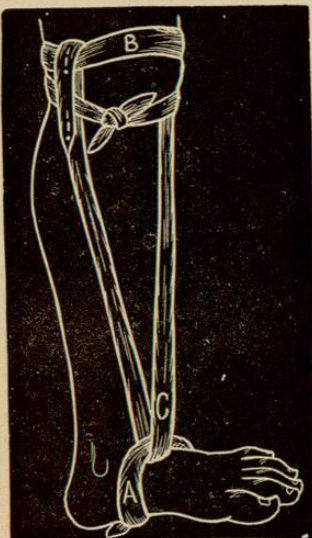


FIG. 101



Tarso-patellar Cravat.

## TARSO-CRURAL CRAVAT.

**Description.**—I. Two cravats, each one one yard in length.  
II. A third cravat eighteen inches in length.

**Application.**—So similar to that of the preceding that no wood-cut is necessary; the only difference being that the second one (B, in the preceding figure) is to be applied about the upper portion of the thigh, and to this the long cravat C (of the preceding cut) is to be fastened, after it has been passed through the cravat-stirrup, A, about the foot.

**Uses.**—The mechanism of this bandage is to forcibly flex the foot, and at the same time the leg, upon the thigh; and hence is useful in cases of rupture of the soleus or gastrocnemius muscles, or their common tendon, and in transverse wounds of the back of the heel or leg.

**Variety.**—*Tarso-pelvic Cravat.* The only difference here being that the cravat is tied about the pelvis instead of about

applied, A, and conduct each extremity, one upon each side of the leg, up and under the loops of the one applied at the patella, B. Flex the foot, to a sufficient degree, upon the leg, and then fasten the cravat last applied by pinning the extremities.

**Uses.**—Mayor proposed this bandage for cases of knee-pan fractures. It is more suitable in cases of the rupture of the ligamentum patellæ, in transverse wounds of the instep, and in cases of talipes equinus, where extension of the tendon Achillis is required; or, after its division, to properly confine the foot that it may overcome this deformity.

the upper portion of the thigh. The uses are identical to those of the Tarso-crural.

## SCAPULO-TIBIAL TRIANGLE AND CRAVAT.

(Sling for the Inferior Extremity.)

**Description.**—I. A cravat, or scarf, two yards in length.  
II. A triangle whose base measures one and one-half yards, and whose height is two feet.

**Application.**—Tie the scarf over the shoulder opposite the injured leg, as A. Place the base of the triangle, near its middle, at the anterior surface of the leg, B, and carry the two ends upwards and tie into the "sling" formed by the cravat. Then pin the apex of the triangle at the outer side of the leg, to the base of the triangle, as at C; folding it across the front of the knee, so as to prevent the member slipping too far forwards, and out of its support.

**Uses.**—To support either lower extremity, when injured; or to hold, moderately flexed, the leg upon the thigh. Is a very convenient and useful dressing.



FIG. 102.

Scapulo-tibial Triangle and Cravat.

## SLING OF THE LOWER EXTREMITY.

**Description.**—A cravat long enough to reach from the neck to the foot, and back again, to tie about it. It is also made from webbing, with a buckle attached, as represented in the cut.



FIG. 103.



Sling of the Lower Extremity.

**Application.**—The limb having been properly bandaged, the cravat or webbing, at its centre, is to be passed underneath the foot, and then tied about the neck.

**Uses.**—As a support, merely, of an injured foot, leg, knee, or thigh, when walking with crutches is allowable.

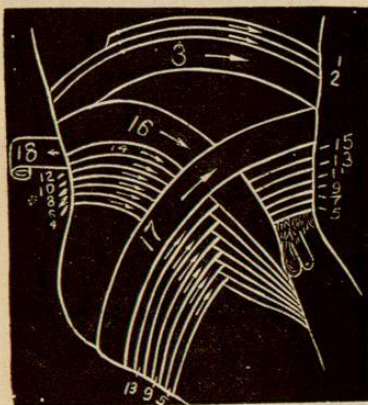
## CROSS OF THE GROIN.

