H. BECKER.

Truss.

No. 167,818. Patented Sept. 21, 1875.

Fig. 1.

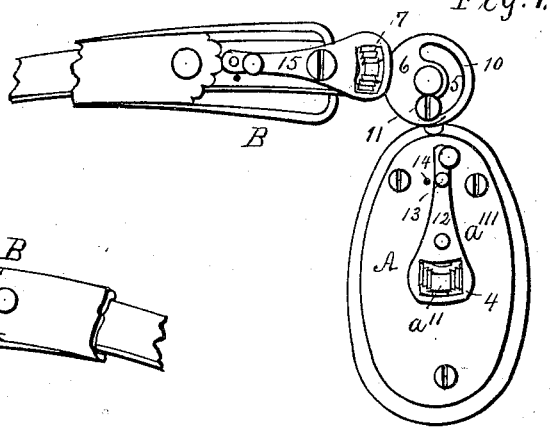
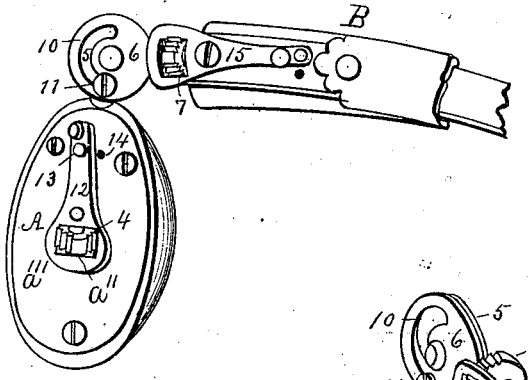


Fig. 2.



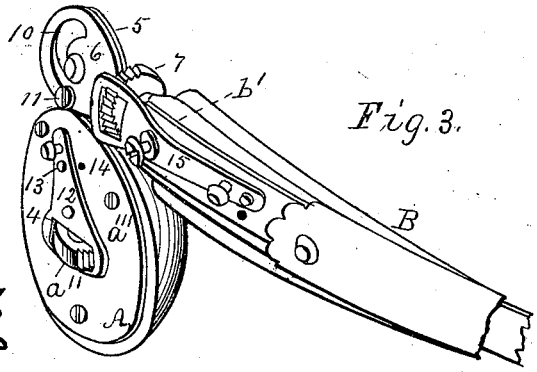


Fig. 3.

Fig. 4.

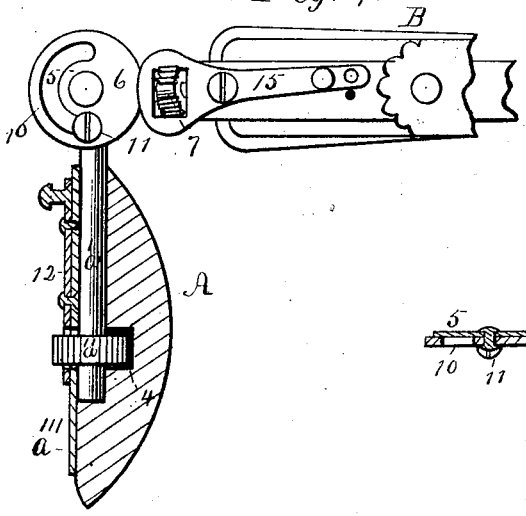
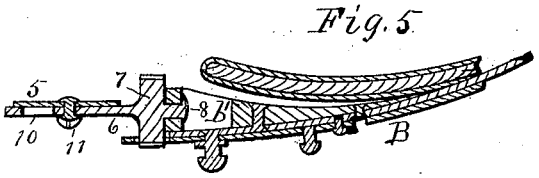


Fig. 5.



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UNITED STATES PATENT OFFICE.

HERMAN BECKER, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. **167,818**, dated September 21, 1875; application filed August 2, 1875.

CASE C.

To all whom it may concern:

Be it known that I, HERMAN BECKER, of the city of Philadelphia, in the State of Pennsylvania, have invented an Improvement in Hernial Trusses, of which the following is a specification:

The object of my invention is to render the hernial pad readily adjustable on the body band or spring to fit accurately upon any rupture, whether the latter be either right or left, as will hereinafter be fully and clearly described with reference to the accompanying drawing, in which—

Figure 1 is a front view of the hernial pad adjusted to the body-band for the right-hand side of the person. Fig. 2 is a front view of the same hernial pad adjusted to the same body-band for the left-hand side of the person. Fig. 3 is a perspective view of Fig. 1. Fig. 4 is a somewhat enlarged front view of the connecting end of the body-band, with a vertical section of the pad, (turned edge in front,) showing the stem thereof; and Fig. 5, a horizontal longitudinal section of the pad end of the body-band, with the attachments shown in Fig. 3, excepting the pad.

