from at least one year after operation. Cases were regarded as cured when they were symptomatically well and either regarded themselves or were regarded by their physicians as cured. No attempt was made to apply the absolute test that the patient should completely empty his bladder at normal intervals. Cases are marked "relieved" when their condition is much better than that prior to operation, but when some frequency or a small amount of residual urine keeps them from being regarded as cured.

TABLE II.

RESULTS OF CUTTING OPERATIONS.

	Cases Heard From.	Well.	Relieved.	Same or Worse.
Number	36.0	11	6	8
Per Cent.	69.3	44	24	32

From this table it appears that about two thirds of the cases operated upon by all methods were improved by the operation. The remaining third were in most cases not essentially worse than before operation, though in two cases their present condition was distinctly more uncomfortable than before operation.

TABLE 3. In this table I have attempted to compare the results of partial operations with those of complete operations. By partial operations are meant those in which only a portion of the prostate was removed. This was generally a third lobe, removed by the suprapubic route. In some cases a considerable amount of tissue was taken, in others only a small pedunculated growth was removed. The complete operations were largely done either by the combined method, suprapubic and perineal (Alexander), or by one of the modifications of the perineal method.

TABLE III.

RESULTS OF CUTTING OPERATIONS.

	Well or Relieved.	Same or Worse.
Partial Operations	57%	43%
Complete Operations	83%	17%

This table shows that the complete operation has given much better permanent results and there are no cases recorded as the same or worse which were not at least as well as before operation. All the cases that were made worse by operation were partial operations.

TABLE 4. In this table I have grouped all the patients who entered the hospital for treatment of enlarged prostate during the ten years from 1892 to 1902. It will be of interest as showing the number of cases recorded as surgical, that is, requiring surgical treatment. It is also interesting as showing the point of view in regard to the cases suitable for operation and as indicating the waves of surgical opinion which have passed over this community. It will be noted that the statistics reflect very accurately the opinion of the general practitioner in the surrounding country as well as that of the hospital surgeon. Thus during the years 1894 and 1895 the operation of castration was being advised and patients were evidently sent to the hospital for that purpose. The following two years show the reaction which followed the failure of this

operation to do all that was claimed for it. The years 1898 and 1899 show the impetus given to prostatic operation by the free discussion of Alexander's combined method which followed his paper read here on that subject. The year 1900 shows a temporary reaction, while the following two years show the influence of the belief in perineal prostatectomy and the increased use of the Bottini operation.

TABLE IV.

Year.	'92	'93	'94	'95	'96	'97	'98	'99	1900	'01	'02
Total No. Cases	4	6	13	28	3	17	37	43	24	36	27
No. Operated	1	1	4	10	1	4	23	17	7	19	13

If the year 1903 had also been added to the list the tendency to operate upon more cases out of the total number submitted would be still more obvious as the records of that year show very clearly the influence of perineal prostatectomy.

In closing I would say that I have collected these cases at the request of the surgical staff, and think that some credit is due them for their willingness to allow their cases to be thus roughly grouped together since they give a very unfavorable idea of the condition of operative surgery if taken at their face value. It is to be hoped that the limitations of such a series of statistics will be borne in mind and that they will be allowed only such weight as they deserve and that no attempt will be made to draw definite conclusions from such a small series of cases.

THE USE OF THE CYSTOSCOPE IN DETERMINING WHAT OPERATION IS ADVISABLE IN PROSTATIC HYPERTROPHY.

BY F. C. BALCH, M.D., BOSTON.

Few people would care to decide what operation was advisable in prostatic hypertrophy from a cystoscopic examination alone, but in connection with the other methods of examination commonly used it often gives us very valuable information as to how we should proceed with the case. Usually the examination is easily made without the use of a general anesthetic, as the use of cocaine takes away nearly all the pain. The urethra must be large enough to admit the instrument and the bladder must be capable of holding about five ounces of fluid without trying to expel it. The absence of these two conditions may make general anesthesia necessary as may also extreme sensitiveness of the prostate, as for instance where there is much ulceration. The view of the prostate may save us in some cases from serious mistakes. Thus in a recent case where the Bottini operation had been advised the cystoscope showed the growth in the prostate to be cancerous and a suprapubic operation was advised instead. Until comparatively recently the use of the cystoscope has been a difficult proceeding requiring very careful manipulation and often failing to demonstrate conditions which operation later proved had existed. Improvement in the older instruments and the

