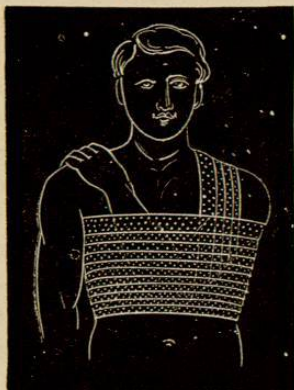


FIG. 62.



Velpeau's Bandage.

then down across the clavicle, and over the front and outside of the injured arm, and *under* the elbow. From here it is to be carried diagonally up, across the chest, to and beneath the axilla of the sound side, covering in the initial end, thus finishing course 1.

Course 2 is the same as course 1 until you reach the point of the elbow; as soon as this point is reached, you make a horizontal turn about the chest, thus finishing courses 2 and 3.

Course 4 is identical to course 1, whilst courses 5 and 6 are in line with courses 2 and 3, the only difference being to overlap each preceding course one-third to one-fourth the width of the bandage, so as to give the whole a firm support to the parts, and cover in the whole of the arm and chest, as shown in the engraving.

Uses.—This bandage is employed in dressing fractures of the clavicle, fractures of either the coracoid or acromial processes of the scapula, and also in luxations of the humerus.

To make a firmer support, the porous adhesive bandage, as shown in Fig. 62, should be used.

Application.—Have the patient place the hand of the injured side upon the opposite shoulder, as, for instance, the left, as shown in the cut.

Place the initial end of the bandage under the axilla of the *sound* side, then carry the roller-head diagonally up across the back to the top of the injured shoulder;

CHAPTER IX.

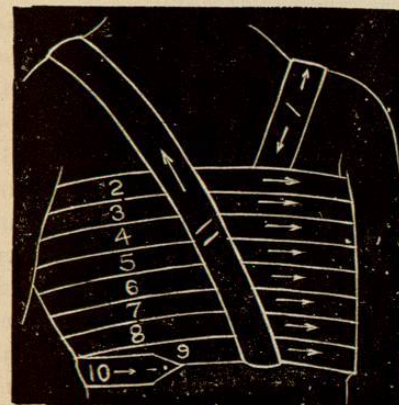
BANDAGES OF THE BODY.

SPIRAL OF THE CHEST.

Description.—This bandage should be nine yards in length, by two inches in width.

Application.—Dropping about one yard of the bandage

FIG. 63.



Spiral of the Chest.

obliquely down across the chest, from the top of one of the shoulders, the left, for instance; carry the head of the bandage down the back to a level with the arm-pits. Make now the spiral turns, 2, 3, 4, 5, 6, 7, 8 and 9, about the chest, and at last confine by pinning, as at 10. Carry, now, the free end of the bandage, 11, which you let fall at the beginning of the application,

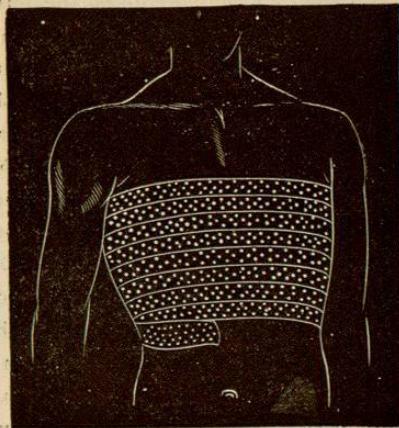
obliquely up over the chest, to the opposite shoulder from whence dropped, and confine, by pinning, to the posterior spiral turns. The spiral courses may be stitched to course 11.

Uses.—This bandage is employed where compression about the chest is needed, as in cases of fractures of the ribs, sternum or vertebræ, or separation of the rib-cartilages; also in wounds of the abdomen with presentation of the viscera. It is also of use in emphysema, or after thoracico-paracentesis, thus compressing the walls of the chest, if they be much expanded.

Variety.—If the roller-head should be carried down to the superior margins of the inferior ribs, and then the circular spirals made, we would have the *Spiral of the Abdomen*. Full a yard more of bandage is, in this case, required. It can also be extended down upon the abdomen, from the "Spiral of the Chest," by having the bandage as long again as needed for the performance of the chest spiral. The *uses* of these varieties are similar to those of the above. They are especially applicable where abdominal compression is desired, as after paracentesis abdominis, eviscerating wounds, dropsies, ovarian tumors, etc.

