

G. W. BELL.

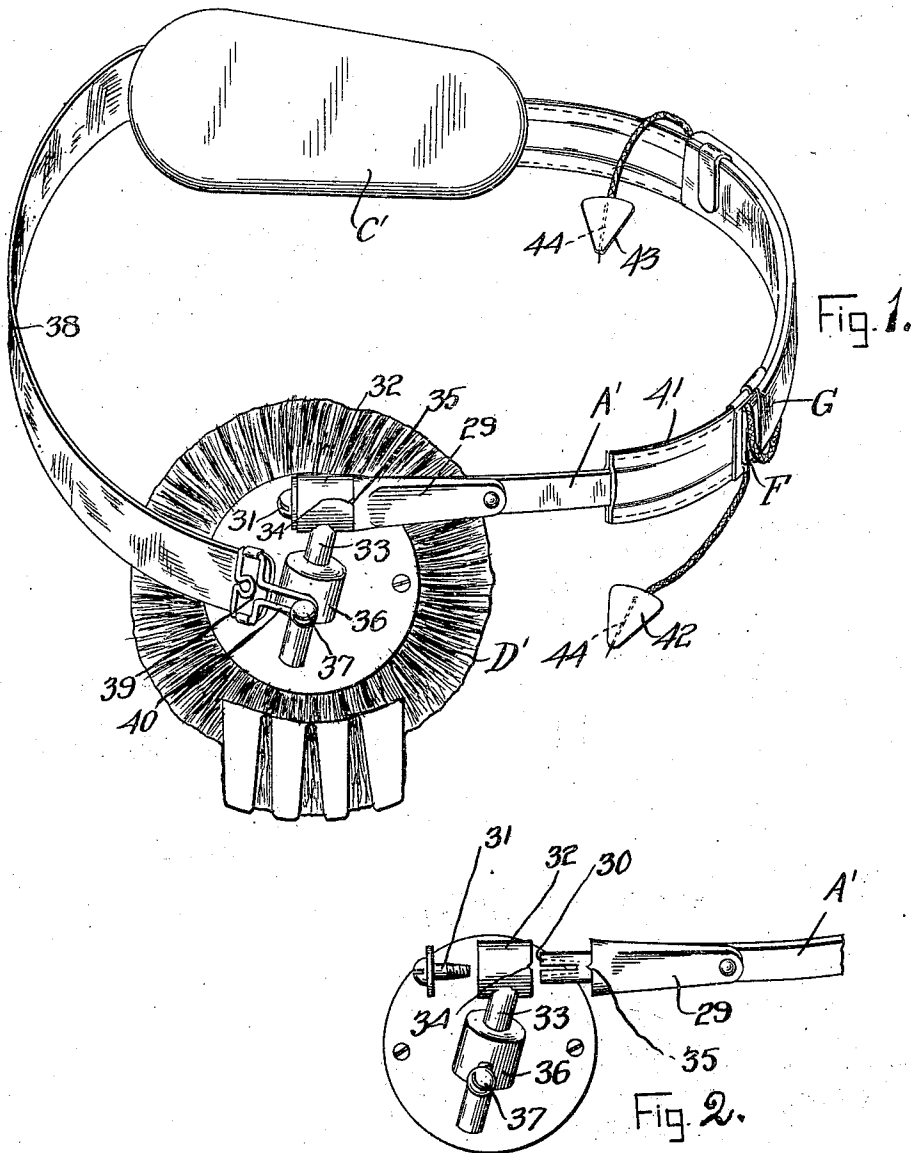
TRUSS.

APPLICATION FILED SEPT. 30, 1908.

934,130.

Patented Sept. 14, 1909.

2 SHEETS—SHEET 1.



Witnesses

C. K. Reinhardt
W. E. Oliver

Inventor
George W. Bell

By D. Swift & Co.
Attorneys

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2 SHEETS—SHEET 2.

Fig. 3.

