

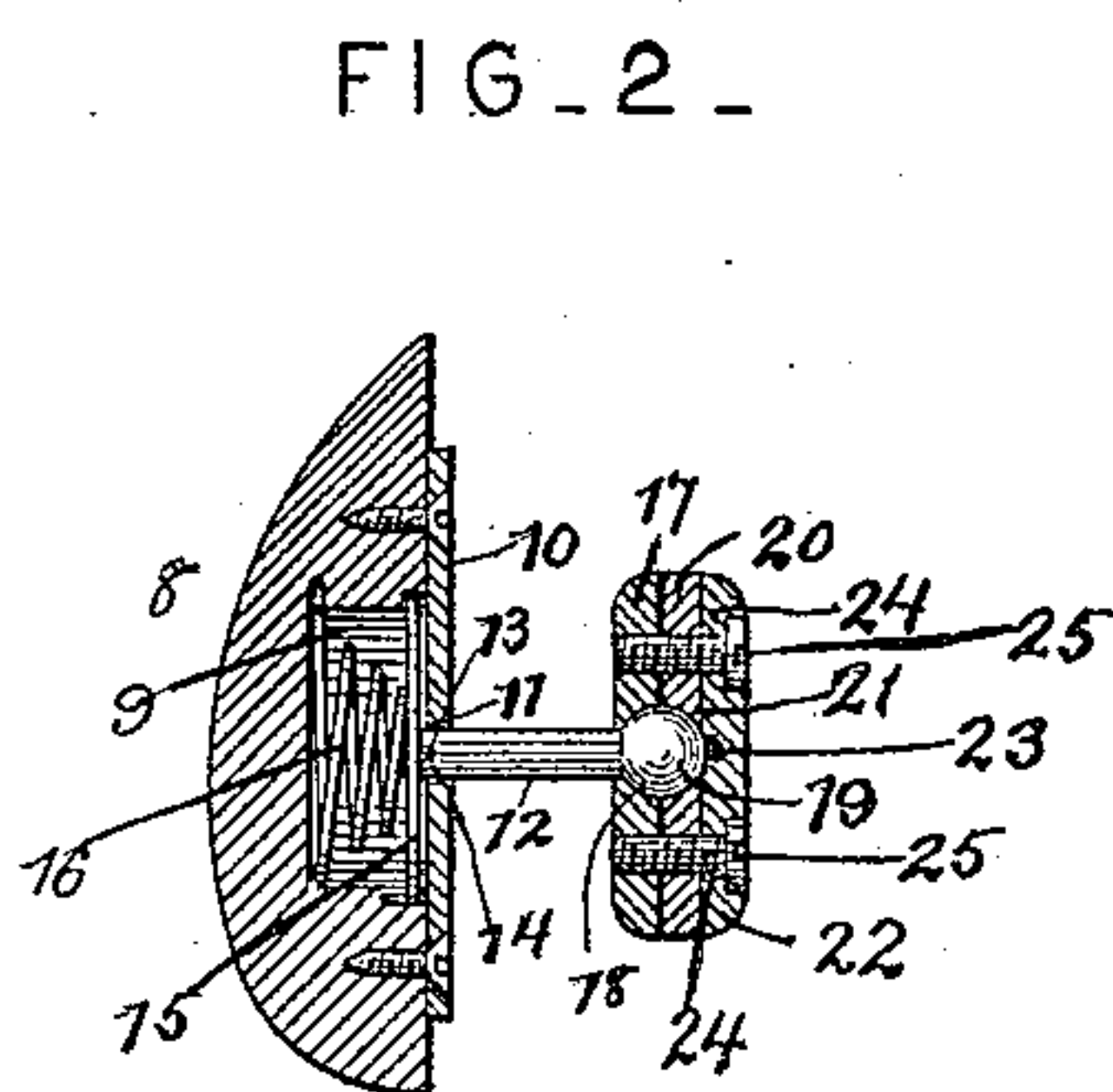