ADHESIVE SPIRAL OF THE CHEST.

FIG. 64.



Adhesive Spiral of the Chest.

As a useful substitute for the flannel "Spiral of the Chest," just described, take an equal sized roller of porous adhesive bandage. It may be applied in a similar manner and will be found to give better *fixed* support to the chest-walls than will the flannel or cotton roller, hence it would be preferred to them in cases of fracture or luxation of the bones or the cartilages of the chest-walls.

It can be applied lower down upon the body, and would then be a variety of the "Spiral of the Abdomen."

CIRCULAR-QUADRILATERAL OF THE CHEST, AND DORSAL CERVICO-STERNAL TRIANGLE.

Description.—I. There should be a quadrilateral wide enough to cover in the thoracic region, and long enough to en-

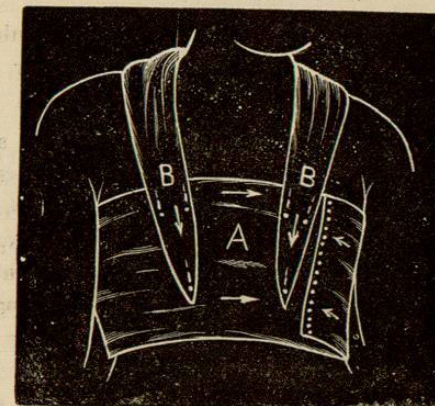
circle, one or more times, the body, and may or may not be of several thicknesses.

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

Application.—Encircle the body with the quadrilateral portion of the bandage, as A, and confine by pins or stitches.

This done, place the centre of the base of the triangle at the nape of the neck, carry the two ends, B, B, forwards and downwards, across the front of the chest, and confine them with pins to the quadrilateral, or thoracico-encircling portion. Then carry the apex of the triangle down the back, and pin it to the quadrilateral portion of the bandage at the back, so as to prevent it slipping down.

FIG. 65.



Circular-Quadrilateral of the Chest, and Dorsal Cervico-Sternal Triangle.

Uses.—For confining dressings to any portion of the thoracic regions; also for supporting the walls of the chest, in case of injury or disease, where the respiratory movements are to be confined.

Variety.—By widening the quadrilateral portion of the bandage, A, or by dropping it farther down the body, so as to encircle the abdomen, we get the *Circular-Quadrilateral of the Abdomen*, and the *Dorsal Cervico-Sternal Triangle*; or, if the bandage be wide enough to cover both the thoracic and abdominal regions, the *Circular Quadrilateral of the Abdomen and Thorax*, and the *Dorsal Cervico-Sternal Triangle*. In either of the cases two strips should be passed from the anterior surface of the quadrilateral to its posterior surface,

across the perinæum, thus preventing the bandage from slipping upwards.

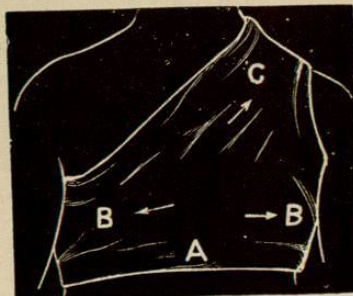
The *uses* of these bandages are to furnish support to the abdomen, as well as the thorax, after ovariectomy, paracentesis abdominis, or other injuries of the abdominal wall.

ANTERIOR THORACICO-SCAPULAR TRIANGLE.

Description.—This bandage should be made of a triangle having a base one and one-quarter yards in length, and a height of eighteen or twenty inches.

Application.—Place the base of a triangle, A, at the inferior and middle portion of the chest. Carry the two ends, B, B, horizontally about the body, and tie at the back.

FIG. 66.



Anterior Thoracico-Scapular Triangle.

Then carry the apex of the triangle, C, up across the chest, over the shoulder diseased, and then down to the ends tied at the back, where it is to be confined.

Uses.—To retain dressings upon either of the lateral-anterior surfaces, or the anterior

surface, of the chest.

Variety.—By placing the base of the triangle at the back, and then similarly applying, you get the *Posterior Thoracico-Scapular Triangle*, which is useful in confining dressings to either the posterior, or lateral, surfaces of the thorax.

