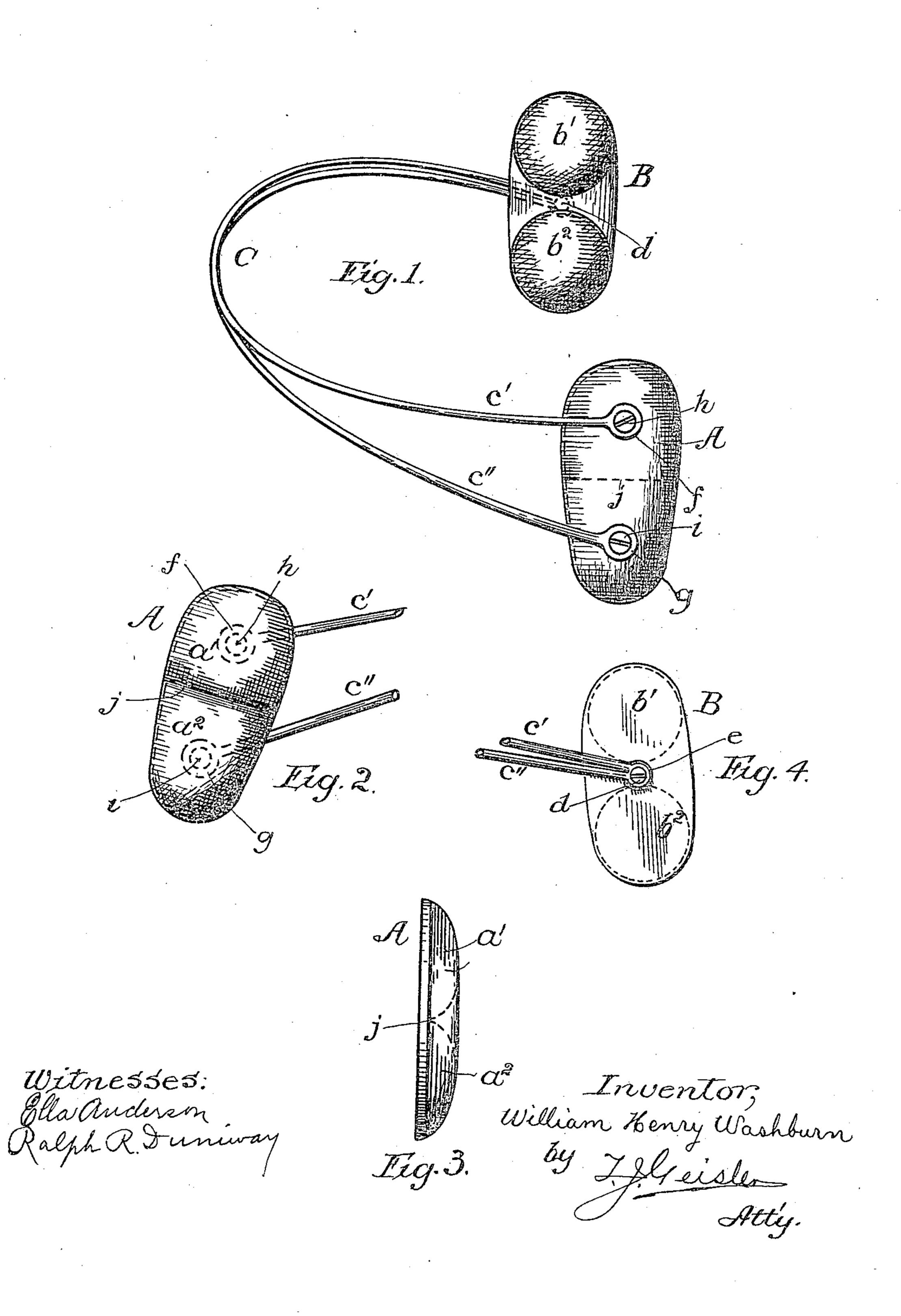
## W. H. WASHBURN. TRUSS FOR HERNIA. APPLICATION FILED FEB. 24, 1905.



## UNITED STATES PATENT OFFICE.

WILLIAM HENRY WASHBURN, OF PORTLAND, OREGON.

## TRUSS FOR HERNIA.

No. 817,600.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed February 24, 1905. Serial No. 247,098.

To all whom it may concern:

Be it known that I, William Henry 5 Multnomah and State of Oregon, have invented a new and useful Improvement in Trusses for Hernia, of which the following is a specification, reference being had to the accompanying drawings as constituting a part o thereof.

My invention has for its object to obtain a truss the construction of which shall be such as to render the same better adapted to retain the intestine within the orifice of pro-5 trusion, especially while the body is bent forward or otherwise exercised, and at the same time to render the use of the truss as com-

fortable as possible to the wearer.

