the abstaining from it under others, when formerly recommended, are two improvements of the utmost importance in modern surgery, due to that war.

The opinion of Mr. Hunter, which was inculcated at the commencement of the war in Portugal, in 1808, that an amputation, even if necessary, or likely to be eventually necessary, had better be deferred for several weeks, until the constitution of the patient should have been accustomed to the injury, could not be enforced for want of the necessary conveniences; and was found to be practically erroneous by every surgeon who was obliged to perform these operations as soon as possible after the receipt of the injury; and although the first amputation done in that country, after the battle of Roliça, was performed by myself, and the last, in all probability, under my direction, at the battle of Toulouse, no one can claim precedence over his brethren, in showing the inaccuracy of the views previously entertained on this subject—an inaccuracy now universally acknowledged.

Mr. J. Bell had taught that the great arteries leading to the extremities of the body, could not be compressed by any ordinary means so as to prevent the passage of blood through them, to the probable loss of life from this cause alone. An amputation at the shoulder-joint was considered a most formidable affair, and that at the hip-joint so murderous that it ought not to be done. When I came to London at the peace of 1814, I found every lecturer teaching these opinions, which had no foundation but in the fertility of their imaginations, then uncontrolled by practical experience. Absurd however, as they were, and contrary to demonstrative fact, it took me many years to overcome them, so strong was the force of long-received opinions. As they are, however, overcome, and are things which no longer exist, except as matters of surgical history, I only allude to their overthrow as among the great advantages the art and science of surgery have derived from that war.

(To be continued.)

NITRATE OF SILVER IN SPERMATORRHOEA,

AND A NEW INSTRUMENT FOR APPLYING IT.

By HENRY THOMPSON, Esq., M.R.C.S., M.B. Lond.,
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THE efficacy of the nitrate of silver locally applied to the urethra, particularly to its prostatic portion, in certain cases of involuntary seminal discharges, has long been acknowledged; and increased experience has now placed its use, in the manner first suggested and practised by M. Lallemand, among the most valuable remedies for what were, before his time, some of the most intractable, and often, on this very account, the most neglected, affections it was the lot of the surgeon to have presented to his notice. But the neglect which, it must be confessed, these cases have, and most undeservedly so, to some extent, received, is daily becoming more a thing of the past. That it has been in part the cause of driving many wretched, nervous, and desponding patients into the hands of some of the most ruthless and rapacious of the whole tribe of quacks, is a fact established by the experience of every medical man, at least in this great city. What other causes may have co-existed, it is not my province here to inquire; nor to detail the disgusting modes, sufficiently obvious to every reader of the new paper press, by which these men have preyed on the weakness and the fears, not only of the afflicted, but of those who vaguely supposed themselves to be so, and who, whether ailing or not, have equally with the real sufferers become victims of the most gross, heartless, and costly deceptions. M. Lallemand, however, has done much, and others have followed in his path, to give this subject its due weight, and to call the serious attention of the profession to it.

Among the many modes of treatment applicable to a certain, and by far the largest, class of these cases of Spermatorrhœa, as they are usually termed, that of passing down to the prostatic portion a piece of nitrate of silver, and exposing it for a moment, so as rapidly to cauterize the surface on which the prostatic and seminal ducts open, has been extensively practised, and found useful. This is, notwithstanding, by many still regarded, as it was at first almost universally, to be a somewhat severe mode of treating the delicate mucous membrane of a narrow and most important canal; the sphere of operation being far removed from the guiding hand, and completely so from the direction of the eye. The use of so potent an agent, with such little powers of control as to the manner, and even as to the exact extent and locality, of its application, was, *a priori*, looked upon as "heroic," or at all

events only indicated in cases of great need. This feeling has naturally led to a more limited use of M. Lallemand's apparatus than is perhaps desirable, and certainly prevented the principle from being brought into action in many cases in which its application would have proved most serviceable, and in which nothing else at present known can so efficiently replace it. Indeed, the want of a modification of this valuable remedy might almost be inferred from the words of Lallemand himself, who most candidly confesses and enumerates the dangers which he has encountered as the results of the operation. But to myself this has been most obviously manifested in practice, from having observed, that although the application of the crude caustic has ultimately effected the beneficial purpose intended, it has often done so at a far greater expenditure of action, attended by pain and inflammation, than was necessary for the cure, or of course desirable for the patient. It involves the act of summoning to our aid a greater power than is necessary in order to remove the morbid condition, which surplus of power is thus expended upon the organ itself, and greatly, as will appear, to the disadvantage and injury of its delicate and complex structure.

