

terference is effected; whether it be through the means of obstruction in, or by inadequacy of, the conveying-tube; whether there be an increased or a diminished calibre in the chief propelling vessel or disproportion in the quantity or quality of the transmitted fluid, etc.

Having now set forth these two laws of hydraulics, and assuming their applicability to explain, as the case may be, the normal sounds and the murmurs occurring to the circulation of the blood during its passage into, through, and out of the heart, it will be useful to examine whether as theories they prove, experimentally, consistent with the various phenomena that occur.

[To be continued.]

REMARKS ON SYPHILISATION.

By GEORGE GASKOIN, Esq., Surgeon, Chevalier of the Order of Christ, Portugal; Surgeon to the Artists' Benevolent Fund; formerly House-Surgeon and House-Pupil, St. George's Hospital.

CERTAIN lectures having appeared in the *Lancet* from the hand of the well known surgeon and syphilographer, Henry Lee—lectures which in an equal degree seem intended to extol the efficacy of the calomel bath in the cure of syphilis, and to depreciate the claims of syphilisation to the favour and study of the profession (for it is difficult to say which of these two is the principal aim of the writer)—it has appeared unbecoming in us, as friends of free inquiry, to remain silent under such a challenge; since, as intimates sharing in the same observations, and students in the same field, we might be accused of acquiescence in these views and complicity in these results, did we permit so narrow an interpretation to be placed upon what we have seen done during the last few months towards elucidating, through this process of syphilisation, many difficult and curious points in the natural history and treatment of the venereal disease. And, as Mr. Lee has given currency to his ideas in a periodical so much in favour as the above, no less with the medical profession than with the general public, so we esteem ourselves fortunate in being permitted to address the profession through the pages of the BRITISH MEDICAL JOURNAL, which was the first in this country to direct attention to the importance of these questions, in their double relation to medicine and pathology. It would, indeed, seem to us that, in penning these lectures, Mr. Lee must have had it in his mind to exert a reply, in order that he might have before him at once those arguments which he will be compelled to meet whenever and wherever he is brought face to face with the subject: or did he hope to strike away from indecision its last remaining prop, and to influence the public mind against views so menacing as those with which we are concerned, to conservatism in this branch of practice? It is undoubtedly more easy, and more in the fashion of the day, to learn from the observation of others, than to spend time in observing for ourselves; and we think that Mr. Lee has committed a mistake, when he believes that, by relying on his great experience and independent resources of experiment, he can dispense for this once with the observation of facts occurring in a constant series. Such experience as we have gathered is fairly at the service of all; we have only to regret its immaturity, from the small opportunities which have hitherto been afforded in this country for studying the subject. It may be that we are not without self-reproach, as having brought too little earnestness into this field

—a fault which is too common in our days not to be admitted as a plea. The blindness which we have indulged, as to the amount of resistance which these novel and ingenious views were likely to encounter at the hands of our countrymen, has left us more unfurnished than we otherwise should have been, had we anticipated (which was far from our thoughts) such an entire difference of opinion before the evidence of facts, and so active an opposition to the spirit of improvement on the part of our talented friend.

It seems to us, however, very strange that a purely scientific question (for such is the aspect which syphilisation wears in this country) should be brought forward side by side with a particular empirical method, which of itself has as little to do with syphilisation as the Goodwin Sands with Tenderden church-steeple. Whether syphilisation can ever vie with mercury as a remedy for syphilis, and especially as a secret remedy, is entirely subsidiary to the scientific questions involved; and these ought not to suffer prejudice because Mr. Lee has discovered a convenient method of administering mercury for the cure of the disease. It is true that, in common with others of his countrymen, the chief promoter of syphilisation is a decrifier of the mercurial treatment.—an opinion which has been arrived at among a scattered population in a country where the disease is endemic; and, moreover, in regard of doctrine, Dr. Boeck has ranged himself under the flag of the unicists, though perhaps between him and the dualists the difference may not be so wide as conjectured; and Mr. Lee, who is, as it seems to us, a dualist in all but the name, from which he shrinks, may stand opposed to Boeck on a double plea of dualism and cure by mercury. There are many among us, however, who, as neither unicists nor dualists, are fain to say, "A plague on both your houses"; or, perchance, viewing dualism with a favourable eye, as being of the latest advance, and recognising in mercury a potent remedy against syphilis, they may still feel interest and curiosity of the highest kind in regard to syphilisation. It cannot escape their apprehension, that mercury is a remedy of old date. We know its power, and we are not without some knowledge of its defects. Syphilisation, on the other hand, is of recent introduction; it is even yet under trial; and as yet, amongst us and elsewhere, it has been chiefly employed in the sense of pure experiment—i. e., without adjuvants and palliatives of any kind. There is plausibility in the argument that, as a means of cure, it may be susceptible of vast improvement. If we view our most received methods by the light of their history, we shall find that they were perfected by the slow hand of time. It is not wise to judge of a thing in the first cast and in the rough. Even as regards the principle of any thing, if new, we should refrain from deciding suddenly or with too violent an emphasis. No better proof of this could be given than in the instance of the mercurial vapour-bath—a remedy which has been tried and discarded repeatedly, after enjoying for a season a certain amount of favour. Many times it has been abandoned, and resumed again. But if, as Mr. Lee would have us to believe, it is constantly successful, faultless, universally applicable, and ever unattended with regret, then we cannot but admire the perseverance of those who have brought it to perfection, and the lenient spirit of society which has been favourable to so many trials of its virtues.

