# Appendix to a Proposal for a new manner of cutting for the stone / [John Thomson].

#### Contributors

Thomson, John, 1765-1846.

#### **Publication/Creation**

Edinburgh : For W. Blackwood, etc., 1810.

#### **Persistent URL**

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# M. LE DRAN'S

# METHOD OF OPERATING

# FOR THE STONE.

Extracted from the fifth Edition of his

OPERATIONS IN SURGERY.

PRINTED AT LONDON IN 1781.

Mr. Cheselden begins the notes which he has added to Mr. Gataker's translation of M. Le Dran's Operations of Surgery, with a character of that work, which the Editor cannot deny himself the pleasure of placing before the reader. It exhibits a degree of candour and liberality in judging of the merits of one who might, perhaps, in some respects, have been considered as a rival, of which we have but few examples in our times. " There are very few pas-" sages," says Mr. Cheselden; " in the foregoing sheets, in " which I have ventured to differ from M. Le Dran; wherever I " have, it has not been without suspecting my own judgment; " and I confess I have never read any book of surgery, from " which I have learnt so much as from his. The judicious reader " will discover in it the greatest experience joined with the clearest " judgment; and the young student will find an exactness, and a " descending to the minutest particulars, which to him will be " extremely useful, not to say necessary." EDITOR.

PRINTED AT LONDON IN UNTERS.

# APPENDIX

TO A

# PROPOSAL

## FOR A NEW MANNER OF CUTTING

# FOR THE STONE;

CONTAINING AN ACCOUNT OF

SOME CASES OPERATED ON AFTER THAT MANNER,

IN

THE ROYAL INFIRMARY

OP

EDINBURGH.

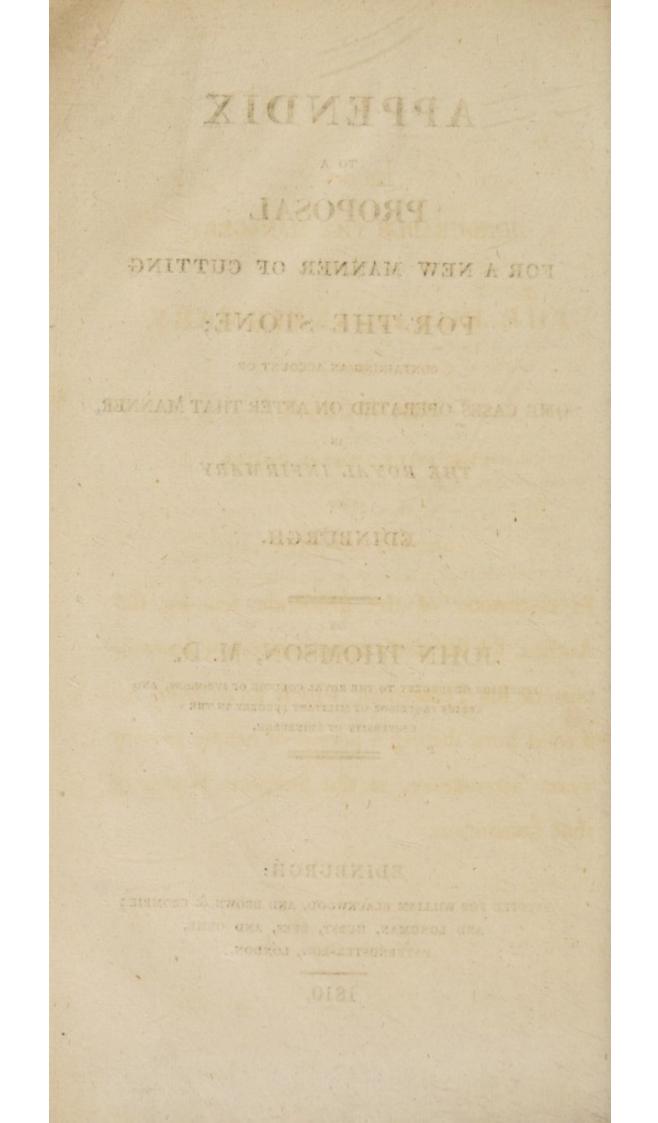
JOHN THOMSON, M. D.

PROFESSOR OF SUEGERY TO THE ROYAL COLLEGE OF SURGEONS, AND REGIUS PROFESSOR OF MILITARY SURGERY IN THE UNIVERSITY OF EDINBURCH.

#### EDINBURGH:

PRINTED FOR WILLIAM BLACKWOOD, AND BROWN & CROMBIE ; AND LONGMAN, HURST, REES, AND ORME, PATERNOSTER-ROW, LONDON.





#### TO THE

#### HONOURABLE THE MANAGERS

OF

# THE ROYAL INFIRMARY.

OF

## EDINBURGH,

THE FOLLOWING PAGES

ARE HUMBLY INSCRIBED;

In testimony of the gratitude felt by the Author, for the daily opportunities of Instruction in his Profession, which have been afforded him, during a period of nearly twenty years attendance, in the Surgical Wards of that Institution. HONOURABLE THE MANAGERS

THE, ROYAL INFIRMARY.

EDINBURGH,

THE FOLLOWING PAGES

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## ADVERTISEMENT.

insimultions and professional caluataies, which in

been no very painful act of self-denial;

irrecons, living and deady to feel

can' say, of mine, either in praise

Jame. Angld

I am too well acquainted with the write

ings of Mr. Bell, and with what he luis

I HAVE published the following cases, less from the belief that they contain any new or valuable information, than from a desire that the Public should possess correct means of judging of the truth of certain statements, which have been very industriously circulated in this City regarding them; statements calculated, if not intended to bring into discredit with the Public, an Institution, which, by the judicious administration of its Managers, and by the abilities and attention of its Physicians and Surgeons, has long been a blessing to the poor of this country.

Of the late account of two of these cases, which Mr. John Bell has assumed to himself the right of publishing, I have not read one syllable, lest, in the relation of facts, I should have been led insensibly into a vindication of my operations and practice. This has been no very painful act of self-denial; for I am too well acquainted with the writings of Mr. Bell, and with what he has said of the operations and practice of other surgeons, living and dead, to feel much anxiety with regard to any thing which he can say of mine, either in praise or in blame. I have suffered to pass, without the slightest animadversion, the many foul insinuations and professional calumnies, which Mr. Bell, during the course of the last eleven years, has been pleased to print and circulate with respect to me; and I trust I shall never find it necessary, for my own reputation, to take notice of any statements, resting solely on the correctness of his testimony. I have the satisfaction to feel, that hitherto they have not injured me: And although I am well informed, that his recent publication is of an actionable nature, I persuade myself, that I shall not be thought negligent of my own character, in permitting him to remain in that security which he has hitherto enjoyed. But I have been informed, that in the account given by Mr. Bell, of my operation on the patient, Robert Walker, a particular reference is made to two of my professional brethren,

have been led incensibly into a vindication

of my operations and practice. This has

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#### ADVERTISEMENT.

both members of the same College with myself, and one of them a Manager of the Royal Infirmary. On that account, alone, have I been induced to allude to the writings of Mr. Bell, and to subjoin to my narrative of that patient's case, a correspondence which I have since had with the two Gentlemen referred to, with the Managers of the Royal Infirmary, and with my former Colleagues. I shall not indulge myself in a single remark on the import of that correspondence; but leave it, as I now do my own account of the Cases, and that which has been given of them by Mr. Bell, to be judged of by the Public.

In justice to my Colleagues, however, I ought to state, that they have endeavoured, by every means in their power, to dissuade me from publishing their part of the correspondence. I applaud the feelings by which they are influenced upon this occasion; but no motives of false delicacy shall deter me, now that my connection with the Infirmary has ceased, and that I have renounced the practice of the operative part of Surgery, from the performance of what I regard as a duty which I owe to the Surgical department of the Infirmary —to the School of Surgery in Edinburgh—to the Public—and to myself. Had my profes-

#### ADVERTISEMENT.

sional character been the only object of attack, and had there been no written or printed records of the sentiments, which the Manager referred to, in conjunction with Mr. Bell, has long entertained of the present system of surgical attendance in the Infirmary, the particular communication, acknowledged to have been made, with regard to the operation on Robert Walker, should have been passed over by me in silence.

The histories of the cases, and the greater part of the reports, now copied from the Journals of the Infirmary, were drawn up by Drs. Robert Greig and Henry Walker, while acting as my Clerks. I embrace with pleasure this opportunity of expressing the sincere gratification I experienced, in observing the unremitting attention which they gave, to the surgical patients in the Infirmary entrusted to my care.

## JOHN THOMSON.

Brown's Square, July 23, 1810.

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# APPENDIX, &c.

## CASE I.

#### JAMES ARCHIBALD, AGED 4.

### Royal Infirmary, June 13, 1808.

"THE lower part of the belly is somewhat swelled, tense, and painful. He has almost constant pain in the point of the penis; great pain and difficulty in making water, which comes away by drops, and cannot be passed in a full stream. P. 120. Skin hot. T. clean. He has passed little urine for the last two days.

For the last eight months, he has been troubled with pain and difficulty in making water, but the symptoms have increased considerably of late. Has used various remedies without advantage.

Let him be put immediately into the warm bath, there to remain a quarter of an hour.

8va. horâ. Passed his urine pretty freely after coming out of the bath. Swelling and tension of belly much diminished.

### Habeat cras Mane, Bol. ex P. Jalap. gr. vi. Calomel. gr. i.

Let him go into the warm bath every night.

#### July 3d. Habeat vespere Infus. Sennæ i.

---- 4th. This day the lateral operation of Lithotomy was performed; but instead of the common staff, one having a groove on the lateral and concave part was employed.

The external incision having been made, the point of the knife was introduced into the groove of the staff, and carried forward with its edge upwards and outwards into the bladder; and a small stone, of an oval form, and rough on its surface, was extracted with the forceps in the usual manner.

<u>5th</u>. Has rested well since the operation. Urine, which comes away chiefly by the wound, has been voided also by the urethra.

