

I. EATON.
SURGICAL CHAIR.
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951,560.

Patented Mar. 8, 1910

Fig. 1.

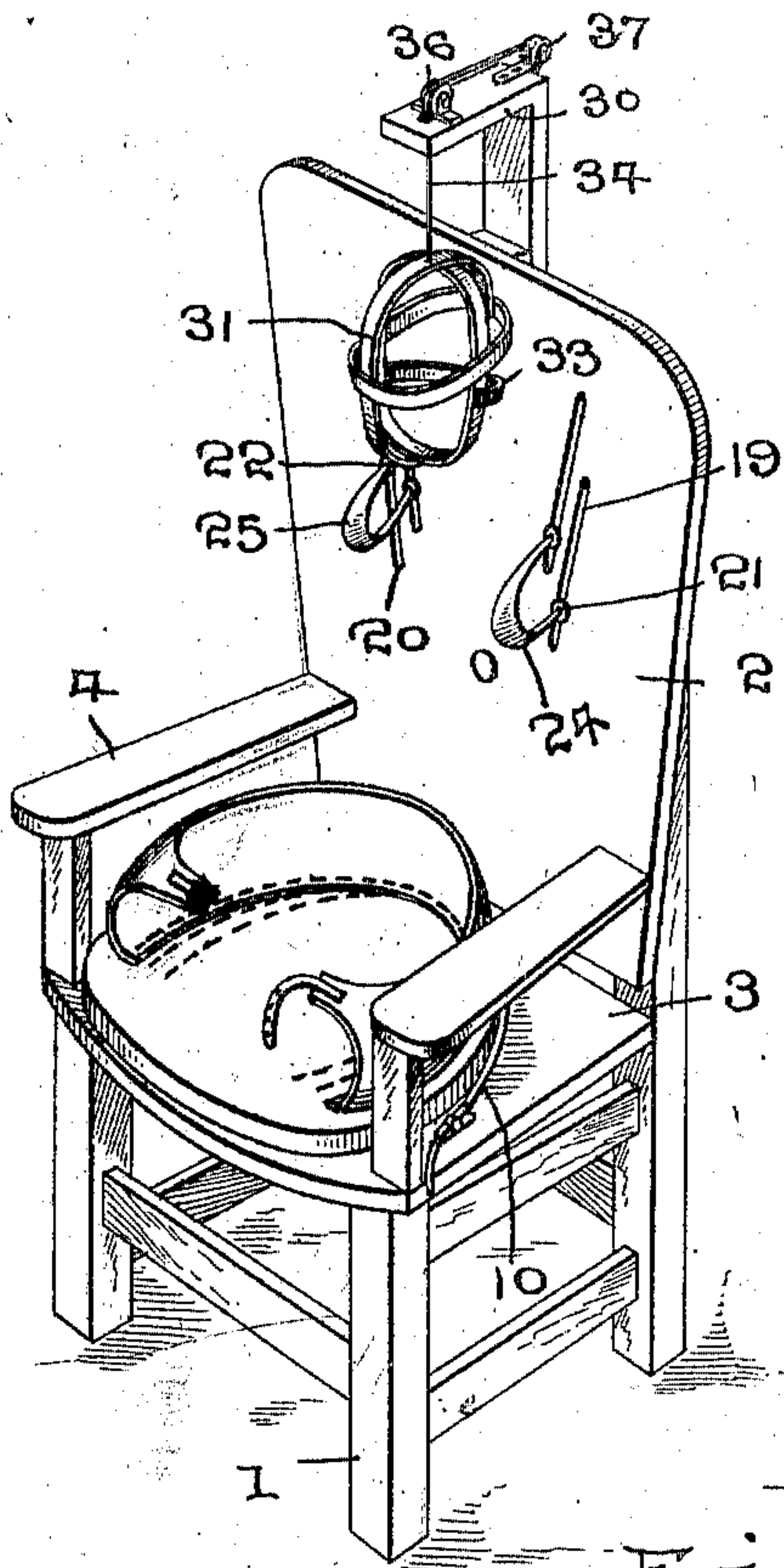


Fig. 2.

