very prudent in not exposing himself, he may secure a cabin in one of the steamers which every year make a trip up the Nile, this will occupy about twenty days, and cost him about £40, and will give him quite enough of the Nile. Then in the beginning of March, if he have money and leisure (and those who have not should hardly go to Egypt) we strongly recommend a Syrian tour; he can go from Alexandria to Jaffa, enter Syria there, and reach the coast again at Beyrout early in May. He will be able, without delay, to return to Europe by one of the numerous steamers which touch there on their way to Constantinople or some continental port. Of course when we speak of a Syrian tour, we take it for granted that the invalid has, during his residence in Egypt, completely lost all febrile symptoms, has almost, if not altogether, got rid of cough, and has regained a fair amount of strength; but for a young gentleman or lady who has so far recovered, whether the winter has been spent in Egypt or in the South of France, we know nothing more likely to bring back health and spirits than the life of a tourist in Syria, in the saddle by day and in a tent by night, appetite is never wanting, and, if a good dragoman has been secured, an excellent table can be had, the weather, moreover, at this time is generally steady, and the country looks well. For such a tour

* The air at Suez is extremely dry and does not suit some, we have seen an elderly lady with chronic bronchitis and profuse expectoration, attacked a few hours after her arrival with intense dyspnea, all secretion being arrested; she became quite comfortable again as soon as she was removed to the moist air of Alexandria. We understand the Peninsular and Oriental Company have now in their own hands the Suez Hotel, if so invalids may calculate on the best accommodation.

the party should consist of four persons at least, and, after an attentive study of "Murray," their arrangements for the journey should be carefully made. The invalid whose health on leaving Egypt is too insecure for attempting Syria, may take ship at Suez for Australia, or at Alexandria for England.

Winter and Spring on the Shores of the Mediterranean is charmingly written, and contains an account not only of Mentone, but of the health resorts of Sicily, Corsica, Algiers, and Spain, and, allowing for some pardonable enthusiasm on the part of Dr. Bennet, may be accepted as a guide, while in Dr. Williams's *Climate in the South of France* readers will find a sufficiently full and, in our opinion, a fair and impartial account of the various towns. Hyeres, Cannes, Nice, Mentone, and San Remo, along the northern shore of the Mediterranean. Those who wish to make themselves up on the subject should read what he says. Nice is, in our opinion, the least to be commended on account of its exposure to keen winds and sudden changes of temperature. In our table it will be seen that Hyeres is separated from the group, and out of this no small advantage arises. Those consumptives in whom the lull in the course of their malady is hardly complete enough to justify their removal to a climate which has so little of what is soothing in it as that of Cannes or Mentone, might on first reaching the south of France take up their quarters at Hyeres.

Those who take much interest in the subject of change of climate for the phthisical will do well to read Dr. Weber's paper in the *Medico-Chirurgical Transactions*. He adduces abundant evidence of the curative influence of residence at Jauja, in the Peruvian Andes,* at a height of ten thousand feet above the sea level, and supplies numerous observations, which go to show that St. Moritz, in the Engadine, and other elevated regions exercise a similar effect, though less powerfully. Physicians occasionally meet sufferers who could go to one of these localities without inconvenience, and would willingly try it, or who may even be able to make a residence there subservient to their business or the exercise of their profession. For a most satisfactory description of St. Moritz we refer our readers to Dr. Yeo's work. In his estimate of its advantages and disadvantages we are inclined to agree. Of its effect on those who had pulmonary complaints we have no experience, but we have known a month spent there in summer

* See also a most valuable paper in a former number of this Journal (May, 1866), by Dr. Archibald Smith.

materially help young people who, without any particular ailment, were dyspeptic and spiritless.

On other continental wintering-places we offer a few observations in the table.

And now, it may be asked, is the climate of the British Isles so unfavourable that consumptives cannot hope in them to battle successfully for life? By no means we reply. In many cases, it is true, complete change in itself affords a valuable stimulus, and for those who every year while in health have been accustomed to a change, going from town in the summer to the sea-side, and in the autumn to a country house, it is probably desirable that when attacked by phthisis they should leave these islands altogether; but others, and especially those whose usual residence is so far north that they may find in other parts of the United Kingdom a climate warm compared to their own, will do quite as well in the south of England, or at Queenstown, or even at Sutton, Ballybrack, or Dundrum (county Dublin).^a

