J. Goodier,

Truss.

No. 108,253. Patented Oct. 11. 1870

Fig. 1.

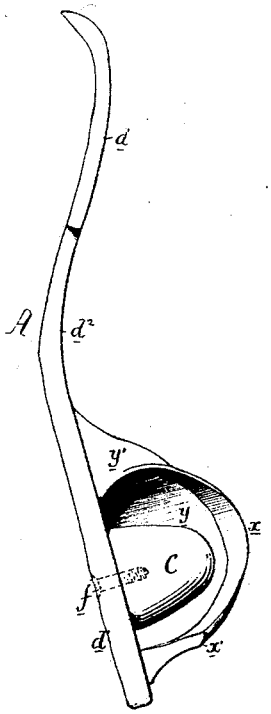
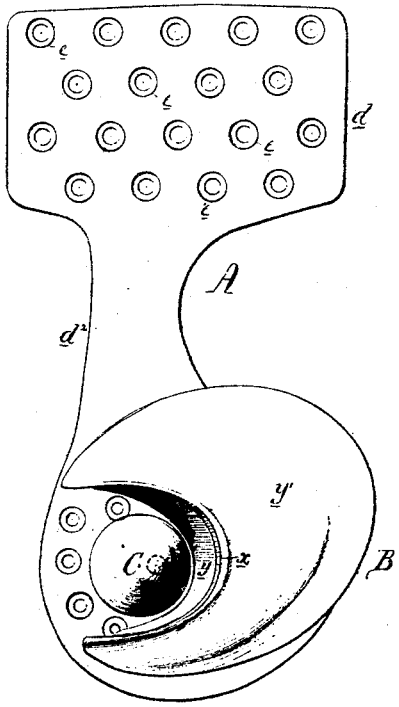


Fig. 2.



Witnesses { Wm. A. Steel
Jno. B. Harding.

John Goodier
by his Attys
Howson and Sons

United States Patent Office.

JOHN GOODIER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 108,253, dated October 11, 1870.

IMPROVEMENT IN TRUSSES.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOHN GOODIER, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improved Truss and Truss-Pad for Hernia, &c., of which the following is a specification.

Nature and Object of the Invention.

My invention consists of a truss provided with a lever and a projecting nut, which turns on an eccentric pin, so that a lateral adjustment of the nut may be obtained by merely turning the same.

My invention furthur consists of the combination of the said lever, its nut, and adjustable shield, as fully described hereafter.

Description of the Accompanying Drawing.

Figure 1 is an edge view of my improved truss.

Figure 2, a front view of the same.

General Description.

The truss consists of what I have termed an abdominal lever, A, and of a shield, B, and projection or nut C, secured to one end of the said lever.

The abdominal lever consists of upper and lower plates d and d^1, suitably curved and connected together by a bent or curved neck d^2.

The upper plate is adapted to the shape of the lower part of the abdomen, and is intended to fit comfortably against the same with a slight degree of pressure.

This plate, for the sake of lightness, and for the admission of air, may be perforated with a number of holes, e, as shown.

The lower plate d^1 of the lever, which I have termed the orifice-plate, is intended to cover the groin or inguinal region, the seat of the hernia or rupture.

This plate is nearly flat, and has secured to its inner face the eccentrically-adjustable nut C and shield or guard B, before referred to.

At the back of the plate there should be a projecting screw or button, for the attachment of a spring and strap, to secure the lever to the wearer's body.

The projection or orifice-nut C is intended to enter the orifice or lower ring of the inguinal canal, in order to press back the hernia, and may resemble, in shape, the end of the thumb, or be made round, oval, or other suitable form.

It is secured to the plate d^1 of the lever by a screw, f, in such a manner that it can be adjusted eccentrically upon the same, or it may be secured by means of an eccentric stem at its inner end, adapted to a socket formed in the plate.

The guard or shield B is also secured to the plate d^1 by one or more screws, in such a manner that it may be readily adjusted thereon, and is made of the peculiar curved or semicircular shape, best observed in fig. 2, in order that it may partially surround the orifice-nut, and, by bearing against the parts of the body beneath the orifice, and on the side toward the hip, regulate the pressure of the said nut upon the hernia.

The raised portion of the shield immediately surrounding the orifice-nut consists of a ridge somewhat higher than the nut at x, and tapering inward from this latter point toward the plate d^1, the said ridge being so reduced in height at its upper end as to meet the plate, while, at its lower end, it terminates abruptly in a point, x', a short distance outward from the plate. (See fig. 1.

The inner edge y of the shield, which surrounds the orifice-nut is nearly vertical, and the portion y' of the said shield is beveled, or gradually rounded off to a thin edge, so as to fit comfortably against the parts with which it is brought in contact.

The above-described truss, when adapted to the body of the wearer, is held in a proper position by the spring and strap before referred to, the spring passing half way round the body, and pressing both the orifice-nut and the shield equally upon the hernia.

As the abdominal lever A, which forms the body of the truss, is adjustable upon the spring, and as the orifice-nut and shield are both adjustable upon the lever, it will be evident that all of these parts can be set at any desired angle, and in any position, to suit the patient, and nature of the rupture.

The lever A acts as such, in case of sneezing, coughing, &c., the plate d being, in such case, forced outward with the protrusion of the abdomen, and forcing the plate d^1, which forms the short arm of the lever, inward, in opposition to the effort of the hernia to protrude by such act of sneezing or coughing, the lever turning upon the spring, to which it is attached, as a fulcrum.

The lever A should be made of such a shape as not to press severely upon the abdomen in the act of stooping.

It should also be made flatter upon its inner than on its outer edge, as shown in fig. 2, so that when two of the trusses, or a truss and a pad, are used, one upon each side, they may not strike together, or otherwise interfere with each other.

It will be observed that the orifice-nut and shield

are also arranged to fit the right and left sides respectively, according as the lever is right or left-handed.

Claims.

1. The pressure-pad or lever A, provided with a supplemental pad or projection, turning on a pin arranged eccentric to the point of the projection, as described.

2. The combination, substantially as herein described, with the lever and its adjustable nut C, of a shield, B, adjustable laterally on said lever, in the manner described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN GOODIER.

Witnesses:

CHARLES SENIX,

FRANK. B. RICHARDS.