A catalogue of chirurgical instruments invented and improved by Mr. Weiss ... to which is added different accounts and testimonials / [John Weiss].

Contributors

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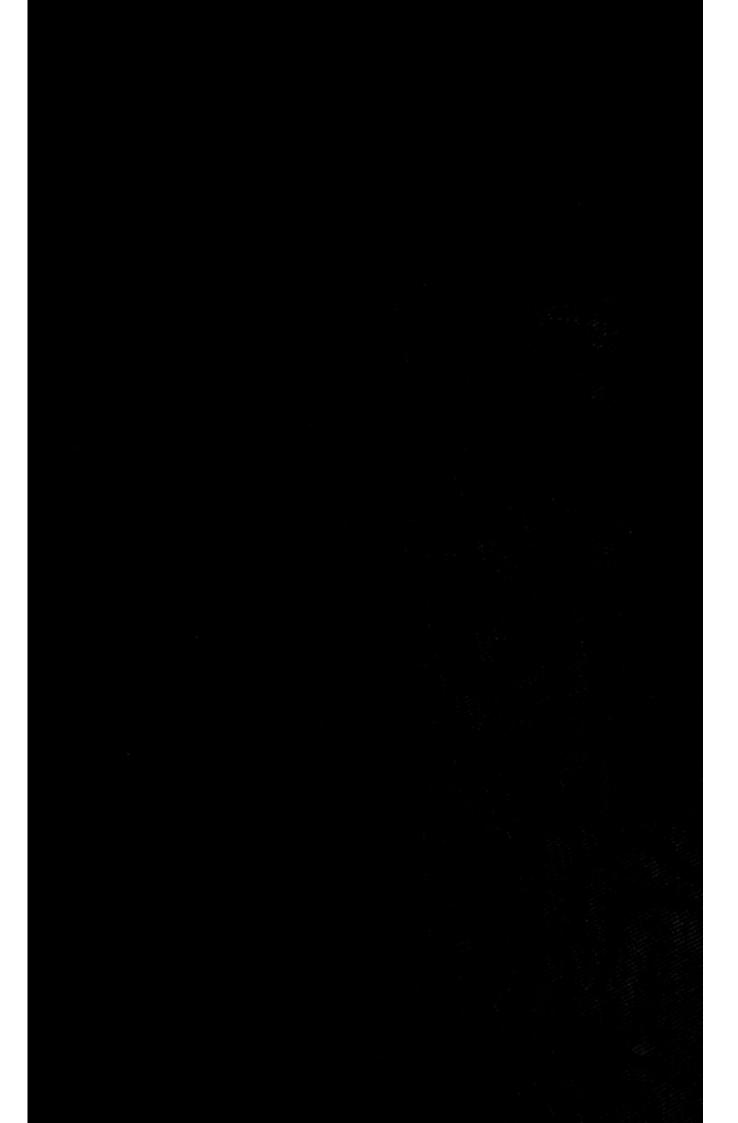
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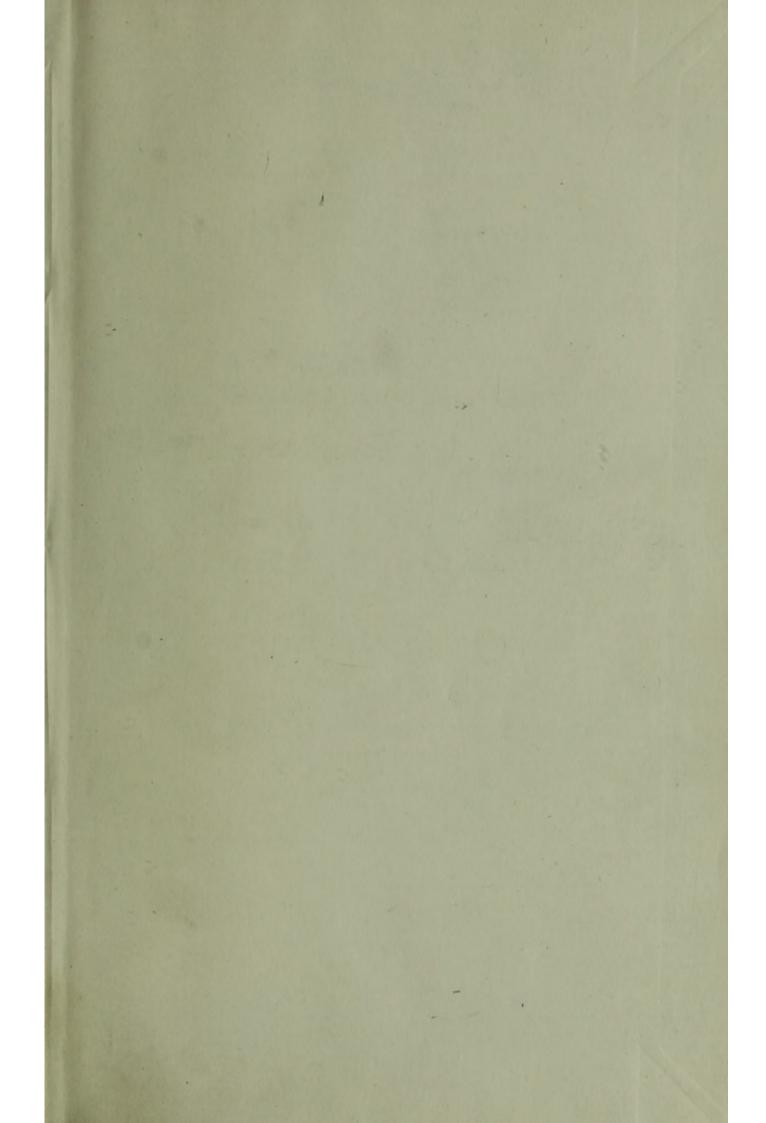


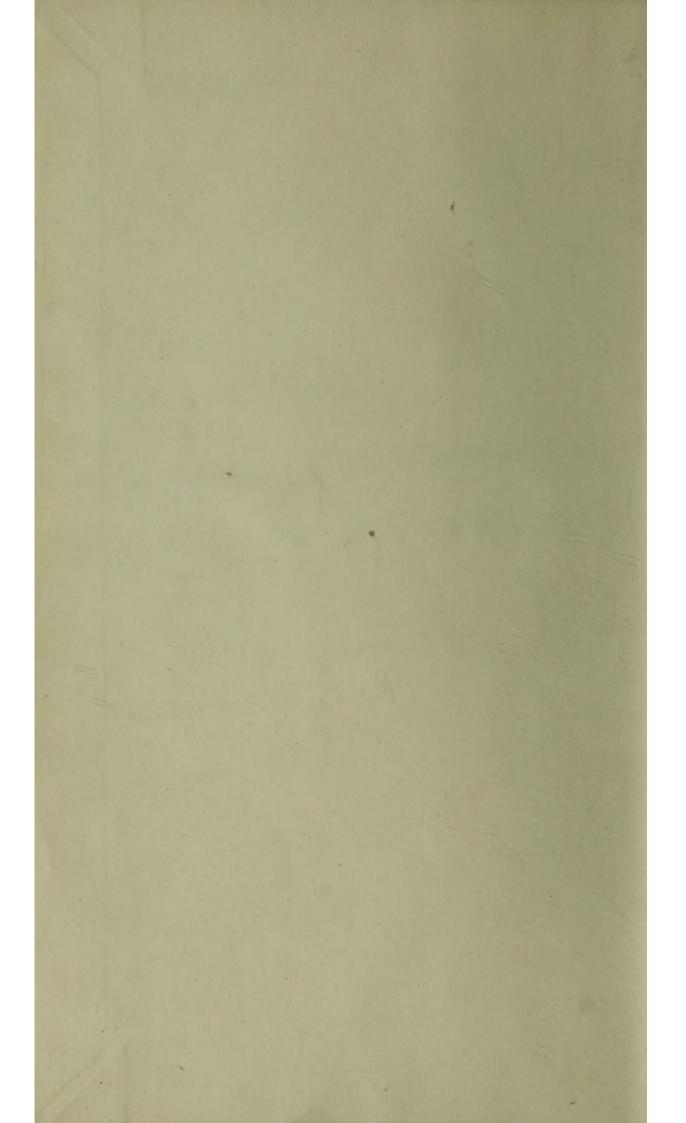
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vierse, J. Evidently published 1824. See pp's7[59] & 71 Vi, 94 pp. in all. New material evidently inserted.





A CATALOGUE

Chirurgical Instruments

INVENTED AND IMPROVED

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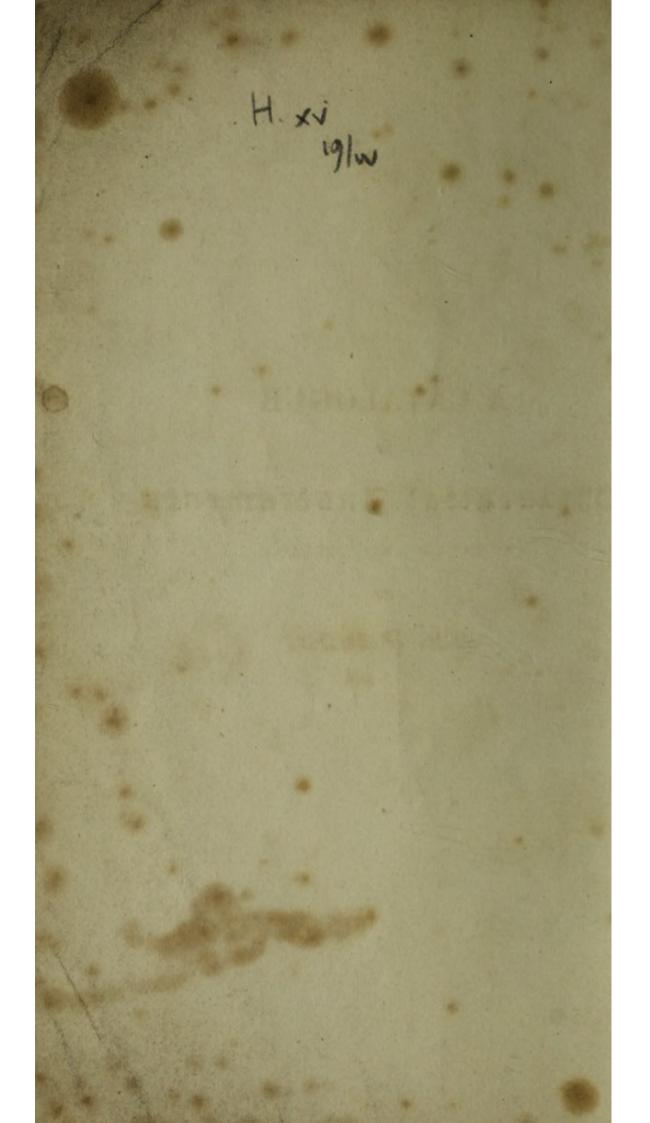
No. 62, STRAND, LONDON, TO WHICH IS ADDED DIFFERENT ACCOUNTS

TESTIMONIALS

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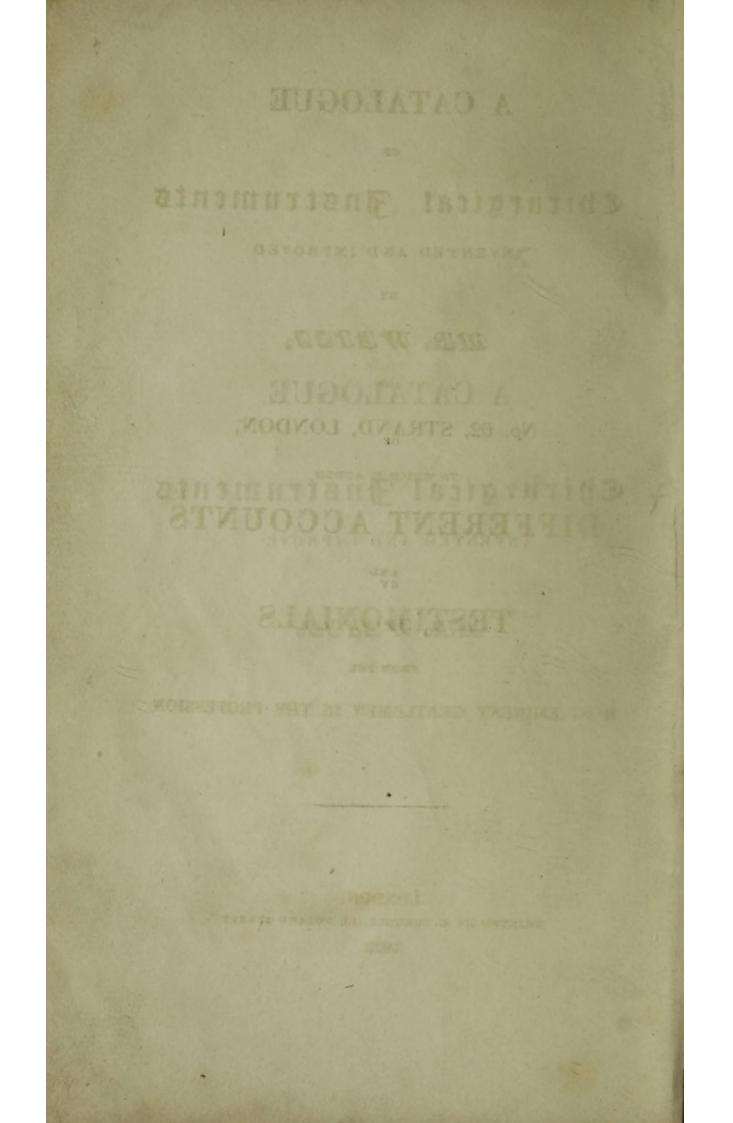
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INVENTED AND IMPROVE

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MB. WEISS.



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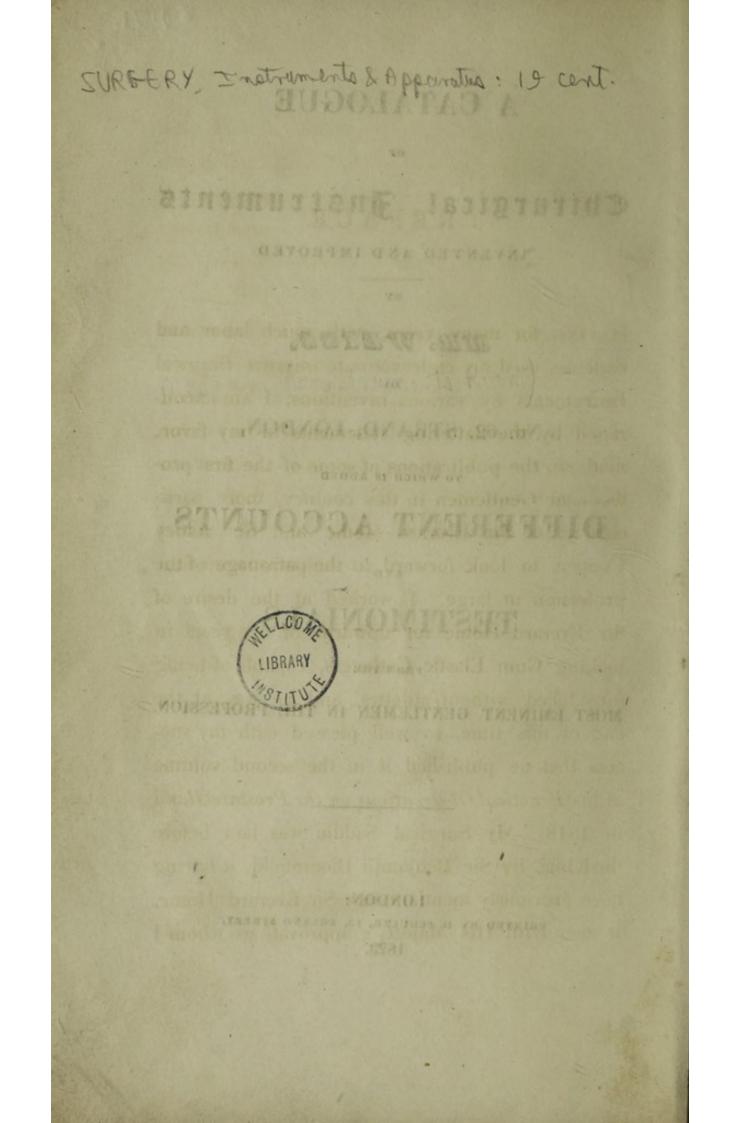
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TESTIMONIALS

FROM THE

MOST EMINENT GENTLEMEN IN THE PROFESSION.

LONDON: PRINTED BY G. SCHULZE, 13, POLAND STREET. 1823.



PREFACE.

the great satisfaction I have great to Sir Astley

HAVING for many years, with much labor and expense, used my endeavours to improve Surgical Instruments by various inventions, I am encouraged by the flattering statements in my favor, made in the publications of some of the first professional Gentlemen in this country, more particularly of Sir Everard Home and Sir Astley Cooper, to look forward to the patronage of the profession at large. I worked at the desire of Sir Everard Home for upwards of five years in making Gum Elastic Catheters, capable of being introduced without stilettes, and he was, at the end of this time, so well pleased with my success that he published it in the second volume of his Practical Observations on the ProstateGland in 1818. My Surgical Saddle was laid before the King, by Sir Benjamin Bloomfield, it having been previously mentioned by Sir Everard Home. It met with His Majesty's approval, to whom I

PREFACE.

have had the honor of being several times introduced, and His Majesty was graciously pleased to point out further improvements which have been adapted. I have also the pleasure to state the great satisfaction I have given to Sir Astley Cooper which he mentions in the publications of several of his cases, (in the *Medico-Chirurgical Transactions*,) in which my instruments have been used with success. Having no patent for any of my inventions, they are in the hands of the public, and the profession must be well aware that great expense and loss of time is attendant on bringing forward new inventions and improvements.