invention of new ones has greatly simplified the process and made it certain that in almost all cases we can see conditions as they actually exist. For the examination of the prostate the Kollman is a very satisfactory instrument. It gives a large, clear field and has the great advantage that even in a very dirty bladder or one in which there is considerable hemorrhage the fluid can be removed and returned again so quickly that we are sure of a transparent medium. All this can be accomplished without removing the tube from the bladder. As the insertion of a catheter or an instrument is often a cause of hemorrhage in these cases it will be readily appreciated that it is an advantage to be able to do all our washing without further irritation to the urethra than is involved in the primary insertion. It has the disadvantage that in certain forms of prostate it is not possible to see the whole of the mass, but it is perfectly practical to see enough of the tumor to decide what operation is advisable. It is not a catheterizing instrument, but catheterization is very rarely necessary and is usually not advisable in old men with hypertrophied prostate. The question of whether blood or pus is coming from either kidney can usually be determined by the examination of the fluid as it comes from the ureter. In many cases of enlarged prostate the distortion of the bladder is such that a ureteral catheter cannot be inserted.

After our examination there are many factors which must influence us in our choice of operations, such as the patient's condition, age, condition of kidneys, etc., but as far as the cystoscopy goes one can say that in that form of enlargement when there is a thickened ring about the internal meatus or a thick posterior lip the case is a very favorable one for the Bottini operation. Where the obstruction is from a ball valve it is very questionable whether the Bottini operation would succeed whereas the suprapubic route affords easy access to the growth. In the case of the pedunculated tumor it is very doubtful whether the cauterizing blade would hit it at all as there is no form of cauterizing instrument where-with we can see just what we are burning. Again there is the chance that the pedicle might be cut through and the tumor left in the bladder. Where the obstruction is on one side only we can easily see where the cut should be made. If we find on examination that the growth is not so much intravesical as back toward the rectum, one of the operations for enucleation would be the operation of choice, other things being equal.

In a word the value of the cystoscope as an aid in operation is more apparent when the galvano-cautery is to be used than when the more radical operation of enucleation of the prostate is intended. It is, of course, a great help in all cases to know just what the condition of the bladder is and whether we have to deal only with an enlarged prostatic gland or some complication in combination with it, such as a stone or some tumor of the bladder wall.

A BRIEF RESUME OF THE PRESENT STATUS OF THE TREATMENT OF THE ENLARGED PROSTATE.

BY ARTHUR TRACY CAROT, A.M., M.D.,

Surgeon to the Massachusetts General Hospital.

It would be hard to name any other surgical problem which has led to such differences of opinion or has been approached by such diverse attempts at solution as the management of the enlarged prostate. A simple enumeration of these will give a good bird's eye view of the subject.

CATHETERIZATION -- OCCASIONAL AND HABITUAL.

False Routes { *a.* Suprapubic (Hunter McGuire)
 { *b.* Perineal

Prostatomy { Incision of { *a.* Perineal
 { Obstruction { *b.* Per urethram (Bottini)

Prostatectomy { Partial { Suprapubic
 { Complete { Perineal
 { Suprapubic
 { Perineal

Orchidectomy — Vasectomy
Ligature of Iliac Artery

While experience has led to the rejection of a number of these methods, those now most in vogue are of such comparatively recent adoption that it would be presuming to suppose that we have yet reached the final solution of the problem.

The very great recent advances in methods of exact diagnosis and in operative technique have, however, put the subject on a much sounder footing than ever before. We begin to feel firm ground under us, and we can stand erect and look about us to see where we have reached and whither next.

The two things that the prostatic patient wishes to know when comparing a future catheter life with the chances of a prostatectomy are, the risk of the operation, and the probability of an effective and lasting removal of obstruction. The cases are still too few, and the time elapsed in many of them too short, to give us all the data we could wish for the answer of these questions.

The statistics collected for this meeting, as well as the results presented in the accumulating literature of the subject, seem to show that the complete removal of the prostate may be expected, in the majority of cases, to restore the power of voluntary urination. Perineal prostatectomy may now be done with so little disturbance of the prostatic urethra and of the voluntary sphincter of the bladder that we may expect in all but the most exceptional cases to avoid the distressing incontinence which followed many of the earlier enucleations of the prostate, both intravesical and perineal. By the use of Young's tractor, the prostate is brought down so close to the surface of the perineum that the incision of the capsule and the enucleation of the gland are carried on under the operator's eye. By this improvement in technique, the danger of the operation has been greatly diminished, and many patients who would formerly have shrunk from subjecting themselves to the risks and uncertainties of a suprapubic prostatectomy and