F. G. OTTO.

TRUSS.

No. 170,106. Patented Nov. 16, 1875.

Fig. 1.

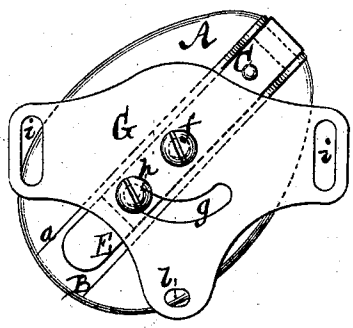


Fig. 2.

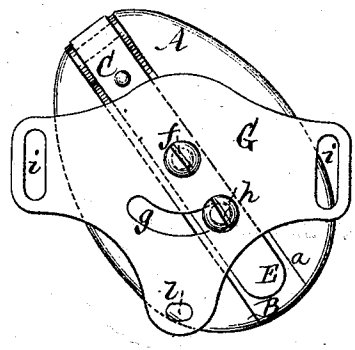
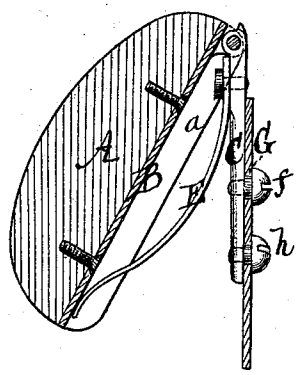


Fig. 3.



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IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. **170,106**, dated November 16, 1875; application filed October 22, 1875.

To all whom it may concern:

Be it known that I, FERDINAND G. OTTO, of Jersey City, in the county of Hudson and State of New Jersey, have invented certain Improvements in Hernial Trusses; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention consists in a novel construction and combination, with a truss-pad, of a plate, to which the pad is attached, whereby the pad may be adjusted toward one side or the other, or at different angles with relation to a vertical line, to accommodate it to the position and direction of the hernia; and, further, in a novel combination, with said plate and the pad, of an elastic device, whereby the pad is enabled to yield to the motions of the body of the wearer, and is thereby rendered more comfortable.

In carrying out my invention I attach the pad to a plate provided with means for connecting the straps by which it is held in place on the person of the wearer. The connection of the pad and the plate is made by means of a pivot, so that the pad may be oscillated to one side or the other, to accommodate it to the position and direction of the hernia, and a set-screw is provided for holding it in any position in which it may be placed. Between the pad and the plate a spring is interposed, by which means the pad is allowed to yield to the motions of the body of the wearer.

The accompanying drawing illustrates the manner of carrying out my invention.

Figure 1 is a view showing the pad in one position. Fig. 2 shows the pad in another direction. Fig. 3 is a central vertical section of the pad and plate.

The pad A is of the usual or any suitable shape, and may be made of rubber or other suitable material. In the rear side of the pad is a groove or recess, *a*, in which is fitted and secured a metallic plate or bar, B, to the upper end of which is hinged a bar, C. Between the bars B and C a spring is interposed, which may be of any suitable description. It is here shown as a flat or strap spring, E, of semi-elliptical form, with one end attached to the bar C near the hinged or upper end, and the other end bearing upon the surface of the plate or bar B. To the outer side of the hinged bar C a plate, G, is attached by means of a screw or rivet, *f*, which serves as a pivot for it to turn upon. In the plate G, below the pivot *f*, is a slot, *g*, which forms an arc of a circle drawn from said pivot. A set-screw, *h*, passes through the slot *g*, and into the bar C, serving as a guide, and limiting the distance to which the oscillation may extend in either direction. The plate G is provided with loops or slots *i i*, for the connection of straps passing around the body of the wearer, and with an eye, *l*, for the connection of the leg-strap.

The pad thus constructed is connected to a strap or straps of any suitable description by means of hooks on said straps engaging with the slots or loops *i i*, and the leg-strap is connected by a hook engaging the eye *l*. By this construction and arrangement the pad is held in place, while the plate is free to oscillate with the motions of the wearer; or the pad may be adjusted to the desired angle with relation to the plate, and held rigidly in such position by tightening the set-screw. The spring between the pad and plate enables the pad to yield in a back-and-forward direction, and is thus more comfortable, in certain cases, than if the pad were rigidly attached to the plate. In cases where the spring is not desired the plate G may be attached directly to the back of the pad.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the pad A, the plate G, having the curved slot *g*, the set-screw *h*, hinged plates or bars B C, and spring E, arranged and operating as herein shown and described.

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Witnesses:

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