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ACCOUNT

OF THE

FLEXIBLE GUM CATHETER

Extracted from the work entitled,

PRACTICAL OBSERVATIONS

ON

THE TREATMENT OF THE DISEASES

OF THE

prostate Gland,

SIR EVERARD HOME, BART. V. P. R. S.

See Vol. 11, Chap. V, page 71.

CHAPTER V.

On the form of the Flexible Gum catheter, and the mode of retaining it in the bladder.

BEFORE I make any further observations on the treatment of the disease in the middle lobe of the prostate gland, in addition to those contained in the first volume, I must state the improvements that have since occurred to me, respecting the catheter ; and as the mode of practice, I have lately been led to adopt, depends more upon the struc-

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ture of this instrument than it did formerly, it is of the more importance, that the catheter should be so constructed as to give us all the advantages such an instrument is capable of affording. In the first volume I complained, that both in England and France, all the flexible gum catheters are made straight, and that it requires a long time before they gain a set in a curved form, by being kept upon a curved iron stilet; that even after a period of ten years, they shall acquire it so imperfectly, that when the stilet is removed, before they can be passed into the bladder, they have become nearly straight, and that the part next the point, is that which most reluctantly retains the curve; added to this, in giving these catheters the curve, almost all those that have two openings near the point, have one of them spoiled in the attempt, if not both; and when there is only one, to prevent this accident, it is necessary to keep the aperture upon the curved part of the instrument, the part, of all others, on which it should not be, as it must come in contact with the lower surface of the urethra, and by its edges, be grasped at the neck of the bladder, or lacerate the middle lobe of the prostate gland, even when it does not project beyond the surface, and in a still greater degree in proportion as it rises above it.

These defects in the flexible gum catheters are great, when the instrument is of a small size ; but when the catheter is made large, which it ought always to be when used in this disease, they become so much greater, that it is hardly ever possible to use one without the stilet, the inconvenience and disadvantages of which have been fully illustrated in the former volume.

It is now twenty years since I applied my mind to the improvement of the form of this instrument, but met with so many difficulties, that I was almost induced to give it up. If the web upon which the varnish is applied, were woven upon a curved stilet, it would ever after retain this shape, but unfortunately, it adhered so closely to the stilet, that it could not be got off; if wove more loosely, the web was not smooth ; and I was told, that the eye could not be well made, unless the catheter was originally straight. These were difficulties, but as it was of very great importance that the instrument should be curved, I thought they might be got the better of; but all the makers that I met with, were irregular workmen, whose ingenuity led them to take up this trade as a very lucrative one, but they had not steadiness to go on uniformly with any one pursuit, and were led away by some other delusive speculation, before they succeeded in making straight catheters so perfect as they might have done. I at last, however, found a more steady, and at the same time, a more in-

genious artisan. Mr. Weiss* has, after the labour of five or six years, succeeded in making flexible gum catheters, curved in their original formation, so that they consequently retain that form : their polish is so great as to make them, in that respect, have every advantage of surface, and their size may be made as large as the surgeon shall choose to direct. In his first attempts in making large ones, they were, from the increase of their diameter, so weak in their sides, as to be unable to resist the spasm which occasionally comes upon the urethra, near its middle, and often when an instrument was retained in the bladder, its sides were actually brought together, and the tube closed up, till the spasm subsided; and afterwards, this part of the instrument had suffered so much, that it became necessary to withdraw it; when taken out, it had the appearance of having been broken by some mismanagement of the patient, but upon slitting open the tube, the passage at this part was nearly closed, from having been grasped with more violence than the coats were able to resist. He now, therefore, gives them strength in proportion to their size, and I have thought it necessary to explain the reason of their being made so strong, as it might appear, both to surgeons and patients, unnecessary, unless they were made

* Mr. Weiss lives at No. 62. in the Strand.

acquainted with the circumstances above mentioned. When the curvature of the catheter is no part of its original formation, although it may have been produced by being long kept in a curved state, yet when allowed to remain in the bladder, it gradually returns to its straight form, by being moistened, and when it has acquired it, the point is no longer kept directed upwards in the cavity of the bladder, but is constantly pressing against the posterior coats, pushing itself out of the urethra, and the irritation it gives the muscular coat of the bladder will often be the means of its being expelled by a spasm with considerable violence; this explains what happens when the patient, in consequence of finding, after he has drawn off his water, that the instrument has been pushed out further than it ought to be, pushes it back again, so as to replace it, he hears a clap or noise, which at first, will alarm him with the notion, that it came against a solid substance, and therefore, that there is a stone in the bladder, while it is nothing more than a spasmodic action of the coats of the bladder upon the instrument.

When a flexible gum catheter is to remain in the bladder, it is very desirable that it should be as little disturbed as possible, since every time it is moved backwards or forwards, it is rubbing upon an inflamed swollen prominent part, and therefore interferes with the subsiding of all these symptoms. I have known a patient suffer considerably from this kind of friction, without being conscious that he was producing it, nor was it readily detected in what manner he did it, as he was constantly in bed, and every time I saw him, was lying perfectly quiet; but one day, my visit being longer than usual, and his getting into an animated conversation, led me to discover it. I found, that the change from the recumbent posture to that of sitting, while talking, was incessant, and upon enquiry, I was told, that this was his usual habit the greater part of the day. Upon explaining to him the disadvantages arising from this kind of exertion, and confining him to a recumbent posture, the symptoms of irritation subsided.

To keep the catheter in the bladder, with as little motion as possible, various contrivances have been had recourse to : it becomes unnecessary to enter into detail upon those that answer this purpose very imperfectly; but I shall particularly mention that which appears to me to have succeeded better than any other. It is an elastic collar for the body of the penis, about an inch and half broad, lined with velvet, the grain of which is placed so as to prevent the collar moving forwards, and this collar, instead of being fastened like that of a squirrel, or any other small animal, is only to have one end lapped over the other, so it may be adjusted accurately to the size of the penis, and then it is to be fixed exactly in that position, by a stud received into small holes in a leather strap. If on each side of such collar, there is a ring, and just below the orifice of the catheter, there is a small silver nozzle, in which the catheter is fixed. and from it, on each side, an arm, half an inch long, is extended, at the end of which there is an horizontal ring, similar in size to that on each side of the collar, applied round the body of the penis. With such an apparatus, all that is necessary to keep the catheter in the bladder, and always in the same state of protrusion from the urethra, and consequently having the same length retained in the cavity of the bladder, is to have narrow bands of kid leather passed through the holes in the mezzle of the catheter, and in the collar on the penis, and then to have them fastened together with the necessary degree of tightness.

Thus secured, the penis and the catheter become, as it were, parts of the same instrument. When the penis becomes extended, the catheter is carried along with it; when it subsides, the instrument is carried back; but that which is a great advantage is, the compression over so large a portion of the penis, which prevents it from varying its dimensions so much as it would otherwise do, and thereby prevents a great deal of inconvenience, whenever a disposition for erection is produced which not unfrequently takes place. Besides the advantages which I have mentioned to belong to Mr. Weiss' flexible gum catheter, I have now an opportunity of stating, that I have kept them fifteen days in the bladder, and when taken out, they have not, in the smallest degree, suffered from the urine in the bladder, or the mucus in ure thra. The colour of the surface has been rendered dull, but the smoothness remained the same, and the curvature had been little, if at all, changed. This has never been the case with any of the other catheters I have employed, either English or French : all of them, in a shorter period, have become so rough, as to be unfit for further use.

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SIR,

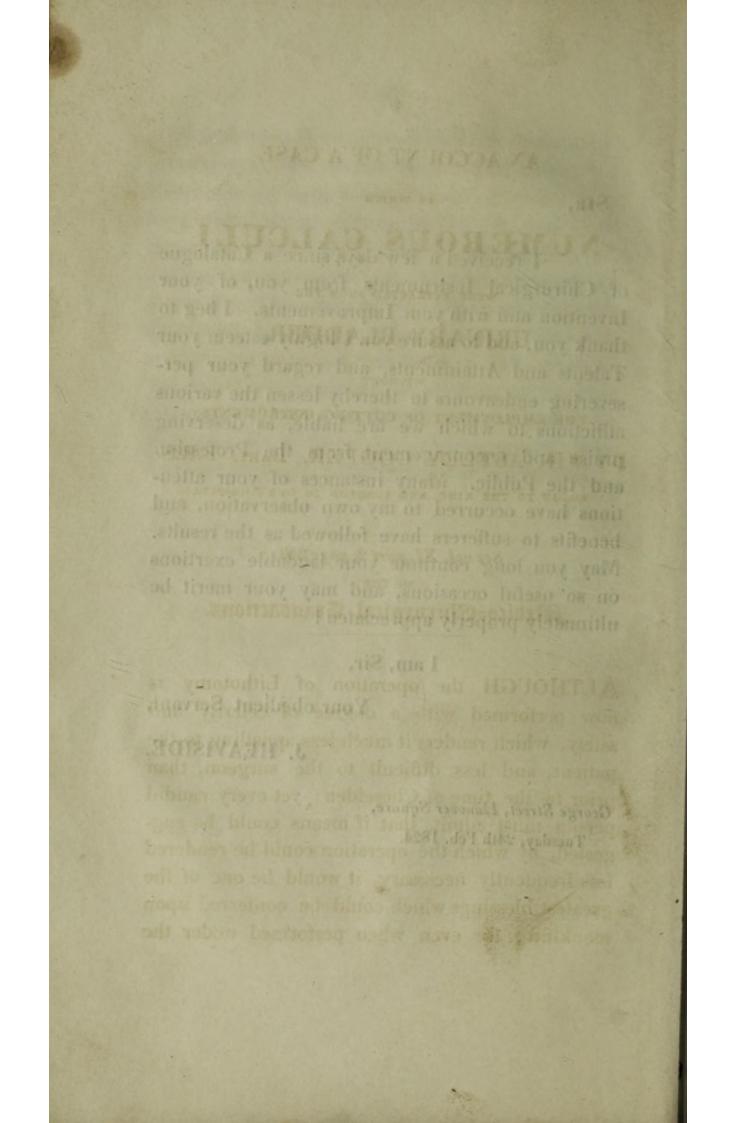
I received a few days since a Catalogue of Chirurgical Instruments from you, of your Invention and with your Improvements. I beg to thank you, and to assure you I highly esteem your Talents and Attainments, and regard your persevering endeavours to thereby lessen the various afflictions to which we are liable, as deserving praise and encouragement from the Profession and the Public. Many instances of your attentions have occurred to my own observation, and benefits to sufferers have followed as the results. May you long continue your laudable exertions on so useful occasions, and may your merit be ultimately properly appreciated !

I am, Sir,

Your obedient Servant,

J. HEAVISIDE.

George Street, Hanover Square, Tuesday, 24th Feb. 1824.



AN ACCOUNT OF A CASE

IN WHICH

NUMEROUS CALCULI

WERE EXTRACTED FROM THE

URINARY BLADDER,

WITHOUT

THE EMPLOYMENT OF CUTTING INSTRUMENTS. BY SIR ASTLEY COOPER, BART. F.R.S. SURGEON TO THE KING, AND SURGEON TO GUY'S HOSPITAL.

See vol. XI, part 2, page 349, of the Medico=Chirurgical Transactions.

ALTHOUGH the operation of Lithotomy is now performed with a degree of celerity and safety, which renders it much less appalling to the patient, and less difficult to the surgeon, than prior to the time of Cheselden; yet every candid person must admit, that if means could be suggested, by which the operation could be rendered less frequently necessary, it would be one of the greatest blessings which could be conferred upon mankind; for even when performed under the most favourable circumstances, the operation of extracting a stone is attended with severe pain, and when the calculus is large, with considerable difficulty and danger.

It was, therefore, with a high degree of pleasure I witnessed the following case, in which numerous calculi were extracted from the bladder, by means which did not expose the patient to any loss of blood, did not produce the slightest danger, or occasion any very considerable degree of suffering.

I am fully aware of the impossibility of extracting large urinary calculi by the means which are here recommended; yet I cannot but feel a hope that they may be removed in the early stages of the disease by the following means, before they have acquired a bulk too large to pass by the urethra.

In the infant also, it will be ever extremely difficult to contrive an instrument of sufficient delicacy to be introduced into the bladder through the urethra, which shall possess such a degree of strength as to enable it to grasp the stone firmly, and to extract it with safety.

I shall now proceed to detail the circumstances of the case as they have been related by the patient himself, and will then conclude with some observations upon the means which were employed to obtain relief, and explain the particular case in which it is practicable to afford it.

CASE as related by the Rev. Mr. Bullen.

The Rev. John Bullen, of Barnwell near Cambridge, aged 64, of a spare habit of body, and of a sanguine temperament, having enjoyed an uninterrupted state of good health, capable of partaking largely of the amusement of hunting, and living always with great moderation, was attacked, in May 1818, with the symptoms of which he gives the following account :—

" I was suddenly seized with a frequent inclination to pass my water, and an uneasy sensation along the course of the urethra, which continued with greater or less violence for about a fortnight, when I was surprized by the appearance of a small round white stone at the orifice of the passage. The escape of this small calculus, which was attended with scarcely any pain, failed to produce any beneficial effect on my former symptoms, which continued unabated, both as to the degree of irritation and the frequency of making water. In this state I remained till June following, during which month several similar calculi passed, to the number of about thirty producing no other inconvenience than a slight smarting pain along the urethra. At the end of June, without any assignable cause, I was suddenly relieved from this discharge of calculous matter, and from every other symptom but that of a frequent desire to void my urine, which latter inconvenience occasioned me no feelings of anxiety or apprehension.

"In the ensuing winter, I was seized with pains across the back and loins, for which Mr. Brewster, of Cambridge, supposing they proceeded from gravel, ordered me medicines which he considered likely to alleviate them, but without producing any permanent good effect.

"I was however still enabled to pursue my favourite amusement of hunting, though frequently obliged to dismount to make water: at this time making no alteration from my accustomed mode of living.

"Without any material change, I remained until the December of 1819, when I found the exercise of riding was becoming considerably more painful, and the inclination to pass my water more frequent attended with some degree of difficulty in its passage, and a change of its usual colour and clearness to a fluid resembling chocolate For these symptoms several formulæ of medecines hav13

was induced to consult Mr. Abbott, a most respectable surgeon at Cambridge, who ordered me medecines highly beneficial in their first effects; the relief, however, they afforded me, was but of short duration, for my symptoms recurred with all their former violence; and though the prescriptions were repeatedly altered at Mr. Abbott's suggestion, no sensible impression could, by the most judicious treatment, be made on the disease.

" My friend Dr. Thackeray of Cambridge was in the June following called in consultation with Mr. Abbott; and both agreeing that the symptoms were produced by stone in the bladder, the sound was introduced to ascertain its presence, but failed to discover it. My symptons continuing unabated, Mr. Abbott, a fortnight afterwards, still impressed with the idea of stone, again sounded me, but the stones, for the reasons hereafter given, escaped detection. To relieve my frequent inclination to make water, and to mitigate the pain I experienced in its discharge, I was recommended the use of an opiate glyster at bed-time, which afforded me considerable relief; but if the injection were omitted but for a single night, the symptoms returned with all their former violence.

" In this of state of suffering I determined to consult Mr. Astley Cooper, and on the 17th of August

went to town for that purpose. Mr. Cooper, suspecting from my account that a stone was present in the bladder, sounded me, but, after searching for some minutes, was unable to detect one; he then directed me to discharge the water from my bladder, and the sound being again introduced, was distinctly heard to strike upon a stone. He then informed me that there were no hopes of permanent relief but from the operation of Lithotomy, at the same time remarking, that as I had not been sufficiently reduced by the irritation of the disease, to render me a favourable subject for the operation, it would be better for me to return to Cambridge, and by pursuing a certain plan of diet and regimen to reduce the high health which I appeared to possess. He also prescribed alkaline medicines for the purpose of lessening irritation. With this advice I returned home, where I remained till October 1820, pursuing the use of the soda and the opiate injection. My sufferings being alleviated only for the moment, and seeing no probability of experiencing further relief from medicine, on the 23d of October I came to London to submit myself to the operation; and the 30th was the day proposed for its performance.

"On the day appointed, Mr. Cooper, his nephew Mr. B. Cooper, and Mr. Merriman, junior, attended at my house. Upon sounding me, the instrument could be distinctly heard by every person present, and even by myself, to strike against a stone. Mr. Cooper, however, was of opinion that the stone was so small as to admit of extraction without cutting into the bladder, and therefore determined not to perform the operation, but told me that he would try less dangerous means to rid me of this complaint, and happily under these circumstances the operation was deferred.

