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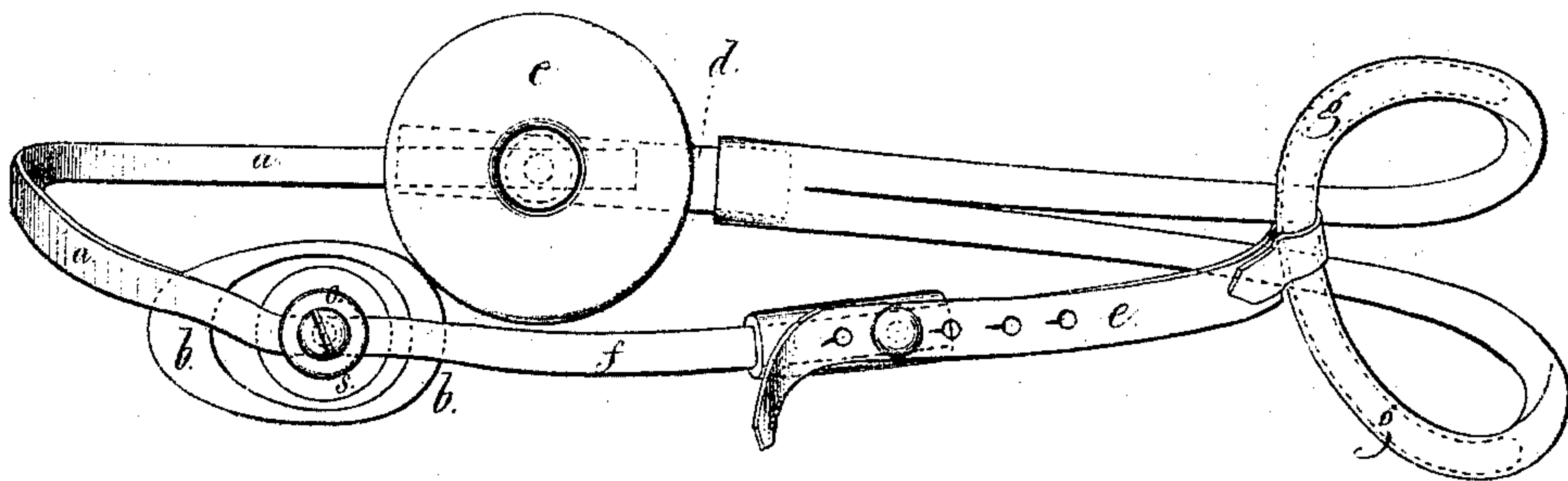
J. A. SHERMAN.

Improvement in Trusses.

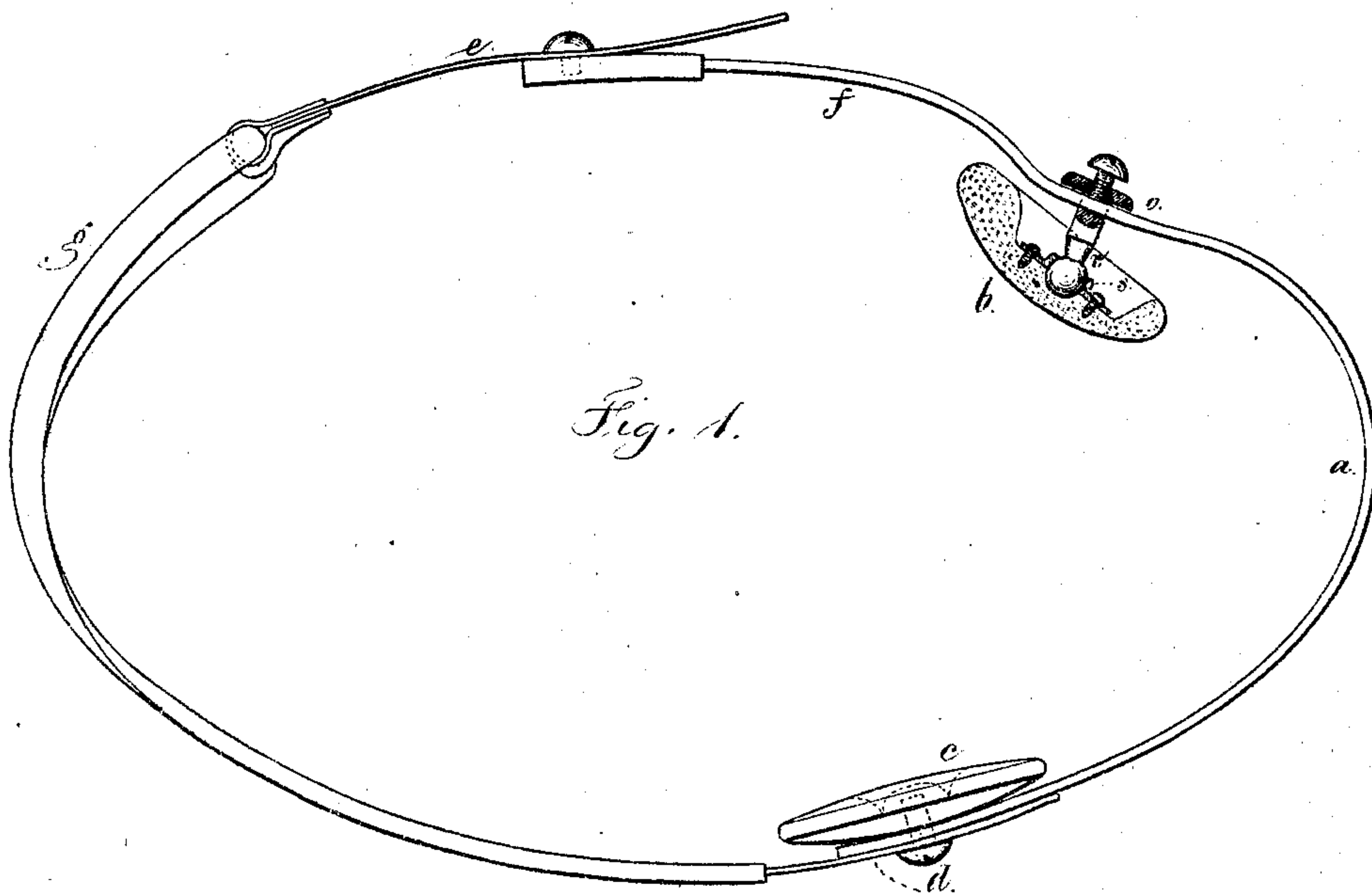
No. 122,859.

