

events, patients in dysphagia live as long, and sometimes longer, without clysters, as they do when clysters have been daily administered, of the best selected nutritious substances. Mr Cruikshanks's patient, who had no clysters, survived two months, after being unable to swallow; although Dr Currie considered it as extraordinary that his patient, who had daily nutritious clysters, lived a month under the same circumstances.

There is still a source of nourishment assigned to the system which has not been noticed. It is maintained by physiologists, that the body is capable of feeding by the absorption of its own fat. Although the opinion is plausible, and very generally received as unquestionable, I cannot find that it has ever been clearly made out. The fat in general wastes, because the process of nutrition is impaired by disease. It is deposited by the absorbents into the thoracic duct, along, perhaps, with the serum of an anasarctous leg! and why not for the like purpose of excretion from the system? The opinion that fat, which wastes in disease, is changed into blood, is not only unfounded, but preposterous, when the patients, as often happens, are remarkably corpulent. If the many pounds of fat, which are lost by a week's illness, are not carried off by the emunctories as excrementitious, it will be allowed, that so much nourishment is not necessary for the support of the system; and that illness would be a cause of plethora, exactly in a ratio corresponding with the severity of the complaint, and the corpulency of the patient. But it has been known, from time immemorial, that in disease the system can endure abstinence to a greater extent than in health; the necessity of this obviously is, because the functions of assimilation are among the "*plures functiones læsæ.*"

*Burton-upon-Trent, May 12, 1809.*

## XII.

*An Apology for the Cutting-Gorget.* By W. SIMMONS, Surgeon, at Manchester.

THE ingenious Mr Lawrence, of London, hath favoured the profession with a few "observations on lithotomy," in the last number of your Journal, the scope of which is, to supersede the use of the *cutting-gorget* in that operation, and substitute, in its stead, the common scalpel, with a slight alteration. In order to strengthen

strengthen his recommendation, he hath subjoined a case, which case, however, if not directly militating against his own doctrine, the advocates of the gorget may be inclined to think, is, at least, not greatly in favour of it. But, as the case is a solitary one, and the termination of it was fatal, I shall excuse myself from offering any further conjecture concerning it.

In the operation of lithotomy, I have always employed the *cutting-gorget*, and with so much success, as to render me satisfied with it; though far from being inimical to improvement, where the change is really such, and founded upon just principles.

In the introductory part of the observations before me, the author has taken occasion to remark on the uncommon success of Mr Cheselden, as a lithotomist; and not wishing to deprive our countryman of any applause he may be justly entitled to, most willingly do I accord with this opinion. In justice to others, however, let it be observed, that dexterous as Mr Cheselden undoubtedly was in performing this operation, he was no less fortunate to meet with so great a number of patients labouring of the stone, who were at the same time free from any disease of the kidneys and bladder, which might hurry on to a fatal termination; or, whose habit did not predispose to inflammation, or tetanic affection, from which, even where the operation had been ably executed, and the patient was apparently out of danger from it, I have had occasion to witness a fatal event.

For effecting the division of the prostate gland, and neck of the bladder, Mr Cheselden employed the common scalpel; which, in process of time, yielded to the *cutting-gorget*, an instrument invented by Sir Cæsar Hawkins.

To exalt either of these gentlemen at the expence of the other, is far from my intention; both were eminent in their day, and both are now no more, so that praise, or censure, is alike indifferent to them. But it is for the interest of science, that the question now agitated again, should be dispassionately canvassed; and, taking success for the criterion, I hope presently to shew, that whatever the merit of the scalpel in lithotomy may be, so far is it from being unfortunate that English surgeons did generally adopt the *cutting-gorget*, that it is still a valuable contrivance, and worthy of being retained in surgical practice. But to proceed:

