

end of the ureter was split open to a distance of a third of an inch, so as to avoid subsequent stricture after it was transplanted, an accident which has marred the success of more than one case where this was not done. A slit was then made obliquely into the right upper corner of the bladder, and the ureter stitched into it, the mucous membrane of the ureter to the mucous membrane of the bladder, with very fine chromicized catgut, and the fibrous coat of the ureter to the muscular wall of the bladder, with six fine black silk stitches. In doing this Van Hook's method was employed, which will be described later on. The bladder was then distended with a pint of weak methyl-blue solution, and, to my delight, not a drop leaked through the point of transplantation. The two-inch cut in the peritoneum was closed with fine catgut, as was also the opening in the parietal peritoneum. In case that the transplanted ureter should fail to adhere, a drainage tube was passed down from the end of the incision in the abdomen to a little below the opening in the bladder, and a piece of iodoform gauze down to the lowest point between the peritoneum and the pelvic fascia. The abdomen was closed with silk-worm gut, and the patient went off the table in fair condition. Apart from the vomiting, which lasted three days, she has made an excellent recovery. The *cathéter-à-demeure* was left in for five days, by which time I believed that the ureter was primarily attached in its new place. It is now ten or eleven days since the operation, and the patient can hold her water for eight hours, and is rapidly regaining her health and strength.

*Remarks.*—This case is of interest for several reasons. 1. It is, so far as I am aware, the first time that the operation has been done in Canada, and my Canadian brethren will, I am sure, share my pleasure in seeing it result successfully. It had been done successfully ten times in Europe and the United States up to May, 1899, including the one I saw Sanger do in Leipsic. The first successful experiments on animals were performed by Paoli and Buschi in 1888. The end of the ureter was split before suturing it into the bladder.

Novaro (*Centralblatt f. Chirurg.*, 1893, vol. xxvii., p. 596), following this method, performed the first operation on man. He made an incision in the end of the ureter 1 cm. in length. Although there was some leakage for a few days, there was a successful result. Penrose (*University Med. Mag.*, April, 1894), Krug (*Journal Obstet. and Gynecology*, N.Y., 1894, p. 496), and Baldy (*Amer. Journal Obstetrics*, 1896, vol. xxxiii., p. 362), performed similar operations, employing the idea suggested by Van Hook, in his "Anastomosis Operations," namely, introducing two traction sutures, each with a needle at both ends, which is passed through the wall of the ureter from within out, forming a loop on its inner side. Both ends are now carried through the bladder wall from