

LITHOTRITY.

To the Editor of THE LANCET.

SIR,—The case of Major Moore was one in which the simple "perce-pierce" of the Chevalier Le Roy, was adequate to all the emergencies. I now beg to forward a case, in which the "instrument a trois branches avec le mandrin a virgule" was employed. I hope to have ready for your next number a paper on the "lit rectangle" and "recto-curvilinear catheter," which are mentioned so frequently by Baron Heurteloup.

I am, Sir, your obedient servant,
D. O. EDWARDS.

Westminster, March 2, 1830.

CASE OF STONE IN THE BLADDER TREATED
WITH THE "INSTRUMENT A VIRGULE."

By BARON HEURTELoup.

Mr. D****, a gentleman of property in Worcestershire, about fifty years of age, of a sanguineous temperament and much addicted to the pleasures of the chase, enjoyed uninterrupted health until about the attainment of his fortieth year. At that time he was seized with pain in the lumbar regions, and which was treated as if it depended on a rheumatic affection. Nearly four years ago, he experienced a difficulty in voiding his urine, but unaccompanied with pain. A year after this, he began to suffer inquietude, but not such painful sensations as he has since experienced. Two years ago, these disagreeable sensations were much increased, and he had himself sounded, but no stone was felt; and the pains continued augmenting, until the beginning of last October. At this time the patient exhibited all the symptoms which indicate the presence of urinary calculi. He consulted Mr. Pierrepont, surgeon to the Worcester Hospital, who explored the bladder, discovered a stone, and did me the honour of entrusting the patient to my care.

On his arrival in London, Mr. D. presented the following predicament. His constitution was good, and general health not otherwise affected than with a slight dyspnoea; his sleep sufficiently good, being only interrupted by his frequent impulses of desire to make water. The flow of urine was, however, suddenly arrested, and the expulsion of the last drop extremely painful. Exercise on foot or in a carriage equally induce suffering, and riding about on horseback was intolerable; a sense of tickling was almost constantly present at the extremity of the penis, and was occasionally increased into a feeling of pinching. He had a mucous discharge from the

urethra, presenting all the characters of a mild blenorrhoea. The patient stated that he had suffered this gleet for three years, and all ordinary means for its removal had been tried without success. The urine was scanty, and thickly charged with mucus, which partly remained in suspension in this fluid, and partly fell to the bottom of the vessel. The recto-curvilinear sound enabled me to detect a stone, situated in the left side of the bladder, and which could only with difficulty be displaced; the bladder would scarce receive an ounce and a half of water; and the sound could with difficulty be moved from before backwards, and during this motion the testicles were retracted towards the abdomen; in fact, great irritability was combined with much rigidity of these organs. The urethra was narrow in its whole extent, and particularly so at the external meatus. A straight catheter penetrated with some stress as far as the neck, but could not be impelled into the bladder; and although not exceeding three lines in diameter, it was completely impacted in the canal.

Mr. D. excepting the circumstance of his great irritability, appeared to me in a condition favourable to lithotripsy. I subjected him for some time to the daily use of bougies, which occasioned considerable pain. During the time (generally ten minutes) which the bougie remained in the urethra, violent spasms occasionally took place, and compelled me to withdraw that instrument before the time which I had prescribed to myself. Sometimes the bougie, although grasped by the sides of the urethra, was expelled, by the spasmodic efforts of this canal. These spasms were alleviated by the use of opium, and during the period of calm, the straight staff was introduced. It did not enter the bladder at first, but having introduced the instrument into the urethra, I desired the patient to attempt the expulsion of the water, which I had previously introduced into his bladder, and upon this, the staff immediately entered. This object being attained, I determined to operate; the mouth of the urethra was so narrow, as only to admit a tube of two lines and a half in diameter; I therefore made a small incision to facilitate its introduction.

In this case, I made use of the "instrument a trois branches avec le mandrin a virgule," with which a stone of twelve lines in diameter may be seized, and destroyed by the eccentric action of its evider. In four sittings the stone was extracted entirely, and the patient cured.

Clinical Remarks.