(*Ascending Spica of the Groin.*)

**Description.**—This should be made from a roller nine yards in length by two inches in width.

**Application.**—Place the initial end of the bandage at the front of the abdomen, 1,

FIG. 104.



Cross of the Groin.

liquely across the inguinal region, from without inwards, upon the abdomen, to the opposite side of the body, thus completing the fifth course. Course 6 is made similarly to course 4; course 7, to course 5; course 8, to course 6; course 9, to course 7;

and so on until the roller is nearly exhausted, when you make one or two horizontal turns about the abdomen, and confine.

**Uses.**—For maintaining dressings upon the inguinal region; also for making compression upon any of the enlarged glands in this neighborhood, and for maintaining a replaced hernia.

**Variety.**—*Descending Spica of the Groin.* This differs from the preceding only in having the courses of the bandage across the groin run from above downwards; that is, course 4 of the bandage is put in the line of course 16; course 5, in the line of course 17; course 7, in the line of course 15, and so on.

## TRAPEZOIDAL T OF THE GROIN.

**Description.**—I. A piece of cloth, cut to the shape of a trapezoid, sufficiently large to cover the groin.

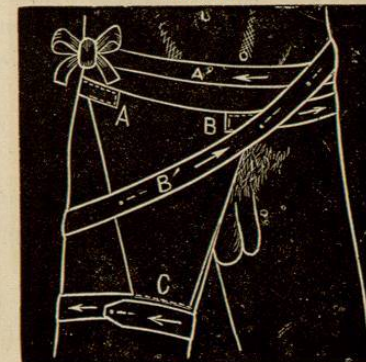
II. To one of the angles of the base of this trapezoid, the external superior (as *A* in the following figure), stitch a small roller, two yards in length by one and three-quarter inches in width.

III.—To the other extremity of the base, *B*, stitch another roller of the same width, but three yards in length.

IV. Across the apex of the trapezoid stitch another roller, having the same width, but being two feet in length, as at *C*.

**Application.**—Place the base, *A-B*, of the trapezoid above the injured groin, and encircle the abdomen with the roller *A*, as *A'*. Conduct the roller *B* across the crest of the opposite ilium, then diagonally downwards across the sacrum and nates to a point considerably below the great trochanter, and then obliquely upwards across the trapezoid, as *B'*, and the abdomen, to pass around the back again, and tie with the portion *A* at the side. Pin the portion *B'* to the trapezoidal

FIG. 105.



Trapezoidal T of the Groin.



piece of lint, and also to the roller-turn, A'. This done, encircle the thigh with the roller from the inferior portion of the trapezoid, as at c, confining it with a pin.

**Uses.**—For confining cataplasmata and other dressings to the groin and anterior surface of the thigh, when the patient is kept in the recumbent posture. Is of little or no value in exercising compression, and hence does not, in this particular, take the place of the Spica of the Groin just described.

#### CRURO-INGUINAL TRIANGLE.

**Description.**—A triangle one yard in length across its base, and some eighteen inches in height.

**Application.**—Place the base of the triangle A, just above and

FIG. 106.



Cruro-inguinal Triangle.

to the inside of the anterior spine of the ilium, the right for example, in an oblique manner; carry, then, the internal (inferior), extremity about the injured thigh, from within outwards, and pin, as at B. Then conduct the other extremity around the body, bringing it forwards and obliquely downwards across the opposite inguinal region, C, and pin to the base of the triangle. The apex is then to be carried backwards and downwards

across the gluteal region of the injured side, and confined as usual.

**Uses.**—This bandage of Mayor's is very useful in confining dressings to one of the nates, upper part of the thigh, or one of the inguinal regions.

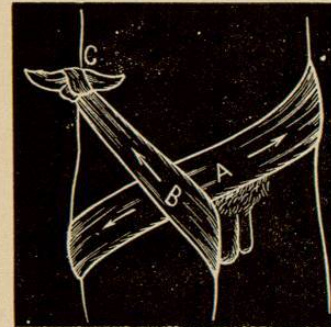
**Variety.**—The *Cruro-pelvic Triangle* is made, essentially, in the same manner; the only difference being that the base of the triangle is applied farther up upon the abdomen, thus adapting it more especially for confining dressings about the crest of the ilium, and the lower lateral portion of the abdomen.