Pulse, which has continued about 120 since his admission, is to-day about 150. Says his belly is free from pain.

He has been observed of late to pick his nose frequently and grind his teeth, particularly during sleep. He has had three grains of Calomel since the operation, which has not yet operated. Habeat Pulv. ex Calomel. gr. iss. Sacchari purissimi. gr. vi. Omni 2da. horâ ad alvi dejectionem.

---- 6th. Seven grains of Calomel and four drachms of Castor oil having failed to procure a stool, a common injection was given to him last night, by which a copious stool was procured. Slept well during the night. Urine continues to come partly by the wound, and partly by the penis. P. about 136.

Contin. Pulv. ex Calomel.

Let him have a few strawberries daily.

----- 7th. Has had four of the powders, by which he has had two stools since yesterday. A good night. P. 120. Urine continues to flow by the wound and penis.

Intermit. P. ex Calomel.

Contin. Omn.

--- 9th. Habeat Sem. Sant. sc. i. ex Syrupi Simpl. 3ss.

---- 10th. Repet. Pulv. Sem. Santonici.

 open. He has complained for the last two days of pain in his ears.

Contin. Sem. Santon. ex Syrupi simpl. 3 ii.

----- 12th. Voided one large lumbricus during the night.

Contin. Sem. Sant.

Contin. Sem. Sant.

— 15th. Continues easy. Urine comes chiefly by the penis. Wound seems to be healing. Contin. Sem. Sant.

- 22d. Repet. Sem. Sant.

----- 26th. Let the strawberries be discontinued.

---- 27th. Cras Mane Cap. Pulv. ex Jalap. gr. x, Calomel. gr. ij.

August 2d. Repet. Pulv. Vermifug.

----- 6th. Urine has come wholly by the natural passage for the last ten days. Wound completely cicatrized.

Let him have some Worm and Laxative powders with him.

DISMISSED CURED."

THERE are only two circumstances mentioned in the history of this case, which seem worthy of notice. One of these is, the form of the staff used in the operation; and the other, the discharge of worms which took place during the cure.

I was induced to make trial of a staff of the form described, partly in consequence of having repeatedly used it with advantage, as I thought, in operating upon the dead body; and partly also with a view to render the operation more simple, by dispensing with the use of the straight staff, which I had recommended in the " Proposal." In using the curved staff, however, in this operation, I met with considerable difficulty in carrying the point of the knife forwards along its groove; and this circumstance, obliged me to take up more time in the performance of the operation, than perhaps would otherwise have been necessary. That the patient, however, received no injury by the manner in which he was cut, is evident from the reports contained in the history of the case, and from the result of the operation.

The very frequent occurrence of worms in the ntestines of children who have stone in the bladder, and the dangerous irritation and fever which they often excite after its extraction, have been, so far as I know, first fully pointed out to the attention of Surgeons, by M. Deschamps, in his " Traite " de la Taille;" a work which contains almost every thing that is at present known respecting the history and most approved methods of performing Lithotomy; and which I cannot but regard, as the most perfect model which we yet possess, for the composition of surgical treatises in general. M. Deschamps seems to think, that in Calculous cases, where symptoms of worms appear, the patient should be allowed to recover from the operation, before any attempt is made to dislodge them from the intestines. His plan of "keeping the worms for a time in good humour," by a plentiful supply of nourishment, is not likely to be adopted by the practitioners of this country. No injurious effects, at least, were observed to follow from an opposite plan of treatment, in the case of James Archibald.

## CASE II.

### ROBERT WALKER, Aged 50.

#### Royal Infirmary, June 27, 1808.

" HAS a great desire to make water, which he cannot do without great pain and difficulty.

Sometimes his urine comes away by drops, and at other times in a full stream, which will frequently stop suddenly, without any evident cause; the desire to make water still continuing. At this time, he feels a severe pain, darting as if towards the neck of the bladder, and fixing in the point of the penis. He feels likewise a dull kind of pain in his loins, a sense of numbness in both thighs, and a particular sensation in his testicles, as if they were drawn together.

These symptoms are most observed before he voids his urine, but he is seldom altogether free from them. He makes water most easily when the body is bent forwards; and sometimes when the flow of urine has stopped, he is enabled to make more by changing his posture. At one period, after making water, he used to observe a slimy discharge from the urethra, but there has been little or none of this, for some time past. When the pain is very severe, he feels occasionally sickness at stomach, with an inclination to vomit, which he sometimes does.

When he is straining violently to pass his urine, a prolapsus ani sometimes takes place; but after the straining is over, the gut goes up easily of its own accord. These symptoms are aggravated by violent exercise or costiveness. His complaints began about a year ago, and have been gradually getting worse. He can assign no cause for them. At first they were attended with a severe purging, which lasted several months. He has used a variety of remedies, with the nature of which he is unacquainted, without relief. He sleeps ill, on account of the frequent desire to make water. His appetite is pretty good. P. natural. Rather costive.

Habeat Vespere Haust. ex Ol. Ricin.

----- 28th. No effect from the physic. Repet. Haust. ex Ol. Ricin.

----- 29th. He was sounded to-day, but no stone could be felt.

H. 8va. Hab. Stat. Haust. Anod.

----- 30th. Hab. Pilul. Rhei Comp. iij. Statim.

July 4th. Hab. Vesper. Ol. Ricin. 3i.

Let him go into the warm bath to-morrow morning.

----- 5th. In performing to-day the lateral operation of Lithotomy, the usual curved staff was introduced into the bladder, and the stone distinctly felt. The external incision having been made in the usual manner, and the membranous part of the urethra being divided, a straight grooved staff was pushed along the groove of the curved, into the bladder. The curved being withdrawn, and the stone felt with the straight staff, the incision into the bladder was made with a large scalpel, conducted along the groove of the staff, with its edge turned upwards and outwards. The stone was then felt by the point of the finger introduced into the bladder, and again by the forceps introduced along a blunt gorget; but on endeavouring to lay hold of it, it appeared to recede before the forceps, and could not afterwards be discovered with that instrument. The curved staff was, at two different times, re-introduced through the urethra, and the stone distinctly felt; but after repeated fruitless endeavours to discover and lay hold of it with the forceps, the patient appearing considerably exhausted, it was deemed expedient to desist, for the present, from all further attempts, and to put him to bed.

Hab. Stat. Haust. Anod. ex Tinct. Opii. Gtt. xl. Habeat Mist. Salin. Diaphoret. 3i. 2da q. q. horâ.

July 6th. Has passed an easy night, but without sleeping much. Had a small stool soon after the operation. The voiding of his urine, which comes in fits, is attended with slight pain. P. 82. Skin moist. Says he has no pain, except in the wound. Cont. Mist. Salin. Diaph. Habeat stat. Haust. ex Ol. Ricin. et Repet. post Hor. iij. nisi prius respond. Alvus.

--- 7th. Has had four or five stools by the physic. A tolerably easy night. Feels no pain, unless when he voids his urine; and says, the pain is precisely similar to that, which he experienced on voiding urine before the operation. P. 76. Skin moist.

Cont. Mist. Salin. Diaphoret.

Cont. Mist.

---- 9th. The tenesmus was troublesome during the night, but it has abated since morning. No stool since yesterday. P. about 86. T. whitish but moist. Abdomen continues free from pain.

Habeat Elect. Lenetivi, 3ss.

 stools. An attempt was made this morning to extract the stone, by introducing a blunt gorget upon the groove of the curved staff; and after considerable difficulty, in laying hold of it with the forceps, it was extracted with difficulty. The stone had a rough surface, was an inch and a half long, and nearly the same in breadth.

Habeat Stat. Haust. Anod. ex Tinct. Opii. Gtt. XL.

Cont. Haust. h. s. ex Tinct. Opii. Gtt. xxx.

Cont. Mist. Diaph. Salin. et Haust. Anod.

Contin. Med.

----- 14th. Continues easy. Habeat Vini Rub. 3vi. in dies. Cont. Med.

----- 16th. Augeat. Vinum ad žviii. in dies. Cont. Haust. Anod. ex Tinct. Opii Gtt. XLV. ----- 17th. Had 2lb. of porter yesterday, for supper and breakfast.

Cont. Cerevis. Fort. et Alia Medicamenta.

---- 20th. Let him have a small bit of steak daily.

----- 23th. Cont. Cerevis. Let his broth be omitted. Aug. Vinum ad 3x.

August 1st. Urine comes chiefly by the penis. Wound cicatrizing, but the granulations from its edges are somewhat prominent.

----- 4th. Edges of the wound appear to have coalesced. Urine has come wholly by the yard for the last three days.

----- 6th. Wound looks well.

### DISMISSED CURED."

P. S. I have the satisfaction to know, that Robert Walker was alive within these few days, and that he has enjoyed very good health since the operation.—July 1810.

THE reader may have already remarked, that when this patient was first sounded on the 29th of June, no stone could be felt in his bladder. This trial was made by several of my Colleagues, as well as myself, at a meeting called for that purpose. Two or three days after, I proposed to my colleague Dr. Erskine, to whose care the patient had been particularly recommended, that we should once more repeat the sounding, before remitting him to the physicians. We accordingly did so; and were about giving up the search as fruitless, when the sound, in the act of withdrawing it, was distinctly felt to rub against a stone.

The patient was brought to the table for operation on the 5th of July, and the stone was not only again distinctly felt, but the noise which it made with the staff, was heard by some, if not by all of my Colleagues. After making the incisions in the manner described in the case, I introduced my finger into the bladder, and with the point of it touched the stone. The forceps were now employed, and I was sensible of their coming into contact with the stone, but for a moment only. They were moved in all directions, but without my being able again to feel it. It was felt, however, by the sound when passed along the urethra into the bladder; and I then endeavoured to conduct upon that instrument, first, my finger, and afterwards the forceps towards it; but in this also

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I was disappointed. The staff being withdrawn, diligent search was again made with the forceps, but with no better success. The staff was a third time passed into the bladder, and with the same result as before; but neither with the fingers, introduced through the wound and into the rectum, nor with the forceps, could I discover the stone. My colleague Dr. Brown, at my request, repeated the search with the forceps; but as he was not more successful than I had been, we agreed to put the patient to bed, and to desist for a time from any further trials.

