Original Communications.

Operation for Extroversion of the Bladder and Epispadias. By GEORGE WILKINS, M.D., M.R.C.S. Eng., Professor of Pathology and Lecturer on Practical Physiology at the University of Bishop's College, Attending Physician to Montreal Dispensary, and to the out-patient department of the Montreal General Hospital. (with illustrations)

(Read before the Medico-Chirurgical Society of Montreal.)

MR. PRESIDENT and GENTLEMEN :—

The case that I am about to bring under your notice this evening is that of *successful* plastic operations for relief of extroversion of bladder, and epispadias.

The patient, a lad of 16 years of age, first came under my care about August, 1873. On examination a large vascular and extremely florid tumour presented itself at the lower portion of the abdomen. Its centre protruded about three quarters of an inch beyond the plane of the abdomen, and was covered with bright red granular patches, bleeding on the slightest touch, and highly sensitive.

At its lower portion were visible the orifices of the ureters, through which, at intervals of a few seconds, drops of urine could be seen bubbling.

This large tumour was the posterior wall of the bladder pushed forward by the weight of the intestines, the anterior wall and normally anterior parts being absent. At the junction of the superior margin of bladder and integument were to be seen the only traces of umbilicus.

Beneath the bladder was a stumpy and imperfect penis about 1¼ inch in length; the corpora cavernosa and integument being deficient above, there was no urethra, merely a groove or gutter.

The glans penis also was grooved, and beneath it was a very large prepuce with a well-defined frænum. On the floor of the penis were visible the orifices of the prostatic and seminal ducts. The penis was erect, and almost in contact with the bladder.

The scrotum was extremely well developed and contained testicles. Its front portion was covered with salts of the urine, and presented an eczematous condition, due to the irritation of the urine which was constantly dribbling away at each side of the root of the penis, over the scrotum when standing or walking, and between the scrotum and thigh, or over the groin, when sitting or lying. The anal aperture was not placed between nates; it was an inch or more anterior to usual position, and the finger introduced, passed upward and forwards in the median line.

His hips and sides, quite up to the arm-pit, were covered with cicatrices of small patches of ulceration caused by his lying in urine while in bed at night.

From the description I have just given of his case when he first came under my care, you can easily understand that every moment of his life urine had been dribbling away, and every night he lay in bed clothes, which by morning were saturated with it.

His parents had endeavoured to ameliorate matters by procuring a suitable urinal; they had two different kinds made in this city, which were of no use; they then took him to New York for the purpose of getting a mechanician there to make one. He was but little more successful. Shortly after his visit to New York, patient came under my notice, and readily consented to any operation that afforded hope of relief.

I decided to operate as recommended by Prof. Wood, of London.

Drs. Gardner, Kennedy, and other of my confrères kindly rendered me valuable assistance.

An incision was commenced at the centre of one side of bladder and carried upwards in a straight line, a distance of about five or six inches; the incision was then continued at right angles to the first (the corner of the angle being rounded) a distance little greater than the breadth of the bladder, then down to opposite side of bladder, about same level with commencement of incision. The flap embraced by this long incision was dissected up to within about quarter or half an inch above superior edge of bladder.

A second incision was carried from the first ascending one, about an inch below its superior margin, outwards a distance of about four inches, then downwards to a point a little below and internal to anterior superior spinous process of ilium, the base of the flap being directed downwards towards thigh and scrotum. A corresponding incision was made in opposite side; each flap was then dissected up to its base. The first or umbilical flap was folded upon itself and placed with its external surface in contact with the mucous membrane of bladder, its previous superior margin reaching a little below the inferior border of the bladder and covering for the time being the penis.

The two side flaps were twisted and placed over the umbilical one, their raw surfaces being laid upon