Let me quote the words of M. Lallemand, and I cannot do better than give them through the medium of his able translator and commentator, Mr. M'Dougall.

In describing the treatment by cauterization, and having stated that he has never seen in his own practice, "any of the violent effects, such as retention of urine, hæmorrhage, long-continued violent pain, narrowing of the passage, &c., described by some operators as supervening," and attributing them to an excess of the remedy, or to exercise shortly after its use; M. Lallemand enjoins the following regimen:—"During the first days subsequent to cauterization, baths, enemata, and diluents should be prescribed, with milk and vegetable diet, so as to dilute the urine as much as possible. All fatigue should be abstained from, and exposure to cold rigorously avoided. For two or three days micturition is frequent, painful, and accompanied with the escape of a few drops of blood. But these symptoms soon pass off, provided no imprudence be committed. I have, however, known the pains to continue ten days or more in patients who committed errors of diet, or fatigued themselves too early, or who exposed themselves to cold and damp. These imprudences are not only injurious, by hindering the rapid termination of the inflammatory process; they may also compromise its results, which depend principally on the facility with which resolution takes place. So long as the inflammatory stage continues, the involuntary discharges are increased rather than diminished in frequency, and sensible improvement only appears when resolution takes place."*

It is only just to give also Mr. M'Dougall's remarks on his own experience, as expressed in the preface, page xv.

"M. Lallemand has described the operation of cauterization as a very painful one, and its after effects as very severe. This by no means accords with my experience. In no case in which I have performed the operation has the pain been severe, or the subsequent inflammation violent, but a discharge, tinged with blood, which has lasted four or five days, or sometimes even a week, has followed the operation; and in certain cases the early passages of urine have been followed by the escape of a few drops of blood. After the operation, *perfect rest and quietude are absolutely necessary*, and the patient should be kept within doors, and pretty much in the recumbent posture, until the discharge has ceased. On no consideration should the patient be allowed to expose or exert himself after the caustic has been applied."

The italics, let it be remarked, are in the original. The reader will infer that neither Mr. M'Dougall nor M. Lallemand desire to convey the impression, that the after dangers are really very light or lightly to be regarded.

I may now be permitted to add, that my own experience, as well as that of others with whom I have had opportunities of discussing the results of this treatment, convinces me, that however carefully and delicately used, unless there is absolute rest on the part of the patient afterwards, either hæmorrhage, retention, or inflammation, are not such unfrequent results in irritable subjects; and the consequences of these may not be underestimated. In illustration of this it may not be inappropriate to mention that, very rarely as is the treatment of such cases recorded, I have met with two which bear on the question, in one of which the use of Lallemand's instrument was followed by "intense inflammation and the most violent chordee" the writer "ever witnessed, which lasted for five days

* Causes, Symptoms, and Treatment of Spermatorrhœa, by M. Lallemand. Translated by H. J. M'Dougall. Second edition, p. 495.

unremittingly." The following sentence remarkably corroborates the remarks made above:—"This case is alluded to as a caution never to use this remedy except when the intensity of the case, in its probable ruin to the constitution, makes the treatment, even with the chance of such accompaniments, a very secondary evil."