In putting the patient to bed, in the circumstances which have been described, I followed a rule, which I have for several years delivered to the gentlemen attending my Surgical Lectures; viz. " That when a stone cannot be felt, after proper incisions have been made into the bladder, and after a careful examination with the fingers, forceps and searcher, we ought to desist from the use of instruments, to put the patient to bed, and to defer any further attempts at finding the stone, until after the abatement of the fever from the operation." This rule, I was led to suggest, from my observation of the injurious effects, which arise from the friction of the forceps upon the inner surface of the bladder; from my knowledge of the fact, that small stones which could not be felt after the most diligent search at the period of operation, have afterwards been passed, spontaneously, through the wound : and likewise, from the instances that have been mentioned by practical authors, in which stones remaining in the bladder, have been brought nearer to its neck, and placed by nature in a situation more favourable for extraction, than when the incisions were first made. It was the consideration of circumstances similar to these, together with the difficulty which occasionally occurs in finding the stone, which probably gave rise to the proposal of the operation for the stone "En Deux Tems;" in which the incisions were to be made at one period, and the extraction of the stone not attempted till another \*. It fortunately happens, however, that but few cases require a mode of operating so protractive, and necessarily so dejecting to the mind of the patient.

By the 9th of July, it being conceived by my Colleagues, that we might safely repeat our search for the stone, I wrote to Messrs. Andrew and George Wood, Surgeons, both Managers of the Royal Infirmary, informing them of the trial that was to be made, next morning at eleven o'clock, and requesting their attendance as a personal favour. My friend Mr. Andrew Wood answered my note, by informing me, that he was extremely sorry it would not be in his power to attend, but requesting that I would allow his son, Mr. William Wood, to be present at the operation.

Having, accordingly, on the morning of the 10th of July, placed the patient in a proper

\* The comparative advantages and disadvantages of this mode of operating, are fully considered in the writings of CAMPER and DESCHAMPS. posture, in the bed on which he lay, I proceeded, in the presence of my Colleagues, the Clerks of the Infirmary, and my friends, Mr. William Wood and Dr. John Gordon, to introduce my finger into the wound. I found it narrower than on the day of the first operation. I could feel no stone with the finger introduced into the bladder, and, what is more remarkable, I could not touch it now, as at the time of the first operation, with the staff introduced through the urethra. Conceiving that the narrowness of the wound, might be a hinderance to the discovery, as well as to the extraction of the stone, I dilated very freely with a blunt-pointed bistoury. Every search that I could make with the forceps and searcher, was now made, but without effect. I could feel no stone. The patient was placed in various positions, some with the view of giving him ease, and others in order to enable me to find the stone more readily. On the introduction of the finger after one of these changes of position, I at length, to my no small pleasure, felt the rough point, as it were, of a stone. I had scarcely communicated this intelligence to my Colleagues, when, in withdrawing my finger a little, I was sensible of something like a fold of the bladder, coming between me and the stone. From the part of the finger that had come into contact with the stone, I was assured, that it was situated towards the right side of the bladder, and to find it, on that side, was now the point to which my attention was directed. After various trials, in vain, to touch the stone with the finger, I at last felt it with the forceps, and endeavoured to seize it. I laid hold of it three several times, with the points of the forceps, but on each attempt at extraction, it escaped from between the blades. Overcome with fatigue, and feeling myself, at that moment, beginning to be agitated with emotions of anxiety, I put the forceps into the hands of Dr. Brown, and requested, that he would have the goodness, to extract the stone for me. He did so, after some difficulty in seizing it, with that coolness and steadiness for which he is so remarkable, and which, with his knowledge and experience, so eminently qualify him for a surgical operator.

Having now detailed, as faithfully and minutely as I am able, all the circumstances of difficulty attending the finding and extracting of the stone in the case of Robert Walker, I have only to add, that I shall feel myself infinitely obliged to the intelligent reader who has himself performed Lithotomy, and who may have met with similar difficulties, to point out to me the errors of my operation, and to inform me how I may instruct others to avoid them.

My own conjecture with regard to this case is, that the stone was lodged in a lateral sac, or pouch of the bladder, from which it projected more or less, according to circumstances. But this is a conjecture, it is evident, which could not have been verified, unless by the death and dissection of the patient.

### To the Surgeons of the Royal Infirmary.

#### GENTLEMEN,

Having occasion to publish an account of the case of Robert Walker, whom I cut for the stone, in your presence, in the Royal Infirmary, on the 5th of July 1808, and being most anxious, that that account should be full and correct in all its particulars, I have transmitted a copy of it for your perusal, and have to request, that you will take the trouble to point out to me any defects or inaccuracies which you may per-I should likewise be obliged to you ceive in it. to state to me, whether you had occasion to observe, during the recovery of this patient, any of those symptoms which usually succeed to violence done to the bladder, by the instruments employed in seizing and extracting a stone.

#### I am,

#### GENTLEMEN,

Your obedient Servant,

### JOHN THOMSON.

Brown's Square, 10th July, 1810. 26

#### To Dr. John Thomson.

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SIR,

In answer to your letter of the 10th current, we beg leave to mention, that so far as we had an opportunity to observe, and can now recollect the particulars of a case which occurred two years ago, we believe the narrative of the case of Robert Walker, to contain an accurate statement of facts, and we recollect no symptom which could be ascribed to violence done to the bladder in the operation. We are,

SIR,

Your obedient servants, JAMES RUSSELL. WILLIAM BROWN. GEORGE BELL. WILLIAM NEWBIGGING. P. ERSKINE.

Edinburgh, July 12, 1810.

# To Dr. Robert Greig, Physician's Clerk, Royal Infirmary.

DEAR SIR, -

Will you do me the favour to examine in the Journals of the Infirmary, the reports in the case of Robert Walker, of the 5th and 10th of July 1808, and inform me whether these reports were composed by yourself, or written to

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my dictation; and if the latter, whether I seemed to you to be desirous, that the Students attending the Infirmary should be fully informed of all the circumstances of that case.

#### Yours most truly,

### JOHN THOMSON.

Brown's Square, July 12, 1810.

#### To Dr. John Thomson.

DEAR SIR,

On looking at the reports of the 5th and 10th April 1808, in the case of Robert Walker, I distinctly recollect, that the former of these was drawn up by me, and subjected to your revisal, previous to its being inserted in the Journal; and that the latter, was written to your dictation in the Operation Ward of the Infirmary, in presence of the Surgical Students, at the usual hour of visit. On every occasion, but particularly on this, it seemed to me to be your anxious wish, that the Students should, through the medium of the reports inserted into the Journals, be put in possession of the fullest and most correct information respecting the cases under your care.

#### Yours truly,

ROBERT GREIG.

Royal Infirmary, Edinburgh, 12th July, 1810.

To Dr. Thomas Hay, George's Street.

DEAR SIR,

I have been informed that you are referred to by Mr. John Bell, in his late publication, as having been present at an operation which I performed for the stone, in the Royal Infirmary of this place, on the 5th of July 1808.

May I take the liberty to inquire of you, whether you at that time perceived any very palpable errors or blunders, committed in the performance of the operation; 2*dly*, Whether it be consistent with your knowledge, that a stone, which has been felt previous to the operation, may, in every case in which the incisions are properly made, be readily laid hold of and extracted at the time of the operation; and, 3*dly*, Whether you gave me, directly or indirectly, any advice or directions with regard to the conduct of it.

I remain,

DEAR SIR,

Yours sincerely, JOHN THOMSON.

Brown's Square, 7th July, 1810.

#### To Dr. John Thomson.

DEAR SIR,

I received yours of yesterday's date, respecting my being present at an operation of Lithotomy, performed by you in the Royal Infirmary, on the 5th of July 1808.

At this distance of time, having made no particular observations of what then happened, I have little to say; but that when sitting by Mr. George Wood, in the Theatre of the Hospital, you, after trying to extract the stone some considerable time, gave the forceps to Dr. Brown, and turned round to where we sat. The conversation was very short, and, as far as I recollect, of little consequence. I am certain, that you neither asked my assistance nor advice,—of consequence I could not give you any opinion.

During the short conversation that then passed, I believe I said, "Are you sure you are in the "bladder." Your answer was, "Yes." And I don't believe any thing more was said on the subject.

The operation was performed, in my opinion, in every step with great propriety, although the stone could not be extracted at that time, which has often happened without any blame being imputable to the operator.

#### I am,

#### DEAR SIR,

Your humble Servant, THOMAS HAY.

Edinburgh, July 8, 1810.

#### To George Wood, Esq. Surgeon.

SIR,

I was informed for the first time only last evening, that you are particularly referred to by Mr. John Bell, in his late publication, as having been present at an operation which I performed for the stone, in the Royal Infirmary of Edinburgh, on the 5th of July, 1808, and as having communicated to him important information respecting that operation.

May I now take the liberty to request, that you will inform me, what the nature and extent of the communications were, which you made to Mr. Bell respecting that operation ; 2dly, Whether you gave me, at that time, any advice or directions with regard to the conduct of it ; and, 3dly, Whether you have since, either as a private friend or as a Manager of the Infirmary, given me the slightest hint, that it would be prudent for myself, or in any degree advantageous to the reputation of the public Hospital, that I should desist from operating in the manner I had recommended in the "Proposal," and which I followed on the 5th of July 1808.

I am,

SIR,

Your obedient Servant, JOHN THOMSON.

Brown's Square, 7th July, 1810.

#### To John Thomson, Esq.

SIR,

I had only the honour of receiving your letter yesterday afternoon, upon my return to town. Upon looking over Mr. J. Bell's late publication, I certainly recollected having had an accidental conversation with that gentleman relative to the operation to which you allude,—and think I may have expressed regret and dissatisfaction at its failure.