One of the imperfections now existing in trusses is that the pad provided for retaining the intestine in place is subject to displacement in case of vigorous exercise or movement of the body, with the result that the intestine is no longer effectively supported, and 15 under such conditions it frequently happens that the pad instead of holding back actually bears upon the protruding intestine and in so doing causes great pain and suffering and even injury, and, furthermore, a pad imperfectly 30 held in place is sometimes upset in such wise as to allow the intestine to protrude entirely. Another source of discomfort now found in trusses is that the back pad is so arranged as to continuously bear upon the same parts 35 of the back of the person and causes the parts so constantly under pressure to become sore. In my invention the back pad is, however, adapted to be shifted about as comfort suggests without in any wise disarranging the 40 adjustment of the truss on the person.

To this end my truss comprises the special features and arrangement and combination of its parts hereinafter fully described, and illustrated in the drawings above referred to.

In said drawings, Figure 1 is a perspective of my truss designed for a case of hernia in the right side of the body. Fig. 2 is an elevation of the bearing-face of the front pad. Fig. 3 is an end elevation of the front pad, 50 and Fig. 4 is an elevation of the outer or rear of the face of the back pad.

Referring now to the letters as designating the parts described, my truss comprises a front pad A, being the pad which is to be ad-55 justed over the orifice of protrusion to retain the intestine within the abdominal cavity, a

back pad B, which is adjusted on the back to bring the bearing of the front pad properly Washburn, a citizen of the United States, in place, and a spring C, connecting the two and a resident of Portland, in the county of pads, by which the required pressure or 60 bearing is obtained over the orifice of the protrusion.

> The spring with respect to its front extremity is of two-membered construction c'c'', and hereby are obtained very important 65 effects—namely, the front pad is securely held against being overturned while bending the body, the pressure of the spring on the front pad is more evenly distributed, the pad is caused to constantly bear upon a greater 70 surface of the body and in so doing is more securely held in place, and the bearing of the front pad over the orifice of protrusion is rendered more effectual even while the body is

bent forward or otherwise moved.

The front pad A may be made as shown in the end view Fig. 3; but when the hernia exists near the pubic bone it is better to make the front pad flexible at the medial line j and with a depression at the middle, as shown in 80 Fig. 2 and indicated by dotted lines in Fig. 3, thus practically converting the front pad into two pads a'  $a^2$ , having a flexible connection. The advantages gained by such modified construction for the case stated are that the front 85 pad may be more comfortably adjusted over the ridge of the pubic bone and is better adapted to maintain an effectual pressure both above and below the ridge of such bone, and by this arrangement the intestine may be ef- 90 fectively held in place without causing any undue pressure on the pubic bone. The described construction has also been found in practical experiences to promote the closing and healing up of the orifice of protrusion.

The front extremities c' c'' of the spring C are respectively made with eyes f g, and the latter are attached by screws h i to the front pad at points equidistant from the medial line j whether the front pad be made inflexi- 100 ble or flexible at such waist-line.

The back pad B is made of two (more or less) separated cushioned protrusions b'  $b^2$ .

The rear extremities of the two members c' c'' of the spring C are formed into an inte- 105 gral eye e, and to such eye is pivotally attached the back pad B by a screw d, so that the back pad may be rotated about its point of attachment on the spring. Thus when the pressure of the back pad on the person 110 becomes uncomfortable the pad may be partially revolved, so as to afford a fresh point

of contact on the body without changing the position of the bearing-point of the back end of the spring C in its relation to the front pad. The great advantage of this arrangement is obvious.

To hold my truss in place, the same is pro-

vided with the usual straps.

Having fully described my invention, what I claim, and desire to secure by Letters Pat-

ro ent, is—

1. In a truss the combination of a back pad, a front pad, and a connecting-spring comprising two members united at the back end, and there affixed to the center of the back pad, said spring members diverging toward their front extremities, which are attached to the ends of the front pad, equidistant from the medial line of the latter, so as to evenly distribute the pressure of the spring to to the front pad, substantially as described.

2. In a truss, the combination of a back pad, a front pad made with a medial hinge or flexible portion, and a connecting-spring comprising two members united at their back ends and there affixed to the center of the back pad, and said spring members diverging toward their front extremities, which are attached to the ends of the front pad, equidistant from the medial line of the latter, there30 by allowing each spring member to independ-

ently adjust itself to the flexible ends of the front pad, and adapting the latter to accommodate itself to the movements of the body, without becoming displaced or releasing its pressure upon the orifice of protrusion.

3. In a truss, the combination of a back pad, a front pad having a cushioned bearingsurface, made with a medial depression, and hinged or flexible on the line of such depression, and a connecting-spring comprising two members united at their back ends and there affixed to the center of the back pad, and said spring members diverging toward their front extremities, which are attached to the ends of the front pad, equidistant from the medial 4 line of the latter, thereby allowing each spring member to independently adjust itself to the flexible ends of the front pad, and adapting the latter to accommodate itself to the movements of the body, without becom- 5 ing displaced or releasing its pressure upon the orifice of protrusion.

In testimony whereof I have hereunto affixed my signature in the presence of two wit-

nesses.

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WILLIAM HENRY WASHBURN.

Witnesses:

T. J. Geisler, Edw. H. Joehnk.