

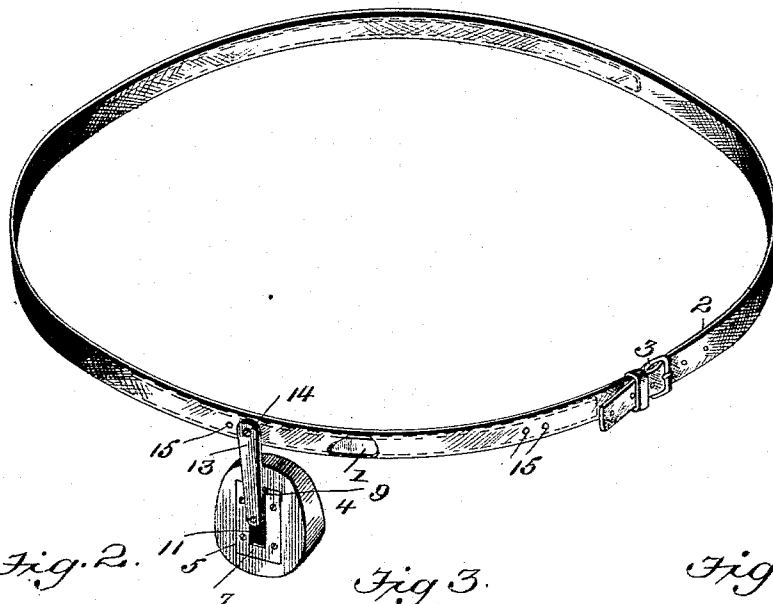
(No Model.)

H. B. SHRIVER.  
TRUSS.

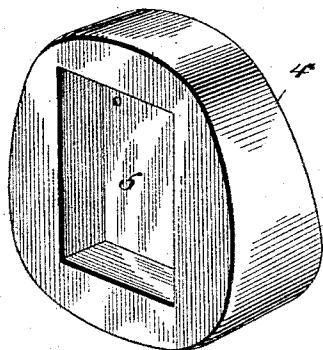
No. 533,675.

Patented Feb. 5, 1895.

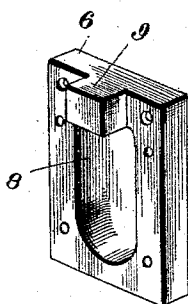
*Fig. 1.*



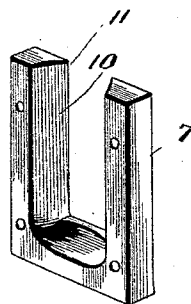
*Fig. 2.*



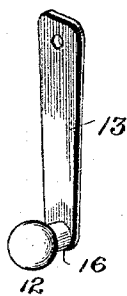
*Fig. 3.*



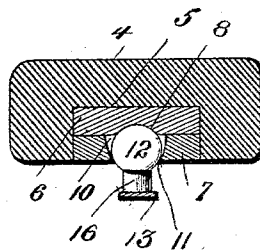
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



Witnesses

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Inventor

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# UNITED STATES PATENT OFFICE.

HIRAM B. SHRIVER, OF TORONTO, OHIO.

## TRUSS.

SPECIFICATION forming part of Letters Patent No. 533,675, dated February 5, 1895.

Application filed May 3, 1894. Serial No. 510,003. (No model.)

*To all whom it may concern:*

Be it known that I, HIRAM B. SHRIVER, a citizen of the United States, residing at Toronto, in the county of Jefferson and State of Ohio, have invented new and useful Improvements in Hernia-Trusses, of which the following is a specification.

This invention relates to hernia trusses, and has for its object to provide a novel device of this character which is simple and durable in construction, and comparatively inexpensive in its manufacture.

To accomplish this object my invention consists in the features of construction and the combination or arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved truss complete. Fig. 2 is a detail view of the pad. Figs. 3 and 4 are detailed views showing the lower and upper plates, respectively, that form the socket joint. Fig. 5 is a view of the arm that supports the pad; and Fig. 6, is a cross sectional view through the pad and socket pieces.