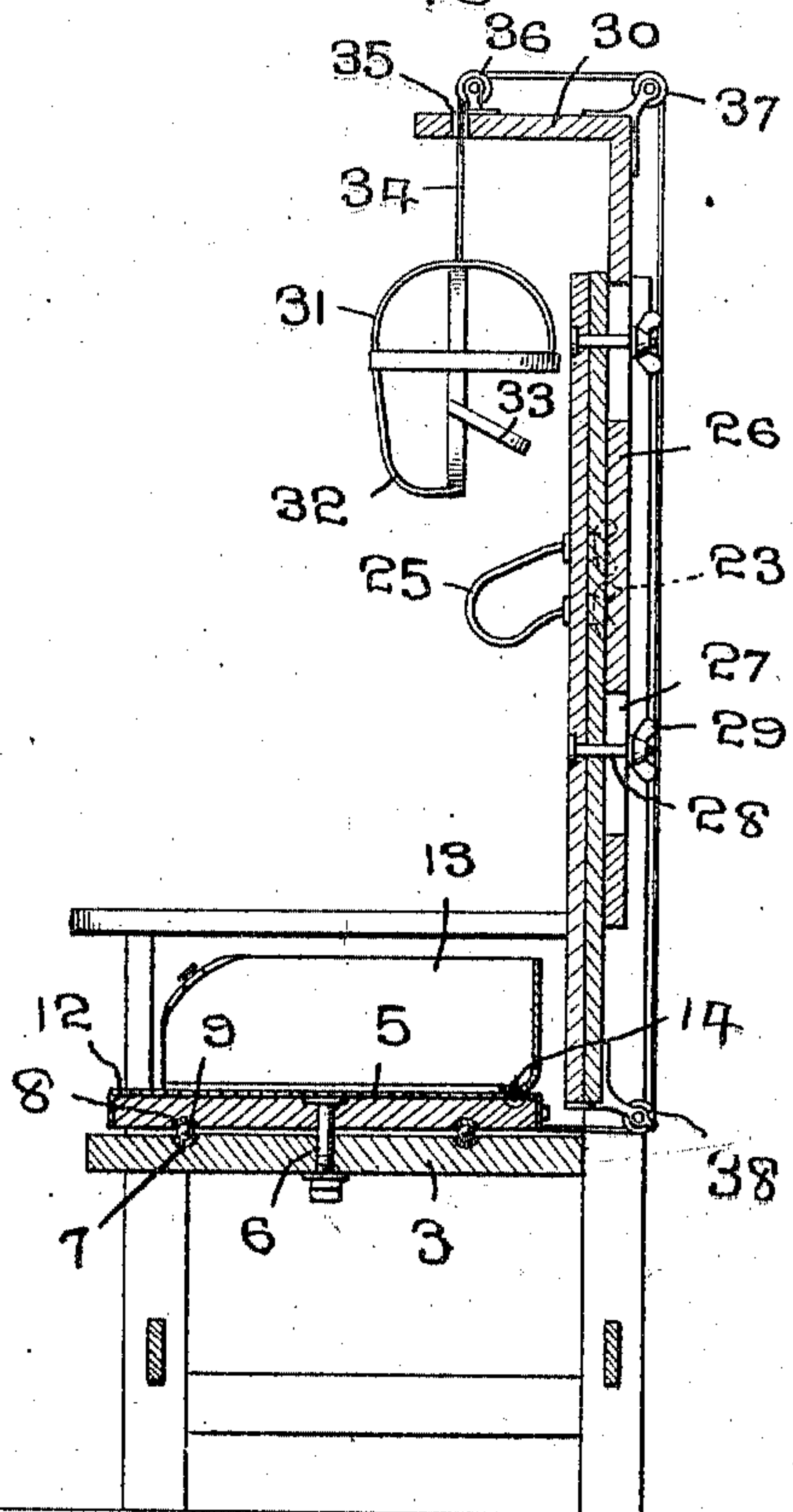
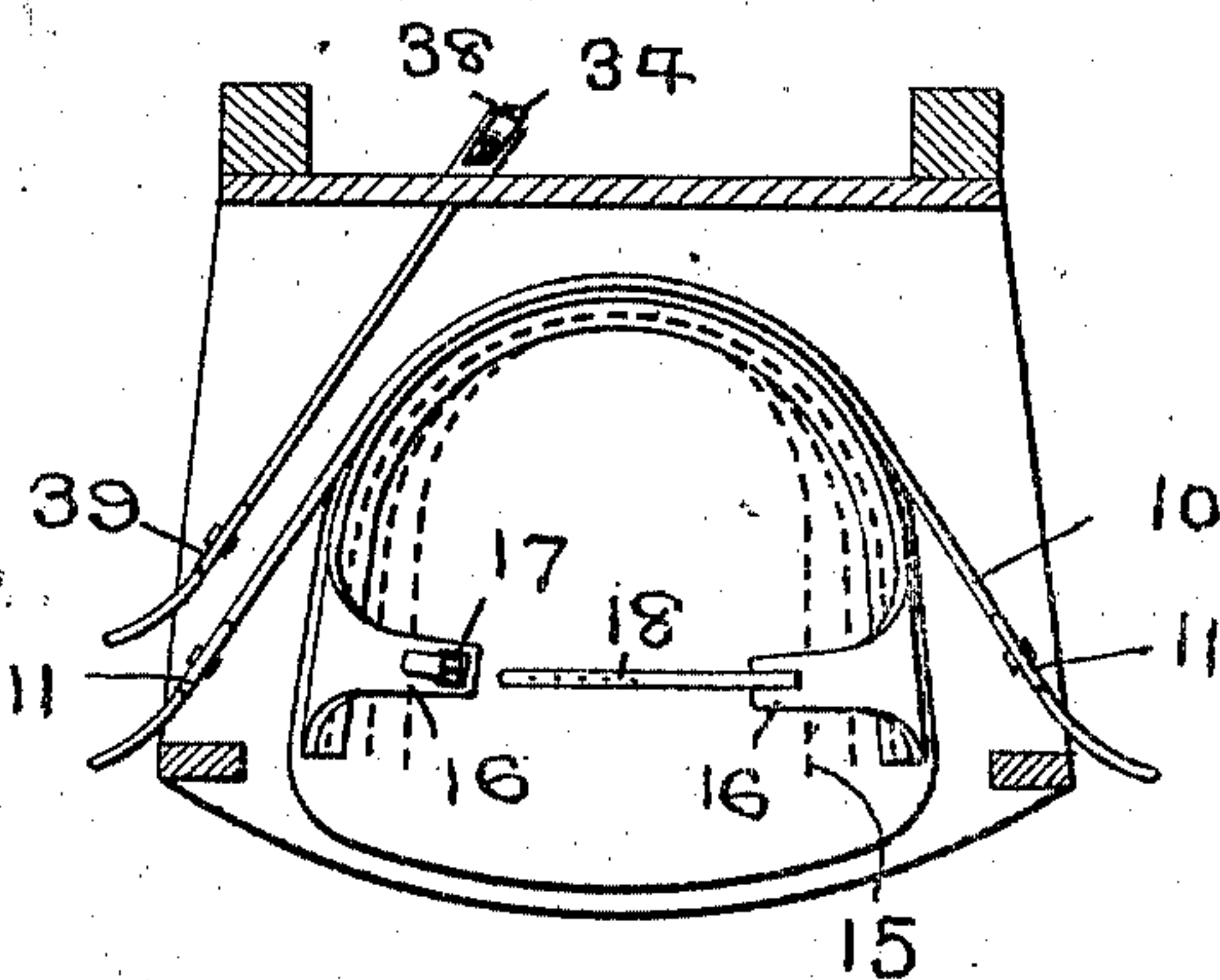


