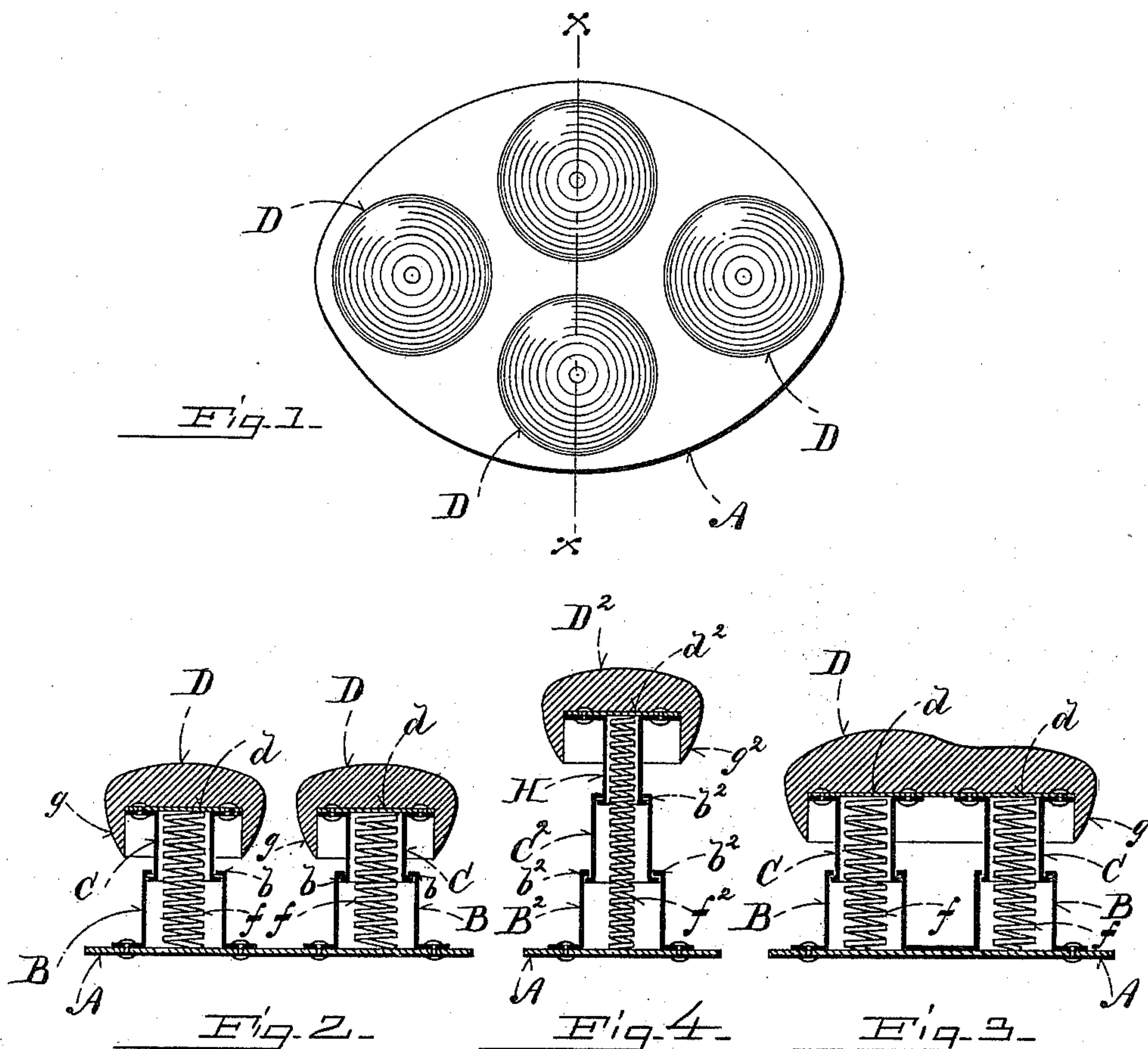


(No Model.)

W. C. SPENCER & J. E. PATRICK.
TRUSS.

No. 537,908.

Patented Apr. 23, 1895.



WITNESSES=
H. Durfee
C. B. Wilbur

INVENTORS
Joseph E. Patrick and
Warren C. Spencer
By C. A. Shaw, Jr.
ATTY-S

UNITED STATES PATENT OFFICE.

WARREN C. SPENCER, OF BOSTON, AND JOSEPH E. PATRICK, OF CHICOPEE,
MASSACHUSETTS.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 537,908, dated April 23, 1895.

Application filed January 5, 1894. Serial No. 495,877. (No model.)