In answer to your second query,—I did not, to the best of my recollection, give you "any advice "or directions with regard to the conduct of that "operation;" and I am certain, that I have had no communication with you in any "quality," upon the subject of your third query.

#### I am,

SIR,

Your obedient Servant,

GEORGE WOOD.

Edinburgh, July 13, 1810.

To Gilbert Innes, Esq. of Stow, One of the Managers of the Royal Infirmary.

SIR,

I have taken the liberty to inclose you a letter, which I hope you will have the goodness to present for me to the Managers of the Royal Infirmary. My friend Mr. Andrew Wood, is, for a reason which is very afflicting to me, ignorant not only of its contents, but of its existence. The knowledge I have, of the deep interest which you take in whatever concerns the character of the Royal Infirmary, and the comforts of the sick poor in that Institution, has made me presume to give you in particular this trouble. I am,

SIR,

With great respect,

Your obedient Servant, JOHN THOMSON.

10th July, 1810.

To the Honourable the Managers of the Royal Infirmary. (Inclosed to Mr. Innes.)

GENTLEMEN,

Understanding from several of my friends, that a most foul and atrocious attack has been made upon my professional character by Mr. John Bell, in one of his late publications against the management of the Surgical department of your Infirmary, and that Mr. Bell has had the audaciousness to state to the Public, that his account of an operation, performed there by me on the 5th of July 1808, has been sanctioned by a Manager of the Royal Infirmary, I have to request, that, in justice to me, you will have the goodness to inquire into the truth of a statement, affecting so materially the honour of one of your own body, and my professional character and interests as a teacher of Surgery.

I am,

GENTLEMEN,

Your most obedient Servant, JOHN THOMSON.

10th July, 1810.

#### To John Thomson, Esq.

SIR,

I am favoured with your letter of this date, which, with its inclosure, shall be laid before the Managers of the Royal Infirmary, at their meeting on Friday next. From what you mention of Mr. Andrew Wood, I presume it is not your wish, that I should take any notice of your letter to that gentleman, previous to the meeting of Managers.

I have the honour to be,

SIR,

Your most obedient Servant, GILBERT INNES.

Edinburgh, 10th July, 1810.

## To Gilbert Innes, Esq. of Stow.

SIR,

I have inclosed you, for the information of the Managers of the Royal Infirmary, the case of Robert Walker, copied from the Journals, my account of that case, and some documents respecting it, which it is my intention to lay before the public, as soon as I am honoured with a communication from the Managers of the Royal Infirmary, in reply to the letter which you have had the goodness to take charge of.

#### I am,

SIR,

With great respect,

Your most obedient servant,

#### JOHN THOMSON.

12th July, 1810.

#### To John Thomson, Esq. Brown's Square.

SIR,

The Managers of the Royal Infirmary have received both your letters transmitted to them through Mr. Innes, and I am desired by the Managers to inform you, that, as nothing appears in their books, nor was any report ever made to them, on the subject to which you allude, they can make you no other answer, than that they can take no concern in the business.

I am, -

SIR,

Your most obedient Servant,

ALEX. BOSWELL, W. S. Clerk.

22, N. Castle Street, Edin. 13th July, 1810.

## To the Surgeons of the Royal Infirmary. GENTLEMEN,

I received your letter of the 12th current; and in consequence of a communication which has since been made to me, I have still to request, that you will be so good as to inform me, whether you had any reason to disapprove of the manner in which I conducted myself, in any part of the operation performed upon Robert Walker, on the 5th of July 1808, and whether it be your opinion, that, under all the known and acknowledged circumstances of the case, the patient had any reason to regret his having fallen that day into my hands.

Your answer to these queries, either severally or conjunctly, as shall best suit your professional engagements, will very much oblige,

GENTLEMEN,

Your obedient Servant, JOHN THOMSON.

Brown's Square, 14th July, 1810.

## To Dr. John Thomson.

DEAR SIR,

I have to acknowledge the receipt of a letter from you, dated 14th current, addressed to the Surgeons of the Royal Infirmary, and a request that I, as one of them, would declare whether I disapproved of your conduct in the circumstances that occurred in the operation of Lithotomy, performed on Robert Walker, and whether I think the patient had cause to regret his having fallen into your hands.

I am led to suppose, that this declaration is requested in consequence of some unfavourable observations, which I understand have been made on that case, in a publication which likewise contains animadversions on the Surgical practice of the Royal Infirmary.

As I have the honour to be one of the Surgeons of that Institution, I feel myself in circumstances somewhat delicate, in being called upon to make the above mentioned declaration, lest in stating my real sentiments respecting your conduct, I may seem disposed to take notice of reprehensions, which I have hitherto disregarded, and shall continue to disregard.

Nevertheless, since you do me so much honour as to deem my testimony of some importance, I have no hesitation in expressing my approbation of your conduct in the case alluded to.

As I am totally unacquainted with the charges of misconduct, that may have been imputed to you, I cannot know to what particular part of your procedure they refer: If the charge is general and indeterminate, a general approval on my part might be all that is required. But I would wish to point out the grounds on which my approbation rests, and on this account beg leave to state, that my situation as your immediate assistant, during the operation, and the actual share I had in it, afforded me an opportunity of understanding more of the circumstances of the case, than could be learned by your other Colleagues, or by the byestanders.

I have great pleasure in being able to declare, that in my apprehension, the operation was performed with deliberation, caution, and ability. An opening into the bladder was expeditiously made, and the forceps cautiously introduced; the search for the stone was diligent, and tender, though ineffectual; the stone was not discovered, and the patient was put to bed.

This part of your procedure met with my warmest approbation. It was acting according to a rule of practice, which had been repeatedly a subject of conversation between you and me, long before this operation took place, and which we both had determined to follow, in all cases of stone circumstanced as this was. I mention this matter, in order to show what my conviction is with respect to this part of your procedure. The patient was not put to bed because the stone could not have been then extracted, but because its extraction could not at that time have been accomplished, without risking a material injury of the bladder, and exhausting the patient's strength and endurance, and thus exposing him to a much greater danger, than could possibly arise from allowing the stone to remain. From this view of the matter, I think, I am warranted in declaring the patient had no cause to regret his having been put into your hands, but, on

the contrary, has every reason to be well pleased that he was not in the hands of an operator, who might have thought it necessary to persevere in his attempts to extract the stone, till he had accomplished his object. In acting in this manner, give me leave to say, I think you acted the part, not only of a good Surgeon, but of an honest man, not hesitating to risk professional reputation to your patient's welfare.

What the obstacles were, which prevented the detection of the stone, I am unable to state; but it appears to me, that these obstacles did not depend on any circumstance, which it was within the compass of a Surgeon's power to foresee or provide against. The opening made into the bladder was sufficiently large, a fact which I was enabled to ascertain from actual examination; the difficulty of finding the stone could not therefore be attributed to any error of yours, in not making the incisions by which the bladder was opened of the necessary extent.

While I state this circumstance, I beg leave, at the same time, to observe, that in so doing, I would not be supposed to be understood as giving a preference to the instruments you employ in the operation of Lithotomy, over others in more common use. In your hands, however, I must declare, that they were so employed as fully to effect the purpose designed to be effected by them, with perfect safety to the patient.

After ten years intimate professional acquaintance, in a situation that afforded daily opportunities of observing your talents and acquirements, I embrace this occasion of offering my testimony to the zeal and success with which you study, practise, and teach the art you profess; a testimony which, in other circumstances, it might have been deemed indelicate in me to give, or you to receive.

#### I am,

#### DEAR SIR,

## Your most obedient Servant, WILLIAM BROWN.

Edinburgh, 32, Hanover Street, 16th July, 1810.

#### To Dr. John Thomson.

DEAR SIR,

I thought my answer to your former queries concerning the case of Robert Walker, quite sufficient for the purpose of repelling all illiberal censures; and, after the elapse of two years, I cannot pretend to recollect the particulars so circumstantially, as to feel myself entitled to enter into the minutiæ of detail. I was not in a situation to judge of the particular circumstances which impeded the extraction of the stone from Walker's bladder. But every person connected with the practice of surgery knows, that many unforseen and unavoidable difficulties occur in performing the operation of Lithotomy, which necessarily occasion embarrassment and delay. And, according to the best of my knowledge and recollection, the delay in this case did not proceed from any defect of execution on your part; and Walker has no reason, that I know of, to regret having put himself under your care. He could not, with justice, complain of your determination to defer the extraction of the stone till a more favourable opportunity, since your forbearance on that occasion probably saved him from the dang r of the very serious consequences, which might have been expected to attend the temerity of persisting in the attempt with injudicious and unreasonable perseverance.

I am,

DEAR SIR,

Your obedient Servant,

JAMES RUSSEL.

St. Andrew's Square, 16th July, 1810.

## To Dr. John Thomson.

MY DEAR SIR,

In reply to the request contained in your letter of the 14th, to the Surgeons of the Royal Infirmary, I have no hesitation in saying, without pledging myself to any opinion with regard to the particular method of operating, contained in your "Proposal, &c." that, having determined on operating in this manner, you performed every part of the operation on Robert Walker, of which I, as a spectator, could judge, with

steadiness, deliberation, and humanity. The external incisions were well and speedily executed; the extent of the incision of the neck of the bladder, I could not judge of, as I did not examine the wound; neither was I aware of the cause of the difficulty in laying hold of the stone: But I am satisfied, from the cautious and careful manner in which you introduced, and handled the forceps, very little violence was done to the bladder; and I think myself freely justified, by the event of the case, in believing, that so far from having cause to regret, your patient may consider himself fortunate, that he fell into the hands of one, who did not permit himself to be influenced by any consideration connected with his own reputation, when the safety of his patient was concerned. The records of the Hospital show, that your patient recovered, without the occurrence of one unfavourable symptom; and I understand he is still alive, and in good health, at no great distance from Edinburgh.

I am,

MY DEAR SIR,

Very truly Your's, GEORGE BELL.