The reason maintained by the author for his preference of the scalpel to the gorget, is scarcely consistent with his usual correctness. To suppose that Sir Cæsar Hawkins was ignorant of the anatomical structure of the parts concerned in the operation of lithotomy, would be entirely gratuitous. Nor is there more

reason for suspecting the anatomical acquirements of many other surgeons, who have pursued his method of operating. Disclaiming, therefore, this mode of defence, I shall transcribe the passage on this subject for another purpose. "Sir C. Hawkins then (says the author, p. 138) may enjoy all the credit of introducing into one of the most difficult, and dangerous operations of surgery, an instrument which can be employed by any individual, of any profession, or trade, who has the simple faculty of combining the motions of his two hands, so as to keep the gorget and staff together, as well as by the most skilful anatomist, and most experienced surgeon." With all proper deference to the author, this is, in my opinion, the highest commendation that ever was bestowed upon any surgical instrument; and how well it is merited by the gorget, my own experience of its use, for nearly twenty years, will bear irrefragable proof.—Yet, in stating my sentiments thus frankly, I hope not to be understood, as meaning to depreciate the importance of anatomical researches, or of dissecting-room surgery; nor am I insensible of the value of manual dexterity. But, to have rendered "one of the most difficult, and dangerous operations of surgery," so simple, and easy of execution, as in the above quotation this author has described it to be, is so far from being a demerit, and on that account to be rejected, that it is a point of excellence, rarely, if ever attained, and ought to be aimed at in every other difficult and dangerous operation.

The author next descends from general to particular objections to the instrument in question, and accordingly he observes (p. 138), that Hawkins's gorget is "too narrow at its cutting part;" and then he also adds, that "subsequent improvements in the form of the instrument have somewhat obviated this objection; but dissection still shews us that the incision is not sufficiently extensive." The generality of lithotomists will, I believe, agree with the author in the former part of this statement, though it should be recollected that the bladder is susceptible of considerable dilatation; but, with regard to the latter, I beg leave to inform him, that in at least twenty different instances, in which I have performed the operation of lithotomy upon the *living* subject, and all with the cutting-gorget, I have not had occasion to enlarge the wound into the bladder in one *single* instance; nor have any of the accidents to which he has adverted supervened. Whence I am warranted in concluding, that, in the instances mentioned, the fault lay not in the instrument, but with the operator, who, if unable to manage the gorget, an instrument (he thinks) that requires neither a *knowledge of anatomy*, nor *manual dexterity* to use it, would hardly have been more successful with

with the scalpel; the chief boast of which is, if I rightly apprehend the question, that it requires a larger share of both these qualifications than will fall to the lot of the generality of surgeons.

The directions for making the first incision next engage the author's attention, and to these I shall take only one exception, which is, that provided the staff can be felt in perinæo, at the spot denoting its curvature into the bladder, the external wound will be made with more precision directly over that part, and without any possible inconvenience. In a fat subject, indeed, like the one whose case the author has given, it was clearly impracticable to feel the staff in its course so near to the bladder; but such an instance of exception will not constitute a valid objection to this rule in suitable cases, inasmuch as a sure though imperfect guide is better than none at all, and especially as the next part of the process will require that the knife should be made to pass through the membranous portion of the urethra into the groove of the staff.

The supposed similitude of the operation with the gorget of Hawkins, and by the *apparatus major*, will now invite discussion; and here, again, I think, the author has failed to establish his point. For, in the *apparatus major*, "the incision is made in the urethra only," (Heister, p. 159.); and the extensive division of the urethra, still practised by some surgeons in the lateral operation, adverted to by Mr Lawrence, has long been discontinued in provincial practice within the range of my observation. Before the section of the prostate gland, and neck of the bladder, constituted a part of the operation, this mode of practice might admit of extenuation, but, since that period, certainly no good argument can be offered in its defence. Heister tells us, that in the *apparatus major*, the intention was to reduce the urethra of the male as near as possible to the condition of that of the female. His words are (p. 115, E. 3.), "the urethra is to be divided, and the neck of the bladder left entire:" And again (p. 111.), "so that there remains but a short part of the urethra entire between the lips of the wound and the bladder—like as in women; which part being sufficiently dilated with proper instruments, the stone may be extracted by convenient hooks, or pliers, out of the bladder." We further learn, from the same respectable authority, that the instruments which were employed for the purpose of dilatation, were a *male* and *female* conductor, so called from their peculiarity of form, and from serving to conduct the forceps into the bladder, and also a *dilatator*, properly so called, because it serves no other purpose than "to dilate the wound made in lithotomy."