With the detractors from the merits of mercury, however, and the devotees of rationalistic medicine, it will ever remain a subject of accusation and a stigma of reproach, if syphilisation be not allowed a fair chance. Some margin of deference must also be

conceded to those who have faith in the growth of social improvement, and who look forward hopefully to a more privileged condition of mankind, through the constant efforts of our art. It appears to us that these lectures of Mr. Lee were singularly ill-timed as regards the subject of syphilisation, being written and published at a conjuncture when it was undergoing an *experimentum crucis* in a hospital constructed and disciplined under very different views from those which are favourable to its success. As our confidence in syphilisation, however, goes somewhat beyond the result of present trials, we shall endeavour to show in what respects this able surgeon seems to have prejudged the question, and how, in a way which seems inexplicable to us, he has missed seeing the main points at issue, accepting the dogmatic assertions of certain French and other writers as pure verity, and at the same time, by a too close adherence to current views and explanations, placing himself at a disadvantage with regard to novel aspects of the truth. Those who have settled themselves into an alliance with the old are mostly unwilling to advance towards the new idea. It is well known that Mr. Lee has, neither at the first nor since, looked on the subject with an encouraging and friendly eye. This has not, however, deterred others from being attentive to the bearings of the question, believing that it contains the germ of truth and future progress, and, indeed, many such germs; even though syphilisation be not established as the only cure for syphilis, and the most approved and ready way of dealing with this most horrible disease.

Mr. Lee may say that he has practised syphilisation himself even before the arrival in this country of Dr. Boeck; we know nothing, however, of his, which is worthy of the name. Many able and distinguished men have attempted to practise syphilisation in an extemporary sort of manner, such as they imagined that it ought to be; but they have failed, for want of attention to the lessons of experience. Taking direction from their own unassisted ideas, they have only arrived at very imperfect results. Long since escaped from the thralldom of personal instruction and professional dictation, they fancied they could take the whole thing in at a glance; whereas, there is no department of medicine which more depends upon experience, and which makes a greater, or we might say even an equal, demand upon attention and carefulness; there are so many little things to attend to and record—so many details in which it is possible to err. In the very dawn of these physiological and pathological truths, Ricord, whose privileges and opportunities were so many, seems not to have had any violent objection to the performance of repeated inoculations; for more than once he took on himself the responsibility of making them. In one case, that of a member of our profession (M. Pages), the positive inoculations made by Ricord were forty in number. Had he originated these ideas, he would have fathered them with tenderness; but, from pride and professional conceit, and being averse to condescend or to consult with men of lower standing than himself, he broke down in his attempts; falling short of a perception of the truth, it is well known how he became a persecutor and decrier of these novelties. Thiry of Brussels, to whom, in those days, was committed the task of adjudication from Paris (a task accepted at his hands), also failed in a manner which seems to us now impossibly absurd, from the clumsiness of his conception. He never troubled to inform himself what the process really was, but followed his own head, when the published work of Sperino would have given him all the instruction he required.