"On the 3d of November, I called at Mr. Cooper's house, when he passed a full-sized bougie into the bladder, for the purpose, as he said, of dilating the urethra, and thus giving the stone an opportunity of passing with the flow of urine. This operation was repeated on the 6th, 10th, and 13th of November; but on the 14th, an inflammation took place in the prostate gland from the introduction of the bougies, and put a stop to the prosecution of this plan of treatment. The effect of this inflammation was a retention of urine, rendering it necessary for Mr. Cooper to draw off my water every twenty-four hours, at which time the calculus could always be distinctly felt by the catheter. After the inflammation had subsided, the power of making water not having returned, M. Cooper passed an elastic catheter into my bladder, and directed me to wear it, teaching me at the same time how to withdraw it when it became either painful or ob-

structed; and on several occasions I discovered small white stones in the opening of the instrument, similar to those which I had passed in 1818. Mr. Cooper, upon being acquainted with this circumstance, expressed a wish to remove the instrument himself, when upon withdrawing it, a stone was seen large enough to fill the opening in the side of the elastic catheter. The passage of these calculi suggested to Mr. Cooper the possibility of inventing an instrument by which he might remove those which remained in the bladder; and on the 23d of November, he brought with him some instruments contrived for the purpose, one of which he directly employed, and was so fortunate in the first trial as to remove eight calculi of small size. The operation was productive of a very inconsiderable degree of pain.

"On the 28th, eight more were removed by the same means, of a larger size than the former, two being as hig as horse beans. This operation was attended with even less pain than the former.

"On the 30th, eleven were extracted, three or four being engaged each time the instrument was withdrawn. The removal of these gave me great relief, for I was immediately enabled to pass a considerable quantity of urine by my natural efforts, and previously to this, ever since the large bougie had been introduced, I had been unable to pas my water without the aid of the catheter.

"On the 8th of December, six stones were removed by the same means.

" On the 13, nine more were taken away,

" On the 19th, three more were extracted.

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"On the 23d, twelve were removed, and thus only allowing the intermission of a day or two for the irritation to go off. The operation was continued until eighty-four calculi were, by these means, extracted from my bladder, when Mr. Cooper pronounced, after a most careful examination, they were all removed. My health has been all this time uninterruptedly good, with the exception of the attack of retention of urine from the use of the large bougie, and I am now able to discharge my urine without the use of the catheter, and to walk nearly as well as I ever did."

REMARKS.

has been frequently or normach for the

When a great number of calculi are found in the bladder, as was the case in the Rev. Mr. Bullen, the circumstance is generally attended with an enlargement of the prostate gland, and it depends upon a sacculus being formed in the bladder directly behind the enlarged gland. In these cases the bladder is rarely completely emptied of its contents, and the calculi crystallize from the urine retained in this sac.

Such stones do not in general acquire the magnitude of those formed under the usual circumstances, and, from their number and collision against each other, their surfaces are generally smooth, and their shape is commonly rounded. Fifty-six such calculi were found in the bladder of Mr. Perkins the brewer, who died from retention of urine; and a hundred and forty-two I extracted from a patient of my friend Mr. Carden's, surgeon at Worcester, who had for some time attended him for retention of urine.

Persons who labour under this form of disease, sometimes pass the smaller of these calculi whilst making water; but the larger still remain, produce retention of urine, and the operation of Lithotomy has been frequently performed for them.

When calculi are thus placed, they are so concealed in the bag in which they are contained, that, in sounding, the instrument is liable to pass over them without their being discovered, and it is therefore necessary to dip the point of the sound towards the rectum as it enters the bladder, in order to detect them, or to pass the finger into that intestine, to raise them from the bed in which they are concealed; and it is for want of attention to this circumstance that I have known a person pronounced not to have the stone, from whom I afterwards removed thirty-seven by the operation of Lithotomy.

The instruments which I first had made for the purpose of removing these stones from Mr. Bullen, were merely common forceps, made of the size of a sound, and similarly curved ; but Mr. Weiss, surgeons' instrument maker in the Strand, shewed me a pair of bullet forceps, which he had invented some years ago for the purpose of extracting shot when deep-seated, and which he thought would, with a little alteration, better answer the purpose I had in view. He removed two of the blades of these forceps, for there were four, and gave them the form of the forceps which I had constructed : the blades of this instrument could be opened whilst in the bladder by means of a stilette, so as to grasp and confine the stone, and they appeared so well constructed for the purpose, as to induce me to make trial of them, (See Plate VI.) On the 23d of November, 1820, I first employed them, and the manner in which they were used was as follows : Mr. Bullen was placed across his bed, with his feet resting on the floor, and a silver catheter was then

introduced, and the bladder emptied of its urine. I then passed the forceps into the bladder, and was so fortunate in my first operation as to extract eight calculi.

The instrument gave but little pain on its introduction, but when opened to its greatest extent, and the stones admitted between its blades, their removal was painful, more especially at the glans penis, which appears to be the portion of the urethra, which furnishes the greatest resistance to the removal of the stones.

A dose of opium was given after each operation, which Mr. Bullen has described; it frequently allayed all irritation; and in the intervals between the latter operations, he walked from Brompton into London; nor was he ever, after the symptoms of retention had left him, either confined to his bed or to his room.

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FURTHER ACCOUNT

EXTRACTED FROM THE

Medico=Chirurgical Transactions,

Vol. XII, page 381,

OF THE

EXTRACTION OF CALCULI

FROM

THE BLADDER,

BY SIR ASTLEY COOPER, BART., F.R.S.

SURGEON TO HIS MAJESTY, AND SURGEON TO GUY'S HOSPITAL.

IN a former Volume of these Transactions, I had the honour of stating that an idea had occurred to my mind, that calculi might be extracted from the bladder by forceps introduced by the urethra : and that, by the ingenuity of Mr. Weiss, Surgeons' Instrument Maker, I was provided with an instrument well calculated to carry my idea into effect. From the Rev. Mr. Buller, of Barnwell, Cambridgeshire, I extracted more than eighty calculi ; but I had not flattered myself with the hope that opportunities of using this mode of relief would often occur, and I have, therefore, received great additional gratification from being able so soon to add three cases to my former account, for one of which I am indebted to my excellent and intelligent friend Mr. Brodie.

Saville Row, Nov. 10, 1822.

DEAR SIR,

I HAVE much pleasure in sending you the following history of a case, in which I was led to adopt a method of treatment which was originally proposed, and successfully practised, by yourself.

Your's truly,

B. C. BRODIE.

To Sir Astley Cooper, Bart.

A gentleman, seventy years of age, came to London in the spring of the present year, complaining of the following symptoms. He had frequent desire to void his urine ; the act of voiding it was attended with more or less difficulty, so that he sometimes required the introduction of the catheter; he had a good deal of pain during and after each attempt to make water; and, at different periods, he had passed several small oval calculi. He consulted Dr. Baillie, who referred him to me, for the purpose of having his bladder examined. On introducing a sound, some calculi were distinctly felt, previous to the instrument entering the bladder; and on an examination being made from the rectum, a number of calculi were perceived in the situation of the prostate gland, apparently contained in one cyst, and sliding on each other, under the pressure

of the finger. In a consultation between Dr. Baillie and myself, it was determined that I should endeavour to extract the calculi, which seemed to be of a moderate size, in the manner which you have described in the XIth Volume of the Medico-Chirurgical Transactions. On the first introduction of a pair of forceps, made by Mr. Weiss, I removed two very small calculi only; but, in the second attempt, I was more successful, and as many as six or seven were brought away, of a larger size. The operation was repeated about ten or twelve times, at various intervals between the middle of June and the end of July; and, in all, about sixty calculi were extracted. These were of various sizes, a few not larger than a pin's head, a great number of the size of ordinary peas, but of an oval shape, and some of them considerably larger. The largest measured half an inch in one diameter, and fiveeighths of an inch in the other, and had four sides and angles; and it was not until after two or three trials that I succeeded in removing it. In each of the unsuccessful trials some small fragments were broken off by the instrument, and it was in consequence of its being thus diminished in size that I was at last enabled to extract it. At the end of July, the symptoms were very much relieved, and no more calculi could be discovered, either with the sound, or with the finger from the rectum. There was, however, still some degree of irritation, which led to the suspicion of some concretions being still left. Unfortunately our patient's private affairs prevented his remaining longer at this time in London, and he set off on his journey homeward. When he had travelled about thirty miles, he was seized with some difficulty in voiding his urine, which led him to return to London, and apply to me again, I discovered a calculus lodged in the membranous part of the urethra, which was readily extracted. It was of an oval form, about the size of a small horse-bean. On the following day, he resumed his journey.

On the 11th of August, he wrote to me from his own house, in the northern part of the kingdom, that he was again troubled with much sense of irritation, that he had a good deal of difficulty in making water, and that the urine deposited the same ropy mucus as formerly. In consequence, I recommended him to apply to an eminent surgeon at Liverpool, for the purpose of having it ascertained whether any calculi remained, and that those might be extracted in the same manner as the others. Since then, however, I have received the following communication from him, dated the 11th of October: " Since I last wrote to you, I have passed three very large round calculi, which, for some time, tormented me much. One of them was squeezed out of the urethra by the finger, the other two were passed in the same night in making water. I have, since that time (which was

nearly a month ago), been very much easier, and continue so, although I believe more calculi yet remain, which, in time, I trust, may pass off without my having again recourse to the instrument."

The following case is in part detailed from the patient's account of his symptoms, and in part from the statement of Sir Gilbert Blane, who is the patient's physician.

CASE II.

SIR WILLIAM B---'S ACCOUNT OF HIS CASE.

"Sir William B. is in his sixty-seventh year: he suffered much at times from long and severe attacks of gout from about his thirty-fifth to his sixtieth year; since which period, the attacks have been much less frequent, much mitigated, and of short continuance. He thinks he first perceived red gravel or sand to come from him occasionally, soon after a long fit of the gout, about seven or eight years since, but did not suffer much inconvenience from it. About four years since, he passed pieces of gravel at different times, and has continued occasionally to do so ever since, sometimes larger than a pea, but generally of an oblong shape. When they occasioned any stoppage in the passage, he used a hot bath at 94°, and drank plen-

tifully of some diluting drink, which, after a little time, succeeded. In the summer of the year 1820, having had occasion to use a great deal of walking exercise in London for three or four days, he was much surprised on passing, first, a considerable quantity of very dark stuff, nearly like coffee grounds, and afterwards, a considerable quantity of what appeared chiefly blood. He did not experience any pain of consequence with this, and, by the following day, his urine was as clear as before. Upon going into the country, he found that if he rode fast at any time, it brought on the passing of the dark stuff, and afterwards, if persisted in, of blood. By degrees he gave up riding, and finally ceased to ride about Christmas last; and finding the same effects to arise, in a slighter degree, from walking much, he has very much given up that also for the last six months. Sir Astley Cooper and Sir Gilbert Blane attended him for these symptoms in June and July, 1821, when he left London for Ireland. Whilst there, he continued to experience the same inconvenience as before, with but little pain, and the same on his return to London. Early in June last, he called on Sir Astley Cooper, to say he was going again to Ireland, and wished to have some conversation with him, when Sir Astley Cooper advised his being sounded, which he then was, and it was ascertained that there was a stone. As it appeared to Sir Astley Cooper to be a small one, he proposed trying to extract it, and, on the fourth trial, with intervals of a week or

so between them, a stone weighing seventeen grains and a half was extracted on the 18th of July. About three weeks after, Sir William, having some fears that there still remained some stone behind, again applied to Sir Astley Cooper, who, upon sounding, found that such was the case; and on making at that time, at his own house, an attempt to extract, he brought it part of the way, but found it too large to bring forward, and therefore returned it; and as soon after as the parts would permit, he commenced enlarging the passage by bougies, which he continued at intervals for nearly a fortnight, and then extracted a stone weighing fiftyfour grains, on the 28th of August, 1822."

Sir William B. suffered pain in making water, swelling of the corpus spongiosum at the scrotum, with considerable urethral discharge, until September 23d, when the symptoms subsided under the application of fomentations and poultices.

When the size of the stone is observed, it will not excite surprise that I had considerable difficulty in extracting the larger, which weighed fifty-four grains, and which I have sent for the Society's inspection. It was in that part of the urethra near the glans that the chief impediment was found; and if I had thought it proper to do so, I could have easily removed it from thence by incision, but I preferred completing the extraction without occasioning a wound ; yet I am now disposed to believe that, in a stone of equal magnitude, it would be better to make a small incision into the urethra anteriorly to the scrotum, than employ force for the extraction of the stone through this narrower part of the urethra. A. C.

Sackville Street, 11th Dec., 1822.

DEAR SIR,

In compliance with the wish which you expressed that I would state what I knew concerning the case of Sir William B., the interesting subject from whom Sir Astley Cooper had extracted, by the urethra, the largest calculus which had ever been removed from the bladder in that manner, I have consulted my notes concerning it. I find that I have, at various times, attended that gentleman for more than twenty years. He states himself, from memory, that he had been subject to gravel for seven years, which accords with my notes, the first appearance of the complaint having been in July, 1815. He found speedy and effectual relief from a short course, consisting of two scruples of subcarbonate of potash twice a day, half neutralized with lemon juice and combined with hemlock and extract of poppy*. He had returns of it in

* See this method of cure fully detailed in an article in the Third Volume of Transactions of a Society for the Improvement the three following years, all of which were removed by the like means, except that in one of the attacks, magnesia was substituted for the potash. After this, he remained nearly free from the complaint for two years, but it returned in the month of May, 1820. The same remedies were had recourse to, but without the same success, for after several weeks' trial, the symptoms were rather aggravated. I then found that I had not been sufficiently vigilant in examining the colour of the sand; for though it was red at its re-appearance on this occasion as it had been on all the former occasions, I now found, on inspection, that it consisted of sand of white colour. This accounted for the want of success from the alkaline medicines, and immediately the muriatic acid was ordered in the dose of seven minims, combined with seven minims of vinum opii, three times a day, duly diluted. Sensible relief was experienced in the course of nine days, and, in fourteen days, he was free from complaint. In the course of the following year, in place of sand, small calculi were passed after pretty severe pains in the region of the kidneys. These calculi were red internally, and white on their external parts. But having passed great part of his time in Ireland in the course of this year, the history of the treatment is not well ascertained; but the history of the symptoms is very distinctly related by

of Medical and Chirurgical Knowledge, 1812, by Sir Gilbert Blane. Also in an article in Select Dissertations by the same author, Lond. 1822. himself, till the period of the operations detailed by Sir Astley Cooper.

The history of this case, will, at first sight, suggest doubts unfavourable to the character of the remedies that have been employed in the treatment, for it cannot be denied that, in spite of them, concretions had formed, of such formidable magnitude, that had it not been for the new method so happily conceived and so skilfully executed by Sir Astley Cooper, the patient would have been subjected either to the sad sufferings of the stone, or to the pain and danger of lithotomy. But in answer, let it be remarked, first, that the relief from the remedies was so speedy and so frequent that no doubt can be entertained of their efficacy; and if the prosecution and seasonable repetition of them had not been interrupted by his frequent and long residences in Ireland and on the continent, there is good reason to believe that the cure, in place of temporary, would have proved permanent and radical, as I have observed it to be in similar cases which had been perseveringly treated in this manner. Secondly, much suffering was prevented by the imperfect use of these remedies; for upon questioning him, he says, that he never had any real pain in the bladder; but only an uneasiness, and that the only suffering deserving the name of pain was in the kidneys, and, on one occasion, in the urethra, from the passing of a stone, the only one that had a rough surface. It is no small recommendation of these remedies, that by preventing additional accretions, the stone becomes smooth, and gives little or no pain, as was eminently exemplified in the case of Lord Walpole, related by Dr. Whytt, about seventy years ago, when the caustic alkalies, soap and lime water, were first introduced. In this case the freedom from pain was such for several years before death, that the stone was supposed to have been dissolved ; but a pretty large one, with a smooth surface, was found after death.

Though there may be occasional failures, therefore, in the full effect of these remedies, such as are incident to all remedies, let us not undervalue the new resources which have recently been devised by chemistry and surgical skill, for the relief of one of the most painful, and, hitherto, untractable maladies incident to humanity. Mankind is deeply indebted to Dr. Wollaston, for the clear light in which he has placed the diversity in the composition of urinary concretions, upon which is founded a corresponding diversity, and even contrast, in the quality of the remedies. Nor does the world owe less to Sir Astley Cooper, for this new method of extracting calculi of such size by the urethra, by which, in innumerable instances hereafter, the most severe suffering and dangers may be averted ; and this method has this advantage over internal remedies, that it is applicable to calculi of every composition, whereas there are certain species of them, such as those composed of oxalite of lime, upon

which neither alkaline nor acid medicines produce any effect.

A question arises on a collateral circumstance in the history of this case, namely, whether or not the great and long-continued alleviation of the gouty complaints may be attributed to the use of the alkaline remedies ?

> I am, dear Sir, with great regard, Your most faithful and obedient Servant, GILBERT BLANE.

To Dr. Cooke, President of the Medico-Chirurgical Society.

CASE III.

Mr. William King, aged sixty-six, mariner, residing at Rochester, was sent to me by Mr. Newsom, surgeon, of Rochester, on account of his having symptoms of the stone.

He came to London on the 29th of October, 1822, and on the 30th, he visited me. I sounded him, and found that he had, as Mr. Newsom supposed, calculi in the bladder. I passed the urethral forceps into the bladder, and, in a few minutes, extracted four calculi; and although I could still perceive that some remained in the bladder, I did not chuse to risk the production of any considerable degree of irritation, but advised him to come on November 1, to have the operation repeated.

