dealt with. Considering the marked manner in which Sir Henry Thompson calls attention to the cases of small calculi removed by me, and the importance he seems to give to his having no calculi below 20 grains in his list, it might be reasonably anticipated that he is in the habit of dealing with larger stones than I am; and that the average weight of his calculi would show a large excess over that of mine. But what are the facts of the case? I refer the reader to the very able monograph on Lithotripsy, in Heath's *Dictionary of Surgery*, written by Mr. Cadge, of Norwich, in which, in a kindly notice of my work, he points out that the average weight of stone in my first 108 cases of litholapaxy was 317 grains (nearly $\frac{3}{4}$ of an ounce), whereas the average weight in Sir Henry Thompson's 75 cases done by Bigelow's method was 130 grains (a little over $\frac{1}{4}$ of an ounce). That is to say the average weight of my calculi was nearly two and a half times larger than Sir Henry Thompson's. These facts dispose of the erroneous impression I have referred to.

A CASE OF SUPRAPUBIC LITHOTOMY.

By ERNEST HUMPHRY, M.R.C.S., L.R.C.P.,
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A. W., aged 65, for the last three years has suffered from frequent and painful micturition, much aggravated by exercise. He had to give up riding on account of the pain it caused, and because of the quantity of blood passed with the urine afterwards.

On December 16th, 1887, I sounded him, and at once came down on a stone that seemed to be of considerable size. He was anxious for its removal, saying he would sooner die than suffer as he had been doing lately.

On January 4th, 1888, Dr. McBurney administered chloroform and Dr. Clarkson assisted me with the operation. A Barnes's india-rubber bag was first put into the rectum and distended with air. A silver catheter was then passed into the bladder and tied in, and about 8 ounces of water injected through it and retained. There was now dulness on percussion to about three inches above the pubes. An incision was made about four inches long, in the middle line, extending to the pubes, and the integuments, fat, etc., divided down to the bladder, which was easily made out by pressing up the catheter. The bladder was now seized laterally with two pairs of artery forceps near the pubes, and an opening made between them. The contained water immediately rushed out and the stone was easily felt. The catheter was now removed, and the incision in the bladder enlarged upwards and downwards, great care being taken to avoid wounding the peritoneum. The stone was then easily removed. The edges of the bladder were sutured with catgut, the mucous membrane not being included; the skin and deep structures were brought together with silk sutures, a drainage-tube being inserted at the lower end of the wound, which was dressed with carbolic oiled lint. A soft catheter was tied in the bladder *per urethram*. The operation lasted about an hour; the patient bore it well and was left in good condition. 10 P.M. Very comfortable; pulse 72; temperature 99.2° F.; blood-stained urine escaping freely through the catheter; a quarter of a grain of morphine hypodermically administered.

January 5th. 7 A.M. Passed a good night; pulse 72; temperature 99.2°; urine clear; some redness and oedema at lower end of wound and on dorsum of penis. 11 A.M. Vomited; much pain in wound; pulse 84; temperature 101.2°; redness on penis increasing; the three lowest sutures removed and the wound opened slightly; a quarter of a grain of morphine used hypodermically. 11 P.M. General condition much improved; feels quite comfortable; pulse 78; temperature 99°.

January 6th. Good night; pulse 78; temperature 99°; wound healthy, redness less; urine offensive; catheter changed and bladder washed out with a solution (one drachm to a pint) of boracic acid.

January 7th. Suffered in the night from flatulence; an enema administered; while straining during action of the bowels some urine escaped through the wound.

January 14th. Has been going on well; upper part of wound healed; urine passing freely through its lower part, very little escaping through the catheter, which is frequently getting blocked with discharge.

January 18th. Much improved; the catheter has been taken out, and, although the urine escapes freely through the wound, he has passed some twice naturally *per urethram*. A thick pad of lint

was firmly strapped over the wound, and he was allowed to get up.

January 14th. Wound healed; has been walking out, and is quite well; expresses himself as feeling better than he has done for years; no trouble with micturition; can hold his water comfortably for six hours; urine clear and free from albumen.

The stone was oval in shape, weighed just over 5 ounces, and was eight inches and a half in its largest circumference. I have not had an opportunity of cutting it, but its outer crust is evidently phosphate of lime. The evident size of the stone gave me no option but to adopt the suprapubic operation. The only anxiety the case gave me afterwards was the redness that appeared about the wound and penis, probably the result of some very small extravasation of urine.

TWO CASES OF SUPRAPUBIC CYSTOTOMY FOR VESICAL TUMOUR.

By GILBERT BARLING, B.S., F.R.C.S.,
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CASE I. *Fimbriated Papilloma: Recovery*.—M., a stout man, aged 67, was admitted to hospital, September 22nd, 1887. He stated that for the last five years he had frequently noticed blood in his urine, and that it appeared without cause and disappeared in like manner. Eighteen days before admission an unusually severe hæmorrhage commenced, and continued without intermission until operation, twenty-one days after it started. The urine, always deeply tinted with blood, and specially so towards the end of micturition, was acid in reaction and free from pus; micturition was frequent, nearly every hour in fact, but without actual pain, although at times there was discomfort from the passage of clot. Careful and repeated examination of the urine failed to detect fragments of growth. Palpation failed to detect any enlargement of the kidneys. Rectal examination revealed general enlargement of the prostate, but bimanually no tumour or thickening could be felt in any part of the bladder. The diagnosis made was vesical papilloma, and the high operation was determined on. When the bladder was opened the finger detected a soft sessile tumour the size of a rather small strawberry, situated at the posterior part of the floor. The growth was easily removed with a scoop, leaving the coats of the bladder apparently healthy. The incision in the bladder was treated in the ordinary way, no attempt being made to suture it. The patient made a slow recovery, and remains well at the present time. Microscopic examination of the tumour showed it to be a papilloma.

CASE II. *Scirrhus Carcinoma: Death: Partial Post-mortem Examination*.—Mr. —, a thin, nervous man, aged 61, the subject of chronic bronchitis and asthma, was seen by me in consultation with Dr. Edginton. There was a history of intermittent hæmaturia for two years, the attacks varying both in frequency and severity, but, on the whole, becoming decidedly worse during the latter part of the time. Examination *per rectum* detected some enlargement of the prostate, but bimanually no tumour or thickening could be felt in any part of the bladder, nor could anything be made out by that method when the patient was anaesthetised for operation. The sound was introduced with some difficulty, but detected nothing abnormal in the bladder, nor did it excite hæmaturia. Palpation failed to detect any enlargement of the kidneys. The urine was examined several times for the presence of tumour fragments, but none were found, nor was there any pus present. During the attacks of hæmaturia micturition was frequent, and pain was produced by the passage of clot, but in the intervals there was neither pain nor increased frequency. The diagnosis made was vesical tumour, probably papilloma. The patient's sight failing him, he was seen by Mr. Priestley Smith, who found him suffering from "incipient atrophy of both optic nerves, probably due to the frequent and profuse losses of blood by the urethra." On March 7th, assisted by Dr. Edginton, I performed suprapubic cystotomy, and, on passing my finger into the bladder, detected a flat sessile growth about the diameter of a crown piece, situated on the left side of the posterior wall, and encroaching on the vertex; the centre of this patch was soft, and bore short papillæ; the margin was slightly raised and indurated. The papillary surface was scraped away with a scoop and the finger-nail, a drain was placed in the bladder, and the incision in the latter left unsutured. During the whole proceeding we had the utmost anxiety from the depressing effect of the chloroform on the patient's heart