These extracts are sufficient to prove the difference subsisting between the *apparatus major* and the operation with the gorget of Hawkins, both in the parts divided, and in the number of instruments employed. And, if the incision through the prostate gland and neck of the bladder be made with the gorget of Hunter or of Cruikshank, which I have used, it cannot be a *misnomer* to designate the operation *lateral*, though performed with the cutting-gorget; for the division of the parts will, in the strictest sense, correspond to the operation by the scalpel, and also provide an aperture through which a stone of a considerable magnitude will pass, without either contusion or laceration of the parts. Such a section of the bladder is at least as considerable in extent as the one made by Mr Cheselden; and we are told, that "the largest stone will easily pass through Mr Cheselden's wound."—Thomson's *Obs.* p. 44. And of Mr Le Dran, although the blade of his *bistoury* was only "half an inch broad, and about three quarters of an inch long," yet "his operation has always proved successful, even in the extraction of the largest stones." *Ibid.* p. 74.

As my object is to *defend* the use of the *cutting-gorget*, I shall not dwell upon several other points of inferior moment in the observations before me, but hasten to express my acquiescence in the opinion, that "the best operators always use the most simple means." Yet, in acceding to this general proposition, I could wish to be understood as reserving to myself the opportunity of its fit application, because the fault, opposed to *complexity*, is that of simplifying too much, and of this I fear there is danger in the present case.

According to Mr Lawrence, the apparatus of lithotomy should consist of no more than three instruments, namely, "a knife, staff, and forceps;" and, it must be confessed, that this list is sufficiently specious, did it provide for every emergency; unfortunately, however, this is not the case.

In the apparatus of Mr Cheselden five are enumerated:—  
 1. A staff. 2. An incision-knife. 3. A gorgeret. 4. A pair of forceps. 5. A crooked needle, carrying a waxed thread.—Thomson, *Obs.* p. 44. Substituting the tenaculum for the needle; attached as I am to a successful method of practice, I will likewise, in gratitude, take the cutting-gorget for the blunt one. The enumeration will then be complete; and if the name of the gorget be still objected to, let me ask, what is it after all but a knife?

That the blunders which have been ascribed to the cutting-gorget do not necessarily belong to the instrument itself, I have before stated; and I will now endeavour to explain, though not difficult,

difficult, that it is less easy of application than this author has asserted. On this part of my subject, then, I shall be expected to go a little more into detail.

That the external incision should be bold and free, is the prevailing opinion among lithotomists, not only for the reasons which this author has assigned, but also to secure any artery that might require to be taken up, the necessity of which will sometimes occur, both from the enlarged diameter and irregular distribution of the arteries in some subjects, however accurately the parts might have been divided in the operation. It will be seen in the observations edited by Dr Thomson, p. 35, 51, 67, and 69, that hæmorrhagy was a source of great apprehension to Mr Cheselden, and that he, in conclusion, strongly reprehends the conduct of those whose practice it was not to secure the divided arteries by ligature. His words are (p. 69.) "Now, if Jacques, or others, who of late have been said to have performed this operation, whether by design or chance, did not take care to secure the blood-vessels, which, as yet, has not been supposed, whatever their dexterity in operating might be, their success at least can be no secret, for many of their children, and most of their men-patients, must have bled to death, as, he tells us, one of his own patients did, where the ligature had not been applied, "by an artery into the bladder." But to continue the description of the operation.

Having thus exposed the urethra, the next object is to make an opening through the membranous portion of it; and this I accomplish by placing the fore-finger of my left hand on the outer extremity of the prostate gland, bringing the back of the knife in contact with my finger, which thus serves for a guide. The point of the knife is then plunged through the membrane into the groove of the staff, and the incision extended from within outward, that is, in the direction of the bulb of the urethra, as far as may be thought fit, for the easy introduction of the beak of the gorget. Thus far every thing is plain and simple, the urethra is reduced nearly to the state of the female urethra, and the passage to the bladder made almost direct. And here I relinquish the scalpel altogether, and finish the incision with the *cutting-gorget*.