On the 1st of November, I extracted three calculi; on the 4th, five more; on the 7th, twelve calculi; on the 11th, two; and on the 13th, three more. I then examined the bladder with care, but could not perceive any more stones, and even before the removal of the last, he had experienced considerable diminution of the pain in making water, and difficulty in passing it.

It is delightful to hear the expressions of gratitude which this patient pours forth for the relief which he has experienced from these operations, under which he has suffered but a slight degree of pain, and has never, for a moment, been confined from whatever exercise he was disposed to take.

Some years ago he passed red sand (uric acid), but for several months before he had symptoms of the stone, he has not perceived any.

From Mr. Brodie's patient two other calculi have been since extracted by the same means: and I have lately removed from a young person, a patient of Mr. Rutherford in Radcliffe-highway, of

thers, and, the instrument

the name of Errington, a calculus of moderate size, and enabled two others to pass by withdrawing the instrument in its dilated state, and thus extended the urethra in such a degree, that the stones passed, in the afternoon of the same day, in a copious discharge of the urine.

I have heard that it has been stated that there was no novelty either in this idea or in the instru-To this I have only to observe, that if the ment. idea had previously occured to any individual, he had so far buried it in his bosom, that I had never heard of it; and as to the instrument, I am quite sure that Mr. Weiss consulted no musty volume for its formation, for so soon as I mentioned my wish he should construct a pair of forceps by dividing a sound in its middle, and giving it a joint two inches from its end, he, without quitting me, observed, that he should make them to open in the mode which the plate in the former volume represents. Mr. Weiss has a strong and ingenious mind and does not use petty artifices to obtain employment or character. But let us for a moment suppose (what I do not believe), that the idea had occurred to others, and the instrument had been made centuries ago, what are we to say of the apathy of those bright ornaments of their profession, Cheselden, Pott, Hunter, Cline, Home, Blizard, &c., who, if they had heard of such an instrument, had never employed it ?

A. C.

Result of the Analysis of the Calculi, made by Dr. Prout.

43

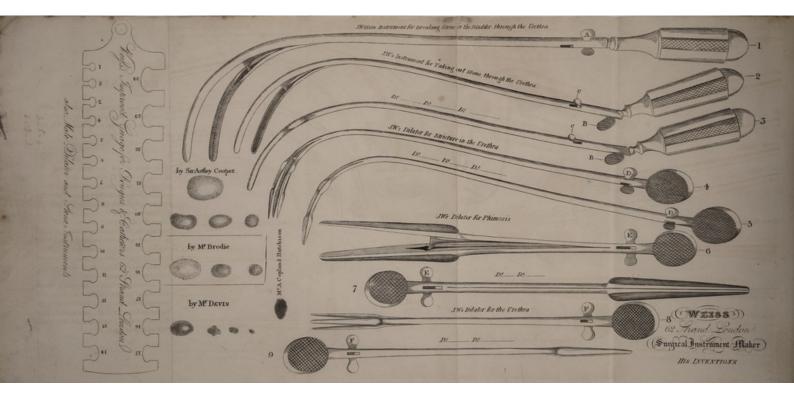
THE largest of these calculi, when entire, weighed fifty-four grains, the other seventeen grains. They are both of the same composition, and consist essentially of lithic acid ; they also contain ammonia, a little fixed alkali, very minute quantities of the phosphate of lime and triple phosphate of magnesia and ammonia, and, probably, still more minute quantities of the oxalate of lime. The presence of oxalate of lime, however, is rather to be considered as inferred than demonstrated : such calculi, when analysed on a larger scale, being generally found to contain more or less of this prin-The ammonia and fixed alkali exist of ciple. course, in union with the lithic acid, and the fixed alkali was, very probably, derived from the medicines which had been exhibited during the promotion of the calculi. Both these alkaline principles, as well as the phosphates, are chiefly confined to the paler coloured laminæ with which the calculi are stratified.

The nuclei of both calculi resemble each other, and consist, as is usual, of a congeries of highlycoloured nodules, or masses of lithic acid, loosely agglutinated together, and which, as the stone dries, contract, and crack into several portions. Hence, the nuclei of such calculi usually drop out, or fall to pieces, when they are cut through, as was particularly the case with that of the smaller of the present two calculi.

lime.

ar dahiw han and red, inhan





EXPLANATION

No. 6 & 7. Au instrument much approved of 31

Of some of the most valuable Inventions, which have given so much Satisfaction to the Profession and of the Mode of using them. See the Plates.

public a complete guage which may lie

asely for his instruments as also for houries

- No. I. Take hold of the flat part, A. and, by turning the handle, you can open it to its full extent. As soon as you feel you have the stone between the blades, turn back the handle, and the strength of the springs will break the stone.
- No. 2. The thumb, when pressed upon the upright, B, will open the instrument; C, is a small screw to be taken out for the purpose of further extending the instrument in case it should grasp a stone too large to be extracted through the Urethra.
- No. 3. Shews the instrument closed.
- No. 4. An instrument which has given much satisfaction to Mr. Guthrie. To open it as described in the plate, hold it with the finger and thumb at D., and turn the handle to the right : turn it to the left, and it will shut as in fig 5.

- No. 6 & 7. An instrument much approved of and recommended by Mr. Brodie for Phimosis, which opens and shuts like the last instrument.
- No. 8 & 9. A small instrument for dilating the Urethra.
- Mr. Weiss having made several useful inventions, thinks he is entitled to lay before the public a complete guage which may be used for his instruments as also for bougies and catheters. This guage possesses a great advantage over Mr. Smith's for metallic bougies, which only graduates from one to twelve, being better divided and having more sizes. This will be of great advantage to gentlemen in the country; he therefore intends to sell them at the very moderate price of 6s 6d, by which means they will come into general use, and he flatters himself the profession will approve of his plan and give it a preference as there are at present so many different guages.

setton to Mr. Galbrie, To once it ne

described in the plate, hold it with the,

alle to the right : turn it to the left, and it

7, Spring Gardens, 8th. August, 1823.

DEAR SIR,

I HAVE had occasion, within the last six weeks, to use with success, your Instrument for extracting small Calculi from the Bladder.

A young man complained to me of slight symptoms of Stone, which led me attentively to examine him with a sound; when I discovered what I considered a small Calculus, and upon which we could distinctly hear the Instrument strike.

I introduced your Instrument and extracted a Calculus about twelve grains weight, which I have sent to SIR ASTLEY COOPER.—The patient is now quite well, every symptom having disappeared with its extraction.

It is my opinion that, if Surgeons were to attend to the early symptoms of Calculus more then they do, and have recourse to this Instrument before the stone has attained any magnitude, the operation with the Gorget or Knife would, much seldomer, be found necessary. I think the profession and the public are deeply indebted to Sir Astley Cooper and you for so valuable an Instrument.

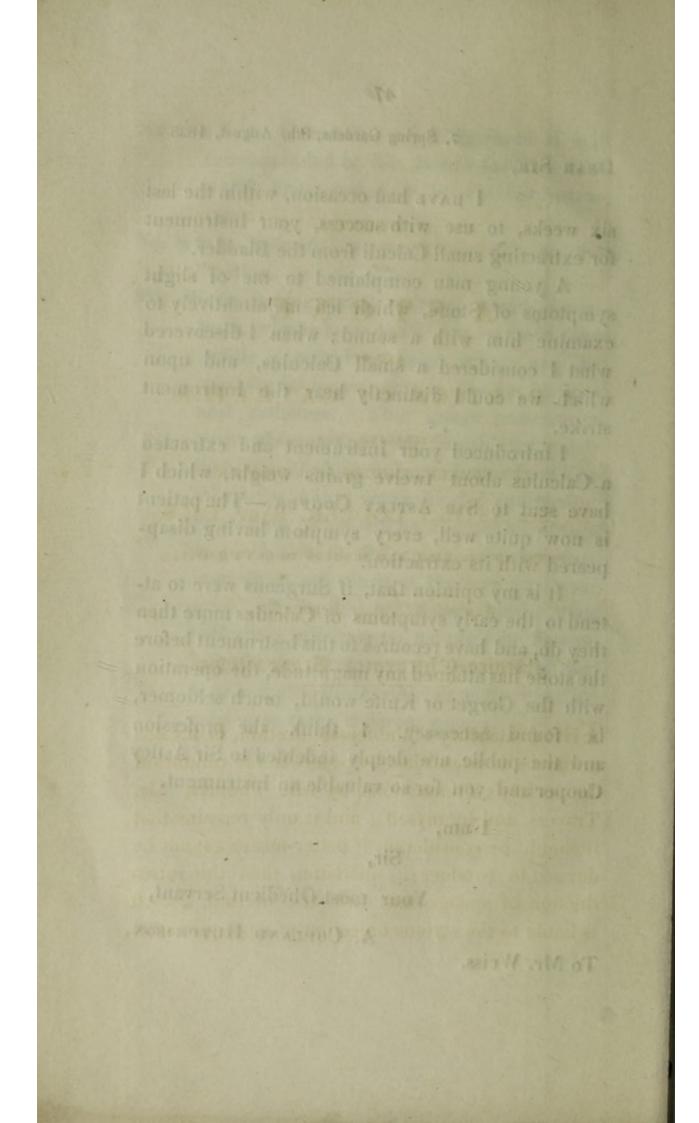
I am,

Sir,

Your most Obedient Servant,

A. COPLAND HUTCHISON.

To Mr. Weiss.



ACCOUNT

OF

ASTONE

120 10 63

AND OF

A PORTION OF CATHETER

EXTRACTED FROM

THE FEMALE BLADDER BY A DILATOR. BY SIR ASTLEY COOPER. BART. F.R.S. SURGEON TO THE KING, AND SURGEON TO CUY'S HOSPITAL

See vol. XII, part 1, page 235, of the Medico=Chirurgical Transactions.

THE dilatability of the female urethra, or meatus urinarius, is established by papers in the volumes of the Society's Transactions, by Mr. Thomas, Mr. Travers, and by myself; and it only remains that it should be considered, if better means cannot be devised to produce its dilatation than the introduction of sponge tent into the urethra, which is liable to the serious objection of its requiring to be borne for several hours, and during that time exposes the patient to the pain and inconvenience of retention of urine. I therefore resolved, on the first opportunity, to employ an instrument, constructed upon the principle of the speculum ani and speculam oris, to enlarge the passage to the bladder; and which would have the advantage of permitting the escape of the urine, whilst it dilated the urinary canal sufficiently to allow of the admission of forceps into the bladder, to extract a stone of considerable dimensions.

An opportunity was soon afforded me by the kindness of Dr. Nuttall and Mr. M'Nab, who requested me to visit a patient of theirs, suffering under the symptoms of calculus.

CASE I.

Mrs. M'C----. I accompanied Dr. Nuttall and Mr. M'Nab to visit this lady, who had been for six months labouring under extreme irritability of her bladder, and such pain and interruption in passing the urine, as to lead those gentlemen to believe she had a stone in her bladder. Upon passing the sound I immediately discovered a stone, which Dr. Nuttall and Mr. M'Nab could distinctly hear. I informed the patient of the nature of her disorder, but assured her I could remove the stone without the use of any cutting instrument, and she had no difficulty in submitting to its extraction. In my return home I called upon Mr. Weiss, in the Strand, and requested him to make me a speculum to dilate the meatus, and he, with his accustomed ingenuity, immediately suggested an instrument infinitely better devised than any I could have contrived for the purpose.—(See Plate IV.)

On the 7th of January, 1822, the above medical gentlemen accompanied me to the house of our patient, and at eight o'clock in the morning I introduced the dilator. At four o'clock in the afternoon of the same day I removed the instrument, and readily introduced my finger into the bladder by the meatus, which was sufficiently dilated for that purpose, and directly felt the stone. I then passed a pair of forceps into the bladder, and immediately grasped the stone with them, and extracted it. The stone was soft, and its outer shell separated from its interior; I therefore passed a pair of flat forceps into the bladder, and removed the larger fragments of calculus; but for several days some small portions passed away with the urine.

During the removal of the stone she was resting, across the bed, unconfined by bandages.

For a few days after the operation she had a severe attack of irritative fever, which required Dr. Nuttall's attention, and she was obliged to lose blood, and to have the abdomen fomented; but I had the pleasure of seeing her gradually restored to health, having never lost the power of retaining her urine; and young, and but recently married, a constant distillation of urine from the bladder would have been an evil greater than death itself.

From the facility with which the meatus yielded to the dilator, in the foregoing case, it seemed that no absolute necessity existed for the lapse of several hours before the instrument was withdrawn, and the attempts at extraction made; and I therefore determined, in a future case, to dilate the meatus for a few minutes only, and then to extract any extraneous body which the bladder might contain.

CASE II.

On Monday, the 24th of March, I was requested by Mr. Ilott, of Bromley, in Kent, to visit a patient of his residing in West Square, St. George's Fields, who had been occasionally subject to retention of urine, for which she had been under the necessity of employing the catheter, the introduction of which she was enabled to accomplish for herself; but the last time she introduced it the catheter broke, and a part of it remained in the bladder. Excessively alarmed at the circumstance, feeling much pain in making water, and great uneasiness at the extremity of the motion in walking or in exercise in a carriage, she mentioned the case to Mr. Ilott, who advised her to submit to the extraction of the broken instrument. In the presence of Mr. Ilott I performed the following operation :

The patient was placed across the middle of a bed, with her head raised upon a pillow, her knees were separated and bent back to her chest, in which position they were held by a nurse, without the aid of bandages, or necessity for other means of confinement.

I then passed the dilator into the meatus urinarius, and turning its screw, I readily dilated the passage to admit my finger. The dilator was retained for two minutes only, when I passed a pair of forceps between its blades into the bladder, whilst Mr. llott withdrew the dilator.

The catheter not being immediately felt with the forceps, I removed them and passed in my finger, when I felt the broken catheter upon the portion of the bladder above the rectum, and having raised it from thence into the axis of the bladder and meatus, I again passed the forceps, and readily extracted it.

This lady suffered very little during the operation; it was very quickly accomplished; her urine passed involuntarily until her next menstrual period, when she recovered the natural power of retention.

REMARKS.

The advantage derived from this mode of operating, in comparison with that by the knife or gorget, consist

First, In the facility with which it is executed. A knowledge of anatomy beyond that which every surgeon possesses who has been educated within the last twenty years, in this metropolis, is not required for it. Indeed, I believe that any surgeon, who practises as an accoucheur, would not hesitate to perform it.

Secondly, It is attended with but little danger; unless the dilatation be violently made, and the instrument be left in the meatus for a length of time; then contusion and irritation might be produced by it, which, in an irritable person, would lead to fever; and, perhaps, inflammation of the bladder. Thirdly, It may be accomplished with very little pain, and in a short time; but still, further experience will be required to determine if it be best to dilate the meatus in a few minutes, or hours, or in several days, by more gradual dilatation. I feel disposed to believe, that if the stone be small, the dilatation should be accomplished in a few minutes; but if it be large, it will be better to dilate but little, from day to day, until the greatest degree of extension is accomplished; carefully avoiding contusion, which is much to be dreaded.

Fourthly, But its greatest advantage is in the preservation of the powers of retention of urine; for if the operation destroys this power, as that by incision does, I can scarcely acknowledge it to be of value; for although it is the means of removing the pain produced by the stone, it exposes the patient to great suffering from excoriation, and which every attention to cleanliness, the constant distillation in urine renders the patient offensive to all around her.

D

ASTLEY COOPER.

Thirdly, it may be accountiated with convenies pain, and in a short time : but still, forther experesure will be required to determine if it be best to dilate the medoe in a tew minutes, or hours, or to several days, by more gradual dilation of the disposed to believe, that if the stope be small, the dihatation should be accoupplished in a few minutest but if it be large, it will be better to dilate but little, from day to day, and the greatest degree of tables, which is much to be dreated by avoiding contation, which is much to be dreated.

Powerkly, hat its greatest advantage is in the proservation of the powers of retention of wrine; for ifthe operation destroy while power, as that by incisions does, I can scarvely ask oon helge it to bo of value refor although it is the means of removing the prime produced by the stant, it exposes the patient to great sufficing from excortation, and which every attention to cleantinges, the constant distillation to ber

INSTRUMENT

FOR PASSING A

LIGATURE ROUND A DEEP-SEATED ARTERY,

INVENTED

BY MR. WEISS,

62, Strand, London.

It is very flattering to my feelings, to think that some of the first Professional gentlemen should come to my house when any idea strikes them that improvements could be made in Surgical Instruments; one of these gentlemen, MR. KIR-BY, of Dublin, stated to me that he had tried several Mechanics in Dublin, but none of them could succeed in inventing an Instrument for Aneurism to his satisfaction, and he had not the least doubt but I could, with a little perseverance, accomplish it; he then gave me an idea of the operation, in which it is well known to the Surgical profession, that the most difficult part consists in passing the Ligature round the Artery if deep-seated, and in extricating the thread from the eye of the needle after it is passed round the Artery. The instrument which I invented will be found, it is hoped, to obviate the above mentioned difficulties. It has already been

E 2

used with success in Subclavian Aneurism by two eminent Hospital Surgeons, and is generally approved of by the Surgical profession. The annexed letter of MR. KIRBY will show how fully I have succeeded.

New Broad Street, January 18th. 1823.

