

(No Model.)

E. STEWART.
UMBILICAL TRUSS.

No. 551,237.

Patented Dec. 10, 1895.

Fig. 1.

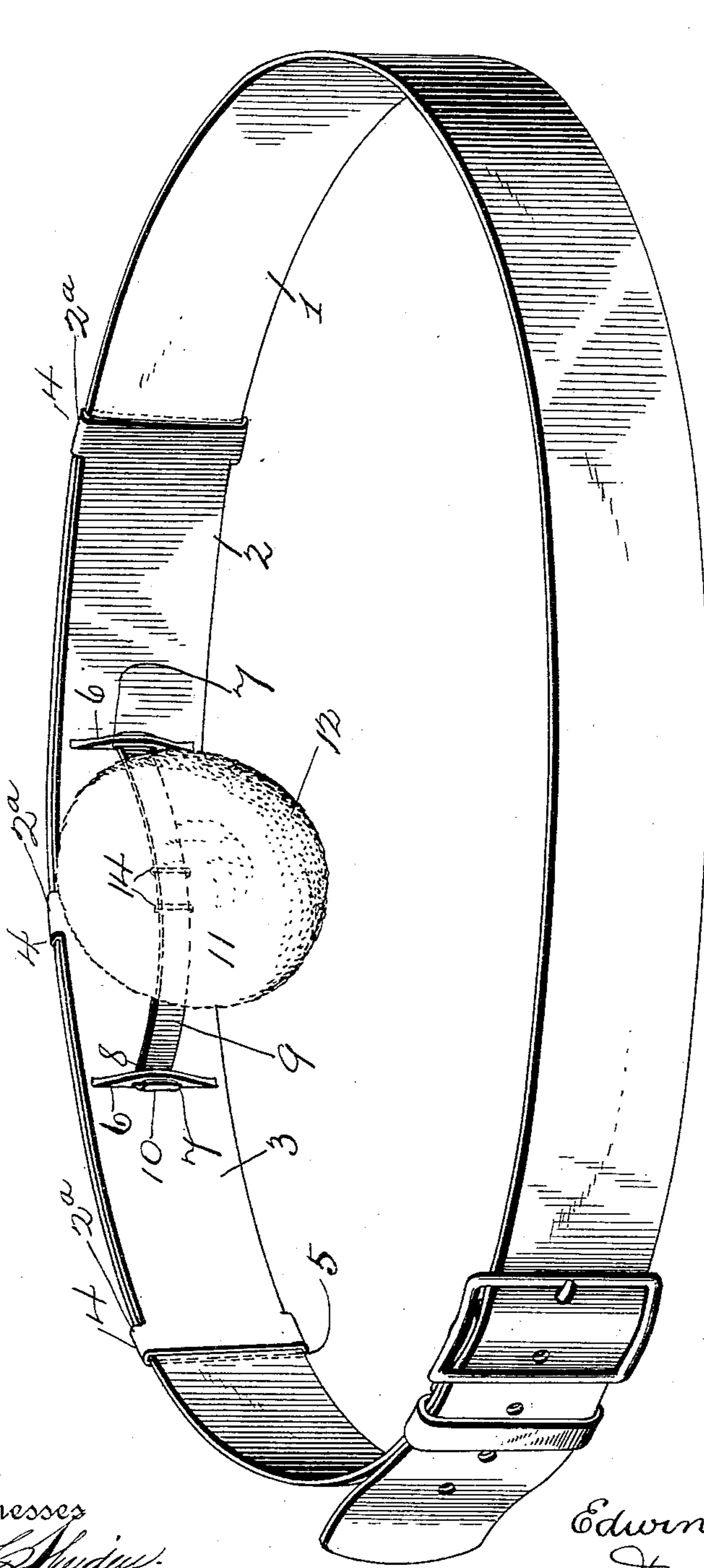
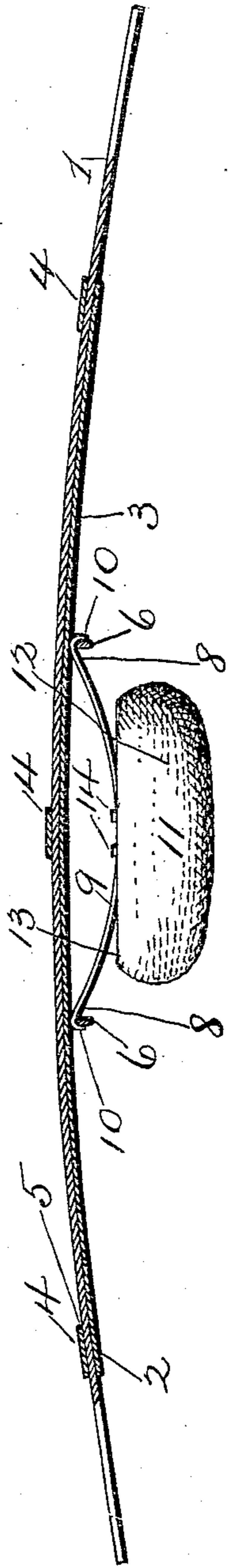