Fig. 3.



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ILDA EATON, OF AURORA, NEBRASKA.

SURGICAL CHAIR.

951,560.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ILDA EATON, a citizen of the United States, residing at Aurora, in the county of Hamilton and State of Nebraska, have invented certain new and useful Improvements in Surgical Chairs; 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.

My invention relates to new and useful improvements in surgical chairs and more particularly to that class adapted to be used for the correction of spinal curvature and my object is to provide means for engaging the head and neck of the patient for directing an upward pull thereon.

A further object is to provide means for anchoring the end of the cable employed for operating the head stall.

A further object is to provide adjustable means for engaging the shoulders and arms of the patient.

A further object is to provide a revolving seat for the chair and mounting the same on roller bearings.

A further object is to provide means for holding the seat in its adjusted position.

A still further object is to provide a band for properly securing the patient in the seat.

A further object is to provide means for adjusting said band to accommodate larger or smaller patients and a still further object is to provide means for adjusting the standard employed for holding the head stall.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings forming part of this application, Figure 1 is a perspective view of the chair complete. Fig. 2 is a central vertical sectional view through the chair, and Fig. 3 is a horizontal sectional view through the chair at a point above the seat.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates the frame of the chair which may be constructed in the usual or any preferred manner, the rear post of the frame being provided with a back 2, while forwardly of said back is a platform 3 and extending upwardly from the platform are arm rests 4, although it will be clearly understood that

these parts may be constructed to best suit the occasion.

Mounted upon the platform 3 is a seat proper 5, which is held in position on the platform by introducing a bolt 6 through the seat and platform and in order to permit said seat to readily rotate, curved plates 7 and 8 are embedded in the platform 3 and seat 5, respectively, said plates forming a race for bearing balls 9, the diameter of said balls being such as to space the seat a distance from the platform, so that the patient may readily rotate the seat to change the position of the body.

In order to hold the seat in its adjusted position, a strap 10 is fixed at its longitudinal center to the rear edge of the seat, the ends of the strap extending forwardly and into engagement with any suitable form of spring clamps 11, which clamps serve to hold the ends of the strap against longitudinal movement when the strap is securely engaged with the clamps and it will be readily seen that by releasing the clamps, the seat may be rotated to the proper position when the clamps are again engaged with the strap and as the clamps are positioned in convenient reach of the patient, the adjustment of the seat can be readily accomplished by the patient.