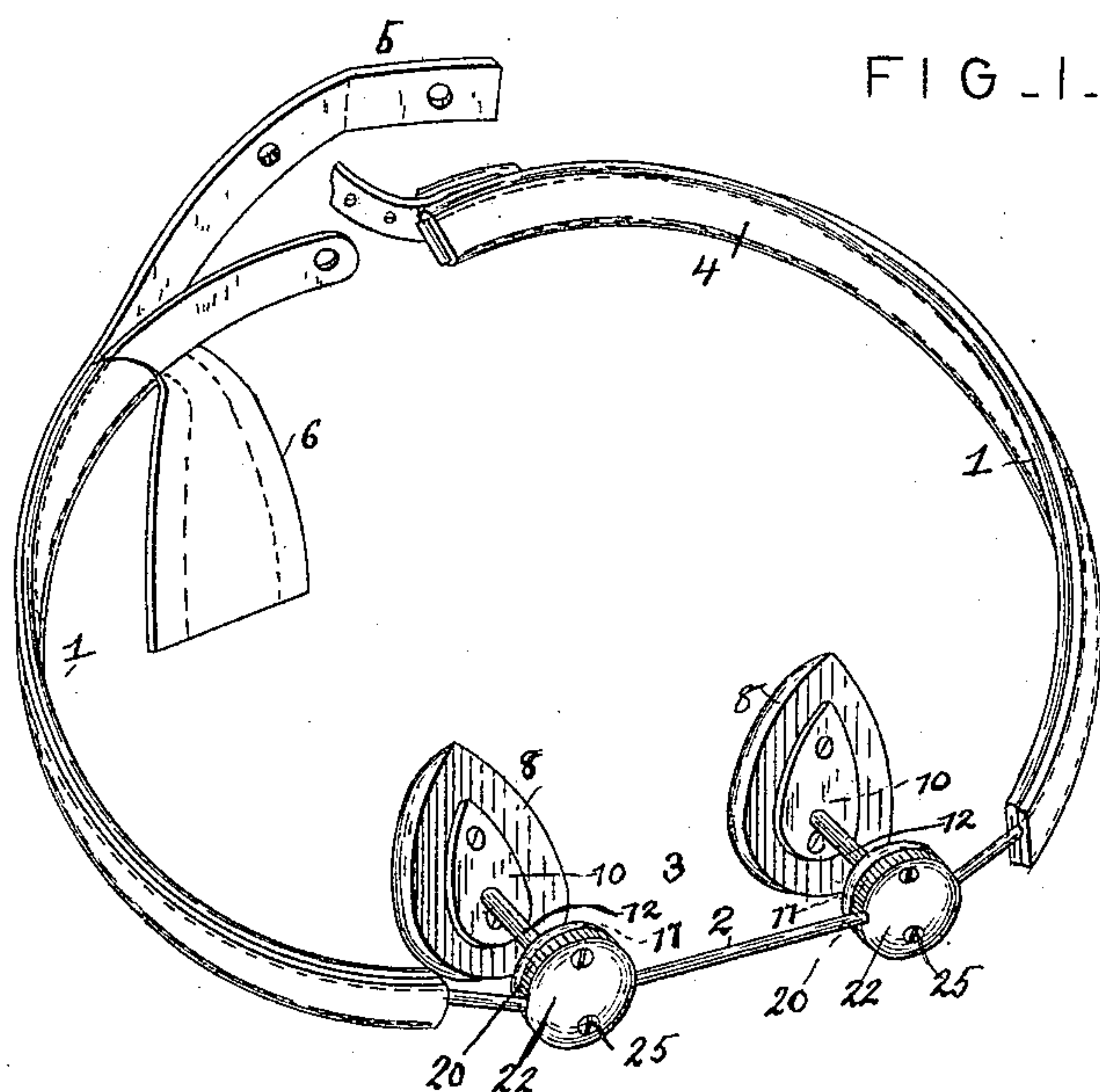
(No Model.)

