2 Sheets-Sheet 1.

F. M. Butler,

Truss.

No. 7,517. Patented July 22, 1850.

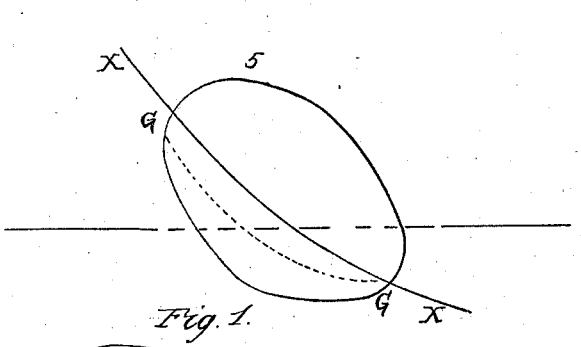


Fig. 1.

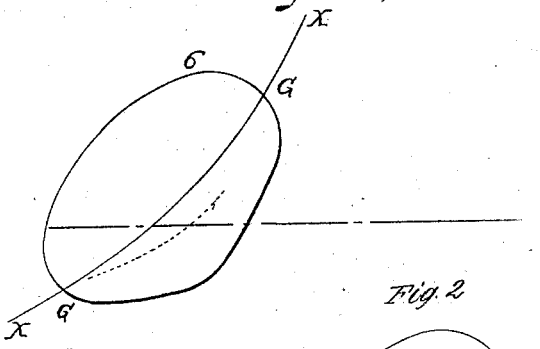


Fig. 2

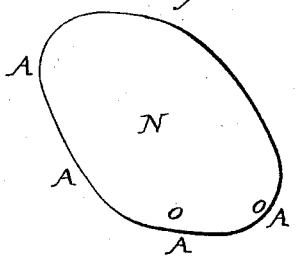
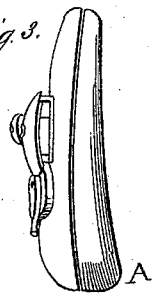
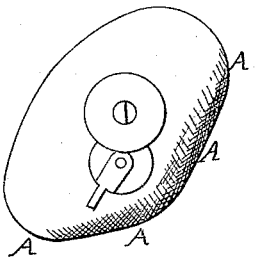
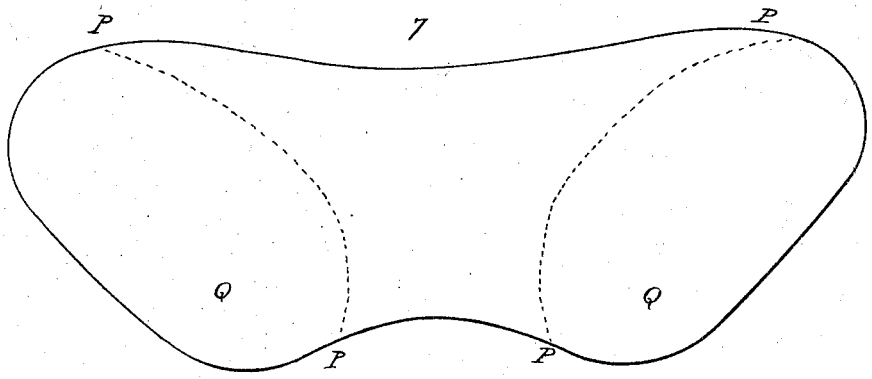


Fig. 3.







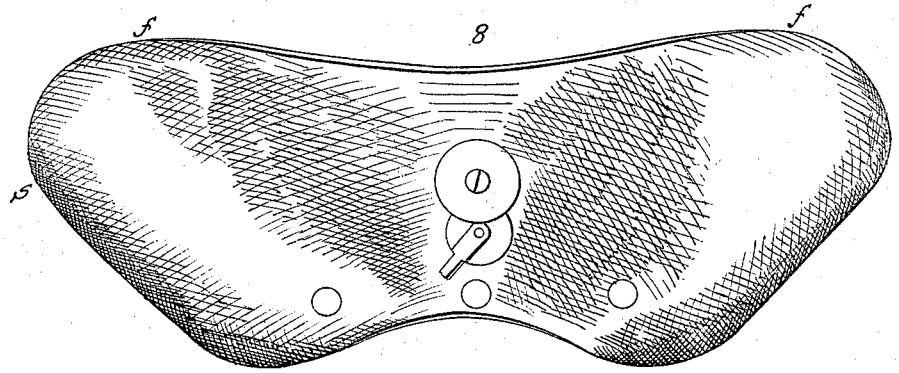


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Fig. 9.

