Reviews and Notices.

CLINICAL LECTURES. By R. B. TODD, M.D., F.R.S. Second edition, edited by LIONEL BEALE, M.B., F.R.S. Pp. 912. London.

THE contents of this volume are well known to the profession, and have already excited the criticisms of the medical press. They consist of the Lectures, which appeared successively in the years 1854, 1857, and 1859, and are now republished under the superintendence of Dr. BEALE, being collected into one large volume. Dr. Beale has undertaken the duty "at the request of the executors of his late friend and former teacher". He has made as little alteration in the arrangement of the matter, he tells us, as was consistent with its collection into one volume.

It would be quite superfluous, at this time of day, to pass any opinion upon the doctrines enjoined and the practice followed by Dr. TODD. Probably all our readers are well acquainted with both these points, and have already made up their minds either in agreeing or disagreeing with the views of that physician. We think it, however, only fair to say this much, that we do not consider Dr. Todd's opinions have, in all cases, been fairly dealt with by those who have taken an unfavourable view of his method of treating diseases. We cannot help noticing that he is occasionally made by his critics to go much greater lengths in the stimulating treatment of acute diseases than, as it seems to us, his writings warrant us in concluding that he really did go. We certainly do not find anywhere in his works that fiery, uncompromising, and universal use of brandy in all diseases, and in all stages of all diseases, which has been ascribed to Dr. Todd. Probably the treatment adopted by some of the late Doctor's severest critics differs only in degree, if at all, from that which is here laid down in the volume before us; and it is somewhat curious to note how the stimulating treatment of fevers and adynamic diseases is spreading beyond our own country, and even amongst the countrymen of Broussais. The opinions of many of the leading practitioners of the day at Paris are becoming very much the opinions of practitioners in this country on these points, and so far confirm the general views of treatment enunciated by Dr. Todd. We say enunciated by Dr. Todd; for the truth is, there was no invention or adoption by Dr. Todd of any novel line of treatment amongst us; only this, Dr. Todd had the courage to state openly, and in distinct terms, what his practice was. Dr. Todd was assuredly not the first person who learnt and taught that diseased processes are signs of enfeebled vitality; and that in one sense, indeed, all diseases are to be classed as adynamic. To our modern pathology, and modern physiology, and modern clinical medicine, we may fairly ascribe this lesson. Dr. Todd, as a physician in extensive practice, was undoubtedly one of the most advanced in the knowledge of scientific medicine; and the practical application of his principles on so large a scale doubtless brought his name prominently before the profession as a giver of stimuli in disease.

We shall not stop here to ask whether he carried this general practice of his day further than was well for his patients. He certainly carried it no further than he thought was beneficial for them. And if, in our judgment, less stimulation and more depletion than Dr. Todd practised form a better basis of treatment of disease, we can only state that it is so in our opinion. The day for vehement assertions respecting the treatment of diseases is, we hope, fast passing away. The great opposition and diversity of opinions held by equally talented observers respecting the treatment of the same disease, should teach us a great lesson of modesty in criticising the practice of our neighbours. "I have", says an old French practitioner, "observed typhoid fevers during thirty years; I have seen all kinds of treatment adopted for their cure, from the most patient expectant method of old practitioners up to the most *turbulent* medication of young doctors; antiphlogistics, excitants, tonics, and antispasmodics, timid venesections, venesections *coup sur coup*, repeated evacuants, enormous sweatings, icy applications, etc. And all these opinions, and all these different or opposing methods of treatment, I have found supported by serious and intelligent practitioners, men worthy of confidence; and they have all given me the same answer, 'I am well satisfied with my treatment.'" We recommend this good sense of the old practitioner to the consideration of those who are disposed to criticise severely the practice of men, who treat diseases differently from what they consider the true and orthodox fashion of dealing with them.

THE SCIENCE AND ART OF SURGERY. Being a Treatise on Surgical Injuries, Diseases, and Operations. By John E. ERICHSEN, Professor of Surgery and of Clinical Surgery in University College, and Surgeon to University College Hospital. Third Edition; enlarged and carefully revised. Illustrated by four hundred and fifty Engravings on Wood. Pp. 1167. London: Walton and Maberly. 1861.

