tion on the surface of the exquisitely-tender iris, and the delicate lining membrane of the cornea. In its quiescent state, it occupied, as I have said, the lower segment of the cornea, with the fundus rising upwards, so as, in a moderate light, to observe half the disk of the pupil, and prevent the little patient from reading, or seeing objects distinctly, when placed low, but which, if raised to the level of the eye, she easily recognises. There has been no increase in its size since first observed, for, according to that beautiful law of nature, which adapts the size of animals to the sphere in which they are destined to move, and to their means of providing for their existence, it is not likely to attain greater magnitude. Unless there arises some indication of mischief to the delicate organs with which it is in contact, I should doubt of the expediency of attempting any operation for its removal, as the limited term of existence apportioned to such an animal will soon remove all apprehension of danger, and the solvent quality of the aqueous humour will speedily reduce it, when deprived of life, to a state in which the absorbents of the eye will exert their influence in carrying it off. That this is a species of hydatid, I think, no one will doubt; it has, however, not yet shown any signs of propagation; should this take place, a question would then arise respecting the necessity of an operation for its abstraction.

This case, which, so far as my knowledge extends, stands alone in medical annals, cannot fail to be interesting to the natural historian, physiologist, and pathologist. To the first it affords an opportunity of studying the habits of an animal in its native situation, which has hitherto eluded his scrutiny, by having occupied the hidden cavities of the frame; the physiologist can, through the clear medium in which it is immersed and surrounded, study the functions of its simple organisation; and the pathologist may contemplate with wonder the singularity of the disease, and perplex his mind with vain speculations on the nature of its origin, whether an *ovum* may have been deposited through the medium of the ophthalmic circulation, by insertion, or absorption, or whether, according to some philosophers, it is a production of spontaneous animation.

In Wardrop's work on diseases of the eye, he does not cite any case similar to this, but mentions the production of animalculæ in the eye of the horse in India, similar to the common *ascaris*, which the natives abstract by forming an opening in the cornea.

Woolhouse observed bladders of air, but

with deference to that author, might it not have arisen from some decomposition of the aqueous humour, attended with the evolution of gas?

Dr. J. Robertson, oculist in Edinburgh, to whom I wrote an account of the case, mentioned in his polite answer, that in the older authors there are accounts of hydatids in the anterior chamber, but on scrutiny they turned out to be an escape of the lens from its capsule, with which the case under consideration possessed not one characteristic in common.

Since writing the above report, a friend has informed me that a case described as one of hydatid in the eye, has been detailed in *Rust's Magazine*, of what date I am ignorant, but it was evident to him that it was not a hydatid, but a prolapsed lens. The above case has been verified by the observation of numerous scientific practitioners, who have received an invitation from Mr. Mackenzie, the eminent oculist of Glasgow, to afford the medical gentlemen of that city an opportunity of examining the case. She is at present in Edinburgh.

New Lanark, N. B., March 20, 1833.

DEFENCE OF
CLOT-BEY'S MODE
OF PERFORMING
LITHOTOMY.*

To the Editor of THE LANCET.

SIR,—As I observe that you have promised to make some remarks on the mode of performing lithotomy adopted by Clot-Bey, in reply to the objections of Mr. Mayo, and as I have myself paid considerable attention to the subject, I beg leave to put on paper and forward to you a few observations of my own on the operation, more especially as it was made the subject of conversation at your chambers, between Clot-Bey and yourself, when I had the pleasure of accompanying the Bey on his visit to you. The explanations so minutely given by Clot-Bey, on that occasion, were called forth, as you will remember, by my erroneously supposing that the operation which he recommended, and which he honestly acknowledged was not his, but *Vacca Berlinghieri's* of Pisa, was the same as the recto-vesical operation of Roche and Sanson.

I was not aware that Vacca had modified

* Mr. Costello has here entered so fully on the subject, that we shall allow his observations to supersede our own.—Ed. L.

his recto-vesical operation so far as to dispense with the incision of the rectum altogether, so that in listening to Clot-Bey I was learning a new and improved form of a method, which I had till then considered as justly condemned by the profession.