#### CRURO-PELVIC CRAVAT.

(Inguinal Cravat.)

**Description.**—A wide cravat one yard in length.

FIG. 107.



Cruro-pelvic Cravat.

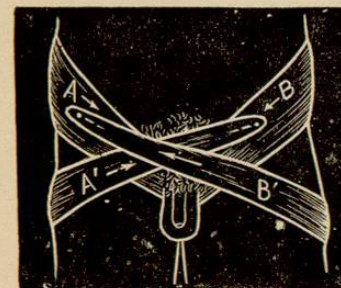
**Application.**—Place the middle of the cravat at the pubic region, as A; carry, then, the superior extremity, or the one to the opposite of the diseased side, obliquely up across the opposite inguinal region, over the iliac crest, and around the back; then conduct the other extremity about the thigh of the injured side, as B, mounting up across this inguinal region, and at last tie with the other extremity at the side, as at C.

**Uses.**—For confining dressings upon the supra-pubic, inguinal, and lower gluteal regions.

#### SACRO-BI-CRURAL CRAVAT.

**Description.**—Two cravats, each four feet in length. Tie them together at one of their extremities.

FIG. 108.



Sacro-bi-crural Cravat.

**Application.**—Place their point of tying at the lumbosacral region, bringing both free extremities, A and B, forwards and downwards across the inguinal regions, one upon each side; then pass them in between and around the thighs, and conduct them obliquely upwards and across the ilio-pubic regions, A' and B', to confine them there with pins.

**Uses.**—For confining dressings upon both groins, as in cases of bilateral buboes.

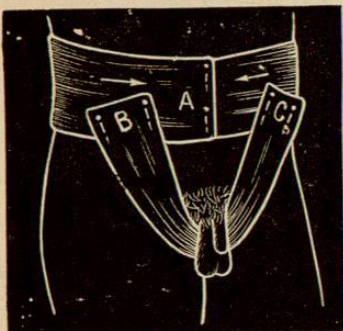


## DOUBLE T OF THE PERINÆUM.

**Description.**—I. A broad band, long enough to encircle the body.

II. Two strips, each one yard in length by two inches in width, sewed at right angles to the broad band, one inch from each other, at its central portion.

FIG. 109.



Double T of the Perinæum.

**Variety.**—*Simple T of the Perinæum.* This differs from the above only in having a single perinæal strip. Is used for the same purposes for which the double T is employed.

## PERINÆAL CRAVAT.

**Description.**—I. A broad bandage to encircle the abdomen, as in figure 109.

II. A cravat two feet in length.

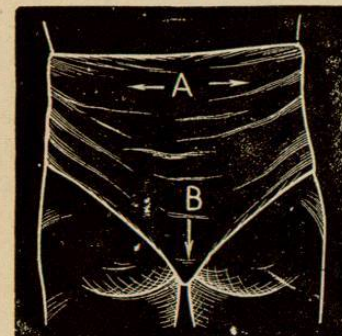
**Application.**—Having applied the abdominal band, as in the preceding cut, A, pin (or button) one end of the cravat to the sacral portion of the broad band; pass the other extremity between the thighs, and pin at the pubic portion of the band.

**Uses.**—Similar to the “T Bandages of the Perinæum.” Ladies make use of this cravat for protecting themselves against the menstrual flow.

## SACRO-PUBIC TRIANGLE.

**Description.**—This should be a triangle one yard in length, by eighteen inches in height.

110.



Sacro-pubic Triangle

**Application.**—Place the base of the triangle, A, at the lumbo-sacral region, with the apex downwards, and carry the two extremities forwards around the body, tying or pinning, at the front. Then carry the apex, B, of the triangle forwards between the thighs, and pin, at the pubes, to the tied extremities.

