recommended by Allerton and got my finger on the stone. Now I had to encounter a second difficulty, for, consequent upon the fistulæ before mentioned, it was impossible to keep the bladder distented with water, and the stone therefore was grasped by the structures of the viscus. Passing a pair of forceps, armed with chamois, I grasped the stone, not without trouble, and although I used the most gentle manipulation, I could, still, it being so soft that the outer layer gave way without producing any change in its position. Again and again I attempted to remove it, but without success, and on passing the forefinger of the left hand freely into the bladder, I found that the stone was attached to the right side of the organ. Fixing the stone with the finger, I now passed the curved scoop above and behind it and broke it in two and removed the part that was free from the bladder. Again introducing the finger, I found the remainder of the stone in a pouch or hernial sac of the bladder, and by the aid of the scoop I was able to dig it out and remove it. This done, I washed the bladder out with tepid water until all debris was removed and the finger could no longer detect any detritus in the cavity. Dr. Adlington also satisfied himself that the cavity was clear. The patient was now replaced in bed, and having recovered from the chloroform, and expressed himself as feeling "all right," I left him for the night in charge of Dr. Valentine. After this he had not a single unfavorable symptom. The incision healed kindly in a few weeks, and as it healed the fistulæ diminished until they ultimately closed, so that, by Christmas, instead of being in his grave, he looked forward to many years of comfort and usefulness.

For over a year and a-half Mr. F. continued in good health, but symptoms of stone again showed themselves, and having gained a lesson from the past, he at once consulted me. The sound now clearly indicated the presence of two small stones between the size of a filbert and an almond. These I determined to crush. The urethra could be fully dilated, and the bladder, though it bled easily, was not, however, what might be termed irritable or painful on exploration.

Consequent on the freedom with which blood flowed, I could not at once finish the crushing, but had to submit the patient to several sittings, when I ultimately got the organ perfectly clear once more. After each crushing, I washed the bladder out freely with water or dilute acid, and continued the dilute acid for some time. Ordered a total change of diet and beverage and small doses of mineral acid to be taken internally.

Under this treatment the patient has continued in excellent health for one or two years and doubtless may live to more than an average age.

In reviewing this case it would seem that hernia of the right side of the bladder had taken place prior to the formation of the calculus, and that the stone had first formed in the hernial pouch and thence spread into the cavity of the bladder, and that the irritation of the portion of the pouch produced ulceration of the mucus membrane, which allowed the urine to pass into the pelvic cellular tissue, whence it forced its way in the two directions named, as the sites of the fistulæ; or that the stone first formed in the bladder and blocking up the orifice of the urethra produced the straining which acted as the exciting cause of the hernia vesicæ, and that the small stone subsequently was washed into this pouch, adhered to its lining membrane, and proceeded to grow etc., as above described.

One important fact established by this case is, that *a stone may be crushed although the bladder does not contain or retain any water*, provided proper care be taken in using the instruments, for in this case, after the reformation of stone, the fistulæ which for a length of time had been closed, opened up again, and each time I tried to wash out the bladder after crushing, so soon as a couple or three ounces of fluid were thrown into the bladder, it began to pass away by the fistulæ, especially the one at the tuber ischii.

Again, much has been said and written about the best mode of incising the prostate and superficial structures to enable the surgeon to extract a large stone whole. In fact some surgeons seem to think that it is better to run the risk of killing a patient by over free division of the prostate and its capsule, or by using an undue amount of force, laterally and antero-posteriorly, etc., rather than that the *stone* should be in any way injured, and I have myself on various occasions seen a surgeon use his utmost