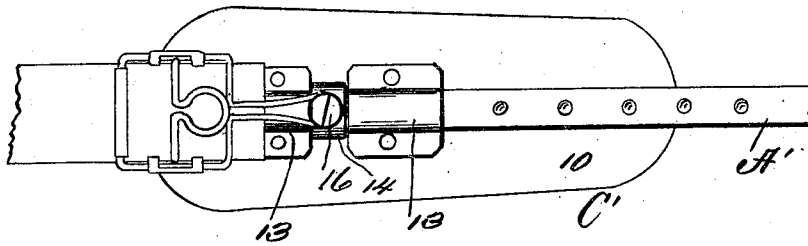


Fig. 4.

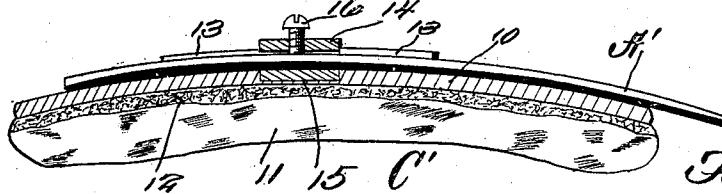


Fig. 5.

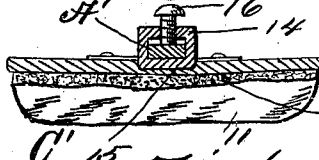


Fig. 8.

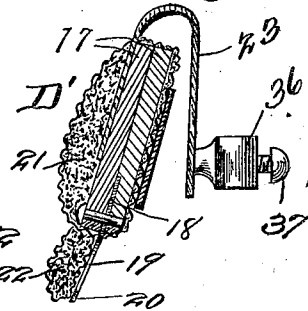


Fig. 7.

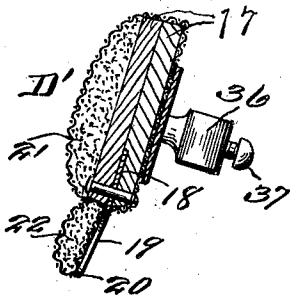
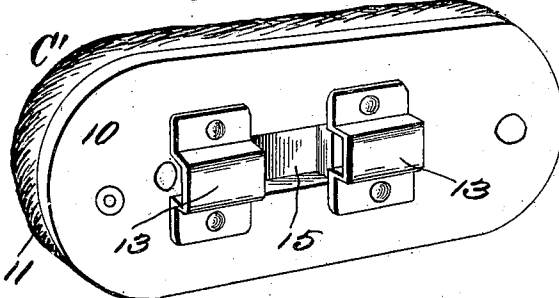


Fig. 6.



Witnesses

J. B. Brownell,
W. M. Miller.

Inventor
George W. Bell

By D. Swift & Co.
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE W. BELL, OF KANSAS CITY, MISSOURI.

TRUSS.

Specification of Letters Patent. Patented Sept. 14, 1909.

934,130.

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To all whom it may concern:

Be it known that I, GEORGE W. BELL, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Truss; and I do hereby 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.

This invention relates to trusses for the treatment and cure of the various forms of rupture and hernia, and it has for its objects to produce a truss of simple and improved construction which may be readily adjusted to the anatomy of the wearer in view of the conditions of the particular case which is being treated.

A further object is to provide a truss the pads of which may be readily adjusted and manipulated so as to exert the desired pressure in precisely required spot.

Further objects are to simplify and improve the construction and operation of this class of devices.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention; it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawings—Figure 1 is a perspective view of a truss embodying the features of the invention. Fig. 2 is a detail view of a portion of the front pad, showing the structure of the connection between the pad and the member A'. Fig. 3 is a rear elevation of the back pad C', showing the rear face thereof and the connection between it and the member A'. Fig. 4 is a sectional view longitudinally through the pad C'. Fig. 5 is a transverse sectional view through the pad C' at right angles to that shown in Fig. 4. Fig. 6 is a detail perspective view of the pad C', clearly disclosing the rear face thereof, in order to show the keepers 13 and the recess 15. Fig.

