(No Model.)

M. R. FLETCHER.

TRUSS.

No. 454,339. Patented June 16, 1891.

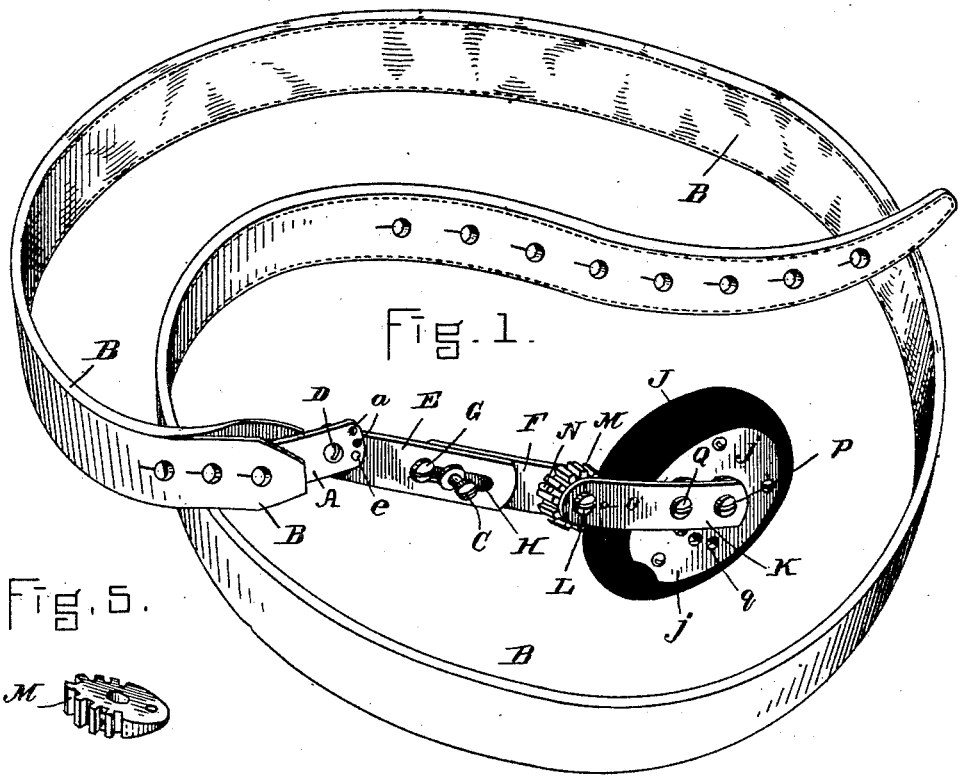


Fig. 1.

Fig. 5.

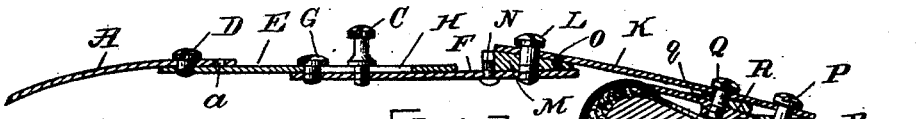


Fig. 2.

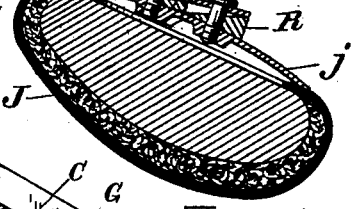


Fig. 6.

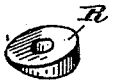


Fig. 7.

Fig. 3.

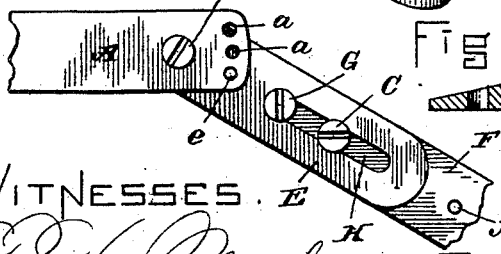


Fig. 8.

Fig. 4.

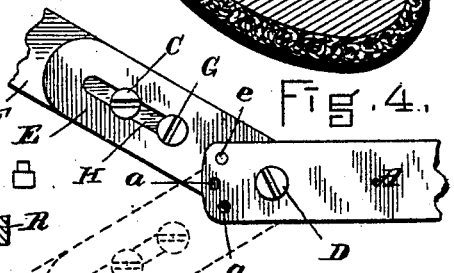
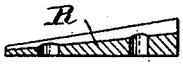


Fig. 9.



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TRUSS.

SPECIFICATION forming part of Letters Patent No. 454,339, dated June 16, 1891.