**Uses.**—To maintain dressings upon the sacral and lower lumbar regions, the perinæum, vulva and anus.

## FOUR-TAILED BANDAGE OF THE HIP.

**Description.**—A piece of cloth one yard in length, by eight inches in width, torn to a four-tailed bandage; see figure 4, page 22.

**Application.**—Place the plane of the bandage over the diseased hip, and carry the two superior ends around the pelvic brim, and confine by tying. Then conduct the two inferior extremities about the upper portion of the thigh, of the side diseased, and fasten as usual.

**Uses.**—To confine cataplasmata and similar dressings, to the parts it covers.

## COXO-PELVIC TRIANGLE.

(*Triangular Bonnet of the Nates.*)

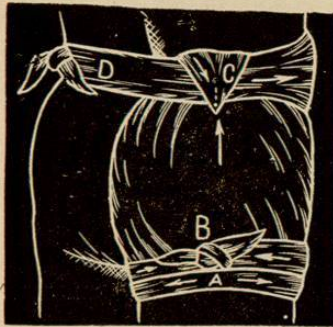
**Description.**—I. A cravat four feet in length.

II. A triangle having a base one yard in length and a height of eighteen inches.



**Application.**—Encircle the lower portion of the abdomen with the cravat D, and confine by tying. Then place the middle of the base of the triangle, A, below the great trochanter, with the apex upwards; then encircle the thigh with the free extremities of the base, and confine by tying as at B. This done, carry the apex of the triangle upwards, and confine it to the cravat, as you see in the wood-cut, at c.

Fig. 111.



Coxo-pelvic Triangle.

**Uses.**—To retain soft dressings to the parts it covers.

## LUMBO-SCROTAL TRIANGLE.

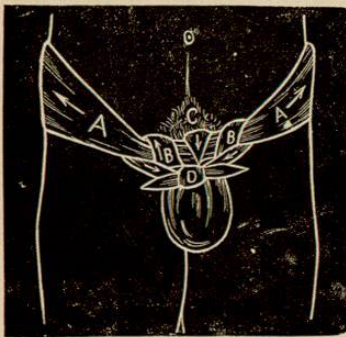
(Suspensory Bandage of the Scrotum.)

**Description.**—I. A cravat sufficiently large to encircle the body.

II. A triangle having a base of fourteen inches and a height of ten inches.

**Application.**—Tie the cravat, A-A, about the lumbo-hypogastric regions. Place the base of the triangle close up to the pubes, beneath the scrotum, and carry the ends, B, B, up over the cravat, then down beneath it, and forwards again, as you see in the cut, and tie in front, as D. Carry the apex of the triangle upwards across the front of the scrotum, passing beneath the tied extremities, and beneath the cravat, and fold down over and in front

Fig. 112.



Lumbo-scrotal Triangle.

of the cravat, confining with a pin.

**Uses.**—As a suspensory bandage for the scrotum, and its contents, and as a retainer of dressings to the parts.

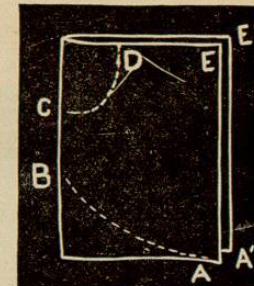
## BOURSE OF THE SCROTUM.

**Description.**—I. A piece of cloth, folded to a double square, six or eight inches in size. Cut off the folded corners by the dotted lines, A-B, and C-D, in figure 113. It is then to be stitched across, from A to B, and from C to D.

II. Around the upper portion of this, E-D-E', is to be stitched, at its central portion, a roller two inches in width by four feet in length.

III. To each inferior extremity, A and A', there is to be stitched a roller one inch in width by two feet in length.

Fig. 113.



Bourse of the Scrotum.

**Application.**—Place the scrotum in the bourse, and draw the penis through the opening left at D, C. Conduct the broad band around the body, and confine by tying. The other two strips that are attached to the inferior portion of the bandage, are to be carried between the thighs, across the perinaeum, and up over the buttocks, one upon each side of the body, and confined to the broad band that encircles the abdomen.