Referring now to the drawings, the reference numeral 1 denotes the main-bar of the truss which is to be of such length as to extend nearly around the body of the wearer, but not press tightly against the same. This bar is formed of flexible inelastic metal, preferably untempered steel, but any other suitable material capable of being bent and retaining its shape, may be used if desired. Secured in any suitable manner to the main-bar 1 is a strap 2, composed of cotton fabric, or fine leather, and provided at one of its ends with a buckle 3. The strap 2 is to be slightly longer than the main-bar, so as to pass wholly around the body of the wearer and then fastened. The main bar is to be wholly inclosed by the strap, or it may be simply secured to the inner face of the same, leaving the outer face of the bar exposed, in which case the latter will be nickel plated in order to avoid rust, and present a neater appearance.

The reference numeral 4, designates the hernia pad which is to be made of hard-rubber, wood, celluloid, or any other suitable material, and to be of any desired shape, but

preferably elliptical or oval, the side that bears against the ruptured part being slightly flattened in order to avoid the natural inclination of the intestine to steal around the pad, and overcoming or avoiding the direct pressure of the pad upon the ruptured part.

The pad 4 is hollowed out, or mortised, as at 5, Fig. 2, for the purpose of receiving socket bearing plates of a ball-and-socket joint or connection between the pad and an arm connected to the main-bar. This socket-bearing is formed by two plates 6 and 7, one of which is secured within the mortise 5, by screws or other means. The plate 6 is provided with an elongated concave channel 8, and a tongue 9, said tongue projecting upward from one of its ends. Secured to the upper face of the plate 6 is a correspondingly shaped plate 7, having a channel 10 formed therein similar to that in the plate 6, and further provided with a mortise 11, that is adapted to receive the tongue 9 of said plate 6.

The manner of securing the last described parts together is as follows: The plate 6 is secured with its concave side up, within the mortise 5 of the pad, and the plate 7 is then secured to the plate 6, the concave, or channelled face of this plate being toward the channel in the plate 6, and the tongue 9 fitting into or registering with the mortise 11. The parts being thus connected form an elongated socket-bearing for the ball 12, now to be described.

The numeral 13 denotes an arm, composed preferably of untempered steel, and nickel plated, the upper end of which is pivotally connected to the main-bar 1, by means of a screw 14, passing into one of the screw-holes 15 in said main-bar. Two or more of these screw-holes 15 may be formed in the main bar 1, in order that the arm 13, carrying the pad, may be adjusted to various positions upon said bar. A ball 12, provided with a base 16 is connected to the lower end of the arm 13, said ball seating within the elongated socket-bearing formed by the plates 6 and 7 within the pad 4, whereby a universal movement of the pad may be accomplished.

If desired, the ball 12, and concave faces of the plates 6 and 7 may be milled or roughened, in order to avoid the accidental displace-

ment of the parts when they have been adjusted to the position desired by the wearer of the truss.

It will be obvious that by pivotally connecting the arm 13, carrying the pad 4, to the main-bar, and by providing the elongated socket-bearing for the ball-joint, a various number of different adjustments may be given to said pad; as for instance, the arm may be swung to the right or left; the pad may be raised or lowered, by simply moving the ball connection up or down in the elongated socket-bearing; or the pad may be revolved or shifted upon its axis to any desired angle. The arm 13 being formed or composed of untempered steel, can be readily shaped or bent toward or from the body of the person wearing the truss, as occasion may require.

It will be understood that the truss may be used for a rupture upon the right or left side, or upon both sides, and for this purpose it is only necessary to change the position of the arm carrying the pad from one screw-hole to another as desired, or to accommodate ruptures upon both sides, it is simply necessary to attach another arm and pad.

A truss constructed according to my invention will possess all the features of simplicity, durability and rigidity; will be easy of ad-

justment, and capable of being bent to any desired shape or form to suit the wearer, and peculiar conditions of the rupture. The main-bar being composed of flexible inelastic metal, and secured to the body by the strap will not press tightly upon the abdomen, or other part of the body, thereby avoiding all rubbing or friction, and at the same time giving ease and comfort to the wearer.

What I claim is—

In a truss, the combination with the main-bar adapted to be adjusted to the wearer, of a mortised pad, an elongated socket bearing secured within said pad and consisting of a lower channeled plate 6 provided with a tongue 9, an upper channeled plate 7 secured to said lower plate and a mortise 11 in said upper plate adapted to receive said tongue, a ball adjustable in said socket bearing and an arm connecting said ball with the main-bar, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

HIRAM B. SHRIVER. [L. S.]

Witnesses:

D. C. GARMAN,

J. O. GARMAN.