To all whom it may concern:

Be it known that we, WARREN C. SPENCER, of Boston, in the county of Suffolk, and JOSEPH E. PATRICK, of Chicopee, in the county of Hampden, State of Massachusetts, have invented certain new and useful Improvements in Trusses, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science

to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of our improved truss-pad; Fig. 2, a vertical section on line, *x, x*; Fig. 3, a vertical section showing a lower pad, and Fig. 4 a sectional elevation illustrating a modification.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

Our invention relates especially to an improvement in the truss-pad of hernial trusses, the object being to obtain greater elasticity, decrease the chances of causing soreness or breaking the skin and also prevent injury to the spermatic cord and other organs by avoiding pressure on them while securely holding the rupture.

The nature of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the base-plate of the pad which may be oval, circular or of any other suitable form. On this base-plate we secure one or more cylinders, B. Into each of these cylinders a second cylinder, C, is fitted to telescope vertically, it being held from disconnecting by overlapping lugs, *b*. A cap-plate, *d*, covers the mouth or top of the inner cylinder. Interposed between said base-plate, A, and the cap-plate there is a spirally-coiled spring, *f*, which tends to force the cylinder, C, outward. The pad proper, D, covers the cap-plate and is secured thereon. This pad may be constructed of hard rubber or any other suitable material, and has its edges, *g*, pendent around the cap-plate. Generally these spring-pushed cylinders each support one pad. In special cases, however, two or more cylinders may be used

to support a pad of special design made to fit any part of the body, as shown in Fig. 3. This we accomplish by making a cast of the part and shaping the pad to coincide therewith.

Wood or metal may be substituted for the rubber bearing surface and its shape may be circular or any other form necessary to overcome the difficulties of the case.

An objection attendant the use of many pads of ordinary construction arises from the fact that the bearing surface embeds itself from constant pressure in the flesh of the wearer and the friction produced frequently causes a sore to form. By overlapping or extending the edge, *g*, around the cylinder as in our improvement this is prevented as none of the working parts can then come into contact with the flesh, nor can the flesh engage or fold around the under face of the bearing surface.

The pad shown in Fig. 3 is intended to fit the space above the pubic-bone and for this reason when necessary we shape it to conform as described, exactly to the parts.

We are aware that truss-pads have been constructed in movable sections, but such have ordinarily had the base-plate socketed to receive a shank and which of necessity is of considerable thickness to steady said shank. As the shank is pressed back by the body against its spring into the base-plate socket it protrudes through the opposite side of said plate a corresponding distance frequently tearing the clothing of the wearer.

In our construction we are enabled to employ a spring much longer and by this means can press the bearing surface nearly twice the distance, than in the forms referred to. This imparts far greater elasticity and hence greater ease to the wearer as in bending the body, the bearing surfaces will give to such extent that an elastic pressure is maintained at all times.

Truss-pads with only one bearing surface tend to weaken the muscles. By forming several spring-pushed surfaces acting independently and with an extended play we create a kneading which strengthens the muscles, and said surfaces working independently, an irritation is produced in the hernial canal which

is essential for the effective closing of the same. Moreover, where there is not an extended play, frequent abrasions of the skin are caused resulting in soreness so serious as
5 to preclude the use of the truss. By continuing the bearing surface toward the base-plate all rough edges are avoided.

The form shown in Fig. 4 is substantially the same as that described, excepting for an
10 addition to the cylinders, B^2 , C^2 , of a third cylinder, H , surmounted by the cap-plate, d^2 , and pushed by a spring, f^2 . The cylinders are provided with stops, b^2 , and the cap-plate is inclosed in the bearing surface, D^2 , with
15 pendent edges, g^2 . It will be understood that any suitable stop, other than the lugs, b , may be employed for the telescoping cylinders and any form of spring or a rubber cushion may be used to press the inner cylinder outward.
20 Moreover, square or triangular telescoping tubes may be substituted for the cylinders without departing from the spirit of our in-

vention. The smaller cylinder may be attached to the base and the bearing surface to the larger cylinder, the position of said cylinders being simply reversed.

Having thus explained our invention, what we claim is—

In a truss-pad the base plate in combination with the cylinder, B , fast thereon; the cylinder, C , fitted to slide vertically in cylinder, B ; the stop-flanges, b ; the horizontal cap-plate, d , secured across the top of cylinder, C , the coiled spring, f ; interposed between the base and cap-plate and the bearing surface, D , chambered on its under side to form
3 pendent edges, g , said cap-plate being secured in the bottom of said cylinder, substantially as described.

WARREN C. SPENCER.
JOSEPH E. PATRICK.

Witnesses:

K. DURFEE,
O. M. SHAW.