No. 818,888. PATENTED APR. 24, 1906.

E. HOVEY & M. M. BLACK.

TRUSS.

APPLICATION FILED JUNE 26, 1905.

Fig. 1.

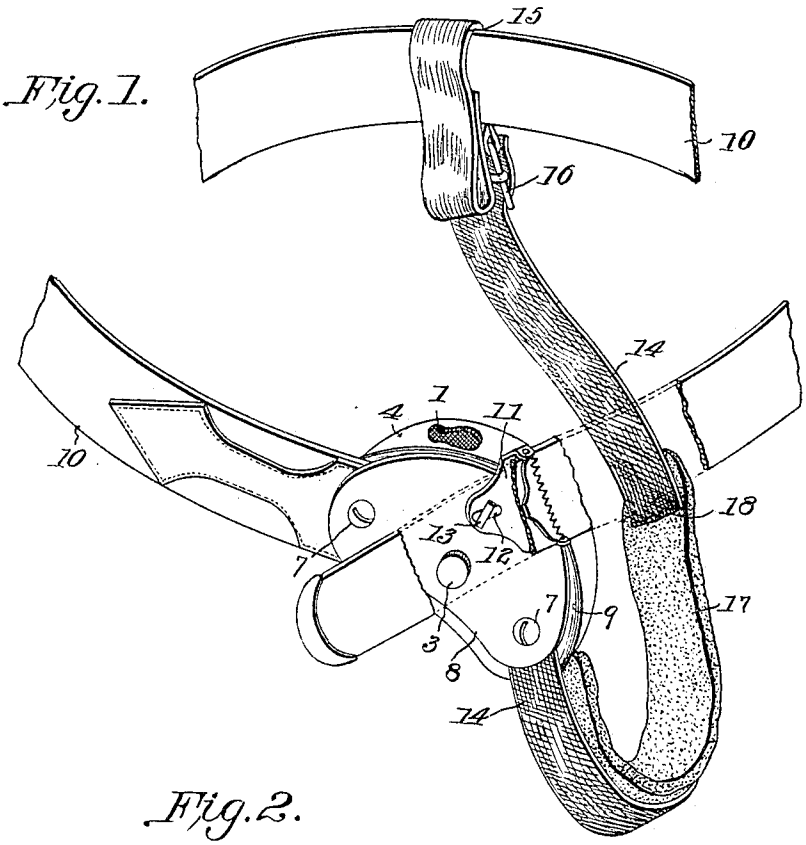
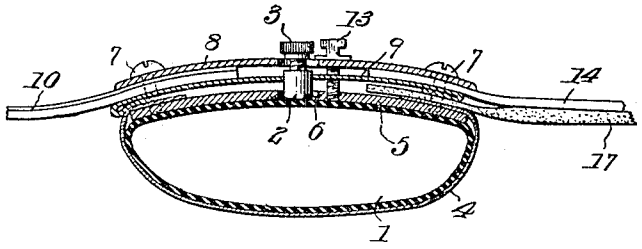


Fig. 2.



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UNITED STATES PATENT OFFICE.

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TRUSS.

No. 818,888. Specification of Letters Patent. Patented April 24, 1906.

Application filed June 26, 1905. Serial No. 267,070.

To all whom it may concern:

Be it known that we, ELIHU HOVEY and MILTON M. BLACK, citizens of the United States, residing at Albion, in the county of Calhoun and State of Michigan, have invented a new and useful Truss, of which the following is a specification.

This invention relates to trusses.

The object of the invention is to provide a truss adapted more particularly for use in the treatment of strangulated hernia, although it is equally adaptable for use in ruptures of all kinds, which shall be comfortable in use, which when once positioned will be positively held against slippage, which shall be shaped in such manner as accurately to conform to the groin, thereby to be more effective in securing the objects designed, to render the truss particularly valuable in the treatment of lesions by causing it to be a generator of heat, which is an essential concomitant in such cases, and generally to improve, simplify the construction of, and render more efficient trusses of the class to which this invention belongs.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a truss, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in perspective of a truss constructed in accordance with the present invention, certain of the parts being broken away for the purpose of clearness of illustration. Fig. 2 is a horizontal sectional view through the pad.