2 Sheets—Sheet 1.

O. E. MILLER & G. S. BENNETT.
TRUSS.

No. 438,169.

Patented Oct. 14, 1890.



Witnesses.

Jas. H. McLaughlin

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(No Model.)

2 Sheets—Sheet 2.

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FIG. 3.

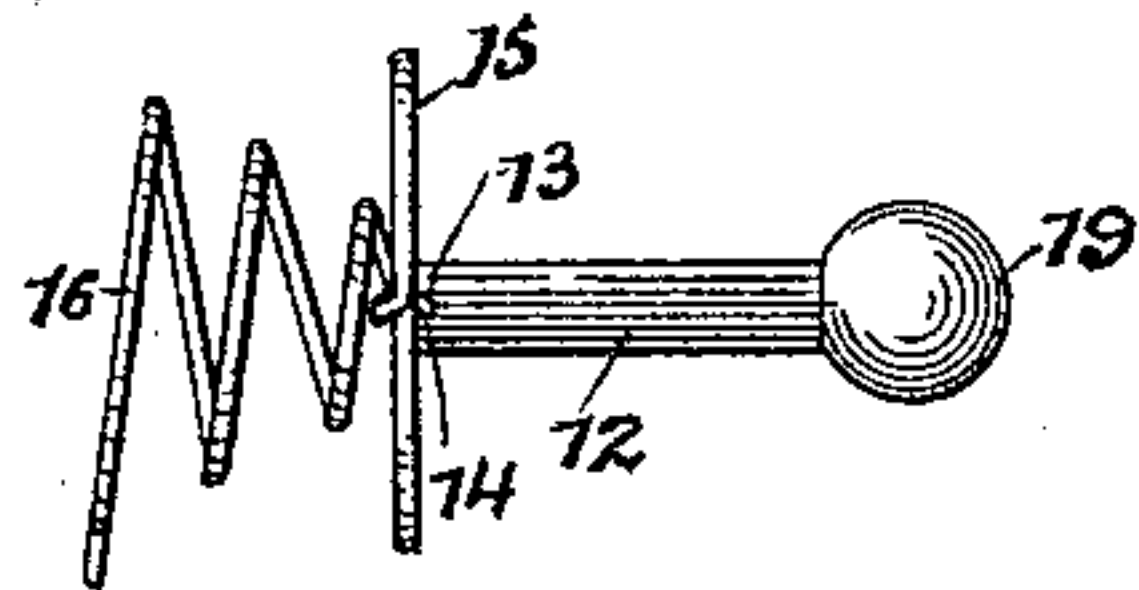


FIG. 4.

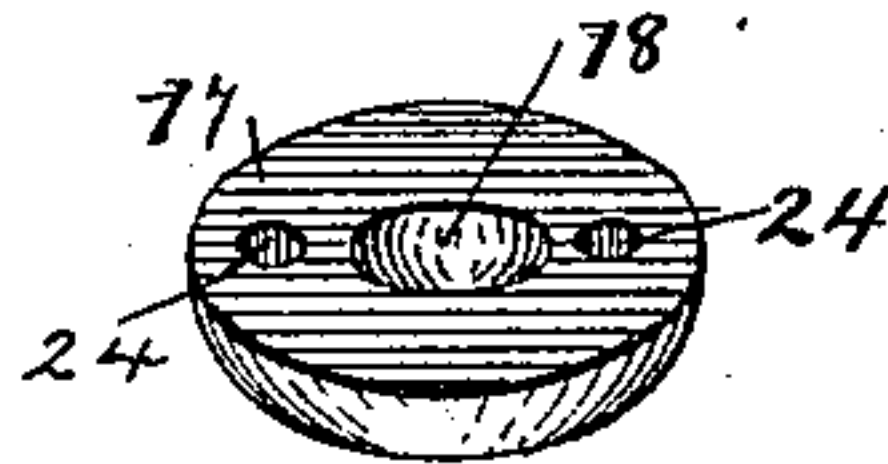


FIG. 5.

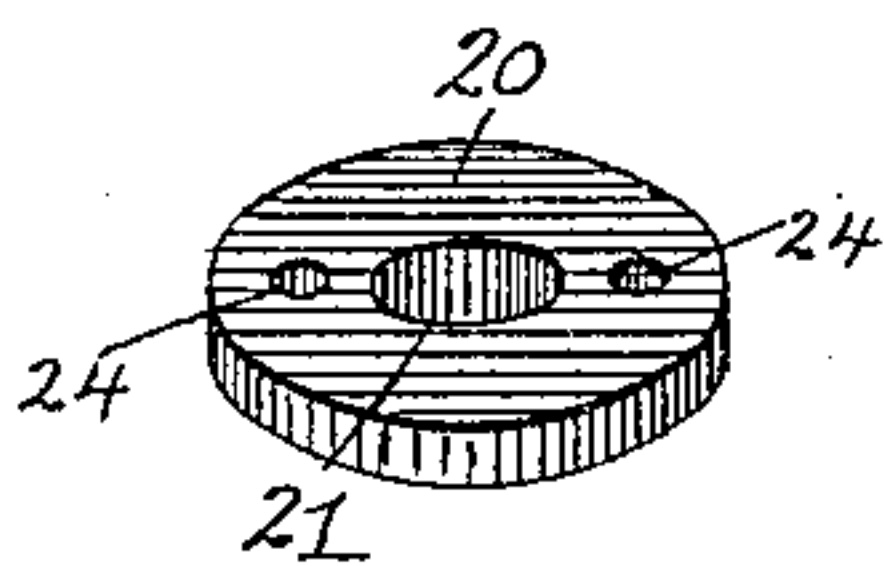


FIG. 6.