But there are many patients who would benefit greatly by the treatment, with whom the necessary rest is almost an impossible condition; young men whose avocations will not permit them, without most inconvenient and serious consequences, to comply with M. Lallemand's injunction. This will be at once obvious to all, and the consequent necessity for a mode of treatment, if possible, adapted to their circumstances; and for such, the modification to be proposed is suggested to be especially useful, as being perfectly compatible with a moderate amount of exercise. And not only so, but there is a degree of inquisitive attention drawn to the patient's condition on the part of friends when operated upon at his own house, and confined there for days, which it may be difficult, but in most cases extremely desirable, to parry, and which sometimes renders the use of the "porte caustique" a very serious undertaking in relation to the subsequent necessities of the patient. Now in the treatment of these cases, it naturally occurred to me, that as in the affections of all other mucous membranes requiring the application of the nitrate of silver, we accomplish it often more advantageously in the condition of solution, made of various strengths—*e. g.*, from one grain of the salt to one ounce of water up to two drachms to the ounce, —we might also apportion, as experience should indicate, our remedy, in the matter of strength, to the management of these prostatic affections also, and not invariably use the crude anhydrous salt as heretofore. The anomaly appears more manifest when we consider that in this particular locality its use is less manageable than in any other, and its excess more disastrous in its results. And I must add, that experience has most completely confirmed the truth of this view. There are very few cases indeed in which, as far as I am able to judge, the strongest solution above-named will not answer all purposes, and accomplish the desired result quite as efficiently, and certainly with more ease and less danger to the patient: so that the cure shall be at all events accomplished more in conformity with the old maxim, "Cito, tuto, et jucunde."

Next comes the mode of its application. This problem I have endeavoured to solve for myself by constructing an instrument for the purpose, at first made to meet a special case; and now that some experience has rendered it more perfect, I beg leave to submit it to the profession in its present form as, I believe, perfectly safe, manageable, and easy of application. It was made from my design by Mr. Coxeter, of Grafton-street, and I can only say that he has embodied the idea with great accuracy and skill. It consists of a curved canula,* having nearly the form of an ordinary catheter, in size about No. 9 or 10; within this, there is a strong stilette, at one end

of which is a well-fitted piston adapted to the bore of the instrument, while the other protrudes from the upper part of the canula, and is shaped into a handle. Immediately below the piston is a piece of sponge about an inch long, cylindrical, and having the same diameter, immovably riveted between two little plates of metal, into which the stilette here divides, and beyond this there is an oval metal extremity, which is made to fit the end of the canula so closely as to form with it, when shut, a conical sound for the purpose of introduction. Its firmness there is secured by means of a screw at the opposite end, so contrived as to clamp the rod and render it immovable in the canula, when made to act by turning it in the usual manner. Thus it may be used as a common sound, and carried down to the spot at which the patient begins to feel severe pain, usually at the commencement of the prostatic portion. The slide, for the purpose of marking this spot, is pushed down to the glans penis, the organ being moderately elongated, and the instrument is withdrawn for the purpose of receiving its charge of solution. The mode of charging is as follows:—Make the sponge to protrude into a bottle containing solution of the strength required, by pushing down the handle, and withdrawing it again, while still immersed in the liquid. This process is to be repeated once or twice if the sponge be dry. By means of the piston, two or three minims are carried up into the canula, in addition to that which enters the substance of the sponge, and then the oval extremity closely shuts all up within. This being secured tightly by means of the screw aforesaid, the instrument is wiped, oiled, and warmed for introduction, not a drop being able to escape until the operator, by pressing on the handle, causes the sponge to protrude in any part of the urethra he pleases, and apply the solution to it at once on all sides; then, while still in situ, by withdrawing the sponge into the canula, two or three drops more fall upon the floor of the canal. The instrument is now removed altogether. There is no rotation of a metallic "cuvette," which is the very painful part of the proceeding with the original "porte caustique." And I am prepared to say that the cauterization is not only equal to that accomplished by the old mode, but to go farther, and assert that it is better adapted, from the form and structure of the prostatic portion of the urethra, to accomplish the end in view, since, while it applies the solution to every part, the floor receives the largest share; and actual experiments on the dead body, followed by dissection, in which I have used for comparison M. Lallemand's instrument and that here proposed, show, beyond dispute, the more entire and equable distribution of the caustic by the latter instrument.

I must notice, further, a strong objection to the former apparatus, which I have not only observed, but heard stated by others who constantly use it, and which is apparent enough on a cursory examination, *viz.*, that in rotating the "cuvette" in order to expose the whole circumference of the urethra to the caustic, which is accomplished by turning the handle with the finger and thumb, its distal end describes a circle of three-eighths of an inch, or more, in diameter, and does not merely turn on its own axis, which is the movement desired; and this occurs in the most tender part of the passage, where in most cases even the mere presence of a sound is extremely painful. This will be at once understood by a reference to the instrument, and observing the motion of the cuvette while a rotatory action is applied to the handle.

