tion involving the welfare of the insane and the duty of society to that unfortunate class.

Finally, every officer of the central lunacy commission should be required, as in Scotland, to take an oath to keep secret all such matters as might come to his knowledge in execution of his office, except when required to divulge the same by legal authority, or as far as he should feel called upon to do so for the better performance of his duty.

In the necessarily brief time which I have felt justified in occupying, I have endeavored to give an outline, in as concise a manner as possible, of what I conceive the simple duty of the State to the insane to be, in a most important matter, touching the direct interests of most—at least the sympathies—of all of us here. Where so much demands accomplishment, cannot our noble profession inaugurate measures to bring about the changes that are required, and help to guide a movement, which, with fewer or more mistakes as we “coöperate” or not, an enlightened public opinion must sooner or later set in motion? The superintendents of our asylums are doing a vast deal in the direction of improved methods for the treatment of the insane, for which they deserve the gratitude of the profession and of the public. They will be only too glad to coöperate in any wise way for carrying that work still further.

LITHOTRIPSY, WITH ENTIRE REMOVAL OF FRAGMENTS AT SAME SITTING BY BIGELOW'S ASPIRATOR.¹

BY NORMAN L. SNOW, M. D., OF ALBANY, N. Y.

SURGERY is constantly making rapid strides, not only in the matter of wholly new and original operations, together with many useful and happy modifications of almost classic methods, but as well also in the mechanical department. In fact, this latter must keep pace with the former, and the majority of surgeons owe to some brother operator, or mayhap ingenious inventor, much of the credit that accrues to them through brilliant results by the more ready methods. Now if this be so in a general sense it is especially true of certain departments, and in no one perhaps in a more marked degree than the genito-urinary. Of the divisions of this latter, perhaps, the bladder can justly claim an equal share, and for the present demands our attention in the consideration of stone and its removal safely by the most speedy method.

Lithotomy is probably the oldest, and litholapaxy, so called, the most recent, lithotripsy and lithotripsy occupying a more intermediate position as to advocacy. Mention of boring and crushing stone in the bladder is made in the Hippocratic writings, but seems not to have been practically carried out, and it was not until as late a day as 1813 that the operation seems really to have been undertaken with any degree of success. In 1817 Civiale's attempts first became noticed, and after more fully perfecting both method and instruments he satisfactorily demonstrated his ideas on the living subject in 1824, and thus established for the operation a permanent place in surgery. His method, however, was lithotripsy proper, the stone being drilled and crushed or ground, the detritus being partly washed

out and partly expelled by the bladder. The operation of lithotripsy, or crushing, had not up to this time been undertaken, the first instruments for which were not constructed until some months after Civiale's public demonstration. Mr. Hodgson, of Birmingham Hospital, was the first to give prominence to this latter method by a successful operation in 1825. Since this date both operations have steadily progressed in favor and nicety of accomplishment under the leadership of such master spirits as Civiale, Baron Heurteloup, Brodie, Aston, Key, Ferguson, Hawkins, Coulson, and Sir Henry Thompson, until it seemed very little more could be desired. But the end was not yet, for with all their skill and ingenuity, and notwithstanding the evacuating apparatus of Sir Philip Crampton and Mr. Clover, with Thompson's modification of the latter, more than one sitting was usually found necessary to fully complete the operation, and it fell to the lot of our distinguished countryman, Professor Bigelow, to so perfect the mechanical part as to render unnecessary but one attempt at the complete removal of any stone capable of expulsion in this way. This was brought about more by fearlessness on the part of the operator than by any marked improvement in appliance, as in his procedure time is a factor of no importance, a directly opposite conclusion from that of all prominent authorities, and the key-note to all future successes in this direction.

Formerly, when lithotomy was much practiced, the small and brittle stone was operated on with more anxiety than the hard and larger; now, on its first detection the surgeon feels he can relieve the bladder of its enemy without endangering his patient but little more than if he were simply to introduce a large bougie.

CASE. Robert A., American by birth, age fifty-three, average weight one hundred and sixty-five pounds, height five and a half feet, habits regular, temperament sanguine nervous. No family history of any moment; neither rheumatism or gout had been inherited; father died at age of fifty-six from lung trouble, resulting from exposure. His early life and manhood had been passed in the West, where the water-supply was from the turbid Mississippi and vicinity. A cigar maker by trade, he worked for a number of years at “damming tobacco.” In this the operator is obliged to stand at a bench, moistening the tobacco with a spray of water ejected from the mouth. In this way swallowed a quantity of water, in addition to which he drank a great deal of same fluid. Of English descent, he inherited a fondness for hearty living, and was in the habit of indulging in hot meat suppers, drinking at times a moderate quantity of ale or lager. Did not take much out-door exercise, and was not very cautious of exposure. Often when fatigued would take large draughts of ice-water and sit in currents of air. Was always well, so paid little regard to preservation of his health. Contracted gonorrhœa when a young man, and this became a long-continued gleet. Has had several slight attacks of rheumatism, but general health good. First noticed trouble in micturition in spring of 1879, symptoms being pains in back, loins, and thighs, with frequent desire. For this I was consulted in June, 1879, his weight at that time being one hundred and sixty-seven pounds. So frequent was the desire to urinate that he had constructed at his place of business a urinal handy by his work, and thus saved a great amount of running up and down stairs.