31, St. Andrew's-Square, July 17, 1810.

To Dr. John Thomson.

#### MY DEAR SIR,

In answer to your letter of the 14th current, I beg leave to state, that I had no reason

to disapprove of the manner in which you conducted yourself in any part of the operation, which you performed on Robert Walker, on the 5th of July 1808: On the contrary, all the steps of the operation seemed to me to be executed with perfect The incision into the precision and coolness. bladder was accomplished with promptness and facility; and, in my opinion, you are entitled to no small credit for your judgment and humanity, in having, in the circumstances which you have so fully detailed in your history of the case, put the patient to bed, and delayed for some days the further search for the stone. To this judicious practice, as well as to the caution which you seemed to observe, in the use of those instruments which it was necessary to introduce into the bladder, I cannot help thinking that the patient's complete recovery is in a great measure to be attributed.

Under these circumstances, I do not think that Robert Walker could have any possible cause to regret his having fallen that day into your hands.

I am,

MY DEAR SIR,

Yours most sincerely,

## WILLIAM NEWBIGGING.

South St. David's Street, 17th July, 1810.

## To Dr. John Thomson.

MY DEAR SIR,

In answer to the letter, which you addressed on the 14th current, to the Surgeons of the Royal Infirmary, I have no hesitation, as one of the number, to declare, that in the manner in which you performed the operation on Robert Walker, on the 5th of July 1808, I saw nothing of which I did not perfectly approve; and so far from having any reason to regret that he had come under your care, your patient, in my opinion, had much cause to congratulate himself on having fallen into the hands of one, who, in circumstances so embarrassing, conducted himself not only with much practical skill, but with exemplary humanity and caution. In point of fact, indeed, I know, that Robert Walker returned to his family, impressed with a grateful sense of your kindness, sympathy, and attention.

In giving you this testimony, I must still be permitted to add, that I think it unnecessary; and that I wish you had continued to disregard those unfounded reports, by which, in the opinion of all who know you, your professional character is far too well established, to be at all injured.

I am,

MY DEAR SIR,

Yours most sincerely, P. ERSKINE.

Nicholson Street, 17th July, 1810.

## CASE III.

#### JAMES RATTRAY, AGED 5.

## Royal Infirmary, July 28th, 1808.

"THERE is a general swelling of the abdomen, accompanied with occasional pretty severe pain in making water, especially in the extremity of the penis. The urine comes generally away by drops, seldom in a full stream. Seems sluggish and inactive; eyes dull and heavy. P. 120. Occasionally voids worms, picks his nose, and starts during sleep. On introducing a sound into the bladder, a stone can be distinctly felt.

Three years ago, this complaint began with the symptoms as above mentioned. Has used many remedies, of the nature of which his mother knows nothing.

29th. R. Sem. Santon. Ji. Syrupi Com. 3ss. M. Cap. h. s.

gr. iii. M. C. h. s.

August 1st. Has voided two worms, (lumbrici) since the exhibition of the worm powder.

Contin. Medicam.

-2d. Has voided another worm since the visit of yesterday.

Contin. Omnia.

---- 5th. Repet. h. s. Pulv. ex Semen. Sant.

---- 6th. Cap. stat. Pulv. Jalap. C. 3ss. Calomel. gr. iii. Mane Injiciat. Enema Domest.

---- 7th. In consultation, it was determined upon to remove the stone by operation. The operation was performed with a common staff, and the membranous part of the urethra being opened, a broad scalpel was carried forwards, with its edge downwards and outwards, so as to open the neck of the bladder; and a stone about the size and shape of a pigeon's egg, weighing 3vii. and x gr. was taken out, slightly rough on the surface.

H. 8va. P. M. P. 154. Skin hot. Let him be put into the warm bath. Habeat Mist. Salin. Diaph.

Evening. Continues as in the above report.

----- 9th. Seven A. M. Has passed a restless night. Skin hot. P. 160. Complains of pain in his head, and slight pain in his abdomen. Had a powder yesterday of Pulv. Jalap. C. 3ss. Calomel. gr. iii.

Stat. Fiat Venæsect. ad 3viii.

Apply twelve leeches to the belly, and the bleeding having ceased, let him be again bathed.

H. 12 A. M. Blood drawn has a buffy coat. P. about 136. Skin moist. Has slept a good deal since morning.

Habeat P. Jalap. C. 3ss.

H. 10ma. P. M. Hab. Calomel. gr. iii.

—— 10th. Continued to sleep through the greater part of yesterday and last night. P. 136. Skin moist. Belly free from pain and tension. Has had repeated stools from the physic.

Cont. Omnia.

----- 12th. A good night. P. 140. Belly costive.

R. P. Jalap. C. 3ss. Calomel. gr. iii. M. Capt. Stat.

—— 14th. Continues easy in every respect. Has had two stools, and has voided another large lumbricus.

Repet. P. Sem. Sant. Ji. ex Syrup. Simpl. 3ss.

----- 20th. Urine comes chiefly by the penis. Repet. P. Vermifug.

gr. ii. 23d. H. S. Cap. P. Jalap. gr. x. Calomel.

---- 26th. A little pudding every day.

---- 29th. DISMISSED CURED."

THIS case affords another example of the co-existence of worms in the intestines, with stone in the bladder of a young person. With regard to the operation itself, I have only to remark, that it was performed according to the second method practised by Cheselden. I cannot help thinking, that when the concavity of the staff upon which the knife is conducted into the bladder, is pressed up, as it was in this operation, close to the arch of the pubis, the danger of wounding the rectum, by this method of operating, is much less than has usually been imagined. It is, I conceive, by keeping the straight staff close to the pubis, in a fixed and determinate situation, that the surgeons of Dublin have for some years employed, with so much safety and success, the Gorget recommended by Mr. Peile.

## CASE IV.

#### JOHN ORPHAT, AGED 46.

## Royal Infirmary, Sept. 9, 1808.

" COMPLAINS of pain and difficulty in throwing out the last drops of urine, which till that time flows pretty freely, though not in a full stream. The pain is felt in a place corresponding to the situation of the neck of the bladder. It is pretty severe, as if burning; continuing for a quarter of an hour after every evacuation of the bladder. He has numerous calls to empty the bladder, which he says, is performed with the greatest ease in an erect posture, though not unfrequently he is obliged to get down on his knees. Occasional pretty severe pain at the point of the penis, with uneasiness in the right loin and belly, and a particular feeling like creeping in the right groin. Urine is very thick, and deposits a pretty copious white sediment. Says, four years ago, he was first seized with pain in the right loin and belly, which continued for eight hours, For this, bleeding and the warm bath were prescribed; by which treatment he soon got better, but ever since has had difficulty in making water, to a greater or less extent; and once, about two years ago, had a complete retention of urine, from what he thinks was the entrance of a small body into the beginning of the urethra. From this he was relieved by the use of the catheter, and has never since had any complete obstruction to the passage of his urine.

About 14 months ago, after a pretty severe pain in the right loin, fever, and general uneasiness for three weeks, he passed a great many stones about the size of small shot.

Examined by the Surgeons, with the sound; a stone can be distinctly felt and heard. Has used alkaline aerated water for about eight weeks; its effects have not been well marked. Regular in bowels, and health tolerable.

----- 16th. Had a doze of salts last night, and a common injection this morning. In consultation, the propriety of the operation was determined on; and as he was anxious about it, it was done to-day by Dr. Thomson. The outward incision was made in the usual manner; and a small artery was secured. The internal incision was performed with a large scalpel on the curved grooved staff, with its edge downwards and outwards; and twenty-six small, round, yellow-coloured, smooth stones were taken out with a scoop, some, or most of which, were attached to the bladder on the inner side of the symphysis pubis. He bore the operation well, and lost a very great quantity of blood, seemingly from the hæmorrhoidal vessels.

Cap. Stat. Pulv. Jalap. Co. Jii.

R. Mist. Salin. Antim. 3vi. Cujus Cap. 3i. 3tia. q. q. hor.

Habt. Stat. Pulv. Jalap. C. 3ss.

------ 20th. Slept ill during the first part of the night. He complained of confusion of his head. P. 94. Skin moist. Belly continues free from pain. Physic has operated very slightly.

Stat. Injic. Enema Domest.

Hor. 6ta. Cap. Ol. Ricin. 355.

----- 21st. Has had one good stool since taking the Castor oil. Continues free from pain. Pulse about 86.

- 22d. H. S. Ol. Ricin. 355.

- 23d. Two good soft pears daily.

---- 25th. Repet. Ol. Ricin. 3ss. h. s. Let him have a little rice pudding daily.

- 27th. A little table broth daily.

---- 28th. Belly costive. Stat. Injic. Enem. Domest. H.S. Ol. Ricin. 3ss. Hab. Vin. Rubr. 3viii,

---- October 1st. A bit of steak to day, and a bottle of porter.

-2d. Repeat his steak. H. S. Hab. Elect. Lenet. 3ii. Warm Dressings to the wound.

----- 5th. Water has begun again to come partly by the urethra.

H. S. Bol. Jalap. Comp.

----- 6th. Let him be put into the warm bath to-night.

----- 7th. Along the outer edge of the wound there is considerable hardness, attended with very severe pain, but without tending to elevation in any particular part. The water comes almost entirely by the penis.

—— 10th. Wound to day has a very unhealthy aspect. The lips are thickened, and the skin around it has a dark red colour. The discharge has a very foetid smell, and it is accompanied with a prickling pain. P. 110. Tongue continues foul. Warm bath to-night at seven.

Habeat Stat. Haust. c. Tinct. Opii, Gtt. xx.

R. Tinct. Opii, Gtt. xx. Vini Antim, Gtt. xx. ft. Haust. quem Capt. h. s. et Repet. Cras

Mane.

R. Boratis Sodæ, 3ss. Syrup. Ros. 3iii. Aquæ 3v. M. Sig. Gargle.

Cont. Vin. &c. et h. s. Capt. Ol. Ricin. 3ss.

