

(No Model.)

D. S. ARMER.

TRUSS.

No. 295,472.

Patented Mar. 18, 1884.

Fig. 1.

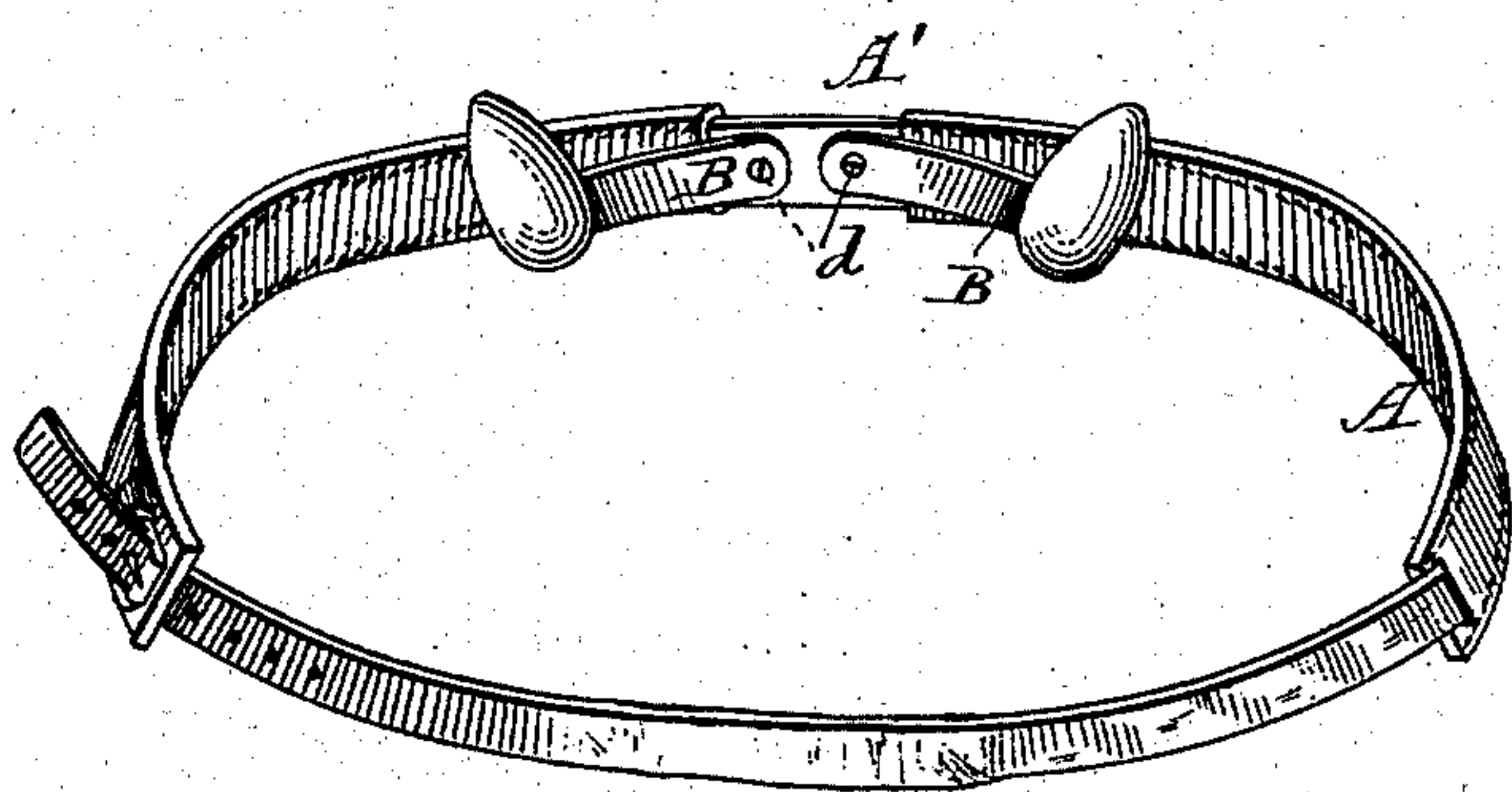
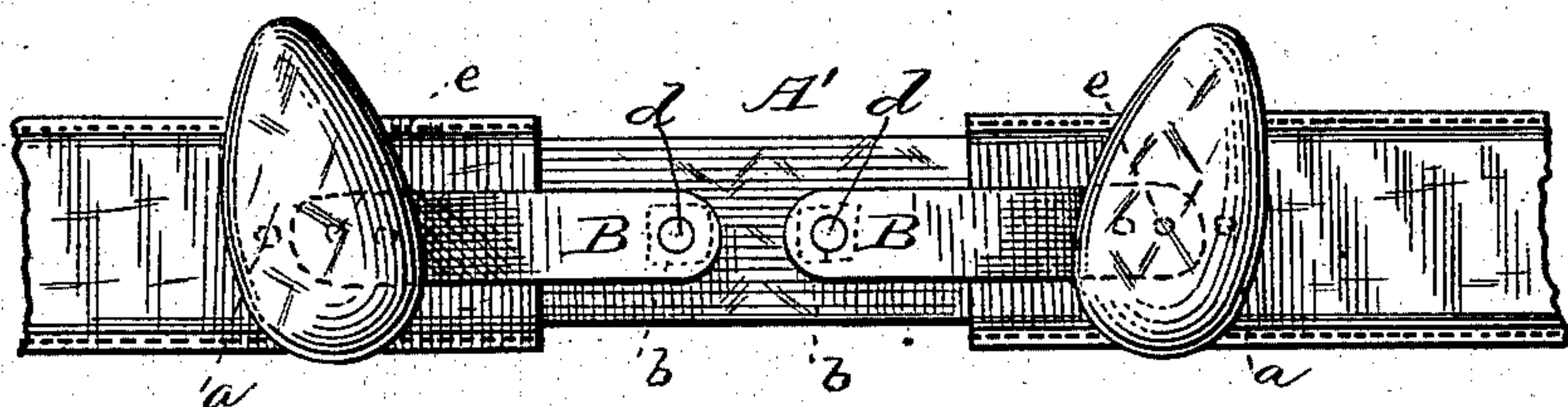


Fig. 2.