To our mind, however, the great health resort for the phthisical patient is the open sea, and by exercising a little caution in the selection of a route, it is available at all seasons. Where local disease has been temporarily arrested, but appetite refuses to come, and strength is gradually failing, nothing produces so sudden an improvement as getting out into the ocean. A sailing vessel is superior to a steamer, but now-a-days sailing vessels are so little used as passenger ships that the accommodation and food on board is seldom such as a consumptive needs. Indeed, in any case, unless he is embarking in a vessel belonging to one of the great companies, the phthisical sufferer should provide himself with tins of preserved soup or essence of beef. The voyage to Australia is probably the best, but before venturing on such a long one he may go to the Cape, or through the Mediterranean to Alexandria. From the advantages of this the poor are by no means excluded. We know respectable men in humble circumstances whose lives have been saved by exchanging the position of an inside servant for that of a ship steward, and we have seen a young man who had cavities in both lungs, and would probably have lived but a few months in a

^a One of the best marked instances we have seen of arrest of phthisis occurred in a young lady who, leaving a damp and bleak northern town, wintered in this little village. She was so fortunate as to find the kind of cuisine which exactly suits a phthisical patient. She took cod liver oil resolutely, and she is now stout and without any symptom of illness, though the left infra-clavicular region is markedly depressed and the breathing cavernous.

counting-house, enjoying fair health for seven years as a purser's clerk.

We have devoted much more space to this subject than we originally intended; but we have not for some years referred to it at length in the *Journal*, and its importance now-a-days, when travelling is comparatively easy, can hardly be overrated. To the consumptive the struggle for life is at all times an arduous one, but in many cases it can be maintained for years, and in not a few of those, whose pecuniary resources are such as to enable them to have every advantage, the struggle is ultimately successful. A portion of lung must in every case be lost, but it may be a very minute islet, and life is not on that account less secure than in many who are anatomically undamaged, and among the means which help in this fight for existence, a judicious change of climate is not the least important, provided it be not relied on alone, but viewed merely as a means of placing the consumptive in a more favourable position for the adoption of other therapeutic measures.

JAMES LITTLE.

The Life and Letters of Faraday. By DR. BENICE JONES, Secretary of the Royal Institution. 2 Volumes. London: Longmans, Green, and Co. 1870. Large octavo, 975 pages.

IN modern experimental science no name occupies so distinguished a place as that of Michael Faraday. Born in the lower walks of life, self-taught, he overcame every obstacle of birth, education, and fortune, and raised himself to the very highest position in the world of science. Faraday was born in 1791, near London. His father was a blacksmith. He was early apprenticed to a bookseller, a circumstance which probably had some influence on his future career, as it gave him an opportunity of reading works of science. Whilst quite a boy, he acquired a taste for the then comparatively new and wonderful science of electricity, and became the possessor of a small electrifying machine. In 1812, he attended the brilliant lectures delivered by Davy at the Royal Institution, and took notes of them, which he sent to the lecturer, expressing at the same time, in a modest and diffident manner, his anxious desire to be employed in Davy's laboratory. At first Davy discouraged the young aspirant, but finally, yielding to his ardent entreaties, he placed him as an assistant in the laboratory of the Royal Institution.

Some time after this appointment he accompanied Davy to the continent as his amanuensis; and on this occasion his quality of temper appears to have been somewhat severely tested by the petulance and exactions of Lady Davy. "Her temper," says Faraday, "oftentimes makes it go wrong with herself and with Sir Humphrey." On his return from this prolonged continental tour, Faraday was entrusted by Davy with the carrying out of some important investigations, during which he made his first great discovery—namely, the possibility of liquifying some of the so-called permanent gases. In 1832, and at the age of 41, he was appointed Fullerian Professor of Chemistry in the Royal Institution; and henceforth the fame of Faraday grew brighter and brighter, until at length its rays spread to every place where science is cultivated or loved.

As a discoverer, Faraday ranks with Davy, Berzeliars, Liebig, and Newton. In almost every branch of physics he laboured with success. A mere catalogue of his discoveries and inventions would occupy several pages of this Journal. What he did, he did thoroughly. The results of his inquiries are likely to endure, for the facts which he made known to us twenty or thirty years ago are not superseded by the facts which he or others discovered at later periods. He created—if we may use such a term—the science of magneto-electricity. He was the first to prove the conservation of statical force. His original papers in the Transactions of the Royal Society during the last thirty-five years constitute nearly the whole of the history of magnetism, electromagnetism, and diamagnetism. Amongst his purely practical labours may be specialized his method of manufacturing glass for optical purposes, his arrangements for deep-sea diving, and his construction of light-house lamps.