* Mr. Coxeter makes this canula of silver, but *without a seam* in it—an improvement which obviates the necessity for using platinum in the construction of the parts which come into contact with the caustic itself, as in the present "porte caustique." When tubes are made with a seam in the ordinary manner, galvanic action is set up, through the solder necessarily used, when moisture is present, and rapid wear ensues. Hence the use of platinum, the necessity for which and the consequent cost are thus superseded in this instrument.

FIG. 1. The instrument closed.

FIG. 2. The instrument open.

- a. Stilette and handle, to the opposite end of which the piston and sponge are attached.
- b. Screw, which clamps the stilette when closed, as in Fig. 1.
- c. The cylinder of sponge which contains the solution.
- d. Oval silver bulb which closes the canula.
- e. End of the piston just seen, the sponge being protruded to its utmost extent.
- f. Movable slide.

I must now bring this paper to a close, as it has already become much more lengthy than it was at first intended to be, and reserve some remarks on other matters connected with the subject for a future time. One more only shall be just mentioned here. Every one meets occasionally with a case of obstinate gleet, which seems to withstand the usual routine of treatment, or indeed almost any other. Such have been at times described as depending on sub-acute inflammation, or some other obscure affection of the prostate gland. Without pursuing the question of their true pathology on the present occasion, I would suggest the application of the nitrate to the prostatic portion of the urethra—a solution, say, of one or two scruples to the ounce. I have found it successful as a last resort. It remains only now to add that Mr. Coxeter will exhibit the instrument to any who may deem it worthy of inspection; and I shall be most happy myself to show and illustrate its mode of action to any of my professional brethren who may feel sufficiently interested in it to call upon me at any time, as well as to receive any suggestion which may tend to the more perfect accomplishment of the object it is designed to attain.

Wimpole-street, Cavendish-square, Jan., 1852.

CASE OF PULMONARY ABSCESS.

WITH REMARKS.

By ROBERT MOLLOY, Esq., M.R.C.S. &c.

(Concluded from p. 72.)

THE case I have thus related has been selected by me less on account of its unusual occurrence—although even in that point of view it would still prove extremely interesting—than to afford the opportunity of adverting to some practical points in the treatment of pneumonia, and its related diseases, as well as to bring before the profession at large, certain views, which have been forced upon me in the course of a sufficiently ample experience, and which I am therefore induced to esteem of some value.

It seems, indeed, at the commencement, so wondrous hard to say anything new of diseases of the chest, and of pneumonia in particular, that the difficulty appears almost insurmountable. With the first glance comes the impression that everything has been said and written which could by any possibility be said, and that the whole subject is exhausted, utterly worn out. But in reality it is not so. A closer investigation reveals to us that the great obstacle to the acquisition of this knowledge is the fact that so much has been written; that we start with biassed minds, filled with preconceived erroneous ideas; that in proportion as we succeed in unlearning what we have already learnt, in discarding much of this so-called knowledge which bars our progress, so are our opportunities enlarged of seeing and learning *that which is*, in preference to that we wish to see. These remarks receive their best and most appropriate application in the case of pneumonia itself. It will doubtless give rise to a smile of incredulity, in the first instance, when I assert that *pure pneumonia*, inflammation of the lungs, is not yet recognised and distinguished as a disease, and that no stethoscopic symptoms exist by which its presence can be made known. The earliest and best symptom we are acquainted with, that of crepitation, is, in truth, a symptom of effusion, and belongs to the *second stage*; it is really the process of depletion adopted by nature to relieve the congested capillaries—an effect to show that inflammation *has been there*, but is not necessarily present: the first step already taken towards resolution or cure. The value of this distinction, which has a real existence, is unquestionably admitted in cases of cerebral congestion; in inflammatory dryness of mucous membranes in catarrh; in serous membranes, as in pleuritis and hydro-pericarditis, giving rise to friction-sound; but better than all, in the inflammation produced by blisters, mustard plasters, or erysipelas prior to vesication. It is, in fact, the period of “acute determination of blood,” of Dr. Williams; a stage of great pathological interest, and when recognised, to be treated actively; but if effusion has occurred—the first restorative step taken by nature,—it is incumbent upon us to have recourse to milder remedies, and to follow wisely in the path she has indicated.

