PART II.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

- The Mechanism of the Gubernaculum Testis. By JOHN CLELAND, M.D. Edinburgh: Maclachan and Stewart. 1856. 8vo, pp. 40.
- Recherches sur les Monorchides et les Cryptorchides chez l'Homme Par M. ERNEST GODARD. Paris: Masson. 1856. 8vo, pp. 38.

THE first, a small but valuable work, embracing the results of Dr. Cleland's researches on the reproductive glands in general, and the structure and functions of the "gubernaculum testis" in particular, has had its origin in the honourable custom of the Edinburgh University, for the last twenty years exactly, to mark with a gift of distinction the most worthy "Thesis" presented by candidates for the degree of medicine prior to graduation; and the several essayists who have received the gold medal have abundantly proved, by their subsequent contributions to literature, that it requires a degree of merit ranging far above mediocrity to obtain an honour which must now be allowed to rank with the highest University distinctions. But whilst we admire the wise discretion displayed by the governing powers of the Edinburgh University, in recognising the force of emulation to urge labour, incite industry, and induce perseverance, it leads us to reflect seriously, and perhaps sadly, on the organization of our Irish institutions in this particular respect, as they manifestly throw no small amount of discouragement in the path of the industrious but ambitious student.

If we examine the governmental organization of the Irish corporations, either granting a license, or conferring degrees, legalizing the individual practice of medicine and surgery,—the absence of any reward or honourable distinction calculated to inspire a just feeling of emulation constitutes a conspicuous characteristic of their educational ordinances. All candidates, without distinction or difference, who are esteemed qualified after being subjected to the ordeal of examination, receive an equal testimonial, conferring the same powers and conveying the idea of an exactly similar amount of value, irrespective of the higher attainments which many candidates evince in comparison with those of more ordinary ability. To us this seems to be a most exceptionable system, not less anomalous as a rational practice than injurious to the spirit of enthusiasm, that impels the ardent student to prosecute those abstract branches of medical investigation, whose material rewards are inversely proportioned to their literate honour as original contributions. We conceive that the present opportunity is now favourable for reconstructing those collegiate rules, and creating a system more in accordance with the prevailing spirit of the hour, whose tendency is to render the principles of competition paramount in every department of science. We are well aware that many eminent men entertain conscientious objections to prizes, honours, or rewards of any description, inasmuch as they may be instrumental in developing mercenary tendencies on the part of students; but such ideas are merely visionary, deduced rather from a morbid suspicion of the failings of our nature than from the more healthful contemplation of those purer elements that govern the mind refined by cultivation, and spiritualized into a self-sacrificing intensity of purpose by the grandeur of the object to be attained, and the benefits it may confer on society in general.

It is not the absolute intrinsic value which renders the gift of moment to the student, its real value is represented by the fact of superior proficiency which it implies. A simple medal represents but little to excite the avaricious, or induce a sordid desire for its possession, but, as the impress of the solemn adjudication of the eminent men, who form the several courts of examiners, to superior merit, it would become honourable, not only from the source from which it proceeds, but also from the admitted ability of the candidate on whom it has been con-Already the "Pathological Society of Ireland," to ferred. which the school of Dublin is deeply indebted for its practical character, has recognised the utility of the views which we advocate, and for the last four years has conferred a gold and silver medal on the most valuable essay contributed by a student on a subject announced at the commencement of each session. And we are ourselves cognizant of the number of students who have been induced by this wise and generous provision to adopt a system of close and accurate research, thus

imbibing habits of investigation, which they have maintained in the more mature periods of that protracted competition which the progress of professional life always implies. The Queen's University has likewise recognised the value of honourable distinctions, and grants at each degree examination medals and gratuities to the most distinguished candidates in each class; and we are personally aware of numerous cases where the largest amount of enthusiastic energy has been put into requisition to obtain the first rank in this infant institu-How much greater would the zeal and perseverance tion. be enhanced if students could indulge in the hope, that in those ancient institutions, whose existence as seats of learning, as temples of science, have conferred honour and dignity on our country for centuries, their labours would be rewarded, their attainments appreciated, and their laudable ambition cherished by the approbation of those men representing the profession they are taught to respect, and the institutions they are expected to honour. We trust that the period is not far distant when a well-digested system of rewards will form a marked feature of collegiate legislation; and that we, as journalists, will not again labour under the painful necessity of instituting invidious comparisons between Irish and Scotch educational ethics, particularly if, in the conscientious discharge of that duty, our remarks must be detrimental to the practical character of our own country.

Dr. Cleland commences his essay by a brief description of the developmental evolution of the generative structures, deducing his account from the foctal parts of an embryonic sheep, and similar observations on the organs in the more advanced stage in the foctal calf. Having insisted on the permanent relations always subsisting in the vertebrata, between the generative and urinary apparatus, and likewise on the close structural alliances between the latter and the "Wolffian bodies," he asserts that the reproductive organs, whether vesicles or ovaries, make their first appearance along the internal borders of the Wolffian bodies, as white parallel streaks on either side of the spinal These cannot be prolonged by continuity from those column. bodies, as the ducts differ in diameter; therefore, the author very properly rejects this supposition as to their origin, although it is insisted that such must be the case by Rathke and Arnold, whilst he supports the more consistent view that a separate and distinct blastema is prepared for their evolution. The testicle, then, assumes a rounded form, the central cavity being occupied by a formative blastema, which arranges itself in transverse bands. The organ is now an independent structure,

wholly surrounded by peritoneum, which forms a "mesorchium," that connects it to the Wolffian body, and in this fold the spermatic artery is developed. On the outer side of the Wolffian body the so-called Müllerian duct appears, which below comes into apposition with the efferent tube of that organ, a fact which has probably led Rathke and Kobelt to confound the Wolffian and generative ducts as identical.

The superior extremity of the Müllerian tube terminates in a convoluted body, which again becomes united with the testicle, completing the communication of the efferent ducts with the gland, forming the "coni vasculosi" and head of the epididymis. These ducts of Müller in the female constitute the Fallopian tubes, and by uniting at their inferior extremities create the uterine cavity. In the human subject the hydatids of Morgagni are formed by atrophy of the Wolffian bodies, whilst in the female they form the "parovaria" of Rosenmüller. Finally, Kobelt conceives that the upper portion of the Wolffian body contributes to the formation of the Morgagnian hydatids, and the lower part constitutes the vas aberrans of Haller.

In this brief abstract of the author's views we have endeavoured to simplify a most obscure phase of organic evolution, which has occupied the attention of physiologists during the past two centuries, and the difficulties attending this investigation are so numerous that it does not surprise an anatomist that the opinions of the most unprejudiced observers should bear the stamp of conflicting testimony. On this account we have rather condensed than criticized Dr. Cleland's views on the subject, which seem faithfully related, judiciously arranged, and accurately described.

The second chapter treats more immediately of the subject forming the title of the essay—" The structure of the gubernaculum testis" and its anatomical peculiarities. Having cursorily detailed the observations of Hunter on the subject, and drawn attention to the various imperfections in the description of this structure by its distinguished discoverer, he then alludes to the opinions of the earlier anatomists, as Pancera and Girardi of Parma, who recognised the ascending cremaster; the former having published a work on the descent of the testis in 1778; and Brugnoni, absolutely about the same period, attributes the descent of the organ to the agency of those muscular fibres,—an opinion in which he is followed by Robin and also by Curling in his recent monograph on the Structure and Disease of the Generative Gland. Finally, the author directs especial attention to the views of E. H. Weber, who also describes an ascending cremaster, but attributes the descent of the testicle to a structure which he thus describes:---

"'This vesicle,' he says, 'grows with its upper part into the abdominal cavity, and drags asunder the lamellæ of the peritoneal fold in which the testicle is hung as in a purse, and bears on its muscular fibres, which are given off from the internal oblique muscle upwards to near the inferior extremity of the testis. Hence it is clear that the part called the Gubernaculum by Hunter is not a solid cord, but that it is a bladder overlaid with muscular fibres. The under part of the bladder grows downwards from the inguinal canal into the scrotum, drags asunder the cellular tissue, and prepares a way for the testis, before that organ has left its place. Thus there exists a large bladder, which is narrowest in the middle where it lies in the inguinal canal, whose upper part projects into the abdominal cavity, is broader, and overlaid with muscular fibres, which pass upwards from the internal oblique, and cover the bladder in oblique and transverse directions; while the under part of the bladder, which is still wider, is not overlaid with muscle, and descends into the scrotum. The descent of the testis is effected thus:-The upper part of the bladder, with the adhering peritoneum, is shoved into the lower part, which passes down into the scrotum, just as you can shove the one-half of a nightcap into the other.""

We have, on many occasions, sought for this peculiar vesicular structure described by that learned histologist, but our examinations have always been unavailing. We therefore fear that a preconceived opinion has tended to prejudice the views of Weber, and induced him to describe structures, rather as they should exist according to his ideas, than as they appear in the normal arrangement of the human body. Not that we would accuse one who has contributed so much to the advancement of scientific inquiry of a wilful desire to convert apparent states into real and unchangeable conditions; but in the prosecution of anatomy there are difficulties to contend with, as, for instance, the age, the state of decomposition, and the mode of preparation of the subject, which so materially influence original inquiries that investigators may, without incurring the charge of misrepresentation, mistake truth rather than pervert it, and confound "the transient features of the shadow with the unchangeable evidence of reality."

The author gives the results of seven dissections of fœtal structures, and concludes from those observations, that there has been a large amount of error in all former descriptions of those peculiar tissues. In the first place, the fibrous band described as passing from the testicle to the scrotum is imaginary, and this portion arises from the fascia of the groin, from the tendon of the external oblique, and a few fibres of the internal oblique muscles; this passes down to the scrotum, and ascends through the external ring to be attached to the "plica gubernatrix;" and the intra-abdominal portion is constituted by the fibrous layer of the peritoneum with the ascending fibres of the internal oblique forming the cremaster. Now, with every desire to deal leniently with the efforts of original research, we must say that a certain degree of ambiguity renders an otherwise minute description open to exception, and fairly the subject of legitimate criticism. All demonstrative subjects, however minute in their description, should be simple to be understood, and clear to be remembered. Here, then, is the summary of these observations in the author's own language:—

"In conclusion, the sum of the structure of the gubernaculum is this: It consists of two essentially distinct parts; *firstly*, the structure descending in advance of the testis—viz., the processus vaginalis and its plica gubernatrix; and, *secondly*, a fusion of the parts forming the wall of the abdomen,—fibres passing downwards from the peritoneum, upwards and downwards from the internal oblique muscle and the aponeurosis of the external oblique, and upwards from the fascia and integument. The first portion pushes its way down through the second, and disperses it, and afterwards, as the plica gubernatrix contracts, the testicle reaches the bottom of the scrotum."

Frequent opportunities have occurred to us, which we have taken advantage of, to trace the description of Mr. Curling in relation to the cremasteric apparatus, and we have invariably confirmed his statements on this subject; and we are confident that, although Dr. Cleland has advanced somewhat beyond him in his observations, further experience will tend rather to reconcile his views with those of preceding authors than create a difference which exists only in a degree, not in fact.

In conclusion, we would draw especial attention to the judicious observations of the author on the cause of the descent of the testicle, and the influence of its permanent position on its normal functions as a secreting organ, and we trust that he will continue an investigation which opens a wide and extensive field for the exercise of those inductive powers which he has already displayed in the essay before us.

M. Godard, in a memoir presented to the "Biological Society of Paris," at its "séance" in March, 1856, has detailed the results of forty-two cases of abnormities of the testicles. Many of these are familiar to the readers of this Journal, and

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many more to those acquainted with the last edition of Mr. Curling's work, which contains some curious examples that seem to have eluded the researches of the author. However, we accept the labours of M. Godard as a most useful contribution to the literature of the subject, and one that will save its possessor from the expenditure of much labour in discovering extraordinary cases of testicular abnormities.

A Review of the Present State of Uterine Pathology. By JAMES HENRY BENNET, M.D., &c. London: Churchill. 1856. 8vo, pp. 99.

THIS essay by Dr. Bennet has been partly written, as we are informed, "to obviate the necessity of entering the polemical arena in any future editions" of his "Practical Treatise on Uterine Inflammation;" from the editions of which already published he has intentionally excluded all controversy. The book contains Dr. Bennet's views relative to this much-vexed question; also, the opinions of others who are opposed to, or at variance with, him; and, besides, all those arguments which Dr. Bennet thinks most conclusive for the establishment of his particular tenets. We shall endeavour to present our readers with a short review of its arrangement and contents.

After some preliminary observations, the author gives a complete sketch of uterine pathology, in which are embodied his particular ideas, otherwise his *professed views*, and which we have no doubt are pretty well known to the profession: however, as they seem to be contained in the few following words, we cannot do better than transcribe them. He says:--

"Inflammatory lesions occupy the most prominent position, and by their presence are explained most of those forms of confirmed vital and functional uterine derangements which were formerly considered to be morbid entities, and described under the names of leucorrhœa, amenorrhœa, dysmenorrhœa, menorrhægia, &c."

In other words, we would suppose him to mean, that leucorrhœa, &c., exist not as diseases *per se*, but their presence is explained by inflammatory lesions; that they are, in fact, the consequence of inflammation, and do not originate without some inflammatory action. In the same manner, Dr. Bennet considers ulceration of the os and cervix uteri, not as a disease existing *per se*, but as the result of inflammation. Having briefly stated his case, the author next proceeds to classify his opponents, and he separates them into two groups. One, those who deny the existence of inflammatory and ulcerative lesions of the neck of the uterus, and the necessity of surgical treatment altogether; or who, admitting the possibility of those lesions, yet ignore ulceration, and consider instrumental examination unnecessary, or even prejudicial. The other group, those who admit all the lesions of the cervix and body of the uterus, yet are opposed to the author as to their origin, symptoms, and importance, "denying that they exercise that influence over the general health" which Dr. Bennet has ascribed to them, or denying that they require the surgical treatment which he states "to be so frequently indispensable."

Amongst those who deny the existence of inflammatory ulceration of the neck of the uterus is Dr. Robert Lee, of London, and to the views entertained by that gentleman Dr. Bennet first alludes. A paper which was read by Dr. Lee before the Medico-Chirurgical Society in 1850, is quoted, wherein its author remarks :--- "In cases of obstinate leucorrhœa, I have often employed the speculum in married women, after I had failed to detect the existence of disease by the ordinary mode of examination. In some of the cases there has been seen an unusual degree of redness of the os uteri, sometimes affecting the whole, and at other times limited to the inner margin, with or without swelling. The white viscid discharge has been seen issuing from the os uteri. I have never seen ulceration of the orifice of the uterus in such a case." And again, body have I ever seen ulceration of the os and cervix, except of a specific character, and especially scrofulous and cancerous." Now, though Dr. Lee has thus asserted, emphatically, that he has never seen ulceration, except of a specific character, of the os and cervix, still Dr. Bennet very naturally observes, that he (Dr. Lee) has seen what he (Dr. Bennet) calls ulceration; as is evident from the following passage, which Dr. Bennet has taken from the same source as the last:---"At other times, both the lips are swollen, nodulated, and fissured, and the mucous membrane covering them intensely red, with an appearance of superficial excoriations, or granulations, which are elevated above the surrounding surface. These apparent granulations are usually considered and treated as ulcers of the os and cervix uteri, but they do not present the appearance which ulcers present on the surface of the body, or in the mucous membranes lining the viscera, and they are not identical with the granulations which fill up healthy ulcers. They present the appearance often observed on the tonsils, which are said to be ulcers, and are not."

Well, then, the question arises,—What is an ulcer; what constitutes an ulcer? Dr. Bennet considers a pus-secreting granular surface, denuded of epithelium by destructive inflammation, upon a mucous membrane, should be called one, and this is what he does call one. Consequently, according to Dr. Bennet, Dr. Lee has seen a simple ulcer of the os and cervix uteri; and if his (Dr. Bennet's) definition of an ulcer be correct, Dr. Lee and himself differ merely in terms. This appearance, be it what it may, Dr. Lee considers not only of no pathological importance, but, besides, of rare occurrence.

With regard to the question of importance, it is set aside for the present, and our author proceeds to remark upon Dr. Lee's opinion of the rare occurrence of this appearance.

Dr. West, of London, who, it appears, agrees with Dr. Lee as to the pathological insignificance of this appearance, which Dr. Bennet calls ulceration, still does not bear out Dr. Lee in the assertion, that such is of rare occurrence. To show this, Dr. Bennet takes up Dr. West's Croonian Lecture for 1854, in which he finds, that of 268 patients examined by Dr. West at the Middlesex and St. Bartholemew's Hospitals, ulceration, or the appearance above described, was seen in as many as 125 instances.

Dr. West is placed by the author at the head of the second category of his opponents; and, after his experience has been alluded to, Dr. Bennet proceeds as follows:---

"Dr. West does what I have constantly implored all who presume to give an opinion on the subject to do: he looks, he examines for himself; and what does he find? 125 cases of ulceration in 268 women examined. If we eliminate the cases of healthy uterus, we find the proportions to be as follows,-ulcerated, 125; non-ulcerated, 110; that is, more than half the patients examined presented ulceration. . . . In 300 cases," continues the author, " examined by myself at the Western General Dispensary, and reported in my work, the proportions were:-ulcerated, 222; nonulcerated, 78; that is, not quite three-fourths presented ulceration. The difference between-more than half, and less than threefourths—is not one which, in a statistical inquiry of this nature, invalidates results. Dr. West's figures prove the extreme frequency of ulceration in women suffering from symptoms of uterine ailment just as forcibly as mine; the slight discrepancy would admit of easy interpretation, were it desirable to enter into the subject. Amongst other causes, it may depend on the less degree of severity with which symptoms were scanned and weighed before an instrumental examination was decided on. . . . What more conclusive answer," says Dr. Bennet, "than the above facts can be made to Dr. Robert Lee, when he states that he has never seen an inflammatory ulceration of the uterine neck? Surely I need not pursue any further the refutation of this remarkable assertion."

Dr. Bennet considers that this appearance, above described, over the os and cervix, is an ulcer, the result of inflammation; that it is of frequent occurrence; and that, so far, he has been corroborated by the evidence deduced, not only from his own experience, but from the writings of Dr. West, as to the frequency, and even those of Dr. Lee himself, as to the reality of its existence.

But though Dr. West has, by his researches, proved the frequency of ulcerative lesions of the os and cervix uteri, yet he does not consider such lesions to be of any pathological importance. The author informs us that Dr. West draws his conclusions from such facts as the following:—

"First. He, Dr. West, examines 40 females affected with venereal disease, on the day of their admission into the venereal wards of St. Bartholemew's Hospital: 18 were suffering from gonorrhœa alone; 10 from gonorrhœa and syphilis; and 12 from syphilis only. Of these 40 patients, *thirteen* presented ulceration: in 10 it was mere excoriation; in 3 the ulceration was more extensive; 'and here,' concludes Dr. West, 'be the cases of ulceration of the os uteri what they may, sexual excesses, at any rate, have no great share in their production.'

"Second. Dr. West gives the result of a careful examination of the uteri of 62 females who died in the medical wards of St. Bartholomew's Hospital, of other than uterine disease. Of the whole number, 43 were married, or were supposed to be so; and 19 were believed to be virgins. The uterus was healthy in 33; diseased in 29. Of the latter, there was ulceration in 17; induration of walls of uterus, without ulceration, in 5; disease of lining membrane of uterus, without ulceration, in 7. And this evidence, instead of substantiating the opinion that they (the lesions) are of great importance, rather, in Dr. West's mind, militates against that supposition."

