(No Model.)

J. T. BARTLETT.

TRUSS.

No. 345,405. Patented July 13, 1886.

Fig 1

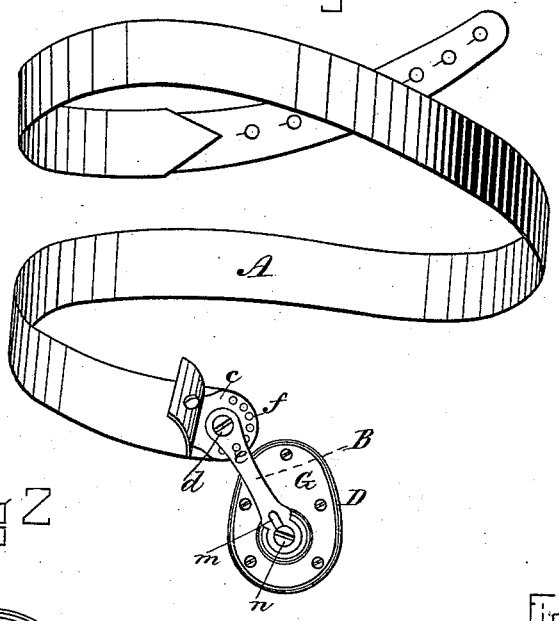

Fig 2

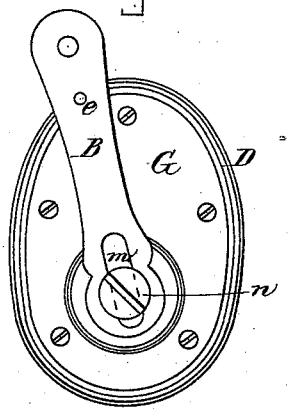

Fig 3

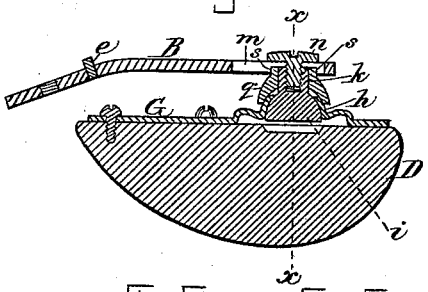

Fig 4

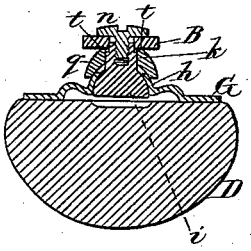

Fig 5

Fig 6

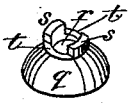

Fig 7

WITNESSES

W. J. Cambridge

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UNITED STATES PATENT OFFICE.

JASON T. BARTLETT, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND EDWARD E. BUTMAN, OF SAME PLACE.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 345,405, dated July 13, 1886.

Application filed May 8, 1886. Serial No. 201,605. (No model.)

To all whom it may concern:

Be it known that I, JASON T. BARTLETT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Trusses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front elevation of a truss constructed in accordance with my invention. Fig. 2 is a plan of the pad and its supporting-arm. Fig. 3 is a longitudinal vertical section of the same. Fig. 4 is a transverse vertical section of the same on the line *x x* of Fig. 3. Figs. 5 and 6 are details in perspective. Fig. 7 is a vertical section through the center of the pad-plate and its socket.

My invention relates to an improvement in trusses for use in cases of hernia; and it consists in a novel combination and arrangement of parts, whereby the pad can be easily and quickly adjusted and held immovably in different positions with respect to its supporting-arm to suit the requirements of the particular case to be treated, as hereinafter more fully described, and specifically claimed.

In the said drawings, A represents an ordinary truss-spring, and B the supporting-arm which carries the pad D, which is of the usual form. The upper end of the arm B is secured to a plate, *c*, at one end of the truss spring by a pivot-screw, *d*, on which it turns as a center, a pin, *e*, on the arm B fitting into one of a series of holes, *f*, in the plate *c*, whereby the arm may be adjusted, as desired, to vary its position with respect to the truss-spring for a rupture on the right or left side, according to the requirements of the case, the adjustment being effected by loosening the screw *d* to allow the pin *e* to be moved from one hole *f* to another, and then tightening the said screw to hold the parts securely together.

The arm B is connected at its lower end to the pad-plate G by means of a ball-and-socket or universal joint, the construction of which I will now describe.

On the plate G is formed a socket, *h*, which is struck up from the under side, and within this socket fits a hemispherical block, *i*, the neck *k* of which extends up through the opening *l*, Fig. 7, at the top of the socket, and is flattened on two sides, as seen in Fig. 5, to enable it to fit into a slot or aperture, *m*, at the end of the arm B, to which it is secured by a flat-headed screw, *n*, which fits a threaded aperture in the neck of the block *i*, which is thus prevented from turning independently of the arm B, the neck *k* extending about half-way through the slot *m*, as seen in Figs. 3 and 4, and being prevented by its flattened sides from turning within the said slot. Between the under side of the arm B and the socket *h* is placed an inverted cup, *q*, which fits closely over the outside of the socket *h*, and is provided with a central aperture, *r*, through which extends the neck *k* of the block *i*. At the top of the cup *q*, on opposite sides of the same, are formed two projections, *s s*, Fig. 6, which are in line with the flattened upper portion of the neck *k*, and fit snugly within the slot or aperture *m* of the arm B, extending about half-way through the same, the under side of the arm resting on the shoulders *t t* of the cup, and thus when the screw *n* is turned down firmly in place the cup *q* is prevented by the projections *s* from turning independently of the arm B, and is locked immovably thereto.

The neck *k* and cup *q* can be moved longitudinally within the slot *m* to vary the effective length of the arm B, but, if desired, a square aperture can be employed instead of a slot. I prefer the slot, however, on account of the advantages of the adjustment which it affords.

When the screw *n* is loosened, the above-described universal joint will allow the pad D to be easily and quickly adjusted in any position, or at any angle desired to press inward and upward, or otherwise, according to the particular requirements of the case to be treated, after which it is secured immovably in place by tightening the said screw *n*, which not only causes the block *i* to be drawn up tightly against the inside of the socket *h*, but also, by reason of the arm B resting on the shoulders *t* of the cup *q*, causes the interior of the latter to be pressed downward against the outside of the socket *h*, the area of the bearing-surfaces and consequent friction being thus materially increased, whereby, when the parts are clamped by the screw *n* after having been adjusted, all liability of slip is avoided, which

is a very important consideration, while the adjustment in every position is effected by means of the single screw *n*, which is located in a convenient and accessible position, and cannot catch or tear the clothing of the wearer of the truss, the entire mechanism being, moreover, simple, compact, easily adjusted by the single screw, and free from liability to get out of order.

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

In a truss, the combination, with the pad D, of the pad-plate G, having the socket *h*, the block *i*, fitting within said socket, and having a neck, *k*, extending up through the same, the cup *q*, fitting over the outside of the socket *h*, and having the projections *s s*, shoulders *t t*, and aperture *r* for the passage of the neck *k*, the pad-supporting arm B, provided with an aperture for the reception of the upper end of the neck *k* and the projections *s s* of the cup, and the clamping-screw *n*, adapted to enter the neck *k* and simultaneously draw the block *i* against the interior of the socket *h* and force the cup *q* down upon the outside of the same, all operating substantially in the manner and for the purpose set forth.

Witness my hand this 10th day of March, A. D. 1886.

JASON T. BARTLETT.

In presence of—
P. E. TESCHEMACHER,
W. J. CAMBRIDGE.