FIGURE OF 8 OF THE NECK AND AXILLA.

(*Spica of the Shoulder.*)

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

Application.—Place the initial end of the bandage at the side of the neck, 1; confine by a single horizontal circular turn, 2.

FIG. 67.

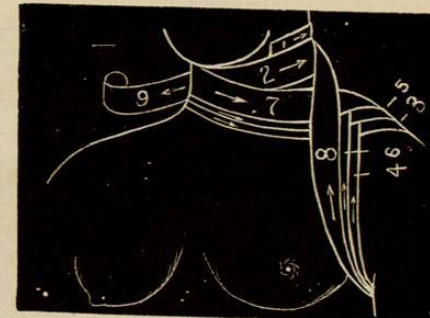


Figure of 8 of the Neck and Axilla.

Continue the course of the bandage about the neck, at last crossing down to the axilla from over the back of the shoulder, thus finishing course 3. Course 4 is made by carrying the roller-head up over the

anterior surface of the shoulder, from under the axilla, to the back of the neck. Course 5 is made the same as course 3; course 6, as course 4; course 7, as course 5; course 8, as course 6, and so on. At last exhaust the bandage by a single horizontal turn about the neck, and confine as usual.

Uses.—To confine dressings to the clavicular, sub-clavicular, and axillary regions; also, upon the shoulder.

CRAVAT OF THE NECK AND AXILLA.

Description.—A cravat one yard in length.

Application.—Standing at the side of your patient, place the centre of the cravat beneath the diseased axilla. Carry, now, the posterior extremity up over the scapular region, across the top of the shoulder, and around over the front of the neck to the opposite side, thus imitating course 7 of the preceding bandage, only making it in the opposite direction; viz., upwards. Then carry the anterior extremity up over the front of the diseased axilla and shoulder to the back of the neck (imitating course 8 of the preceding bandage) to tie with its fellow there.

Uses.—Similar to those for which The Figure of 8 of the Neck and Axilla is employed.

FIGURE OF 8 OF THE SHOULDER AND OPPOSITE AXILLA.

(Descending Spica of the Shoulder.)

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

Application.—Place the initial end of the bandage upon the

FIG. 68.

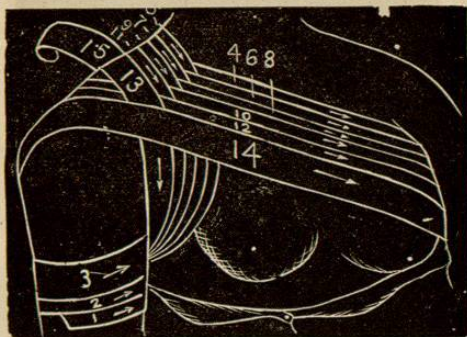


Figure of 8 of the Shoulder and Opposite Axilla.

right arm (supposing it to be the *right* shoulder that you wish to cover) and confine it by two horizontal, circular turns, 2 and 3, about the arm. Turn 4 is made by mounting up to the right side of the neck (from the back) and passing diagonally downwards across the chest to the *left* axilla. Passing under this axilla, remount to the right side of the neck (across the back), and then descend to the *right* axilla, thus finishing course 5. Course 6, is similar to that of course 4; course 7, to that of course 5, and so on until the bandage is exhausted, at last confine by pinning.

Uses.—Is used to maintain dressings upon the shoulder, or acromio-clavicular region, arm-pit, or axilla.

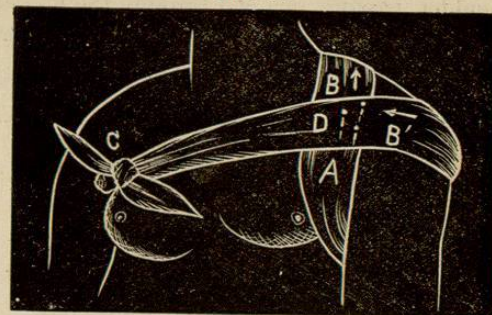
Variety.—The *Ascending Spica of the Shoulder* is applied in a very similar manner, the only difference being that course 4 takes the place of course 14, and course 5 the place of course 13, etc., as shown in the cut; in other words, you ascend gradually upwards to the neck. The descending variety is preferable, as it gives greater solidity.

SIMPLE BI-AXILLARY CRAVAT.