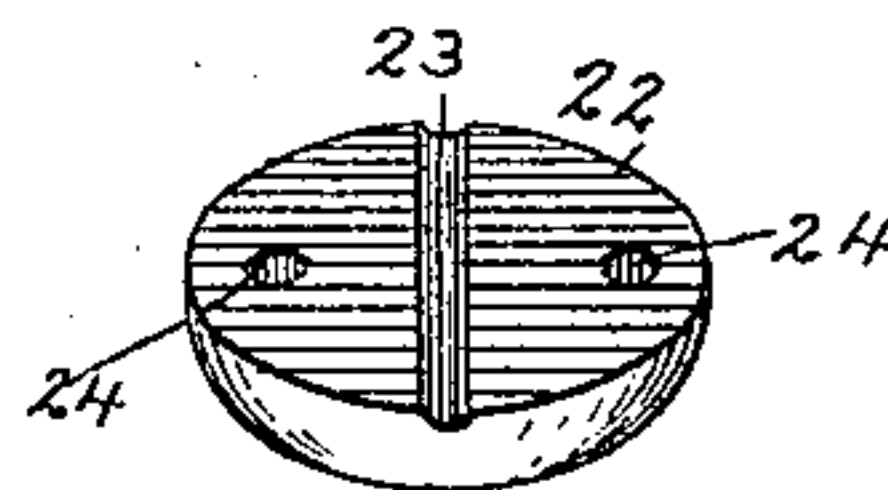


FIG. 7.

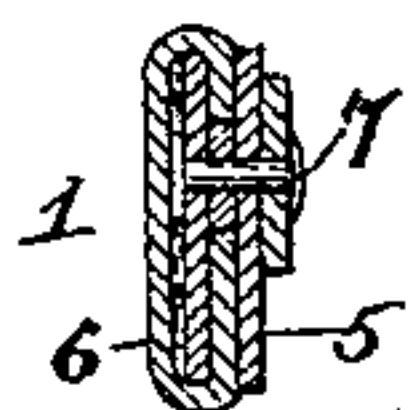
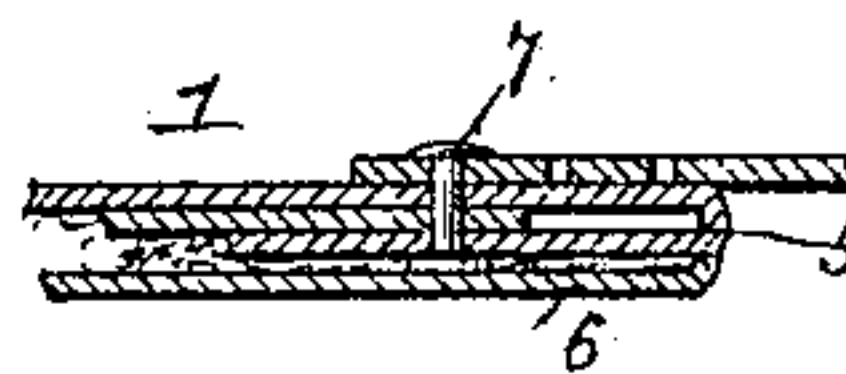


FIG. 8.



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UNITED STATES PATENT OFFICE.

ORLANDO E. MILLER AND GEORGE S. BENNETT, OF DENVER, COLORADO.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 438,169, dated October 14, 1890.

Application filed April 21, 1890. Serial No. 348,775. (No model.)

To all whom it may concern:

Be it known that we, ORLANDO E. MILLER and GEORGE S. BENNETT, citizens of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented a new and useful Truss, of which the following is a specification.

This invention has relation to trusses for the treatment of hernias; and among the objects in view is to provide an inexpensive truss of simple construction, light, and durable, the pads of which are capable of being adjusted at all angles in any direction, which are yielding in their pressure and secure against slipping.

Various other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective of a truss constructed in accordance with our invention. Fig. 2 is a transverse section through one of the pads. Fig. 3 is a detail in side elevation of the pad, stud, or post. Fig. 4 is a detail in perspective of the post socket-disk. Fig. 5 is a detail in perspective of the binding-disk. Fig. 6 is a detail in perspective of the outer clamping plate or disk. Fig. 7 is a detail in transverse section through the body-band. Fig. 8 is a longitudinal section of the same.

Like numerals of reference indicate like parts in all the figures of the drawings.