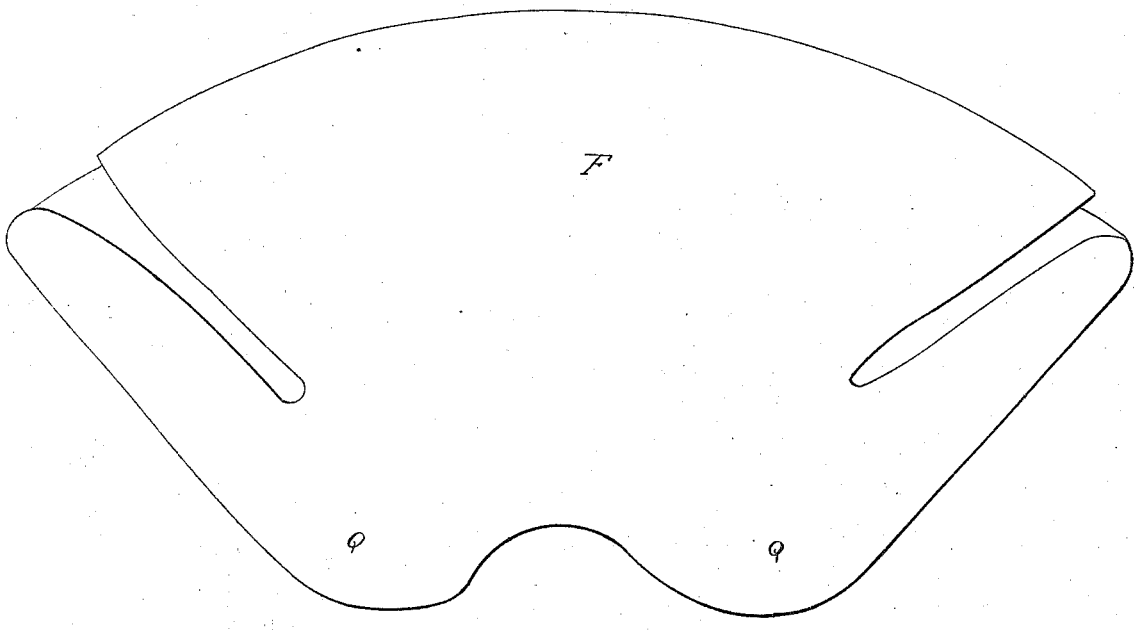
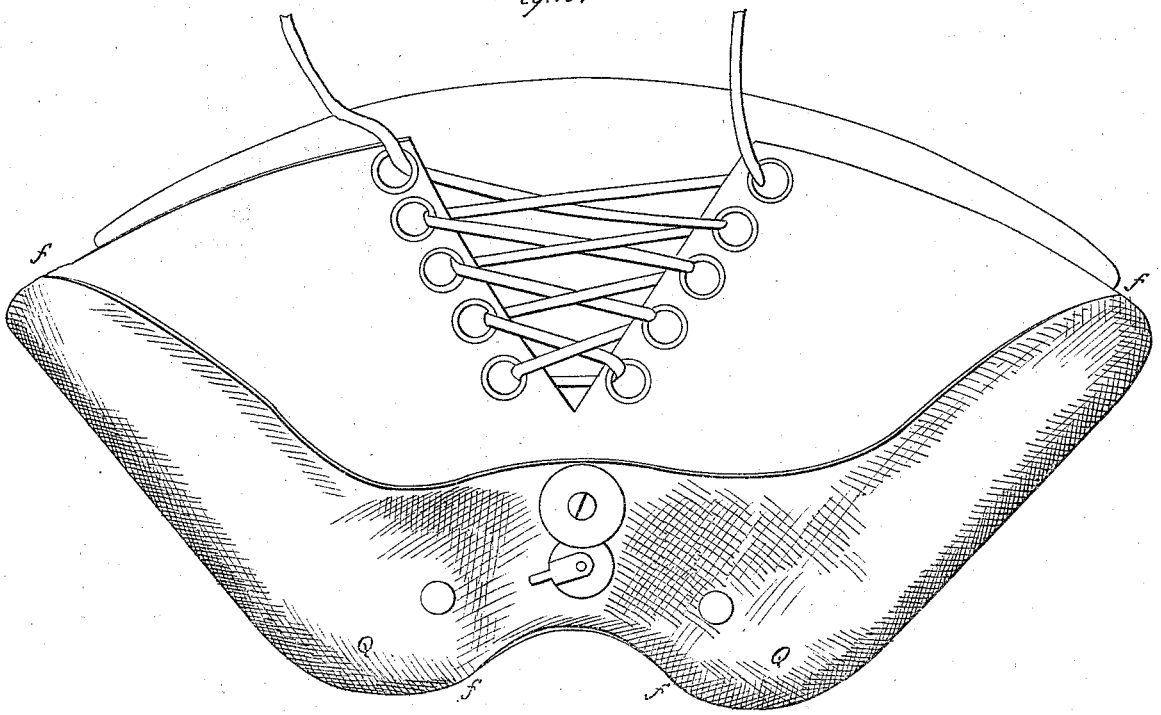


Fig. 10.



UNITED STATES PATENT OFFICE.

FREDERICK M. BUTLER, OF NEW YORK, N. Y.

IMPROVEMENT IN TRUSS-PADS.

Specification forming part of Letters Patent No. 7,517, dated June 22, 1850.

To all whom it may concern:

Be it known that I, FREDERICK M. BUTLER, of the city, county, and State of New York, have invented a new and Improved Construction of Trusses for Hernia, Abdominal Supporters, Braces, &c.; and I hereby declare that the following is a full and exact description.