With respect to the first conclusion propounded from the statistics laid down by Dr. West, Dr. Bennet considers—when out of 40 women positively exposed to sexual intercourse, ulcerative lesions are found in 13, or one-third, and that to a more or less marked degree—that the presence of such are not satisfactorily explained by the existence of either syphilis or gonorrhœa, and that he is warranted in coming to a totally different conclusion from Dr. West. In reply to Dr. West's second laid down statistical conclusion, deduced from the 62 post-mortem examinations,—namely, the pathological nonimportance of inflammatory lesions of the uterus, -Dr. Bennet remarks, that he, on the contrary, is, for the same reason, only more strongly convinced of their importance; "since the existence, unrecognised and untreated, of a large amount of uterine disease in the female population, is an indirect cause of death," and that, inasmuch as these inflammatory lesions are of their nature debilitating, "through their reaction on the functions of digestion and nutrition;" and, when not treated, tend to induce a state of "debility," "anæmia," and "deficient vital energy," they must render a female incapable of resisting disease. Enpassant, allusion is made to the statistics of Dr. Boyd, as quoted by Dr. Lee. Dr. Boyd, it seems, examined 708 uteri, without discovering an instance of inflammatory ulceration; but found: -Cancer, 21 cases; bony or fibrous tumour, 31; dropsies of the ovaries, 13; puerperal cases, 24; and 3 of simple enlargement; therefore, Dr. Boyd concludes that ulceration of the neck of the womb is of rare occurrence.

Again, the author, quoting Dr. Lee, alludes to the examinations of Mr. Hewett and Mr. Pollock, who ran over as many as 900 uteri at St. George's Hospital, and who never came across a single example of simple ulceration of the neck or mouth of the womb, and who, consequently, arrived at the same conclusion as Dr. Boyd:—

"At the time these statements were first published," remarks Dr. Bennet, "and were brought forward as a proof that pathological anatomy gave no evidence even of the existence of a morbid condition, said by me to be of such frequent occurrence during life, my reply was:—That mucous membrane lesions had not been found after death, because they had not been sought for, as had often before been the case in the history of pathological anatomy. The observers whose results were so confidently appealed to by Dr. Lee —observers whose talents and integrity I esteem greatly—were looking for bony and fibrous tumours, for dropsies and cancerous degenerescence, and they found them. They were not looking for inflammatory ulcerations, and they did not find them. I could bring other valuable testimony forward to corroborate the results arrived at by Dr. West, who, being alive to the existence of ulceration, was looking for it, and found it."

The author does not fail to call attention to the following curious fact in medicine, viz.:—Dr. Lee ignores the existence and pathological importance of ulceration, because *he does not* find it after death; and Dr. West considers it pathologically insignificant, because *he does* find it after death.

Dr. Bennet now takes up Dr. West's denial of the pathological importance of inflammatory ulceration of the neck of the uterus, and fully analyzes it. He quotes the following paragraph from Dr. West's Lectures :--- " The really important question is, whether ulceration of the os uteri is to be regarded as the first in a train of processes which are the direct or indirect occasion of by far the greater number of the ailments of the generative system; or whether, on the other hand, it is to be considered as a condition of slight pathological importance, and of small semeiological value; a casual concomitant, perhaps, of many disorders of the womb, but of itself giving rise to few symptoms, and rarely calling for special treatment?" This quotation Dr. Bennet calls "the key" to Dr. West's Lectures; and considers that the first part of the paragraph may be deemed as a statement of the views which Dr. West attributes to his adversaries, " of the scientific error he thinks he has to encounter;" and that the second portion of the paragraph is "a concise enunciation of the opinions with which Dr. West rises from the investigation." Now, Dr. Bennet asserts, that Dr. West has made a fundamental error "at the very threshold of inquiry." If Dr. West will substitute the words, "inflammation of the neck and body of the uterus and their sequelæ," for the words, "ulceration of the os uteri," Dr. Bennet will "accept his proposition as a true exposition" of his (Dr. Bennet's) opinions. But by using the words, "ulceration of the os," &c., Dr. West is considered by our author to "wrestle with an imaginary enemy;" for neither he nor any one else regards ulceration of the "os a disease existing per se," but, like the ulceration of any other part, depending on, and the result of, inflammation.

"On the contrary," he says, "all who have written on the subject have spoken of ulceration, and described it as the result of the inflammation which, invariably, necessarily precedes and accompanies it, and which may exist without it, for years, in the uterus or elsewhere."

Then comes a denial, by Dr. Bennet, of the statements deduced from Dr. West's lectures:—First, that ulceration of the cervix is of slight pathological or semeiological importance; second, that it rarely calls for "special treatment;" and third, that it does not appear to exercise any particular influence over sterility, or the production of abortion.

With respect to the influence of ulceration in inducing sterility and abortion, Dr. Bennet considers, that if for a considerable length of time he has been constantly consulted by young, sterile, married women, in whose history he could gain evidence of uterine mischief either soon after or previous to marrying; if, on examination, he finds some inflammatory lesion; and then, having treated and cured the disease, if these women become fruitful, he is warranted in considering the local disease the cause of sterility.

Again, in those cases in which sterility for years has ensued subsequent to tedious or instrumental labours, owing to the remains of uterine suffering; if this condition is found connected with local inflammation, and having been removed by treatment, if, in many instances, pregnancy again occurs, "am I not," exclaims Dr. Bennet, "warranted in considering the temporary sterility of these women occasioned by the temporary local disease?"

" If, on the other hand, I find women who are continually aborting or miscarrying, are generally suffering from symptoms of uterine ailment, and present, on examination, local inflammatory lesions, mostly inflammatory ulcerations, and if, on thoroughly removing these lesions, I find that a large proportion at once go to full time, and are delivered of live children, am I not warranted in concluding, that in these females the existence of the inflammatory disease was the cause of the abortions, and of the premature termination of the pregnancies?"

Dr. Bennet repudiates all figures, all statistical results, as compared with the results of his actual practice.

Next follows the repudiation of Dr. West's doctrine, that inflammatory ulceration of the neck of the uterus "rarely calls for special treatment;" and this topic is ably discussed under three heads:—1st. Are these lesions connected with the general break-down of the health, so constantly observed in the patients presenting them? 2ndly. Is their removal necessary for the recovery of health? And 3dly. Can they be removed without resorting to instrumental and surgical treatment?

Dr. Bennet then goes back, again takes up the question as to the existence of non-specific ulcerations of the cervix, and he adduces Dr. Tyler Smith's testimony in corroboration of their entity. It is worthy of remark, that Dr. Smith—according to Dr. Bennet—once, so late as 1850, supported many of the opinions of Dr. Lee relative to this subject; but it seems that he has lately published a work on Leucorrhœa, describing simple ulceration of the cervix, "in which," remarks Dr. Bennet, "the granular, bleeding, muco-pus-secreting surfaces, described" in a former publication of Dr. Smith's "as not constituting ulceration, as not deserving that appellation, are now carefully and minutely depicted as superficial ulcerations of the os and cervix uteri, and are distinctly stated to be the morbid change that immediately follows abrasions or excoriations of the mucous membrane."

Having alluded to the fact of the recognition of inflammatory ulceration of the os and cervix uteri in Edinburgh, Dublin, France, and America, Dr. Bennet then proceeds to examine the various doctrines that have, from time to time, been put forward as accounting for all those derangements of the uterus which, by Dr. Bennet, have been, and are, attributed to inflammation. Dr. Bennet mentions these theories under the following heads, thus:—The leucorrhœa theory, the syphilis theory, the ovarian theory, and the displacement theory.

According to the leucorrhea theory, it is presumed that the lesions and granular conditions of the os and cervix uteri have originated from the irritation produced by depraved secretions; the secretions themselves having been altered, or rendered unhealthy, by "some change in the enervation or nutrition of the uterus." Dr. Tyler Smith is the upholder of this theory, and its merits are next examined by the author. After fully describing Dr. Smith's theory, Dr. Bennet says:---

"Starting from these anatomical and physiological considerations, and extending his former idea, Dr. Tyler Smith assumes that a morbidly augmented secretion from the mucous glands of the cervical canal, occurring under the influence of general or local causes, is 'the most essential part of the disorder' in women presenting symptoms of uterine ailment, and is the cause of the mucous membrane lesions, and of their sequelæ, which are observed in prac-To this morbid condition, which he terms leucorrhœa, Dr. tice. Tyler Smith attributes the morbid changes which I and others have described as the evidence and result of inflammation; that is, congestion, erosion, well-marked ulcerating hypertrophy, induration, the functional derangements of the uterus, and the secondary sympathetic reactions which are observed in the cases presenting them. The word inflammation is so sedulously avoided, that a careful perusal of Dr. Tyler Smith's work, leaves in the mind a doubt, as to whether he admits its existence even as a secondary result of this mysterious entity, leucorrhœa."

This "attempt made to unite past and present pathology, by Dr. Smith, does not appear calculated," in Dr. Bennet's opinion, to overturn what Dr. Smith designates "the inflammation theory," viz.: that professed by Dr. Bennet. The latter asks:—What are the congestions of the capillary villi, the erosions, ulcerations, and hypertrophies, but inflammatory lesions?

"To say that they are symptoms of leucorrhœa is merely to evade the question; to answer by a word which, thus used, has no rational meaning; and yet, if Dr. Smith admits that they are in their intimate essence inflammatory conditions, why does he not frankly say so? In every part of the economy, in every tissue, they are considered by pathologists to be the symptoms, conditions, and sequelæ of inflammation; and to ignore this fact is to ignore the established laws of general pathology. Indeed, it would be just as rational to call inflammation, ulceration, and thickening of the mucous membrane of the throat, 'leucorrhœa,' as to give that appellation to these identical changes in the cervical and vaginal mucous membrane."

Dr. Bennet holds that the leucorrhœa doctrine of Dr. Smith's case may be proved unsound by "the general laws of pathology," for hyper-secretions or fluxes from mucous or glandular organs do not produce any changes in the structures over which they flow, "*apart from inflammation*;" inflammation being essential, to endow them with irritating properties. Familiar examples are given, as in the occasional hyper-secretions of the nasal and intestinal mucous membrane; if the hyper-secretion be unattended with inflammatory actions, the parts which come in contact with the secretion never become irritated; whereas, if they are accompanied by inflammatory action, the contrary is the case. "Inflammation has supervened both as cause and effect." As such is "the pathological law" in other organs, "it must hold good in the uterus."

"The morbid hyper-secretions of the cervical canal, and of the vagina, are in themselves innocuous, and only acquire irritating properties through the intervention of inflammation."

The term leucorrhœa, in Dr. Bennet's opinion, ought to be applied only to—

"Those forms of passive mucous hyper-secretion of the vaginal, cervical, and intra-cervical mucous membrane which often temporarily exist independently of inflammatory lesions, and independently of uterine ailment. These passive conditions of hypersecretion he looks upon as 'the reflex conditions of health,' which 'seldom come under the eye of the profession as distinct morbid states.'"

The next explanation offered for the occurrence of inflammatory uterine lesions is "the syphilitic theory," namely, that by far the greater number of these changes arise from secondary syphilis. This theory, it seems, had its origin in the French school of medicine, but we are informed that Dr. Tyler Smith considers "that far too little importance has hitherto been given to the connexion between secondary syphilis and obstinate leucorrhœa, with disease of the os and cervix uteri;" and that "there is a large amount of undetected syphilis in the works of Dr. Whitehead and Bennet." The latter, however, asserts that his opinions have not in any respect been modified by Dr. Smith's arguments, since the publication of the first edition of "Uterine Inflammation;" but, on the contrary, he feels convinced that Dr. Smith, and those who hold similar views, have very greatly exaggerated the influence of syphilis in the production of inflammatory lesions of the neck of the uterus. He says:—

"This view of the subject appears to be the natural result of a transition state of opinion. First, inflammatory lesions of the uterine neck are ignored, or denied; second, it being no longer possible to deny their existence, they are considered to be often syphilitic; third, their inflammatory nature is recognised as the rule, and their syphilitic nature is thought to be an occasional, but rare, occurrence."

Now, Dr. Bennet is one well qualified to give an opinion relative to the frequency or the contrary of the syphilitic origin of these lesions; he was, for the period of two years, house surgeon to the Hôpital St. Louis, the great receptacle for cases of skin disease in Paris, and into which are admitted numerous cases of secondary syphilis. Here Dr. Bennet was given to understand that ulceration of the cervix uteri was very common, and generally considered to be of a syphilitic character.

During the entire time of Dr. Bennet's sojourn in the Hôpital St. Louis, he made it a rule to examine the state of the uterine organs, and he was at first rather inclined to believe in the syphilitic origin of the lesions there seen, as a general rule; but it happened that previous to hisappointment at St. Louis, Dr. Bennet had studied uterine diseases at La Pitié, where are received a number of women who have been recently discharged from the Maternité, and who, as a general rule, are not affected with syphilis; and he "was struck by the similarity between the ulcerative states" he "saw amongst the syphilitic patients at St. Louis, and the ulcerative states" he "had seen amongst the non-syphilitic patients at La Pitié." It was this fact that first caused Dr. Bennet to doubt the secondary nature of these lesions, and led him to examine the question with great care. The results of Dr. Bennet's investigation were, first-that in the same individual affected with secondary syphilis these lesions had quite a different appearance from those seen in the throat. Second-That they did not, like secondary ulceration of the throat, yield to anti-syphilitic treatment. Third, that when the uterine lesion was left unattended to, and the anti-syphilitic treatment alone had recourse to, the syphilitic affection of the throat and skin disappeared, "but the uterine disease generally remained the same." The conclusion naturally arrived at by Dr. Bennet was, that syphilis was not the cause of the majority of those uterine lesions, but that, on the contrary, they were the result, for the most part, of simple inflammation, induced by the life which the patients had been in the habit of leading prior to their admission into hospital.

"If," remarks Dr. Bennet, "chronic, inflammatory, and ulcerative conditions of the uterine neck are, generally speaking, nonsyphilitic, even in those who are actually suffering from secondary syphilis, they are, \dot{a} fortiori, still more likely to be non-syphilitic in women who are to all appearance free from any syphilitic taint; and such I believe to be the case."

The ovarian method of accounting for the presence of these lesions might, at first sight, be presumed to be a very favourable one. Dr. Bennet, however, tells us, that, "unfortunately, the ovarian theory does not bear the test of experience." If symptoms of ovaritis be, "through sympathetic reaction," the origin of the uterine disease, he argues, that by treating the ovaritis, and overcoming it, we ought to remove the lesions supposed to be depending upon its existence; but this happens, in the majority of instances, not to be the case; on the contrary, it turns out that, by directing attention to the uterine lesions only, and overcoming them, in the majority of instances we get rid of the ovarian disturbance, and so experience proves the fallacy of the ovarian theory.

The displacement theory next occupies the attention of the author, and is discussed in the fullest manner possible. He argues against this theory, both from the consideration of the anatomical and physiological facts bearing on displacement, and from pathology and therapeutics; proving, to us, in a most satisfactory manner, that displacement is, for the most part, the epi-phenomenon of inflammation. He concludes his volume with a general summary.

When we first opened Dr. Bennet's essay, it was with a certain degree of apprehension, well knowing that disputations between the members of the obstetric branch of the profession, in particular, are, as a general rule, remarkable for the illiberal spirit in which they are carried on; we had not proceeded far, however, in our perusal, ere all our apprehensions vanished. This essay is remarkable, not alone for excellent composition, admirable arrangement, and lucid reasoning, but likewise for the calm, candid, and gentlemanlike manner in which the author has dealt with his opponents. So far as we are concerned, we have no reason to gainsay any of the conclusions arrived at by Dr. Bennet, deeming them, as we do, those of common sense, and such as are, for the most part, sanctioned by our own school of medicine. On that account we refrained from making any running commentary in the course of our attempt to give an idea of the author's views, and his arguments in their support as opposed to those of other writers.

In conclusion we may observe, that one of Dr. Bennet's opponents would do well to take a lesson from him, with respect to the tone and temper of his writings, and, like Dr. Bennet, endeavour to exercise his judgment—in this matter, at least—impartially, in accordance with the enlightenment of the present day, instead of evincing "an anxiety to crush the modern views of uterine pathology."

AMONG the many revelations of modern science, few have attracted more attention, or excited greater interest among naturalists, than the phenomena of Parthenogenesis; whether, with Owen, we regard this term as the appropriate designation of the alternation of dissimilar generations; or, with Siebold (and this, in our opinion, is the more correct), we restrict its application to the production of offspring "sine concubitu" from perfectly formed mothers. With regard to the former, Chamisso, as early as the year 1819, found in the Salpæ (a group of tunicated molluscs) that many species which are associated in long chains give birth to insulated individuals, which in their turn produce concatenated offspring; and these remarkable observations have been confirmed by all who have examined these and kindred forms; and from the researches of Sars, Steenstrup, Siebold, and others, we arrive at the conclusion, that, in many of the forms of lower existence, animals produce offspring, which at no one time of their development resemble their parents; but which, however, in their turn

On a true Parthenogenesis in Moths and Bees; a Contribution to the History of Reproduction in Animals. By CARL THEODOR ERNST VON SIEBOLD, Professor of Comparative Anatomy in the University of Munich. Translated by WM. DALLAS, F.L.S., &c., &c. London: Van Voorst. 1857. 8vo, pp. 110.

bring forth a progeny which revert in their form and nature to the parent animal, so that the maternal animal does not meet with its resemblance in its own brood, but in the descendants of the second, third, fourth, or even more remote degrees of generation; and this has been proved to be the case in many of the Medusæ, Claviform Polypes, Salpæ, many Entozoa and Aphides; and, according to the assertions of some naturalists, in all the lower classes of animals; so much so, that we cannot avoid inferring that many animals described as belonging to distinct species are but the alternate generation of known forms. The phenomena of alternation of generation differ essentially from metamorphic changes; in metamorphosis we have changes taking place in the same individual; while in alternation of generation, or metagenesis, different and many individuals arise and are separated from the parent; besides, in the course of metagenesis, in many instances metamorphosis also takes place. In metagenesis we observe that in one alternation are produced distinct ovaries and ova; in the others the development does not take place from ova, but by a process of gemmation; and in the isolated Salpæ, a remarkable organ (Stolen proligerum) has been described, whence are developed the catenated offsprings.

These facts have gone far to solve a difficulty felt by some opponents to the "development theory;" it has been stated by the ingenious author of the "Vestiges," that if animals have not been developed since the Creation, our first parents should have had deposited in their structure either all the human entozoa or their ova. The phenomena of metagenesis, however, may lead us to infer, that all human entozoa may be but alternate forms of those animals found in other creatures or elsewhere, and this is actually the case with one entozoon (Cysticercus fasciolaris) which in one form is found in the cat, in another in the rat or mouse. In true parthenogenesis phenomena of a totally different nature are exhibited-phenomena, the belief in the occurrence of which, did it rest on individual or questionable testimony, would gain but slight assent among the learned, but when we find such an array of names of naturalists who have mainly contributed to the advancement of natural science, all bearing testimony to the facts as related by Siebold, we cannot withhold our belief, that in many cases perfect offspring can arise "sine concubitu," from animals fitted for a union of the sexes, and that in one species of insects at least the sex of the offspring depends on the entrance of spermatic filaments into the egg.

