(No Model.)

C. E. McCANDLISS.

TRUSS.

No. 436,721. Patented Sept. 16, 1890.

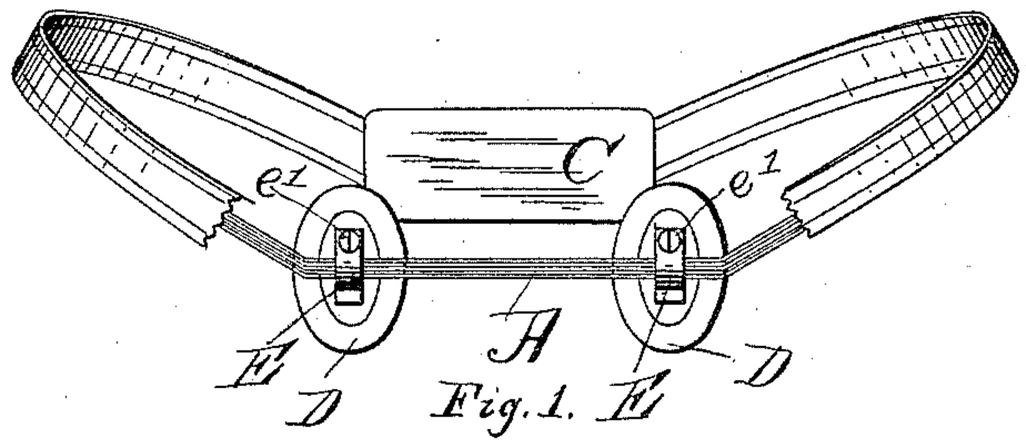

Fig. 1.

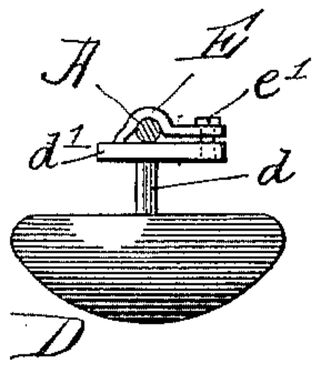

Fig. 2.

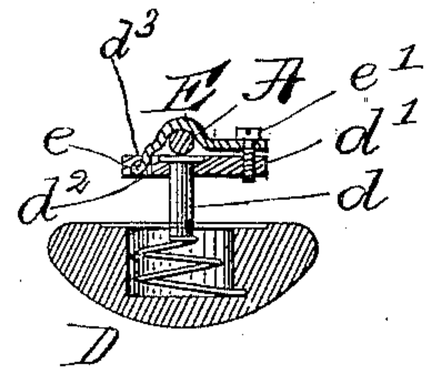

Fig. 3.

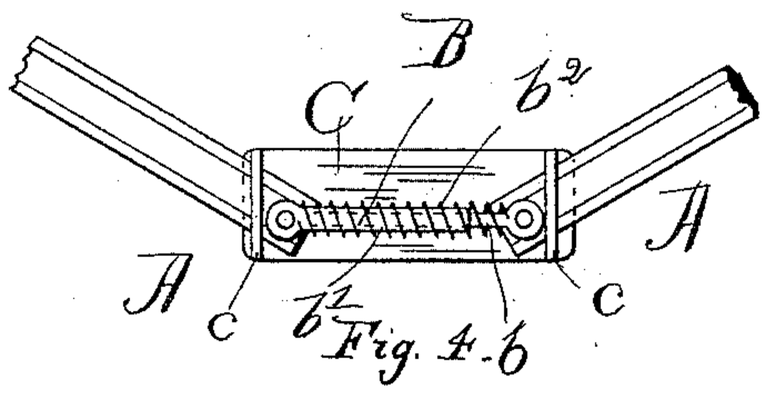

Fig. 4.

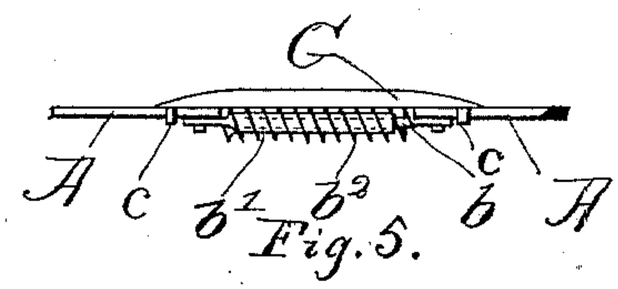

Fig. 5.