7 is a sectional view through the back pad D', showing the construction thereof and the tubular sleeve or socket 36. Fig. 8 is a sectional view similar to Fig. 7, showing the spring 23 carrying the tubular sleeve or socket 36.

Corresponding parts in the several figures are denoted by like characters of reference.

Referring to the drawings, a supporting member or spring A' is clearly illustrated. This member or spring A' is preferably made of any suitable tempered non-corrodible metal, such as silver, or other metal or other material that is plated or otherwise protected against corrosion. This spring or supporting member is suitably shaped and curved to fit and rest easily upon the hips of the person wearing the truss; said supporting member or spring may be readily bent, fitted and adjusted to any peculiarities of the anatomy of the wearer. Carried by the supporting member are back and front pads C' and D'. The front pad D' is preferably composed of a plurality of thicknesses or layers 17, of leather or other suitable material cut to the desired shape; said layers or lifts being connected together by stitching, riveting or in any other convenient manner. A flat spring 18 is interposed between two of the lifts 17, said spring being of such dimensions as to project at the lower edge of the pad where it is provided with notches or serrations 19, forming a plurality of resilient members 20, which are capable of being individually manipulated and bent so as to exert varying degrees of pressure. The pad D' is equipped with body engaging cushion 21, having flanges 22 that engage the spring fingers 20 and which is subject to the direct pressure of said fingers. It will be readily seen that by properly bending and manipulating the fingers 20, the flanges 22 of the cushion may be made to exercise varying degrees of pressure against the body of the wearer, and that the pressure is capable of being adjusted and regulated very minutely and accurately. The cushion may be saturated with any suitable liniment or medicament that it may be desired to use in connection with the truss.

For the purpose of mounting the pad D' in position for operation, it is provided with a supporting spring 23, to which the tubular sleeve or socket 36 is integrally connected, into which is threaded the screw 37, as shown

clearly in the detailed sectional view of Fig. 8 of the drawings. But, as shown in Figs. 1 and 2, the pad D' has connected to a plate thereof the tubular sleeve or socket 36.

5 Upon the front end of the supporting member, there is secured a casting 29 having a slit or bifurcated terminal socket 30, which is internally threaded for the reception of a slightly tapering screw or bolt 31, by the insertion of which the split or bifurcated
10 socket-portion will be expanded so as to bear frictionally against a sleeve 32 fitted externally thereon and having an arm 33 which is radial to the axis of the bolt. The sleeve
15 32 is provided at one end with notches 34 adapted to be engaged by a lug 35 upon the casting 29; hence, when the parts are assembled together, and secured by means of the screw 31, the parts will be held securely in
20 position, and the sleeve 32 will be prevented from turning upon the socket-portion 30 of the casting 29, partly owing to the friction due to the expansion of the socket-portion by the insertion of the tapering screw, and
25 partly owing to the engagement of one of the notches 34 with the lug 35.

As shown in the drawings, the socket 36 engages the arm 33, and is provided with a set screw 37, which is designed to bear
30 against said arm, in order to hold the pad firmly secured. Under the construction described, it is very obvious that the pad is universally adjustable, and that any desired adjustment may be very readily and quickly effected. It is also clear that the parts will
35 be very securely retained in any position to which they may be adjusted; and that the adjustment may be very readily changed as often as may be desired.

40 The back pad C' is equipped to rest lightly upon the fleshy portion of the hips, and is preferably constructed of several thicknesses of leather 10, 10, suitably connected by riveting or in any other suitable and convenient
45 manner; said pad is preferably provided with a facing 11 of textile material and, if desired, with a stuffing 12 of soft and yielding material, such as cotton wool. The pad C' is provided with metallic keepers 13 slidably engaging the reduced rear ends of the
50 supporting member A'; and the latter is equipped with a metallic loop 14 which is seated in a recess 15 of the pad, intermediate the keepers 13, and which is provided
55 with a set screw 16 bearing against the supporting member or spring A'; upon which the loop 14 is secured in such wise as to retain the pad against displacement; it will be readily seen that by loosening the screw
60 16, the loop 14 and the pad may be readily adjusted lengthwise of the supporting member. This construction, and manner of adjusting and securing the back pad is extremely simple, and, at the same time, thoroughly efficient. The loop 14 does not re-

quire to be riveted or otherwise secured upon the pad, and the latter may be readily adjusted and detached, as required.