Fig. 2.



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UMBILICAL TRUSS.

SPECIFICATION forming part of Letters Patent No. 551,237, dated December 10, 1895.

Application filed July 2, 1895. Serial No. 554,742. (No model.)

To all whom it may concern:

Be it known that I, EDWIN STEWART, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Umbilical 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.

This invention relates to improvements, as hereinafter set forth, in umbilical trusses.

In the accompanying drawings, Figure 1 represents a perspective view of my improved umbilical truss. Fig. 2 represents a section thereof on the line 2 2 of Fig. 1.

The object of my invention is to produce an umbilical truss which, while affording the maximum of yielding or elastic pressure and support to the affected part, also affords a rigid support to the pressing device and to the parts of the abdomen adjacent thereto, and maintains the belt or band by which the truss is secured to the body in proper position.

1 represents the belt or band by which the truss is attached to the body of the wearer.

2 represents a strip or plate of rigid material, as plate metal, hard rubber, or the like, of a length corresponding, or nearly so, with the width of the abdomen, said strip or plate 2 being of gradual outward curvature from end to end so as to present a concaved inner face 3, conformable to and adapting it to fit around the abdomen.

4 represents a series of belt-keepers, of which there may be any desired number, said keepers being composed of strips of metal or other material, either integral with the strip 2 or separately therefrom and secured thereto and having horizontal ends 2^a, which overlap the edges of the curved strip or plate 2, and are secured at their ends by brazing, welding, solder, or the like to the inner face of said strip 2, the body portion of said belt-keepers 4 extending transversely across and a slight distance outwardly from the outer face of said strip or plate 2, so as to leave a space 5 between them and the strip or plate 2 to receive the belt, which is slid therethrough and which is held by said keepers snugly against the outer face of said strip 2. The

rigid outwardly-curved strip or plate 2 not only affords strengthening support to the abdomen, but also serves to hold that portion of the belt crossing the abdomen rigid and in place and to furnish a firm bearing-support to the spring-supported pressure-pad, the material of which said strip or plate is formed, such as above stated, being normally rigid yet sufficiently flexible to admit of its being drawn or contracted around the abdomen as the ends of the thereto-connected belt are drawn around the body.

6 represents a pair of keepers or strips of metal or other suitable material extending transversely across the inner face of the curved strip or plate 2 and having central eyes or ways 7 through which pass and slide the lower ends 8 of the pad-supporting spring 9, which is formed of plate metal of bowed or arched form and has intumed lips or flanges 10, which normally impinge against the outer faces of said keepers or strips 6 and serve as stops to retain said bowed spring in position and to limit its inward movement.

11 represents the pad, which has a suitable cushion-face 12 and a rigid backing 13, the latter being provided with ways 14, within which the apex of the bowed spring has bearing. The curved lower ends 8 of the pad-supporting spring 9 have slide-bearing on the inner face of the strip or plate 2. By reason of such curvature said ends, as the spring is compressed, slide freely on said strip 2 with the least possible friction and with the greatest ease, thereby, in connection with the shape and location of the spring, affording the utmost elasticity and ease of movement and automatic adjustment to the pad. By means of the normally rigid, yet under compression flexible, strip 2, the entire outward pressure exerted by the spring is borne by said strip and the clothing is protected and all indication that a truss is being worn is prevented.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

An umbilical truss consisting of an outwardly-bowed strip of rigid material, a series of transverse keepers extending along the outer face thereof and having intumed ends, a belt passed between said keepers and strip, a pair of transverse keepers located adjacent

to the center of the inner face of said curved strip, an inwardly-bowed spring of plate metal having re-curved ends to engage with and slide in said keepers on the inner face of said bowed strip, and a pad secured to the apex of said bowed spring, substantially as and for the purpose set forth.

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

EDWIN STEWART.

Witnesses:

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