The sensibility of the parts was acute in this patient; the passing of a gum elastic bougie for a few moments only, into the urethra, excited violent spasms. It was

necessary to change this morbid state, before attempting to apply the "instruments debroiment," or else I should have incurred the risk of being obliged to desist in the middle of the operation. I employed bougies, not with the intention of enlarging the urethral canal, but with the view of extenuating its irritability. In the present case, however, the introduction of bougies did not produce the desired effect, for after ten or twelve days the spasms were as violent as ever; I was therefore obliged to resort to opiate medicaments; these succeeded in soothing the irritated parts, but rather deranged the functions of the digestive organs. This last circumstance is doubtless an inconvenience; but infinitely less injurious to the patient, than the consequences which would have resulted from the operation, if undertaken whilst the urethra and bladder were in a sensitive state.

With respect to these spasms, produced in the urethra by the presence of a bougie, the patient presented a phenomenon which has occasionally been noticed under the same circumstances, but which in this case was particularly well-marked. When the bougie was introduced, the spasms immediately developed themselves, and lasted three, four, or five minutes, at the end of which time they would entirely cease. This circumstance, which at first appeared to be but of little importance, led to a stratagem which has been frequently of service to me. When I operated, I took the precaution, beforehand, of introducing a bougie into the canal for a few minutes; the spasmodic state was induced, and the contractions took place upon the bougie, and before the time of the operation; consequently the introduction of the instruments became comparatively easy.

I have stated that, in the commencement, I had attempted to introduce a sound into the bladder without success. Two reasons accounted for this: first, the extreme rigidity of the organs, which was natural to the patient, and much augmented during the spasm; and, secondly, a deep sinuosity in the cul-de-sac of the prostate. When, by the preparatory measures which I have just described, I had removed the impediments arising from the first cause of this impossibility to introduce the straight catheter, I had recourse to the following manœuvre, in order to clear the neck. Having made an injection of water into the bladder, until a desire of expelling its contents became pretty urgent, I passed into the meatus urinarius the point of my instrument, for the purpose of resting it; I then desired the patient to endeavour to evacuate some of the injected liquid, and I immediately profited of this movement to penetrate into the organ, which I reached with facility.

The mechanism by which I succeeded may be easily conceived. The urethra was distended with the water which the bladder expelled, and the neck remaining open, permitted the instrument to pass it. This manœuvre is important to know, for it will enable the surgeon to avoid many useless and fatiguing attempts. Besides the effect of preventing the cervix from contracting, it produces its depression. During the contraction necessary to prevent the escape of the urine, the levator ani draws up the neck of the bladder, but during the time of expelling the urine, the muscle relaxes, and permits the neck of the bladder to be lowered. In the first of these conditions, I was prevented from entering by the contracted cervix; but in the second, when the patient made an effort to expel the water, I entered with facility. There are other manœuvres to facilitate our penetration per urethram into the bladder, in certain circumstances, which will be considered in future papers.

It has been seen that, previously to the destruction of the stone, I made a slight incision of the urethra, the mouth of which was very much straitened. This little preliminary incision is seldom necessary; narrowness of the meatus urinarius is a circumstance, however, which renders it indispensable.* It is only slightly painful, and is indeed, as respects its inconvenience, perfectly unimportant. To introduce as large an instrument as the rest of the canal will take, is of consequence; but this is oftentimes impeded by the narrowness of the meatus, which is a circumstance unfavourable to the success of the operation, as it is a principle admitted, that the more powerful the instrument, the more prompt is the operation; and the power of an "instrument debroiment" is, *ceteris paribus*, in the direct ratio of its magnitude.