SIR,

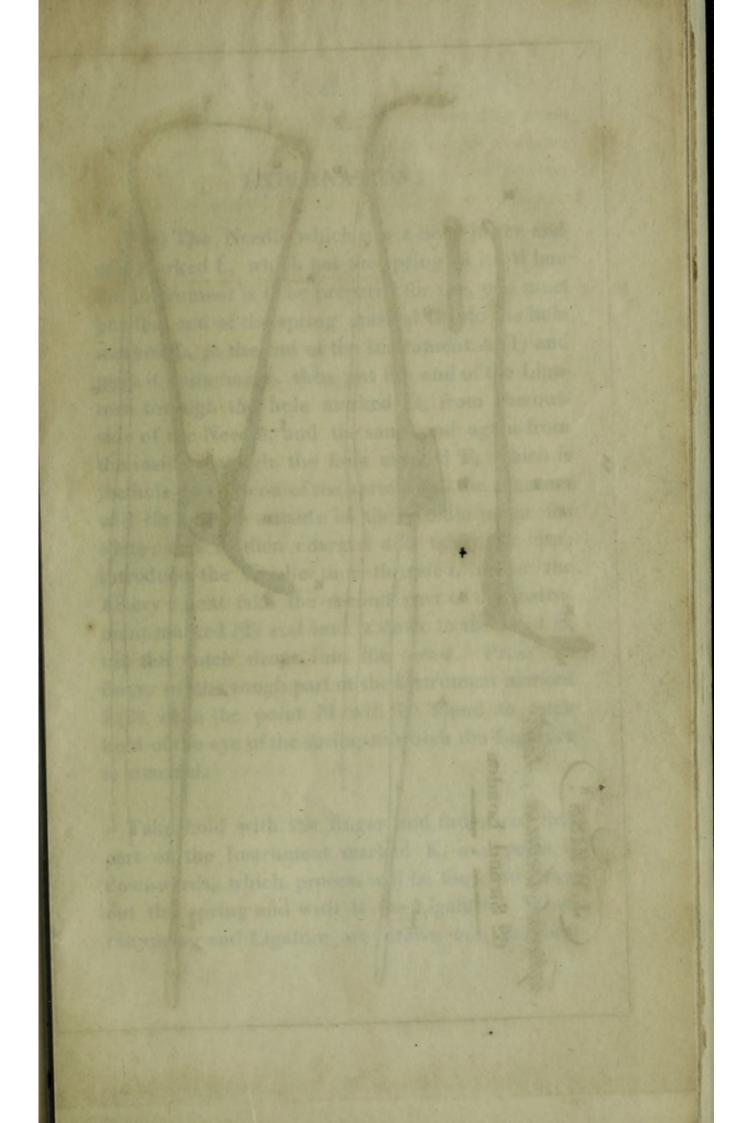
I think it due to your ingenuity to inform you that I yesterday applied a Ligature twice to the Subclavian Artery above the Clavicle with your Aneurism Needle, and found its application easy and entirely satisfactory in each instance. Whatever be the result of the operation, which unforeseen and difficult circumstances render very doubtful, I feel it my duty to state, that your Needle removes a difficulty which every operating Surgeon has complained of in his attempts to noose the deep-seated Arteries, and that I should be at a loss to name any modern example of the application of a mechanical contrivance to Surgical purposes, so happy in point of simplicity and effect, or so promising in point of usefulness.

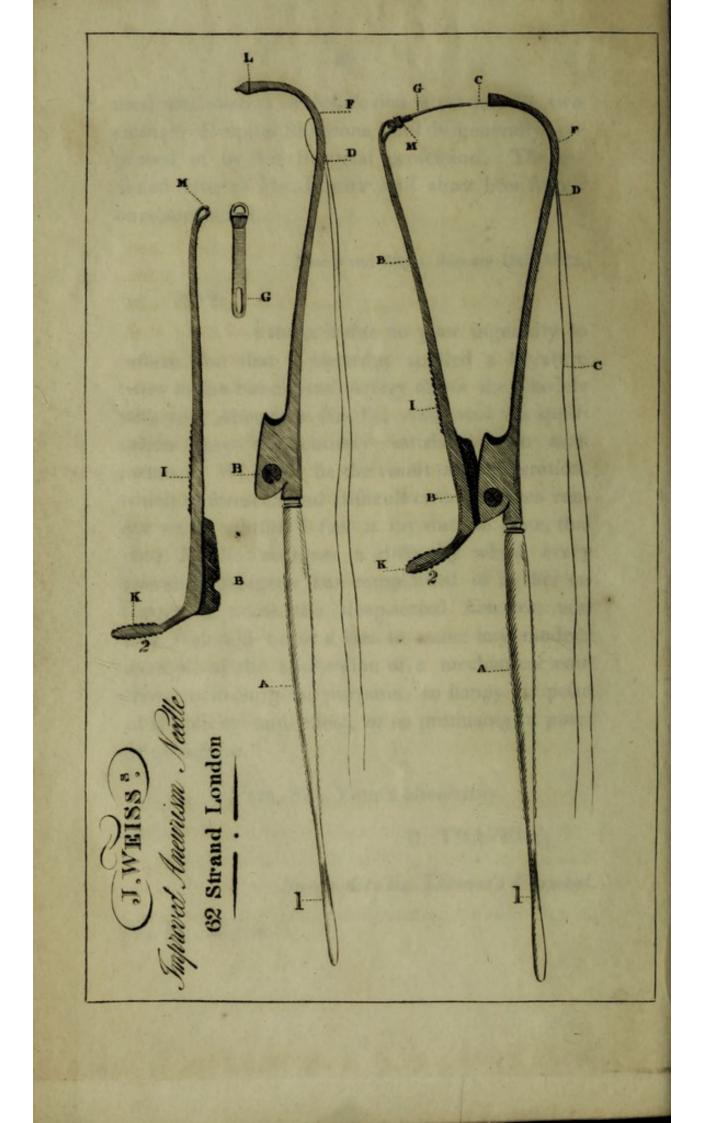
I am, Sir, Your's obediently,

B. TRAVERS,

Surgeon to St. Thomas's Hospital.

To Mr. WEISS.





EXPLANATION.

A (1) The Needle which has a hole in the end of it marked L, which has the spring in it. When the Instrument is to be prepared for use, you must put that end of the spring marked G into the hole marked L, at the end of the Instrument A (1) and push it quite home, then put the end of the Ligature through the hole marked D, from the outside of the Needle, and the same end again from the inside through the hole marked F, which is the hole in the end of the spring G; the Ligature will lie on the outside of the Needle as in the Plate; and is then charged and ready for use: introduce the Needle thus threaded, under the Artery; next take the second part of the Instrument marked (2) and lead it down to the joint B, till the notch drops into the screw. Press the finger on the rough part of the Instrument marked I (2) when the point M will be found to catch hold of the eye of the spring to which the Ligature is attached.

Take hold with the finger and thumb of that part of the Instrument marked K, and press it downwards, which process will be found to draw out the spring and with it the Ligature. When the spring and Ligature are drawn out, the best way to clear the one from the other is to cut Ligature away at both ends from the Instrument. In order to free the spring from the second part of the instrument after the operation, it will be necessary to pull them not directly one from the other, but to give the Instrument a half turn to the right in dislodging it from the spring.

16, Saville Row, April 3, 1823.

SIR,

I have the pleasure to inform you that I have lately employed your Aneurism Needle in an operation for Axillary Aneurism, and that I found it enabled me to apply the Ligature round the Subclavian Artery with great facility. I conceive that no other Instrument with which I am acquainted, would have answered the purpose so effectually : and,

I am, Sir,

Your obedient Servant,

B. C. BRODIE,

To MR. WEISS.

As every man is at least entitled to the credit of his own Invention, and as Mr. Weiss has, with regret, been informed that insinuations have been thrown out against the originality of his Aneurism Needle, and that too, by Professional Gentlemen from whose education and habits he would have expected greater liberality, he deems it a justice to his own character to lay before the Public, the following Letter from Mr. Kirby, of Dublin, in answer to one from Mr. Weiss on the subject of the said Aneurism Needle.

> 56, Warwick Street, Dublin, February 17th, 1823.

SIR,

I have at length received my parcel, and with many thanks I acknowledge your improved Aneurism Needle. I defered my reply to you until I had an opportunity of speaking from experience of the value of the Instruments. It is unquestionably a great improvement—it merits all the praise bestowed on it by Mr. Travers, and does infinite credit to your genius. Sanctioned by the approbation of Sir A. Cooper, Mr. Brodie, Mr. Travers, &c. it will soon be in the possession of every Surgeon of respectability. I am obliged to you for the notice you have taken in your advertisement, of my share of the invention, and shall do you equal justice by stating the circumstances which led to an invention of such importance.

In September last, accompanied by my friend Mr. Melin, I had a long conversation with you on

the subject of an Instrument for passing a Ligature round the Subclavian Artery. I explained the nature of the difficulties of that operation, and told you that in Ireland I never could get an Artist to take my ideas, or form any thing to my mind. You rapidly comprehended the qualities which should be combined in the Instrument, and you expressed yourself as certain you could construct one to my satisfaction. In a few days after my return to Dublin, I received, by Mr. Melin, your first attempt, which I returned as insufficient, with further observation as to your future experiments, and the principles which should guide them. It is most ungenerous in any one to claim to the discovery, or to attempt to rob you of the reward so justly due to your labour and genius. As far as my testimony can prevail, you may use it to any weight this letter possesses -you are heartily at liberty to employ it in any way conducive to your interest, and the establishment of your right.

I have the honor to be, Sir,

Your much obliged

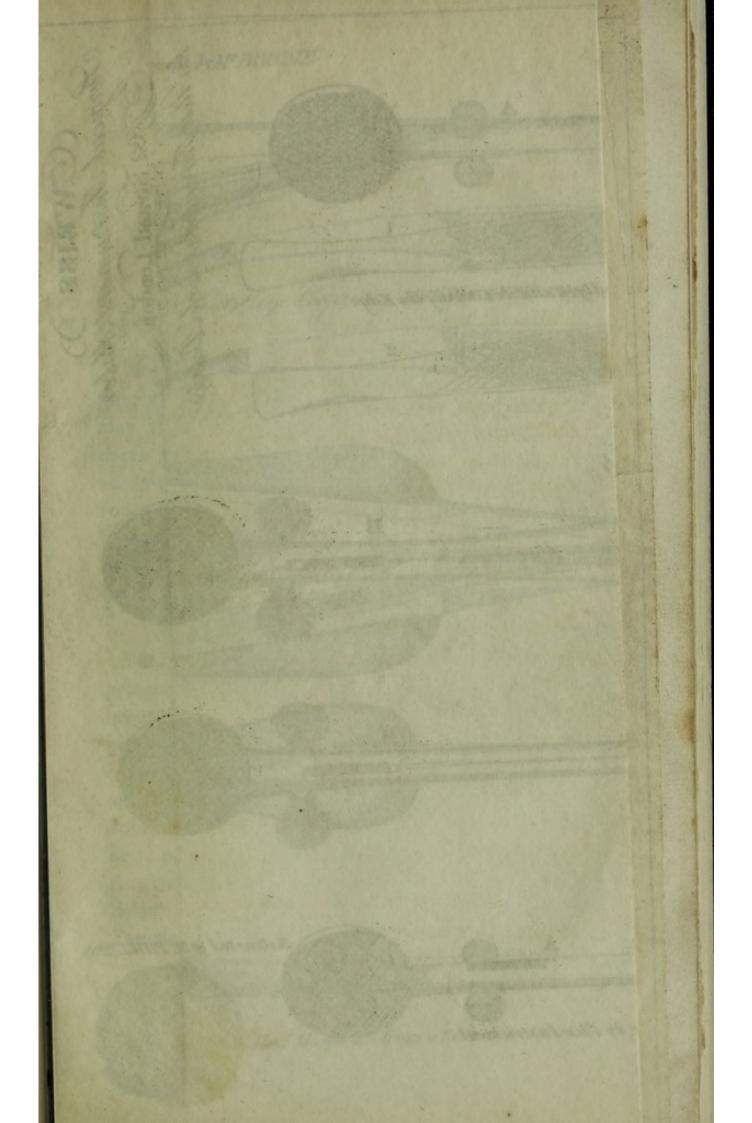
and faithful Servant,

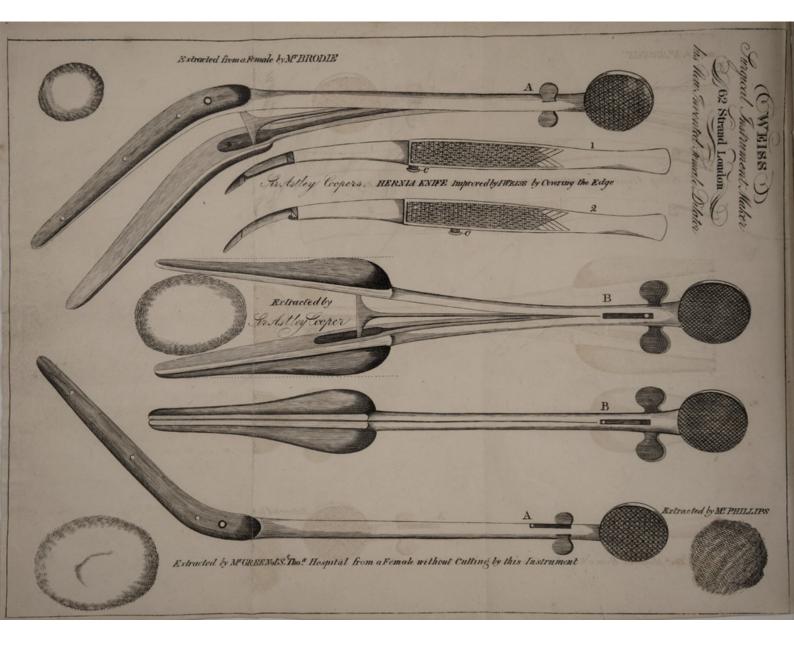
(Signed)

JOHN KIRBY.

President of the Royal College of Surgeons, Ireland.

To Mr. J. WEISS, Strand, London.





EXPLANATION

OF

J. WEISS's

Female Dilators and improved Hernia Knife.

The Female Dilator, by turning the handle to the right, will be found to open to any extent you may think proper. The Instrument A has a curve in it, which by some gentlemen is thought an improvement, as it does not take up so much room. The Hernia Knife, letter C, has a small button, which, when you wish to cover the cutting part of the Instrument, you must press with your finger and push it forward.

Mr. WEISS has the honor of laying before the profession, engravings of some Instruments lately invented by himself, and, he is happy to say, approved of by several of the most distinguished Surgeons of the metropolis, as will be seen by the annexed letters. He has also to refer to the 12th volume of the Medico-Chirurgical Transactions, or to page 193 of the 13th No. of the Medico-Chirurgical Review, for some interesting cases published by Sir Astley Cooper, respecting the Female Dilator. Mr. Weiss feels it a justice to add, that the Female Dilator was suggested to him by that distinguished ornament of the profession, Sir Astley Cooper, Bart. and it is most gratifying to his feelings to find that the Instrument has proved so useful in the hands of others.

To Mr. Bransby Cooper Mr. Weiss is also indebted for the suggestion respecting the Improved Hernia Knife, Nos. 1 and 2 in the Plate; which gentleman very frequently mentioned to him that it would be a very great improvement if the cutting part could be covered when introduced: which he has effected to Mr. B. Cooper's great satisfaction.

Copy of a Case published by SirA. Cooper, at page 236 of the 12th Volume of Medico-Chirurgical Transactions.

Mrs. M^cC——. I accompanied Dr. Nuttall and Mr. M^cNab to visit this lady, who had been for six months labouring under extreme irritability of her bladder, and such pain and interruption in passing the urine, as to lead those gentlemen to believe she had a stone in her bladder. Upon passing the sound I immediately discovered a stone, which Dr. Nuttall and Mr. M^cNab could distinctly hear. I informed the patient of the nature of her disorder, but assured her I could remove the stone without the use of any cutting instrument, and she had no difficulty in submitting to its extraction. In my return home, I called upon Mr. Weiss, in the Strand, and requested him to make me a Speculum to dilate the meatus, and he, with his accustomed ingenuity, immediately suggested an instrument infinitely better devised than any I could have contrived for the purpose.

On the 7th of January, 1822, the above medical gentlemen accompanied me to the house of our patient, and at eight o'clock in the morning I introduced the dilator. At four o'clock in the afternoon of the same day, I removed the instrument, and readily introduced my finger into the the bladder by the meatus, which was sufficiently dilated for that purpose, and directly felt the stone. I then passed a pair of forceps into the bladder, and immediately grasped the stone with them, and extracted it. The stone was soft, and its outer shell separated from its interior; I therefore passed a pair of flat forceps into the bladder, and removed the larger fragments of caculus; but for several days some small portions passed away with the urine.

During the removal of the stone she was resting across the bed, unconfined by bandages.

For a few days after the operation, she had a

severe attack of irritative fever, which required Dr. Nuttall's attention, and she was obliged to lose blood, and to have the abdomen fomented; but I had the pleasure of seeing her gradually restored to health, having never lost the power of retaining her urine; and, young, and but recently married, a constant distillation of urine from the bladder would have been an evil greater than death itself.