Patented Jan. 16, 1872.

*Fig. 2.*



*Fig. 1.*



*W. H. H. H.*

*Chas. H. Smith*  
*Harold Perrell*

*Jacob A. Sherman.*  
*Lemuel M. Perrell atty.*

# UNITED STATES PATENT OFFICE.

JACOB A. SHERMAN, OF NEW YORK, N. Y.

## IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. 122,859, dated January 16, 1872.

*To all whom it may concern:*

Be it known that I, JACOB A. SHERMAN, of the city and State of New York, have invented and made an Improvement in Trusses; and the following is declared to be a correct description of the same.

This invention is made to facilitate the adjustment of the pad upon the hernia, and the pressure of the pad, and also to give an amount of elasticity to the straps sufficient to accommodate the movements of the body. I make use of a metal spring-bar, extending around one side of the person and passing beyond the hernia-pad in the form of a lever end, to which the strap is connected that goes around the other side of the body and buttons at the back end of said spring-bar. This spring-bar is to be sufficiently soft to be bent to the required shape for the body, and the lever end produces an inward pressure by tightening the strap. This is to be distinguished from those trusses that have only a front spring-bar and straps, or else a spring-bar going almost around the body without straps. The strap I employ between the ends of the bar is made diverging with a wire bow or semicircle in a case formed in the strap, the connection being made near the middle of this bow; thereby there will be a yield in the strap. It will accommodate the motions of the body, and will not be liable to slip.

In the drawing, Figure 1 is a plan of the truss. Fig. 3 is a front elevation of the same.

The spring *a* is of a shape to extend around one hip of the person and in front of the groin, and upon this the pad *b* is connected at a position to accommodate the hernia. At the back end of the spring is the pad or pressure-button *c*, connected to the spring by a nut and screw, and the latter is formed with a head over which the strap *d* is buttoned. The strap *e* is adapted to being buttoned upon the lever end *f* of the spring *a*, and between the straps *d* and *e* is the bow spring *g*, made of a wire in the form of a semicircle or bow, and introduced within a case that extends beyond the ends of the spring, and is attached to the strap *d*. By this construction the spring *g* renders the con-

nection between the ends of the metal pad-spring sufficiently elastic to allow the same to accommodate itself to the movements of the body; and the bow-spring *g* is not liable to become injured or bent out of shape, and the said bow-spring *g*, passing partly around the convex surface of the person, takes an extended bearing and is not liable to slip. The spring *a* can be bent contiguous to the pad *b*, so that the lever end *f* will project more or less, and hence the pressure of the pad on the hernia can be regulated according to the tension of the strap *e* and the angle to which the end *f* may be bent. The pad *b* is made hollow, and preferably of hard rubber or wood, and it is connected to the spring *a* by the screw clamping clip *o* made to pass over the said spring *a*, and the shank *r* of said clip terminates with a ball that is received within a socket, *s*, that is attached within the hollow pad.

By this construction the pad is free to turn in any position to accommodate the rupture, and the point of bearing of the ball of the shank *r* is so near to the central portion of the surface of the pad that the strain is not liable to displace the pad from the cavity of the rupture.

The spring-bar *a* is not a clamping-spring to act between the front and back of the person. It partakes of the character of a bar that may be bent to suit the shape of the person; and the force with which the pad is pressed upon the hernia depends upon the angle at which the lever end *f* of said spring-bar is bent and the tension of the attaching straps.

I claim as my invention—

The spring *g* and its case extended as straps, and connected at *d*, in combination with the strap *e* applied near the middle of such bow *g*, substantially as specified, and in combination with the spring *g* straps *d* and *e*, the bar *a* with the lever end *f*, and the pad *b*, substantially as specified.

Signed by me this 25th day of July, A. D. 1871.

Witnesses:

J. A. SHERMAN.

CHAS. H. SMITH,

GEO. T. PINCKNEY.

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