Cont. Haust. Vin. Tart. Antim. Gtt. x. c. Continue the poultice, and let him again use the warm bath. Omit. Mist. Diaph. Salin.

----- 12th. Warm Dressings.

H. S. Ol. Ricin. 3ss. Warm bath to night.

H. S. Hab. Elect. Lax. 355. Balneum. Tepidum.

---- 17th. Warm bath every second night.

---- 20th. To have a few stewed apples daily. H. S. Hab. Ol. Ricin. 3ss.

<u>25th.</u> Desires that his wine be omitted, and that, in its stead, he may have porter. Wound looking well. Urine comes almost entirely by the natural passage.

- 27th. DISMISSED CURED."

There was a peculiarity, in the situation of the greater part of the stones, in the bladder of this patient, to which, I have not been able to find any thing similar, in the writings of practical authors. By a slight inaccuracy of the Clerk's, probably arising from the inaccurate manner in which I had expressed myself to him, it is stated in the case, that the stones were " attached to the bladder on the inner side of the symphysis pubis." They were not attached, in the strict meaning of that term, but they were inclosed in sacs

or folds, and kept suspended in these sacs or folds on the fore part of the bladder. Two stones having come away in the first attempt to extract with the forceps, I laid that instrument aside, and took out the remaining twenty four stones with the scoop. Previous to the introduction of the scoop, and to my being able to lay hold of a stone, I had to turn the fore part of my finger towards the anterior parietes of the abdomen, and to disengage the stone from the situation in which it was lodged. The stones fell, sometimes one, sometimes two, or even more, from the sacs or folds, into the general cavity of the bladder; and as this was small, and most of the stones of the size of a hazel nut, they were readily felt by the finger, and fixed by it in the scoop.

It might have happened, that some of the stones in this case should have escaped from my examination, but none came away during the cure; and as the patient was completely relieved by the operation, and has ever since remained free from the symptoms of stone, it may reasonably be presumed that none were left in the bladder.

Some surgical Authors, whose opportunities of observation do not seem to have been very extensive, at the time even when they had composed large Treatises on Surgery, and who, as usually happens, are, upon most professional subjects, confident in proportion to their want of knowledge, deny, or pretend to deny, altogether, the occurrence of sacs or folds in the cavity of the human bladder. But to pretend to deny the existence of a

fact, which has been so often observed and recorded by Anatomists and Surgeons, and of the truth of which, the most incredulous may convince himself, by the inspection of almost every collection of morbid anatomical preparations, must proceed, I conceive, either from a very culpable degree of ignorance indeed, or from a much worse principle. For the sake of the reader, but slightly conversant in subjects of this nature, into whose hands these pages may fall, I shall quote a passage, from a paper, inserted into the Philosophical Transactions of London, for the year 1808, by Everard Home, Esq. a Surgeon, who has enjoyed, and who has known how to avail himself of, the most extensive practical opportunities in his profession, and one to whose instructions as a teacher, and to whose writings as an author, I am, among many others, indebted for much valuable information .--- " In several cases, in which I have examined the body after death, calculi have been found inclosed in cysts, formed between the fasciculi of the muscular coat of the bladder, so as to be entirely excluded from the general cavity, and therefore had not produced any of the common symptoms of stone. I have seen in the same bladder, two, three, and even four such cysts, each containing a calculus of the size of a walnut \*."

\* The following case of Calculus and Cystocele, was printed and circulated in Edinburgh, in the year 1785, with what the During the recovery of Mr. Orphat, he was attacked, about the fourteenth or fifteenth day after the operation, by a disease, which in its progress, appeared to me, to be that now well known, under

Operator, (the late Dr. John Aitken, Lecturer on Anatomy,) must have considered as an appropriate motto:

> Speak of me as I am-Nothing extenuate-Nor set down aught in malice, SHAKESPEARE.

## Case of John Paxton, above sixty years old, admitted into the Royal Infirmary on March 25, 1785.

"HE is constantly affected with pain and itchiness in the glans penis, particularly aggravated when discharging his urine; to do which he has a frequent inclination.

It is never passed in large quantities at a time, and six months ago, was often observed bloody; and he sometimes has noticed the blood in a coagulated form. Since that period, however, it has been natural in colour and smell.

For a fortnight he says a cough has attacked him, and been particularly severe in the night. During that space, he has been troubled with looseness and piles: He attributes them partly to cold; but the last complaint more especially to stress in voiding urine and fæces.

The urine is sometimes evacuated in drops, and the penis painfully inflated.

Pulse 80,-skin cool,-appetite impaired,-sleeps generally ill.

Four years ago passed a calculous concretion, twice the size of a common pea; and the above symptoms to a greater or less degree have been present since.

During all the former part of his life was healthy, and had no other complaint, except ague.

Upon sounding, a stone is felt, and the concave part of the instrument is heard to strike upon it. The finger, pushed high in the rectum, does not perceive the stone. the name of *Hospital Gangrene*. This is a disease, however, which does not appear to be exclusively confined to Hospitals; for in two instances, at least, in which the disease has been observed in

He has an easily reducible hernia on each side of the pubis.

\_\_\_\_\_ 26th. R. Mucilag. G. Arab. Un. vi.

L. L. Gut. lx m. Capt. Urgente Tussi.

R. Infus. Tamarind. Un. viii. Capt. m. Abradantur Pili Perinæi.

----- 27th. Dr. Aitken, in compliance with the result of a consultation, performed the lateral operation for the stone.

As no stone was felt when the forceps were introduced into the bladder, a doubt arose about its being penetrated by the gorgeret.

Several surgeons examined, but could not find the stone.

A considerable loss of blood took place from a small vessel on the left side of the wound, which had been opened by the gorgeret.

As the patient seemed to be a good deal exhausted, it was thought proper to discontinue the operation for the present.

<u>28th.</u> Pulse soft, about 84 in the minute—had considerable pain through the night, which is now abated—urine flowed through the wound—had a stool yesterday afternoon—took a draught in the evening, and slept about two hours during the night.

<u>29th.</u> About four o'clock appeared very restless and uneasy, and continued so without any particular complaint until about five o'clock, when he died.

\_\_\_\_\_ 30th. Dr. Aitken dissected the body in presence of several gentlemen.\_\_\_\_\_In making an incision from the os pubis to the umbilicus, pus was found in the cellular substance\_\_\_\_\_a cut was made in the fundus of the bladder, and, upon introducing a finger

the Infirmary of this place, it could be traced, in its origin, to patients who were brought in, affected with it, from different parts of the city. Of one thing I am certain, that Hospital Gangrene has

through this, a stone was found lodged in a cyst of the bladder, (cystocele,) just at the ring of the external oblique in the mouth of the herniary sac, on the right side.—The stone was of an oblong shape, with a protuberance on the middle of one side, and something inferior in size to a hen's egg.—Mr. Russel, Dr. Aitken's assistant in the operation and dissection, introduced his finger at the above mentioned incision, and through the wound (which was of the ordinary size) made with the gorget, so as to meet the Doctor's finger, introduced into the wound in the perinaum.

The bladder was found diseased, its coats very much thickened, and several cysts in its internal surface.

> Extracted from the Infirmary Journal, by JOHN COPLAND, Dep. Surg. Cl."

I COULD multiply examples of sacculated bladders without number, but shall content myself with adding only one more; a case which is justly celebrated in the history of those medicines, which have at different times been recommended, as solvents for the stone.

From the Transactions of the Royal Society, No. 462.—A Letter from Edward Nourse, F. R. S. Surgeon to St. Bartholomew's Hospital, to the President and Fellows of the Royal Society, giving an account of several stones found in bags, formed by a protrusion of the coats of the bladder, as appeared upon opening the body of one Mr. Gardiner. Read, January 7th, 1741-2.

"PERMIT me to lay before you the bladder of Mr. Gardiner, who was, the 5th of March 1739, before the trustees appointed by the Parliament to enquire into the Efficacy of Mrs. Stephen's been less frequent in its occurrence, and less in-

jurious in its consequences, during the last, than it was during the first ten years of my attendance, in the Surgical wards of the Royal Infirmary of Edinburgh.

medicines, produced as an instance, where they had been effectual in dissolving the stone in the bladder.

Mr. Gardiner was searched by me on Saturday the 30th of December 1738. I felt a stone the moment my instrument was introduced; which was likewise felt by Mr. Wall, his Apothecary, then present.

The Tuesday following, he began to take Mrs. Stephen's medicines, and continued them eight months.

On the 30th of November 1739, I saw him at Child's Coffee-House, when he told me he was quite free from his usual disorders: I there search'd him again in the presence of several Physicians and Surgeons, who likewise felt for the stone, but none could be found.

Mr. Gardiner dying on Saturday the 2d of January 1741-2, the next morning, in the presence of Mr. Sainthill and Mr. Wall, I opened his bladder, and therein observed six preternatural apertures of different sizes, the biggest capable of admitting the top of my finger. Each of these openings led to a separate bag, formed by an enlargement of the internal membrane of the bladder, protruded between the fibres of its muscular coat.

These bags are to be seen on the back part of the bladder, a little above the vesicula seminales; and when viewed on the outside, seem to be but two; though they are in number equal to the openings within, already mentioned; and divided from one another by the duplicature of the internal membrane, which forms a septum between each of them.

In these sacculi or bags are contained nine stones; the largest about the size of a small nutmeg; and with what facility some of them moved out of, and returned into the sacculi, the following circumstance will clearly evince. The fistulous opening in the perinæum, which I had every reason to believe, was occasioned by the attack of gangrene, closed up gradually after Mr. Orphat left the Infirmary; and I had the satisfaction of seeing him, in good health and spirits, towards the end of last April.

When I had opened the abdomen, Mr. Sainthill handling the bladder, brought two of these stones up to its *fundus*, where they were felt by Mr. Wall and myself. We then examined the kidneys; the right contained a little matter, otherwise it was as it should be; but of the left, two thirds were wasted; its *pelvis* was contracted in proportion, and the *ureter* almost impervious. Upon rehandling the bladder, neither of us could find any stone: I therefore laid it open, and we found them all in the *sacculi*. The stones that are in one of these *sacculi* have been so much inlarged since their lodgment, that without force and laceration they cannot be got out.