In the study of this most interesting work, we are struck

with the circumstance, that science is often retarded by general or sweeping assertions, although emanating from high authority. When Castellet, in 1795, reported to Réaumur, that he had found that a moth of Bombyx mori (silkworm) laid perfect eggs, though unimpregnated, he received the laconic reply-"ex nihilo nihil fit." How different in a similar case was John Hunter's reply—"But did they hatch?" for naturalists have long been familiar with the circumstance that unimpregnated females will sometimes lay eggs; but these have hitherto been supposed to have been invariably incapable of being developed into a perfect animal. A common example of this is the occurrence of pullets' eggs, but these are notoriously incapable of being developed by incubation. At first blush we might be led to infer that reproduction without fecundation was impossible, so contrary does it appear to the usual course of nature, both in the vegetable and the animal kingdom. We observe what careful precautions are taken that the spermatozoa should reach their proper nidus uninjured: how many provisions are found to hedge around the safety of the pollen! Exceptional cases, however, do occur in the vegetable kingdom. The Cælebogyne, for instance, a dircious plant from Australia, has produced fertile seeds at Kew, although the female only is known to botanists; and M. Lecoq has deduced from some experiments of his own, that similar phenomena occur sometimes in hemp, spurge, &c. Our author seems to have been fully aware of the great caution required in carrying on an investigation of this kind, and to have devised his experiments accordingly.

In his introduction he describes the seminal receptacle found in female insects. The existence of such a receptacle in bees, 'explains how it is that a queen, fertilized by a single coitus, after discharging a number of eggs in the first year, may again, in the following year and still more subsequently, lay eggs capable of development, because the seminal filaments are preserved in this receptacle uninjured, and in a quantity sufficient for successive broods. Siebold reviews at length the cases of alleged true parthenogenesis or "Lucina sine concubitu," which are to be found recorded by many observers, and shows that errors may have occurred in the observation of these cases; one of the earliest on record is that of Albrecht, who in 1701 wrote a treatise---" De insectorum ovis sine prævia maris cum femella conjunctione nihilominus nonnunquam fœcundis." He took a brown pupa, which he preserved apart, and yet the moth evolved therefrom laid fertile eggs. He says :---" Cum masculum huic papilioni haud adfuisse certus essem, et propterea ejus ova subventanea et sterilia esse judicarem, vix am-

plius eorum habui rationem relictis interim iisdem oscitantius et sine omni cura sub dicto vitro per totum tempus hyemale." Dr. St. Blancard is stated, too, in 1696, to have had a spider which for four consecutive years laid eggs from which young spiders escaped, "although no male spider had ever appeared in the business." Dumeril, Bernoulli, Treviranus, Burmeister, and others, have made similar observations, but in all these instances the possibility of mistake has been shown by Siebold. This author then enters upon experiments which he performed on some sac-bearing Lepidoptera, particularly Solenobia lichenella and triquetrella, and by taking every precaution he convinced himself, and doubtless his readers also, that true parthenogenesis occurred in Psychides. Examples in the honey bee next came under his notice, and in these investigations he was greatly assisted by the distinguished apiarian, Dzierzon. From accurate observations of the habits of bees, as well as from careful dissections, Dzierzon arrived at the singular conclusion, that drone eggs require no fecundation, and that true parthenogenesis is normal in these insects.

In the "Bienenzeitung" of Eichstadt, 1845, he thus expresses in the following numbers, that the queen (female bee), to become good for anything, must be fertilized by a drone (male bee), and that the copulation takes place in the air,-I express the conviction, from which all phenomena and mysteries may be perfectly explained, that the drone eggs do not require fecundation; but that the co-operation of the drones is absolutely necessary when worker bees are to be produced." Again-"In copulation the ovaries are not fecundated, but the seminal receptacle, that little vesicle or knot, which in the young queen is filled with a watery moisture, is saturated with semen, after which it is more clearly distinguishable by its white colour; the activity of the ovaries in the normal state commences only after copulation, but it is not necessarily caused thereby; hence many unfecundated queens lay no eggs at all, while others lay only drone eggs; and even workers do the latter, although, from their want of a seminal receptacle, I regard them as quite incapable of copulation. I am convinced that such eggs are sufficient for the production of drones, whilst the egg from which a queen or worker is to be developed must come in contact with the seminal receptacle." In another place he thus writes:---" The queen has it in her power to deposit an egg just as it comes from the ovary, and as the unfecundated mothers lay it; or, by the action of her seminal receptacle, to invest it with a higher degree, a higher potency of fertility,

and awaken in it a more perfect being, namely, a queen or worker."

Baron v. Berlepsch, of Seebach, has also contributed much to establish this theory of Dzierzon's, and by liberally placing his hives, furnished with Dzierzon's movable comb-supports, at the service of Siebold, enabled the latter fully to confirm Dzierzon's views. Baron v. Berlepsch also performed three experimenta crucis: in the first he contrived the exclusion of a queen at the end of September, when there were no longer any males, and this queen, early in the ensuing year, furnished 1500 cells with a drone brood, the subsequent accurate dissections of Leuckart proving that this queen was a virgin. The second experiment exhibited considerable ingenuity. Knowing that a high or a low temperature causes the movements of spermatozoa to cease and become inert, he subjected a queen to a very low temperature in an ice-house; she recovered, and afterwards laid thousands of eggs, yet from all these were only males evolved. The third experiment was performed with the crossing of Italian and German bees. These, although of the same species, are found to differ most remarkably in appearance and disposition, and in the mixed breed which resulted, the drone offspring without exception presented the same variety as the queen-mother, thus affording a very strong negative proof that drone eggs do not require the interposition of the male bee. This matter has, however, been subjected to further proof by Leuckart and Siebold, for they examined freshly laid eggs, and in numerous instances they detected spermatic filaments in or on worker-eggs, while none could be found in drone-eggs. The experiments of Siebold upon this point seem to have been conducted with great nicety and care. He says:---

"I soon convinced myself that there was no possibility of discovering the delicate seminal filament between the granulo-vesicular yelk-masses, the linear object to be sought for was too subtle to be capable of discovery with certainty amongst the many mutuallycrossing outlines of the yelk vesicles; after various vain endeavours to render the interior of the bee's egg accessible to the inquiring eye, I came at last to the idea of employing an artifice which I had soon acquired by practice, and which allowed me to survey at least a portion of the inner space of the bee's egg quite gently with a very thin 'glass plate, and so that it was ruptured at its lower pole, opposite to the micropylar apparatus, and the yelk gradually flowed out at this spot, by which a clear empty space was produced at the upper pole within the micropylar apparatus, between the egg-envelopes and the yelk which was retiring downwards."

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Having thus microscopically examined the new-laid eggs of bees, he arrives at the following conclusion:—

"Amongst the fifty female bee-eggs examined by me with the greatest care and conscientiousness, thirty furnished a positive result; that is to say, in thirty I could prove the existence of seminal filaments, in which movements could even be detected in three eggs; of the other twenty eggs twelve were unsuccessful in their preparation."

There was some difficulty in procuring drone-eggs for the purpose of examination, as the season was late; however, as Baron v. Berlepsch spared neither trouble nor his hives (of which he had 104 in his bee colony), twenty-seven drone eggs were procured, and of these the author states:---

"I examined these twenty-seven drone-eggs, which might have been about twelve hours old, and which agreed perfectly both in their appearance and organization with the female eggs, with the same care and by the same method with which I had treated the female eggs, and *did not find one seminal filament in any single egg*, either externally or internally."

Three of these only were unsuccessfully prepared, and the same queen, both before and afterwards, laid eggs from which worker bees were developed.

In the latter part of his work Siebold enters on the consideration of the occurrence of true parthenogenesis in the silkworm moth, and details some very interesting observations on these insects. On a patient review of this subject, we can hardly withhold our assent from the propositions laid down by the author, and these views are considerably enforced by the strange facts detailed by other observers in regard to the prevalence and the absence of one or other sex among insects. Leon Dufour has stated, for example, that he never obtained a male insect of *Diplolepis gallæ tinctorum*, of the genus *Cynips*.

A priori we should say, that this was a topic from which we could expect nothing of practical utility or industrial application, and yet we are told that Dzierzon and others in their bee colonies have turned it to material advantage.

An Introduction to Clinical Study; or, an Interpretation of Symptoms and Signs. A Manual adapted to the Use of the Hospital Student. By the late A. G. MALCOLM, M. D., &c. Belfast: Greer. 1856. 8vo, pp. 150.

THIS little posthumous work is the first part of a comprehensive design which the lamented author had in view for the purpose of simplifying the study of clinical medicine, and as a help, especially for students. At the time of his premature decease the present portion of the undertaking was well nigh through the press, and, as stated in the preface, "his friends thought it was due to his memory, and might not be altogether unacceptable to the profession, and the medical student for whom he had so long and unremittingly laboured, that the present volume, with its unavoidable defects and imperfections, should be given to the public."

While this volume cannot be said to add much to our knowledge in interpreting the "symptoms and signs" of disease, it certainly gives a very clear outline of those features which indicate certain morbid changes; and thus the student, especially, will be guided in forming a correct diagnosis, or, at least, will be assisted in making a true "interpretation" of the "symptoms and signs" which may be present; and the busy practitioner will find many useful hints in its pages, and will be led to mark several important matters in the examination of a patient which he might otherwise not observe: and who will deny that it is often of very great moment that no point should be overlooked.

In this brief notice it would not be possible to convey a very accurate idea of all that the volume before us contains, but we may state the heads under which the author has arranged this Introduction to Clinical Study :-- First, he considers "the general appearance" which the patient presents, the points which likely strike the physician at his first visit, and the inferences which the practitioner will probably draw from the inspection. Among the most prominent symptoms in the general appearance to which the author refers are, the complexion of the patient; his expression of face; the manner and position; the tone of voice and speech; the eye; the respiration; the pulse; the tongue; the state of the blood, as it appears within its vessels, as withdrawn from the system, and as viewed through the microscope; the skin; the strength; the general feeling; and the sleep: to each of these individual points he devotes considerable attention, and directs attention to each one, which affords material guidance. Having thus discussed the various points to be observed in the "general appearance," he passes on to consider the interpretation of derangements of the nervous, respiratory, and circulating systems; derangements of the digestive processes and of the urinary functions; and then examines derangements of the female reproductive system, and of the skin. Thus, it will be seen that this little volume embraces a very wide field indeed in the study of clinical medicine. Under the several heads into which the subject has been divided, the author notices the various symptoms and signs which belong to each, and points out their practical value and importance, but, as the publication was designed more especially for the use of hospital students, he has not gone into those minutiæ which are found in the treatises and monographs which refer to these questions; still, as we have already said, both the student and practitioner will find much valuable information and many useful hints, in a condensed form, in this little book, which we recommend to the notice of our readers.

We shall now give an extract, for the purpose of showing the manner in which the author has treated his subject: and first, of cough, as a symptom :---

"Cough is, perhaps, of all the symptoms of derangement of the respiratory organs, the most common in pulmonary disease; at the same time we shall find that it may exist in the case of perfectly healthy lungs. Cough is a violent, rapid, expiratory effort, and may be voluntarily produced. It arises from irritation, either direct or indirect, of the sensory nerves of some part of the respiratory structures. The least irritation of the larynx or glottis instantly brings on a fit. The membrane of the trachea is less sensitive; while, in health, the deeper-seated parts of the tube seem but ill supplied with sensory nerves, yet, under disease, even these parts acquire an unusual degree of sensibility. Cough, then, may be excited by direct irritation of the sensory nerves of the mucous membrane in health, and, to a greater extent and degree, in disease. But it may have many other sources; thus: irritation of neighbouring parts, as the parenchyma (by deposits), the pleura, diaphragm, the stomach, the liver, and tumours pressing upon the lungs. These, however, are not by any means constantly so irritated as to induce cough; hence, absence of this symptom would not argue the absence of disease in any of these organs or parts, even the pulmonary parenchyma, or pleura.

"Cough varies in many ways. Thus, it may be various from differences in—1. The source of irritation; 2. The degree of sensibility in the part irritated; 3. The character of the cough itself; i. e. the degree and state of the muscular contractions; 4. The state of the bronchial membrane.

"Cough of a constant, hacking kind (almost without expectoration) may arise from elongated uvula; if produced only on attempting to swallow, from disease of the coophagus or pharynx; if suddenly suffocative, and for a time in rapid succession, it is irritation of the larynx. If acutely painful, we must look to the pleura, or for a fractured rib, or other injury. If convulsive, it is usually a form of nervousness, or some sympathetic irritation. If it shakes the entire frame, is anticipated with great dread, shrieking, and rapidly successive, it is hooping-cough. Dry cough is usually nervous, or pleuritic, or noticed in the first stage of pneumonia, phthisis, and bronchitis, besides diseases of the neighbouring organs, as the stomach, liver, gall-bladder, and all cases of reflex pulmonary irritation, as from worms. The humid cough is a symptom in catarrh, and other forms of bronchitis, especially the winter cough of old persons, the softening of tubercles, and pneumonic suppurations. A difficult cough is one which is painful, and unrelieved by any expectoration. It is noticed in acute stages of pneumonia, bronchitis, and phthisis. A long-continued cough is either The cough is wheezing in chronic, inflammatory, or tubercular. bronchitis, and hooping in pertussis, croup, and laryngitis, and arises from narrowing of the pulmonary tube. It is barking, or hollow, in *chronic bronchitis* and *hysteria*. The paroxysmal cough is heard in cases of asthma, softening, and cavities, in tubercular disease; hooping-cough, in which the intermissions are nearly perfect; and in chronic bronchitis. A chronic hoarse cough denotes ulceration of the larynx; a croupy cough, congestion or plastic inflammation, when not nervous.

"Cough has various indications, according to age. Thus, in the infant, if short, caught, distinctly obstructed, it probably marks pneumonia; if constant, but free, bronchitis. In the child it is usually bronchitic, pleuritic, or sympathetic from abdominal irritation. In the adolescent female it may be bronchitic, hysteric, or from uterine irritation. In the adolescent male, phthisis should be looked for. In mid-age, pneumonia, pleurisy, and bronchitis, generally: and in females, the state of the digestive organs may be inquired after. In the old—if chronic—bronchitis, emphysema, asthma, and heart disease, are the most common causes.

"When cough is short, painful, and attended with livid lips and a brown congestion of the cheeks, look out for pneumonia. When hacking, frequently paroxysmal, frequently dry with flushing and perspiration, phthisis should be suspected. When there coexists frontal headach, aggravated by the cough, which is wheezing and constant, but increased by accumulation of phlegm, by atmospheric changes, and on retiring to or leaving the bed, some form of bronchitis is present. Cough, induced only in certain positions, is of some diagnostic value. This cough, brought on by turning on one side, is noticed in lesions of the pleura, or parenchyma of the inferior lung. Cough induced by keeping the head low is noticed in hydrothorax, pericarditis, and other diseases of the heart, and in *ascites.* Cough induced in suddenly rising up, or in any sudden movement, is observed in bronchitis and phthisis, and arises, in great measure, from the displacement of accumulated mucus. Cough that induces pain of the head is usually bronchitic; pain of the abdomen, peritonitic; pain of the side, pleuritic, pneumonic, hepatic, or splenic. Cough that completely intermits is either *pertussis*, hysteric, or reflex; seldom bronchitic, save in the very advanced stages."

The preceding extract gives a very fair idea of the manner in which the author has treated his subject throughout, showing the value he wished to be placed upon a symptom or symptoms in diagnosing any disease, and how any single symptom may denote several morbid conditions, and hence the necessity for a strict examination of all the signs and symptoms present, a careful analysis of the whole, and the due regard to be had in comparing and estimating the value of each. We trust we have now adduced enough to recommend this "Introduction to Clinical Study" to the favourable consideration both of students and of the practitioner. To the former it is peculiarly adapted, and should be duly appreciated by them, as the production of one who laboured long and earnestly for their advantage, and whose untiring industry, singleness of mind, and genuine philanthropy, have left a noble example, well worthy the imitation of all.

We cannot close this brief notice of the last work upon which this gifted physician was engaged, without expressing the deep sorrow we feel, in common with every one who had the honour of his friendship, for the great loss which the profession has sustained by his premature death. Few men of his standing have evinced such a persevering research in the wide field of medical science; and none have pursued such investigations from more disinterested and philanthropic motives. Of him it may be truly said that he loved his profession for itself, in the lasting opportunities which it afforded him for storing his mind with useful knowledge, and of benefiting his fellowmen. Like many other estimable members of the profession who have passed away ere their sun had attained the meridian, the morning of his life gave promise of a brilliant day; and that promise was in full progress towards being rapidly fulfilled, when, alas! the overtaxed frame succumbed, and he sank, a victim to that very disease to which he had devoted a large share of his research, and the characteristics of which he had rendered familiar to his pupils and many of his younger Had he been spared, he would not only have enbrethren. riched the medical literature of our land, but he would have

taken a leading position among the ablest practioners of the country: his fate has been otherwise; yet, while we deplore his early loss, we can, with feelings of satisfaction and friendly pride, point to his name as ranking among the host of noble men, who have been an honour to their profession and to the land of their birth.

Cranial Presentations and Cranial Positions; Suggestions, Practical and Critical. By R. W. WEST, M. D. Glasgow: Mackenzie. Reprinted from the Glasgow Medical Journal. Pamphlet, pp. 60.

THIS pamphlet has been reprinted from the Glasgow Medical Journal for October and January last, where probably many of our readers may have read it with as much interest as we did. It is an attempt to place our knowledge of the mechanism of cranial positions and presentations on a more distinct footing; to explain the different views held by writers on the subject; and to correct certain errors into which they have fallen. We shall not attempt to follow the author in his criticisms upon the views of others, but briefly lay before the reader his own. The first point in which he differs from other observers is in making the ear the landmark by which the position of the head is determined, in its relation to the pelvis; other writers take one or other fontanelle. He makes four positions: in the first, the right ear is near the symphysis pubis, the occipital end descending first in the axis of the brim, and finally coming round to the arch of the pubes by the left side, i. e. the ordinary first position of British authorities. In the second and most frequent position, the left ear is near the symphysis pubis, the occipital end of the head descending, and coming round to the arch of the pubes by the right side. The third position shows us the left ear near the symphysis pubis, the frontal end of the head descending in the axis of the brim, and finally coming round to the arch of the pubes by the right side. And in the fourth position the right ear is towards the symphysis pubis, the frontal end of the head descending, and finally coming round to the arch of the pubes by the right side. The relative frequency of these positions is based upon 481 cases, carefully observed by the author; of which 306 were in the first position, 151 in the second, 15 in the third, and 9 in the fourth.

From this it is clear that in the large majority of cases the occiput will emerge under the arch of the pubes; but it is quite as clear that in the minority of third and fourth positions the forehead will pass under the arch, and not, as has been described, change into the second and fourth. That there is reason for further observation we do not question, and perhaps the deservedly great authority of Naegelè may have commanded too implicit acquiescence in his statements. For those whose experience and observation qualify them for judges, Dr. West's investigations will have a peculiar interest.

The second part of the pamphlet consists of unclassified and abnormal positions, exhibiting the same acute criticism, and illustrated by cases carefully observed; and in an appendix we have extracts from the author's registry, showing the frequency of these positions, and the minute progress of the head in the different varieties. As illustrative of the author's theory we have four interesting plates. Without pronouncing any decided opinion upon the correctness of the views herein promulgated, we can nevertheless recommend the pamphlet to the careful consideration of our readers.

The Prostate Gland, and its Enlargement in Old Age. By DECIMUS HODGSON, M.D. Edin., M.R.C.S. Eng., Demonstrator of Anatomy to the University of Glasgow. London: Churchill. 1856. Royal 8vo, pp. 84.

