external openings of the perforated parts were extremely irregular and jagged at the edges, presenting the appearance of having suddenly been burst. One of these ruptures was situated about seven inches from the anus, and the other existed at the junction of the rectum with the colon.

A scirrhus stricture of the rectum was discovered, situated about three inches from the anus, presenting a ring of mucous membrane and subjacent cellular tissue, so much altered in structure and thickened, as almost completely to block up that passage. In some parts it was semi-cartilaginous in its composition. On the mucous surface of this stricture were several ulcerated slits, or fissures; some of them running in a direction with the long diameter of the intestine, and others having a spiral direction, and intersecting those others. The extent of the stricture was three-fourths of an inch, and the gut above the stricture was thrown into large pouches.

The large omentum was completely shrivelled up, and formed into a kind of rope, lying across the lower edge of the stomach. In many places the peritoneal surface of the small intestines showed strong evidence of severe inflammatory action, as also did the peritoneal lining of the abdominal parietes. Small pulpy shreds of lymph were scattered about, and loosely adherent to the parts on which they were situated. The mucous coat of the small intestines did not present any diseased appearance, except slight vascular enlargement of some of the mucous cryptæ or glands.

The cæcum and right side of the colon were but slightly affected. The stomach was healthy, the mucous coat towards its fundus being only a little engorged with blood, giving it a dirty-red appearance. The liver was smaller than usual; its surface was of a deep dirty-greenish colour; when cut into, its colour was natural, but its substance was firm, condensed, and heavy for its size. The kidneys were normal in their structure.

The cavity of the abdomen contained about 6lbs of a bloody fluid, mixed with feculent matter, and of a most detestable smell. I could not get the odour of it off my hands for nearly two days, and only then by repeated washings, which almost deprived them of cuticle.

In the thorax, the heart and its envelope were quite healthy, but both lungs were much condensed and engorged on their posterior or dependent parts. The trachea contained a quantity of frothy mucus mixed with blood, the result of the extreme agony and struggles of the patient while dying.

The brain and its membranes were healthy; a small quantity of serum, about a drachm, was found in the ventricles. The veins and sinuses contained much blood. The verdict of the Jury was "Died by the visitation of God."

I had a conversation with some members of this man's family who attended the inquest, and they told me that the deceased had been much in the habit of drinking large quantities of raw whiskey; but they stated that his general health was good, only that he sometimes complained of "pain and soreness in the bottom of his belly." He never was by his health incapacitated from doing his duty as bailiff, as his illness lasted only a very short time, and was extremely slight.

This case is an additional confirmation of the fact that extensive disease, and that of long standing, may exist in the intestinal tube without producing any severe symptoms, or even much inconvenience to the patient, until it causes the fatal termination.

CASES OF STONE

TREATED WITH

LITHOTRIPTIC INSTRUMENTS.

To the Editor of THE LANCET.

SIR,—I beg to forward to you reports of three cases of calculus in the bladder Treated successfully by lithotripsy, and to request their insertion in your valuable Journal. I have the honour to be, Sir, your obedient servant,

HEURTELOUP, Baron, M.D.

18, Holles-st., Cavendish-sq.,

May 16, 1835.

CASE 1.—Patient 70 Years of Age—Several Calculi—Sacculus in the Bladder—Modification of Percuteur to meet the Case—Six Applications—Recovery, since nearly 18 Months.

Mr. Richard Julian, seventy years of age, tall and stout, but of rather a weakly constitution, occupying a situation in the Treasury of Ireland, observed that for about three years he was in the habit of voiding bloody urine after taking exercise either on foot or in a carriage. After a time this evacuation of blood was accompanied with great pain, which became so severe and constant, that he was induced to consult Mr. Colles of Dublin, who sounded twice, and ascertained the presence of a stone in the bladder. At the joint recommendation of this gentleman,

and a friend of the patient, Capt. Armstrong, whom I had cured of the same complaint three years previous, and who is still (five years after the operation) in perfect health, Mr. Julian came to London and applied to me. I sounded this patient on the 31st of October, 1833; the bladder and urethra were in a tolerably good state, but bled at the mere contact of the catheter; the contractility was such, that four ounces of water were retained with difficulty. There were several calculi in the bladder, varying from about thirty to forty lines in circumference. The collision of these was very distinct in sounding. It was not possible to move them about in the bladder, being only able to level them with the convexity of the catheter, and not to pass the instrument underneath them.