From the facility with which the meatus yielded to the dilator, in the foregoing case, it seemed that no absolute necessity existed for the lapse of several hours before the instrument was withdrawn, and the attempts at extraction made; and I therefore determined, in a future case, to dilate the meatus for a few minutes only; and then to extract any extraneous body which the bladder might contain.

22, Lincoln's Inn Fields, May 16th, 1823.

SIR,

I have great pleasure in offering my testimony to the utility of your instrument for dilating the female Urethra, and I shall be happy if the following case should contribute to recommend it to the notice of Surgeons.

Mary Wallace, thirty-one years of age, of a delicate frame and irritable constitution, was admitted into St. Thomas's Hospital on the 24th of last October, with well marked symptoms of stone in the bladder. The presence of the calculus was ascertained by sounding; but the operation was deferred in consequence of her being out of health, until the 22nd of November. On that day I introduced the dilator, and separated the blades until the patient complained of pain ; and then, waiting till the uneasiness had subsided, I again increased the expansion of the instrument by means of the screw, till pain was reproduced. In the course of a few minutes the painful sense of stretching and distention was relieved, and I proceeded with the dilatation. In this manner, regulated by the feelings of my patient, I continued gradually and cautiously to enlarge the meatus during two hours and a half. I was then enabled to introduce, with ease, my fore finger into the bladder; and finding that the calculus was in a favorable position, I introduced a pair of straight forceps, without waiting for further dilatation, and readily seized the stone in its long axis. I proceeded immediately to the extraction, but, from the size of the calculus, I was unable to bring it readily through the meatus, and during this attempt she complained of much greater pain than at any time during the dilatation. As I held the stone in the most favorable position, I

was however unwilling to quit my hold, and with moderate force, (at least with no more than is ordinarily required, and in no longer time than is frequently necessary in extracting a large sized stone in the operation of lithomy) I succeeded in extricating the calculus. It proved to be of considerable size, as the subjoined admeasurement will fully shew.

She seemed much exhausted by the operation ; and this was followed during the first few days by considerable constitutional irritation, and by symptoms indicating abdominal inflammation. Under the prompt and active measures however, which were taken, she was gradually restored to health. It is particularly worthy of notice that she passed her urine freely during the whole time; and that she was able in the course of twelve hours after the operation, to hold her urine more or less perfectly, and to discharge it voluntarily : and that the dilatation of the meatus left ultimately no weakness nor loss of power in retaining her urine.

The above case, is I think, a gratifying proof of the facility with which even a large calculus may be extracted by the aid of the dilator. The operation might have been effected with less inconvenience had the dilatation been carried on somewhat longer: and I do not doubt that the enlargement of the meatus might be accomplished in much less time without any difference in the result. The subsequent inflammatory affection and accompanying constitutional irritation I should be disposed to attribute much more to a peculiarity in the constitution of the female than to any circumstances necessarily connected with the operation. The result of this case, as that of others, evinces in the circumstance that the patient was relieved without producing incontinence of urine, a decided superiority to the use of the knife, as it regards this essential point.

I am, Sir,

Your obedient Servant,

JOSEPH HENRY GREEN.

MR. WEISS, Surgeon's Instrument Maker,

STRAND.

Pall Mall, 17th April, 1823.

SIR,

I have the satisfaction to inform you I have used the instrument you invented for dilating the female urethra, and I have found it answer extremely well. I dilated the urethra with great ease to allow of the introduction of a pair of forceps, with which I extracted a stone larger than a French bean of the mulberry kind, which had been in the bladder four years, and had given the woman great pain; the bladder for many months was so irritable, she was obliged to use a catheter to prevent the acute pain she always felt from the efforts made to expel urine.

I consider your instrument of great utility, and I hope it will be generally used; and that the female part of the creation will in future (by an early use of it) avoid the usual operation which was almost always followed by an involuntary discharge of urine during the remainder of their lives.

I am, Sir,

Your obedient Servant,

JOHN PHILLIPS.

To MR. WEISS.

16, Saville Row, May21, 1823.

SIR,

I extracted the calculus whic hI shewed you lately, from a female patient in St. George's Hospital, by the process of dilating the urethra. I employed for this purpose the instrument which you invented and which has been used and recommended by Sir Astley Cooper. The dilatation was effected very readily, but gradually, in the space of twenty-four hours. The patient suffered little inconvenience afterwards, except from incontinence of urine, which, however, ceased to trouble her in less than a fortnight from the time of the operation.

I am, Sir, Your obedient Servant,

B. C. BRODIE.

MR. WEISS, 62, Strand.

SIR.

Dundee, 16th March, 1824.

In November, 1823, I succeeded, in presence of Mr. Crichton and Dr. Nemmo, of this town, in extracting a calculi from the bladder of a female, between sixty and seventy years of age, by means of your forceps, after having dilated the urethra to a considerable extent, for twenty minutes prior to the operation, with your dilator, for the invention of which, I think, you deserve great credit.

For some weeks before, I had tried ineffectually the spongtents and afterwards a dilator, used for extracting bullets in gun shot wounds.

The Stone measures 2 inches in length.

Do. do. $1\frac{3}{5}$ inches in breath.

Do. do. 1 inch in thickness. Weight $9\frac{1}{2}$ drams troy.

Being, I believe, the largest that has been taken from the bladder without the knife.

The lady had an excellent recovery without any untoward accident, and is, at this moment, in perfect health.

So much for your Satisfaction,

ALLEX. RAMSAY, M.D.

DESCRIPTION

AND

Use of the New Speculum Ani, &c.

INVENTED

he time of the or

BY MR. WEISS,

62, STRAND, LONDON.

A. The new screw-handle that turns round, and by the screw attached to it, expands the shanks and blades.

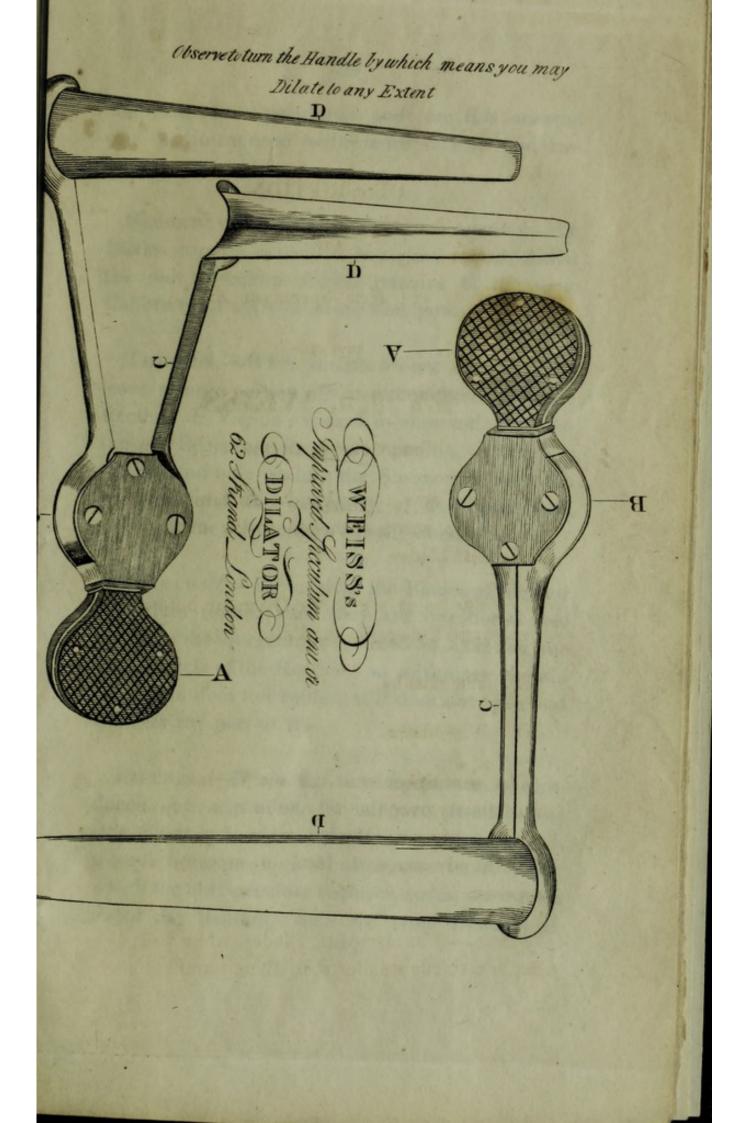
B. The joint which the Operator holds, as he turns round the screw-handle.

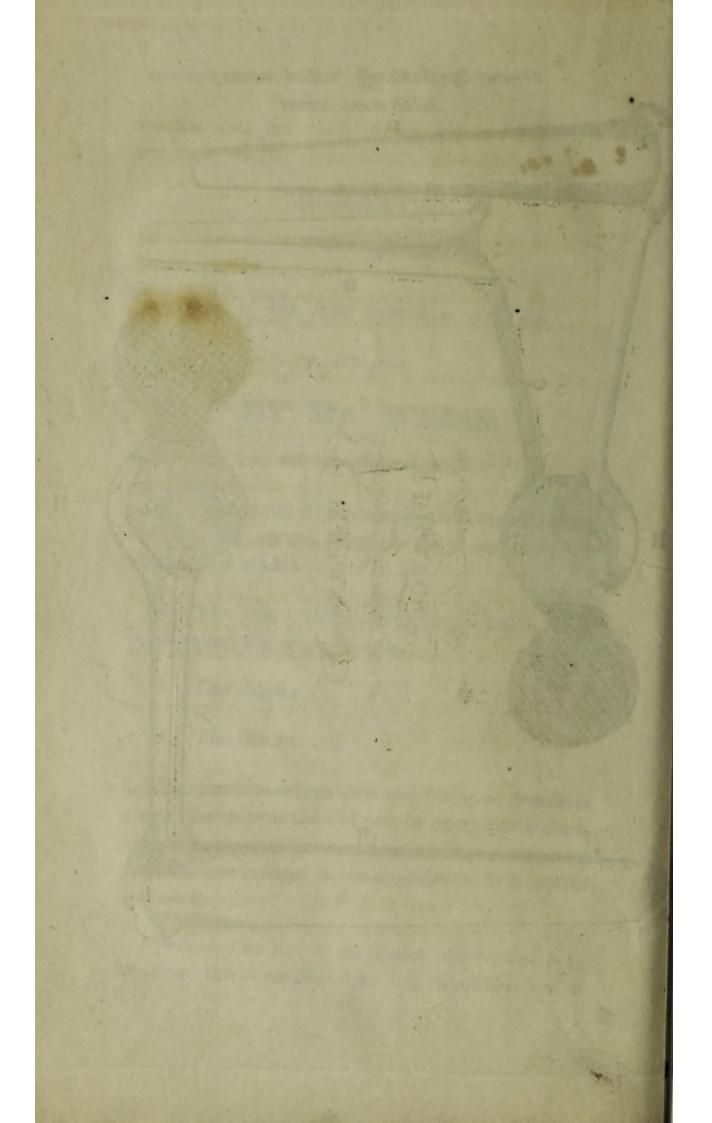
C. The shanks.

D. The blades.

The new Speculum Ani aut Vaginæ possesses a superiority over the old one in many particulars, both as a piece of Mechanism, and as conferring practical advantages in its application to Surgical purposes.

FIRST.—The size of its Blades, when shut, is at least two thirds smaller than the circumference of





the common Speculum, and on this account can be introduced with more facility and less pain.

SECONDLY.—By its power of opening, the Blades can be expanded to a great extent, whilst the old Speculum always remains of the same Calibre from not possessing that power.

THIRDLY.—When the blades are opened, they leave a large portion of the circumference of the Rectum or Vagina exposed to observation, whilst the old Speculum from not opening, covers the whole, and only enables the Surgeon to view the parts beyond the extremity of the instrument, which the new Speculum equally does.

FOURTHLY.—By turning the Blades of the new Speculum round, after they are introduced and opened, the Surgeon is enabled to examine the whole circle of the Rectum, an advantage the old Speculum does not confer, at it does not open and uncover any part of it.

correctly and perhaps to ascertain if the

Vagina or m the os uteri, the expansion of t

FIFTHLY.—When the new Speculum is introduced and expanded, it supports itself in the situation it is fixed, and renders the assistance of a second Surgeon to hold it quite unnecessary, which the old Speculum requires, and as operations about the Rectum, &c. are more frequent in

F 2

females than males, this instrument enables the Surgeon to spare their delicate feelings.

SIXTHLY.—If the new Speculum can be introduced beyond any Stricture of the Rectum, its power of opening will enable it to act as a very powerful Dilator of the Strictured part, and may supersede the employment of the Bougies in ordinary use.—These appear to be the advantages resulting from its superiority over the old Speculum as a piece of Mechanism.

Its applicability to some Surgical purposes, also demonstrates its superiority.

FIRST, In case of tumours in the Rectum, Vagina or in the os uteri, the expansion of the new Speculum will enable the Surgeon to examine the Pedicle or Base more accurately, and to pass the Ligature around it more easily.

SEONDLY, In Fistula in ano, the Surgeon will be able to examine the course of the Fistula more correctly and perhaps to ascertain if the Fistula open into the Rectum, when this instrument has fully dilated it: he will also be able to introduce his finger more easily, and with more protection from the Bistoury; whilst if he should divide an Artery that requires to be secured, he may probably be enabled to see it, and to secure it by a Ligature, which he could not do with the old Speculum ; and in case he finds it impracticable to apply a Ligature, he would be enabled to apply the next best remedies, pressure and a Styptic, by placing the Styptic on the extremity of the bleeding vessel, and expanding the Blade of the Speculum placed upon it, by means of the screw.

THIRDLY, In cases of internal Hæmorrhoids, in which it is necessary to excise a proportion of the relaxed membrane of the Rectum, this instrument enables its state to be examined in situ, previously to operation, and applications to be made to it after, if necessary.

FOURTHLY, In cases of that troublesome and painful ulceration about the Sphincter Ani, called "a crack," and which is formed between two of the Plicæ Ani, this instrument enables applications to be made, by which it will be probably healed without having recourse to the usual operation of excision.

FIFTHLY, In cases of tumours situated as above mentioned, this instrument will enable the Surgeon to ascertain its nature, and apply appropriate remedies, and in cases of internal abscess in those parts to open the tumour more conveniently.

dealers if compared to Mic nearing Smellan

DESCRIPTION

with the old Specularity and in case he finds it

SPECULUM VAGINIA AUT ANI,

INVENTED

BY MR. WEISS,

62, STRAND, LONDON.

A. The joint of the instrument.

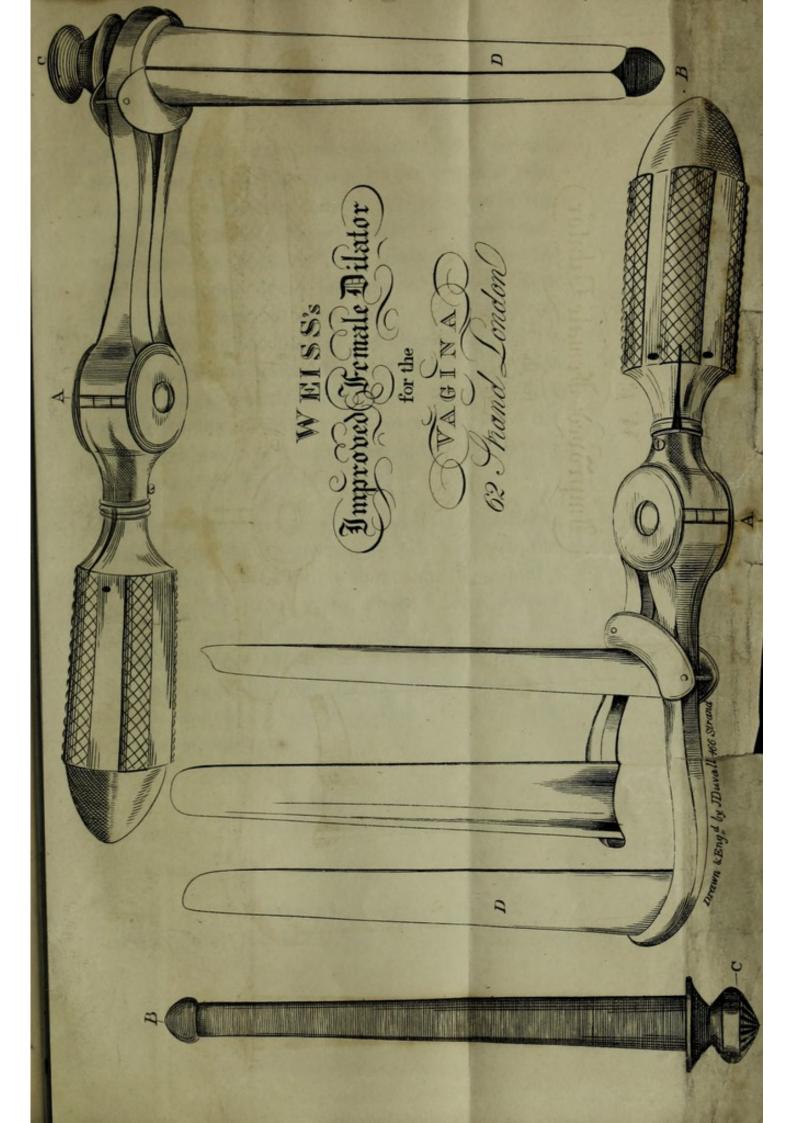
B. C. A round wooden peg, which is inserted into the tube betwixt the blades of the instrument, for the purpose of forming a round and smooth extremity, to facilitate its introduction.