I am,

GENTLEMEN,

Your most obedient, and

most humble Servant,

EDw. NOURSE."

## CASE V

#### ROBERT SUTHERLAND, AGED 4.

## Royal Infirmary, May 27, 1808.

" WAS in the Hospital about nine months ago, from some urinary complaints, at which time a calculus was distinctly ascertained to be in the He passes his urine very often, and by bladder. drops, though it often flows from him without his knowledge. It is accompanied with very severe pain at that time, so much so as to make him cry out, and grasp the root of the penis. By the account of his relations, the testes are drawn up at this moment. . Such a paroxysm does not attend at every time of making water, but returns at irregular intervals. Urine, by account, in every respect natural, but occasionally containing small quantities of blood. By account, since birth his water has come away by drops; but about 18 months ago, for the first time, a paroxysm as above described was observed.

This account is received from his grandmother, as he himself is averse to give any account of his feelings. Pulse about 85. Health good. Belly open. — 27th. R. Calomel. gr. iij. Sacchari. gr. vi. M. C. H. S. Repet. Cras. Quoque Balneum Tepid. H. S.

---- 28th. Medicines prescribed, together with the bath, were given. To day Dr. Thomson made the external incision for Lithotomy, in the usual manner, a curved staff being in the bladder. The groove being found, and a straight director introduced along it into the bladder, the first staff was withdrawn, and the neck of the bladder opened by keeping the edge of the knife in a direction *upwards* and slightly *outwards*. The forceps now introduced, after slight dilatation with a bistoury, drew out a small rough stone of a pale brown colour.

R. Calomel. gr. ij. Sach. gr. vj. M. ft. tal. iij. Sig. One every hour till they operate.

 from an injection of warm water. P. about 140,-T. white.

Cap. P. Jalap. Co. 3 i. et Repet. Bal. Tepid.

Habeat Sub. Mur. Hyd. gr. iv. ex Sacchari Albi. gr. vi.

R. Syrupi 3i. Aq. Cassiæ 3ss. Sp. Salin. Arom. 3ii. Aquæ Font. 3iv. M. Sig.

A large table spoonful every hour.

Hor. 2. P. M. R. Calomel. gr. ii. Sacchari. gr. vi. M.

Cap. St. et Repet. ad. 3m. dos. Om. Horâ.

H. 5a. P. M. No stool.

R. Semin. Coriand. Stat. 3i. Aq. lb. i.

Tere Semin. Coque ad 3viii. et Injic. stat.

Repet. Sub. Mur. Hyd. gr. ii. Om. hor. ad Alvum Ciendum.

## June 1. Nine A. M. Cap. Stat. Pulv. Jalap. Co. 3ss.

At the visit. Took 16 grains of Calomel in the course of the afternoon, but without the effect of procuring him a stool. Had a coriander injection last night, and a purgative one this morning, which brought away with them only a small quantity of greenish fæculent matter. Took this morning at 8 o'clock, half a dram of the Compound Powder of Jalap, which he still retains. Passed rather an indifferent night; but he has slept a good deal in consequence of an opiate which he got this morning.

Hab. Jus. Bov. p. p. c.

Evening. DIED to-day two hours after the visit."

THIS is the last of five cases, operated on by me for the stone in the Royal Infirmary of Edinburgh, during the year 1808-9. No difficulty occurred in this case, either in finding or in extracting the stone; and I was, from this circumstance, encouraged to flatter myself with a favourable result. I had even ventured to predict it; but the event shows, how much I must have been disappointed. As I was not permitted to open the body after death, a thing which I most earnestly entreated of the child's grandmother, I cannot pretend to say, precisely, upon what the death of this patient depended. The ease which he experienced after the operation, for a period of nearly thirty hours, was as complete as any I had ever seen enjoyed, either by a young or an old subject, who had undergone the operation for the stone. In the report of the 30th of May, I have stated, that he seemed to feel pain when pressure was made above the region of the pubis; but of this I was doubtful, for there

was no tension then, nor afterwards, in the region of the bladder, and the child expressed uneasiness every time he was touched by any person, except his grandmother. Leeches, however, were applied to the belly, as a precautionary measure; but neither I, nor any of my Colleagues, judged it necessary to re-apply them, nor to take any blood from the arm.

I was of opinion, that his illness proceeded from an attack of bilious fever; and the intelligent medical reader will have already perceived, from the medicines prescribed, that I continued of that opinion till the hour of his death. I have also been since, somewhat confirmed in this opinion, by having learned, that a child of the same family, upon whom no operation had been performed, died of an affection precisely similar.

After this statement, I shall only add, that if the death of my patient, in this instance, proceeded from a cause different from what I apprehended it did, the symptoms under which he laboured appeared to me to be very different from those, which I have had an opportunity of observing, in patients who had suffered from inflammation in the region of the bladder, after the extraction of a stone.

## CASE VI.

#### REV. MR. R.

I HAVE been favoured with the following account of this case, in a letter which I received a few days ago, from my very worthy friend the patient himself. The history of the case affords a good example of strictures in the urethra, produced by the presence of stone in the bladder; and of two diseases, the one of a local, and the other of a constitutional nature, depending upon, and removed by the cure of the strictures. The simplicity, accuracy, and brevity of the account, that is given of the succession of symptoms which occurred in this case, are such as to persuade me, that I should do wrong, were I to attempt to describe these symptoms, in any other words than those, in which the patient has expressed himself.

## " MY DEAR SIR,

## 10th July, 1810.

" I had the pleasure to receive yours of the 7th, late last evening; and shall lose as little time as possible, in complying with your request, to the best of my reccollection.

"" The first time I had any symptom of my complaint was, I think, in the Summer of 1803. My horse stumbled, and the sudden jerk occasioned by my pulling the bridle, to prevent his coming down altogether, made me feel as if some sharp pointed weapon had been thrust into my abdomen; and upon alighting about an hour after, I was astonished to observe my urine much mixed with blood. The bloody mixture did not continue above three or four hours at that time, and the pain occasioned by it, of course, went off. But frequently after that period, when I rode ten or twelve miles on a stretch, I found my urine tinctured with blood, attended with pain in the urethra; but walking any distance did not produce that effect, till September 1807, when walking or riding a couple of miles, brought on bloody urine, accompanied with very acute pain in the bladder and urethra, and often much difficulty in discharging my urine. From that time I continued to suffer much pain on making any motion, and often when in a state of total inaction, except when in bed, during the following Winter and Spring. In April 1808, I transmitted a state of my case to Dr. Gregory; who wrote me, that from the symptoms of my complaint, he suspected I had a stone in my bladder, and that before any thing could be done for me, it would be indispensably necessary to get myself sounded, which was attempted to be done twice in my own house; but neither of the attempts succeeded. The gentleman who tried to sound me found a stricture in my urethra, which he could not make the instrument to pass. On the 15th May, 1808, I had a very severe attack of fever and ague, when one of my testicles swelled to the size of my fist. By the application of Goulard water, the swelling abated; but the testicle was not nearly reduced to its natural size when I went to Edinburgh on the 29th of June. You may perhaps recollect, that on the first day of July, you sounded me in the presence of Drs. Gregory and Gordon, when you fully ascertained'I had a stone in my bladder. A few days after you began to introduce the bougie, with a view to remove the strictures which you found in my urethra, and continued to do so every second or third day, for four or five weeks, which gave me partial ease; and, with the assistance of soda water, which you directed me to drink in moderate quantities, I felt myself considerably relieved : And in that state I returned home, on the 29th of August. I carried with me from Edinburgh some dozens of the soda water, and a quantity of the supercarbonate of potash, as a succedaneum to the soda, which I used as you directed; and continued to experience an uneasiness, though not intolerable, till about the middle of November, when I began to be much pained, particularly after a discharge of urine, which was very frequent, and of course in very small quantities, often scarcely an ordinary tea-spoonful. On the 8th December, I had an excessive attack of the stone, attended with fever and ague, and a swelling in the other testicle; and from that date, I was not able to move, without much uneasiness, and consequently

was very seldom without doors, till the 1st of March, 1809, when I set out for Edinburgh, where I arrived on the 3d: And on the 10th of that month, I underwent the operation of Lithotomy .---You may probably recollect, that I had a very severe, I may say a dangerous, return of fever and ague, the night after you performed the operation. On the morning of the 11th, you found me considerably relieved; and from that time, I had no untoward symptom. My recovery was uninterrupted, and at the end of seven weeks after the operation, viz. on the 28th April 1809, I found myself, though weak, in tolerable health, at my own fireside. I continued rather feeble during the Summer months; by the middle of September, my strength was so much restored, that I was able to walk eight or even ten miles in a forenoon, without feeling much fatigued. I sometimes felt uneasy from, what I apprehended to be, the remains of stricture, but that was no impediment to me in walking or riding. My uneasiness, however, increased in December, and for some weeks I was rather alarmed by the very frequent desire I had to make water, the discharge of which was attended with much pain in the urethra, and as I apprehended in the bladder, immediately when the urine began to come off; but I felt instant relief after it was discharged. That uneasy feeling, however, went off in a short time, and, since the middle of last January to this hour, I have enjoyed as good health as at any period these twenty years.

"From this rude sketch, I hope you will be able to collect what may be necessary for your purpose. At nine years of age, I was attacked with Ague, which brought me to the gates of death, and every Spring and Autumn since that time, I have had a return of it; sometimes three or four returns in the course of a year: But since the night of the 10th March, 1809, when I underwent the operation, I have not had the slightest return of it. And I can truly say, I have not been half so long free of Ague these forty-five years. Though at the age of fifty-six, I cannot look for the vigour of thirty, I am at present in very good health, and cannot say, I have any uneasy feeling occasioned by that dangerous complaint, which you was so very instrumental in removing.

