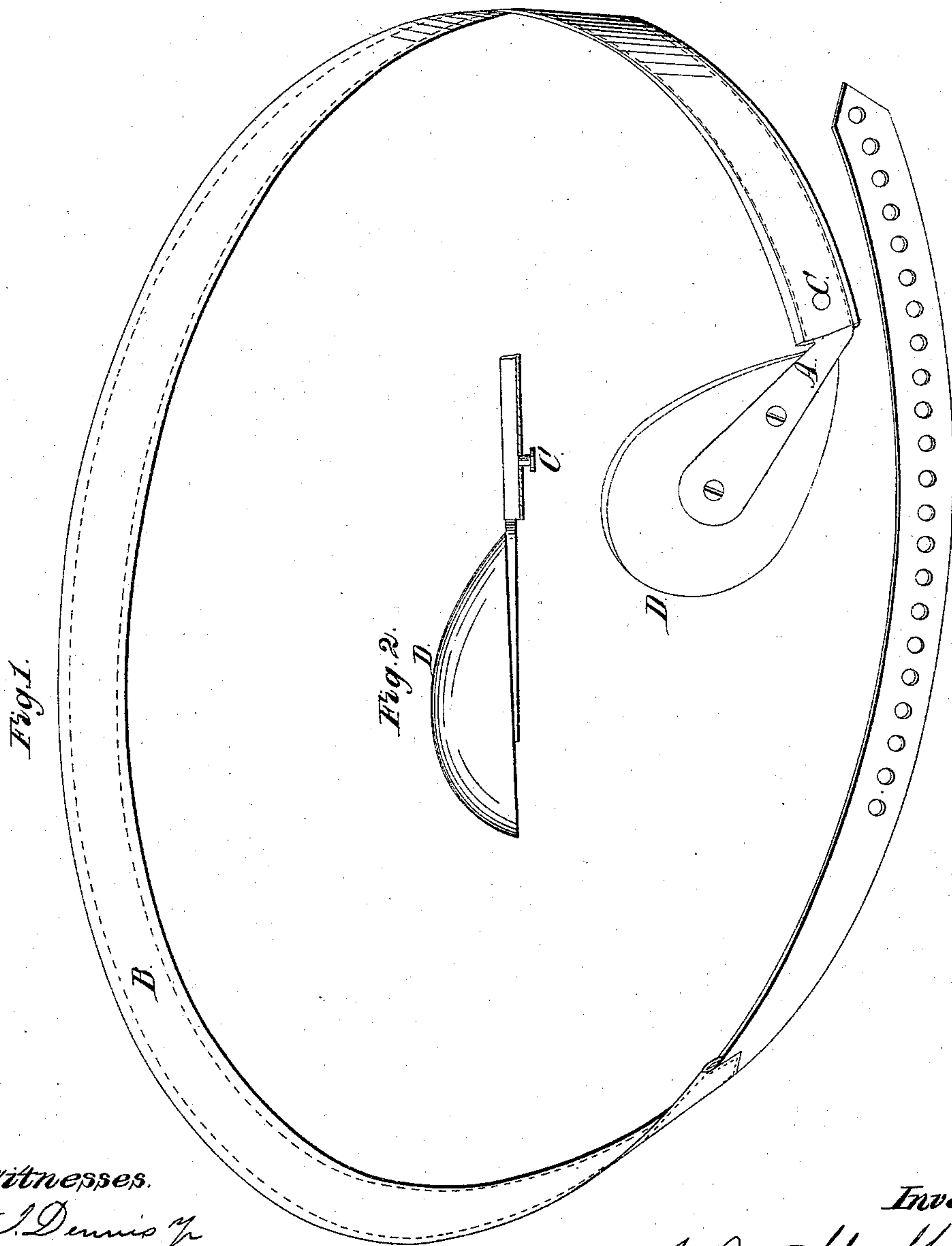


N.W. Hubbard,

Truss.

N^o 55,868.

Patented June 26, 1866.



Witnesses.

*J. Dennis Jr.
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Inventor.

N.W. Hubbard

UNITED STATES PATENT OFFICE.

N. W. HUBBARD, OF FULTON CITY, ILLINOIS.

IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. 55,868, dated June 26, 1866.

To all whom it may concern:

Be it known that I, NOADIAH W. HUBBARD, of Fulton City, Whiteside county, State of Illinois, have invented a new, useful, and Improved Truss for Retaining Hernia; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The nature of my invention and improvements consists in making truss-springs for retaining hernia so thick and stiff as to be nearly rigid or yield but very little—that is, so rigid that it will hold or retain the hernia with very little actual pressure when the wearer is in a normal condition or making no exertion, and also make it so rigid that it will not yield so much as to let the hernia escape when the wearer makes great exertion. This arrangement enables the wearer to live and labor with nearly the same freedom that he did before he was ruptured, and without pain, oppression, or debility.

Trusses, when made of steel and tempered so as to be very elastic, have to be adjusted with great actual pressure in order to retain or hold the hernia when the wearer makes great exertion. This great pressure, when the wearer is making no exertion, is often very injurious to the wearer, causing much pain, oppression, and debility, which are avoided by using my improved truss.

In the accompanying drawings, Figure 1 is a perspective view of the truss. Fig. 2 is an elevation of the pad.

In these drawings, A is the steel spring, made to reach half-way around the body, or a little more, the end of the spring terminating at B in Fig. 1. This spring may be covered with leather or cloth, as shown in the drawings, with a strap perforated to hitch onto a knob, C, in the spring, to hold it on the person.

I make the spring A of steel about five-eighths of an inch wide and about one-tenth of an inch thick, so as to be very stiff and rigid and not yield but little, and leave the steel in its natural state without tempering.

I make my truss to fit the same side the hernia is on, and bend one end at about an angle of forty-five degrees with the plane of the spring, as shown in the drawings, and fasten

to it the pad D, made of hard wood, in about the form of half a hen's egg, about two and three-fourths inches long and one and one-half inch wide for adults with scrotal or inguinal hernia. I bend the spring to fit around the body as nearly as I can, and twist it at the neck or angle to adapt the pad to the form of the body where it is ruptured. The plethoric require the pad turned under at the lower end more than those that are thin and spare; and to increase or diminish the pressure I bend the spring in or out about two inches from the pad.

A truss for a large scrotal hernia, or for a muscular hard-working man, or a man who is corpulent, should have great power of resistance, so that the hernia cannot escape, and at the same time so little actual pressure that when the wearer is making no exertion it can be worn with ease and without pain from the pressure.

I make my truss with just sufficient range of elasticity to permit it to be applied readily—that is, I make the spring so rigid and stiff that it will not open or the pad recede from the opposite side more than about three-fourths of an inch in applying it to the body with a pressure of about one and a half pound, or a little more or less, as the case may require. Such a spring, if you open it one-third of an inch more, and it requires that to let the hernia escape, will give a pressure of about eight or ten pounds, making the wearer as safe from protrusion as he would be with a very elastic truss with eight or ten pounds actual pressure, thus giving the wearer the benefit of great resistance, when required, and the ease and comfort of comparatively slight pressure when not making any exertion.

I apply the pad in the same place for large scrotal or simple oblique inguinal hernia—that is, directly over the internal ring, and on and in the direction of the canal, until the pad reaches the external ring.

What I claim is—

A truss in which a pad of the form and arrangement substantially as set forth is connected, in the manner set forth, with a main-spring of the form and rigid character substantially as herein described.

NOADIAH W. HUBBARD.

Witnesses:

I. DENNIS, Jr.,
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