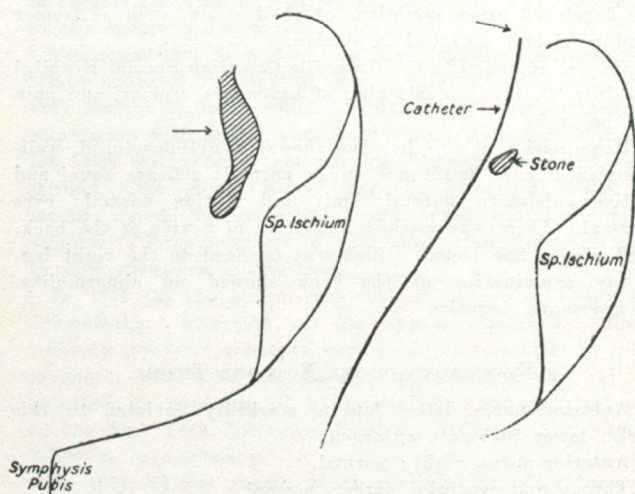


# THORIUM X-RAY REQUIRED TO CORRECT AN OPAQUE CATHETER X-RAY.

Lieutenant W., now in this hospital for ureteral calculus, has had colic for two years, at first diagnosed as appendicitis. The X-ray revealed a small opacity in the right ureteral area low down. A stereoscopic X-ray demonstrated that the opacity was external and posterior to a wired catheter introduced into the right ureter, and the inference was that the opaque body was not in the ureter. A thorium X-ray, however, showed that the ureter was pouched and a stone was in the pouch. Major Pirie, to whom I am greatly indebted for unvarying courtesy and suggestions, located this stone as 1 cm. inwards,  $\frac{1}{2}$  cm. downwards, and  $\frac{4}{5}$  cm. forwards from the spine of the right ischium, with the bladder empty, so that the stone cannot be far away from the ureteral meatus. An attempt will be made to get it through in the same way as in the case above detailed. It will probably be necessary to dilate the ureter with bougies as well. Relation of stone to opaque uretral catheter:—



Pouch revealed by thorium injection.

## INSTRUMENTATION TO REMOVE FOREIGN BODIES FROM THE BLADDER.

Soldiers do not belong to the class of men who introduce foreign bodies into their bladders. At least only one such case has presented itself at this clinic. In the centre of a vesical phosphatic calculus, which was removed suprapubically (before we had lithotrites) was found chewing gum. Before enlistment I had three such cases in which the cystoscope and lithotrite were the only instruments called on. Almost all other foreign bodies can be removed through an operating cystoscope with very little trouble.

### LITHOTRITY.

Since the arrival of lithotrites at this clinic no suitable cases have presented themselves for this simple method of removing calculi, except one, and he refused operation either by knife or lithotrite. Usually vesical calculi are easily diagnosed and easily removed suprapubically, and are therefore not sent here. A disadvantage of cutting operations is illustrated in the case above referred to as having a calculus with a chewing gum nucleus. In that case, after suprapubic removal, the only method by which "pain in the scar" could be eliminated was a frank avowal of my knowledge of what the stone contained. He professed surprise, of course, and remarked that he did not chew gum, but he apparently did not care to stay under my care and observation, and so the pain disappeared.

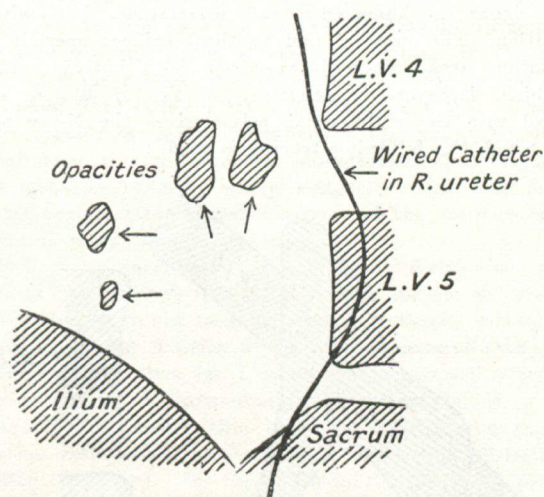
We have considerable wealth of obscure kidney and ureter disabilities from which to choose. In addition to the usual catheterization of ureters, &c., radiograms of the renal pelvis and ureters distended by opaque fluids have been found valuable. Radiograms of the course of an opaque catheter in the ureter have their uses also, but to a more limited extent.

## OPAQUE CATHETER USED TO DEMONSTRATE EXTRA-URETERAL OPAACITIES.

Private D., 28 years old, has had nocturnal enuresis since

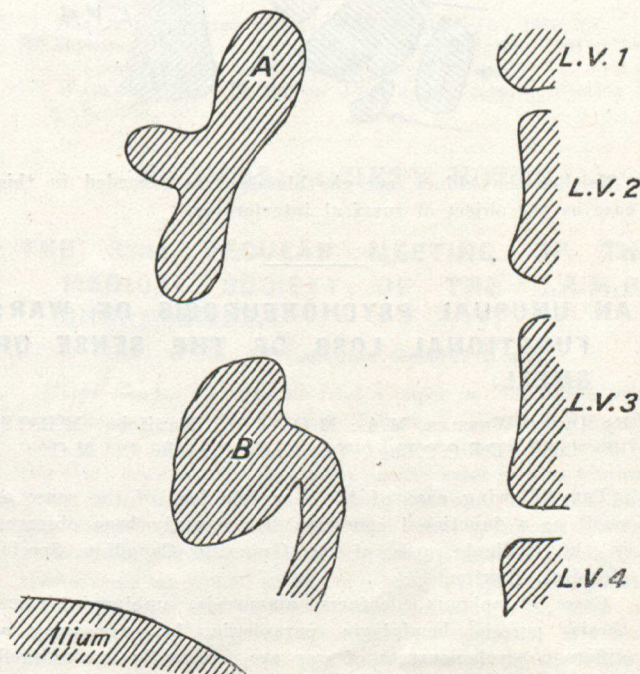
childhood. He enlisted twelve months ago, but has never been sent overseas on account of incontinence. Moreover, he usually rises four or five times at night to urinate, and has frequent urgency by day when, if no urinal is handy, he occasionally wets his clothes. The urine is normal in every way, except that it contains calcium oxalate crystals. On cystoscopy the bladder capacity is 16 oz. and no abnormalities are found. The X-ray reveals four opaque bodies above the crest of the right ilium, which are extra ureteral, as demonstrated by their relation to the opaque catheter. A rough tracing of the X-ray plate demonstrates that the ureter is deflected from its course, presumably by a mass of tubercular inflammatory tissue, part of which is calcified.

The symptoms are due to this:—



## SLIGHT HYDRONEPHROSIS DEMONSTRATED BY ARGYROL X-RAY.

Corporal B., 26 years old, injured his back in a railroad wreck four years ago, following which he passed blood in his urine, and has subsequently had an ache over the right kidney at times and passed urine like café-au-lait. For a year and a half he has had pollakiuria, which is now of marked degree by night and day, and he has occasionally enuresis, and when unable to find a urinal he sometimes wets his trousers. His urine is normal. Bladder normal to cystoscope. Both ureters are easily catheterized, but the urea content of right and left urines is as 1 to 1'3. 7 c.c. of 40 per cent. argyrol injected into the renal pelvis gives these tracings, which show a range of movement of 1½ in. and a renal pelvis deformed by back pressure.



Composite tracing of renal pelvis.  
"A"—with expiration.  
"B"—with deep in-piration.

November 21, 1916.—Kelly's operation for fixation of the kidney was done. Many dense adhesions were present.