Witnesses;

Walter Fowler,
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UNITED STATES PATENT OFFICE.

DAVID S. ARMER, OF COLUMBUS, INDIANA, ASSIGNOR OF ONE-HALF TO
THOMAS C. WOODBURN AND JOHN N. MARING, BOTH OF SAME PLACE.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 295,472, dated March 18, 1884.

Application filed February 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, DAVID S. ARMER, a citizen of the United States of America, residing at Columbus, in the county of Bartholomew and State of Indiana, have invented certain new and useful Improvements in Trusses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in trusses for the treatment of hernia and analogous injuries; also, for the use of those having constitutional tendency to hernia, in which case it is to be used as a preventive of the same; and it consists in the construction and combination of the parts, as will be hereinafter set forth, and pointed out in the claim.

In the annexed drawings, which illustrate my invention, Figure 1 is a perspective view, and Fig. 2 is a detailed view, the ends of the supporting-band being broken away.

A represents a band of spring metal, which is bent into a circular shape, and is provided with flaring sides, so as to conform in shape to the body, which band is covered with suitable material, which is secured thereto by rivets *a* at one end and by sewing at the other. The front portion of this band *A'* is preferably straight, and the free ends of the same are provided with a buckle and strap, as shown in Fig. 1, whereby the same may be secured to the body of the wearer.

To the central part of the straight portion of this truss are attached screw-threaded nuts *b b*, and the opposite side of the band is provided with washers, against which washers are held, by means of screw-bolts *d*, the spring-arms *B*, the terminals of these spring-arms being provided with truss-pads, which are attached to the same by screws *e*. The spring-arms *B*, which carry the truss-pads, are bent slightly, as shown in Fig. 1, and are of sufficient strength to hold the truss pads or balls in position.

By the means hereinbefore described the

truss-pads will always remain in the position in which they are placed, as they have a pivotal movement upon the screws *e* and the bolts *d*. Thus when the body is moved in any position the truss-band will be either raised or lowered, and the spring-band *B* will hold the ball or pad in position and will not "give" with the movement of the band or body.

I am aware that prior to my invention trusses have been manufactured and patented which show certain parts which are similar to those employed by me. For instance, Reinhardt and Carter, No. 3,760, dated September 24, 1844, in which case is shown a truss-band which is open at its front end and provided with a pivoted spring-bar to which the truss-band is attached. In this case the inventors rely upon the band to secure a spring movement, and as the parts, when once adjusted, are rigid upon each other the spring pad and band will move at the same time. As another example, as shown in the patent of Dailey, dated April 13, 1858, the truss-pad is only given a pivotal movement at the end of the strap or band and not upon the end of the link for attaching the pad to the strap. Moreover, a spring is not employed in this patent. Further, as shown in the patent of North, dated July 5, 1853, the pads are not attached to the bands so as to have a pivotal movement, he providing means for adjusting the same rigidly. In the patent of Sherman, dated April 2, 1867, a truss-pad is connected to the connecting link or spring, which is provided at its end with a ball-joint, thus allowing a movement of the pad and the link, or spring is connected rigidly thereto, being also provided with means for adjusting the same upon the band, so that the parts, after being adjusted and secured to each other, are not allowed a pivotal movement. In view of this recognition of the state of the art, it will be seen that in my invention I combine certain old elements which have heretofore been applied separately to trusses, to wit: a supporting-band to which is pivoted, as near the center as possible, inwardly-curved springs, the end of the springs adjacent to the band being pivoted thereto, so as to turn freely upon the band, the outer end of this curved spring being attached to the truss-pad by means of a pivot,

upon which the truss-pad can turn freely. By this construction it will be seen that the truss-pad is allowed two motions—one, a circumferential motion upon the pivot, by which it is attached to the band, and another, rotary motion upon a pivot at the end of the spring. With my style of truss the band which encircles the body is constructed so as to embrace the same securely, and in order that it may be rigid at its front portion the securing means are located at the back of the band. In cases of rupture, the hernia is located to one side of a median line within the iliac vein, artery, and nerve, and trusses when not properly constructed will exert a pressure upon the hernia in a direction toward the iliac vein, artery, and nerve, and, as a consequence, when a pressure is exerted upon these vital parts this pressure is likely to and has caused in a great many cases paralysis. The pressure as exerted by my improved truss is toward a median line and away from

the iliac vein, artery, and nerve. Moreover, owing to the two movements hereinbefore described of the pad, the wearer may move his body in almost any possible position without displacing the pad.

I claim—

In a truss, the rigid supporting-band or waist-belt flaring outward and extending only partially around the body, the two ends thereof being connected in the back by a flexible band, combined with two inwardly-curved springs pivoted near each other to the front of the supporting-band, and each spring carrying upon its outer end a loosely-pivoted pad, all substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID S. ARMER.

Witnesses:

JACOB SIMON,

JACOB SILVERMAN.