

the raw surface of that flap, and their former superior edges meeting in the median line. Through these edges, two harelip needles were passed, each needle taking up, but not perforating umbilical flap. Two sutures were also inserted into edges of same flap.

The large wound left by removing the integument I covered as much as possible by drawing together the angles of the spaces by means of harelip needles and sutures. The opening still left was dressed with carbolized oil. Patient was put to bed in a sitting posture.

For the first three or four days he experienced a great deal of annoyance from acrid urine which collected beneath his nates, notwithstanding he was carefully lifted out of bed twice a day, and every soiled article removed.

This, however, was remedied by a suggestion of mine which added much to my patient's comfort:—That was to place patient in a hammock chair and to have the part upon which nates rested covered with oil cloth, and directly beneath, an opening through both oil cloth and canvas of chair, and below that again to have a receptacle for urine; a folded cloth placed between nates and oil cloth. This worked admirably; injections, which were frequently necessary to wash out mucous collected under flaps, could be used with but little disturbance to patient; all passed through this aperture. Patient slept more comfortably he said than he ever remembered to have slept before. His feet I should add rested on pillows on a box.

With the exception of a slight attack of erysipelatous inflammation at one of the edges of the wound, patient did extremely well, so that in about six weeks after the operation, the large gaping wound left by removal of integument, which, of course, was last to heal, was almost closed up, leaving a long and narrow cicatrix as shown in last photograph.

Contraction caused by cicatrization, however, was greater than I had anticipated, and in consequence a small portion of lower surface of bladder was still left exposed to view. The large thick flap above prevented clothes from touching it so that no inconvenience resulted.

The greatest annoyance to patient previous to operation was the rubbing of his clothes against the very sensitive mucous membrane of bladder, in walking, more especially in going up and down stairs. His suffering from this cause was very much relieved by the operation. He could now walk with comparative ease. On account of this fact, and his sleeping so much better in the chair than in bed, he was so

satisfied with his improved condition that it was difficult to get him to consent to another operation that for restoring the penis. He appeared to dread the ether; it caused such unpleasant sensations for hours after consciousness was restored. However in February last he consented, and with the same valuable assistance as in former operation I proceeded as follows: An incision was commenced at the side of that portion of bladder left uncovered by former operation, about an inch external to margin, and carried downwards and around the angle between penis and scrotum to point on opposite side of bladder corresponding to commencement of incision. A second incision was begun about two inches directly beneath the commencement of the first one, and carried down the outer margin of scrotum, then along its lower margin and up outer margin of the other side of scrotum to a point corresponding to commencement of incision. Between these two incisions was embraced the whole of the integument of the scrotum as seen from in front. This was dissected up, and the flap left exposed to the air for a few minutes to check bleeding.

An incision was also made along the sides of penis, commencing where first incision passed downwards, and carried as far as the glans. The integument at each side of the bladder was then dissected up, and the two sides folded on themselves and approximated as much as possible in front of the bladder by means of silk sutures. The integument above the incisions at each side of the penis was also dissected up to the extent of about $\frac{1}{2}$ an inch so as to afford a sort of groove into which edges of flap about to form roof of urethra was to be placed. The surface of lower edge of flap formed by first operation was also laid bare.

All bleeding having ceased, the integument covering scrotum, which had just been separated from its connection there, still, however, retaining communication at each side, with integument covering groin, was lifted over penis, and placed somewhat like a saddle upon it and lower portion of bladder. Its upper border was then connected by sutures with lower border of old flap, its outer edge was fitted into groove made at each side of penis and held there by sutures, whilst its lower end was free, projecting slightly beyond end of glans penis. Thus what remained exposed of bladder after former operation was completely covered, and the gutter of urethra was converted into a covered channel.

The testicles were covered by drawing in front of them the edges of integument left on posterior surface and sides of scrotum.