To be successful in the composition of a prize essay necessarily carries a powerful prestige in favour of the author, as it must always imply a degree of information far above mediocrity. Besides, it must pass through an ordeal trying in the extreme. as it must be amenable to the criticism not only of the many, but likewise to the not always strictly generous cavillings of the unsuccessful few, who, as competitors, may have entered the lists to struggle for that palm of victory which a more fortunate rival may have succeeded in obtaining. Those literary defeats are invariably attended with that sense of intellectual inferiority which few indeed are willing to admit, and the mortification resulting from such a cause is most commonly accompanied by such feelings of bitterness as completely to overshadow all those generous sentiments which, under different circumstances, it would be our chiefest pride to manifest even to our most acknowledged opponent. Still, however, whilst labours of this description must be always attended with those social disadvantages which it would be difficult to dispute, yet they are, at the same time, endued with certain as obvious advantages, equally as impossible to be controverted. In the first place, they are eminently calculated to awaken and

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keep thoroughly alive that spirit of emulation without which the most laboured attempts at composition will always be marked by a certain degree of dulness and insipidity, but too apparent to the general reader,-deficient as, in such a case, they must necessarily be in that exciting tone of enthusiasm, which can breathe its own fire into the driest subject, and thus invest it with a sufficient interest to secure an attentive and continuous perusal. The ambition of the youthful aspirant for literary distinction here finds ample scope to expand itself, and labour, toil, and midnight vigil become to him but a secondary consideration, while supported and upheld by the glimpse of that distant reward which he confidently expects to obtainvalueless in the eyes of the many, but to him invaluable-the approbation and encouragement bestowed on his exertions by the few whose position and acquirements are such as to confer a weight and importance on the decision which emanates from their lips in favour of superior merit. Secondly, competitive compositions must always argue a certain perfection and completeness, rarely to be met with in productions of a different The apprehension of successful rivalry stimulates the stamp. mind like a watchful sentinel, and facts apparently trivial, which under ordinary circumstances might have been overlooked or carelessly slurred over, are now closely examinedtheir bearing on the point at issue accurately weighed and determined, and many which, at the first casual glance, might have appeared totally undeserving of more than a slight and passing comment will repeatedly eventuate in forming the nucleus of an ingenious theory or powerful argument in favour of some hypothesis conceived years before, but which was suffered to lapse into oblivion from want of this very confirmation in its support. Indeed, we consider it hardly possible to define distinctly the actual value of this species of writing as applied to the real advancement of the medical profession generally; and, slow as our public Boards have shown themselves in availing themselves of its employment as a practical test of efficiency, still, the very fact of its adoption even in a comparative degree by those bodies, so proverbially averse to every kind of change, so wedded to old and obsolete customs with such a pertinacious bigotry as to appear to have been placed in their several positions designedly for the purpose of acting merely as obstructives to every species of rational improvement, must always stand as one of the most incontrovertible proofs of its substantial and intrinsic excellence.

We have before us at the present moment one of those prize essays, written by Dr. Decimus Hodgson. The nature and ultimate design of the work may be at once clearly understood by the two paragraphs of its preface, which we quote:—

"The following monograph is principally founded upon my Inaugural Dissertation, on graduation, to which a gold medal was awarded by the University of Edinburgh in the year 1855.

"I have endeavoured to lay before the reader, in some detail, an account of the healthy anatomy of the prostate, and the morbid changes which it undergoes in old age."

On those grounds, dictated by himself, we will now proceed to examine how far the author has succeeded in achieving the purpose he has proposed—previously premising that the first few pages are occupied with a general description of the gland, followed by a very clear and intelligible explanation of the steps to be pursued in order to acquire a precise idea of the character and relative anatomy of this important organ. At page 10 we accordingly find its description thus given :—

"The prostate occupies the middle line of the body in the front part of the pelvic cavity; it is placed behind the pubic arch, and half an inch, on the average, intervenes between the upper surface of the gland and the lower border of the pubic bones at their symphysis; the distance varies, however, somewhat according to the dimensions of the pelvis, the size of the gland, and the extent to which the bladder may be distended. In children and boys it is placed almost vertically in the pelvis, and gradually obtains its oblique position as life advances. The anterior true ligaments of the bladder, consisting of the strong anterior portion of the pelvic fascia, are attached to the lower margin of the pubic bones on their posterior aspect, and pass backward on the upper surface of the prostate to the neck of the bladder; they are separated from each other by a median interval or depression, which corresponds to the position of the dorsal vein of the penis, after it has passed into the pelvis, and is about to subdivide to form the prostatic plexus of veins; the ligaments cover in this plexus and send processes between the individual veins to join the capsule immediately surrounding the prostate; at the neck of the bladder the anterior true ligaments become united to the fibrous tissue of that part, and give origin to the middle longitudinal fibres of the muscular coat; or, as some have more correctly expressed it, the ligaments serve as a medium of insertion of those fibres to the pubic bones. The levatores prostatæ are a pair of muscles which arise on each side from an oblique line on the posterior aspect of the pubic bones, and proceed downwards to expand on the sides and lower surface of the gland in the manner of a sling. The deep layer of the triangular ligament of the pelvis is one of the divisions of the pelvic fascia; it is attached to the arch of the pubes above, and to the rami of these bones, and a

portion of the rami of the ischia latterly; below, it degenerates into a layer of cellular tissue which expands over the external surface of the levator ani muscle; this fascia, although connected with the bones above mentioned, is not intimately united with the periosteum covering them, as is the case with the anterior layer, but is continuous with the obturator division of the pelvic fascia; it is pierced immediately below the pubic arch by the dorsal vein of the penis; the prostate lies behind it, and receives from it, about an inch below the pubic arch, a prolongation which is continued backwards, and amalgamates with the capsule of the gland; this layer may be said to form the deep division of the prostatic capsule, above which the plexus of veins are placed; this prolongation of the fascia over the prostate, as the urethra leaves the gland, is an arrangement whereby the canal passes through a firm membrane, without the disadvantage of having a defined edge surrounding it at that part. The lower surface of the prostate lies on the anterior surface of the middle third of the rectum, its apex being found, on examination from the gut, to be an inch and a half or three-quarters from the anterior margin of the anus, and its base about two and a half inches from the same point; the apex of the gland is separated from the rectum by a slight cellular interval as the gut turns downwards and backwards to reach the anus. If the bladder be empty, or nearly so, the position of the gland and its relation to the rest of the urethra may be ascertained in the living body by passing a catheter into the bladder, and examining the parts by means of the forefinger in the rectum; the finger will detect in front the course of the instrument, covered, but not masked, by the bulb of the urethra; beyond that, the catheter may be felt somewhat more distinctly in themembranous portion of the urethra; and behind this the prostate will be discernible as a slightly prominent body, merging in front and behind into the neighbouring structures; if the bladder be full of urine, the prostate is masked by the distension."

We have extracted the entire of this article, as it furnishes a decisive proof of the author's capability of dealing with a part of the anatomy of the human body admittedly complex, and of a character so difficult as to render a description of it, so conveyed as to be intelligible to the general class of readers, by no means an easy task. No doubt, the petty caviller at minute faults might be enabled to discover a point or two on which to exercise the peculiar bent of his disposition, by marking with his decided reprehension a few trifling, isolated instances, not exactly in accordance with the received views on the subject; but the candid mind will be as equally prompt to acknowledge that the undoubted excellence of the whole is more than sufficient to atone for any trifling fault that may have incautiously crept into a mass of composition of the intricate nature of the one before us. "To obtain a correct idea of the urethra as it exists in the erect posture of the living body, the dissected pelvis ought to be supported by blocks in such a manner that the tips of the coccyx may be on a plane half an inch or so higher than the lower margin of the pubic arch, and the internal surface of the pubic bones look upwards as well as backwards, &c., &c."

The suggestion conveyed in these few lines is really excellent, for the method, as at present generally pursued, is certainly calculated to imbue the junior student with a very erroneous idea respecting the actual position of parts in their natural condiction; and every one is fully sensible of the difficulty of eradicating from the mind a wrong impression received at this period, when once firmly implanted. When, however, it can nearly in all instances be at the moment obviated by the simple means here detailed, we conceive that the mode recommended should, where practicable, be always adopted and acted upon.

To those really anxious to acquire a proper idea of the prostatic portion of the urethra, we would strenuously advise a perusal of the author's article on this subject, as it is one so very plain and precise in all its details as to be easily comprehended by the most limited capacity. Precisely the same remark will apply to the anatomy of the prostate itself; and in this portion of the work we are happy to observe that he has called especial attention to a fact generally believed, but unquestionably void of any direct foundation to rest upon-we allude to the lobular arrangement of the gland, which it is usually said to possess; a condition certainly indistinctly defined in the numerous specimens that we have had very frequent opportunities of observing-the truth appearing to be, that they are so blended and fused with each other as to set at defiance any attempt at accurate division. He has, in our opinion, very clearly explained the grounds on which the error commenced, and why it has been hitherto propagated in almost every work on the subject, so as repeatedly to puzzle and confound the efforts of the junior student in his fruitless struggles to delineate satisfactorily the so-called lobes, which are pictured so precisely in the pages of the practical anatomist:-

"The lobes of the prostate are usually described as three in number: two lateral and one middle lobe. Not that there is any particular lobulation to be observed in the general contour of the adult gland, but partly because in the fœtus and certain animals there are observed two distinct lateral lobes which in man are joined together in the middle line, and completed by the growth between their posterior extremities of the third lobe; and partly because the enlarged gland presents, in many cases, a lobulated appearance on its urethral aspect, having the character of two lateral lobes, and a middle lobe intermediate between them at the neck of the bladder, &c."

His description and relative anatomy of the middle lobe is so very excellent that we are tempted to extract it:---

"The third or middle lobe deserves, on many accounts, a particular consideration. It performs the part of the 'isthmus' in connecting the posterior extremities of the lateral lobes together, in the space contained between the neck of the bladder and the termination of the ejaculatory ducts. Above, it is bounded by the neck of the bladder and the contiguous portion of the urethra; below, and in front, it lies on the ejaculatory ducts and utricle; laterally and anteriorly it is inseparably connected to the lateral lobes, and their isthmus; and posteriorly it bulges out between the lateral lobes, in the form of a white rounded mass when it is of unusually large size. In persons under twenty years of age, with healthy prostates, the middle lobe is not usually found to protrude between the extremities of the lateral lobes."

Sir Everard Home unquestionably deserves the full credit of having first accurately described this portion of the prostate; and, no matter how many others may have cursorily alluded to it, to him only is due all the honour of having considered it with that degree of attention sufficient to invest it with that amount of pathological interest as to render it a subject of paramount importance to the practising surgeon.

At page 25 is given a description of the utricle or Weberian body, and we are induced to allude to it only because from the context it might be inferred that it was an organ always easy to be demonstrated in the substance of the prostate. Now, such an impression would be highly erroneous, and frequently produce disappointment; for, unless the gland to be experimented on be extremely recent and taken from a young subject, the cavity in question is most difficult to be detected, and will sometimes elude the closest research. That it may, under very extraordinary circumstances, entangle the point of a catheter, and thus be attended with very serious consequences to the patient, there can be no doubt; but we quite agree with Mr. Hodgson, that such an event is very improbable, more especially when we consider the extremely minute size of the orifice leading into the cavity, with its position and direction so completely opposed to the course which the beak of the instrument would naturally pursue, after passing the curvature invariably found to exist at the membranous portion of the urethra.

At pages 33 and 34 we are favoured with rather a copious

account of the size of the prostate at the various periods of life from infancy to puberty-a subject not only curious in its details, but likewise possessed of some real practical interest to the surgeon, owing to certain operations in which it might be a matter of some moment to determine, at least approximatively, the bulk of this organ at a definite period of existence; but in the adult, or the individual more advanced in life, we can conceive nothing more utterly futile than the attempt to reduce to one common standard the size of the gland as existing in the great mass of mankind. The very diversity of opinion which prevails on this subject, and this amongst authorities of the highest class, coupled with the extreme liability to variation in development, as exhibited in different individuals in the other appendages of the generative system, ought to be quite sufficient to teach us the absolute impossibility of assigning any definite limit to the capacity of the organ as far as actual dimensions are concerned; and we can with perfect safety assert, that in the four last subjects that came beneath our notice, and that very recently, this remarkable difference in size was so strikingly obvious as to lead us immediately to the conclusions stated above.

At p. 35 Dr. Hodgson states :--

"The prostatic secretion, as it is seen in the dead subject, is of an opaque, milky appearance, and more or less viscid in different specimens. It consists of a serous fluid, holding in suspension molecules, granular globules, and epithelial particles of the squamous and columnar varieties; indeed, its minute character presents nothing peculiar."

After quoting the view of Haller, "that the prostatic secretion is added to the seminal fluid merely to increase the expulsive force," the author thus continues:—

"Nothing has since been added to our information on this point, excepting the observation made by Mr. Adams, that the fluid is uniformly acid after death; and the suggestion that this acidity may aid to preserve the fluidity of the alkaline semen."

We are glad that this opinion of the author so completely coincides with our own, in which we have never hesitated to express our conviction that we are totally ignorant of the functions and uses of this particular organ, the elucidation of which might profitably employ the time and attention of the physiologist, ultimately leading to some important result, perhaps rendering its mode of treatment, when in disease, more rational and less empirical than it is at present. We must pass over the remainder of this chapter, as well as the succeeding one, which treats especially of the process of healthy micturition. Both of these will, however, amply repay the reader for their perusal; and near their termination he will find his attention drawn to the long discussed question respecting the mode in which the urine is normally retained in the healthy bladder, with the opinions entertained by Bell, Guthrie, and Handcock, on this confessedly intricate subject. We must, however, candidly admit, that we are inclined to give in our adhesion to the views propounded by Mr. Guthrie, as being, at least, more plain and intelligible in their nature than the subtile but certainly ingenious theories advocated by Mr. Handcock.

Having fairly disposed of the anatomy of the prostate, and considered its function and structure, as far as they are at present understood, Dr. Hodgson next proceeds to investigate that peculiar form of disease to which it is so especially liable at certain periods of life; alluding, of course, to that remarkable increase of development which, interfering with the offices of the urinary apparatus, must naturally terminate in an uninterrupted and intolerable course of suffering, sufficient to render the life of the wretched patient a positive burthen to him. One of those forms of disease, known by the name of parenchymatous hypertrophy, is thus described by the author:—

"This affection is usually traceable to stricture or inflammation of the urethra of long standing, stone in the bladder, or some such source of irritation acting upon the neck of the bladder and prostatic urethra, and setting up chronic inflammation of the gland. The disease is not of such a nature as to enlarge the prostate to the same extent as is found in glandular hypertrophy; the prostatic urethra is not distorted or altered to any remarkable degree, although the bulk of the gland may be increased to twice its usual volume, or more.

"On section, the substance of the prostate is found to be condensed and fibrous; the cut surface being dotted with numerous minute yellowish granulations, the glandular vesicles imbedded in the thickened interglandular tissue; each of these is attached by a sort of pedicle, consisting of its ducts and vessels."

This affection of the gland would appear, according to the investigations of Dr. Jones, to depend principally upon an hypertrophy of its muscular elements; but the author, with great candour, admits his inability to explain the causes that produce this effect. It is, however, fortunate that this form of disease is amenable to treatment,—the exhibition of iodine, and the application of the proper remedial measures to the primary affection, being always capable of insuring a permanent cure. The same remark will not, however, apply to the true glandular enlargement so frequently met with in old age; and, here displaying not the slightest hesitation in honestly avowing his own conviction respecting the extent of our present knowledge on this important subject, at p. 47 he says :—

"Minute anatomy does not disclose anything peculiar in the character of those enlargements; the condition of the glandular structure appears to be even less altered, as seen under the microscrope, than it does to the naked eye. More extended observation may detect greater changes than we are at present acquainted with; for the present it is sufficient to state, that the most experienced pathologists have failed to discover anything whereby this structure of the hypertrophied tissue may be distinguished with certainty from the normal gland."

After an avowal so candid, it would be idle indeed, on our part, to institute a critical examination of this portion of the work, as it can only be regarded as a resumé-and an admirable one it undoubtedly is—of all that has hitherto been written on the subject; but still it is our firm belief that no one, however extended his information may be, could possibly rise from the perusal of those pages without having profited largely from the valuable hints interspersed throughout nearly every sentence; and whether we regard the train of symptoms so graphically described as accompanying this obstinate but truly formidable disease, or the treatment as recommended to be pursued in its several stages, all bear the impression of a master hand, familiar with his subject, and conversant with the art of imparting it in a graceful and pleasing manner. With respect to the illustrations at the termination of the volume, we would only observe, that they appear to be faithful transcripts of what they are intended to represent.

Clinical Lectures on certain Diseases of the Urinary Organs, and on Dropsies. By ROBERT BENTLEY TODD, M.D., F.R.S., Physician to King's College Hospital. London: Churchill, 1857. Fcap. 8vo, pp. 435.

LECTURES on clinical medicine, when well conceived and ably and faithfully executed, have always obtained the favourable notice of the profession. Since the publication of that great storehouse of medical facts, the "Clinique Médicale" of Profes-

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sor Andral, we have had, in these countries, several works of a like form, worthy to take a place beside it, among which we may rank the Lectures of Watson, Latham, and our distinguished countryman, Graves. These productions, like standard legal reports, will always maintain a high degree of authority. They are pictures of diseases, accurate as photographs; and it is no small test of their fidelity to nature, that, when we take up one of these portraits, we find at once a likeness for it in some case or example which previously, perhaps, appeared to us anomalous, but now becomes easily understood. Such is always the triumph of genius in every art. The true painter draws from nature; he knows that to imitate is to succeed: the mere artist alters a feature here, or throws in a little more light or shade there, and thus produces a pretty picture, but one in which we see more of art than nature.

It is natural to expect that what had succeeded so well in the hands of those eminent physicians whom we have mentioned, and of others, should afford a subject for general competition; and, accordingly, our medical journals teem with illustrations of this mode of teaching. It seems to us a pleasant and useful mode of conveying instruction, and, as such, we freely endorse it; but we do not go quite so far as some of its favourers. For instance, among some valuable observations in the preface of the work now before us for review, we find the author deprecating long courses of lectures on the practice of medicine and surgery, and proposing to substitute for them publications on select subjects:—

"How much better," he observes, "would it be to confine the lectures on these subjects to the discussion of difficult, doubtful, and important points of pathology and practice, preceded by a sufficient statement of first principles suitable for the uninitiated."

Now, with all deference to the high authority of Dr. Todd, it strikes us that this would be like setting a mathematical tyro to solve deductions from Euclid before teaching him the book. We confess that, without any disrespect to clinical teaching, but fully alive to its great value, we should be sorry to see it taking the place of its elder sister. Courses of medical lectures, when properly illustrated by drawings and pathological specimens, and not *too disputative*, form, in our opinion, an excellent groundwork for a beginner. They show the art in its general aspect; they supply the rules of which clinical cases are the examples; they prevent that narrowness of view which a partial study of individual examples tends to generate;

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in fact, the clinical lecturer himself, before he can interpret correctly the details of a case, must borrow aid from the general lecturer's department; he must sketch the broader features of the malady before he can show the difference or agreement of the example before him. Would he, then, debar his class from sources of general instruction, while he himself comes before them charged with all the abstract information which he has been able to acquire from the collective experience of himself and others? Guarded in this way against error, he is able to caution his students against that mistake into which they would otherwise be likely to fall, viz., arguing from the particular to the universal.

