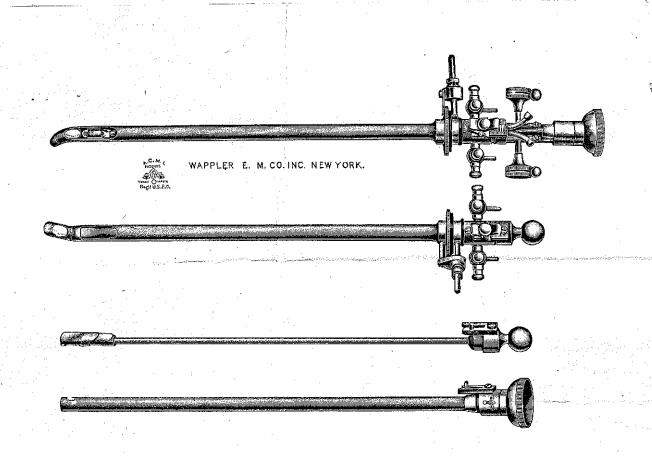
## THE BROWN-BUERGER CYSTOSCOPE

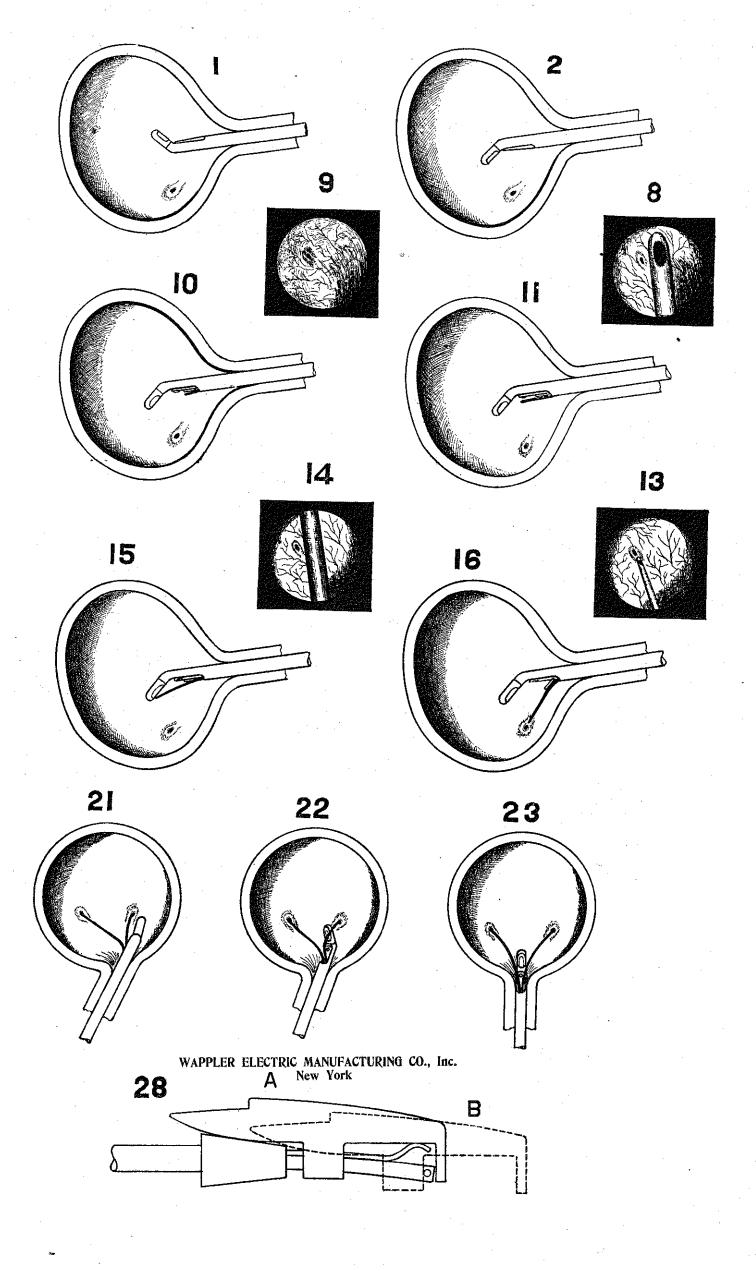
(TECHNIQUE)