THIS new edition of Mr. ERICHSEN's standard work has undergone most careful revision on the part of the author, who has not only added to it from the rich stores of his own experience, but has incorporated such of the observations of other surgeons as were best fitted to render the book a complete treatise of the present state of the Science and Art of Surgery. The additions thus made have increased the work to above one hundred and twenty pages beyond the size of its predecessor. Much of the new matter appears in the form of what may be termed interstitial deposit among that which already existed—indeed, there seems to be scarcely a page where this has not taken place; but we also meet with a full consideration of several subjects which were either omitted or but very briefly noticed in the former editions.

In turning over the pages, we observe that Mr. Erichsen has, in the chapters on Amputation and on Gunshot Wounds, availed himself of the information collected by Dr. Macleod, and published in his valuable treatise on the *Surgery of the Crimean War*.

In a Chapter on the Arrest of Arterial Hæmorrhage, Mr. Erichsen introduces Dr. Simpson's account of the application of Acupressure, and expresses on this proceeding the opinion that—

"Of the value of this method of arresting hæmorrhage in the case of small arteries, there can be little doubt. It has long been familiarly employed in restraining the hæmorrhage from the coronary artery of the lip after operations for hare-lip; and in vessels such as this, the branches of the temporal, the digitals, etc., it is unquestionably a safe as well as a convenient and easy method of suppressing bleeding. But for arteries of large size, as the femoral, it yet remains to be shown that Acupressure can be depended upon as a mode of restraining hæmorrhage equally safe with the ligature."

Mr. Erichsen is a strong advocate of the early use of the Starched Bandage in fractures. When this mode of treatment was first introduced, he did not think it safe to have recourse to it until the sixth, eighth, or tenth day, when the swelling of the limb had begun to subside. For some years, however, he has, in some hundreds of cases of fractures of all kinds, followed Sentin's plan of putting up the limb in the starched apparatus immediately after the occurrence of the injury; and he says that, the more experience he has of this plan, the more reason has he to be satisfied with the results. In cases of fractured thigh, for instance, "patients have frequently been cured without any shortening whatever, with the preservation of the natural curve of the limb, and without confinement to bed after the first week." In compound fractures of the leg and thigh, he has succeeded in producing union of the wound, and converting the compound into a simple fracture, more frequently by putting up the limb in the starched apparatus than in any other.

In speaking of Injuries of the Head, Mr. Erichsen describes, besides concussion and compression, a morbid condition, to which he gives the name of *cerebral irritation*, in which the patient does not present the symptoms of either of the above-named states, nor any combination of their phenomena. It generally follows blows upon the temple or forehead; and is probably, in many cases, connected with laceration of the cerebral substance. The symptoms are thus described:—

"The *bodily symptoms* are as follow: The attitude of the patient is peculiar and most characteristic; he lies on the side, and is curled up in a state of general flexion. The body is bent forwards, the knees are drawn up on the abdomen, the legs bent, the arms flexed, and the hands drawn in. He does not lie motionless, but is restless, and often, when irritated, tosses himself about. But, however restless he may be, he never stretches himself out or assumes the supine position, but invariably reverts to the attitude of flexion. The eyelids are firmly closed, and he resists violently every effort made to open them; if this be effected, the pupils will be found to be contracted. The surface is pale and cool, or even cold. There is no heat of head. The pulse is small, feeble and slow, seldom above 70. The sphincters are not usually affected, and the patient will pass urine when the bladder requires to be emptied; there may, however, though rarely, be retention.

"The *mental state* is equally peculiar. Irritability of mind is the prevailing characteristic. The patient is unconscious, takes no heed of what passes, unless called to in a loud tone of voice, when he shows signs of irritability of temper, or frowns, turns away hastily, mutters indistinctly, and grinds his teeth. It appears as if the temper, as much as or more than the intellect, were affected in this condition. He sleeps without stertor.

"The course taken by these symptoms is as follows. After a period varying from one week to three, the pulse improves in tone, the temperature of the body increases, the tendency to flexion subsides, and the patient lies stretched out. The mental state also changes. Irritability gives way to fatuity; there is less manifestation of temper, but more weakness of mind. Recovery is slow, but, though delayed, may at length be perfect; although in these, as in all other cases of cerebral disturbance, ulterior consequences may be manifested." (P. 299).