The name of Dr. Todd has been so long and so honourably before the public, that any production from his pen cannot fail to receive attention. He has, doubtless, enjoyed many advantages which other men want. Succeeding to an hereditary name in medicine, nursed under Colles in an able school, associated with the first men of the day in his department, he has not depended for eminence on such accidental support, but on his own deep research, unwearied labour, and practical knowledge. Independent of his works on physiological subjects, he has been several times before the medical public, but never too often. His Croonian Lectures on Gout and Rheumatism, before the London College of Physicians, have successfully illustrated what appears to be the true pathology of these diseases; and in the present work, forming the second series of clinical lectures from his pen, the same subject is, among others, incidentally resumed. The Lectures now published are not intended to include the whole subject of urinary diseases and dropsies. They consist of sixteen lectures on these subjects, embracing various points of interest connected with them, and illustrated by select cases, each presenting some striking characters. In the first two lectures he discusses at some length the causes and treatment of hematuria; he proceeds in the next two to consider the various forms of disease of the kidneys, especially associated with albuminous urine and dropsy; and in the following lectures, up to the twelfth, he describes the typical forms of dropsy. The remaining chapters are taken up with the consideration of the gouty kidney, gouty inflammation of the bladder, and pus in the urine, &c., with valuable remarks on the phenomena and treatment of gouty disease. It is obvious that the subjects just mentioned afford many opportunities for the "discussion of difficult, doubtful, and important points of pathology and practice," and the author has made large use of them. We shall select from so much interesting matter a few

points for our readers, which appear to us, from their more novel character, to possess interest; while at the same time we assure them that it is no small credit to Dr. Todd, that, even to subjects long known and apparently trite, he has been able to give an air of novelty.

In his remarks upon the dropsy which arises after scarlet fever, the author traces it to three conditions, which he considers necessary to coexist:--

"These are—lst, a peculiar irritated state of the kidneys; 2nd, an analogous morbid state of the skin; and 3rd, a certain depravity of blood—by which I mean not only a deficiency in the amount of the red corpuscles of that fluid, as well as of the solids of the serum, but also the unnatural presence of certain poisonous matters, which interfere with its proper nutrient changes."

For the full development of dropsy he deems the concurrence of all these conditions necessary, and, if one of them be absent, dropsy may exist in a slight form, but not in its full results. With respect to the skin, he thinks that in cases where the morbid poison is not sufficiently eliminated, or its due elimination suddenly arrested, dropsy is apt to supervene; but that, when the morbid matter has been from the first enticed out to the surface, and the desquamation excessive, dropsy is much less probable. As to the kidneys, their anatomical condition is a plugging up of the uriniferous tubes with epithelium, and an augmented amount and irregular distribution of blood to these organs. The Malpighian capillaries become gorged, the serum escapes into the uriniferous tubes, some also of the red particles pass into the urine from the rupture of the capillaries; hence the urine is albuminous, and of a dark, murky colour, and loaded with fibrinous casts of the renal tubes. The change in the blood is one which seems to arise during the progress of the disease, and to be absent in the early stages; water ceases to be discharged from the system by its two great channels, the kidneys and skin, and, being stopped in this way of exit, it makes its way into the areolar tissue through the parietes of the bloodvessels. Why it enters this tissue more than others, the author attributes to the "determination of blood to that integument, caused by its state of irritation." Thus the blood becomes surcharged with water, its red particles are rapidly exhausted, and the albumen of the serum passes out by the kidneys. The nature of the disease exercises in all probability a control over the formation of the red corpuscles, something like what the rheumatic poison effects on the influence of lead. Further, this deteriorated condition of blood

must react upon the rate and vigour of its capillary circulation. Such is the theory proposed by the author for the dropsy after scarlet fever; we present it without comment to our readers, as it is based on facts, and can only be overturned by similar means.

The treatment proposed by Dr. Todd for scarlatinal dropsy is modified by the views which we have just described. He regards the quality of the blood as deteriorated by the disease, and that bloodletting should be employed with great caution, lest a still greater depravation of that fluid may be produced. Hence he advises that our efforts should be directed to establish a new emunctory for the elimination of water by acting on the intestinal mucous membrane; when, after a fair trial of these means, and by acting on the skin and kidneys by the daily use of warm baths and the *gentler* kinds of diuretics, we find the kidneys still refusing to act properly, while the urine contains traces of red blood—in that case a little blood may be taken from the loins by leeching or cupping to relieve the local congestion:—

"Take but little at a time, and rather repeat the bloodletting in smaller quantities than take much at once."

Again---

"I do not recommend you to do this early, during the more irritative stage of the renal affection, as you will generally find bloodletting at that time much less efficacious in diminishing congestion than at a later period."

From much practical experience in this disease, we do not entertain so sombre a view of the dangerous effects of bloodletting as the author, and we think that we have seen some lives saved by its timely employment. The vast majority of these cases, however, get well by the simple measures well known in practice, and of the nature which the author has advised.

Dr. Todd has given, in the fourth and twelfth lectures, some interesting remarks on the "gouty kidney." He states that in persons of extreme gouty constitution, a contracted and shrivelled state of the kidney occurs, in which a large portion of the organ is wasted, and its structure condensed. Though usually found in inveterate gouty habits, it may occur also, but more rarely, in other states of the system. He describes at some length its anatomical characters. On inspection, the organ appears greatly reduced in size, the reduction in some cases amounting to one-half or one-third of its natural dimensions. It is also shrivelled and lobated, and its capsule is thickened and loosely attached. On dividing it longitudinally, the cortical substance is seen remarkably wasted, so as to seem in thickness a mere rind.

Pseudo-hydatids or renal cysts are not unfrequently found, arising, as Dr. Johnson explained, most probably from dilatations of the uriniferous tubes. On examination with the microscope, some of the tubes are found empty, others collapsed and folded into fine plaits, giving them the appearance of fasciculi of fibrous tissue; other tubes again are largely dilated, and furnished scantily with epithelium, and a few epithelial cells contain fat. The circulation in the organ has become modified, the coats of the minute arteries are hypertrophied, and the vessels tortuous and full of oil in some cases, producing atrophy of the corresponding Malpighian body. Saline deposits are occasionally found in the tubes, consisting of lithate of soda. Such are the chief characteristics of the atrophied kidney, and as it is very frequently associated with gout, he gives it the name of the "gouty kidney." The rationale of its production is also explained by him. The blood, altered in its character by some morbid matter, as that of gout, not only furnishes to the kidneys an unhealthy support, but also its noxious ingredients are brought to these organs for elimination. The continued presence of such poisonous elements must react upon the kidneys, disturbing their functions, causing partial congestions, and insufficient nutrition, the result of which is a gradual decay of the organ. This state of kidney has been regarded as an advanced stage of Bright's disease, especially as the urine is slightly albuminous. This opinion Dr. Todd holds to be erroneous.

The author gives some valuable observations upon gout of the bladder, which he conceives to manifest itself in four different ways. One is in an inflammatory form:—

"I apprehend that in these cases the mucous membrane of the bladder is red and inflamed, presenting, indeed, the ordinary appearance of a mucous membrane in a state of inflammation. It is a condition, however, which must be distinguished from inflammation of the bladder as excited by other causes, and unconnected with any specific poison."

He observes that pus is often secreted in this state, but that, when retained, an alkaline condition of the urine occurs, causing paralysis of the bladder. The *second* mode of attack leads to an opposite state, as regards the urine, from the former, viz., that of *incontinence*. The chief symptom is a great frequency of voiding urine, due to a highly sensitive state of the mucous membrane of the bladder, so that it is intolerant of the presence of the smallest quantity, and the patient is constantly obliged to evacuate its contents at short intervals. A *third* class of cases is attended with sudden *retention* of urine, due, not to the condition of the mucous membrane, but to that of the muscular coat:—

"Gout here attacks the muscular structure of the bladder, so as to paralyze it in a manner probably somewhat analogous to that in which the active principle of belladonna affects the circular muscular fibres of the iris, and allows the pupil to become dilated."

The paralyzing effect of gout upon muscular structures is often witnessed ; thus we find it exerted upon the heart, troubling and causing intermission of the action of that organ ; upon the stomach, producing that sinking state which almost realizes death ; and upon the voluntary muscles as evidenced in lumbago and pleurodynia. The fourth mode of attack generally arises from the effects of gluttony or excess in drink, or from partaking of some indigestible substance. The patient is suddenly seized with violent pain in the bladder—

"Which in some cases lasts an hour, but in others continues to torment the patient for a much longer time, preventing him from sleeping, and often producing great distress. This condition is usually relieved by free counter-irritation, the administration of alkalies, and the cautious use of opiates."

We shall conclude with a brief notice of some points in the treatment of gout which the author proposes. First, as to the local management, he prefers that course which long experience sanctions, viz., keeping the part warm by enveloping it in carded cotton covered with oiled silk, so as to produce a perspiring state of the part. Leeches are, in his opinion, not to be employed : they leave, he thinks, injurious effects after them:—

"There is no doubt that, if you apply leeches to gouty joints, you will remove the pain pretty quickly, but you will leave a state of permanent weakness, from which the patient will be a long time in recovering."

He speaks in strong terms of the good effects of blisters over the affected joint, in relieving pain and removing effusions. He deprecates, however, a large blister : the size he suggests varies according to the size of the joint, "from that of a sixpence to that of a half-crown, or, at the very largest, a crownpiece." By the previous application of mustard, the effects of the blister are accelerated, and the quantity of serum increased. Blisters are not, according to him, contra-indicated even in a red appearance of the joint, provided that too large a surface should not be vesicated. With respect to the use of colchicum, Dr. Todd is one of those who look at this drug with suspicion, and he enters a protest against its indiscriminate use. When possible, he tries to cure his patient without it; and he coincides with the opinion that, if it cures the present attack, it is at the expense of a repetition of it after a short interval. Colchicum loses by time its effect in controlling pain, and patients are obliged to augment the dose until they become confirmed colchicum-drinkers, just as we find confirmed opium-eaters.

The author gives a remarkable picture of this baneful indulgence:----

"I once attended a lady of high rank, who had gradually accustomed herself to doses of the wine of colchicum, which were measured, not by tens or twenties, but by hundreds of minims; and yet, such was the little influence of these large doses upon the essence of the disease, that her attacks became more and more frequent, her joints were horribly crippled, and her nervous system was fearfully shattered. I endeavoured to persuade her to leave off the colchicum, but without success; and she ultimately died in a state of extreme prostration, due mainly, as I believe, to the inveterate addiction to this drug."

With respect to the administration of lemon-juice as a medical agent, he states that he had been in the habit of using it as an useful diuretic in dropsies, long before Dr. Owen Rees introduced it into notice as an anti-rheumatic remedy. He disbelieves in any specific effect which it is said to possess in gout or rheumatism, but regards it as of service in augmenting the quantity of urine when the kidneys do not secrete sufficiently. The opinions of practitioners are so strangely discordant about this agent, that a trustworthy series of observations becomes desirable.

The few selections which we have just given from the work before us will afford our readers, we trust, an idea both of the valuable matter which these Lectures contain, and of the easy style and popular explanations of many points of even recondite pathology. We think that both student and practitioner could not desire a more thoroughly practical, and perfectly trustworthy guide for the study of urinary diseases. And we cannot conclude our remarks without recording the great pleasure and profit which we have received from their perusal, hoping that their accomplished author will be long spared to pursue that career of untiring industry which has enabled him to give so many valuable works to our medical literature.

Researches in Pathological Anatomy and Clinical Surgery. By JOSEPH S. GAMGEE, one of the Surgical Staff of the Royal Free Hospital, &c. London: Baillière. 1856. 8vo, pp.216; with Illustrations.

It is almost impossible to review either with critical precision or analytical accuracy any series of brief and unconnected essays, as the greater the amount of practical facts they may embody, the more difficulty is incurred in the attempt, not only to do justice to the author, but also to convey a legitimate amount of instruction to the reader of a bibliographical notice: these two objects constituting the paramount duty of the analyst, which he should perform under all circumstances, whatever may be the construction of the volume submitted to his examination, or the character of its contents as original inquiry or special compilation. Hence arises a difficulty in adapting the mode of examination to the precise nature of the work and its tendencies, which has therefore originated two different modes of investigation, namely, "Review and Abstract,"-the former implying a re-examination of the opinions of an author, firstly, as to possibility; secondly, as to probability; and lastly, whether the statements adduced partake of the character of facts holding a legitimate relation as proofs to opinions propounded, either original in themselves, or having an undoubted tendency to subvert ideas previously received as correct on any given diseases. Here the reviewer analyzes. detects fallacy, unveils prejudice, and confounds baseless reasoning; or, on the other hand, strengthens the arguments of the author by the introduction of new facts, which may have eluded his attention, devoted to a special line of investigation, and throws into deeper relief the truths enunciated by the essayist. Such is his judicial capacity; neither exercised without serious reflection, nor expressed without due deliberation; and when he comes to assume his judicial character, he makes that judgment merely the natural sequence of the reasoning which he has previously adopted, and then allows the reader to accept or renounce his opinions and conclusions according to his own particular views. But in an *abstract* the salient points only of an essay are selected and placed before the reader, the facts being so self-evident as to render any exhibition of proofs superfluous; the premises being admitted and indisputable, note and comment become wholly unnecessary. This latter mode of examination particularly applies to the essays before us, as they are principally made up of the opinions of preceding authors, collected with a view to draw especial attention to particular lesions, and to create convenience in reference to obscure pathology and rare affections of the human body.

Ruptures of the parietes of the heart from the predisposing influence of dilatation, fatty degeneration and typhoid softening, are recognised in all the class-books treating of cardiac affec-But lacerations from the effects of external violence tions. usually receive but an incidental notice; and in many works fail to be mentioned even in a cursory manner. To this subject the author seems to devote especial attention, not only by individual observation, but also by the display of a large amount of industry in the research after cases recorded by preceding authorities; and we would be doing him an injustice if we did not record our approbation of those generalizations deduced from the statistics of cardiac rupture, and state that these results were very different from the opinions we entertained prior to the perusal of Mr. Gamgee's essay on the subject. First, he has proved that all the cavities of the organ, without exception, as well as the cavæ, are subject to laceration more or less extensive. Twenty-eight cases are detailed, which he thus summarizes :----

"The ages of the 28 subjects were very various; thus 2 infants, 7 below 21 years, 4 between 21 and 30, 12 adults not precisely recorded, 3 at 53, 60, and 70 years respectively. These facts confirm the very natural supposition that, provided the external violence were sufficiently active, the heart of the mature man or of the decrepit adult would no more effectually resist it than that of the tender infant.

"Sex, as is well known, materially affects the proportion of surgical injuries, women being much less exposed to them than men; the rule is borne out in the present instance; for of the 28 cases, 20 were males, and 5 females; of the other 3 no mention is made about sex.

"The causes which produced the lesions under consideration may be thus classified. Falls from a height, or from a carriage in motion, 9. Passage of a wheel over chest or other forcible compression of it not accurately defined, 10. Kick from a horse, 4. Bullets fired against the chest from gun or pistol, 4. Blows of unknown kind, 1.

"The duration of life after the accident is not mentioned in 9 out of the 28 cases. In 11 of the remaining 20, death was instantaneous; of the other 8, one got up, ran a few steps, and fell dead; 1 lived half an hour; 2 lived two hours; 1 three hours; 2 four hours; and 1 fourteen hours. Of these cases, the first and last deserve special mention. Of the first (No. 3 of table), the heart is figured in Plate I. After receiving a kick on the chest from a horse, the man got up, put on his hat, walked several steps towards a stable, and fell dead. Upon examination, the pericardium was found uninjured, but the heart presented three ruptures. It is worthy of notice, that the integument presented no sign of the blow, though the sternum was broken across the middle.

"It was an infant who survived the marvellous period of fourteen hours with a rupture nine lines in length at the posterior surface of the right auricle. It had been occasioned by the passage of a cart-wheel over the chest, whereby also several ribs were broken, though no mark of contusion was impressed on the surface of the body. The circumstantial manner in which this extraordinary case (27 in the table) is related in Rust's Magazin für die Gesammte Heilkunde (vol. 16, p. 92), leaves no doubt whatever as to its authenticity. The wonder it excites is somewhat lessened by the reflection, that possibly the rupture was limited at first, and only acquired the mentioned extent, as the heart's fibres separated during its action.

"Co-existing lesions. No mention is made of the condition of other parts of the body in five of the 28 cases. In two, the recorder alludes generally to other injuries, but does not specially mention any; in the remaining twenty-one cases the co-existing lesions admit of the following classification :- 1st. ABDOMEN. Its condition is not alluded to in ten. In five, it is expressly said to be healthy. In three, the liver, and in other three the spleen, was the seat of laceration. 2ndly. HEAD. In thirteen out of the twenty-one cases its condition is not alluded to; in four, it is said to have been healthy. In one, there was a slight bruise over the occipital protuberance. In one, depressed and comminuted fracture of the frontal bone and laceration of the cerebral lobes. In one, general contusion of the brain and fracture of the middle fossa at the base of the skull. In one, the scalp was torn and the parietal fractured. 3dly. PARIETES OF THE THOBAX. In one of the twenty-one cases now under consideration, the condition of the chest-wall is not mentioned, but it may fairly be presumed to have been healthy, as Bérard was the recorder. The man fell from a scaffold, and there were lesions of the cranium and abdomen, besides the heart rupture. In six cases it is particularly mentioned that there was no bruise of the chestwall. In three, that the bruise was but slight. In one, there was sensible depression of the chest-wall. There were fractures of the

ribs or sternum, or of both, in eleven out of the twenty-one cases. In two of the eleven cases it is particularly mentioned that there was no displacement of the fragments; in a great majority of the others, the extent of the rupture, the nature of the cause, or the integrity of the pericardium, exclude all possibility of the heart rupture having been occasioned by penetration of one of the bony fragments."

As to the precise seat of the cardiac lesion, the following are the facts:—It affected the right ventricle alone eight times; the left ventricle alone three times; the right auricle alone once; right auricle and other parts, three times; left auricle, three times; left auricle and other parts, four times. Thus the cases tabulated would represent the ruptures in the following order of occurrence: Auricles, right, four; left, seven;—ventricles, right, eight; left, three: making the numbers ten on the left, to twelve on the right; and also showing the ratio as to the ventricles to be as eight on the right to three on the left. We shall extract the concluding summary in the author's own language:—

"a. Ruptures of the heart by external violence, independently of penetrating wound, are notably more frequent than is generally supposed.

i **b**. They occur irrespectively of age and sex, provided the requisite cause come into operation; but of the cases recorded, the majority are in adult males; in accordance with the known fact, that they are most frequently the subjects of injuries from being much more exposed to them.

"c. The common causes are falls from heights, and the application of severe violence to the chest.

"d. Death is usually sudden. Cases are on record, however, in which persons have been capable of momentary but severe exertion after the accident, such as rising from the ground and running. The survival of fourteen hours renders Rust's case unique.

"e. The most frequent co-existing lesions are ruptures of the liver and spleen, injuries to the head, and fractures of the bony chest-wall, but without penetration of the fragments. In 9 of the 28 cases analyzed, there was either no bruise of the thoracic parietes, or a very slight one.

"f. The pericardium is intact in at least one half of the cases. The observations relating to the condition of the heart's texture are few; but they demonstrate that even perfectly healthy hearts are liable to the accident under consideration. Analysis of 22 cases, with a view to determine precise seat of lesion, gives the following result:—12 ruptures of the right to 10 of the left side; but the disproportion between them is much greater, 8 to 3, when ventricles alone are considered. It is curious that the left auricle is more frequently the seat of rupture than the right, in proportion of 7 to 4.

"g. In the few cases which have survived, the symptoms have been those of severe shock. No other therapeutic indications occur than husbanding the vital powers by keeping the body warm, and in a horizontal position of perfect quiet.