Faraday was an exceedingly popular lecturer. His style was clear and simple. He had a ready utterance, and he possessed the rare quality of being able to express his ideas in the fewest possible words, without at the same time exhibiting anything approaching to baldness of style. Of the moral character it would be difficult to speak in terms too favourable. He was eminently pious; and he did not allow his earthly sciences to interfere with his devotion to the study of things "which are not of this world." Truly, it may be said of this great philosopher that he approached perfection as nearly as it is possible for creatures swayed by human passions to do. He was pre-eminently truthful, generous, unselfish,

unenvious. He was endowed with a rare mental organization. His biographer says that his imagination sometimes approached divination. His manners were kindly and unaffected, and the high honours which he received exercised not the slightest corrupting influence upon him. Faraday died on the 25th August, 1867. He was married, and he had many dear relatives. All Britain mourned his death; and his departure left a great blank in the world of science.

Dr. Jones has carefully discharged the somewhat difficult duties—less difficult, however, than usual in the case of Faraday—of a biographer. He had ample opportunities of becoming thoroughly acquainted with Faraday and his thoughts and deeds, having been for many years secretary to the Royal Institution, and a most intimate friend of the illustrious philosopher, whose career he has so faithfully and so graphically written.

RECENT WORKS ON SANITARY SCIENCE.

1. *Fourth Annual Report of the Metropolitan Board of Health of the State of New York*, 1869. New York: Appleton and Co. 1870.
2. *Investigations in the Military and Anthropological Statistics of American Soldiers*. By BENJAMIN APTHORP GOULD. New York. Published for the U. S. Sanitary Commission, by Hurd and Houghton. 1869.
3. *Health of the Navy*. London. 1870.
4. *Annual Report of the Medical Officer of the Privy Council*. London. 1870.
5. *Public Health—A Popular Introduction to Sanitary Science*. By WILLIAM A. GUY, M.B., Professor of Forensic Medicine and Hygiene in King's College, London. London: H. Renshaw, Strand. 1870.
6. *A Resume of the History of Hygiene*. By W. H. CORFIELD, M.A., M.B., Professor of Hygiene in University College, London. London: H. K. Lewis, Gower-street. 1870.
7. *Lectures on Food*. By H. LETHEBY, M.B., &c., Medical Officer of Health and Chemical Officer of the City of London. London: Longmans, Green, and Co. 1870.

8. *Population: Its Law of Increase.* By N. ALLEN, M.D., Lowell, Massachusetts. 1870.
9. *Physical and Medical Topography, &c., of Wheeling (United States).* By J. E. REEVES, M.D., Wheeling. 1870.
10. *Reports on the Health of Leicester, for 1867, 1868, and 1869.* By J. W. CRANE, M.D.
11. *Nekrosozoic Process.* Reports by Dr. F. DELAFIELD and Professors J. R. WOOD, R. O. DOREMUS, and A. FLINT, jun. London: A. Garstin and Co., Welbeck-street.
12. *Various Reports on Sanitary Matters.* By Dr LOGAN Medical Officer of the California Board of Health.
13. *Opening Remarks.* By the President (Dr. RUMSEY) of the Public Medicine Section of the British Medical Association. August, 1870.
14. *A Digest of Facts relating to the Treatment and Utilization of Sewage.* By W. H. CORFIELD, M.B., &c. London: Macmillan and Co. 1870.

THE greatly increased attention given, of late years, to sanitary matters has re-acted upon the literature of that branch of medical science, and works and periodicals on public and private hygiene are now becoming very numerous throughout Europe and North America. We give here the titles of a few works, relating more or less intimately to public health, but their contents will be dealt with fully, and to a great extent explained in our reports on public health. In this number we largely make use of the valuable information given in Dr. Simon's report, and we have freely borrowed, with due acknowledgement, from some of the others.

Of Dr. Simon's annual reports, it would be indeed difficult to speak in terms too laudatory; they are a credit to the country, as well as the able authors whose writings enrich their pages. The present report is one of almost more than usual interest. The huge Blue-book on the Health of the Navy contains a great variety of useful statistical information. The report of the New York Board of Health contains 594 pages, and is certainly a most creditable addition to recent works on hygiene. The New York Board of Health has been only four years in existence. It is composed of five sanitary commissioners (all medical men), and four police commissioners. Its staff is composed of a secretary, a sanitary superintendent, two assistant sanitary superintendents, and ten sanitary inspectors (all except the

secretary, medical men), counsel, attorney, assistant attorney, engineer, chemist, chemical disinfecter, corresponding (medical) secretary, chief clerk, register and deputy register, clerk, and a large number of subordinate officials. The revenue of the Board is about £30,000 a year. In a future number we purpose describing the sanitary operations carried out by this admirably constituted public health body. The Californian Board of Health was only instituted last year under the direction of an able sanitarian—Dr. Logan.

