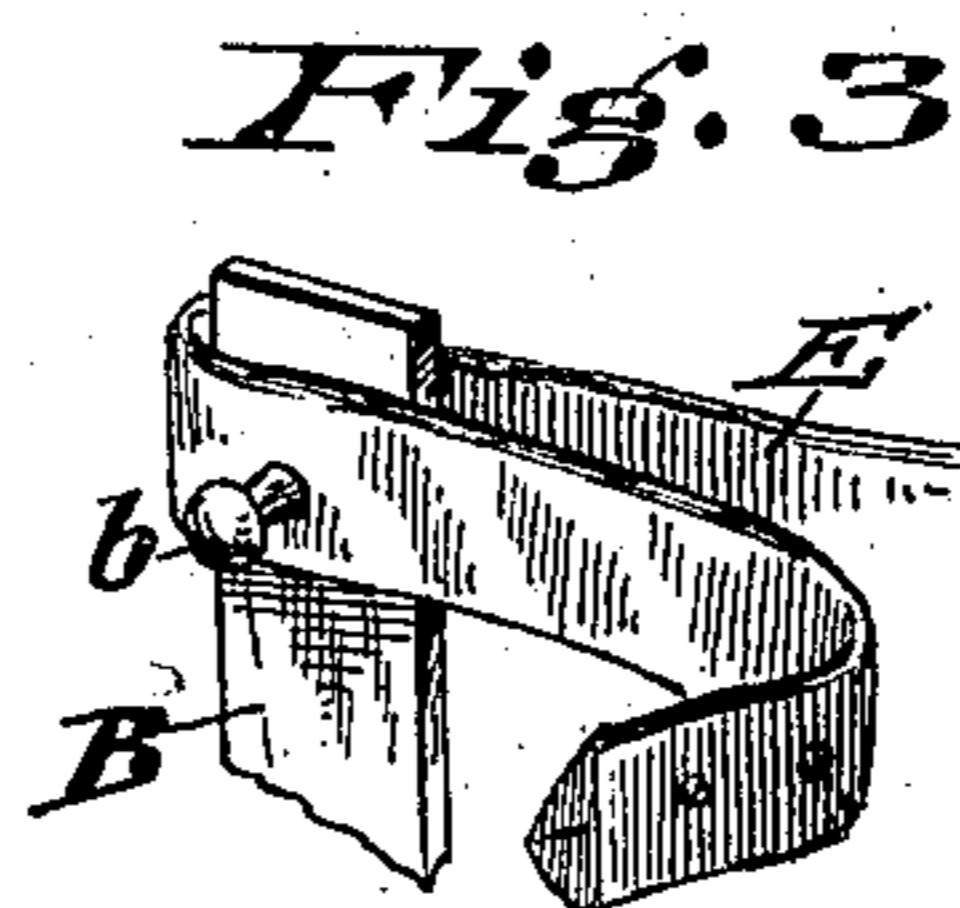
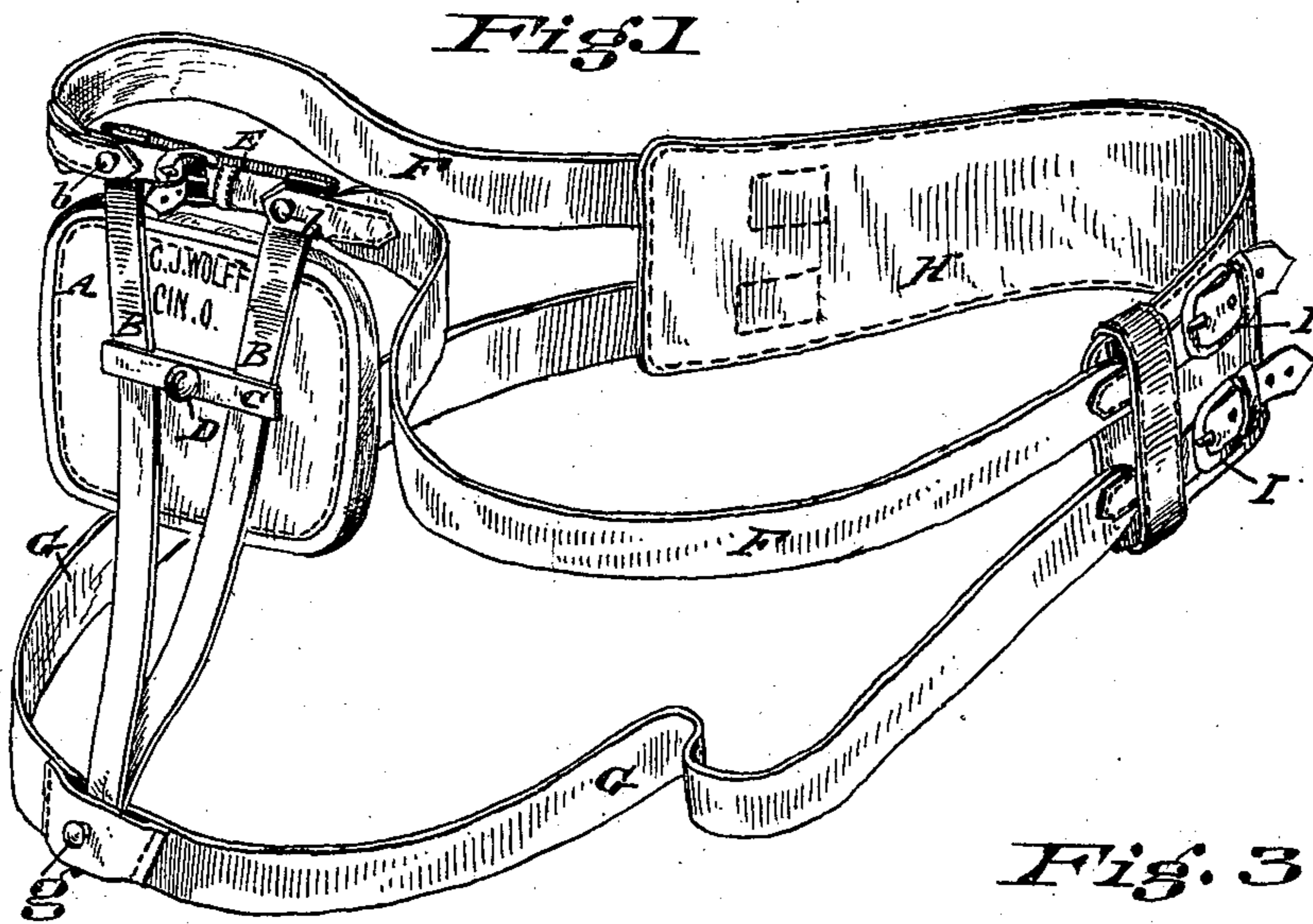