I performed the first operation on the 4th of November, and employed the *percuteur*; the calculi appeared all situated in a sort of depression or sacculus, and being pressed one against the other, it was very difficult to pass the branches of the instrument between them, which is absolutely necessary before one can be seized. After having made two or three fruitless attempts to seize a stone, I considered that it would be more prudent to desist, and employ an instrument more suitable to the anomaly which I suspected. There appeared to be a sort of collar or ridge to this sacculus, which projected, more especially during the contraction of the bladder, and rendered it difficult to seize the calculi without also laying hold of the bladder. Having confirmed my opinion on this subject, by further and suitable examinations, I considered that by employing a *percuteur* with the immoveable branch *long*, and the branch that moves *very short*, I should much facilitate the action of grasping the stone, and do away with any risk in the attempt; for whilst the small branch acted so as to seize the stone, the long branch would keep away any portion of the bladder.

This instrument I am happy to say did realize my expectations, for in six short applications the difficulties of the case were entirely overcome, and the patient was restored to perfect health.

This case affords a proof, that notwithstanding an anomalous conformation of the bladder, a considerable quantity of calculus concretion may be removed by lithotripsy; difficulties of this nature are often met with, but not to so great an extent. It also shows the importance of well and carefully considering the nature of the case in making use of lithotriptic instruments, and seeing that they are suited to the peculiarities which may pre-

sent themselves. Serious consequences might have resulted had I persisted in the employment of the *percuteur*, as usually constructed. The varied and numerous anomalies which may occur, require different means of surmounting the difficulties which are produced. Lithotripsy, therefore, must be considered as an art, replete with important and interesting particulars, and not merely as a means of curing a complaint, which remains the same whatever be the nature or difficulties of the case.

Mr. Julian was operated on more than a year and a half ago, and still continues quite well. The operation was performed in presence of Mr. Quin, of *St. Bartholomew's Hospital*; Mr. Smith, a friend of the patient; and Mr. Biggs.

CASE 2. *Patient aged 63; two large flat calculi; three applications; recovery, since nearly 20 months.*

Mr. Elwick, from Higham Ferrers, Northamptonshire, 63 years of age, of a good constitution, having enjoyed almost uninterrupted good health, has voided, for nearly twenty years, at different intervals, but with little or no inconvenience, gravel resembling lentils, but rather more elongated. For the three years previous to his applying to me he had ceased voiding them; but from that time he observed symptoms of stone in the bladder. I sounded Mr. Elwick on the 13th Sept. 1833; the urethra was moderately capacious excepting at the orifice, the bladder of good size and dilatable, but irregular at the *bas fond*, where there were two flat calculi, about as large as walnuts, but not easily moveable. The patient voids his water rather frequently and in small quantities. The first operation was performed the 18th September. The bladder not being very irritable I was able to continue the action of the *percuteur* for six or seven minutes, so that in three applications the calculi were entirely removed.

The feature worthy of remark in this case is the rapidity with which the cure was completed, although the calculi were of considerable size. This may be accounted for by the small degree of sensibility, and the facility which was consequently offered me of rendering the operations of longer duration than usual. This quiescent state of the bladder would also account for the patient feeling so little inconvenience from the presence of two considerable calculi in his bladder; but may not this latter circumstance be in part attributed to the flattened shape of the stones? Since the month of September, 1833, Mr. Elwick has enjoyed perfect

health. Mr. Elwick's son and Mr. Biggs were present at the operations.