These remarks on pneumonia being premised, I would beg to call particular attention to the fact that we rarely have to treat simple disease: that the terms pneumonia, bronchitis, pleuritis, “familiar in our mouths as household words” though they be, are, as *expressions of disease*, simply untrue. A few years of practice, and the experience necessarily resulting,

enable us to perceive that these simple affections are seldom met with, but that we have to contend with complex diseases, which require a different consideration. My experience leads to the conclusion that pneumonia rarely exists without—indeed, I might say is almost invariably complicated with—bronchitis or pleurisy.* Hence arises the necessity for a new nomenclature, which will indicate facts as they certainly exist, so that the terms broncho-pneumonia pneumo-bronchitis, pneumo-pleuritis, pleuro-pneumonia, will at the same time embody the actual phenomena of disease, as well as represent the presumed relative frequency of their occurrence. Broncho-pneumonia being the most common, in which the bronchial mucous membrane is either primarily or principally affected with very fine crepitant rhonchi, and with mucous expectoration, varying at times, and shading off into rust-coloured, tenacious, pneumonic sputa; changing, perhaps, every few hours, so as to occasion much uncertainty and mistrust of his diagnosis in the mind of the medical attendant: pleuro-pneumonia, the most uncommon of all, in which acute pain is the most prominent symptom, and is to the patient the index of his danger, as well as the principal cause of his suffering. Admitting this to be so, it is obvious that the chief value of this distinction will consist in the modified treatment which each case will necessarily require in accordance with the prominence of the primary or secondary symptoms, and to this point, indeed, our attention should be principally directed.

Another most important practical fact, which I presume will hardly escape notice, is the circumstance of my having allowed nourishment and stimuli at a period which many will regard as too early. This was not permitted without due consideration. Irrespective of the fact that I have seen numerous patients sink from exhaustion in many acute and chronic diseases, when their powers were most called for, and indeed most relied on, I am decidedly of opinion that attention to early and proper support of the system would materially increase the chance of recovery, and greatly facilitate the attainment of the object of the attending physician. This principle may be stated and illustrated in a very few words—all acute disease tends to a particular termination, and that speedily, rarely lasting, according to my experience, longer than a few days. Thus, pneumonia ends in hepatization or gangrene; pleuritis, peritonitis, and inflammation of serous cavities generally, in effusion; and we should bear constantly in mind that a totally opposite plan of treatment may be, and possibly is required for the *effects of disease* from what would be needed for the preceding inflammation itself. Again, let us take into account that the processes of waste are in more or less active operation in every complaint; that the secretions of the intestines, mucous as well as faecal, the urine, halitus of the breath, must continue, and that even the muscular weariness which vents itself in incessant tossings to and fro on the couch of pain is a sad exhauster of the nervous energy. Hence our legitimate aim must be to maintain the powers of the system, by supplying adequate nourishment, from which alone these powers are derived. Let me here remark, that if we wait until the constitution *absolutely* requires this support, we are too late. Good and wholesome blood is not made at once and immediately from any nourishment, however proper. The researches of Chossat, Letellier, and others have satisfactorily demonstrated that, after a certain period of inanition, food, freely and properly administered, fails to produce its directly beneficial effect; and it is likewise notorious that a horse taken from grass feeding requires home keeping on corn for some days before he is in condition to undertake a journey—the first few feeds having a purgative effect. The main object, therefore, to be guarded against is, that a patient be not permitted to fall into a state of exhaustion consequent upon too prolonged abstinence from all nourishment. Should this occur, not only is much valuable time lost in endeavouring to repair the mischief, but more frequently all stimulating plans of treatment come too late to be beneficial.

It will hardly fail to be remarked that I intermitted the use of mercury and resumed it at a subsequent period. The plan I am accustomed to pursue, and which I regard as very important in those cases where its prolonged use is indicated, is to give it until there is slight increase of saliva, and the

* Exception has been taken to this statement, on the ground that bronchitis has undoubtedly a separate and independent existence. This is true of the larger bronchial tubes which are anatomically distinct, but my remarks have reference only to the minute structure of the lungs, to the smaller bronchial divisions, the intercellular passages of Mr. Rainey. Moreover, the fact has been already recognised and admitted in the term, “capillary bronchitis,” applicable to these inflammations with sub-crepitant rhonchi, which has lately crept into use. It is, however, very objectionable, and ought to be discarded.