"h. The mechanism of these ruptures is twofold:—1stly, by jerk of the blood contained in the heart; 2ndly, by direct compression, which may extend from a mere bruise on the front wall of the heart, to its complete disorganization. In both these modes of operation it is very probable that the extent and kind, if not the origin, of the rupture, are sometimes regulated by contraction of the heart's fibres."

The second essay treats of senile gangrene, and records the particulars of two cases, one presenting the evidences of arteritis, the second, calcification of the arterial coats, both being followed by a form of dry gangrene. Having drawn attention to the opinions of Brodie, Carswell, and the celebrated Dupuytren, as to the pathology of this affection, he states the postmortem appearances which lead him to look for disease in various morbid changes, rather than as the result of any single lesion, and in this we follow the author, recognising :--- 1. Alterations in the blood (typhoid); 2. Alterations in the arterial trunks; 3. In the capillaries; 4. In the heart; and 5. Local neurasthenia as being variously the prevailing cause inducing passive gangrene; and it is only by taking this enlarged view of its causation, that we can account for the defective nutrition which constitutes the essential element of the disease appearing under such a variety of distinct physiological phases. As to treatment, nothing is added to our previous knowledge, but we can assure Mr. Gamgee, that in the Irish school we are led to deal with each case as a separate study, as we rarely admit the power of specifics, even when supported by the eminent authorities he has named in this well-written essay.

In some judicious remarks on the complication of malignant disease with cystic formations, the author advocates the opinion of their combination, and further conceives, that when secondary cancer supervenes on the removal of the so-called cystic sarcoma, that the former was present in the original tumour, and is never produced by the conversion of a benign into a malignant deposit; in these views we fully concur, and we shall continue to maintain them until the microscope succeeds in revealing characters of cancer elements more positive than have as yet been ascertained by that useful adjuvant to pathological study. In connexion with this subject, he speaks of Professor Landolfi's caustic, chloride of bromine, which has received notice from us in a former Number, and notwithstanding the evidence which is daily and almost hourly accumulating in favour of caustics for the eradication of cancer, we still prefer the knife, both on account of its expedition and safety, as also because we cannot believe in the specific curative agency of any escharotic at present discovered, or likely to be added to the Materia Medica.

We avoid the remarks on syphilisation, as these are more social than surgical in their tendencies, in order to examine an essay embodying some judicious observations on lithotomy and lithotrity, in which we fully concur; but at the same time we cannot see the novelty in the Neapolitan mode of performing the lateral operation described as follows by Mr. Gamgee:—

"An ordinary grooved staff having been passed, and the patient tied up, the operator grasps the handle of the instrument in the left hand, and inclines it to the right side, at the same time pressing down in the perineum. By this manœuvre, the curve of the staff is readily felt beneath the integument, which is moreover made tense by it; and, in the majority of instances, the prostate gland can be felt in front of the anus, and even its interior edge defined, so as to furnish a very valuable guide. The operator now makes the ordinary external incision of the lateral operation, and divides the tissues down to the staff, which is constantly pressed towards the wound; in its upper angle, and a very little below the surface, the right index finger detects the anterior edge of the prostate; the point of the knife pierces the membranous urethra a little in front of that edge, and now the operator's two hands must co-operate; with the left one, the handle of the staff is carried upwards, towards the middle line, and backwards; thus the concavity of the staff becomes distant from the rectum as it approaches the pubis, and the point is pushed further on into the bladder. Simultaneously, the point of the knife having been from the first kept in contact with the staff, the right hand is raised and pushed forward, so that the back of the knife slides along the groove, and its point enters the bladder; the blade being narrow, it only notches the anterior edge of the prostate and its urethral surface in the passage onwards. It is not until the point has entered the bladder that the prostatic incision is completed; and this is done by fixing the back of the knife against the staff, and directing its point downwards and to the left, in the direction of the inferior oblique axis of the prostate, the one commonly divided; the knife is now withdrawn without cutting, in the same direction in which it was introduced. The maxim is, to make the prostatic incision as small as is consistent with the safe extraction of the calculus. It is enjoined that the fibrous ring at the base of the prostate should be preserved intact.

"The introduction of the forceps and removal of the stone complete the operation."

All these steps are taught by every surgical anatomist in Dublin; and the use of triangular knives, laterally grooved staffs, gorgets, cutting, plant, or grooved, have long been exploded in this country, except when they are occasionally displayed at lecture as the natural curiosities of the past generation.

Fractures of the extremities have been made the subject of critical inquiry so extensively, that we had almost esteemed this particular department of surgery exhausted of all novelty tending to useful practical results; but the author having critically examined the treatment of Pott, Sharpe, Liston, Mayor, and others, makes a judicious series of reflections on the physiological laws to be observed in their arrangement, evidently leaning towards the suspension plan of Mayor, called "hyponartheses," to which he attributes many advantages that seem, we are bound to admit, just and well deserved; and from the experience of its application in the Dublin hospitals, its merits are far from being exaggerated; yet, it will ever occur, that surgeons, following the light of their own individual opinions, will continue to treat fractures, not after any particular mode, but subject to the precise exigencies of the case before them, which is open to the influence of as many local and general peculiarities as any other affections in surgical practice.

In conclusion, we would draw the attention of surgeons to the subject of calcareous disease of the testicle and its appendages, which, ably treated by the author, opens a fertile source of inquiry to the pathologist as a senile disease; and we trust that Mr. Gamgee will continue those essays which have afforded us not less information than material for future reflection.

On the Diseases of Women; including those of Pregnancy and Childbed. By FLEETWOOD CHURCHILL, M. D. T. C. D., M. R. I. A., Professor of Midwifery to the King and Queen's College of Physicians, Ireland, &c. Fourth Edition. Dublin: Fannin and Co. 1857. Fcap. 8vo, pp. 827.

WE have already reviewed this work on three different occasions, and each time in terms of the strongest commendation. The fact of a *fourth* edition being called for is the best proof of its high reputation and intrinsic worth: nevertheless, we would not be doing our duty were we to dismiss it without further notice. On examination of its contents, we find a great many improvements in this new edition. The actual quantity of matter is increased by *sixty* pages; the index is more copious; and there are introduced eighteen good illustrations of disease: some of them, the author tells us, "were taken from original drawings, others from the published works of Huguier, Clarke, Boivin, and Dugès, &c.; none from Dr. Ramsbotham;"—a statement sufficiently plain and definite, but in our opinion objectionable, inasmuch as it leads one to suppose that Dr. Ramsbotham is a contributor to the iconography of female diseases,—which we believe is not the case; and moreover shows that a most unfounded accusation of not literary, but pictorial piracy, made by Dr. Ramsbotham against the author, has been sufficient to cause Dr. Churchill to exhibit here a little angry feeling, when he should only have despised an unworthy calumniator.

Whilst adhering to the same division of his subject pursued in former editions, the author has in the present one given some new chapters, which render the work more complete. The first of these is upon *urethritis*, a disease described by Ashwell, and of which not much is known beyond its very intractable nature. Chapters on occlusion of the vagina, and occlusion of the os uteri, are also added, and will be found to contain an epitome of all the knowledge we possess on these important subjects. The chapter on ovarian irritation-also a new one-is a reprint of an excellent monograph which appeared in the pages of this Journal some years ago. Under the head of Diseases of Childbed, three new subjects are introduced, viz .: tetanus, paralysis, and arterial obstruction in puerperal women. Here again the author displays his usual industry, and on each of these subjects he gives, in a clear and well-arranged manner, the results of extensive researches; so that, within the compass of a few pages, we have brought before us nearly all the information relating to the particular disease under consideration, scattered over the wide field of obstetric literature.

In the other parts of the book Dr. Churchill has endeavoured, and successfully so, to keep up with the present advanced state of our knowledge. At the same time, he altogether abstains from entering into any of the controversies which have raged on the other side of the Channel, touching certain uterine diseases and displacements, and their modes of treatment. In adopting this course we believe he has not been influenced by any consideration of mere convenience or policy, but has acted simply in accordance with his principles and honest convictions, as every man ought to do who has at heart the advancement of scientific truth. Upon those varied controverted points which have engaged so much attention, the author's views are moderate, and are conveyed in temperate language.

Respecting the employment of the speculum, we should have been glad if Dr. Churchill had expressed himself more boldly and decidedly against the too prevalent abuse of this instrument. From the frightful extent to which this is at present carried, by a certain class of practitioners in London and elsewhere, there is much reason to fear (as we have before stated) a reaction against the speculum, so violent as may deprive us of a valuable aid to diagnosis and treatment, and bring down heavy public censure upon our common profession. For, this indiscriminate use of the speculum is not merely a great medical error,-too often the cloak for fraud and imposition,but it is far more than this, it is a great moral evil, and one that should be denounced by every man who has at heart the best interests of his profession. Sooner or later the public will find out this abuse, and then its correction will speedily follow, but not before the status of the entire medical body is lowered, and its hold over public confidence seriously shaken.

We cannot take leave of this, the last publication of the medical press of Dublin, without expressing our regret that the author should still adhere to the barbarism of printing his prescriptions in *contracted* Latin. The titles of many journals and foreign books, referred to in the notes, are also almost invariably *contracted*, so that, in some places, it is difficult to understand from what, or whom, the quotation or authority is taken. We have detected, moreover, numerous typographical errors; and whenever the French language is used, the vowels are very rarely accented. We regret to have to make these, perhaps, hyper-critical remarks on a book otherwise so perfect, whether we regard the style of the author, the completeness of his treatise, or the getting up of the volume.

On the Pathology, Symptoms, and Treatment of Ulcer of the Stomach; with an Appendix of Cases. By WILLIAM BRINTON, M. D., F. R. C. P., Physician to the Royal Free Hospital, &c., &c. London: Churchill. 1857. 8vo, p. 227.

"DISEASES of the Stomach," it has been remarked by Abercrombie, "have, from various causes, presented a wide field for speculation, conjecture, and empiricism ; a vague and indefinite phraseology has often been allowed to take the place of principles; and the whole subject is removed, in some measure, out of the usual limits of pathological inquiry. Amid this uncertainty we must endeavour to discern what is truth; and should this prove to be more limited than a slight view of the subject might lead us to expect, something will, at least, be done by ascertaining its extent, and tracing the course by which it may be enlarged."

It is because the work of Dr. Brinton is an attempt to ascertain what is truth, its extent, and the course by which it may be enlarged, that it merits a somewhat extended notice in our pages, not from its adding much to the store of knowledge we already possess on the subject of which it treats, but rather from its arranging and collecting, as it were, into a focus, the principal materials that had previously been ascertained, thus doing away with much vague and indefinite phraseology, and removing one form, at least, of disease of the stomach, from the wide field for speculation, conjecture, and empiricism, lamented by Abercrombie.

The work is divided into four parts. The first treats of the "pathology" of the gastric ulcer, but it would be more correctly described as treating of the morbid anatomy of the disease, for though much information has been collected as to the anatomy of the ulcer, the value of which as a guide to pathological inductions can scarcely be over-estimated, yet the true pathology of the disease, or the nature of the morbid actions from which these appearances may have resulted, is scarcely touched upon. This is to be regretted; for, let us declaim about theory as we may, it is only by the reduction of our facts to theory that they acquire importance; and to every manit is an assistance in this process, to have the conclusions arrived at by others laid before him. In noticing this section of the work, therefore, some of the more important pathological inductions arrived at by other authors will be brought forward, that they may be measured by the facts collected by Dr. Brinton.

The second part treats in detail of the symptoms observed during life, and the means of diagnosis. It also contains a section on the "ætiology" of the disease, which, if it had been more extended and placed in conjunction with the facts collected in the first part, might have supplied the want there so evident : that it is not so placed, is due probably to the work being, as stated in the introduction, in a great measure a reprint of papers that had previously appeared in various journals.

The subject of treatment is considered in the third part; and in the appendix, cases illustrative of the principles laid down are given.

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Dr. Brinton begins what he hopes may form a series of essays on the diseases of the stomach, with an inquiry into the pathology, symptoms, and treatment of ulcer of this organ, because, he says:—

"It would not be very difficult to establish a title to precedence on the part of this disease over the other affections of the organ. For of what other gastric malady can we allege that it occurs very frequently; that it may generally be detected in the living subject; that it runs a protracted course, at any stage of which it may be suddenly fatal; that it is usually curable; and finally, that it is the result of a specific structural lesion, such as can at once be detected in the examination of the dead body? And if the statements implied in this question be but partially true, how can we justify ourselves in diagnosing cancer or dyspepsia, except by a process of inductive reasoning, which generally amounts to, and often specifically includes, a reviewal of the usual phenomena of this disease prior to its rejection, as the true explanation of the symptoms before us?"

We shall now proceed to an analysis of the several parts of the work, and lay before our readers the more important facts that have been ascertained, but referring to the work itself for the details which have been gleaned from "the numerous necropsies of this lesion that the author's own practice has afforded, and about 1100 more, the majority of which have never before been collected, much less compared with each other," that he has obtained from various journals and reports, British and foreign, and hospital museums.

PART I., PATHOLOGY.—The frequency of ulcer of the stomach may be best inferred from the number of times this lesion has been observed in a given number of persons, dying from all diseases, and subjected to careful necropsy. Much valuable evidence of this kind is adduced, which goes far towards justifying the following propositions arrived at by Dr. Brinton :—

"1st. That the ulcer of the stomach is so far from being a rare lesion, that evidence of its present or previous existence may be found in from two to thirteen per cent. of persons dying from all causes; and that the ulceritself, open and unhealed, may be observed in from one to ten per cent. 2nd. The 7226 necropsies thus collected offer us about 360 ulcers, which are pretty equally divided into 190 open ulcers, and about 170 scars. These numbers tolerably correspond to a total proportion of five per cent, which is divisible into $2\frac{2}{5}$ and $2\frac{2}{5}$ for these conditions respectively. 3rd. The above range of frequency is so remarkable as to suggest some special cause or causes. These, however, could only be determined by a special analysis of the class, age, and sex of the patients received into these hospitals in which these observations were made. Failing such an analysis, I will only point out that the maximum frequency of the ulcer (stated by Dahlerup) occurs in the spirit-drinking population of Copenhagen; and that its larger proportion in the German Krankerrhaeuser may be plausibly referred to the inmates of these institutions being, on an average, of greater age, if not of more destitute circumstances, than the persons usually received into English hospitals."

The statistics derived from British hospitals show the lowest per-centage of cases; being, of open ulcers, about 1 per cent., and for ulcers open and cicatrised, from 2 to $3\frac{1}{2}$ per cent. Observations made on the living subject accord with these statements, the out-patient practice of the hospital Dr. Brinton is attached to affording, from an annual attendance of 4000 patients, about 40 instances of this malady, or 1 per cent.

Sex.—That the female sex is more liable to this disease than males has long been known. The degree in which they are so appears, however, to have been much exaggerated, as, in 654 cases in which the sex is mentioned, the proportion is 440 females and 214 males, numbers which nearly correspond with 2 to 1.

Age.—With reference to the age most liable to the disease, the conclusions arrived at by Dr. Brinton are still more widely at variance with the generally received opinion, that it is during the first years of puberty that this disease is most likely to occur. The facts collected lead him to infer—

"That the liability gradually rises from what is almost a zero at the age of ten, to a high rate, which it maintains through the period of middle life; at the end of which period it again ascends, to reach its maximum at the extreme age of ninety. We may therefore conclude that the ulcer of the stomach is specially, though not exclusively, a disease of middle and advancing life"ⁿ.

Situation.—Of 220 cases, in 86 the ulcer occupied the posterior surface of the stomach; in 55 its lesser curvature; in 32 its pyloric extremity; in 13 its anterior and posterior surfaces, often at two opposite places; in 10 its anterior surface only; in 5 its greater curvature; and in 4 its cardiac pouch:—

"These numbers claim a marked preponderance of liability for the posterior surface, the lesser curvature, and the pyloric pouch, over the anterior surface, the greater curvature, and the cardiac sac respectively; the ulcers in the three first situations together making up 187, or nearly $85\frac{1}{2}$ per cent. of the whole."

[&]quot; "The disease occurs chiefly at the period of puberty, and very often, particularly in the female sex, as early as the fifteenth year."—*Rokitansky*.

The facts here presented possess very great importance in several points of view. In the second part of the work they are referred to in connexion with a method of diagnosis first proposed by Dr. Osborne in a series of papers published in this Journal, entitled, "Propositions relating to Diseases of the Stomach," which is founded on the effect of posture on the pain, whereby not only important evidence of the existence of an ulcer is afforded, by the increase of the pain caused by lying, so as to favour the gravitation of the contents of the stomach to particular parts of its walls, but often also its exact position indicated.

In other points of view the situation of the ulcer is also of importance. Dr. Osborne refers to it as one of his reasons for attributing the disease to long-continued irritation of the tubular glands that secrete the gastric juice, which are most numerous and best developed in the situations where the ulcer is most frequently found.

In a medico-legal relation, also, the situation of the ulcer is of importance, as observed by Dr. Williamson, in his papers on the "characteristic marks by which to judge of the cause of perforations of the stomach," published in the nineteenth volume of the first series of this Journal, where it is shown that perforations from the action of the gastric juice after death, and from the effects of corrosive poisons, are principally found at the cardiac extremity.

The next point we have to notice is as to the number of ulcers found in the same stomach. Cruveilhier states that there is rarely more than one, and Christison, in his work on Poisons, adopts this statement as distinguishing such cases from the effects of corrosive poisons, where, he says, the number of ulcers generally exceeds one or two. Dr. Brinton, however, has collected 536 cases which specify such details:—

"Of these, a plurality of ulcers was present in 113, a number which corresponds to rather more than 1 in every 5 cases, or about 21 per cent. Of these 113, 97 (corresponding to 463 instances of ulcer) offered the following numbers: in 57 there were two ulcers; in 16 three; and of the remaining 24, in which 'several' ulcers were present, 3 cases offered four, and 2 cases five ulcers each; while in 4 there are reasons to suppose even this number was exceeded."

The margin, base, and depth of the ulcers are next considered; and here, especially, we think Dr. Brinton might have added to the interest and usefulness of the facts he has so carefully collected, by entering into the consideration of the doctrines they inculcate. In noticing some of the preceding sections, a few of their more important bearings have been indicated, and here, though briefly, the same course shall be pursued. To any one treating ulcers in the stomach, such as are here described, one of the first and most important questions arising would be as to the mode of their production. On consulting some of our leading authors, a great and direct variance would be met with on this subject, and the mode of treatment recommended would be found to vary in a nearly equal measure. Thus, in the Cyclopædia of Practical Medicine, Dr. Houghton asserts "that the inflammatory origin of ulceration of the stomach appears to be underiably established. Accurate investigation has evinced that the ulcerative solution of continuity is preceded, on all occasions, by more or less hypertrophy and hardening of the mucous membrane in which it arises. In those ulcers which are consequent on an acute inflammation, this is less obvious than in chronic cases; and on the other hand also, in some of the most chronic forms, occasionally little alteration is found in the parts surrounding the ulcer. Yet these appearances are so commonly found, that it gives room for the inference that ulceration is a change which has a secondary relation to the foregoing inflammatory alterations in the stomach. It is obvious, likewise, that as it commences by inflammatory action, its extension, whether in breadth or depth, is to be ascribed to the occurrence of the same condition which is from time to time kindled in the part."

