## S. S. RITTER.

## Improvement in Trusses.

No. 120,537.

Patented Oct. 31, 1871.

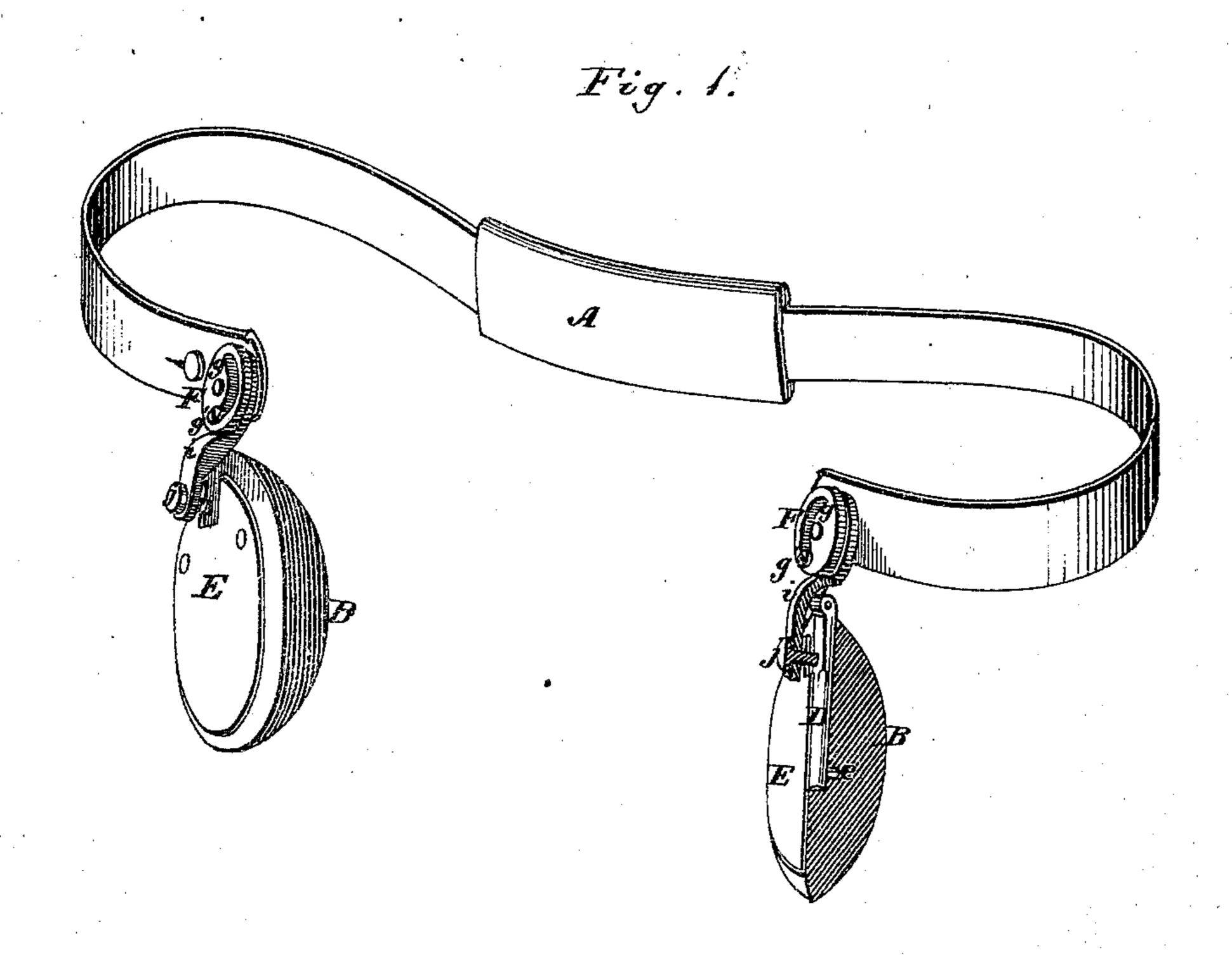


Fig. 3.