In the chapter on Aneurism, he speaks on the whole favourably of compression by apparatus; which, he says, "may be employed in cases where it would not be safe to have recourse to the use of the ligature"; and is to be preferred to the ligature, as being not more tedious and infinitely safer in all ordinary cases of femoral and popliteal aneurism. He properly adds the caution, that "its success depends very greatly on the continuous care bestowed on the patient during the progress of the treatment." Of the methods of treatment by forcible flexion and digital compression, he has also a favourable opinion. The flexion plan, the credit of first successfully employing which he accords to Mr. Ernest Hart, "is most likely to be attended by success in those cases in which the aneurism is small, situated low in the popliteal space, and in a young or middle-aged subject, who can bear the continued flexion without much inconvenience." Like every other plan of treating aneurism, it occasionally fails. The digital compression plan, first employed by Vanzetti of Padua, "might be very advantageously combined with the treatment by flexion; but its great advantage seems to be, that it is applicable to arteries at the root of the neck, to which it would not be possible to apply any kind of compressing apparatus, or when the surgeon is placed in such situations as not to be able to obtain such an apparatus." In our last number, we gave an abstract of a case of inguinal aneurism successfully treated on this plan by an American surgeon. In speaking of the treatment by manipulation proposed by Mr. Fergusson, Mr. Erichsen is more cautious in giving an opinion. He says that its employment has been too limited to enable an estimate of its value to be formed; and that it can scarcely be considered (nor is it intended to be) of very general application. It may possibly, however, be advantageously applied to aneurism at the root of the neck and similar situations difficult of access for operation; but the danger of rupture of the sac, or of diffusion of the aneurism must be borne in mind.

The chapters on Special Aneurisms have been increased by the addition of sections on Intrathoracic, Intracranial, and Intraorbital Aneurisms. Regarding the Intrathoracic or aortic aneurism, the author speaks only as to the physical and rational signs and diagnosis; operative surgical treatment is, of course, out of the question.

He attaches more importance to the rational signs—namely, pressure effects (pain, dyspnœa, dysphagia, and œdema), pulsation, and tumour—than to the auscultatory signs, the value of which, he says,

"In the diagnosis of aneurisms within the chest, is perhaps, not so great as in many other thoracic diseases in the early stages of the affection, and in those cases in which the aneurism continues small and sacculated throughout, or is so deeply seated as not to approach the parietes of the chest. . . . . When, in addition to this, it is borne in mind that aneurisms of the arch often prove fatal by bursting into contiguous cavities and canals before they have attained a greater size than

a walnut or a pigeon's egg, and thus are incapable of furnishing a murmur of any very marked kind, it can be easily understood that the value of auscultation is but small in many cases of thoracic aneurism." (P. 563.)

In an interesting section on Intracranial aneurism, Mr. Erichsen has derived his statistical information on the subject from an elaborate paper published in *Guy's Hospital Reports* by Dr. Gull. The causes of intracranial aneurism, Mr. Erichsen observes, are very obscure. The frequency of the occurrence of spontaneous aneurism in the arteries within the skull

"Can only be accounted for by the thinness of their coats, and the want of an external cellular sheath rendering them unable to support the increased pressure from within, to which they are occasionally subjected in consequence of the alteration in pressure of the cerebral circulation at different periods; the result of some variation in the relative quantities of the different fluids within the cranium, or of determination of blood to the brain. This would more particularly be the case if their natural elasticity had already been impaired by the occurrence of atheromatous or other degeneration of their coats. As these changes are the natural consequences of advance in age, we find the tendency to the occurrence of this disease increase with advancing years." (P. 583.)

The intracranial aneurism is almost always formed by the uniform dilatation of all the coats of the artery. Of the sacculated form, Mr. Erichsen is not acquainted with an instance; and he believes that it would be less likely to occur than rupture of the vessels. It is somewhat remarkable, that the other vessels of the brain than that affected are very commonly healthy in cases of intracranial aneurism.

The symptoms of intracranial aneurism are very equivocal; and, Mr. Erichsen says, aneurism of large size may exist at the base of the brain without causing any symptoms whatever. The only symptoms that are of constant occurrence when the disease proves fatal, are those of hemiplegia and apoplexy. These may come on suddenly; or they may be preceded by a train of phenomena indicative of chronic disease within the cranial cavity. The most constant symptom is pain, which varies greatly both in extent and in character. The sight and hearing are often impaired; there may be paralysis in various degrees; the mental condition may be affected; and the gastric functions are often impaired. Very often, however, there are no premonitory symptoms; but the patient is suddenly seized, when apparently in good health, with rapidly fatal apoplexy.