When this incision is not made, the operation becomes more painful to the patient, and troublesome to the surgeon; this arises not merely from the stress of the instrument on the meatus, and the consequent impeding of its motion, but owing to the sympathy existing between the end of the penis and the bladder, violent contractions of the latter are produced. In the same manner, the irritation of the cervix vesicæ, produced by a desire of voiding the urine,

* This little incision, "*la moucheture*," is not to be confounded with what is called "*la boutonniere*," which I was not sufficiently explicit in defining in my last note. "*La boutonniere*" is a longitudinal incision of the urethra in any part, for the extraction of a stone; the resemblance of this opening to a button-hole has suggested the name.—D. O. E.

or the presence of a stone, or the existence of a slight inflammation, affects, sympathetically, the extremity of the penis. Contractions of the bladder are particularly to be guarded against, as rendering the operative process more difficult to the surgeon, and painful to the patient. There are other inconveniences which arise from operating with too narrow a meatus; it first impedes the easy ejaculation of the fragments which are arrested at the extremity of the penis, and the bruising occasioned by the passing of the instruments, keeps the meatus, and adjoining portion of urethra, in a state of pain and inflammation for some days, which renders each consecutive séance more painful, compels the surgeon to operate at longer intervals, and, consequently, defers the period of cure.

When this incision is made, it is necessary to be careful in preventing the adhesion of the two lips of the wound, which otherwise would take place with surprising rapidity. This little operation is performed according to rules which are founded on certain anatomical circumstances, which will be treated of in another paper.

It has been said that Mr. D. had, amongst the symptoms of his disease, a mild blenorrhœa; this symptom is rarely produced by the stone at its commencement. It is also a remarkable fact deserving of attention, that this gleet affection resisted all the means employed against it. The removal of the calculus was the only means of cure; for, in fact, the blenorrhœa disappeared with the last fragment of the stone.

This case furnishes me with another occasion of remarking upon the importance of raising the pelvis by means of the "lit rectangle." I have frequently observed, that when in the horizontal posture, the instrument gives no sensation of fragments, the elevation of the pelvis in the manner prescribed, enabled me to feel and grasp them. Whoever has seen the useless explorations and manipulations usually had recourse to, will be enabled fully to appreciate the value of this auxiliary. It is, perhaps, to the employment of this bed, that I owe the advantage of curing the greater part of my patients without confining them. The reason of this is simple: the fever, and the excessive irritation of the bladder, are entirely occasioned by the long and painful researches which are otherwise necessary in the seizure of calculi. The rectangle-bed, by the position which it gives to the patient, renders this part of the operation simple. It throws back fragments, and even entire calculi from the cervix, and relieves the operator from the necessity of strongly depressing this part of the organ, for the purpose of apprehending the pieces within its precincts. Some further remarks on the

art of seizing the last fragments, I shall include in the subject of a succeeding paper.

The operations done upon Mr. D. took place in the presence of Drs. Boyton, Whymper, and Eve (of Philadelphia); Messrs. Green, Brodie, Pierrepont, White, Edwards, Good, Gillett, Benson, &c.

BRONCHOCELE.

Observations on *real bronchocele*, or what might perhaps be better called *guttural hernia*, are so extremely rare, that we have thought it worth while to extract the following passage from M. Larrey's recently published "*Clinique Chirurgicale*."

"Real bronchocele," says this author, "consists of one or several tumours filled with air, which, during its forcible compression in the upper portion of the trachea, the larynx, or the mouth, has produced small herniæ of the mucous membrane; these tumours rapidly increase in size, so as not unfrequently to exert a violent pressure on the vessels of the neck. They are situated in front, or at the sides of the larynx, between the hyoid bone and the thyroid cartilage, or between the cricoid cartilage and the first tracheal ring, and are invariably produced by violent exertion. The most characteristic symptom of this kind of bronchocele consists in the disappearance of the tumour under compression. In Egypt we frequently observed this kind of bronchocele in the blind, who are very numerous there, and who are employed by the priests to chant at the top of the minarets. It generally happens, that after two or three years, such persons became totally unfit for this office, on account of the occurrence and subsequent increase of these tumours. Since my return from Egypt, I have had the opportunity of observing two cases of bronchocele in two subaltern officers, who had for a considerable time been employed as military instructors. One of them had near the larynx two tumours, which were free from pain, and crepitus on pressure. They were of equal size and globular form, and the skin by which they were covered was rather tense, but without any morbid alteration. Both individuals had almost entirely lost their voice, being unable to make themselves understood by words, except whilst forcibly compressing the tumours. They were also obliged to breathe with their mouths wide open. In consequence of the continued pressure on the vessels of the neck, the jugular veins had become enlarged, and they suffered greatly from congestion within the head. The application of bladders filled with ice, and of graduated

compresses with camphorated spirit and liq. ammon. acetat., greatly reduced the size of the tumours, but did not prevent their reappearance on the least exertion."