Clot-Bey first described the operation, assisting our comprehensions by a diagram; he then answered the objections made against it. All this was done in an interlocutory manner, which it would be impossible for me now to reproduce. I shall therefore give the substance of his statements only.

It has already been stated, [that this operation differs from the *recto-vesical*, in the rectum not being cut. The instruments used in performing it are, a double-edged straight bistoury, a straight knife, and a grooved staff. The straight knife has a very narrow blade, and is blunted at its point, to the extent of two or three lines or more. With these are the ordinary forceps, &c. Care should be taken to empty the rectum before operating. The patient is bound, and placed in the same position as for the recto-vesical operation. The operator introduces the staff, and confides it to an intelligent aide, himself standing or sitting before the patient. Holding the bistoury in his right-hand, he makes the integuments of the perineum, close to the margin of the anus, tense with the left, by applying the thumb on the right, and the index-finger on the left, taking care not to throw up the scrotum too much, nor to draw the integuments towards himself. Neglect of this precept might be followed by ecchymosis of the scrotum, and even by infiltration of urine. The skin should be stretched from one ischium to the other, and not from the coccyx to the pubis.

The operator now makes an incision, which begins at the very margin of the anus, leaving, however, this margin uninjured, and is carried along the *raphé* to the extent of an inch or twenty lines. This incision traverses the integuments, and those triangular fibres only of the sphincter which pass towards the white line under the raphe, where the different muscles of the perineum are confounded together with the bulbo-cavernous muscle, and stops only at the bulb of the urethra itself. The index-finger of the left-hand is now passed into the anterior angle of the incision, to feel for the groove of the staff. It is easily felt; the straight bistoury is now guided on the nail of this finger into the groove, and being held as a writing pen, the urethra is laid open to an extent equal to the external incision, and no more. He now lays down the bistoury and takes the knife, which he also holds as a writing pen; he introduces its blunt point into the groove of the staff at

the posterior angle of the wound; he then takes the handle of the staff in his left-hand from the assistant, and instead of pressing it downwards towards the perineum as the assistant did, in order to make it prominent in the place where the external incision was to be made, he now draws it upwards, resting it against the symphysis of the pubis, and inclining it a little towards himself, he passes the blunt-pointed knife in the direction of the staff into the bladder, with an obliquity from below upwards, so slight as to deviate but little from the horizontal.

When the operator has penetrated to the extent of about an inch into the bladder, without altering the position of the staff he elevates the handle of the knife towards the scrotum. The back is thus made to rest against the groove of the staff, while its extremity in the bladder departs from it, commencing its division of the neck of the bladder and prostate; the subsequent withdrawal of the knife completes not only the division of these parts to the extent required, but also that of the membranous portion of the urethra, and of the cellular tissue surrounding it, which might not have been divided in the introduction of the knife.

The operator now restores the staff to the assistant, and introduces his finger, guided by it into the bladder; the staff is then withdrawn. The reason for not withdrawing it when the neck of the bladder and prostate were to be divided should be stated. It is an axiom in surgery, that the parts, to be neatly and easily divided, should be rendered tense, to prevent their being carried before the edge of the knife out of their proper position. Now the staff resting against the symphysis of the pubis, steadies the prostate and urethra under the knife, while it carries them away from the rectum towards the pubis. With his finger, he is now able to judge of the extent of the incision, and if he considers it proportionate to the size of the stone, he introduces his forceps and withdraws it; if not, he introduces his blunt-ended knife on his finger, and enlarges the incision to the extent required. In extracting the stone, it should be carried out rather between the tuberosities than the branches of the ischium. If there be no reason to the contrary, it will also be advantageous to turn the branches of the forceps to the angles rather than to the sides of the wound; this will afford protection to the surface of the urethra, and the wall of the rectum, against the asperities of the stone. Clot-Bey did not, any more than Mr. Mayo, consider that there was any danger of wounding the ejaculatory ducts; but even if this objection were well founded, it might be easily obviated

by inclining the handle of the staff a little to the right, so that its groove, instead of corresponding exactly with the middle of the inferior posterior wall of the urethra, would present itself to the left of the median line, still on the same surface of the canal; a corresponding direction should be given to the knife, both in introducing and withdrawing it.