Description.—This should be a cravat (a triangle folded to this form) one yard in length.

Application.—Place the middle of the cravat in front of the axilla of the diseased side, as A; carry both extremities upwards over the same shoulder as B, B', there crossing them. Then conduct that extremity which passes over the front of the axilla, B, backwards over the shoulder and the

FIG. 69.



Simple Bi-axillary Cravat.

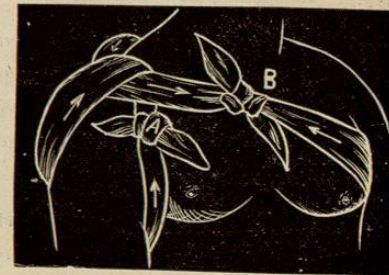
opposite axilla, and tie to the other extremity, B', that has been passed somewhat obliquely across the breast, as at c. Afterwards pin one to the other at the crossing-point, d.

Uses.—To confine dressings about the axillary region and shoulder; also for bringing the shoulder forwards upon the chest, in cases of wounds at the front of the part, or of burns upon the posterior, or scapular regions where vicious cicatrization may be feared.

COMPOUND BI-AXILLARY CRAVAT.

Description.—This bandage is made from two cravats, each being one yard in length, and made similarly to the Simple Bi-axillary.

FIG. 70.



Compound Bi-axillary Cravat.

Application.—Placing one of the cravats, the centre, beneath one axilla the right, for instance, conduct the two ends upwards and tie at the shoulder, as A. Place,

now, the other cravat, beneath the opposite axilla, carry one extremity forwards, obliquely upwards, across the chest, and the other obliquely upwards across the back, to the opposite shoulder, passing one end through the noose made by the cravat, A, first applied, and confine by tying, as at B.

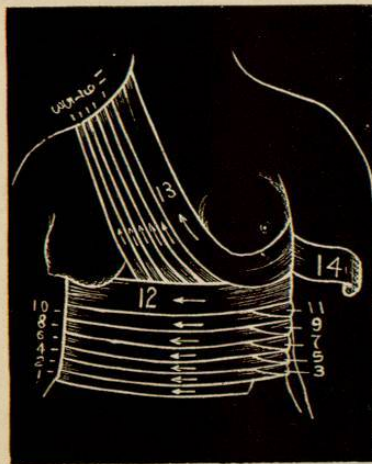
Uses.—Similar to the above. It also affords means for confining dressings to both axillary regions simultaneously.

CROSS OF ONE MAMMA.

Description.—This bandage is made from a roller eight yards in length by two inches in width.

Application.—Place the initial end of the bandage, 1, below the diseased gland, the left for example, and confine by a

FIG. 71.



Cross of One Mamma.

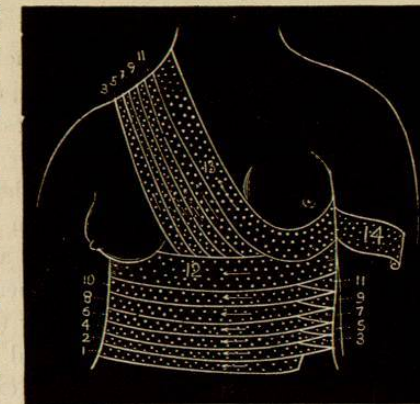
confine it by pinning, as usual.

Uses.—As a "sling," or support for an inflamed or suppurating breast; and also for exercising a compression upon the gland, when occasion may demand it. In this last case it

should be applied with considerable firmness, so that the direct benefit from continuous pressure may be obtained.

An American surgeon has taken advantage of the expansi-

FIG. 72.



Porous Adhesive Cross of the Mamma.

bility of sponge in maintaining compression of the Mamma. The sponge (a large one) is thoroughly cleansed and impregnated with some antiseptic and then pressed between two flat surfaces until it becomes dry, and as flat as possible. It is then firmly strapped or bound upon the breast with some one of the breast bandages which have been described, and is gradually made to expand, by moistening with water, if the secretions from the gland or sore be not sufficient for this purpose.