EXTIRPATION OF A SCIRRHOUS TUMOUR
IN THE NECK, BY M. LARREY.

Nicol. Moret, ætat. 40, of a robust constitution, but of scrofulous habit, had on the left side of the neck a lobulated tumour, which extended from the mastoid process along the jaw to the larynx; it was of ten years' growth, and had of late attained to such a size, as to form a large prominence in front of the lower jaw. It was almost immovable, and free from pain; the skin by which it was covered did not exhibit any morbid alteration. He had been treated by various methods, but without benefit. Some practitioners had advised the extirpation of the tumour, whilst others considered this impracticable. M. Larrey, though fully aware of its difficulty and danger, perceived, however, no other means of delaying the fatal termination of the case, and finding the patient resolved to undergo the operation, it was performed in the following manner:—An incision was made parallel to the horizontal branch of the lower jaw; and three others which met the first at right angles, one along the anterior margin of the sterno-mastoid muscle, another across the centre of the tumour, and a third over the larynx; the flaps were carefully detached from the scirrhus mass, and the tumour dissected from the surrounding parts; some of its roots were very deep-seated, so that it was necessary first to remove three quarters of the tumour, in order to have access to them; one of the roots was so near the large blood-vessels, as to require to be tied before it could be removed; another lobe was fixed between the transverse processes of the second and third cervical vertebræ; another, of oval form, was adherent to the cellular sheath of the common carotid, which was thus, on its removal, completely laid bare; a third pedicle was attached to the left side of the larynx, and seated between the genio-glossus muscle and hyoid bone, and a fourth reached upwards into the mouth. More than fifteen vessels were tied, among which were the external maxillary, the submental, occipital, superior thyroid, and sublingual arteries; several branches of the facial, vagus, and sub-lingual, and the accessory nerve, at its passage through the sterno-mastoid muscle, were divided. The wound was closed by about twenty sutures. The operation lasted fifty minutes, and was borne by the patient with great firmness; immediately after it he was seized with syncope, which was soon followed by a tranquil sleep. No untoward symptom was observed during

the first three days after the operation, except a slight febrile excitement on the third. On the fourth, the dressings were removed for the first time; the wounds had almost completely united, and there was not much suppuration in the situation of the ligatures. On the ninth and tenth days the ligatures came away, and on the 31st day after the operation, the patient was perfectly cured. The tumour was found to consist of fibro-cellular texture; the external portion of each lobe was formed by very dense cellular tissue, of which concentric layers were sent towards the centre of each lobe, like the cells of an orange; the cellular tissue contained between these cells was of greyish-white colour, rather dense and elastic.—*Clinique Chirurgicale de M. le Baron de Larrey.*

MEDICAL ARRANGEMENTS FOR THE NEW
POLICE.

To the Editor of THE LANCET.

SIR,—Perhaps you are not aware that the Commissioners of Police, (of course with the sanction of Mr. Peel) have determined to send their sick men to the dispensaries and hospitals, for medical assistance, instead of appointing district surgeons, as was at first contemplated.

This information was communicated to me by a surgeon of great respectability, who had an interview with one of the commissioners a short time since.

Can any thing so flagrant and unjust be permitted to pass, without the censure which it merits? Can the sacred name of charity be thus perverted? What will the dispensary system next bring upon the profession?

I suppose Mr. Peel will, ere long, for two guineas per annum, supply his family and servants with medical attendance and medicines, as I believe the physicians and surgeons from these establishments attend patients at their own houses.

Without your continued and powerful exertions to repress these growing evils, and a determination on the part of the general practitioners, to unite and assist you in your laudable endeavours, I predict that this industrious and meritorious class of men, will soon be deprived of more of the emoluments which they have hitherto received, and to which they are justly entitled.

I am, Sir, your well-wisher,
A SURGICAL REFORMER.

London, Feb. 29th, 1830.