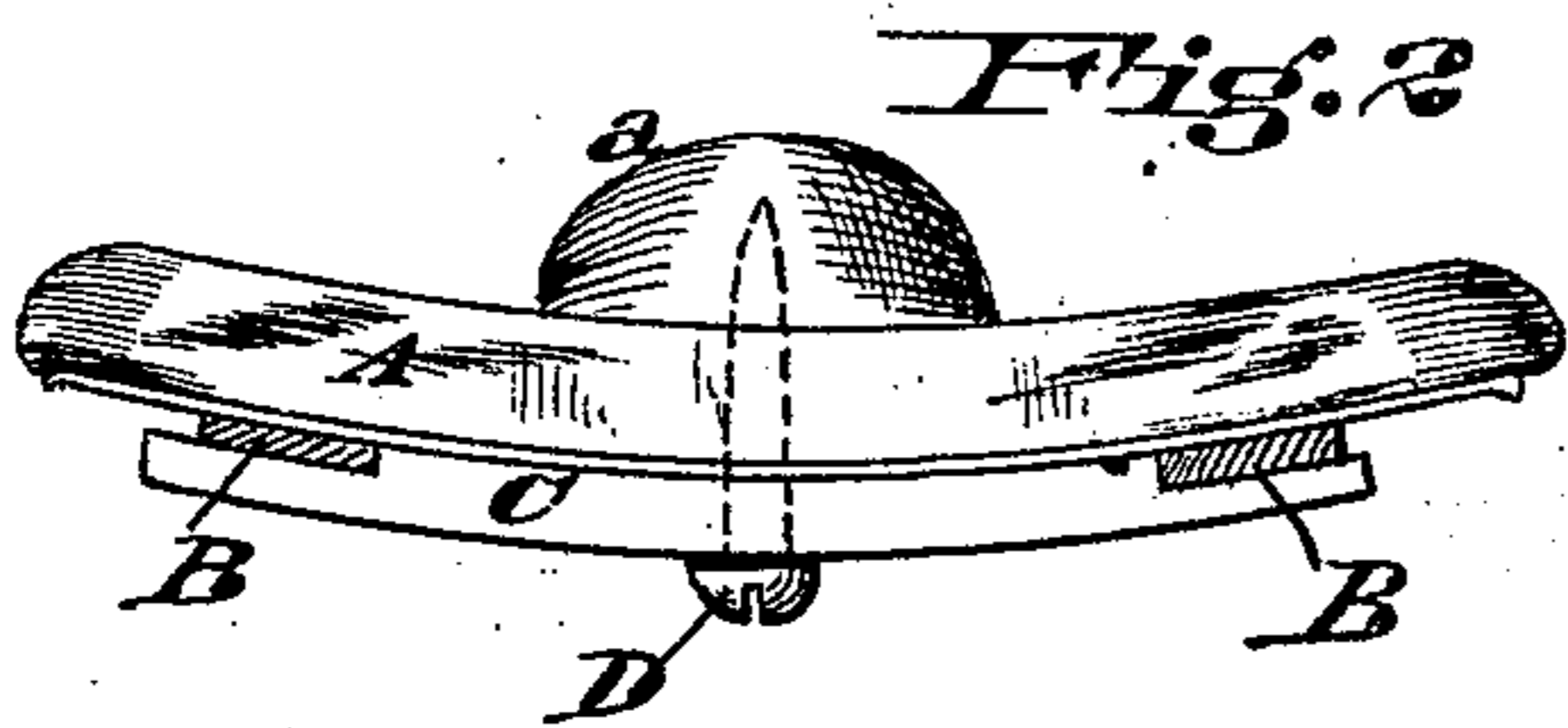