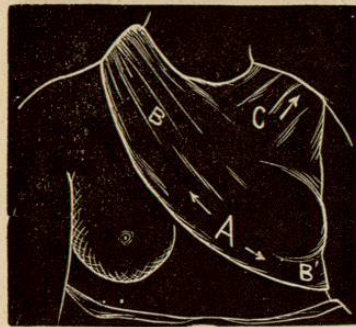
Variety.—*The Porous Adhesive Cross of the Mamma.* This is shown as applied to the patient in Fig. 72. The description and application is similar to that of the non-adhesive Cross just described.

NOTE.—This porous adhesive bandage adheres but slightly to the integument; is reversible, hence it is to be preferred to the ordinary Adhesive Plaster Roller. It does adhere, however, to itself, hence furnishes much firmer support than does the flannel or cotton roller. Being perforated, it also adapts itself more evenly to the contour of the gland, and also permits egress for the discharges when crossing over a wounded surface.

TRIANGLE OF THE MAMMA.

Description.—This should be made from a triangle having a base one yard in length and a height of eighteen inches.

Application.—Placing the base of the triangle, A, at the xiphoid cartilage, carry one end obliquely up over the opposite shoulder, B, and the other end, B', below the axilla of the diseased side, and tie them together at the back.



Triangle of the Mamma.

Uses.—Similar to the preceding; but it is more especially adapted than it for retaining cataplasms and other dressings to the gland, and the region about it; is more easily applied than the above, and makes an excellent suspensory bandage for the mamma.

BOURSE OF THE MAMMA.

Description.—A piece of lint ten inches in length, and eight inches in width when folded at the centre. Cut off, then, the folded corners, A and B, by the dotted lines O-D, and E-F; stitch, then, the whole together from G to F; viz., G-O-D-E-F. This done, to each of the two corners at G, and the two at H, stitch a narrow strip sufficiently long to meet and tie, with its fellow (the two inferior), about the body, and (the two superior) about the neck.

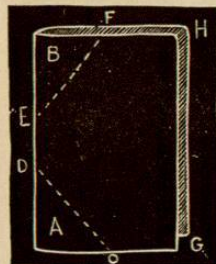


FIG. 74.

Application.—Introduce the diseased gland into the bourse; A, carry the two ends, B and B', around the neck, the one on one side, and the other on the other, and confine them by tying; conduct, now, the two inferior ends, c and c', horizontally about the chest, and tie them either there, or, after crossing them, bring forwards, and tie in front.

Uses.—As a suspensory of the gland in cases of hypertrophy, or extreme flaccidity. Also useful in confining cataplasmata, or other dressings.

FIG. 75.



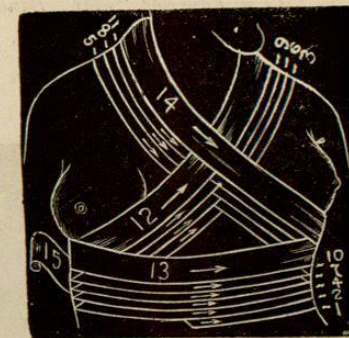
Bourse of the Mamma.

CROSS OF THE TWO MAMMÆ.

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

Application.—Place the initial end midway between the lower extremity of the xiphoid cartilage and the umbilicus, and, going from right to left, confine it by a single horizontal turn, 2. Continue in the same course, till you come to the right side of the chest, when you mount obliquely upwards across the chest, to the left shoulder, thus finishing course 3. Course 4 is a horizontal turn about the chest. Continue about the body, horizontally, till you get to the left scapular region, when you mount obliquely upwards across the back, to the right side of the neck, and then descend obliquely downwards, across the front of the chest, below the left mamma, thus

FIG. 76.



Cross of the Two Mammæ.

finishing course 5. Course 6 is made similarly to course 3; course 7, to course 4; course 8, to course 5; course 9, to course 6; course 10, to course 7; course 11, to course 8; course 12, to course 9; and so on until the roll is exhausted, when you confine as usual.

Uses.—In case of disease of both breasts where suspension is required; also for compression, and for the retaining of dressings. It is not a very stable bandage, besides being open to the objection of somewhat cording the neck. For retaining topical dressings, or for suspension, the triangular mammary bourse, see figure 75, would be preferable.

NOTE.—Mayor's system may be used in making this bimammary bandage by simply applying the Triangular Caps of the Mammæ, one to each gland; the two apices being confined, as described upon page 90, or else tied or pinned together. This would then be known as *The Bimammary Triangle*.

