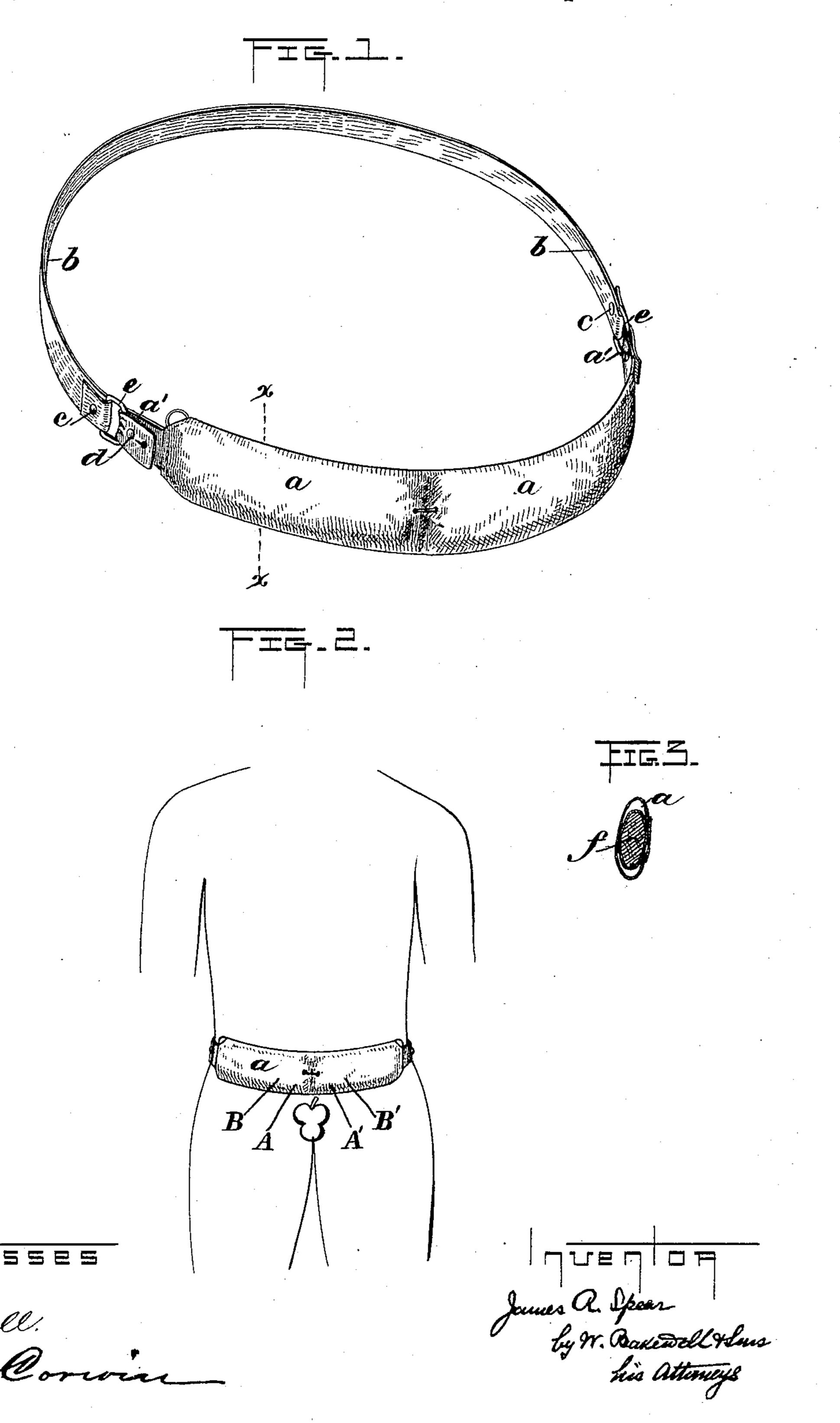
(Model.)

## J. R. SPEER.

TRUSS.

No. 390,143.

Patented Sept. 25, 1888.