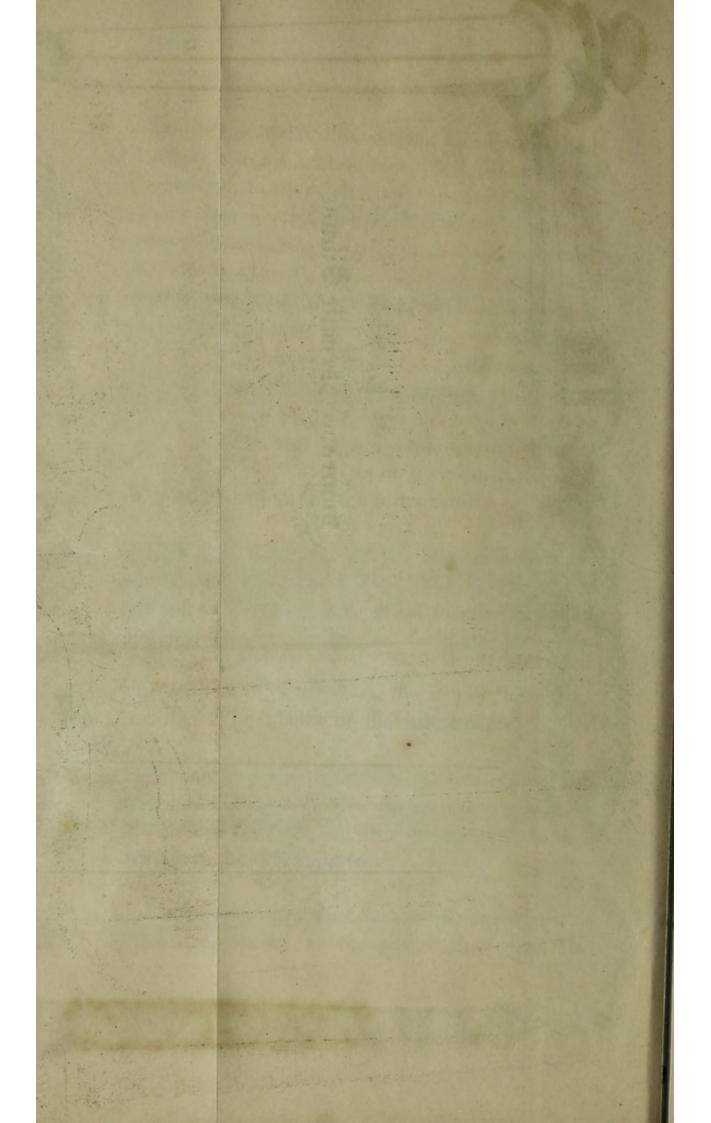
D. The blades of the instrument.

By turning the handle of the instrument the blades can be extended to any necessary size, and it will be found a superior instrument to any Speculum Ani yet invented.

The blades, when shut, form a very small instrument if compared to the pewter Speculum Va-

those parts to open





ginæ made by the French, which is a pewter tube, that cannot be opened or expanded, the diameter of which is one-inch five-eights at the points, and it is polished inside; I apprehend, however, the Patients must suffer severely by the introduction of an instrument of such large dimensions, whereas mine may be gradually extended above two inches wide, and should it be necessary to introduce any tube, one made of thin silver, polished inside, and quite the size of the French one, may be passed between the expanded blades of the new Speculum, without the least pain to the Patient.

This instrument may also be used as a Speculum Ani, for the same purposes as the one with two blades that I invented a short time ago, and a gentleman Mr. SLEIGH, to whom I have showed both instruments, stated to me, that the instrument with three blades had a certain superiority in some particular cases over that with two, and I do not hesitate to introduce a note from that gentleman respecting it.

> London, September, 23, 1823, 23, Chapel St. GEOSVENOR SQUARE.

To May, W BISS

SIR,

I take the earliest opportunity of stating, that the Instrument you have invented for dilating the Sphincter ani muscle, perfectly accords with my wishes, and will be found, I am persuaded, to answer the purpose remarkably well. It is to be regretted that I did not see it previous to my work on the posterior method of performing Lithotomy, having gone to the press; for in it I have described the Speculum Ani I devised, which I now most cheerfully acknowledge is far inferior to your's; however, even with this, I have repeatedly succeeded in dilating the Anus, so as to admit three fingers, without producing any peculiar uneasiness to my Patient, or any subsequent loss of the tone in muscular fibres. I shall get a plate of your Speculum annexed to my publication.

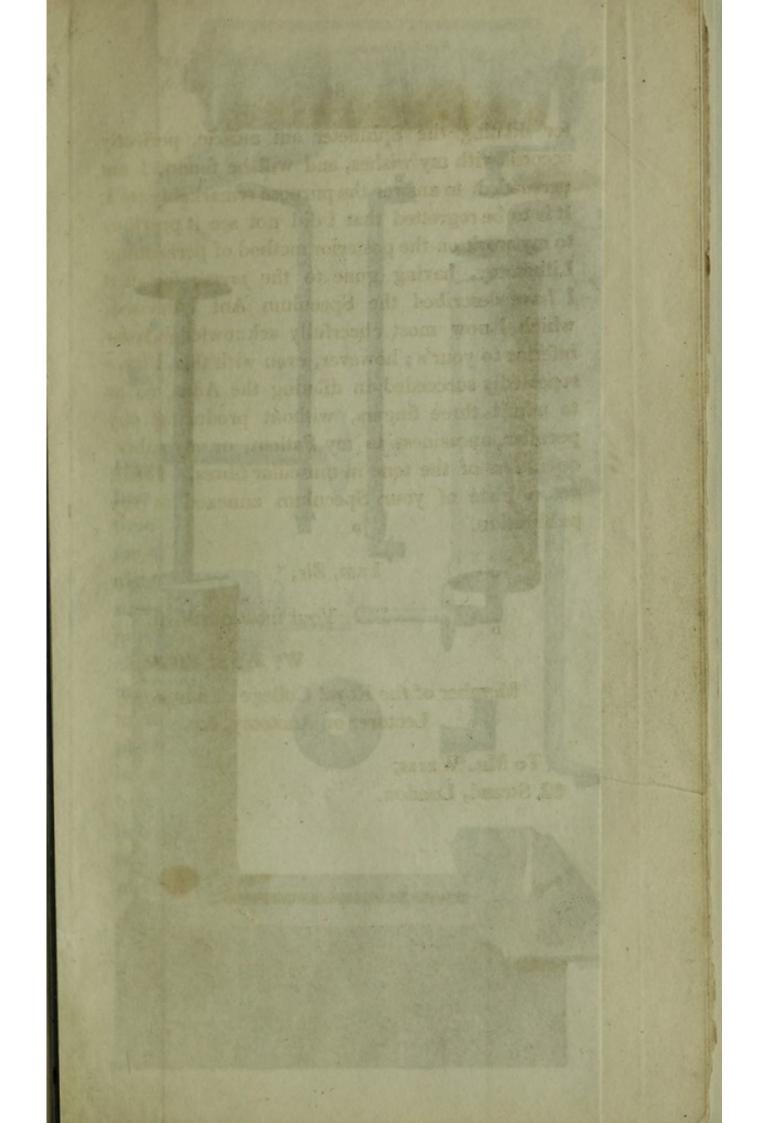
I am, Sir,

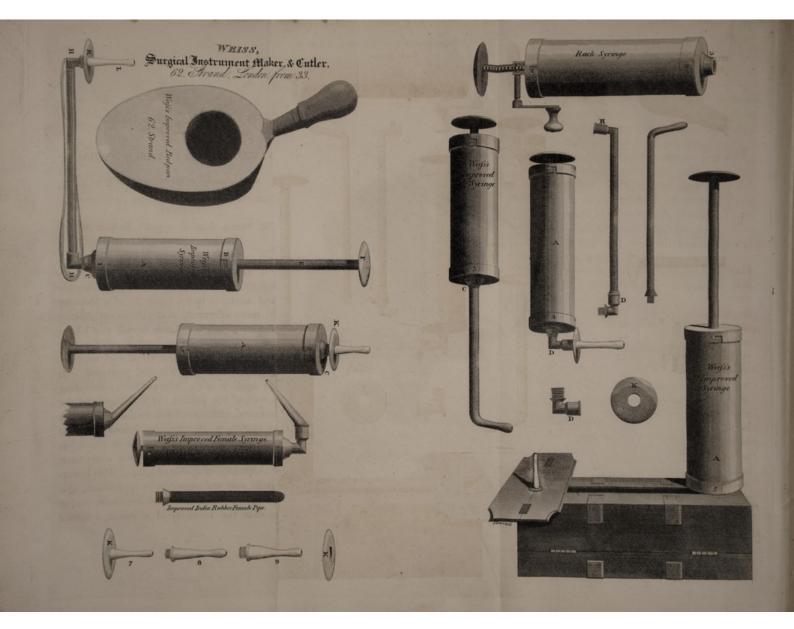
Your most obedient,

W. W. SLEIGH,

Member of the Royal College of Surgeons, Lecturer on Anatomy, &c.

To MR. WEISS, 62, Strand, London.





WEISS'S

Surgical Instrument

NEWLY-INVENTED CLYSTER SYRINGE,

MADE AND SOLD AT HIS MANUFACTORY FOR

SURGEONS' INSTRUMENTS, RAZORS, & IMPROVED CUTLERY,

No. 62, Strand, London, opposite Bedford Street, (removed from No. 33.)

HAVING, at the request of many eminent Members of the Faculty, lately devoted considerable time and attention to the invention of a Machine for the more effectually and conveniently administering of Clysters, I flatter myself that I have succeeded in finishing an instrument for that purpose, in all respects the safest and most decidedly superior to any hitherto produced. It may be applied in six different ways, according to the will of the patient, as explained in the plate annexed, and is not liable to get out of repair in any climate whatsoever, by reason of its not being made with valves, the leather of which has been found to become hardened in a short time, and consequently incapable of acting. This Instrument is so easy and simple in its application, that it requires no professional superintendance, and in consequence the necessity of requiring a second

person to use it, (which has often prevented the administration of other injections, in cases where they have been imperatively required,) is thereby avoided.

A Machine contrived for forcing the liquid by means of air, on the plan of a Fire Engine, was invented some years ago at Paris, but it did not answer as an Engine, neither do I think it could as a Syringe, as the bowels must, of course, with such a machine receive as much air as liquid, and this is the most dangerous injection which can possibly be given, particularly when conveyed through a *brass* or *copper* tube, which will, in twenty four-hours, collect sufficient verdigris to do material mischief. From all such defects I can confidently assert, that my Syringe, which is made of a mixed metal, is perfectly free, as is fully demonstrated by various testimonials from Professional Gentlemen of the highest repute.

It is gratifying to me to state, that the improved Syringe has received the unqualified approbation of some of the most eminent of the Faculty; and amongst other testimonials in favour of its superiority, I beg to transcribe the following from MR. GOLDING, Member of the Royal College of Surgeons, and Surgeon to the Royal WEST LON- DON INFIRMARY, whose extensive opportunities of judging of its merits are well known.

77, St. Martin's Lane, May 1st, 1820.

Sir, loid w dire villoal out bas, ao

I greatly approve of the newly-invented Syringe you have sent for my examination, and am glad to find your attention has been directed to the improvement of so useful an Instrument, which seems well adapted for domestic as well as professional purposes. I think it more convenient than those which have been heretofore employed, and have directed it to be used in such cases as come under my care, not only in private practice, but in the two Charitable Institutions to which I belong.

Injections do not appear in this Country so highly appreciated as they deserve, although on the continent their advantages are extensively acknowledged, and they constitute no trifling part of the Practice of Medical Men. It is remarkable that they are not in more general use, when we reflect how numerous are the complaints produced by a confined state of the bowels, and how quickly they are relieved by a removal of that cause. The occasional employment of injections is, certainly, the most convenient and comfortable way of obviating

so frequent a source of misery and pain-and as injections produce neither temporary constitutional disarrangement, nor render the habit so accustomed to their use that they may not be at any time discontinued, the same objections cannot be urged against their employment, which are so often made to other remedies ; whilst the simplicity of their formation, and the facility with which they can at all times be had recourse to are arguments in favour of their adoption. In a medical sense, they are invaluable : during the attack of inflammatory disorders, and various other complaints to which the bowels are subject, when the stomach rejects Medicines of every kind, and when all other remedies prove quite ineffectual, how often do we find a common injection of the most simple kind, produce the most salutary results : and, by unloading the lower bowels, by clearing a passage for flatulent collections, and by acting as a kind of internal fomentation to the whole disordered canal, suspend the most distressing irritation, and produce tranquillity and rest.

In a domestic point of view they are not much less important; and I speak with confidence, when I state that of all the cases of *Hemorrhoids* or *Piles* in which I have been consulted, and of *Fistula*, for which it has been necessary to operate for their cure, I scarcely remember one which could not be ascribed to a long and habitual neglect of the bowels. In speaking thus much of the remedial powers of injections, I trust I convey to you a correct sense of the opinion I entertain of their utility, and of the Syringe which you have invented for their more convenient administration; particularly when I add, that, by your Instrument, no common air can be injected with the lavement, as in the ordinary instruments of this description, by which the most distressing consequences have, in some instances, been produced.

I am Sir,

Your very obedient, humble Servant, To Mr. WEISS, Strand.

B. GOLDING.

Directions for using the Instrument, and keeping it in Order.

This Instrument can now be used in six different ways: by *five* of which it may be administered by the Patient himself, without the assistance of a second person.

The figures in the plate annexed, numbered from 1 to 5, are the syringes; the part to each, marked A, is the cylinder; B, in No. 1, is the moveable top which should be taken off, when the Instrument requires cleaning; C is the opening through which the liquid should be poured; D is the part of the pipe which should be screwed to

the syringe at C. The pipe L should be screwed into the long pipe at H, and the small circular plate K then placed on it, or, when used with the box, the table shewn in figure 5 should be placed on it as a seat for the patient. E is the piston and F the handle to it, which should be drawn up sufficiently high to admit the quantity of liquid prescribed, and pressed down immediately before use, so far as that the liquid may appear at the extremity of the pipe L. in order that no air may be injected. When the instrument is about to be used, the syringe should be placed before the patient in a chair, or on the box, as shewn in the plate No. 5, and the pipe L then introduced, by the patient sitting down upon it. He should then press down the piston at F, until the syringe is discharged of the liquid, taking care that a few minutes elapse before the syringe is withdrawn, and the irritation has subsided. Figure 2 is the syringe as prepared for application by a second person. Figure 3, as best adapted for a person inclining to corpulency. Figure 4 is the syringe, when used with a short pipe, as is frequently preferred. Care should be particularly taken, that in every case the syringe is placed in front of the patient.

When the instrument requires cleaning, take off the top B, and pull out the piston or sucker; wash the inside with warm water, and wipe it dry: if the instrument should not go easy, a little pomatum or sweet oil should be applied to the piston : or should it, on the other hand, get too loose, put the piston into some water boiling hot, and there let it remain for a quarter of an hour; after which, apply some pomatum or sweet oil, and it will then operate correctly. When the syringe is not likely to be wanted again for some time, it is recommended that the piston be taken out, and with the inside of the cylinder, be cleaned and wiped dry.

Further Testimonials of Mr. Weiss' Instruments.

Dr. Vance, the Surgeon of Greenwich Hospital, introduced the forceps and extracted part of a broken stone in the first effort. In the next attempt several small pieces were removed.

The patient, a very old man, was suffering under another disease of which he died, and many small stones were found in the diseased's bladder that had been long incapable of retaining more than an ounce or two of urine. He thinks, under circumstances of better health, that the instrument might have enabled him to extract all the calculi.

Greenwich Hospital, 14 March, 1824.

It is admitted by all who exercise the Profession of Surgery, that the possession of proper instruments is a valuable acquisition, and however competent a Surgeon may be to give directions for the construction of Instruments for particular purposes, a great deal must depend on the genius and ability of the maker. I have had the satisfaction of observing, that you not only evince great facility in executing the designs of others, but that the profession is much indebted to you for many inventions, which are calculated to lessen human affliction.

SIR,

As the Instrument Maker to Greenwich Hospital, your zeal, attention and ability, entitle you to high commendation, and as I am preparing to leave the Institution, I have much pleasure in offering you this testimonial, with an assurance that I shall endeavour to give my successor a proper impression of your merits.

1 am, Sir,

Your most Obedient Servant, GEORGE VANCE, Surgeon of the Hospital.

Mr. J. WEISS, 62, Strand, London.

SIR.

SIR,

24, George Street, Feb. 15, 1823.

I thank you for having so promptly acted upon my suggestion, and executed an instrument so powerful in the spring, and at the same time expanding the sides so readily by means of the screw, for breaking stones in the bladder. When I have used the instrument I will let you have my opinion of it.

I take this opportunity of informing you that I have succeeded in removing fourteen stones from the bladder, about the size of horse beans with your other instrument, and I enclose the stones for your inspection.

I am, Sir,

Your obedient Servant, THOMAS DAVIS.

To MR. WEISS, Surgeon's Instrument Maker.

in hall

28, Margaret Street, Cavendish Square.