In more recent times, Nélaton, in his benevolent desire to place the subject once more upon its feet, where he tried it, failed, as the subject of experiment was one of those cases wherein experience has shown that success is not attainable. In an age distinguished more by independence than by earnestness of character, it is not possible but that many such failures should occur. Every one now aims at the merit of invention; the great and daily effort is to start something new of one's own, or at least to improve and gain a point upon our neighbour—something, if it be but a gum-lancet, originates in the brain of every man on the register of practice. It will not be found a very easy task to break in such men to a close observance of rules or to any uniformity of idea. It is in the nature of things that failures, and even scandals, should arise. In syphilisation, experience has most weight. In our hundredth lesson, we learn as much as in the first. We need only turn to the first lecture of Mr. Lee, and read his attempt at inoculation of the hard chancre on the bearer, to see how he understands the thing. After stimulating the secretion of the sore, he inoculates seven times in succession, at intervals, first of two, then of three and four days; he then breaks suddenly off, having failed to get anything like a positive result. Already the affair is decided; he has now arrived at an unquestionable fact wherewith to point the moral of his tale. Such a case is not fit for print; it would satisfy no one in the least conversant with syphilisation. He should have continued the inoculations daily, and not have broken off on the verge of a probable, or at least of a possible, result. So far from being typical, such a case decides nothing and teaches nothing. And, if Mr. Lee ask what difference there is between inoculating every day and every other day, it is replied to him, that there is a difference both theoretical and practical; and, since the method we point out is the recognised way, if he wished to succeed, he should have chosen no other path than that which leads to success, especially in cases which are published by him for instruction. But, if he plead that, with regard to the inoculation of the hard chancre, a successful or so-called positive inoculation was not the point aimed at, but rather to prove the difference between the soft and the hard chancre, as shown in the behaviour of their secretion when inoculated on the patient, then it is freely accorded to him as a general fact, that there is a great and almost an extreme variety in the quality of the secretion of chancres. There is a chancrous virus of great intensity, and another which, as a rule, seems dull and pointless; all being subject, however, to peculiar exceptions in the relative behaviour of such on the inoculated, which exceptions, as we cannot understand them, we are content to call capricious.

Mr. Lee says of the secretion from the soft chancre, that it is "invariably", the French say "fatally", inoculable on the bearer. Others have found this not to be so. We shall, however, confine ourselves for the moment to a submissive shrug. But, when the French say that it is impossible to inoculate from the hard chancre on the bearer, this is what we are wholly unwilling to concede to them. We direct their attention to the face; and say that, although soft chancres are not impossible in that region, as proven by experiment, yet they occur with such difficulty that it is clear that they must be very rare indeed, if ever such occur at any time in the field of practice. The chancre in the face, beginning in a papule or a pustule, becomes hard, and is followed by secondaries; and yet many times it has been shown to be auto-inoculable on the very first essay. To this they reply that, however it might have

appeared formerly that the soft chancre does not affect the face, the very fact of its auto-inoculability proves such to be an error, and is, indeed, sufficient to show that the soft matter, or matter of soft chancre, is an element of such chancres. Such is their mode of reasoning. All indurated chancres, the secretion of which is inoculable, are, according to their argument, either soft chancres with an inflamed base, or else mixed or mule chancres; that is, with soft chancre superimposed on a hard chancre, or *vice versa*, such as Mr. Lee calls twofold chancre. Here the theory of dualism finds its most lively expression. In the single chancre which a man has we are to see, not one, but two. By a keen intellectual process, the chancre alone is doubled; the man remains but one. In the mixed state and character of the chancre, which must be of rare occurrence as regards frequency, and of very limited duration compared with the existence of a sore (for the tendency would ever be to separate and part), they (the French) find a ready foil for all that is urged upon them adverse to their theories. Every inoculable Hunterian chancre becomes subject to the imputation of being a *chancre mixte*. Where Hunterian chancres were formerly seen, the "*chancre mixte*" has now possession of the ground. It is sufficient for us to say, that a hard chancre is not seldom inoculable on the bearer, generally during the first week, while it is in a stage of progress, before it becomes indolent, as even common ulcers are wont, and at all periods of its existence, if the chancre become irritable, and if its secretion be increased either naturally or by artificial means. Sometimes, on the first trial, a positive result is obtained; and sooner or later, on successive daily trials, it will prove inoculable in the majority of cases, both on the bearer and on a syphilitic soil. If the incubation of the chancre be short, we shall, as a rule, succeed more readily than where the incubation has been long. Some have hazarded the opinion, that these hard chancres with long incubation are derived from the contagion of secondaries; but that is an opinion which is entirely *sub judice*, and by no means proved.

If we wish to inoculate the hard chancre on the bearer, we shall succeed by following the method of those who have succeeded. There is also a way not to do it, which has also been much put to use; but this way is hardly so satisfactory and confirmatory to those who employ it as ours is to us; for they get positive results in a certain percentage of cases on the very first essay, and the prescribed way, as followed by us, we have said to be, early or late, very commonly successful.