Dr. Guy's book contains a graphic description of the various epidemics which ravaged the population of these countries, from the earliest period until the end of the eighteenth century. Dr. Corfield's pamphlet gives the admirable inductory lecture to his course on public health, delivered by the author last May, in University College. Dr. Rumsey's pamphlet contains the interesting remarks on State medicine made by him at the late meeting of the British Medical Association.

Dr. Letheby's work is an enlargement of the four extremely interesting "Castor Lectures" delivered by the author two years ago. It contains a great variety of most valuable and recent information relative to food and diet.

In Dr. Allen's pamphlet, the author shows that in parts of the United States the conditions for the rapid increase of the population ought to exist, but that from a variety of causes which he points out, and which are remediable, the population is not increasing, except by immigration.

Nekrosozoic process is simply a plan of embalming the human body, which appears to have been tried with great success in the United States. The process consists in applying, *not* injecting, a fluid, which appears to possess very great preservative and disinfecting properties. Perhaps this wash would prove useful in the case of the bodies of those who had died from contagious diseases.

RECENT WORKS ON MENTAL DISEASES.

1. *The Physiology and Pathology of Mind*. By HENRY MAUDSLEY, M.D., Physician to the West London Hospital; Lecturer on Insanity of St. Mary's Hospital Medical School, &c., &c. Second Edition, revised. London: Macmillan & Co. 1868. 8vo, pp. 516.

2. *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.E., &c., &c.
3. *On the Obscure Diseases of the Brain and Disorders of the Mind.* By FORBES WINSLOW, M.D., D.C.L., Oxon. (Hon.), &c., &c. Fourth Edition, revised. London: John Churchill & Sons. 1868.

THE treatise of Dr. Maudsley has already reached a second edition, and has been translated into German, by Dr. Böhm. The remarkable merit of the book has thus been already recognized, both in these countries and abroad. Written with great clearness and elegance, and evidencing a thorough mastery of the intricate subject of which it treats, it must be regarded as one of the most important contributions to the literature of insanity, which have appeared in recent times.

The first part of the work is devoted to an inquiry into mental phenomena from the physiological point of view, and although we differ with the author as to the low estimate which he has formed of the value of the psychological method of investigation, we regard it as very important that the physiological method should be made to yield as abundant fruit as possible, and that the subject should be thoroughly worked out on this basis. This portion of the treatise will be found to contain many striking and ingenious views, as well as a tolerably complete account of the principal inductions which have been arrived at. It is this section which will be read with most interest by the profession at large; the second portion of the work, treating of insanity, being likely to interest a more limited class.

The chapter devoted to the spinal cord, will be found to contain the essence of Dr. Maudsley's doctrines regarding the education of the nervous centres by experience. The following observations regarding the cord, which will give a notion of the author's manner of dealing with his subject, seem to us to be eminently just and cogent:—

“In the registration of impressions made upon it, in the assimilation of their residua, there is slowly embodied a quantity of energy as an organic addition of power; force is being stored up in the gradual organization of its faculties. The exhaustion which we feel from our efforts to acquire any particular skill of movements, as in learning to

dance, the labour given to the frequent voluntary repetition of the stimulus and adapted reaction thereto, until by practice the definite relation has been established, and the desired skill acquired ;—these testify to the expenditure of so much force which has been laid up as statical power in the constitution of the ganglionic cells of the cord, rendering possible for the future a group of associated movements in answer to a moderate and, as might often seem, disproportionate stimulus from without. Like the brain, the spinal cord lays up a good store of power in its memory. Man's life truly represents a progressive development of the nervous system, none the less so because it takes place out of the womb instead of in it. The regular transmutation of motions which are at first voluntary into secondary automatic motions, as Hartley called them, is due to a gradually effected organization in the proper centres ; and we may rest assured of this, that co-ordinate activity always testifies to stored-up power either innate or acquired."

From Dr. Rudall, surgeon to the Melbourne Hospital, we have a translation of a short treatise on mental diseases by the late Professor Schroeder Van der Kolk. This was the last of the numerous labours of its celebrated author, and was left unfinished at his death. The work has been rendered complete by re-printing two previously published papers, in which the author had treated those portions of the subject which were found to be wanting in the manuscript.

The greater portion of the treatise is devoted to the physiology and pathology of the brain, and will be found to contain a great deal of interesting and valuable information on these subjects detailed in a clear and methodical way, together with a number of original observations by the author himself.