A gentleman upwards of sixty years of age, labouring under great pain and difficulty in voiding urine (which, indeed, was constantly dribbling from him), applied to me for advice, informing me, at the same time, that he had passed several small stones, which, from his description, were evidently lodged in the prostate Gland. I at once had recourse to your instrument, and have much satisfaction in being able to state, that I removed with great facility, at three several applications, at the interval of a day between each, twenty stones varying in size from a large pea downwards.

My patient experienced complete relief, as he was enabled to retain and void his urine with ease.

THOMAS HARDING,

Surgeon.

To MR. WEISS.

SIR,

The statement in my work, upon the Diseases of the Urine, and Urinary Organs, to which you refer, is very much at your service, to insert in the Catalogue of your valuable Inventions; and I feel pleasure in adding to what I have there said, that, whenever I have had recourse to instruments, whether elastic gum, silver, or steel, of your manufacture, they have always proved peculiarly satisfactory: and no less so, whenever I have requested any instrument to be made according to a pattern given.

This testimony I feel entirely due to you, for the uncommon care and attention you bestow upon whatever comes from your hands, and, therefore, think you deserve every encouragement.

Remaining Yours, &c.

J. HOWSHIP.

George Street, Hanover Square, Feb. 23rd, 1824.

Retention, from Enlarged Prostate Gland.

In March 1818, Mr HEAVISIDE was requested to visit a gentleman, aged 69, who, while under the care of Dr. HOOPER for another complaint, had retention of urine. Mr. HEAVISIDE found there was also an immense scrotal rupture on the right side, reaching down very nearly to the knees, and examining by the rectum, ascertained a very enlarged prostate gland. The urethra, by the weight and magnitude of the hernia, was so dragged out of its proper course, that an elastic gum catheter, passed with great difficulty beyond two acute angles of the canal, was stopped by a third obstruction, which could not be overcome, apparently in the prostatal part of the Urethra. Upon this account, the patient was requested to see another surgeon in consultation ; who, after Mr. HEAVI-SIDE had again endeavoured, in vain, to introduce a catheter, made several unsuccessful attempts; but at last, with a large silver catheter, forced his way, and with extreme distress to the patient, the water was drawn off.

Much local pain, fever, and tenderness about the lower part of the abdomen, followed the operation, for which symptoms, he was, for some time, attended by Dr, HOOPER. The retaining an elastic gum catheter in the bladder, and occasionally changing it, constituted nearly the whole of his surgical treatment; for although it might be supposed that his rupture ought to be supported by some sort of bandage, and attempts of this sort were repeatedly made, he could never bear them, for if the hernial tumor was raised only three inches, it invariably produced a pain in the bladder, only relieved by letting it down again.

Feb. 1822. The general health began to decline, the appetite gave way, while nausea, and sometimes vomiting, came on. The bowels acted regularly, but medicines failed in removing the irritable state of the stomach, which, at length, rejected every thing that was taken; he now sunk more rapidly, and on April 8 died.

I was desired to examine the body; which, with the contained viscera, was excessively loaded with fat. The pyloric end of the stomach was drawn downward by the omentum, which descended at once by the spacious opening at the groin into the hernial sac. Into the same cavity, the whole of the colon had passed down, and was closely adherent to the parietes of the bag; the very adhesions having become as much loaded with fat, as the omentum or mesentery. The abdomen contained some, but the sac most, fluid; in the whole about twelve pints of serum. Some few adventitious bands, from effusion of lymph, were found in the lower part of the abdomen. These bands were probably the result of the peritoneal inflammation, that followed the first introduction of the catheter; and one of them, attached to the fun-

dus of the urinary bladder, and to the intestinal canal near the rupture, explained the cause of the uneasiness felt whenever the hernia was supported.

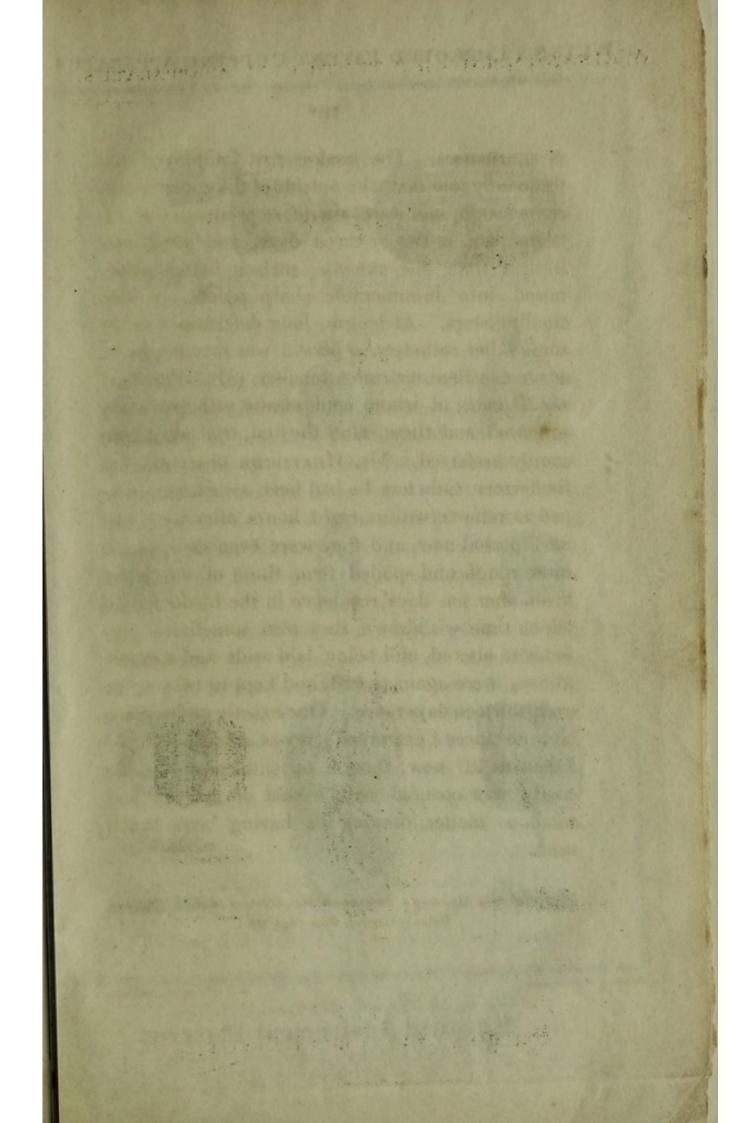
The urinary bladder, prostate gland, and urethra removed, the inner membrane of the urethra laid open, was highly vascular and irritable. The bulbous portion of the urethra, owing to a strong preternatural band of ligamentous fibres attached to the left side of the ossa pubis, and passing thence to spread itself over the bag to assist in its support, was pulled downwards, and drawn entirely out of its natural course. Opposite the part where this band lay against the canal, the inner membrance of the urethra was upon the left side ulcerated, to the extent of an inch. The appearance of the ulcer was that of a greyish-coloured, purulent, sloughy, cellular membrane, with a very vascular margin. Between this spot and the external opening, upon the right side of the urethra, was a second ulcer, less extensive, but otherwise similar to the first.

The prostate gland was exceedingly enlarged. In the posterior part of the prostatal portion of the urethra was a ragged opening, passing through the substance of the gland, for the extent of an inch ; by this opening a large-sized bougie freely entered, and as freely passed out, through a second opening, through the projecting part of the gland, into the cavity of the bladder. The mucous membrane near these openings was extremely vascular and irritable. From the great difficulty experienced, and the violence that had been employed in the first introduction of the catheter, it is pretty clear the instrument was then forced through the substance of the enlarged gland; for that operation was attended with such excruciating pain that he roared and stamped furiously, and bled so freely by the urethra and through the catheter, that although it was presumed a quart of urine was drawn off, it was not easy to determine what proportion of it was blood.

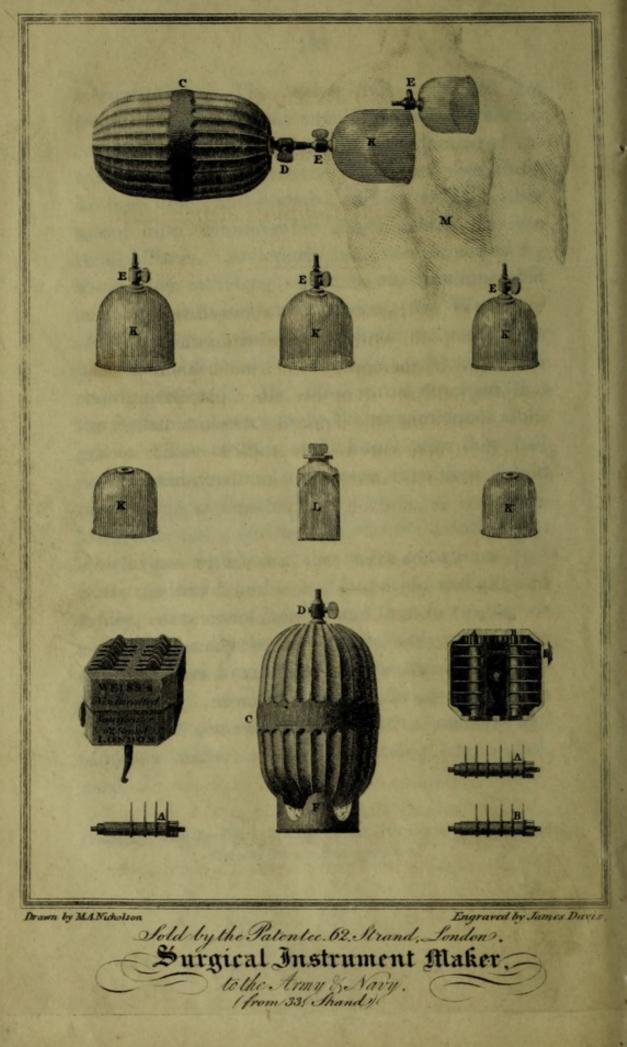
The ulcers in the urethra appeared to be the result of the irritation and friction incident to the frequent removal of the catheters, an operation that always excited extreme pain ; and as this distress was of course regulated by the degree of change the instrument had undergone by lying in the urethra, it became a peculiar care to withdraw the catheter sufficiently early. There was considerable difficulty in determining this point correctly. The progress of this case, however, afforded Mr. HEAVISIDE a favourable opportunity for ascertaining the comparative value of elastic gum catheters, of common, and those of superior manufacture, applied in the same case, and under the same

circumstances. The maker first employed was frequently told that the outside of the catheters became rough, and were therefore productive of extreme pain in two or three days, and sometimes in less time, the smooth surface being either raised into innumerable sharp points, or into small blisters. At length, long determined to try some other catheters, a person was recommended as an excellent instrument-maker, (Mr. WEISS, of the Strand,) of whom some elastic catheters were procured, and these, after the first, trial were constantly preferred. Mr. HEAVISIDE observed that the former catheters he had been sometimes obliged to remove within eight hours after they had been passed new, and they were even then found more rough and spoiled than those of the latter kind, after ten days' residence in the bladder ; at which time withdrawn, they were sometimes perfectly unaltered, and being laid aside and allowed to dry, were again passed, and kept in twelve, or even thirteen days more. One exactly under these circumstances I examined ; it was smooth and polished as if new, though on slitting it up, its cavity was covered with a coat of mucous and sabulous matter, proving its having been much used.

(Extracted from Howship's Treatise on the Diseases of the Urine, and Urinary Organs, from page 322.)



WEISS'S IMPROVED PATENT CUPPING APPARATUS.



DIRECTIONS

S'S IMPROVED PATENT CUPPING

FOR USING

The Improved Cupping Apparatus.

Observe that the cock D is screwed tight to the globe; then fill with spirits of wine, the cavity in the centre of the cup F, which holds about a teaspoonful, and set it on fire, then place the globe perpendicular on the flame, as shewn in the plate, taking particular care that the cock D, is left open, until the globe becomes so warm, that you scarcely can bear your hand on it, shut it and dip it in cold water.

It will be observed *there* are six glasses of various sizes, and three cocks to fit the glasses, which may be used at discretion. Screw the cock marked E to the glass which is selected for use, then fix it to the globe at D, as shewn by the drawing in the accompanying plate, press the glass close to the Patient's skin and open the cock D, the cock E being previously opened, the air will then rush into the globe and when the skin is sufficiently raised, shut both the cocks and pull off the globe from the glass: when the glass is to be removed from the Patient open the cock of the glass.

minutent instrument instant

Directions for Shifting and Cleansing the Lancets.

Be very particular to place the lancets upright, *i. e.* on *half* cock ; then turn the bottom screw Itill the lancers disappear ; pull off the top, open the steel part K and take out what lancets are necessary, and observe, when you put them in, that A between the lancets, should correspond with the same letter on the edge of the brass box, and B with the letter B in like manner ; be careful that the lancets are not on *half* cock, when the top is put on, and that the engraving of the Maker's name, &c. on *both* parts, meets on the same sides of the Instrument; by pressing gently on the top, and turning bottom screw I, it will be completely fixed on.

Directions for using the improved Lamp in the common Mode of Cupping.

As the lamp is required to be fixed on the finger during the operation, J. WEISS has so contrived as to make it fit closely by pressure to a finger of any size. When the lamp is to be used, pour a little spirits of wine into one of the cupping glasses, dip the cotton into it, and it will be found to answer better than any *lamp* yet introduced, as with the ordinary *lamp*, if not constantly used, the spirits will lose their effect, and will not, by any means, produce so strong a flame; besides the ordinary lamp must be nearly filled with the spirits before any fire whatever can be obtained. Observe that the cotton must be put in quite loose.

OBSERVATIONS ON CUPPING, &c.

As inflammatory diseases constitute the majority of those to which the frame of man is subject, much importance has, in all ages, been attached to local bleeding as a remedy. Two modes of topical blood-letting have been adopted by the profession, one by Leeches, the other by Cupping ; the latter possesses the practical advantage of abstracting the blood more rapidly, of enabling the Surgeon to ascertain the precise quantity drawn, and of being always available where Leeches cannot be obtained. Cupping has not, however, acquired that extensive and general use which its benefits entitle it to, from the acknowledged difficulties of the art of employing the ordinary Cupping Apparatus, unless the Cupper be engaged in constant practice, and thus acquire and maintain great dexterity particularly in the management and application of the Glasses. This constant practice is so essentially necessary, that the Assistant Surgeons of some large institutions at a distance from town, to whose duty Cupping devolves, are obliged to practice dry Cupping on themselves to preserve their skill, and many country practitioners are obliged to abandon the remedy altogether.

To remedy this defect and to render Cupping more available, I have, after numerous experiments, succeeded in inventing a Cupping Apparatus, so simple in principle and construction, and so easy and effectual in application, that any one may manage it and make it universally useful. The air in the common Cupping glass is rarefied by flame; by my improved instrument, the air in the Cupping glass rushes out into a Globe Vacuum on turning a cock, and exhausts it of any quantity of its air the Surgeon pleases. The common Cupping glasses are applied with so much force and the flame of the lamp is so closely in contact with the patient's skin, that children are terrified, and many delicate ladies faint, by which the operation is frustrated; in the common mode of Cupping on tender parts with great inflammation, particularly about the bowels, the glasses were knocked on so quickly, I have seen the Patient faint and no blood would flow; mine can be applied with the utmost gentleness, and with more precision to a particular spot, when the flame of the lamp has been long extinguished. The improved instrument excels for dry Cupping, as then its full power can be employed.

The simplicity of action of the new apparatus has rendered it an object of jealousy and of calumny to the Cuppers, because its construction enables any one of good natural sense to apply it, and many gentlemen in the country who have been obliged to come to town from the country when they required Cupping, now use it as a domestic remedy. The late eminent actor, Mr. J. Kemble, who was frequently obliged to be Cupped, constantly carried my instrument with him on his travels, and the operation was performed on him by his own servant. He stated to me, that before he was in possession of this instrument, he was once compelled to leave a shooting party in the North of Scotland, for the sole purpose of coming to London to be Cupped !

The professional Cuppers have published long treatises on their complicated art and operation of Cupping; I shall briefly state those circumstances which are considered necessary and proper to be attended to.---First, set the Lancets of the Scarificator to a proper depth; on this absolutely depends its success. If the Lancets be set too deep, they penetrate through the skin down to the adipose substance that interposes between it and the parts beneath, leaving incisions of such a length as to allow the cellular tissue and fat to protrude as soon as the glass is applied, by which the wounded capillaries are compressed and their bleeding entirely suppressed. On the other hand, if the

incisions be too superficially made, the outer laminæ only of the skin are wounded, and unless they extend into the cutis vera no bleeding ensues. For general purposes let the Scarificator be set so that the points of the Lancets project from the face of the box to the distance of one quarter of an inch. Before the Scarificator is used observe particularly to raise the skin by means of the Globe and Cupping Glass. After the incision has been made by the Scarificator, the Cupping glass is to be applied, and the air drawn out by turning the cocks D and E, by which it rapidly escapes into the Copper Globe from the glass. When the skin is sufficiently raised, shut both the cocks and pull off the globe from the glass, and it is again available for the successive glasses to be applied.

It is almost needless to add, that mine will be found a most convenient, superior, and desirable instrument to professional gentlemen in the country, and in the colonies or parts abroad, and to all persons subject to apoplexy, palsy, determination of blood to the head or other vital organs, or to chronic inflammations, to whom frequent Cupping is recommended by the profession.

G. SCHULZE, PRINTER, 13, POLAND STREET.

