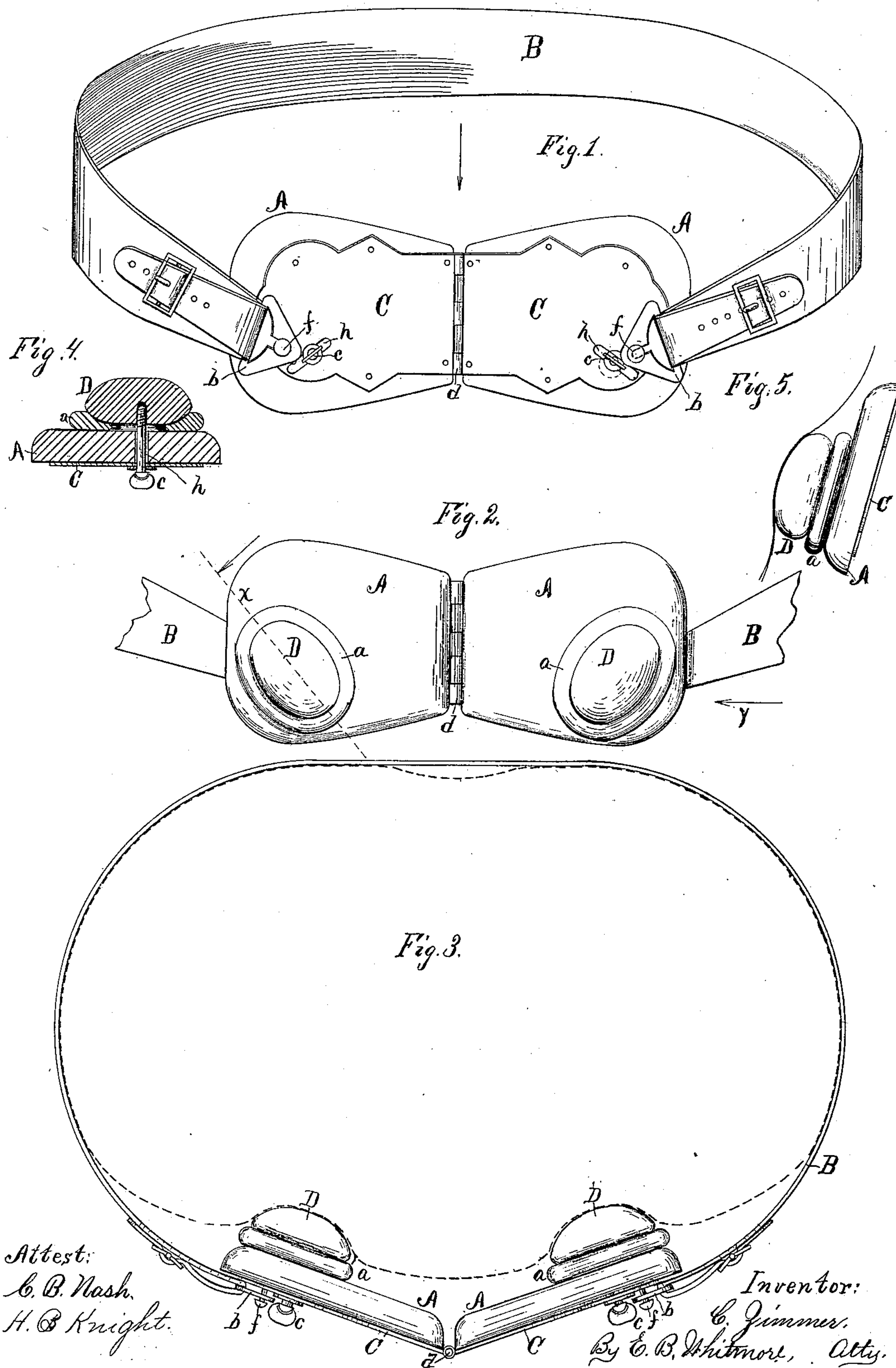


(No Model.)

C. ZIMMER.
ABDOMINAL TRUSS.

No. 337,290.

Patented Mar. 2, 1886.



Attest:

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UNITED STATES PATENT OFFICE.

CHRYSTOM ZIMMER, OF ROCHESTER, NEW YORK.

ABDOMINAL TRUSS.

SPECIFICATION forming part of Letters Patent No. 337,290, dated March 2, 1886.