The pad A I generally make of hard wood, and in the form of a longitudinal section of an egg, and secure its narrower end to the body-band B by means of a stem, a', provided with a transversely and centrally fixed short cylinder, a'', at its lower end, both of which are let into the flat side of the said pad and secured therein by a covering-plate, a''', which has an oblong hole, 4, through which a portion of the perimeter of the cylinder a'' projects, so that the pad A can be rotated on the stem a', while the upper end of said stem projects above the pad A in the form of a flat circular plate, 5, which is a little inclined toward the inner side of the band B, to which it is attached through the medium of a like circular plate, 6, which has a short cylinder, 7, and a stem, 8, (see Fig. 5,) whereby it is secured so that it can be easily rotated in the receiving end of a thick piece of metal, b', which is riveted fast to the end of the body-band B. (See Figs. 3 and 5.) The circular plates 5 and 6 are pivoted together at their centers, and the plate 6 has a concentric opening, 10, which is traversed by a headed screw-stem, 11, fixed perpendicularly in the plate 5, thus together forming a flat joint whereby the pad A can be swung in a semi-circular manner and firmly secured so as to project at any required angle from either edge of the body-band, and thus adjust the same truss to suit either a right or left side rupture. The respective peripheries of the small cylinders a'' and 7 have each a series of ratchet-teeth extending about half-way around the peripheries, and divided at midlength, so that one-half of each series will pitch or incline in opposite directions toward the two respective ends of said series. Pivoted to the plate a''' of the pad A there is a thin, flat steel spring-lever, 12, of the first order, the weight-end of which has a roomy concentric opening which receives within it that portion of the periphery of the cylinder a'' which projects through the plate a'''. The power end of the lever 12 has a fixed pin, 13, which projects downward into either one of two corresponding stay-holes, 14, in the plate a'''. These stay-holes are arranged so that either end edge of the opening which receives the projecting portion of the cylinder a'' will be held thereby in connection with the ratchet-teeth of one half of the series, while the other half of said series is left free to move without contact with the opposite edge of said opening in the lever. It will be understood, therefore, that the pad A can be rotated and adjusted securely to fit upon the rupture, whatever the extent of the rotary movement on its stem a' may be, in either direction permitted by the special adjustment of the lever 12, as just described. The under or upward pressure of the said pad A is produced by means of the cylinder 7 on the stem 8, in connection with the thin, flat steel spring-lever 15, the periphery of said cylinder having ratchet-teeth constructed and arranged as the teeth in cylinder a'', and held in adjustment by the spring-lever 15, which is constructed and operated in the same manner as the spring-lever 12, and the flat circular projecting ends 5 and 6 of the stems a' and 8 being pivoted together at their centers, as shown and described, it will be readily understood that the pad A can be

readily adjusted so as to give an under or upward pressure upon a rupture to any degree desired. In brief, by means of the two described devices, the pad A can be adjusted with facility by the wearer to press in any direction upon the rupture that the peculiarity of the same may at any time require, or the greater ease of the wearer may render desirable. It will also be seen that the same truss can be adjusted to fit any rupture at either the right or left side of the person by simply swinging the pad A around from one side edge to the other of the body-band B, and then adjusting the spring-lever 15 into connection with the appropriate division of the ratchet-teeth in the cylinder 7, as hereinbefore set forth.

This last-named feature of my invention is of great importance to those who keep a stock of trusses on hand for sale, because it adapts the same truss to be applied and fitted for either a right or left rupture, and consequently half the usual stock will be sufficient to meet the demand.

Having thus fully and clearly described my improvement in body-trusses, I claim as my invention—

In a hernial truss provided with a swinging joint for connecting the hernial pad A to the body-band B for the purpose of rendering the truss readily adjustable for either the right or left side of the person, as described, the combination, with the hernial pad A, of the rotary stem a' and its ratchet-toothed cylinder a'', and spring-lever 12, constructed and arranged substantially as set forth, for the purpose of enabling the wearer of the truss to readily adjust and secure the position of the pad A so as to bear against either the right or left side of the rupture or directly against the front of the same, as the wearer may desire, substantially as described.

HERMAN BECKER.

Witnesses:
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WM H. MORISON.