## I am,

With much regard, MY DEAR SIR, Yours most truly, W. R."

The operation was performed in this case, as in the second and fifth cases, according to the manner described in the "Proposal." I was assisted in it by Dr. Brown, in the presence of Messrs. Erskine, Bell, Wood, and Gordon. The stone was small, and no difficulty occurred in the ex-

traction of it. An opiate was given to the patient after the operation, with the view of alleviating his pain, and of procuring him some rest. He was seized, however, soon after being put to bed, with a cold shivering fit, which in intensity and duration, was the most severe from which I have ever seen a patient recover. It lasted fully more than five hours. During all this time, the countenance of the patient, who is naturally of a pale complexion, and of a very spare habit of body, wore the aspect of death. Warm applications were made to various parts of the body, but brandy toddy, of considerable strength, was the first thing that seemed to put an end to the cold fit. Fortunately for my patient, the hot fit, that succeeded, bore no proportion to the cold. He slept well during the night, and awoke next morning in an easier state, than I had ever seen any patient at this period, who had been cut for the · stone.

The alkaline medicines were prescribed in this case, with no very great expectation of benefit. The relief, however, that he experienced, immediately after beginning to use them, was more sudden and more complete, than usually happens, even in those cases in which alkaline medicines ultimately prove beneficial. It was indeed so sudden, as to satisfy me, that it did not proceed from any chemical effect, which these medicines could have produced upon the surface of the stone itself, or even upon the uric and phosphatous deposites that were observable in his urine.

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## METHOD OF OPERATING

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THE art of surgery, ever employed in finding out the safest and easiest means of cure, has been frequently engaged in endeavours to improve this operation; and the situation of the bladder, which may be opened either at its fundus or its neck, has suggested different methods of performing it; such as the Apparatus Minor, the Apparatus Major, the Lateral Operation of Mr. Cheselden, and that of M. Rau. There may likewise have been some others, which, as I do not propose to compare one manner of cutting with another, would be needless to mention.

These four methods, which I have described in the Parallel published by me in 1730, have still varied in the hands of those who have practised them; every one having either added to, or retrenched from them, according as his judgment directed him, in order to render them more perfect. I shall say no more here of these different operations, the advantages and inconveniences of which I have already demonstrated; but shall only describe the manner in which I have performed the operation for some years past, and which I have fixed upon preferably to any other, as it has always proved successful, even in the extraction of the largest stones. From this repeated success we may at least infer, that it is as little liable to inconveniences as any other method.

Every thing being ready for the operation, the patient must be put into a convenient situation for the surgeon, and be fastened there, that he cannot move. In order to this, he is to be placed upon the table, prepared as before directed, with his buttocks even with the edge of the table, his back leaning against the back of the chair, and his head supported by pillows.

Two assistants raise up his knees, and fasten his hands and feet with ligatures. The ligatures which I use are very convenient, as they are soon put on, and as readily taken off again without hurrying the patient, who, indeed, from the fear he is under, is not always sensible of their being applied; and they likewise secure the patient as effectually as the large ligatures used at the hospitals, which are described in the Treatises of Lithotomy. Each of the two ligatures is a tape, made of strong thread, two inches broad, and about two feet long, the two ends of which are joined together by a seam, in such a manner as to describe a circle. The tape being thus doubled, the ligature is but a foot long. A slip knot, made of such another tape, brings together and joins the two sides of this ligature, which then forms a sort of figure of eight. This knot is not fixed, but may be moved towards either end of the ligature. Each of the assistants passes one of the patient's hands into one end of the ligature, and fastens it with the slip knot at the bending of the wrists; which done, he passes the other end of the ligature under the foot like a stirrup. He then puts one of his hands between the patient's arm and his ham to bear it up, while with the other he holds his foot.

The ligatures being thus applied, I introduce the staff into the bladder in the same manner as was before directed, and feel for the stone. The two assistants before-mentioned keep open the patient's knees, whilst a third stands on one side of him upon a chair. I then raise up the scrotum, and directing the last assistant to support it with both hands, so as to avoid bruising it by pressing it either against the staff or the os pubis, I place his two fore-fingers on each side of the part where the incision is to be made; one of the fingers being laid exactly along that branch of the ischium which rises towards the pubis, and the other pressed upon the raphe, that the skin may be kept fixed and tight. Whilst I thus place the fingers of the assistant who supports the scrotum, I still keep hold of the handle of the staff, and direct it so as to form a right angle with the patient's body; at the same time taking care that the end of it is in the bladder.

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This position is the more essential, as all the other instruments are to be conducted along the groove of this. If the handle of the staff was kept inclining towards the belly, the end of it would come out of the bladder; and the gorget missing its guide, would slip between that and the rectum.

The staff being rightly placed, I take the knife from the assistant who holds the instruments, and put it into my mouth; then pressing the beak of the staff against the rectum, I feel the curvature of it through the perinaeum. The incision ought to terminate an inch and a half below where we feel the bottom of the curvature. If we do not carry this incision sufficiently low, it may happen not to be of a size to allow the extraction of a large stone, and might lay us under a necessity of extending it further afterwards, for the skin will not lacerate here, nor easily give way for the passage of the stone. I therefore begin the incision from the lower part of the os pubis, continuing it down to the place that I before directed for its termination; after which, I pass the point of the knife into the groove of the staff, and cutting from below upwards, without taking the point out of the groove, I open the anterior part of the urethra as far as the incision that is in the skin.

The beak of the staff, which was pressed upon the rectum, must now be raised and pressed against the os pubis. At the same time I turn the handle towards the right groin, that the groove which is at the beak of the staff may face the space between the anus and the tuberculum ischii on the left side; then carrying the point of the knife down the groove, I slide it along the beak, turning the edge that it may face the space between the anus and the tuberculum. By this incision I exactly divide the bulb of the urethra, and by doing this on its side, we are sure to avoid wounding the intestinum rectum, which for want of this precaution has been often cut. This first incision being made, I again pass the point of the knife into the curvature of the staff to the part where it bears against the perinaeum, and direct it to be held there by the assistant who supports the scrotum ; this done, I take a large director, the end of which is made with a beak like that of the gorget (PLATE, Fig. 8.); and conveying this beak upon the blade of the knife into the groove of the staff, I draw the knife out. I then slide the beak of this director along the groove of the staff into the bladder, and I withdraw the staff by turning the handle towards the patient's belly. The following circumstances will sufficiently satisfy us that the director is introduced into the bladder; first, if it strikes against the end of the staff which is closed; secondly, if the urine runs along the groove. I next feel for the stone with this director, and having found it, endeavour to distinguish its size and surface, in order to make choice of a proper pair of forceps; that is, one of a stronger or weaker make, or of a large or small size, agreeable to that of the stone; after which I turn the groove towards the space between the anus and the tuberculum ischii, and resting it there, convey a bistory along the groove, shaped as in Fig. 7. the blade of which is half an inch broad, and about three quarters of an inch long. I continue the incision made by the knife in the urethra, and intirely divide the prostate gland laterally, as also the orifice of the bladder; and I am very certain that the introducing the use of these two instruments which are

ducing the use of these two instruments, which are not employed by other lithotomists, does not prolong the operation a quarter of a minute, but rather shortens the time, both by facilitating the dilatation that is afterwards to be made with the finger, and by rendering the extraction of the stone more easy. The bistory being withdrawn, the groove of the director serves to guide the gorget into the bladder; I then introduce my fore-finger along the gorget (which is now easily done, as the urethra and prostatae, being divided, do not oppose its entrance), and with it I dilate the passage for the stone, in proportion to the size of which I discover it to be. This dilatation being made, I withdraw my finger, and use the proper forceps.

I have taken no notice of this beaked director in my "Parallel of the different Methods of cutting for the Stone," having invented this instrument since that treatise was printed; but I find great advantages in the use of it. First, it slips very easily to the end of the staff, which the gorget will not always do without difficulty, in those patients whose prostatae are very large, so that we are more certain of conveying this into the bladder. Secondly, it is not so large as the gorget, and consequently has a freer motion in the neck of the bladder, by which we are better enabled to discover the situation, size, and surface of the stone. Another advantage is, that it serves to conduct the instrument safely wherewith we divide the urethra and the prostate gland, which cannot be performed by the common knife, because the size of it will not admit of its being carried far enough into the bladder.

Neither have I mentioned this incision in my Parallel, as I did not at that time practise it: but I have there observed, that whatever incision is made, in what is called the Apparatus Major, a part of the urethra and the prostatae remain intire; that these must necessarily be lacerated by the introduction of the finger; and that the finger should be introduced very cautiously, as well to prevent injuring the wounded parts, as to avoid, as much as possible, giving pain. But as it is necessary that the whole passage should be opened, from the end of the first incision to the orifice of the bladder inclusively, it is much better done by incision than laceration ; besides, a stone of a middle size cannot be brought away without lacerating the inner surface of the prostate gland on one side, if not on both, and occasioning a considerable contusion, as may be seen in the cases related in the Parallel before-mentioned. It is better therefore to divide it by a proper incision, as this will certainly be attended with less pain than lacerating it. Add to this, if on account of extracting a very large stone the parts must necessarily suffer a laceration, that which follows the incision I have proposed, only renders the opening of the wound larger, and occasions much less contusion of the

prostatae. The incision, in this case, directs the laceration, which otherwise is always made with great contusion and irregularity.

Another advantage we derive from the incision, and which cannot be known but by performing the operation, and comparing it with other methods, is the ease with which the finger is introduced, and the passage dilated. Before I used this incision in the urethra, and the prostatae, I often found great difficulty in repressing with the finger, the resistance of the neck of the bladder, which is invested by the prostatae; and when they were large and hard, as they sometimes are, I did not, perhaps, get the better of it without injuring the tendons of the bladder, and the membranous part of the urethra, which alone sustained all the efforts of the finger in preventing the neck of the bladder's being forced towards its fundus; but by making the incision in the urethra and the prostate gland, the difficulty of introducing the finger into the bladder is removed.

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