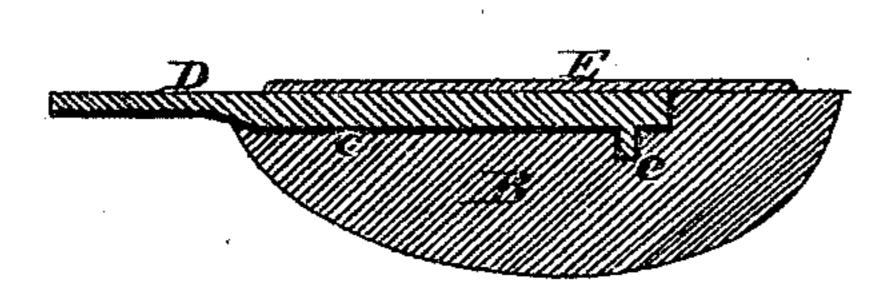
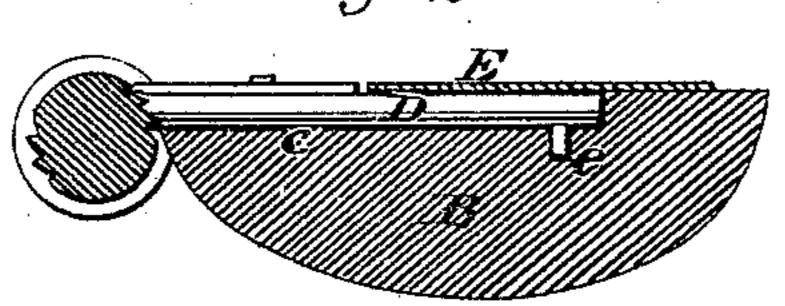


Fig. 2



Witnesses C. F. Ellswith. S.S. Ritter. By Hill rallerroute Die Attorneys

## UNITED STATES PATENT OFFICE.

SAMUEL S. RITTER, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. 120,537, dated October 31, 1871.

To all whom it may concern:

Be it known that I, Samuel S. Ritter, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improved Truss; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a perspective view of a truss illustrating the application of my improved pads, one of which is shown in section. Figs. 2 and 3 are longitudinal sections of pads, showing the shafts made rigid instead of jointed, but swiveled to the pads the same as in Fig. 1.

Similar letters of reference in the accompany-

ing drawing indicate the same parts.

My invention has for its object to provide an improved truss for the treatment of rupture or hernia, in its various forms; and to this end it consists in the construction of the pads, and in the means employed for their adjustment to the body of the wearer, as I will now proceed to describe.

In the accompanying drawing, A is the body, belt, or side spring of a truss, constructed in the usual manner. B are the pads, composed wholly of wood or with wooden backs, and provided with a central longitudinal groove, c, in such back to receive a short shaft, D, which is held in place by a metal plate, E, as shown. The end of the shaft within the pad is formed with a lateral spur or pin, e, which projects into a groove formed in the pad at right angles to the groove c. By this construction the pad is swiveled upon the shaft and turns in either direction to adjust itself to the body of the wearer, and is further prevented from slipping off the shaft.

There are various means for attaching the pad thus constructed to the truss, any one of which may be adopted, as fancy dictates. I prefer such an attachment, however, as shall adapt the pads for reversal upon the body-belt or springs. A convenient means for this purpose consists in pivoting the flattened end of the shaft to the center of the plate F formed upon or attached to the end of the body-spring A. This plate is provid-

ed with a curved slot, g, through which a setscrew, g', projects into the flattened end of the shaft. By operating the set-screw the shaft and its pad can be swung around the end of the bodyspring, and held at any desired point within the limit of the slot. This feature, however, I lay no claim to.

For regulating the pressure of the pads I prefer to employ the means shown in Fig. 1, which consists in pivoting the outer end of the shaft D to an arm, i, swiveled to the slotted plate F. The end of the arm i projects somewhat over the pivot, and is provided with a set-screw, j, whose point bears against the shaft, as shown. By operating the set-screw the pad is held a greater or less distance from a perpendicular line to regulate its pressure upon the body of the wearer. If desired, a ratchet and spring may be employed to regulate the pressure of the pad, in which case the shaft is made rigid, as shown in Fig. 2. When this adjustment is not essential to the operation of the pads the shaft may be made rigid without the spring and ratchet, as shown in Fig. 3. These, of themselves, I do not claim, however, but only desire to claim them when combined with the swiveled shaft De. I preferably adopt, however, the adjustable jointed shaft for the pads, and the slotted plate F and set-screw g' for uniting the same to the body or side springs, as these I believe to be the most efficient and economical.

Having described my invention, what I claim

as new is—

1. The shaft D e, in combination with the grooved truss-pad B, substantially as described, for the purpose specified.

2. In combination with the shaft D e, upon which the pad rotates, the pivoted arm i with its projecting end, and the set-screw j, substantially as described, for the purpose specified.

The above specification of my invention signed

by me this 17th day of August, 1871.

Ś. S. RITTER.

Witnesses:

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N. K. Ellsworth.

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