## United States Patent Office.

JAMES R. SPEER, OF PITTSBURG, PENNSYLVANIA.

## TRUSS.

SPECIFICATION forming part of Letters Patent No. 390,143, dated September 25, 1888.

Application filed December 17, 1887. Serial No. 258,156. (Model.)

To all whom it may concern:

Be it known that I, James R. Speer, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Apparatus for the Relief of Hernia and other Abdominal and Pelvic Diseases; and I do hereby declare the following to be a full, clear, and exact description thereof.

The object of my invention is to provide means for the relief of hernia, especially hernia of the class known as "inguinal" and "femoral" hernia, which are the most common among adults, and are often serious in their consequences and difficult of treatment, and sometimes fatal.

The invention is also applicable to the treatment of other diseases of the abdomen and pelvis.

My invention consists in a hernia belt composed of a flexible tube or purse section having closed ends and an opening at its middle for the insertion of a movable pad, which is arranged within the flexible tube or purse section, the closed ends of the purse or tubular section being connected by a band, as will be hereinafter pointed out and claimed.

I shall now describe the invention more in detail by reference to the accompanying draw-30 ings, in which—

Figure 1 is a perspective view of the bandage, showing it as it is when applied to the patient. Fig. 2 is a view of the front of the patient, showing the bandage in position. Fig. 35 3 is a section on the line x x of Fig. 1.

Like symbols of reference indicate like parts in each.

In the drawings, a represents that portion of the belt which I shall call the "tube." At each end are short straps a, which afford means for attaching the elastic b, which passes around the back of the patient. The attachment may be made in any suitable way; but I prefer to employ rings e, and stud-buttons c and d, the straps a and the ends of the elastic band being passed through the rings and then buttoned. The tube a consists of a hollow bandage, made, preferably, of leather, and having a transverse opening in the middle on the

side next the body, through which pads or 50 filling are inserted. The spots A A' indicate where inguinal hernia occurs, and the spots B B' indicate the femoral-hernia spots. In applying the belt a pad of rubber, f, or some other material, is put inside the tube so that 55 it shall be over the affected places. When the belt is adjusted, and after the hernia has been properly reduced, the belt is fitted around the pelvis. The tube then extends around the rim of the abdomen from side to side of the 60 pelvis, and passes between the upper edge of the pelvis and the trochanters. The elastic band then holds the belt securely in place, and, as the tube can be stuffed with the pad or other material—as cotton or wool—to any de- 65 sired degree of fullness, the efficiency of the belt is very great.

The instrument, as before described, is an efficient surgical appliance for the prevention and control of hernia, and is an advantageous 70 substitute for the painful and expensive steel spring trusses which have heretofore been frequently used for this purpose, and which often have to be abandoned as inefficient or too painful to be endured. My improved 75 truss is painless to the wearer, is durable, and to a patient afflicted with hernia in any of its forms is of inestimable value. The tube and the belt are preferably made of leather, because of its non-elasticity and durability, though 80 other flexible material may be substituted.

One of the chief inducing causes of hernia is the pressure of the diaphragm with its numerous and heavy contents upon the abdomen in the act of lifting heavy weights, running, 85 leaping, and horseback - riding. The use of my improved belt prevents this, both by reason of the pressure of the pad upon the ruptured part, and by reason of the support which the tube gives to the abdomen and pelvis. 90 This makes the belt beneficial to laboring men and others who practice violent exercise.

In addition to the use of my improved belt for the cure of hernia, it may also be employed with advantage in other diseases of the pel- 95 vis, because it supports the pelvis and thus affords relief and comfort to any person who may be affected with disease in that place.

I claim—

In a hernia-belt, the combination, with the flexible tube or purse section having closed ends, and an opening at its middle, of a band which connects the closed ends, and a movable pad arranged within the flexible tube or purse section of the belt, substantially as and for the purposes specified.

In testimony whereof I have hereunto set my hand this 5th day of December, A. D. 1887.

JAMES R. SPEER.

Witnesses:
W. B. CORWIN,
THOMAS W. BAKEWELL.