The body-band 1 has its two terminals curved and flattened toward their ends, as shown, and near its center is reduced to substantially cylindrical shape in cross-section, the inner face of the same being flattened, as at 2, to prevent the pad-connections, hereinafter described, from slipping when bound in position thereupon. At each side of its center the body-band is bent rather abruptly, thus forming an intermediate straight central portion 3 for the reception of the pads. The inner faces of the terminals of the body-band are covered by inner facings 4 of leather or chamois, which facings are somewhat wider than the terminals and have their opposite longitudinal edges doubled and stitched, as at 5, to the opposite longitudinal edges of an outer facing of leather 6, and the space between the inner facings and the terminals is

stuffed, as shown. The facings 6 are longer than the inner facings or the terminals and have their ends bent round the ends of the terminals and between the inner facings and terminals, as shown, and through this bent portion and the exterior portion of the outer facing of leather and the intermediate body-band there is passed a copper rivet 7, the inner head of which, it will be observed, is covered by the inner facing and cannot come into contact with the body of the wearer, and thus we avoid any accumulation of verdeggris.

8 represents the pads, which are of the usual exterior formation, the rear face of each pad being provided with a circular recess 9, which recess is covered by a plate 10, screwed thereto. The plate 10 is provided with a central opening 11, through which is passed the post 12, the inner end of the post being provided with a transverse slot 13, in which is soldered a spring-wire 14, which is coiled at one side of its connection to form a flat convolute spring-cushion 15, and below the post forming a coiled spring 16, the former spring resting against the inner face of the spring 10, and the latter spring resting against the bottom of the circular recess. The first-mentioned spring permits the pad to have a yielding lateral movement in all directions upon its post, and is therefore cushioned upon the post, while the spring 16 permits the pad to have a yielding direct pressure or in line with the post.

The post is loosely encircled by a plate 17, provided upon its rear face with a socket 18 for the reception of the spherical head 19 formed of soft metal upon the outer end of the stud or post. The thickness of the socket-disk is such as to nearly cover the spherical head, and the opening in the disk is of such a size as to permit the post to freely move in all directions therein.

20 represents a binding ring or plate, formed of steel and provided with a central circular opening 21, the inner edge of which is adapted to bind upon and slightly bite into the soft-metal head of the post.

22 represents the outer clamping-disk, the inner face of which is provided with a transverse groove 23 for the reception of the central portion of the body-band. The disk 22 is also provided with opposite threaded open-

ings 24—one occurring at each side of the groove 23—which openings are continued through the binding-ring and inner clamping-disk.

5 The flattened portion of the body-band lies against the rear flat face of the binding-ring, and said band is tightly clamped in position between the outer binding-disk and the plate by means of opposite binding-screws 25, inserted through the aligning openings 24 of
10 the socket and binding-disk and the binding-ring.

By loosening the binding-screws very slightly the pads may be slid upon the portion 3 of the body-band to any desired point,
15 and the pads may be tilted or swung to assume any position, whereby they are adapted for pressing upon variously-located hernias and support the same in a normal position.
20 After the pads have been tilted, as mentioned, the binding-screws 25 are rotated so as to draw the socket and clamping-disks and binding-ring together, and in so doing the inner edge of the steel binding-ring bites into the
25 soft metal of the spherical head, and the post is maintained in position.

It will be obvious that the groove 23 of the plate 22 may be omitted in case a flat band is substituted for the round band 2 shown.

30 Having described our invention, what we claim is—

1. The combination, with the body-band of a truss, of a pad, a post for supporting the same and terminating at its rear end in a
35 head, a plate encircling the post and provided

with a socket for the reception of the head, a binding-disk having an opening smaller than and adapted to partially receive the head, said opening having sharp angular edges adapted to bind upon the head, a clamping-disk mounted
40 on the binding-disk and the two embracing opposite sides of the band, and binding-screws inserted through the three disks at opposite sides of the head, substantially as specified.

2. The combination, with the body-band of a truss, of a pad, a post for supporting the same and terminating in a soft-metal spherical head, a plate or disk encircling the post and provided with a socket for the reception of
50 the head, a binding-disk formed of steel and having an opening smaller than and adapted to receive the head and provided with sharp angular edges adapted to bite into the soft metal of the head, a clamping-disk mounted
55 upon the binding-disks and with the same embracing the body-band, said clamping-disk being provided with a transverse groove for the reception of the band, and binding-screws located at each side of the band and threaded
60 in openings formed in the three disks, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

ORLANDO E. MILLER.
GEORGE S. BENNETT.

Witnesses:

CHARLES SPARKES,
H. J. HERSEY.