Having therefore ascertained that the beak of the gorget is in naked contact with the groove of the staff, I push the gorget cautiously forward towards the bladder, bearing the point "hard against the staff," "observing all the while that they do not separate," and very gently depressing the handle as the instrument advances, when the entire division of the prostate gland and destined portion of the bladder is soon unequivocally announced, by  
the

the full flow of urine. This, then, is executed at one *single* incision, which, as before observed, I have never found it necessary to enlarge.

But, perhaps, it may be objected to this method of operating, that however successful with these precautions in a distended state of the bladder, in a collapsed state, or when the patient had voided his urine a short time previously, the operation is rendered doubly hazardous. This objection, however, is negated by the result of my own experience. Always it has certainly been my wish to have the bladder well distended with urine at the time of the operation, both because a tense state admits of a more easy and clean incision than a collapsed one, and because the fundus of the bladder is then effectually removed beyond the reach of the gorget, and its sides are prevented from sinking into folds. Repeatedly, however, these advantages have been denied me, and I have had to operate where the urine had been immediately before parted with, and the bladder was consequently in a state of collapse.

Thus situated, I have proceeded through the different steps of the operation with even more than usual caution; and as soon as the advancement of the gorget, and dribbling of urine, have indicated the complete division of the prostate and bladder, I pause, and then by a slight elevation of the handle of the instrument, and depression of its beak, at once disengage it from the groove of the staff.

This simple movement will give security to this the most hazardous part of the operation. The concavity of the gorget will then give ready admission of the finger into the bladder, in order to ascertain the position, and magnitude of the stone, and serve as a conductor to the forceps;—and the stone may then be extracted in the usual way. And if, from the number of calculi, the repeated introduction of the forceps should be found necessary, the index of the left hand will serve for a conductor, and supersede the employment of the blunt-gorget, an instrument that I had considered as entirely obsolete.

In endeavouring to explode the cutting-gorget from practice, and revive the use of the scalpel, however modified from the common form, this author has very properly left the power of selection to the operator himself. Availing myself therefore of this liberal concession, and of the above explanation of the grounds of my own choice, I hope hereafter to escape obloquy for preferring a knife of the *figure* of the gorget: and if, at any future period, it should be judged expedient to enlarge the wound into the bladder, I will compromise the matter, by making the enlargement with the scalpel.

As success is the aim of us all, where this has been repeatedly, and expeditiously attained, surely, as a rule of prudence, we ought to be slow to change our means. In extracting a stone from the bladder, I have seldom been more than a few minutes, although I have always placed *celerity* secondary to *safety*; having ever present to my mind the well known adage of *sat cito si sat bene*, without a due regard to the import of which, from an affectation of dexterity, the lives of our patients will be frequently exposed to unnecessary hazard. However, these remarks might perhaps have been spared; because, I believe, the operation will, in general, be fully as soon executed by the cutting-gorget, as by the scalpel.

Such then is the *apology*, which I have to offer, for continuing to use the *cutting-gorget* in the operation of lithotomy. Yet, open to conviction, if by a still more ample experience, I should alter my opinion in favour of the common knife, I shall then without hesitation adopt it. And I have ventured to graft my *apology* upon the observations of Mr Lawrence, because, though I may differ from him in opinion, on this occasion, yet, from the perusal of his other works, I have derived both pleasure, and improvement.

Manchester, 20th May 1809.

### XIII.

*Case of very Copious Hæmorrhage from the Urethra, in consequence of the Application of a Bougie, armed with the Argentum Nitratum, to a Stricture.* By Mr SAMUEL COOPER.

**M**OST practitioners in surgery, who are in the habit of treating strictures on the plan recommended by Mr Home, must have had repeated occasion to observe a troublesome degree of bleeding, after applying the caustic to the disease. Mr Home, himself, has related several such instances, and I have in my recollection a few which have fallen under my own observation. The cases, which have been published by the above gentleman, only interrupted the progress of the treatment for a short time; about a week afterwards, the use of the armed bougie was generally resumed, and a cure ultimately accomplished.

Of late, however, I have met with an example, in which the bleeding was so profuse, and productive of such debility, that it would