Mr. Lee seems to throw on Drs. Boeck and Bidentkap the entire responsibility of the affirmation, that the matter from a hard chancre is inoculable on a syphilitic soil. He now affects to yield a sort of half belief to their assertion, that all the matter used by them in syphilisation is obtained from hard sores; that is to say, he would seem graciously to concede something when he refrains from convicting them of an absurdity in terms. This may be intended for politeness; but it is scarcely satisfactory to us, leaving, we confess, as the phrase goes, "something to be desired". These gentlemen did no more than follow the progress of science in inoculating the matter of the hard chancre on the patient. The most distinguished among the pupils of Ricord, the late Dr. Melchior Robert, successfully inoculated the matter of the hard chancre on the bearer "in the majority of instances"; and, having studied the conditions of its inoculability, this observer also pointed out the method to be employed. He obtained from the municipality of Marseilles the permission to practise syphilisation in the hospitals committed to his charge,

at a time when, as a result of previous professional intrigues elsewhere, it had been proscribed, and indeed stamped out, in every department of France. Robert practised syphilisation with a marked degree of success, and with great relief to his patients; although he was far from having at his command the amount of information we now possess. Ricord himself, in reply to Dr. Boeck, when interrogated as to the auto-inoculability of the indurated chancre, replied that "sometimes" it was so—*i. e.*, on the first essay; but since that time, dualism being in the ascendant, Ricord has been more reticent. This far-famed syphilographer, however, remains an unicist; and so, professedly at least, does Mr. Lee. The syphilographers of the Lyons school, pursuing their own plan, obtained six per cent. of positive inoculations. In Paris, a result of two per cent. was obtained. The numbers so seriously diminish on the road from Marseilles to Paris, that we are fair to look for an explanation in the *modus operandi* of these Parisians. Ricord has pointed out the scanty secretion of the hard sore as one cause of its non-inoculability; and this condition, doubtless, has a share in producing the negative results. The French confine themselves to the use of needles in inoculation, and are averse to any other mode of proceeding; herein lies another source of ill success. It is to be understood, that they only use the needle's point in all probability but once, or at least they do not perform successive inoculations.

Keeping out of the sphere of vision all that has been done elsewhere than in the Scandinavian peninsula towards inoculating the hard chancre on the bearer, and making a summary of negative results from different lands, Mr. Henry Lee asks, "How is the difference in their results?" (of Drs. Boeck and Bidentkap) "and those on the continent, England, and America, to be explained away?" To this we answer that, in France, Melchior Robert has perfectly succeeded in inoculating the hard chancre on the bearer; in England, Henry Lee has given us some lessons in that line; in Germany, Krobner of Breslau has fully proved the hard chancre to be inoculable in the majority of cases, and has also inoculated from mucous tubercle successfully, wherein there can be small suspicion and pretext of the *chancre mixte*. Other observers have arrived at equal results. The same class of experiments have been recently performed at Vienna with some *éclat*, and the results of Bidentkap more than confirmed. Mere clinical observation will show that an infecting sore sometimes inoculates the parts with which it lies or is brought in contact; but here our French objectors bring in the phantom of the *chancre mixte*, and Mr. Lee his twofold chancre. If any desire to see the question in a practical light, let them peruse the following case of Melchior Robert's (*Traité sur l'Auto-inoculabilité du Chancre*, etc., 1861, p. 9). Here, at least, there is no plea of *chancre mixte*.

March 29th, 1858. A woman, 35 years of age, has been repeatedly under treatment. At the present hour, the symptoms are of the worst description;—a vast ulceration on the right knee; a very large gummy tumour on the same side; plastic degeneration of the left sterno-mastoid; extinction of vocal power. Six punctures were made on the left thigh with the pus of an indurated chancre from another person, situated on the mucous surface of the prepuce; which pus, inoculated on three different occasions on the bearer, gave negative results. March 30th. Six papules. From March 30th to April 6th. Six ulcerations, of a centimètre in diameter, replace the six punctures. They suppurate long: after the lapse of a month, we find them still active. This woman is treated by multiple inoculations, which

treatment, in a short space of time, has considerably changed her state of health for the better.

[To be continued.]

MR. CARDEN'S METHOD OF AMPUTATION.

By F. LE GROS CLARK, Esq., Surgeon to St. Thomas's Hospital.

I AM enabled to bear testimony to the value of the method of amputating above the knee-joint, suggested by Mr. Carden, of Worcester, and approved by Mr. Syme.

My first adoption of this operation was entirely accidental. I intended to excise the knee-joint of a young woman, and for that purpose made my usual broad crescentic incision, extending from one condyloid tubercle to the other, and across the ligament of the patella. On raising this bone, I found the extent and nature of the disease necessitated amputation. I at once decided to complete the operation by sawing through the femur, after cutting directly backwards through all the tissues behind the bone.