C. J. WOLFF.
Truss and Abdominal Support.
No. 211,611. Patented Jan. 21, 1879.



Attest
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UNITED STATES PATENT OFFICE.

CHARLES J. WOLFF, OF NEWPORT, KENTUCKY.

IMPROVEMENT IN TRUSSES AND ABDOMINAL SUPPORTS.

Specification forming part of Letters Patent No. **211,611**, dated January 21, 1879; application filed October 26, 1878.

To all whom it may concern:

Be it known that I, CHAS. J. WOLFF, of the city of Newport, county of Campbell, and State of Kentucky, have invented a new and useful Improvement in Trusses and Abdominal Supports, of which the following is a specification:

My invention relates to the construction of a truss or abdominal support, and the mode of securing it in position to the body of the wearer.

The object of my invention is to fit the support or truss to the body of the wearer in such a manner that it will allow the body of the wearer the utmost latitude of natural motion and still be retained in position, with great ease and comfort to the wearer.

The invention consists in the combination of a back-piece, two diverging straps or bands, two independent vertical springs, brought together at their lower ends, and having the straps attached to them at their top and bottom ends, and a clamping-bar attached to the pad by an adjusting-screw, said bar having at each end a notch, which embrace the springs in order to retain the pad in proper position, all of which will be fully hereinafter described in detail.

In the annexed drawings, Figure 1 is a perspective of my improvement. Fig. 2 is a horizontal central section of the pad shown in Fig. 1. Fig. 3 is a plan of one end of the spring and strap attachment thereto.

A represents an ordinary umbilical pad and a boss on the pad, adapted to fit into a rupture to prevent hernia. B B represent curved elastic steel springs, and should be highly elastic, like the spring of a clock. C represents a clamp-bar, which has gains or notches cut at the ends thereof, to embrace and hold the springs B firmly to pad A. D represents a screw for fastening clamp-bar C to the pad A. F G represent straps, which are secured at one end to buttons *b b* and *g* on the ends of the springs B, and at the other ends to the back-piece H. I represents buckles for taking up and letting out the straps.

In Fig. 1 the spring B is shown to come together below the pad, and pivoted together in the form of the letter V, the lower ends of which are arranged on or attached to the shank of the button *g*; but a separate fastening could be used, it only being necessary to hold the lower ends of the springs together.

The straps F G are spread some distance apart, and effectually prevent the pad from slipping up and down. The elastic springs B give great latitude for movements of the body in bending, and yet the strain is always on the center of the pad, which prevents drawing or working when one end or strap receives greater strain than the other by the motions of the body. By having the springs project out from the center of the pad the body can bend, and the springs, being highly elastic, will yield to the motions of the body without drawing the pad out of position.

It is obvious that when an abdominal support is to be employed the shape of the pad will be that usually employed in that class of supports, and the springs will be made to extend out from the pad in accordance with location of the pad and size of the wearer.

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

The combination of the back-piece H, two diverging straps, F and G, two independent curved springs, B B, united at their lower ends, and having the straps F and G attached to their ends, a central pad, A, and a clamping-bar, C, attached to the pad by an adjusting-screw, D, and having notches at its ends embracing the springs B, to retain the pad in proper position, substantially as shown and described.

In testimony whereof I have hereunto set my hand this 19th day of October, 1878.

CHAS. J. WOLFF.

Witnesses:

E. E. WOOD,
W. D. HUNT.