To enable others to make and use my invention, I proceed to describe its construction and operation, reference being had to the drawings hereunto annexed and making part of this specification.

Figure 1 is the pad, inside view; Fig. 2, the pad, outside view; Fig. 3, the pad, edge view; Fig. 4, the pad, section view; Figs. 5 and 6, the size of plates. The two together form a diagram showing the angle at which the pads are placed. Fig. 7 is a double pad or supporter, inside view; Fig. 8, double pad or supporter, outside view; Fig. 9, double pad or supporter with elongated arms and apron, inside view; and Fig. 10, double pad or supporter with elongated arms lacing, outside view.

My invention consists in, first, the exact shape in which the case should be formed to adapt itself to the boundaries of the thigh and pubis (that being generally a rounded obtuse angle); second, the proper quilling or curling of the outer and under edge thereof adapted to the rotundity of the abdomen; third, the exact and proper method of padding the same, so as to suit the configuration to which it is adapted, and thus avoid making too great pressure upon the fullness of the abdomen by bearing firmly with the raised parts of the pad which pass outward of and underneath the muscles of the abdomen and form a plano-concave pad.

The pad represented at Figs. 1, 2, 3, and 4 is of a peculiar form or shape. The lower and outer sides form a rounded obtuse angle, and the upper and inner edges of the pad are formed by a continued rounded line connecting the extremities of this angle. In other words, when the lower edge of the pad is made to sit over and upon the ridge of the os pubis the outer edge is found to extend outward to the Poupart ligament, and upward and outward along the line of that ligament in its direction to the spinous process of the ilium, thus forming an obtuse angle and fitting in the boundaries of the thigh and pubis.

The shape and position of the plate are seen at Figs. 5 and 6.

The plate may be used flat or it may be quilled. I prefer the latter mode. If the plate be made flat, I fill the blanketing so as to raise the padding around the lower and outer edges at Fig. 1, and sometimes use both quilling and raising, as with pieces of blanketing or other stuff placed on the lower and outer boundaries of the pad.

The direction of the pad with reference to the horizontal line formed by the spring and strap around the body will be seen definitely at Figs. 5 and 6. The center of the longer diameter of the pad (slightly curved) is intended to lie over and upon the inguinal canal. (See curved line *x x*, Figs. 5 and 6.)

The pad in shape (a plano-concave) is slightly concave, so as to give the greatest bearing on the under and outer sides. The sides are pared or sloped a little sometimes, so as to bring the padding within the boundaries of the plate, and sometimes the padding is left to extend beyond the plate. The same effect is produced by quilling the plate (and more easily)—that is, turning up the outer and under edge from G to G, Figs. 5 and 6—making it internally dished, as seen at N, Fig. 1. With a plate thus formed the blanketing is made of uniform thickness or raised, as before mentioned, and the edges pared in slopingly, as above described.

For corpulent persons the pad is increased in thickness and otherwise reduced in size. Occasionally a part of the lower edge of the plate is pared off, (see occult line from O to O, Fig. 4,) so as to accommodate the unevenness in the os pubis or to permit the lower and outer corner or heel of the pad to bear more firmly above the crural arch. The same general form is given to the double or supporter pad, Figs. 7 and 8, the plate of which is made entire to reach across the abdomen and adapt its outer boundaries within the limits of the Poupart ligament. A part of the plate at the lower side is hollowed out to avoid contact with the symphysis pubis, and the body of the plate between the letters P P P P is rounded up to avoid pressing on

that part of the abdomen fronting the bladder. Each of the ends Q of the plate is quilled, as in the case of the single pads (or the blanketing raised); but within the boundaries P P P P the blanketing or padding is made with one or more folds less than is used on the outer ends. The same general form is given to the supporter-pad, Figs. 9 and 10, with the exception that the ends Q are elongated or extended upward, and the body of the plate between them on the upper side removed or hollowed out to admit an apron and lacing center support to the abdomen, which is adaptable to the rotundity of the abdomen in every stage of the gestation. The apron F is a continuation of the padding upward, but is separated from the sides.

The form of spring I use is of the common kind, and that adapted to the Hull's truss and supporter; but I confine myself to no specific form of spring-belt band or brace for the purpose of confining these improved pads to the abdominal walls in giving a general or specific support to the abdominal viscera.

Between the letters S S S S, Figs. 8 and 10, an edge is turned up on the plates to give greater strength when using light brass or other metal.

What I claim as my invention, and desire to secure by Letters Patent, is—

The formation of the pads for trusses, braces, supporters, &c., as above described—to wit, made of shape in the boundary seen at Figs. 5 and 6, (a rounded obtuse angle,) and the padding made somewhat hollow and fullest on the sides, as seen in Figs. 1, 3, and 4, adapted to bear under and outward of the fullness of the abdomen, making a plano-concave pad, whether single or double (the latter seen in Figs. 7, 8, 9, and 10).

FREDK. M. BUTLER.

Witnesses:

OWEN G. WARREN,

ALBERT G. PIKE.