The seat 5 is provided with a covering 12, of any suitable material, preferably leather and to said covering is attached a band 13, also preferably of leather, said band having its lower edge attached to the covering by means of a lace 14 or otherwise and by providing that portion of the covering adjacent the side edges of the seat with series of openings 15 to receive the lace, said band may be adjusted to fit around patients of various sizes and in order to securely clamp the band around the hips of the patient, the upper forward edges of the band are provided with tongues 16 to one of which is attached a buckle 17 and to the other a strap 18 having openings therein to receive the tongue of the buckle and by properly positioning the band around the patient and extending the strap 18 through the buckle and drawing the same taut, the patient will be securely strapped to the seat.

The back 2 is provided with slots 19 and 20, which slots are arranged in pairs and on opposite sides of the vertical center of said back, said slots being preferably arranged at an angle to the vertical center of

the back and each set of slots substantially parallel with each other and through these slots are extended bolts 21 and 22, respectively, the outer ends of said bolts being threaded to receive wing nuts 23, while to the inner ends of the bolts are attached shoulder straps 24 and 25, respectively, said straps being adapted to extend around the shoulders of the patient and form a support at this point and in view of the length of the slots through which the bolts extend, said straps may be adjusted to accommodate patients varying in height.

Adjustably attached to the rear of the back 2 and preferably at the vertical center thereof is a standard 26, said standard being provided with vertically extending slots 27, through which extend bolts 28 and by means of which the standard is held in engagement with the back, the outer ends of the bolts being threaded to receive wing nuts 29, which bind against the standard and hold the same in its vertical adjusted position.

At the upper end of the standard 20 is an inwardly extending section 30, which projects forwardly over the back of the chair and over the head of the patient occupying the chair.

In order to support the head of the patient, a head stall or sling 31 is provided which is adapted to fit around and over the upper portion of the head, one part of the stall having a chin strap 32, which is adapted to extend below the chin of the patient and in the rear of the chin strap is a neck strap 33, which is adapted to extend in the rear of the head adjacent the neck of the patient and in order to operate the head stall, a cable 34 is attached to the upper portion of the stall and extended upwardly through an opening 35 in the free end of the section 30, said cable thence extending over sheaves 36 and 37 on the section 30, thence downwardly and around a sheave 38 attached to the lower end of the back 2, from whence said cable extends over the platform 3 to a point adjacent the forward portion of the platform and at one edge thereof, the free end of said cable being secured by a spring clamp 39 and as said clamp is positioned adjacent one of the clamps 11, it will be in convenient reach of the patient when occupying the chair.

By arranging the device as herein disclosed, it will be readily seen that the various parts thereof may be adjusted by the patient while occupying the chair and if the patient finds that one position becomes tiresome, the ends of the straps 10 may be released from the spring clamps 11 and the position of the seat changed, or if the pa-

tient wishes to change the position of the head by raising or lowering the same, the free end of the cable 34 may be released from its respective spring clamp 39 and the proper adjustment made of the head stall.

It will further be seen that by providing the ball bearings for the seat, said seat may be readily rotated to adjust the same and that the band on the seat may be quickly adjusted to accommodate different patients.

It will also be seen that the patients, unless entirely helpless, can adjust the various parts of the device without requiring the assistance of an attendant and in view of the simplicity of the chair, it can be very cheaply constructed and at the same time rendered strong and durable.

What I claim is:

1. A chair of the class described, comprising the combination with a frame, a back on said frame and a platform attached to the frame; of a seat rotatably mounted on the frame, a band adjustably attached to said seat, means to attach the same to the body of a person, a head stall and means to adjust said head stall vertically.

2. A chair of the class described comprising a frame having a back attached thereto, and a platform on said frame, a seat rotatably mounted on said platform, means to hold said seat in its adjusted position, a band adjustably attached to said seat, means to secure the band around the body of a person, a head stall adapted to engage the head of a person, a cable adapted to control the movement of said head stall and means to hold said cable in its adjusted position.

3. A chair of the class described, comprising the combination with a frame having a back and platform; of a seat rotatably mounted on said platform, a ballbearing for said seat, a band, means to adjustably secure said band to the seat and additional means to hold the seat in its adjusted position.

4. In a chair, the combination with a frame, having a back thereon, said back having slots arranged in pairs at opposite sides of the vertical center of said back; of bolts extending through said slots, means to anchor said bolts, shoulder straps attached to said bolts, a head stall and means to support and hold said head stall in its adjusted position.

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

ILDA EATON.

Witnesses:

ZELLA WENTZ,
CLARA V. DRAKE.