One of the principal features of the present invention resides in the novel construction of the pad 1, which is reniform in shape and is provided with an inflating-tube 2, that is closely sealed by a plug or cap 3. The pad is made of soft rubber, and the operative face is enveloped in a pouch or cover 4, consisting of a plurality of plies of white silk—in this instance five. Disposed upon the rear or outer side of the pad is a plate 5, preferaby of metal and corresponding to the contour of the pad. This plate has an orifice 6, through which the tube 2 projects, and thus operates to hold the pad from any longitudinal movement relatively to the plate. Over the perimeter of this plate is folded the silk pouch 4, as clearly shown in Fig. 2, and is clamped in position thereon by means of screws 7, which pass through the outer plate 8 of the pad, through the overturned portions of the pouch, as shown in Fig. 2, and engage threaded orifices in the inner plate.

Disposed between the two plates is a guard 9, which is constructed, preferably, of leather and has its ends underturned, as shown in Fig. 2, and through these underturned ends project the screws 7. Secured between the guard on one side of the pad and the plate 8 is one terminal of a waist-strap 10, which is by preference made of elastic material, the other terminal of which carries an ordinary spring-clasp 11, adjustable on the belt and provided with a slot 12, adapted to interlock with a hook or button 13, which passes through the plate 8 and guard 9 and is seated in a threaded orifice in the plate 5.

Secured between the plate 8 and the guard 9 on the side of the pad opposite the point of connection of the strap 10 is a crotch-strap 14, which is held in place by one of the screws 7 and has its upper end formed into a loop 15, through which the strap 10 passes, a buckle 16, carried by the strap 14, operating to adjust it to cause the pad to occupy the desired position. Disposed upon that portion of the crotch-strap which will contact with the flesh between the crotch is a silk pad 17, one end of which is provided with a transverse slot 18, through which the crotch-strap projects, and the other end of which is inserted between the guard and the plate 5 and is secured by the same screws that hold the strap in position. The object of this pad is to prevent chafing, and thus discomfort, which inevitably ensues where a thick strap of ordinary leather is employed.

In the use of the truss after the pad has been properly positioned and the straps 10 and 14 adjusted the cap 3 is detached and an ordinary bicycle-pump connected with the inflating-tube, and the pad is inflated until it exerts a pressure that is uncomfortable, if not painful. The pump is then detached, and the valve is operated until sufficient air is allowed to escape to cause the pad to be perfectly comfortable, after which the cap is again replaced, thereby precluding the possibility of escape of air. Owing to the yielding nature of the pad and its pouch or covering of silk the healing of lesions will be rapidly and effectively secured without any pain or discomfort to the wearer of the article. By

reason of the manner in which the parts are combined should it be desired to supply a new pouch 4 it may readily be effected by loosening the screws 7 and hook 8, positioning the pouch upon the pad, and then reassembling the parts as before. The pad 17 may be replaced when necessary simply by removing all of the screws 7, whereupon the crotch-strap can be detached and also the silk pad and the latter be renewed.

It will be seen by reference to Fig. 2 that the tube 2 lies within the plane of the plate 8 and that the cap 3 projects only a slight distance beyond the same, so that a protuberance at this point is obviated, which would be objectionable in use. Moreover, as the waist-strap covers the cap 3 there will be no danger of the flesh of the wearer being pinched between the cap and the plate 8.

Having thus described the invention, what is claimed is—

1. In a truss, the combination with a pad provided with an air-inflating nipple, of an inner plate provided with an orifice through which the nipple projects, a pouch inclosing the pad and having its margins overturned upon the plate, an outer plate having an orifice to permit access to the nipple, a waist-strap and a crotch-strap each having one of its terminals disposed against the inner side of the plate, a guard disposed against the straps, and screws passing through the terminals of the straps, the guard, and into the inner plate.

2. In a truss, the combination with an inflatable pad, of a plate disposed upon the rear side of the pad, a pouch inclosing the front side of the pad and having its margins overturned upon the plate, an outer plate, waist and crotch straps each having one of its terminals disposed between the plates, and means for clamping the two plates together.

3. In a truss, the combination with an inflatable pad, of a plate disposed upon the inner side thereof, a pouch inclosing the pad and having its margin inturned upon the plate, a protecting-pad having one terminal disposed upon the plate, a guard disposed upon the plate and the terminal of the protecting-pad, a waist-strap and a crotch-strap each having one terminal disposed upon the guard, the crotch-strap being projected through an opening in the protecting-pad, and being adjustably connected with the waist-strap, a plate bearing upon the terminals of the two straps, and assembling-screws carried by the outer plate and engaging orifices in the inner plate.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

ELIHU HOVEY.
MILTON M. BLACK.

Witnesses:
ARZA L. MCCUTCHEON,
ADAH S. MCCUTCHEON.