This truss may be secured or retained in position for operation by means of a single elastic strap 38 having terminal loops 39 and 40 which, in this case, are made to engage the set-screws that are utilized for mounting the front and rear pads in position.

The supporting member may be guarded and protected by any suitable casing or covering; such protective covering has been indicated in the drawings, at 41, and it is desired to be understood that it may be of any desired material and construction.

An electrical attachment or appliance may be used with the improved truss; such appliance comprises a battery or pile F inclosed within a suitable casing G, that may be mounted upon or attached to the supporting member, said battery being provided with positive and negative disks 42 and 43 having pins 44, whereby they may be mounted upon or connected with the body of the wearer. The use of such electrical appliance is well understood, and it requires no further detailed description.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood. This improved truss is extremely simple in construction and is so designed as to be capable of being very minutely and accurately adjusted to produce the very best results in connection with the treatment of any given case. Not only are the pads capable of individual adjustments, but, owing to the construction of the front pad, the projecting fingers thereof may be individually bent and adjusted, so as to cause the desired amount of pressure to be exerted in any given spot; this being of the greatest importance in the successful treatment of hernia, as well as conducive to the comfort of the patient.

Having thus described the invention, what is claimed is:

1. In a truss, a curved resilient supporting member, a back pad having keepers slidably engaging the supporting member and a loop secured upon the supporting member intermediate the keepers.

2. In a truss, a curved resilient supporting member, a back pad having keepers slidably engaging the supporting member and provided with a recess intermediate the keepers, a loop fitted in the recess and slidably engaging the supporting member, and a set screw in said loop bearing against the supporting member.

3. In a truss, a curved resilient supporting member having a terminal casting provided with a split internally threaded socket and a lug adjacent thereto, a sleeve mounted upon the socket and provided with lug engaging

notches and with a radial arm, a tapering screw engaging the socket, and a pad having a sleeve engaging the radial arm and provided with a set-screw bearing against said arm, said pad having a plurality of projecting resilient fingers.

4. In a truss a curved resilient supporting member having a terminal casting provided with an internally threaded split socket, a tapering screw engaging the socket, a sleeve fitted externally upon the socket and having a radial arm and a pad having a sleeve engaging said arm.

5. In a truss, a curved resilient supporting member having a terminal casting provided with a split internally threaded socket and a lug adjacent thereto, a sleeve mounted upon the socket and provided with lug-engaging notches and with a radial arm, a tapering screw engaging the socket, and a pad having a sleeve engaging the radial arm and provided with a set screw bearing against said arm.

6. In a truss, a curved resilient supporting member, a back pad having keepers slidably engaging the supporting member, a loop secured upon the supporting member intermediate the keepers, said supporting member having a terminal casting provided

with a split internally threaded socket and a lug adjacent thereto, a sleeve mounted upon the socket and provided with lug engaging notches and with a radial arm, a tapering screw engaging the socket, and a pad having a sleeve engaging the radial arm and provided with a set-screw bearing against said arm, said pad having a plurality of projecting resilient fingers.

7. In a truss, a curved resilient supporting member, a back pad having keepers slidably engaging the supporting member, a loop secured upon the supporting member intermediate the keepers, said supporting member having a terminal casting provided with an internally threaded split socket, a tapering screw engaging the socket, a sleeve fitted externally upon the socket and having a radial arm and a pad having a sleeve engaging said arm, said last named pad having a plurality of projecting resilient fingers.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE W. BELL.

Witnesses:

W. T. HACKER,
J. E. VINCIL.