Application filed November 4, 1885. Serial No. 181,837. (No model.)

To all whom it may concern:

Be it known that I, CHRYSTOM ZIMMER, of the city of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Abdominal Trusses, which improvement is fully set forth in the following specification, and shown in the accompanying drawings.

The object of my invention is to produce an improved abdominal truss, which, from its construction and arrangement of parts, is better adapted to the uses for which it is intended, the invention being fully set forth in the following specification, and more particularly pointed out in the claims.

Referring to the drawings, Figure 1 is an elevation of my improved truss, showing the hinge-plate and the belt attached in place; Fig. 2, a view of the truss reversed, showing the face or side of the same turned toward the person when in use; Fig. 3, a view of the same, seen as indicated by arrow in Fig. 1, drawn to show the manner in which it bends to the curve of the abdomen, the latter being represented in heavy dotted lines within the belt; Fig. 4, a section of one of the pads with the rubber ring and pad-holder, taken as on the dotted line *x* in Fig. 2, and viewed as indicated by the arrow; and Fig. 5 a view of the truss seen as indicated by arrow *y* in Fig. 2, the belt and some other parts being omitted.

The truss shown is double, and designed to be used to bring a pressure upon two parts of the form at once.

Referring to the parts, A are the pad-holders, which are preferably made of wood, being of the same form and size, slightly tapered, and cut square across at their narrow ends.

C is a metallic plate made in two parts, united in a flexible or hinge joint, *d*, the parts of the plate being firmly secured to the respective pad-holders, as shown, by means of which jointed plate the planes of the pad-holders may be relatively varied at pleasure. The belt B is of simple form and kind, being provided at either end with a clasp, *e*, fitted to engage pins *f*, projecting from the pad-holders, buckles being provided by which to lengthen or shorten the belt at pleasure.

D are knobs or pads for pressing upon the parts which need supporting when the truss

is worn, which may be formed of wood, perforated sheet metal, or other material, being held to place upon the faces of the respective pad-holders by means of fastening-screws *c*. These pads I form convex or crowning at their respective sides, turned toward the holders, and mount them upon elastic rings of india-rubber, as shown, said rubber rings yielding and shaping themselves to fit the convexity of the pads when gently pressed thereagainst by the screws. I thus mount the pads so that their bearing upon the pad-holders shall not be rigid, but slightly yielding and admitting of a slight motion thereon. The fastening-screws *c* for the pads pass through the hinged plate and pad-holders from the outside to the inside thereof, being fitted with screw-threads into the respective pads, the plate and pad-holders being formed with slots *h*, through which the fastening-screws pass. By means of these slots the pads are laterally adjustable upon the pad-holders, on account of which said pads may be moved and held to bear upon the person of the wearer as desired. It will be seen that the belt is attached to the pad-holders at points considerably below the middle of the latter, or much nearer the lower edge than the upper edge of the same, on account of which the lower edges of the pad-holders when placed upon the person are turned inward toward the person, as shown in Fig. 5—that is to say, the pad-holders are by that means held so that the planes of the same shall not be vertical, but inclined away from the person at the top. This causes the truss to move easily and perfectly fit the inclination of the surface of the abdomen when placed thereon, and to better keep the truss from slipping or working upward while being worn. The pads are also placed below the horizontal center line of the pad-holders, as shown, and nearly opposite the respective points at which the ends of the belt are attached to the pad-holders.

The pads of abdominal trusses have, as sometimes constructed, been mounted upon conical metal springs. Such springs are more expensive than rings of india-rubber, besides being heavier, and are liable to corrode from the presence of perspiration.

What I claim as my invention is—

1. In combination with the pad-holder of a

truss, a pad formed with a tapering or inclined surface, as shown, turned toward said holder, an elastic ring fitted to said inclined surface of the pad, and forming an annular rest or seat
5 for the same, and a fastener to hold said parts together, substantially as shown.

2. In combination with the pad-holder of a truss formed with slot *h*, a pad formed with an inclined posterior surface, an elastic ring for

receiving and holding said pad, and a clamp- ing-screw for the parts passed through said slot, by means of which said pad can be laterally adjusted upon said pad-holder, substantially as described.

CHRYSOSTOM ZIMMER.

Witnesses:

E. B. WHITMORE,
H. B. KNIGHT.