The accuracy of adaptation of this flap, and the advantage of ready drainage, followed by a good recovery, induced me to repeat this operation in the case of a young gentleman who was the subject of serious disease of the knee-joint, too extensive to admit of excision. This case, also, in every respect answered my expectations, both in the facility with which union took place, and in the subsequent firmness and solidity of the stump.

On a third occasion I repeated this operation, on a patient whose leg was badly fractured, and in whom both popliteal vessels were ruptured. The severity and complication of this patient's injuries (apart from the above) prevented my witnessing the final success of the operation; but as long as he survived I had every reason to be perfectly satisfied with the operation.

I have come to the conclusion that this form of amputation, where practicable, is unquestionably a great improvement on any of the ordinary methods of removing the thigh, by the circular or double flap operations. And I would not limit this observation to amputation through the condyles. I consider it preferable, as shown in my first operation, even where the condyles are entirely removed. Thus, I have been led to abandon the last of the muscular flap operations, except those at the shoulder and hip-joints. I have relinquished them, one by one, in favour of the skin-flap, as my confidence has increased in the latter. The tendency of the fleshy flap is to retract, and lose bulk; whereas that of the skin-flap is to gain in consistence and firmness, and therefore in capability of sustaining pressure.

The operator in public must be willing, in making skin-flaps of sufficient amplitude, to produce a stump which is, at first, anything but sightly in appearance. If the opposed flaps fit too nicely at first, there is risk that there will be subsequent deficiency and gaping, when the filling out of the tissues occurs.

In the amputation to which I have referred, the incisions were made with the limb unflexed; and the skin was retracted before the back flap was made.

I may add that I have, for some time past, relinquished all dressing to stumps. Bathing the cut surface with strong spirit lotion favours coagulation of the fibrinous precipitate from the serum, and this facilitates an early adaptation of the flaps. To save pain, long silk sutures may be passed through the flaps, after the arteries are secured. They can be subsequently tied without much disturbance to the patient.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

VILLAGE HOSPITALS: THEIR POSITION WITH REGARD TO COUNTY INFIRMARIES, UNIONS, AND THE PROFESSION.

By HORACE SWETE, Esq., Wrington, Bristol.

[Read January 25th, 1866.]

It will be remembered well by those present to-night, the wretched condition as to medical stores and appliances, in which our army was, when, twelve years since, the Crimean war commenced. We cannot easily forget the call for nurses, drugs, lint, etc., that, day after day, came to us from Scutari and Balaklava; and we can still less easily efface from our remembrance the devoted band of sisters, headed by Florence Nightingale, who left their homes of luxury and plenty, for the privilege of aiding our wounded soldiers in the East. This state of things was a crying evil, one that reflected great discredit on the Executive, and which called forth all the warm sympathies of our profession for their brethren in the army, who, whilst possessed both of the will and the skill to alleviate misery, yet were denied almost the most simple surgical necessaries.

It may be received as an axiom, that out of evil comes good. Should our army again have to take the field, the medical department of both forces will no longer feel the want of hospital appliances. The exertions of the late Lord Herbert of Lea have placed the medical department on a new footing; and military hospitals and schools of medicine have arisen in various places. Nor has the good stopped here. Miss Nightingale has brought the experience she gained in the East to bear on our civil hospitals. Nursing institutions are arising in our principal towns, and a great impetus has been given to the enlargement and building of hospitals. Since the date of the Crimean war, nearly twenty county or large hospitals have been built, or are in process of building, whilst nine of our old established institutions are undergoing considerable enlargement.

In the year 1859, two new hospital plans arose: that of Cottage hospitals, of a small number of beds, from twelve to twenty; and Village hospitals, of a simpler character still. Nor must we confound the two plans, though the names of village and cottage hospitals are often used synonymously.

The Cottage hospital system was, I believe, first established at Middlesborough, in Yorkshire. The system is that of furnishing small houses with hospital beds, in simple style, where patients are admitted by recommendation notes. The nursing in most of these is done by voluntary sisters. In some, I am happy to say, the surgeon is paid for his attendance. The funds are aided by gifts in kind, of food or wine, the patients paying nothing. Of these small hospitals, there are about ten—at Middlesborough, North Ormsby, Marske, Stockton, Darlington, Hartlepool, West Hartlepool, Walsall, and Weston-super-Mare. These have effected much good, at a small cost, providing hospital accommodation to many living at a considerable distance from a county infirmary. Most of these hospitals are for accidents and surgical cases only, and are situated in the immediate neighbourhood of factories or iron-works. That at Marske is, I am informed, entirely supported by the Messrs.