In comparing this operation with several other modes of cutting, Clot-Bey dwelt on the advantages which he believed it to possess over them. The passage which it made into the bladder was the shortest; it was formed in the widest space between the bones, through parts the least furnished with vessels of middling calibre, and the most remote from those of large size; it rendered infiltration of urine impossible, large stones might be extracted through the opening without lacerating or grievously contusing the soft parts against the bones. Now an operation which is simple in its mode of performance, which gives security against infiltration of urine, hemorrhage, and the contusions of violent extraction, diminishes, doubtless, the chances of a fatal termination. These propositions will be universally admitted. All these advantages belong also to the rectovesical operation, but that exposes to fistula and tedious cure, while Vacca's operation, in which the rectum is uninjured, is secure against such unfavourable results.

On examining any correct sketch of the parts, exhibiting a side view of the bladder, prostate, urethra, and rectum, in their relations with the bones of the pelvis, it will be obvious that the neck of the bladder may be cut in its inferior posterior part, without injuring the rectum, and the prostate divided, either slightly, or deeply, or even entirely through, without hurting the intestine, as loose cellular tissue is interposed between them. There exists a considerable space between the rectum and the bulb, and all these parts may be cut without injuring the intestine.

Whatever be the mode of operation employed in the perineum, no larger opening can be obtained than is formed in this; and even all other modes fall short of the extent obtained in this; for it must be remembered, that the posterior boundary of the incision is in the cellular tissue which covers the anterior part of an empty intestine, whose walls offer no resistance, but are applied to each other when undistended; thus the anterior and posterior surfaces are in contact, and both may be pressed back against the sacrum and coccyx, in the same manner as they are by the head of the child in parturition.

To place this in its strongest light, a few words of recapitulation may be per-

mitted. If the rectum remain untouched, there can be no fistula in the rectum, neither can we have any other of the evils which follow from wounding it. If the ejaculatory duct be untouched, the evils ascribed, whether rightly or wrongly, to a wound of them, are avoided. If the smallest branches of vessels, instead of the large trunks, be divided, the loss of blood must be comparatively less. If the knife do not go near the large vessels, those vessels are not divided.

It is obvious that the widest apertures are the best for the extraction of bodies of large size; that a wound may be enlarged, if one of its boundaries can yield or retire considerably; that a knife with a blunt end can neither cut nor puncture with such end. It is upon such self-evident truths that the advantages of this method are established. A method so simple would have challenged universal attention, had not the discovery of lithotomy happily opened brighter prospects to suffering humanity.

I shall not now reproduce the flattering observations which Clot-Bey made in your presence, upon the operation he had seen me perform that day on a patient of 77, with my improved percussor; but as a defender and propagator of the operation of Vacca, I think it will be interesting to your readers generally, to know what opinion this distinguished surgeon entertains of the method which I practise. "Lithotomy," said he, "will supplant lithotomy in all civilized countries where individuals can devote themselves to specialties in surgery. In uncivilized countries, the cutting operation will continue to be practised."

I have endeavoured to give the Bey's explanations as faithfully as possible, and in the hope that he will be satisfied with the attempt, I have the honour to be,

Sir, yours, &c.

W. B. COSTELLO.

7, Parliament Street, Westminster,
March 12th, 1833.

MURIATE OF GOLD IN DROPSY.

Dr. Wendt relates in *Rust's Magazin*, B. XXV. eight cases of dropsy, of which seven were cured by the muriate of gold; the eighth case was complicated with consumption. This remedy has been employed for several years in the hospital at Breslau, and with success. Most of the cases were the sequelæ of intermittent fever.