"In some cases the presence of aneurism has been detected by a loud rough or 'whizzing' noise being heard on the application of a stethoscope over one side of the head, and, perhaps, being audible to the patient. This sign, however, exists but in few cases; but when it does occur, it is unquestionably the most pathognomic of all. I am not aware that it has been met with in any form of cerebral disease except intracranial aneurism. With the exception of the whizzing noise, no special signs are afforded by aneurisms within the skull, which will enable us to distinguish between the symptoms occasioned by their presence and those of other tumours of the brain, and of organic cerebral disease." (P. 556.)

In the treatment there is usually little to be done: but, if the nature of the case be rendered obvious by the loud rough whiz being heard over one side of the head, or by the application of the stethoscope to the mastoid process, the carotid artery on the affected side may be tied. This was done in a "most interesting and instructive case" reported by Mr. COE, of Bristol, in the ASSOCIATION MEDICAL JOURNAL for November 30, 1855.

The chapter on Nævus has been enriched by the addition of some valuable observations on the treatment of this affection in various special situations; and on the *nævoid lipoma*,—a form of disease with which Mr. Erichsen has occasionally met, but which does not appear to have attracted much notice, although M. Nélaton speaks of it.

"It is a tumour in which the nævoid structure is conjoined with or deposited in a cellulo-fatty mass. This disease is invariably seated upon the nates, back, or thigh. It occurs as a smooth, doughy, indolent tumour, incompressible, not varying in size or shape, without heat, thrill, or pulsation of any kind, possibly having a few veins ramifying over its surface, but no distinct vascular appearance. It is usually congenital, or has been noticed in early childhood; and continues without any very material change in shape, size, or appearance, until the inconvenience or deformity occasioned by it requires its removal. This is best effected by the knife. After removal, the tumour will be found to be composed of a cellulo-adipose basis, having a large number of veins ramifying through it, so as to constitute a distinct vascular element, communicating with small cysts containing a bloody fluid. The situation in which I have seen such tumours occur, where they gave rise to most inconvenience, and where their removal has required the greatest care, has been the anterior part of the thigh, just below Poupart's ligament, close upon and almost in connexion with the femoral vessels." (P. 634.)

In the chapter on Disease of the Hip-joint, Mr. Erichsen has incorporated much of the instructive clinical lecture on this subject published by him, last year, in this JOURNAL; and, *en passant*, we observe that he has acted similarly with regard to his lectures on Nævus, Sacro-iliac Disease, Stricture of the Œsophagus, etc., which have appeared in this and other periodicals.

The section on Stricture of the Œsophagus is concluded by a notice of the operation of Gastrostomy, or opening the stomach, first proposed by M. Sédillot, anp practised by him, Fenger, Cooper Forster, and others. Of the operation, Mr. Erichsen observes:

"The value of this operation has as yet to be determined by experience. In no case in which it has as yet been done has it as yet succeeded in adding much, if anything, to the prolongation of life. In reasoning upon it, two objections present themselves. First, there is the great and immediate danger of destroying life outright by the induction of peritonitis; though it is by no means impossible that the tendency to abdominal inflammation may be lessened by the previous starvation of the patient. But supposing this risk to be overcome, what is gained by the artificial opening? It is true that through it the patient might be nourished; but as every idiopathic stricture of the œsophagus is either from the first of a cancerous character, or eventually assumes a malignant action, of what advantage is it to endeavour to prolong a precarious existence, which must in a few weeks or months be cut short by the unchecked progress of a malignant disease? Would not the immediate danger of the operation much more than counteract all good to be eventually derived from it?

"There is, however, one class of œsophageal strictures which are of the most obstinate character, and rapidly fatal by simple occlusion of the tube, without any tendency to malignancy. These are the constrictions that result from the swallowing of corrosive liquids, whether acid or alkaline. In such cases as these, in which speedy death by starvation is inevitable, I think that the

operation of Gastrotomy might with propriety be had recourse to." (Pp. 816-17.)