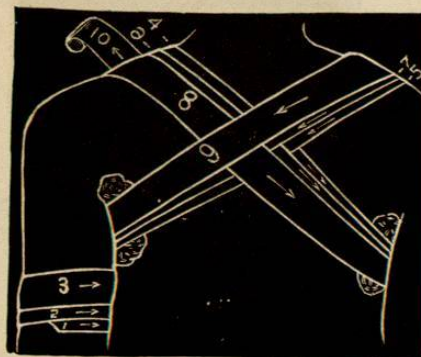
Two Bourses may also be employed; each being made and applied similarly to that one described upon pages 90 and 91.

POSTERIOR FIGURE OF 8 OF THE SHOULDERS. ✓

(*The Posterior "Star" Bandage of the Old Authors.*)

Description.—This bandage is made from a roller, eight yards in length by two inches in width.

FIG. 77.



Posterior Figure of 8 of the Shoulders.

Application.—Place the initial end, 1, at the middle and posterior part of the left arm. Confine it by two circular turns about the arm, 2 and 3. Continue in the same course till you reach the anterior surface of the arm, when you ascend obliquely across the axilla and

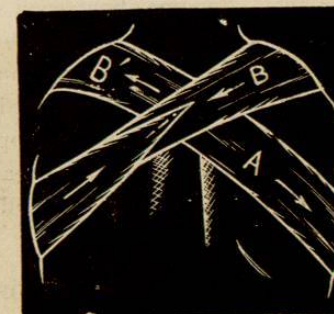
chest to the left side of the neck; from here you descend obliquely across the back, to and beneath the right axilla, thus finishing course 4. Carry the roller under this axilla up to the top of the same shoulder, and obliquely down across the back to the left axilla, thus finishing course 5. Course 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 bandage is exhausted, when you confine as usual.

Uses.—For retaining dressings upon either the anterior or posterior surface of the chest; for fixing the shoulders backward, in case of burns of the chest, or in backward displacement of the sternal end of the clavicle, and also for assisting in holding in coaptation the ends of a broken clavicle, or clavicles. Also of use in luxations of the acromial end of the clavicle. It is necessary to have considerable cotton-wool, or some like substance, in the axillæ, in order to guard against chafing of the parts.

SIMPLE DORSAL BI-AXILLARY CRAVAT.

Description.—This bandage is made from a cravat one and one-half yards in length.

Application.—Place the middle of the cravat across the inter-clavicular space, A. Carry one extremity down below one axilla, the right for example, and up over the same shoulder, B. Carry the other extremity up over the other shoulder, B', down in front of and beneath the same axilla; at last confine it to the other extremity, after you have sufficiently extended the shoulders backwards.



Simple Dorsal Bi-axillary Cravat.

Uses.—This bandage of Mayor takes the place of the preceding, and may be preferred to it for its simplicity.

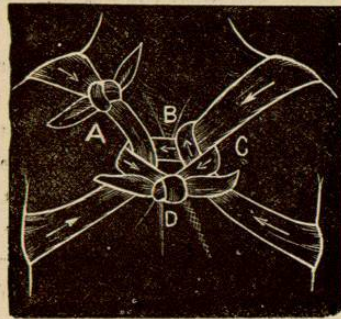
COMPOUND DORSAL BI-AXILLARY CRAVAT.

Description.—I. A cravat one yard in length.

II. Another cravat two feet in length.

Application.—Tie the shortest cravat about one of the

FIG. 79.



Compound Dorsal Bi-axillary Cravat.

shoulders, the left for example, as at A. Now place the centre of the other cravat in front of the opposite axilla (the right in this case), and carry one end up over the same shoulder (the right) and the other beneath the same axilla, to the back. Carry, now, the superior extremity through the noose formed by the cravat first applied; then twist the other extremity about this one, as at B and C, and finally tie as at D.

Uses.—The same as the Simple Dorsal Bi-axillary Cravat, and the Posterior Figure of 8 of the Shoulders. This is a very powerful bandage, and the arm-pits need to be well padded.

Variety.—Take three cravats, two of them being, each, about two feet in length, the remaining one something short of this. Tie one about each shoulder. Then tie the third one through the nooses formed by the first two, so as to bring the two together at the back, thus taking the place of the single noose, B, C, D, of the preceding cut. If there is danger of either of these bandages slipping from the shoulder, a cravat might be tied across the breast, from one to the other, similar to that at the back, thus effectually preventing such a mischance.

