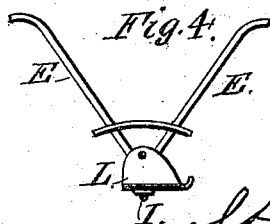
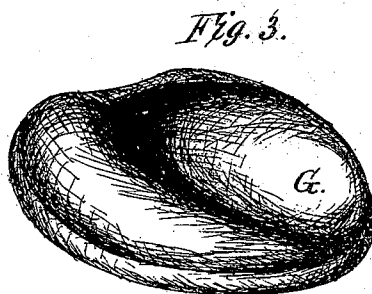
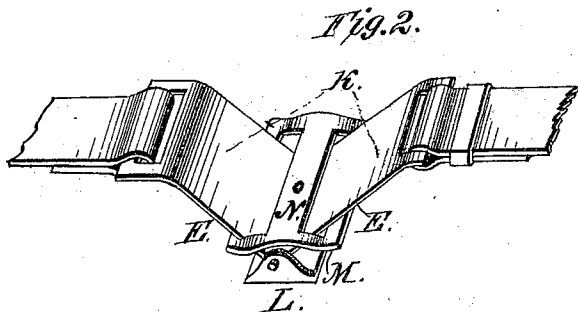
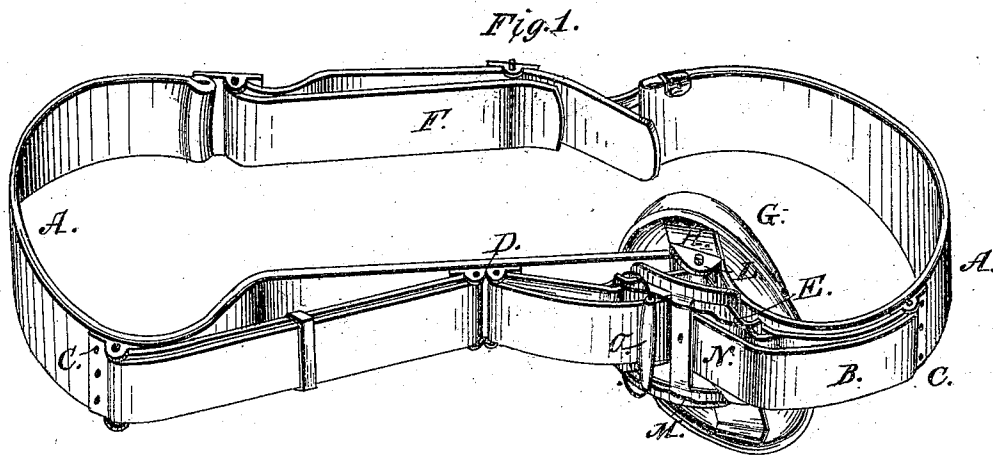


S. M. BAYARD.

TRUSS.

No. 170,466.

Patented Nov. 30, 1875.



Witnesses:

W. W. Metchel
William C. Pratt.

Inventor:

Stephen M. Bayard

UNITED STATES PATENT OFFICE.

STEPHEN M. BAYARD, OF IONIA, MICHIGAN.

IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. **170,466**, dated November 30, 1875; application filed April 7, 1875.

To all whom it may concern:

Be it known that I, STEPHEN M. BAYARD, of the city of Ionia, in the county of Ionia and the State of Michigan, have invented a new and Improved Instrument for the Relief and Cure of Hernia; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings and letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in providing a flexible belt composed of a series of small malleable metallic springs, covered with a web of cotton, and coated with rubber or other suitable materials to prevent rust, and inclosed in leather or other suitable material, and accurately fitted to the form of a person, in combination with an elastic rubber belt, so attached as to give all the force or pressure required; also, a device for increasing or decreasing the tension of the rubber web, so as to enable the person wearing the truss to increase or lessen the pressure at will, without removal or change of apparel, and without trouble or inconvenience, the whole resting upon a pad of peculiar form, having a wing or extension forward and upward upon the abdominal parietes, of concave form, for the double purpose of supporting the abdomen and firmly fixing and holding the pad in its proper place by means of atmospheric pressure or suction. The pad is attached to the belt and pivoted, so as to make it self-adjusting. A rubber web, a few inches long, connecting the ends of the belt on the back, saves the necessity of a pad, and renders it easy, elastic, and readily fitted to the size of a person.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction, operation, and use, reference being had to letters in drawings, in which—

A represents a belt or girdle, which is constructed of a series of small malleable metallic springs. These springs are first covered with a web of cotton, then coated with rubber or other suitable materials, to prevent rust. These are laid between two pieces of straps of leather, which are also coated on the inside with rubber cement, and compressed to-

gether. When nearly dry they are stitched longitudinally between each spring and at the two edges. B represents an elastic rubber web, attached to the belt by any suitable clasps or fastenings on each side, just in front of where it passes over the hip *c c*, and running to the center just above the pubis, where they are received by another clasp, D. These webs are double, their ends terminating on the side where the pad is required, or on both sides in case of double hernia, when two pads are required. The two wings of the compression-buckle are lettered E E. By these the combination of the elastic web with the main belt is made, and any degree of force or pressure is easily attained. F is a double elastic web of a few inches in length, attached to each end of the belt by any suitable clasps or fastenings which will allow the same to be lengthened or shortened, by means of which the ends of the belt are connected together and adjusted to fit the person by tightening or loosening when required. G is a hernial suction-pad of hard rubber or any other suitable material, in form to fit accurately the inguinal region, having on its anterior superior surface a flange or wing concave and formed so as to produce suction or atmospheric pressure upon the abdominal parietes and support the abdominal walls. This pad is attached to the belt by means of a slotted bar, H, attached to it longitudinally, through which the bolt I passes, and pivots it to the belt, making it self-adjusting. Upon the upper side of the belt, and held by the same bolt I, is attached the compression-buckle K by means of the bar L, through which the bolt I passes. On the ends of the bar L ears are formed, which receive the ends of the wire which connect the two wings of the compression-buckle K, which is constructed of two thin flat pieces of sheet metal, hinged together at one side, and having a slot on the other side of each piece, to which slot each end of the elastic web B is attached. A sliding clamp, M, is loosely slipped over each wing of the hinged plates E E, and has a bar, N, between them, under which the middle of the web B is passed, after having been passed through loops or clasps on the main belt A, on each side of the pad G. When the clamp M is raised by a little force, in ad-

dition to the force of the elastic web B, which passes under the bar N of the clamp, which force is applied by means of the pulley-cord and billet O, the two ends of the web B are made to approach each other. Thus the contraction of the web is made to apply its force directly to the pad G, and then, by a little force applied upon the middle bar of the sliding clamp M, it is made to slide down, thus throwing off the force of the rubber web B, and thereby relieving the pressure upon the pad G.

What I claim as new and as my invention, and desire to secure by Letters Patent, is—

1. The combination and arrangement of the flexible belt A with elastic web B and the compression-buckle K, substantially as described, and for the purposes set forth.

2. A compression-buckle of the form described, when used in combination with elastic webs, for the purpose of increasing and applying its force upon a hernial pad, substantially as described.

STEPHEN M. BAYARD.

Witnesses:

W. W. MITCHEL,
WILLIAM A. PRATT.