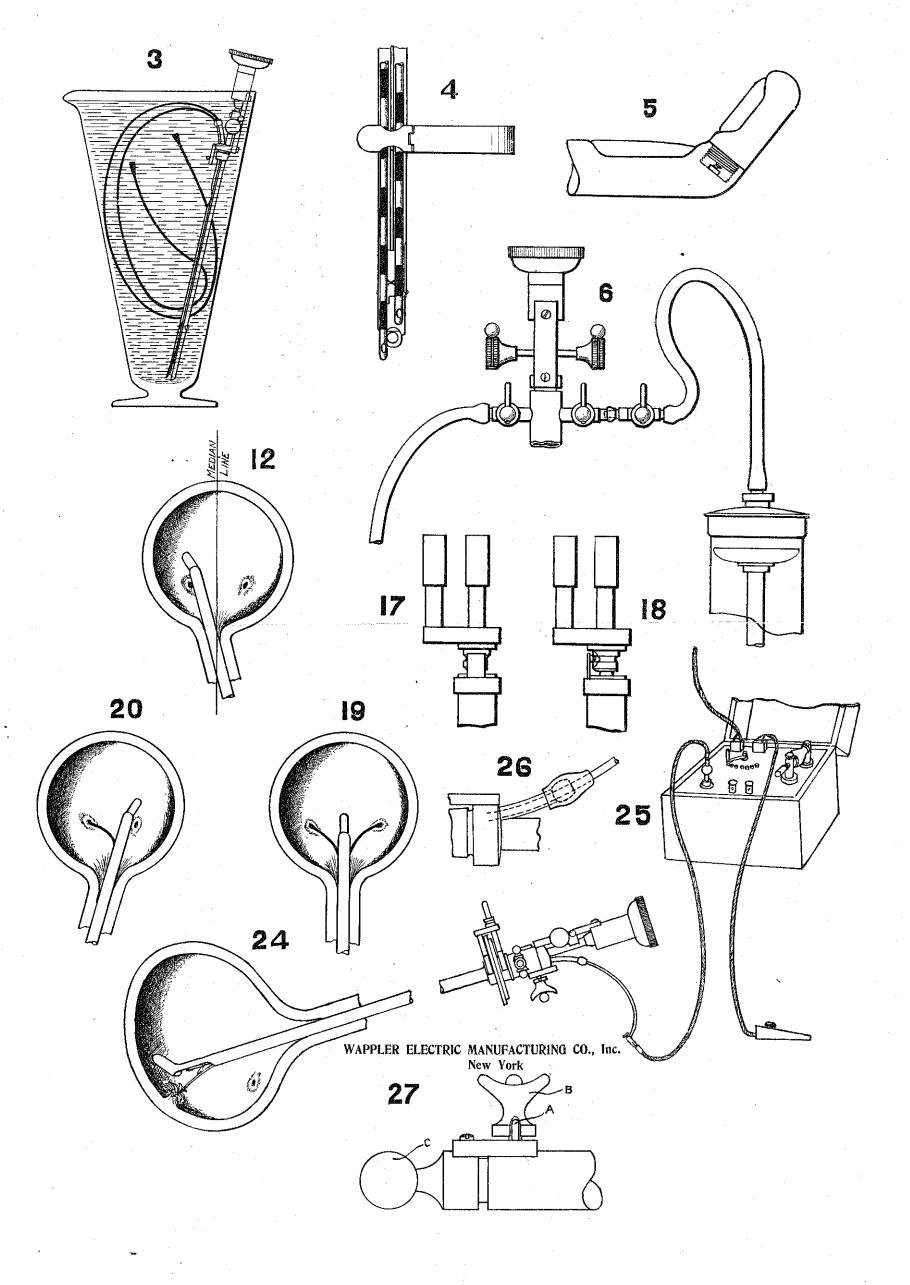


## WAPPLER ELECTRIC MANUFACTURING COMPANY, Inc.

173-175 EAST 87th STREET

NEW YORK CITY, N. Y.