At no time had there been any evidence of renal cal-

¹ Read at a meeting of the New York State Medical Society, February, 1881.

culus or kidney disturbance. During the summer of same year received a severe fall striking lumbar region on back of a chair; the pain was very severe but yielded to simple treatment. Consulted me in November, 1879, for a feeling of weariness about back, loins, and thighs, accompanied by frequent urination with pain and tenesmus, also burning in perineum and end of penis. Urine contained pus, mucus, oxalate of lime, uric acid, and bladder epithelium. Put him on the alkali anodyne treatment with strict injunction as to hygienic details, dieting, etc. Diagnosed chronic cystitis and symptoms continued during following winter with remission and exacerbation.

Examined for calculi at different times but could detect none. The bladder was washed out several times during the winter and spring, with different medical solutions, the walls each time being well distended.

An analysis of urine in June, 1880, gave 1022, neutral, trace of albumen, blood, mucus abundant, uric acid crystals and epithelium. Was advised a change during heated term and accordingly went to the Canadas. Was greatly benefited thereby and remained very well until the cooler months, when a relapse of the old trouble came on. Could now retain his water but a very short time, and had a pain along urethra, stream often double, stopping at times then recommencing. Voided it best in recumbent position. Pain in glans penis was described like tingling of a nerve in end of finger. Examined him in October with Thompson's short curved sound and detected a roughened gritty feel in left posterior fundus of bladder.

One month later, at my suggestion, he was seen and examined by Dr. Van Derveer, who felt quite positive he detected a small stone. In December it could be distinctly felt, and for a few weeks seemed to increase rapidly in size so that a very satisfactory click could be obtained. Advised an operation, to which he readily assented; accordingly on December 27th, assisted by Drs. Van Derveer, Shanks, Perry, and Mr. Furbeck, student, the operation of lithotripsy was undertaken. The bowels had been moved the night before and a light breakfast had been taken; ether was administered by Dr. Perry, the patient coming under its influence nicely.

The bladder was injected, and a lithotrite having been introduced, the blade was pressed well back against the posterior fundus, the stone being seized quite readily. It proved quite brittle, all portions being crushed in a short time. Experienced but little difficulty in the introduction of Bigelow's large sized evacuating tube, and a moderate suction force with the exhausting bulb soon gave evidence in the glass receiver that the work had been satisfactorily accomplished. Was obliged to recrush a fragment too large for the tube, but this was soon disposed of. An introduction of sound failing to detect the slightest remaining portion the operation was completed.

Entire time occupied was thirty minutes, weight of fragments eighty grains. No vomiting or unpleasant effects from ether, an unusual circumstance. The patient was placed in bed between woolen covers and given ten grains of sulphate of quinine with slight anodyne. Found him on evening of same day quite comfortable, had no chill, passed water quite freely, there being but a slight tinge of blood. Some pain in iliac region, but on the whole comfortable.

December 28th. Passed a good night, perspiration free, some uneasiness and smarting in passing water,

but no severe pain. Blood continues to be present in small quantity, temperature and pulse good.

On the second day introduced a soft catheter easily, and washed out the bladder. Continued quinine in two-grain doses four times daily, with instructions to use diluents freely and exercise care in diet.

By the fifth day temperature and pulse were normal, bowels open, and water passing nicely, patient able to be up and about the house, and on January 6th, ten days from date of operation, although the weather was extremely cold, he was able to attend to business.

THE TREATMENT OF SINUSES BY TENTS.

BY EDWARD T. WILLIAMS, M. D.

THE knife, in modern surgery, seems to be regarded as the panacea for every ill. It was otherwise among the ancients, who, though behind us in knowledge, often showed themselves before us in common sense. They always viewed the cutting instrument in its true light, as the surgeon's last and worst resort. The popular method of treating sinuses is a good illustration of this backward progress of surgery. We hardly hear nowadays of any way of treating a sinus except by laying it open. This leads me to speak of a simpler method which I have tried successfully a number of times, — the use of tents. I speak only of simple sinuses, such as are usually treated by cutting. Take a narrow strip of sticking plaster and fold it or roll it lengthwise between the fingers, as one rolls a slip of paper to light a lamp or cigar. Push it to the bottom of the sinus, and leave it three or four days, till it excites a healthy suppuration. Then remove the tent, bring the walls of the sinus together if necessary by a bandage or adhesive strips, and let it heal from the bottom like a fresh wound. This acts on exactly the same principle as the knife or caustic, namely, by exciting an active and reparative inflammation in the place of a chronic and stationary one. I do not say that it will take the place of the knife in all cases, but it certainly will in many. It is an old plan, but one that ought not to be dropped altogether out of mind. It is beyond doubt that *fistulae in ano* have often been cured by this method, or by the seton, which acts in the same way, and that this is the real secret of the success obtained by certain empirics in the treatment of that disease.

Two special applications which I have made of the same essential principle I would like particularly to notice.

The first is the application of a *bougie à demeure* as a substitute for cauterizing or curetting the uterus in chronic endometritis. Pass in a common urethral bougie and let it remain a short time in the womb. I have never ventured to exceed five or ten minutes, but have seen it followed by a decided relief of symptoms.

The second is the same thing applied to the urethra (male) in cases of gleet and seminal emissions. Both these conditions, as it seems to me, are most frequently kept up by a kind of chronic prostatic urethritis, with probably a granular condition of the mucous membrane. The prostatic portion is supersensitive, and sometimes bleeds a little on the passage of an instrument. The *sonde à demeure* is admirably adapted for these cases, and though perhaps less effective in a bad