In the same work, Carswell enunciates a similar doctrine, and ulceration of the stomach is treated of, under the head of gastritis, by Dr. Stokes. Abercrombie, along with many of lesser note, may be referred to as taking the same view. On the other hand, Rokitansky asserts that "the perforating gastric ulcer is in no way connected with gastritis, and cancer, though it is often mistaken for these affections." Again, he savs :--- "It has not been clearly ascertained in what shape the malady takes its origin, and in what manner the further development is effected. It is probable it commences with an acute, circumscribed, red softening (hemorrhagic erosion), or with a circumscribed sloughing of the mucous membrane; it is still more probable that the ulcer increases in this manner, the tissues at the base of the ulcer sloughing and exfoliating layer by layer." Handfield Jones takes much the same view, and compares the process to that by which simple ulceration of the cornea takes place :--- "Both, when the system has made no reparative effort, may have smooth level margins; both may heal by the deposition of fibrine at their base and around their margins; both show, when they advance unchecked, a decided tendency to perforate the tissue in which they exist. In both, the ulceration is evidently not the result of violent inflammation, but of a local loss of substance or disintegration. It seems as if the tissue slowly liquefied, molecule by molecule, in a given part, in consequence of defect of assimilative power. The process in the case of the cornea is evidently not identical with sloughing, such as occurs in purulent ophthalmia, and there is reason to believe that the same is true also of the analogous change in the gastric parietes." In confirmation of this view, the same author, in his work on Diseases of the Stomach, adduces the fact that, of the eight cases he gives, there was only one in which there was not some tolerably sure indication of local or general failure of vital powers in other parts besides the stomach, and he further argues that, as a tonic treatment is well known to obtain the cure of the ulcer in the cornea, it seems highly reasonable to suppose that it would avail equally in the case of the stomach.

In a work specially devoted to one form of disease, concerning the nature of which there is so much uncertainty as the foregoing extracts indicate, it cannot but be regarded as a serious defect, that the difficulties in which it is involved should be passed over with merely a cursory notice in a chapter devoted to "Pathology;" nor can the statement in the second part, that ulcers of the stomach resemble ulcers in the leg, and may arise under very different causes, be taken as compensating for the void in the first part. We may have—

"No more reason to assume an invariable commencement of the gastric ulcer by hemorrhage, or by softening, or by a submucous deposit of lymph, than we have to restrict the beginning of what is evidently a similar process of *destructive absorption*^a in the limb to an ecchymosis, a pimple, a superficial abscess, a burn, or a varicose vein."

But, as in the cases thus referred to, the surgeon regards it of no trifling importance, in deciding his treatment, to ascertain the cause of the ulceration, so must the physician who wishes to treat scientifically the affections of the stomach have as clear ideas as to the actions going on in the part as his sources of information will enable him to obtain.

The very different appearances presented by the margin and base of the ulcers in many cases, as described by Dr. Brin-

^{*} Is this term used loosely, or does Dr. Brinton adhere to Hunter's theory of ulceration?

ton in the following passages, show that he is correct in believing that they do not always arise from the same mode of action. When these are considered, along with the peculiarities of the constitutions in which ulceration occurs, in some cases debilitated, anemic, chlorotic, as in the young non-menstruating female, where all the vital processes are imperfectly performed; and in others as in the adult man, where these processes may be in full activity, but the stomach long exposed to irritation from spirit-drinking and irregular living, it will be evident that an exclusive adherence to either of the foregoing views must be erroneous; and that the thickened, raised margin and indurated base, must proceed from something more than the attempts at reaction.

" In some instances there is little or no evidence of inflammation in the neighbourhood of the lesion, which consists of a mere removal of the mucous membrane over a circular space, that forms a shallow but level pit, with a sharp, smooth, vertical edge, as though it had been punched out. In other cases, that appear to form the majority, the mucous membrane that constitutes the immediate margin of the ulcer is somewhat swollen, so as to be raised a little above the level of the adjacent mucous surface. And a microscopic examination shows that this thickening, which is always accompanied by induration, depends upon an exudation of lymph into the areolar tissue beneath the mucous membrane, as well as into the matrix of the latter tissue itself. In short, there can be no reasonable doubt that we have here a slight but appreciable amount of inflammatory reaction; and, that in respect of its nature, this reaction is closely akin to that adhesive inflammation of the peritoneum or neighbouring viscera to which we shall presently allude. In many instances, indeed, the swelling and induration around the ulcer far exceed that just mentioned, and convert the mucous membrane, for the distance of half an inch, an inch, or more, into a thick. brawny mass, which has sometimes been mistaken for cancer. . . .

. . The history of the lesion may be connected with what seems to be the most obvious explanation of that maximum, minimum, and medium inflammatory reaction and thickening which we have indicated in the above remarks. As one might expect, the simple punched-out ulcer is usually either a small or a recent lesion, on the one hand, or is associated with a weakly or cachectic (in the female often a chlorotic) state of constitution, on the other; while the maximum of thickening is generally found in connexion with the same circumstances which favour the occurrence of adhesive inflammation on the exterior of the stomach: and among these, especially, with a large size and long duration of the ulcer. It is, however, curious to notice how frequently it occurs in comparatively young subjects, many of the best instances recorded having been persons of about the age of twenty or twenty-five. Still, this fact does not qualify the preceding statement as to the usual duration and diameter of the indurated ulcer, but seems merely to express the degree in which the inflammatory process is capable of being heightened by the vigour of youth.

"The base of the ulcer, so long as it is formed by the tissues of the stomach itself, presents appearances similar to those of its margin. Its usually firm and hard consistence is derived, partly from the density of the areolar muscular tissues originally present; partly from an increase of their cohesion, due to that infiltration of fluid or exudation of lymph which inflammation generally brings about. In others (and by no means unfrequent) cases, the progress of ulceration, apart from any such reaction, is betrayed by the soft, flocculent, or even gelatinous consistence of the floor of the ulcer; where we sometimes see flakes of dead tissue, the size of which almost entitles us to regard them as sloughs."

The *duration* of the disease is ascertained with difficulty; making allowances, however, for errors, the range of duration is remarkable:—

"In what are certainly exceptional cases, the ulcer has been known to be fatal in as little as ten days; generally by perforation, sometimes by exhaustion caused or hastened by vomiting, very rarely by hemorrhage. But in the majority of instances, a period of several weeks or months precedes the fatal event. And an extension of this period to years seem to be not uncommon. Among cases of this kind—possibly relapses, but more probably continuous, open ulcerations—I find in my notes, one of 35 years, two of 30 years, three or four of 20, four or five of 15, and several of 10, 7, 5, and 4 years' duration.

"The *healing* of such ulcers, by a process of cicatrization, appears to be much more frequent than is generally supposed. The examinations of Dittrich, Jaksch, Willigk, and Dahlerup, reveal a total of 147 scars and 156 ulcers, making the proportion of the former nearly equal to that of the latter. In other words, half the instances of this disease undergo what is probably a spontaneous cure."

Though this disease is by many named the "perforating ulcer," the inquiries of Dr. Brinton lead him to the conclusion that perforation should be regarded as rather an exceptional occurrence, taking place in a proportion which is equivalent to about 13.4 per cent. of cases of ulcer. The sex of those cases offers nearly the same proportion as the ulcer generally, about two females to one male; but perforation in females occurs most frequently early in life, and in males at the more advanced periods. A careful inquiry shows that the whole of the excess of cases of perforation in the female falls on the sixteen years of life which intervene between the ages of 14 and 30, while nearly two-thirds of that excess belong to the six years between 14 and 20; but Dr. Brinton does not believe this to depend on the physiological changes taking place in the female constitution at this period.

There are about twenty cases on record where the perforation, instead of, as is general, giving rise to a fatal peritonitis, resulted in chronic abscess and fistula. This is due to the limited diffusion of the gastric contents; but what restrains them is, Dr. Brinton says, not always easy to specify. A consideration, however, of the complete fulness of the abdomen, and the pressure exerted by the viscera on one another, which serves so important a part in preventing effusion after wounds of the intestines, as is now very generally admitted by surgeons, would lead one to wonder rather that the diffusion of the gastric contents is not more frequently limited, than that it is ever so; and to ask whether this might not be more frequently the case, if it were not for the purgatives and other injudicious domestic remedies so frequently had recourse to on the occurrence of the perforation.

Hemorrhage and exhaustion are other causes of death in cases of gastric ulcer which are fully investigated; on these we shall not dwell, but close, with one more extract, our notice of this part of the work, the publication of which has conferred an essential service on medical science, by affording a guide to all future investigations on the important subject of which it treats:—

"We may end this brief sketch by a summary which well illustrates how much we have yet to learn respecting even the more obvious pathological relations of this important malady. Let us assume (what, however, it would be very rash to assert) the accuracy of all the conjectures to which the preceding statements have led us. Let us suppose that of every 100 ulcers of the stomach, 50 cicatrize, $13\frac{1}{2}$ perforate its walls, $3\frac{1}{4}$ erode its larger vessels, and 2 or 3 kill by the sheer exhaustion and inanition they involve; we have still a proportion of about 30 ulcers in every 100 left quite unaccounted for. In other words, we have yet to determine the termination of nearly one-third of all the instances of this lesion: and are ignorant whether the presence of an ulcer in the stomach heightens the liability to disease in general, or to certain maladies in particular; or, finally, whether the persons who are the subject of such a lesion have merely the ordinary liability to most other maladies, failing the access of which the ulcer does but anticipate, hasten, or increase that gradual failure of the nutritive functions, which is one of the most essential elements of death by old age."

The length to which this notice has extended forbids any very minute analysis of the remaining parts. This is of the less importance, as the extracts already given must show the style of the work, and prove that it is one worthy of a place on the table of even the most hurried practitioner.

In the second part a typical case is given, and then the several symptoms are carefully examined, and their bearings on the pathological conditions fully illustrated. The diagnosis generally is then discussed, especially with reference to two questions:—1st. "What is the minimum of evidence that will justify us in affirming the existence of an ulcer of the stomach during life? 2nd. What are the diseases with which it is most likely to be confounded?" To the first of these Dr. Brinton replies that he thinks—

"That nothing less than all the chief symptoms enumerated entitle us to pronounce a decided opinion. In other words, unless the pain possess the characters attributed to it, unless this pain be accompanied by vomiting, and unless there be evidence of hemorrhage having occurred in the course of the malady, there is no sufficient basis for a definite diagnosis of the existence of a gastric ulcer. The date, duration, and frequency of the pain chiefly indicate some morbid condition of the mucous membrane of the stomach. The vomiting adds that this disease implies great irritation of the nervous centres connected with the organ. And it is reserved for the hemorrhage to show that the disease is such as to involve an absolute breach of continuity in the structure of the stomach."

However, there are many cases beyond the limits of secure diagnosis, in the treatment of which we should, as Dr. Brinton suggests, act on our suspicions:---

"It is in obscure and uncertain cases of this kind that it is most important for us to be thoroughly acquainted with the whole characters of the disease, as shown in its more chronic and typical forms. The pathology of the lesion, in general, must supply any casual deficiencies in the physiognomy (so to speak) of the particular instance. Above all, we must remember that it is our first duty to be useful, and that suspicions which fall far short of definite diagnosis may yet be sufficiently important to dictate the whole plan of treatment. Suppose, for example, that we are consulted by a patient for protracted or severe dyspepsia, which has seriously affected the general health, and is associated with pain and tenderness in the epigastrium, and pain in the interscapular region, increased or provoked immediately after the ingestion of food; if, on further inquiry, it turns out that this pain is especially called forth by proteinous substances, or by hot liquids, and that it is affected, as above described, by movement, rest, and posture,

there can be little objection to our keeping steadily before us the possibility of a gastric ulcer. Such a suspicion, it is true, guides us to a specific course of treatment, but that treatment involves neither pain nor danger of any kind, and scarcely more severity of diet than many a dyspeptic sufferer would gladly submit to in order to secure the removal of his distressing symptoms. If unfounded, it does no harm; but, if well founded, it effects incalculable good."

As to the diseases with which ulcer is most likely to be confounded, cancer, Dr. Brinton thinks, bears the closest resemblance toit, and is distinguished with greatest difficulty. He has well contrasted the leading symptoms, but he has omitted to notice the frequent absence of pain in cancer of the stomach, and the occurrence of enlarged and tortuous veins in the integuments of the abdomen: symptoms difficult of explanation, but that are often of importance in the diagnosis.

In the third part the treatment of the disease is considered. Dr. Brinton, like most authors, attaches greatest importance to the proper regulation of the diet, and the directions given by him are of a highly practical nature; but for these and the treatment generally, we must refer to the work itself, the careful perusal of which, we are satisfied, will afford pleasure and profit to even the most experienced.

In a future edition we hope to see some points more fully treated of, and we would suggest the addition of a section on the medico-legal questions to which the sudden occurrence of the symptoms of perforation have so often given rise.

A Report upon some of the more important Points connected with the Treatment of Syphilis. By HOLMES COOTE, F. R. C. S., Assistant Surgeon to St. Bartholomew's Hospital, &c. London: Churchill. 1857. 8vo, pp. 141.

THE principle of Mr. Holmes Coote's book is a good one, namely, to give the results of his own personal observations, and to endeavour to draw from these results such conclusions only as shall seem of necessity to follow from them. Were all writers on this eminently vexed question of syphilis to follow out a similar plan, much that is obscure would be cleared up, and much that is contradictory would be reconciled. What is wanted is honest observation, apart from preconceived theory or opinion, and we rejoice to see Mr. Holmes Coote leading the way in the right direction. Having said thus much in favour of the author's mode of proceeding, we shall now endeavour to glean out some of his deductions for the benefit of our readers. This is not always easy, owing to the unevenness of his style, which is sometimes curt, sometimes involved and obscure. The book is a collection of rough notes made, we should say, with a view to the future publication of a more extended work; and, as such, is useful, not only to the author, but to those who are, like him, endeavouring to elicit the truth as regards syphilitic affections.

In his opening remarks Mr. Holmes Coote states that he is-

"Far from regarding venereal complaints in that very serious light which some would make us believe, viz., that they are interminable in their results, and pass out of one infection from generation to generation, blighting the growth, and being the parent of an endless variety of ailments."

He says :---

"It appears to me that the poison, in general, wears itself out except in the very severe cases. Fortunately the transmission of syphilis from parent to offspring is comparatively uncommon."

He also comes to the conclusion that the diversified peculiarities of syphilitic sores are due to the action of one poison upon various tissues, and that the occurrence of bubo has no influence upon the constitutional effects.

The book consists of eight chapters. In the first, which is introductory, he states his opinion-

"That syphilis and gonorrhea are coexistent with promiscuous sexual intercourse, as practised by the inhabitants of Europe, i. e., where one woman receives several men. They scarcely exist among the inhabitants of the East, where the practice of polygamy is universal, unless, indeed, they have been introduced, as is the case in our Indian possessions, by the formation of large military depôts, or the construction of cities. The conditions necessary to call forth the venereal disease seem to be the same universally, namely, a large assemblage of men, with an inadequate proportion of females."

Mr. Coote's opinion is in favour of the spontaneous origin of syphilis (that of gonorrhœa is admitted); but he grounds it less upon any ascertained facts, than upon strong probability.

We perceive nothing worthy of note in the second chapter, which treats of blenorrhagia and gonorrhœa in both sexes in an extremely superficial and unsatisfactory manner.

The propositions laid down in Chap. III., on primary syphilis, are :---

"1. There is but one syphilitic virus.

"2. When the ulcerative action is chronic, the natural structure of the part on which the poison is acting determines the character of the sore."

Under this proposition we find the rather startling assertion that the dense structure of the glans penis renders the occurrence of indurated chancre in this situation impossible. We can only meet such a statement by the counter-statement that we have met the indurated chancre on the glans penis not a few times, and we have little doubt as to which assertion will meet with corroboration from most of our readers.

"3. Phagedæna and gangrene occurring during the course of the disease depend as much on idiosyncrasy, either natural or acquired, as on the nature of the poison.

"4. Every form of primary disease may be followed by constitutional affections, the nature and duration of which no one can predicate."

As regards treatment, we find absolutely nothing new: we do not say this as a matter of blame, for, as regards treatment, the present age of practitioners is ever striving after something new, and the danger is rather that what is good and old will be forgotten. Mr. Coote is a moderate anti-mercurialist, and quotes Dr. Graves, among other *surgeons*, as deserving merit for opposing the over-salivation practice. Mr. Coote further believes in the great efficiency of complete cauterization of the sore, if small, and spreading without induration; for the rest we shall let him speak for himself:—

"In the case of a non-indurated sore spreading feebly, and showing signs of incipient granulation, the administration of mercury is injurious, as retarding the healing process, and in no way protecting the patient from secondary accidents. When a sore continues to spread quickly, or, after seven days, shows no inclination to heal, mercury may be given with advantage. That mineral is also required when syphilitic induration exists in the slightest degree. The administration of mercury in cases of primary phagedena requires the nicest discrimination. It is useful in many cases of chronic phagedæna, but generally dangerous, if not positively injurious, in the acute varieties."

Believing, as he does, that profuse suppuration confers no immunity from secondary symptoms, Mr. Coote recommends great delay in opening buboes, and the use of every means to resolve them; he disapproves of leeches, and recommends mercurial frictions and plasters; and, when openings are necessary, that they should be made longitudinally, not parallel to Poupart's ligament. All this, though very good, is not new, and we should apologize to our readers for noticing it, but that we are of opinion what is good practice cannot be brought before our minds too often.

The chapters on inflammation affecting syphilitic sores, and on diseases resembling syphilis, are so meagre and deficient, that we are at a loss to account for their insertion in the work at all. When treating of secondary syphilis, in reference to Mr. Acton's opinions (viz., "that the simple and the phagedenic sores are rarely followed by constitutional syphilis, whereas the indurated chancre rarely, if ever, fails to be succeeded by the most positive secondary symptoms"), he says :—

"I beg, with every respect, to dispute both positions. . . . It appears to me that it would be more correct to say, that no one who has primary syphilis in its slightest form can be safely guaranteed from the occurrence of constitutional disease; but that, if six months elapse after the healing of the primary sore, the patient remaining well, the chances are greatly in his favour that he will not experience any further annoyance. An exception to this, however, must be made in the case of primary phagedæna, because experience teaches us that in this form of disease the interval between the primary and secondary symptoms may extend over from ten to fifteen years. The peculiar danger attending the Hunterian or indurated chancre arises from the fact of its being obstinate and chronic in its course; and the longer the primary disease remains, so many more are the chances of constitutional infection from absorption."

With regard to the contagion of secondary syphilis, he holds the extreme doctrines, and gives his complete assent to Professor Porter's opinions on the subject of the transmission of the poison through the semen without sores, even when impregnation does not take place.

We must here take leave of the author. His book is, as we have said, a step in the right direction; but, unless followed up, we fear that in its present imperfect and crude form it cannot be viewed as a satisfactory step.

Traité de l'Angine Glanduleuse, et Observations sur l'Action des Eaux-Bonnes dans cette affection, précédés de considérations sur les Diatheses. Par NOËL GUENEAU DE MUSSY, Médecin de l'Hopital de la Pitié, &c. Paris: Masson. 1857. 8vo, pp. 269.

THE name of Gueneau de Mussy is familiar to the profession in Ireland, in connexion with our terrible fever epidemic of 1847-

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1848, which M. Henri de Mussy, cousin of the author of the volume now before us, studied with great diligence, in conjunction with the lamented Oliver Curran. We have read this treatise with great interest also, as coming from a pupil of the great Chomel, to whom he has addressed it in an affectionate classical dedication.

The object of M. de Mussy has been to establish a complete analogy between the diseases of the skin and those of the mucous membrane. He believes that their close resemblance in structure, function, and vicarious action, might induce us, d*priori*, to conclude that the pathology of their organic lesions would be identical. Upon this hypothesis, which is not new, and was even stated by Broussais in his revival of natural pathology, the author refers all the affections of the pharynx, larynx, œsophagus, bronchi, &c., to the spread of some herpetic or analogous eruption, creeping along the continuity of surface, and producing constitutional effects, modified by the nature of the tissue subjected to its attack. The principal arguments upon which M. de Mussy rests his hypothesis are as follows:—

1st. The marked predisposition of persons suffering from herpetic and squamous eruptions, eczema, pityriasis, &c., to affections of the throat and pharynx, and *vice versâ*.

