straining, similar to the case of No. 1, but the bag did not burst, however, and the straining subsided in a few moments. The patient had micturated just before being anæsthetized, and no residual urine was found in the bladder. In the abdominal incision two small vessels required to be twisted, the peritoneum did not present itself, and the bladder was seen bulging slightly at the bottom of the wound; this was hooked up and a nick made into it to admit the finger tip. A large stone was immediately felt; the bladder wound was enlarged by the fingers and two stones were removed, the larger one almost a complete sphere 5¼ inches in circumference, mulberry, weighing slightly over two ounces; the other almond-shaped, weighing eighteen grains. The double drainage tubes were inserted, two stitches were put through the abdominal wound, and it was dressed with boracic acid and gauze. 17th: The pulse, since the operation, has not exceeded 82, nor has the temperature been above normal; somewhat colicy pains in the bowels, possibly due to the calomel administered on the night previous to the operation. From the 17th to the 23rd nothing to note in particular; on the 23rd the first urine passed by the penis, pain insignificant. On the 24th he was on the lounge, and on the 8th of April he was downstairs, the wound healed, and from that day on he was out walking.

Subsequent history: On the 3rd of May he complained of pain in his left lumbar region, tenderness extending into the groin, œdema of the whole left side, extending from the hip almost to the eighth rib, well over towards the umbilicus. The tenderness was excessive, and most prominent over the region of the kidney; feet swollen; temperature 100°; pulse feeble and rapid; several slight chills. The urine was scant and contained large quantities of urates; his tongue became dry and parched, his temperature ran up to 101½°; pulse very flighty. He died on the 11th of May, eight days after attack. I show the specimen there discovered. All the organs of the body were healthy with the exception of the left kidney, which contained a large calculus; the perinephritic fat was in a state of acute inflammation, etc. The operation is seen to be in no way responsible for the patient's death.

In Case No. 1 you will remember that he had what was called a "typhoidal" attack in October, 1890, with a relapse in December. Now, I do not suppose that these attacks were typhoid fever at all, but were pyæmic, and that the cause was an accumulation and retention of pus in the sac in the bladder. I show you here a specimen of a bladder that has in its walls one large and many smaller sacs. (*See cut.*) I have two other specimens of a similar kind, one of them occurring in the female. In none of these cases was cause found for the development of the sacs. Suppose with me for a moment that at the time of his first symptoms in 1885, or subsequently, a small calculus was deposited and retained in one of these pockets, and that even from its slight

weight continually increasing the sac enlarged, but the mouth remained about the same size, small enough to retain the accumulations. We can easily account for the symptoms that stimulated the typhoid condition, and also see clearly from whence came the great discharge of ropy mucus and pus that he refers to as having occurrred in February, 1891. It will also explain why the surgeons had been unable to find the stone when it was searched for. Dr. Henderson was of the opinion from the great emaciation, night sweats, and other symptoms, that it was a case of tubercular ulceration of the bladder. Many of the symptoms certainly looked that way, and the chances of touching the stone so sacculated were small, if not at that time absolutely impossible.