## Directions and Technique for Brown-Buerger Cystoscope

ALL PARTS of the Cystoscope and attachments used must be thoroughly sterile. The ureter catheters should have bichloride of mercury solution or formalin gas under pressure forced through their lumen and the sheath be cleaned out by means of the cleaning rod supplied with the instrument. The small tubes where the catheters are entered can be cleaned out with ordinary pipe cleaners. The catheterizing telescope, with two catheters in place, is immersed in a 5% carbolic acid solution in the manner shown in Fig. 3. In Fig. 4 is illustrated a spring clip, which holds the catheters in place at the far end of the telescope until the latter is to be introduced. To insure good vision the lenses, i. e., both objective and eye-piece should be cleaned with a piece of chamois just before using. To obtain a good light, which will not cease when the instrument is in the bladder, abide by the following rule:

FIRST---Be sure that the small spiral wire at the end of the lamp makes good contact with the corresponding contact of the instrument, as illustrated in Fig. 5. In order to make contact it is often necessary to raise this small spiral wire slightly.

SECOND—Apply some of the grease, supplied with the instrument, to threaded part of the lamp. This is to prevent leakage of fluid into the contacts mentioned above, in which case a short circuit would take place and the light go out.

THIRD-See that the cord connection 17, 18, is kept dry and away from any fluid.

The lamp is made so that it developes the least heat with the highest possible brilliancy. The safe point of illumination is when the light is almost white. If not familiar with the safe limit, practice by turning on current slowly, watching the appearance of the lamp filament and stop at the point where the red changes into white light. Test this out before introducing the instrument, and shut off the light until ready to examine and catheterize.

Fig. 17 shows the position of the switch when the light is on. Fig. 18 shows the position when the light is off.

TECHNIQUE-The sheath, with obturator in situ is introduced into the bladder, as shown in Fig. 1, and revolved until in position, shown in Fig. 2. The obturator is then removed and the bladder irrigated through the open end of the sheath until the irrigation fluid returns perfectly clear. The telescope with the two catheters in place is now inserted and the bladder distended with the requisite amount of fluid through one of the two irrigating faucets, as shown in Fig. 6. The same Fig. also shows how the distending fluid can be drained off through the remaining faucet To prevent the escape of the distending fluid around the catheter where the same enters the instrument small perforated rubber caps are used through which the catheter is inserted, as is shown in Fig. 26. Similar rubber caps, not perforated, are used to close up the end of the catheters and also to close up the catheter entrances in cases where the instrument is used for bladder examinations only and no catheters are used. Fig. 12 shows how the ureter opening is found by bringing the instrument over to the side and slightly turning it towards the ureter. Fig. 10 shows a side view of the position of the instrument, and Fig. 9 shows the view obtained of the ureter. Advance the catheter as shown in Fig. 11, until the tip of the catheter appears in the field of vision, as shown in Fig. 8, then advance the catheter 1 cm. so that the tip of the same is beyond the field of vision, as shown in Figs. 14 and 15. Deflect the catheter until the tip of the same appears in the field and bring the tip of the catheter directly above and close to the ureteral opening, as shown in Fig. 13 and 16. The entire instrument is then brought forward and downward, thus entering the catheter in the ureteral mouth. The deflector is then released and the catheter advanced into the ureter. After the one side is catheterized the instrument is brought over to the other ureter opening, as shown in Fig. 20. In doing this the first catheter is left clear of the deflector, making the manipulation of the second one easy. Proceed with the second one in the same manner as with the first.

Fig. 19 shows position of the instrument after both ureters have been catheterized. To remove the instrument and leave the catheters in place, first remove the catheterizing telescope, then bring the sheath to one side as in Fig. 21. Twist the lamp under the catheter, Fig. 22, so as to obtain the position shown in Fig. 23. The sheath can now be easily withdrawn and the two catheters will remain in the ureters.

The fulgeration treatment of bladder growths is illustrated in Fig. 24. The apparatus for producing the fulgeration spark is shown in Fig. 25, also how the same is connected to the insulated wire which is passed through the cystoscope.

In Fig. 28 is shown the far end of the obturator. Notice that there is a movable part which can be shifted to positions "A" or "B." Before introducing the obturator be sure to have this movable part in position "B." When the clutch "B," Fig. 27, engages the pin "A," the near end "C" of the obturator is locked watertight into the sheath and the movable part "B," Fig. 28, at the far end, is raised up in the fenestrum of the sheath to position "A," relieving the edge.

The clutch "B," Fig. 27, not only tightens but also releases the obturator or telescope, thus eliminating all jarring of the instrument.