

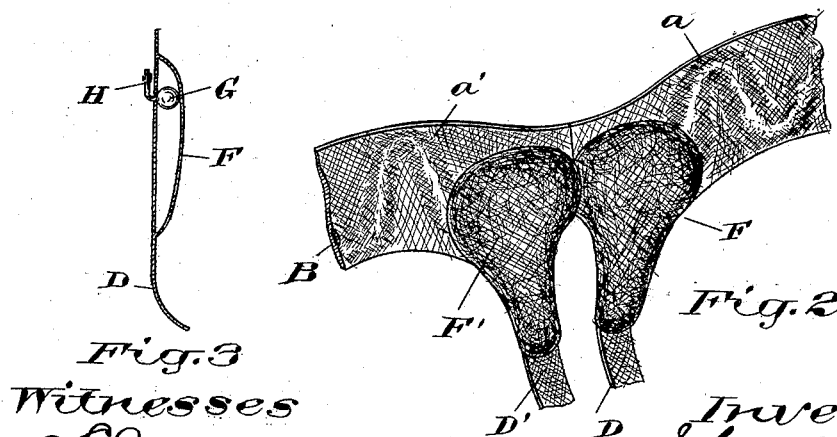
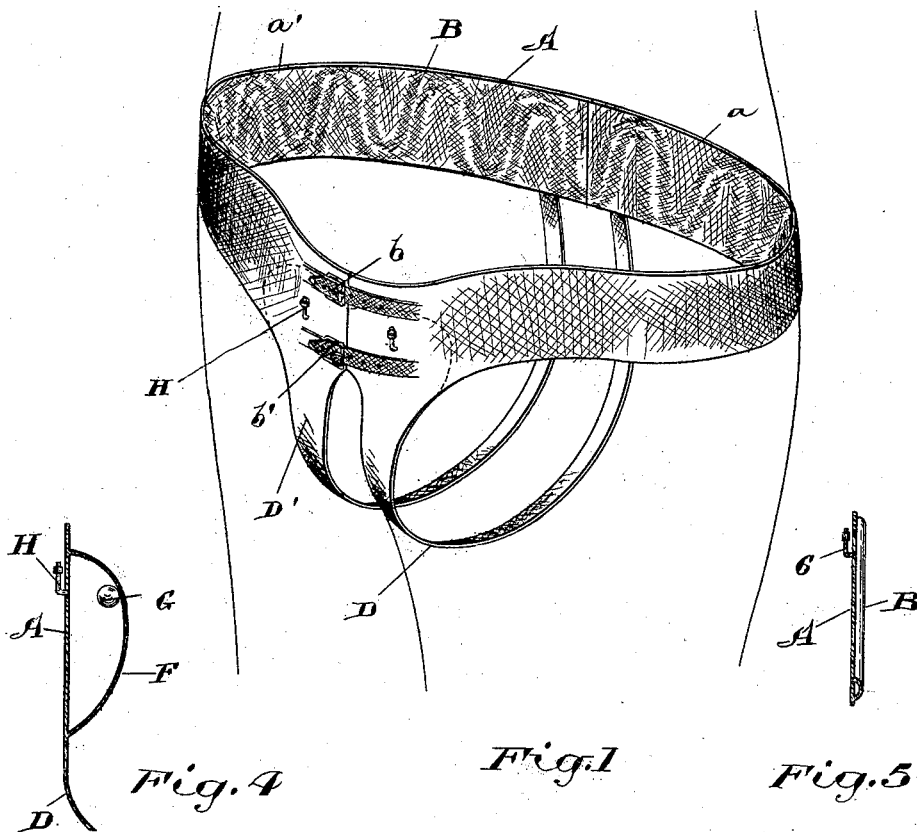
No. 647,551.

Patented Apr. 17, 1900.

J. BAIN.
TRUSS.

(Application filed Sept. 15, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

JOHN BAIN, OF BRACEBRIDGE, CANADA, ASSIGNOR OF ONE-HALF TO
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TRUSS.

SPECIFICATION forming part of Letters Patent No. 647,551, dated April 17, 1900.

Application filed September 15, 1899. Serial No. 730,607. (No model.)