2nd. The outbreak of the herpetic eruptions in the course of tracheal or pulmonary disease, as herpes labialis in pneumonia, &c.

3rd. The frequent termination of coryza in bronchitis, pneumonia, &c.

4th. The facility with which this train of morbid symptoms may be cut short by the timely application of some escharotic, such as nitrate of silver, to the tissues likely to be affected.

M. de Mussy has described with great exactness the appearances observed in sore throat, occurring in persons of relaxed or strumous habits; and he has given a well-executed plate representing the peculiar granular appearance of the pharynx in such cases. The special affection of the follicular tissues which he refers to is familiar to most practical physicians, although we believe it has not been minutely described in any systematic work. He lays great stress upon the teazing cough or *hemming*, and the scanty viscid expectoration which accompanies these forms of disease; and here we have some very interesting remarks upon the pathology of the affection known in these countries as clergyman's sore throat.

In the treatment of these affections Dr. de Mussy gives the palm to the sulphurous mineral waters of the Pyrenees, especially the Eaux Bonnes; and relates many instances of suc-

cessful treatment at these springs. When we take into account the careful dietetic system pursued in these cases, we are inclined to accept the unrivalled remedial powers of the Eaux-Bonnes cum grano salis. Besides, these pharyngeal affections are very recurrent, often disappearing suddenly, and returning after an indefinite period of time. The American treatise of Green has made much impression upon Dr. de Mussy, who has quoted very largely from that work. No second opinion can be entertained by practical men as to the utility of nitrate of silver applied to the pharynx, and even in certain cases to the larynx itself; but the idea of passing a sponge into the bronchi, and squeezing out a cauterizing fluid into the lower airpassages, is a chimera, which has already vanished into oblivion, with other Transatlantic wonders. We consider this treatise, in fine, a valuable addition to the many practical and scientific works which the French medical school has just reason to be proud of.

The Change of Life in Health and Disease : a Practical Treatise on the Nervous and other Affections incidental to Women at the Decline of Life. By EDWARD JOHN TILT, M. D., Senior Physician to the Farringdon General Dispensary and Lying-in Charity, &c. &c. Second Edition. London: Churchill. 1857. 8vo, p. 291.

THOUGH by no means a modern fashion, yet it is becoming every day more and more general, especially with the members of the medical profession, to write a book of some kind or other, for the chief purpose of attracting public notice. So far back as "several years," Dr. Tilt presented the public with a "little work," of which he now brings forth a second edition. The gem has expanded; the little volume has swollen into a big book, from the accumulation of "materials," which, the author informs us, he has been diligently collecting during the "several years."

The "little work" was on "Diseases of the Change of Life;" the title of the present volume is "The Change of Life in Health and Disease." On the back of the present addition appears in gilt letters these words only, "The Change of Life;" so that, on first taking it up from our library table, we were under the impression the author, whoever he was, had mistaken the character of our Journal, and had sent a religious work for review; upon seeing the name of Tilt, however, our error was at once corrected. In limine, we take the opportunity, on behalf of the medical public, for, though the profession is mentioned, perhaps it may not be included, of acknowledging the "apology" which Dr. Tilt has offered for the delay in appearance of the second edition of his "little work," and, at the same time, of assuring him that such a step, on his part, was quite unnecessary. We live in a happy age; one overflowing with unselfish philanthropy; the instant a deficiency in any system or work is discovered, some kind individual steps in and sets all right, and that from the abstract love of doing good. Should a "want" in "medical literature," especially, be experienced, it is at once remedied. We have no hints in any of our medical works to help us in the treatment of the diseases of women at the critical period of life, and so Dr. Tilt set himself to work to supply them; for which we are in duty bound to feel most grateful.

"In none of our classical works," says Dr. Tilt, "have I found diseases of the C. of life" [the letter, we presume, means "critical period," and is not to be used in a phonetic sense] "brought within the range of the laws of general pathology, and no general principles of treatment are laid down for the guidance of others."

And so Dr. Tilt, in his philanthropy, has accumulated, "by a mental process, very tedious, material for a fuller elucidation of the subject."

"Sir C. M. Clarke" [we are told, in commenting on the diseases of this epoch], "states that it is not unusual with women to refer all their extraordinary sensations to the *C. of life.*"

And we say that Dr. Tilt does exactly the same as the women mentioned by Sir C. Clarke. Every extraordinary sensation, every possible disease occurring to women between the ages of 40 and 45, are set down to be depending more or less upon the "C." of life.

"The present volume," says the author, "illustrates the period comprised between the 40th and the 55th year, and in addition to other data, it embodies the tabulated estimates of the symptoms and diseases observed among 500 women, who were at the C. of life, or who had passed it. The facts I have collected, the pathological views to which I have been led, and the plans of treatment they have suggested to me, having borne the test of experience; I venture now to place them before the profession."

These 500 women whose cases may be said to form the basis of Dr. Tilt's work, were, it seems, the subject of 119 different diseases or "morbid liabilities at the critical period;" some

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of the 119 morbid liabilities attacking a large number of the 500. Thus, 459 were the subjects of "nervous irritability;" 287 had "flushes," &c., &c. The list of morbid liabilities given by Dr. Tilt covers a page and a half of small print in double columns, and contains, absolutely, all "the natural shocks that flesh is heir to," from a boil on the perineum, " boils in seat," to disease of the brain, "apoplexy, and hemiplegia." This long list of ailments Dr. Tilt has separated into groups, and to each group is devoted a chapter: each chapter contains some general remarks on its statistical heading, a few cases, and some observations on treatment. We have heard that some surgeons, who have made a special study of syphilitic disease, were said to look upon every symptom, sore, or spot presented to them with a "venereal eye." Surely, Dr. Tilt may, with some truth, be said to view all diseases occurring in women between the ages of 40 and 55, with a "climacteric" organ.

The period of puberty is viewed in the same manner as, and contrasted with, the period of cessation.

Statistics are the fashion of the day,—happily, they are readily procured when required,—and their use was not lost sight of by Dr. Tilt when *making* his book; consequently, we are presented with numerous "Tables," some of them curious enough, and, perhaps, useful. An index affords easy access to them. There is a table of marriages in Ireland for eleven years; another, showing the number of bachelors, spinsters, widowers, and widows, at different ages, &c.; a fecundity table, for Sweden and Finland, and one showing the length of the "dodging time." In all, thirty-three.

The volume also contains what may be considered as a small system of "C." (to use the author's own contracted appellation) therapeutics, and an analysis is displayed of the waters of Aix and Savoy, together with an intimation that Mr. Taylor, of Baker-street, makes up Dr. Tilt's "Flush Powders," for which, however, the receipt is given. There are receipts for two descriptions of flush powders, and these have been found most useful: by the way, practitioners do not pay "sufficient attention to flushes and chills."

Hygiene holds a prominent position. The author remarks, on the hygiene of the "nervous system;" the hygiene of the "muscular system;" that of "the digestive functions;" of the "cutaneous functions;" the hygiene of "the reproductive organs;" and mental and moral hygiene. Physiology is not omitted: at the very first page the reader is prepared for some new and striking revelation in that science:— "The present century," remarks Dr. Tilt, "has witnessed magnificent discoveries in the pathology of the brain and of the spinal marrow; but it will be obvious to those conversant with medical literature, that the pathology of the ganglionic system has received comparatively little attention; neither can it be much advanced until EXPERIMENTAL PHYSIOLOGISTS have accurately investigated many points connected with the *physiology* of the ganglia and their nerves. My object has been to *prepare the ground* for other labourers, by throwing on an intricate subject all the light I could collect."

Well, on searching for all this "*light*," we found a physiological account of the changes which the ovaries undergo, similar to that in *all* school-books; we were informed that the ovaries have the power of exciting certain changes in the constitution, and that they chiefly exercise their influence through the medium of the nerves:—

"That while sensation and motion are intimately dependent on the cerebro-spinal system, nutrition is dependent on the ganglionic; and that, in the central ganglia, situated in the epigastric region, there is a condensation of ganglionic nervous power, which gives and receives from each organ a variable impetus." Again: "If the ovarian stimulus be insufficient, it will retard the first appearance of menstruation."

And vice versá. Still, notwithstanding these curious facts and new lights in physiology, we are told that,—

"It is not surprising that organs similarly endowed should fraternize; and that, whether at each M. [which means menstrual] period, at puberty, or at the C. of life, undue ovarian influence should give rise to more or less nausea and sickness, &c."

We have no hesitation in saying, that Dr. Tilt's book is, in our opinion, one of those literary manufactures of the present day, which issue so abundantly from the press as the production of *certain* members of the medical profession. It is an "accumulation of materials," and nothing else, which would tend to perplex a student, and could not be waded through by a welleducated physician. The only class by whom it may be appreciated is that of the individuals between forty and fifty-five years of age, whose particular constitutions Dr. Tilt has made his study. These, when wearied of the dry detail, or appalled by the perusal of the long list of diseases, some of which they must undergo, may turn for solace to the following passage:—

"Besides the vast improvement in health, it must not be thought that the C. of life implies *the loss of all personal attractions*. The beauty of youth charms that of maturer age, excites admiration; but in many women there is at the C. of life, and long after, an autumnal majesty, so blended with amiability, that it fascinates all who approach them. To those fired with a little noble ambition it may be safely said, that the home government of society, from Almack's down to the lowest of our social strata, offers a wide field of employment to women at this period of life. Many never think of cultivating their minds until they find their influence fading with their charms, and then set about acquiring a less perishable empire, and employ this period of freedom in literary pursuits. . . . It is a matter of history how society has been influenced by the drawing-rooms of Mme. Lambert, Mme. de Tencier, Mme. du Deffand. Those acquainted with French society at the present time will remember the influence of the late Mme. Recamier over a large circle of talented friends; and during my residence in Paris I have, myself, frequently witnessed the benign influence of Mm. Swichine prompting those around her to what was great and noble," &c.

Query, was it Mme. Swichine who prompted Dr. Tilt to write his book on the "Change of Life"? Should any of the "beings" between forty and fifty-five, whom, as old maids, it may not be easy to conciliate, peruse the subjoined, they cannot fail to soften:—

"The most distressing appeals to medical sympathy are made by those who, when unnerved by the C. of life, find themselves alone in the world, bereft, when most needed, of the solace of filial piety or the gushing sympathies of conjugal affection. One can only at first respond to such appeals with a sympathizing look and a silent pressure of the hand; but, should tears burst their bonds, lightening the suffering spirit of half its load, sweeping away black sorrow, disquietude, and trembling doubts, then it may be hinted that time steals even sorrows from the heart, doubtless because they are sweeter than joy, and that, after a brief period, nothing will remain but calm judgment and the unmoved remembrance of past goodness, where it was once thought that impassioned love and devoted tenderness must be eternal," &c., &c.

Who can deny that poetry finds a place in Dr. Tilt's work (in justice to him, we must say that the italics are our own), after reading such passages as the above, more particularly the last. Oh! how some sentimental, antiquated virgin will, "as the bee upon the flower," "hang upon the honey of" his "eloquent tongue." And should we find fault with our author for combining "poesy" with medicine? Surely not; in these days, when physicians find it *convenient* to write for the *general public*, such little embellishments are necessary, and Dr. Tilt is only doing what others do.

Farewell, then, to Dr. Tilt; we leave him to gather more materials for the construction of his third edition, fervently hoping that it may not be completed till after the lapse of "several years." In the mean time, "should the changes of life ever force us to rove" to London, we need scarcely say that not being of the magical age or sex he publishes for, we should, after what we have written, fear to call at 11, Yorkstreet, Portman-square, to consult him.

The Functions and Disorders of the Reproductive Organs, in Youth, in Adult Age, and in Advanced Life: considered in their Physiological, Social, and Psychical Relations. By WILLIAM ACTON, late Surgeon to the Islington Dispensary, and formerly Externe to the Venereal Hospitals, Paris. London: Churchill. 1857. 8vo, pp. 108.

LET us pause for a moment, and reperuse the above title. Yet, stop! we have not quoted the entire page; for at the foot is the announcement, in small italics, that the book is "reprinted from the third edition of his Practical Treatise on Diseases of the Urinary and Generative Organs."

Before we proceed further, we are naturally led to inquire, why does Mr. Acton not reprint the whole of a work which has already survived three editions, or whence the necessity of affixing a new and popular title to an old story in another shape? We trust we shall be able to reply satisfactorily to these queries before we lay down the work and our pen, or we err egregiously.

To commence, then, with the preface. The author herein states, in limine, that he ventured in the last edition of his work, just alluded to, to treat of the *functional disorders* of the urinary and generative organs; that since that period he has accumulated much additional material; and he now presents the results of his practical experience. He admits freely that he has drawn very largely upon the writings of Owen, Carpenter, and Rymer Jones, in his physiological descriptions; while to Lallemand, Parise, and Roubaud, he is also much indebted for observations on the aberrations of function to which the generative organs are liable; "preferring," he says, "that they should share the responsibility of many statements which I could establish in my own experience." Further on we read:—

"Should these pages accidentally fall into the hands of laymen of sense and information, many of the facts and opinions to be found therein will, I apprehend, prove at least suggestive. The continent

student will find reasons for continuing to live according to the dictates of virtue. The dissolute will be taught, on positive and irrefragable grounds, the value of self-control. The married man will find advice and guidance; and the bachelor, who is often placed in a trying social position, will glean consolation from observing, that not only are his sexual sufferings appreciated and understood, but that rules are given him for their mitigation. The physiologist will see his principles reduced to practice. The comparative anatomist will judge how much light his investigations on the animal kingdom have thrown upon sexual relations in man. The surgeon will learn how to manage that difficult class, the hypochondriacal, and how to address himself to the audacious old libertine, who, setting at naught [sic] religious principle and social customs, acts in open defiance of the laws of his country, Lastly, the advocate who practises in the ecclesiastical or criminal courts will here find the basis for many valuable arguments,-nay more, he may learn how, in many cases of guilt, fair cause may be shown for a culprit's committal to a lunatic asylum instead of a prison."

With what prescient sagacity he has supplied material for valuable reflection to the various sorts and conditions of men, into whose hands his modest little book may "accidentally" fall! At the same time, what shrewd reserve does he evince on the subject of the possibility of its finding its way into the hands of the young, the ignorant, the innocent! That we are not making a false application of the doctrine of chances in this latter remark, the sagacious reader may judge from the next paragraph of the preface. He goes on:—

"I have been induced to publish this part of my third edition separately, because it is complete in itself, and contains information which has a more extensive bearing on the social well-being of society than other parts of the work, the bulk and strictly professional nature of which must render its circulation limited."

Having disposed of the preface, we must hasten with our task. In dealing with the work before us we would be brief, for we feel that our situation is not unlike that of an unfortunate chimney-sweeper, who, having got himself fairly within the flue, must press rapidly on to the end of his job ere he can expect to breathe fresh air. We trust our readers will forgive the homeliness of a simile which has presented itself irresistibly to our mind by reason of its very *smuttiness*.

The work, then, we are to understand, is not strictly a professional one; nevertheless, in some degree it is so; in fact, it appears to be made up of an agglomeration of very heterogeneous materials, without much regard to accuracy of arrangement; for we have in one page a copious extract deliberately transcribed from some of our standard works on physiology, then a piece of vididly poetic, but at the same time morbidly, may we not say mischievously, sentimental description of voluptuous and sensual excesses, the very perusal of which, we "apprehend, will prove at least suggestive;" then, perhaps, a little piece of sound sense in the way of hints or directions for the proper conducting of the moral and physical education of youth; hints, however, in no wise more valuable than those which may be found in many excellent works on educational subjects. Mixed up with all these we have here and there a little medicine, with perhaps some sapient suggestions regarding the mode of procedure to be observed by physicians in dealing with the more filthy frailties of our fallen nature.

The author has divided his treatise into two parts, the first of which, extending to page 51, descants upon the normal functions of the reproductive organs—1. In youth; 2. In adult age; and 3. In advanced life. The second treats of the functional disorders of the same organs in these three stages of life.

In the first part of the work (containing, as it does, much that is really good in its way, when placed in proper hands), there is enough in almost any one page to condemn the whole to the lowest level of Holywell-street. We write advisedly, and must tell the author that we approve not of the system adopted in works of this kind, namely, of sacrificing to the corrupt and vitiated tastes of a certain portion of the public, under pretence of writing for the profession, those disclosures which in a moment of suffering were made to the physician as to a confessor. He may seek in vain for *our* sympathies.

"I should be ill discharging the duties I owe the profession and those who have consulted me,"—and this, be it remembered, may fall accidentally into any hands,—" did I pass by in silence the scenes of sexual suffering which I have witnessed."

We forbear to transcribe the particulars of such cases, but would for a moment direct attention to one clause in the same page with the last quotation:—

"Let the man who has married early pause, hear a voice seldom heard, and, when heard, seldom listened to. Let him learn that his felicity and his bodily ease may be imperilled even now, while he smiles in fancied security."

This is followed by a harrowing account of a tissue of miseries, described in the most inflated language, and which our author informs the public is only "one phase of sexual suffering."

The second section of the first part, namely, on the normal functions in adult age, abounds with plain speaking with a vengeance, nor has the author considered it necessary to prescribe technical bounds to his terms, but he treats of these matters with a freedom and grossness which are truly disgusting.

That medical writers must sometimes enter freely into particulars, which, however, are only intended for medical readers, we are well aware; this is unavoidable, and differs *toto coelo* from the course pursued in the work at present under consideration, in which we find the author labouring to invest the minutest particulars of his theme with an extravagant importance---

> "Exposing barbarously to wanton gaze The mysteries of nature;"

while ever and anon he introduces lengthy quotations from Lallemand, Parise, and other writers of that school, as it were to relieve the temporary exhaustion of his own descriptive powers.

The second part of the work is thus subdivided :----

"Div. i. Functional *diseases* in persons who do not know the consequences of repeated acts of sexual intercourse, and commit excesses from ignorance.

"Div. ii. *Persons* who know the consequences of sexual excess, but cannot control their passions.

"Div. iii. Debauchés who, indignant at the loss of power consequent on their previous excesses, stimulate the reproductive organs, for the purpose of gratifying their animal passions."

One extract from the second of these divisions, and we have done:--

"This is a class of persons the consulting surgeon occasionally meets, deserving of great sympathy. . . . They sometimes think this unnatural excitement is healthy. They pride themselves upon it, appear astonished at the surgeon wishing to remove the cause, and cannot comprehend that their constitutions have been much reduced by the fatigue which the organs have undergone. Common sense usually triumphs, and they feel intensely grateful for the relief they obtain. The surgeon must acknowledge, however, that these affections are frequently very rebellious. The duration of disease, prolonged residence in warm or unhealthy climates, or allowing the sexual passions unrestrained liberty, has often brought the constitution into a very delicate state; still, great amelioration may be surely promised. The means of cure cannot be here dwelt upon. They must depend upon the particular affection present."

So much for the medical value of the work. In conclusion, it is almost superfluous to say, that we feel we cannot reprehend too strongly that "sacra fames auri," which could induce a man of education, as the author evidently is, to *prostitute* his professional honour in thus pandering to the worst passions of human frailty, by writing a book which, like the productions of Curtis, L'Amert, and many other members of that tribe of lewd quacks with which the great metropolis abounds, should be sold in a *sealed envelope* to mark its character.