Application filed April 15, 1889. Serial No. 307,359. (No model.)

To all whom it may concern:

Be it known that I, MOORE RUSSELL FLETCHER, doctor in medicine, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in the Surgeon's Truss for the Treatment and Radical Cure of Hernia or Rupture; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

The object of my invention is to provide a truss adapted by various mechanical adjustments to give more perfect support to any particular part of the lower abdomen and to any peculiar conformation of the body of the wearer.

My truss is of novel construction in respect to the features herein shown and described, and particularly referred to in the appended claims.

In the drawings, Figure 1 is a perspective view of my improved truss complete. Fig. 2 is a longitudinal section through the pad and parts adjacent thereto. Figs. 3 and 4 are details showing two positions of the jointed parts by which the truss is adapted for use either right side or left side. Figs. 5, 6, and 7 represent the wedge-shaped ratchet and washers hereinafter described. Figs. 8 and 9 represent in longitudinal and transverse section a single substitute for the two wedge-shaped washers.

The body or main spring A of the truss is of spring-steel covered with leather or other suitable material B, which terminates in a strap suitably perforated near each end to engage with a stud C on the metallic part of the truss, so as to secure the same in proper position around the body of the wearer.

E is an extension of the body A, pivoted to such body on a screw or rivet D and furnished with a protruding stud *e*, fixed in position opposite said screw or rivet and adapted to enter either of three corresponding perforations *a* at the end of the main spring. By this construction the extension E, with the pad and intermediate parts, may be deflected laterally, either to right or left, and the truss thereof made either right hand or left hand by causing the stud *e* to enter the perforation *a* at either edge of said spring. If the central perforation is engaged, the extension is held in a straight course, the screw D in either case holding the parts A and E in close surface contact. Figs. 3 and 4 will make clear this lateral deflection.

F is a slide connected to the extension E by means of the screw G and threaded stud C or by two ordinary suitable screws passing through the elongated slot H in the extension, so that the slide may be extended or contracted within the limits of the slot and held fast in the position desired.

The pad J is connected to the end of the slide F by means of an arm K, termed the "pad-rider," which is pivoted to said slide by the screw L, which also passes through a wedge-shaped ratchet or cogged wheel M, interposed between said slide and arm. The cogged teeth or equivalent recesses in the wheel M extend around half its periphery, and a stud N, Figs. 1, 2, or 3, protruding from the slide, enters either of the recesses and fixes the position of such wheel so that its outer face shall slope in the direction desired. The arm or pad-rider K fits down upon such outer face and is secured to said wheel M by a rivet O, entering a hole *m* therein, so that the position of the arm and pad is controlled by the wheel M and the stud N, and may be adjusted by loosening the pivot-screw L and causing the stud N to enter another recess.

The wedge form of the wheel M gives an inward and upward pressure to the pad when said wheel is held with its thin edge downward by the protruding stud N, since the arm K, which carries the pad, fits down closely against the inclined outer face of such wheel. This device therefore serves a purpose beyond that of a mere joint or pivot, the plane of pressure being capable of adjustment at will as well as the radial direction of the arm. The position of the pad is further adjustable in two respects with relation to the arm K, on which it is mounted. The back plate *j* of the pad has a threaded perforation to receive the screw P and equidistant therefrom a series of like perforations *q*, either of which may receive the screw Q, those two screws thus holding the oval or kidney-shaped pad to the arm K with its major axis more or less nearly in line with the arm. A double-wedge-shaped

block or washer or two independent wedge-shaped washers R of different thicknesses may surround the screws P Q and be interposed between the arm K and the back plate *j* of the pad, so as to vary at will the position of the pad on the arm.

I claim as my invention—

1. In a truss, the body or main spring A, the extension E, adapted to be deflected to right or left and held in a fixed position, and the slide F, connected to said extension by suitable fastenings, in combination with the pad and its supporting-arm pivoted on said slide and adapted to be fixed in position radially from said point, substantially as set forth.

2. In a truss, the body or main spring A, the extension E, adapted to be deflected to right or left and held fast, and the slide F, secured to said extension by set-screws, in combination with the pad J and its supporting-arm K, pivoted on said slide, and with the wedge-formed recessed wheel M and engaging-stud N interposed between said slide and arm, substantially as set forth.

3. In a truss, the body A, extension E, slide F, arm K, and pad J, in combination with the wedge-formed wheel M and the double wedge or washers R, adapted to adjust the plane of pressure of the pad, substantially as set forth.

MOORE RUSSELL FLETCHER.

Witnesses:

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