CASE 3.—*Patient aged 63; good constitution; four applications; complete recovery, since 18 months.*

Mr. Branfill, of Walthamstow, 63 years of age, of a good but rather plethoric temperament, had experienced, for about five years, occasional pain in the loins, and some time after commenced voiding gravel of a reddish colour. Three years after this there was considerable derangement in the functions of the bladder; but at first these symptoms were not of sufficient importance to induce the patient to seek advice. They soon, however, increased in severity, and Mr. B. was sounded at two different times, but no stone was detected. Some time after he consulted Sir Benjamin Brodie, who discovered a calculus, and recommended the case to me.

I found, on sounding, a moderately capacious urethra; a bladder which allowed the injection of five ounces of water, but which was contracted at the *bas fond*, where there were several calculi about the size of large filberts. These were all removed in four applications of the *percutur*, of about three minutes' duration each, and the patient found himself relieved from every unpleasant symptom. These operations were performed in the presence of Dr. M'Dougale, Dr. Maling, Mr. Creed, Mr. Rowe, Mr. Biggs, &c.

The only remark that this case suggests worthy of attention is the difficulty that was experienced in grasping the calculi, on account of the *embonpoint* of the patient. This difficulty was occasioned by the *bas fond* of the bladder being under such circumstances considerably elevated, which has a tendency to throw the calculi to the sides. For a year and a half Mr. B. has not experienced the smallest return of the complaint, and is now in perfect health.

COMPLETE OBLITERATION OF THE ABDOMINAL AORTA.

THE following case of obliteration of the abdominal aorta is, perhaps, the most complete and best detailed of any as yet recorded in the annals of science, and is particularly worthy of notice in an anatomical point of view. We give merely the most prominent features, referring for a more minute description to the *Archives Gnrales* for May:—

CASE.—A woman, fifty-one years of age, of feeble constitution, commenced about four years before her reception into *La Pitie* (March 1835) experiencing some numbness in the right lower extremity, and a few months afterwards in the left. Palpitation of the heart soon came on, and persisted; progression now became difficult from the state of the legs, which were numbed, cold, and the seat of constant pain. Her sufferings became aggravated during the last year, and the patient entered the service of M. Louis at *La Pitie*, at this time the lips were violet-coloured, the heart beat tumultuously, and the pulse was irregular. An hmoptysis, accompanied with extreme oppression, soon set in, and the patient died ten days after her admission into the hospital.

Explanation of Plate.

Fig. 1.—External form of abdominal aorta; *a* Celiac trunk; *b* Superior mesenteric; *c c* Renal arteries; *d* Inferior mesenteric; *a b* and *c d* Level of the cuts across the artery which exhibited the appearances in Fig. 3 and 4.

Fig. 2.—Aorta opened; *a a* Reddish coagulum extending from the renal arteries to the inferior mesenteric; *b* Probe in the lateral canal; *c* Right renal artery flattened out; *d* Celiac axis ditto; *e* Superior mesenteric ditto; *f* Inferior mesenteric.

Fig. 3. Transverse section of the aorta at the level *a b*; *a a* Red clot; *b* Infundibulum resulting from the detachment of the clot posteriorly.

Fig. 4.—Transverse section of aorta at the level *c d*; *a a* Firm tissue obliterating the aorta, and surrounded by the arterial parietes contracted and folded upon it.

Autopsy.—Upon examination after death, the left auriculo-ventricular orifice was found considerably contracted, and the edges of the mitral valve were covered with a cartilaginous incrustation, as thick as the moiety of a coffee-grain.

The aorta, examined externally, presented its normal volume and disposition as far down as the origin of the renal arteries, immediately below which it was converted into a species of solid, fusiform chord, having twenty-two lines of circumference above, twenty-six at the middle part, and then gradually contracting down to the origin of the inferior mesenteric, where it presented only fourteen lines in circumference: from this point it descended to the sacro-vertebral angle, in the form of a dense round chord, about the size of a large urethral bougie. The