To all whom it may concern:

Be it known that I, JOHN BAIN, of Bracebridge, in the district of Muskoka and Province of Ontario, Canada, have invented certain new and useful Improvements in Hernia-Trusses; and I hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to certain new and useful improvements in hernia-trusses; and it relates more particularly to the peculiar construction of the bandage and pad.

Hernia signifies a protrusion through an abnormal or accidental opening of any organ from its natural cavity, but most generally signifies a protrusion of the abdominal viscera, which is subject to violent pressure from the diaphragm and other surrounding muscles of the abdomen. This pressure forces the viscera downward and outward against the walls of the abdomen, and if at any point these walls are not sufficiently strong to resist the pressure some portion of the viscera is driven through them, with the result that a hernial tumor is formed. To reduce the hernial tumor and hold it in position and to relieve the walls of the abdomen from the violent pressure of the viscera in order that the hernia can heal is the object of the present invention, which consists, essentially, of a truss embracing in its construction an elastic bandage adapted to be fitted to the body of the wearer and preferably made of pure gum-rubber in order that it will cause a compression of the walls of the abdomen to enable the edges of the opening to close together heal, and a diminutive air-cushion fitted to the bandage to hold it slightly away from the body of the wearer to permit of a circulation of air between the bandage and body, two straps suspended from the front of the bandage, adapted to pass under the crotch and be attached by buckles or other suitable fastenings to the back of the bandage, and an air pad or cushion at the junction of each of these straps with the bandage at the front to hold the hernial tumor in position.

The invention is hereinafter more fully set forth, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective

view of the truss, showing the manner in which it is fitted to the body of the wearer. Fig. 2 is a perspective view of a section of the bandage pads and straps. Fig. 3 is a sectional view through the pad, showing it disinflated. Fig. 4 is a sectional view through the pad, showing it inflated. Fig. 5 is a sectional view through the bandage.

Like letters of reference refer to like parts throughout the specification and drawings.

A represents the bandage, which is preferably made of pure gum-rubber in order that it will conform to the movements of the body of the wearer. The bandage A preferably consists of two independent sections *a a'*, locked together at the front and back by means of straps and buckles *b b'*, respectively, or other suitable fastening devices. Each of the sections *a a'* is provided with a serpentine air-tube B, extending from end to end of the same and fitted with an air-valve C, by means of which it is inflated.

Suspended from the front of each of the sections *a a'* is a strap D D', respectively, of sufficient length to permit of its being passed under the crotch of the wearer and connected to the bandage A by means of buckles or other suitable fastenings at the back of the sections *a a'*. At the juncture of the straps D D' with the bandage A are air-cushions F F', respectively, of the requisite shape for the hernia-pads.

Within each of the air-cushions F F' is a ball G' of rubber, in order that the sides of the cushions F F' can be held away from each other when the cushions are partly or wholly disinflated. Each of the air-cushions F F' is provided with an air-valve H, so arranged as to readily admit the air into the cushions F F' and effectively check its escape. By means of the balls G the air-cushions F F' when disinflated or partly disinflated are enabled through the motions of the body to draw the air through the valve H on the same principle as the air is drawn into the bulb of a common syringe, thus enabling the air-cushions to constantly regulate the pressure of the hernia-pads.

The air-tube is shown to extend around the bandage A in a serpentine form in order that a comparatively-small portion of the band-

age A will come in contact with the body of the wearer.

Having now particularly described and ascertained the nature of my said invention, what I claim is—

1. A hernia-truss embracing in its construction an inflatable hernia-pad a ball contained within the inflatable hernia-pad to prevent the collapsing of the sides and a valve for the inflation of the hernia-pad substantially as specified.

2. A hernia-truss consisting of a body-bandage an air-tube connected to the body-bandage and extending from end to end of the same a strap one end of which is connected

to the body-bandage at the middle of the front the other end of which is adapted to be connected to the body-bandage at the middle of the back an inflatable hernia-pad connected to the inner sides of the bandage at its junction with the depending strap and a ball contained within the inflatable hernia-pad to prevent the collapsing of the sides substantially as specified.

Toronto, September 1, A. D. 1899.

JOHN BAIN.

In presence of—
C. H. RICHES,
E. L. COUSINS.