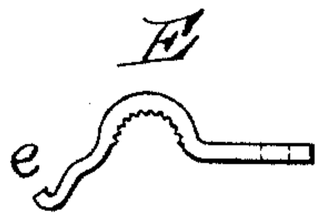

Fig. 7.

Fig. 6.

Witnesses:

Luke F. Hayden.

Inventor:

Charles E. McCandliss.

By his Attorney

Albert A. Wood.

UNITED STATES PATENT OFFICE.

CHARLES E. McCANDLISS, OF ATLANTA, GEORGIA.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 436,721, dated September 16, 1890.

Application filed June 2, 1890. Serial No. 354,052. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. MCCANDLISS, a citizen of the United States, and a resident of Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Trusses; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to surgical appliances, and more particularly to that class of such devices known as trusses or supporters, the object being to so improve such devices as to render them sure in the engagement of parts and hence secure against slipping thereof, which is extremely dangerous in cases of hernia, to which this class of device is particularly applicable, and to render them more comfortable to the wearer, the invention consisting of several novel and useful elements, which will be hereinafter fully specified, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a view slightly in perspective of a truss, showing a front view thereof. Fig. 2 is a view in side elevation of the pad, its stem, and the cap securing same to the body-band. Fig. 3 is a longitudinal vertical section of Fig. 2, showing the interior arrangement of parts. Fig. 4 is a view from the back of a portion of the truss, showing the spring extension-piece and the back of the back pad. Fig. 5 is a top view of Fig. 4. Fig. 6 is a detail view in section of the body-band, showing a part of its surface dentated by small longitudinally-extending ridges and grooves. Fig. 7 is a detail showing the correspondingly dentated portion of the cap and its conformation.

In the figures like reference-marks indicate corresponding parts in the several views.

The elastic body-band A is formed of a steel spring, the ends thereof approaching at the back and being connected by the extension-link B, which is formed of a socket b' and a pin b sliding therein, its withdrawal being resisted by the spring b^2, suitably arranged in connection therewith. This spring allows the body-band to expand and contract in size and so affords means for the adaptation of the truss to hip and other motions of the body, which leaves the retaining-pads D independent of and unaffected by this motion. The ends of the body-band and extension-link are isolated from contact with the body by means of the pad C, which in use will be stationary on the body, and the band A and extension-link B will have play thereon, any slipping being prevented by straps c, under which the ends of the band A pass. The band may have a sheathing a, of soft leather or fabric, extending the desired distance thereon, for the purpose of preventing metallic contact with the body.

The retaining-pad D may be of any form, so long as it has a stem d and bar D′ swiveled thereto, which construction is preferred. The bar d' has a slot d^2, having a shoulder d^3, into which enters the hook e of the cap E, through which the screw e' passes, being elongated and being further from the center of the body-band A than is the bearing of the hook e in the slot d^2, by reason of which great compression can be brought to bear on the said body-band without danger of stripping or breaking the screw, which is a great objection to all of the constructions heretofore employed, and it is well understood that any slippage at this point is very dangerous to the patient, by reason of a probable enlargement of the hernia, rendering it frequently incurable. To further insure non-slipping of the pad on the body-band, I dentate or serrate a part of the surface of the body-band A and the cap E, as best shown in Figs. 6 and 7, with small ridges and grooves, extending longitudinally of the band A and being cut or indented directly into the metal composing the said band, and the corresponding ridges and grooves in the cap E fit directly into these at any angle in which the pad may be required, and it is thus obvious that there are no intermediate parts to slip and endanger the patient; also, by reason of this construction, the strength of the body-band is left unimpaired and all danger of breaking obviated, which is obviously a great advantage also as regards its safety to the patient.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

In a truss, the combination of the back pad C with the straps *c*, through which pass the ends of the body-band, the rod *b*, attached to one end of the body-band, and the hollow sleeve *b'*, attached to the other end, and the surrounding coil-spring b^2, substantially as shown and described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

CHARLES E. McCANDLISS.

Witnesses:
A. P. WOOD,
S. M. WOOD.