There are several other subjects in the book, regarding which we should have liked to give our readers an analysis of Mr. Erichsen's opinions; but we are warned that we have occupied at least as much space as can be allotted to us. The σχολαστικος in Hierocles' carried about some of the stones of which his house was built as specimens of the edifice. We have done the like, but, we trust, with a much more satisfactory result than was arrived at by the owner of the house. In commencing this notice, we alluded to the revision which the book had undergone at the hands of its author; and this revision has, we will add in conclusion, resulted in the issuing of a work which more than maintains the position it had already earned—that of being an honour to the school of British Surgery, and to the memories of Samuel Cooper and Robert Liston, from whose teachings the author derived that knowledge which he has so well applied and improved.

British Medical Journal.

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CELLULAR PATHOLOGY: ITS PRESENT POSITION.*

IT is now some years since Professor VIRCHOW has endeavoured, by the application of the views originally brought forward by Professor Goodsir of Edinburgh, to overthrow the doctrines put forth by Schleiden and Schwann as to the cell-theory. It is true, we nowhere find it stated that he is in any way indebted to Mr. Goodsir; and throughout Germany, as well as in other countries, it is supposed that, whatever merit may belong to these views, their originality is not to be questioned. The English translation of the work now before us is, however, dedicated to the Edinburgh Professor—a circumstance which indicates a recognition of some sort as to his connexion with Virchow's peculiar views of cellular pathology. What that connexion is, will be made apparent by the following passages:—

"From this it follows not only that the entire organism, as has been stated by the authors of the cellular theory, consists of simple or developed cells, each having a peculiar independent vitality; but that there is, in addition, a division of the whole into departments, each containing a certain number of simple or developed cells, all of which hold certain relations to one central or capital cell, around which they are grouped. It would appear that from this central all the other cells of its departments derive their origin. It is the mother of all those within *its own territory*." (Goodsir's *Anatomical and Pathological Observations*, Edin., 1845, p. 2.)

"Hence it follows that the structural composition of a body of considerable size, a so-called individual, always represents a kind of social arrangement of parts, an arrangement of a social kind, in which a number of individual existences are mutually dependent, but in such a way that every element has its own special action; and, even though it derive its stimulus to activity from other parts, yet alone effects the actual performance of its duties. I have therefore considered it necessary, and I believe you will derive benefit from the conception, to portion out the body into *cell-territories*." (Virchow's *Cellular Pathology*, by Chance, London, 1860, p. 14.)

There can be no question, therefore, that all that belongs to territories around cells, and to brood-cells, which form so important a feature in the theories of Professor Virchow, originated with Mr. Goodsir. In the same manner that the author has derived his leading views as to cells from one Edinburgh Professor, so he has borrowed, and equally without acknowledgment, his notions concerning leukæmia from another; viz., Professor Bennett. His theory also as to fibrine and softened clots is for the most part obtained from the observations of Zimmerman and Gulliver; and his views as to the diffusion of cancer are taken from Professor Van der Kolk. Indeed, throughout the book will be found a general appropriation of the ideas of other pathologists, almost in every case presented entirely as his own, and the whole worked up in founding a doctrine the nature and correctness of which we shall now proceed to consider.

According to Schleiden and Schwann, all development originates from a formative fluid or substance (*blastema*) by the deposition of molecules and granules, one of which either enlarges, or several of which unite together to form a nucleus (*cytoblast*). Around this a membrane is precipitated, to constitute a nucleated cell; the whole consisting of—1, nucleus often containing nucleoli; 2, cell-wall; and 3, contents, or the matter between the nucleus and cell-wall. Cells so formed might multiply themselves in various ways. This doctrine, which is consistent with the vast mass of observations since made by histologists, and applicable alike to physiological and pathological processes, is declared by Virchow to be "a theory of development which has now been almost entirely abandoned, and in support of the correctness of which not one single fact can with certainty be adduced" (p. 10). He maintains, on the contrary, that "where a cell arises, there a cell must have previously existed (*omnis cellula e cellulâ*), just as an animal can spring only from an animal, a plant only from a plant. In this manner, although there are still a few spots in the body where absolute demonstration has not yet been afforded, the principle is nevertheless established, that in the whole series of living things, whether they be entire plants or animal organisms, or essential constituents of the same, an eternal law of *continuous development* prevails. There is no discontinuity of development of such a kind that a new generation

* Cellular Pathology, as based upon Physiological and Pathological Histology. By Rudolph Virchow, Professor of Pathological Anatomy, etc., in the University of Berlin. Translated by Frank Chance, B.A., M.B.Cantab., etc. 8vo. London: 1860.