**Uses.**—To retain dressings to the scrotum, or to exercise compression upon its contents; but more especially as a suspensory bandage. Rubber makes a good substitute for the linen bourse when compression is demanded, as proposed by Richard and Nélaton, in cases of voluminous varicoceles and sarcoceles. Nélaton employed, in these cases, small *tubes caoutchouc vulcanisé*, and by so doing forestalled the American surgeon in a similar use of the *capote*. Compression can also be maintained by the use of adhesive strips, which method is fully described in the Chapter upon Strappings.



## DOUBLE T OF THE TRUNK.

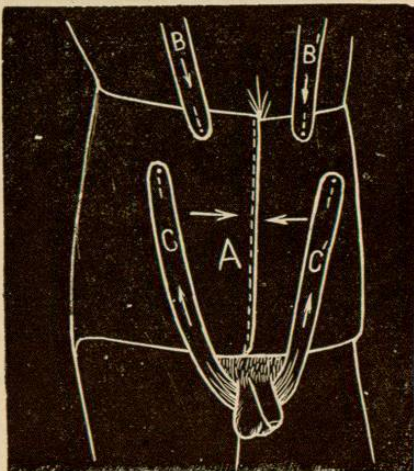
**Description.**—I. A large, quadrilateral portion of cloth to encircle the abdomen.

II Two strips, sufficiently long to pass over the shoulders, to act as "suspenders."

III. Two strips of the same length to be passed across the perinæum.

**Application.**—Having encircled the abdomino-lumbar re-

FIG. 114.



\*Double T of the Trunk.

gions with the broad quadrilateral portion of the bandage, pass the two portions, B, B', of the bandage from the posterior to the anterior surface, and confine with pins to the main bandage. Then, pinning the remaining two strips to each lumbar region of the broad bandage, conduct them forwards, across the perinæum, and upwards to the abdomen, there to confine; having care

to have crossed them upon the perinæum, so that the strip fastened upon the right of the patient, posteriorly, shall be fastened upon the left, anteriorly, etc.

**Uses.**—As a dressing after paracentesis abdominis, or eviscerating wounds. Also, as a retainer of pubic and perinæal dressings.

**NOTE.**—For the *Spiral of the Abdomen*, see page 82; and for the *Circular-Quadrilateral of the Abdomen* (and the *Abdomen and Thorax*), and the *Dorsal Cervico-Sternal Triangle*, see page 83.

The *uses* of these bandages are similar to those for which the Double T of the Trunk is employed.

## CHAPTER XI.

## IMMOVABLE DRESSINGS.

This variety of surgical dressing has long been known to the profession. The Father of Medicine, Hippocrates, was quite conversant with the use of this apparatus, and used it in most cases of fractures. His teachings upon the subject seem to have been lost sight of, however, during the many centuries that have followed him, and so the introduction of this style of dressing, during our later years, has been accredited to the *reviver* as a new discovery. *Resurgam* is the epitaph of all things surgical, and the history of the succeeding ages is but the unfolding of the truthfulness of the prophecy. In other words, a modern inventor (so-called) can hardly hope to be anything further than a reviver of some forgotten principle.

The stiffening substance made use of by Hippocrates, was wax, rosin, and cerate, instead of the plaster-of-Paris, starch, dextrine, etc., made use of by the moderns. This was well rubbed into the bandage, and upon each succeeding turn of the applied roller, besides being applied to the compresses, packings, and even the limb itself.

Mr. Eaton, the English Consul at Bassora, introduced the knowledge of these hard plaster bandages to the English public in 1798, and Pirogoff, in 1854, during the Crimean war, used it very extensively.

## THE BAVARIAN PLASTER SPLINT.

**Description.**—Take two pieces of Canton flannel, of length sufficient for the injured member, and of width sufficient to overlap slightly when brought around the limb. Those for the leg would resemble the pieces of the leg of a stocking when it is cut vertically. The pieces should now be