ANTERIOR FIGURE OF 8 OF THE SHOULDERS.

(Anterior "Star" Bandage.)

Description.—This bandage should be eight yards in length by two inches in width.

Application.—Place the initial end, 1, at the front of the middle of the right arm, and confine by two horizontal circular turns, 2 and 3.

Continue in the same course till you reach the posterior surface of the arm, when you mount up over the shoulder of the same side then cross diagonally downwards to the left axilla, thus finishing course 4.

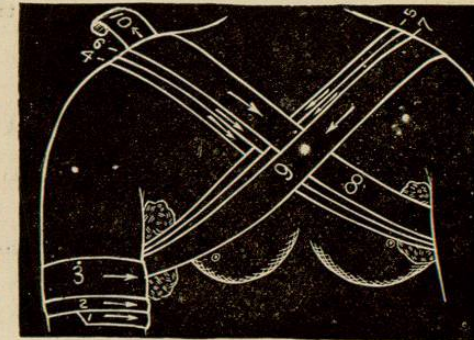
Pass the roller-head beneath this axilla, up over the same shoulder, and diagonally down across the front of the chest to the right axilla, thus finishing course 5. Conduct the bandage under this (the right) axilla, and then upon the right shoulder, and diagonally down across the front of the breast to the left axilla, thus completing course 6. Course 7 is made similarly to course 5; course 8 to course 6; course 9 to course 7, and so on. At last exhaust the bandage, and confine either by pinning or stitching to the other courses.

Uses.—In cases of fractures of the sternum, or separation of the sternal cartilages; also in cases of burns on the interscapular regions, when vicious cicatrization is to be feared. Might be of use in some clavicular dislocations. As in all of the axillary bandages, this one needs a thorough protection of the axillæ by cotton-wool in order to prevent chafing of the parts, especially the posterior portion.

SIMPLE STERNAL BI-AXILLARY CRAVAT.

Description.—This bandage is made from a cravat one and one-half yards in length.

FIG. 80.



Anterior Figure of 8 of the Shoulders.

Application.—The opposite to that of the Dorsal Cravat, described upon page 93, this one being applied across the chest instead of the back.

Uses.—Similar to those for which the preceding is employed.

COMPOUND STERNAL BI-AXILLARY CRAVAT.

Description.—Two cravats, one one yard in length, the other two feet in length.

Application.—Opposite to that of the Compound Dorsal Bi-axillary Cravat, described upon page 94. This one being applied across the chest.

Uses.—Same as the Anterior Figure of 8 of the Shoulders.

Variety.—Prepare three cravats, two of them being two feet in length, the third one not quite so long. After tying one of the longer ones about each shoulder, tie the remaining one into the nooses formed by the other two, across the front of the chest. A fourth cravat is now necessary to prevent those fastened about the shoulders from slipping forward and off these parts, and is to be tied to them across the back.

CHAPTER X.

BANDAGES OF THE LOWER EXTREMITY.

✓ SPIRAL OF ONE TOE.

Description.—This should be made from a roller four feet in length by three-quarters of an inch in width.

Application.—This is so similar to that of the Spiral of One Finger, described upon page 60, figure 40, that no further discussion is necessary.

Uses.—For injuries to the toes, similar to those of the fingers for which the spiral is there used.

FIGURE OF 8 OF ONE TOE. ✓

(*Spica of the Toe.*)

Description.—This bandage should be made from a roller, two yards in length by three-quarters of an inch in width.

Application.—Similar to that of the Figure of 8 of the Thumb and Wrist, or Spica of the Thumb. See figure 41, page 61.

Uses.—Of a similar use to that of the Spica of the Thumb.

ADDUCTOR BANDAGE OF THE BIG TOE. ✓

Description.—The bourse may be cut from the "thumb" of a buck-skin or a dog-skin glove. To this, on one side, stitch a piece of elastic ribbon. To this elastic ribbon attach also a strip of ordinary adhesive plaster; one that is long enough to reach around the foot.

II. Two other smaller strips of adhesive plaster of sufficient length to surround the foot, as shown in the cut.

[97]