The remarks on the pathological changes in the brain, are of especial importance, as Schroeder Van der Kolk had devoted extraordinary care to the investigation of the minute anatomy of the nervous centres, and was deservedly considered as one of the very highest authorities on this subject. He adopts a division of the cerebrum according to function, which, in so far coincides with that of Gall, that the anterior lobes are regarded as being connected with the intellectual faculties.

The author states that in cases of intellectual insanity, he has invariably found the grey cortical substance of the anterior lobes presented morbid changes, being either more deeply coloured, more adherent to the pia mater, or softened. In melancholia, on the other hand, he has found that the cortical substance of the upper and posterior portions of the hemispheres exhibited traces of disease.

If future observation should confirm this statement, it will be an extremely important advance in our knowledge of cerebral pathology; but there are so many conflicting observations, that we must, for the present decline to receive this as the expression of a general law.

A very interesting point in the author's remarks is with regard to idiopathic inflammation of the dura mater. This disease, which is usually hardly noticed by writers, is, according to the author, much more frequent than is generally supposed. He details fully the history of eight cases, in which he believes this affection to have existed, and summarizes some of the more important points regarding the malady, as follows:—

“From my experience, which is not entirely exhausted by the preceding cases, I cannot hold idiopathic pachymeningitis, independent of external injury or syphilis, to be so rare a disease as authors affirm. I believe the disease is frequently mistaken, and supposed to be a febris larvata, on account of the regular intermissions, or more frequently a cephalæa rheumatica.

“At first sight it may appear strange that this inflammation is distinguished by such intense painfulness. It must be remembered, however, that the dura mater cerebri consists of two layers, of which the outer forms the periosteum with which the dura mater proper is coherent. The great painfulness in consequence of inflammation, is possessed by the dura mater in common with the periosteum of other bones. The dura mater of the vertebral canal, separated from the periosteum, is, according to my experience, far less painful in inflammations, than the dura mater cerebri. Also degenerations, ossifications, and even inflammations of the falx cerebri appeared in a few cases which have occurred to me, not to pursue a very painful course. In the vertebral canal, an isolated inflammation of the dura mater occurs indeed only seldom, and on that account we have no perfectly pure observations. However, I have not observed the pains occurring here in such severity, although, perhaps, they proceeded from other parts. If the disease takes a more chronic course, through which the dura mater unites almost inseparably with the skull, then the severe pains do not always occur. * * *

“The intermittence is also peculiar, it often occurs as distinctly periodic as in intermittent fever, but mostly manifests itself irregularly, so that rather long complete intermissions are distinguished. Here, again, we recognize the correspondence of the dura mater, with the periosteum of other parts. In periostitis generally, the pain comes on more severely during the night, or it has even longer intermissions. Other authors also mention the intermittence of the symptoms of the

disease. Especially many observations of the kind are found in the works of the distinguished Lallemand."

The following remarks on the classification of insanity, will show the division adopted by the author:—

"We are accustomed to compare the different kinds of intellectual confusion according to the differences of the phenomena which they call forth, and to note them down as mania, monomania, melancholia, dementia, and idiotism. This classification certainly serves to distinguish the different forms, and deserves to be retained; however, it has not always appeared to me to be quite practical, because it proceeds more from the morbid symptoms than from the nature and origin of the disease. For some years, I have therefore reduced the different forms of the disease to two principal groups, which may be designated as idiopathic and sympathetic insanity, which are distinguished from one another by special characteristics, and which serve all considerations in a therapeutical point of view.

"In idiopathic insanity the brain suffers primarily; it may have for its origin, unusual mental exertion and over-excitement of the brain, or may have been occasioned by some violent influence, such as a fall, a shock, or by a certain tendency, and not unfrequently by an hereditary predisposition.

"Sympathetic insanity exists, when the brain suffers only secondarily, and the exciting cause lies in other parts of the body, especially in the abdomen, or in the sexual apparatus. By long continuance, idiopathic insanity may proceed therefrom; recovery may not occur, unless the remote causes have been got rid of. Hence results the great practical utility of this classification."

The translation bears some evident marks of haste, for which the professional duties of Dr. Rudall perhaps offer some excuse. In several instances, the desire to be literal has led the author to employ modes of expression, which are scarcely intelligible. It is not very easy, for example, to catch the meaning of such a sentence as the following, which is found in page 36.

"Suppose a good friend, in rapid course, panting and heated, were to reach us."

Of Dr. Forbes Winslow's well known treatise, it is sufficient to say, that this, the fourth edition, contains some additional matter, especially with regard to the pathology and treatment of epilepsy, progressive locomotor ataxy, aphasia, and glosso-laryngeal paralysis.