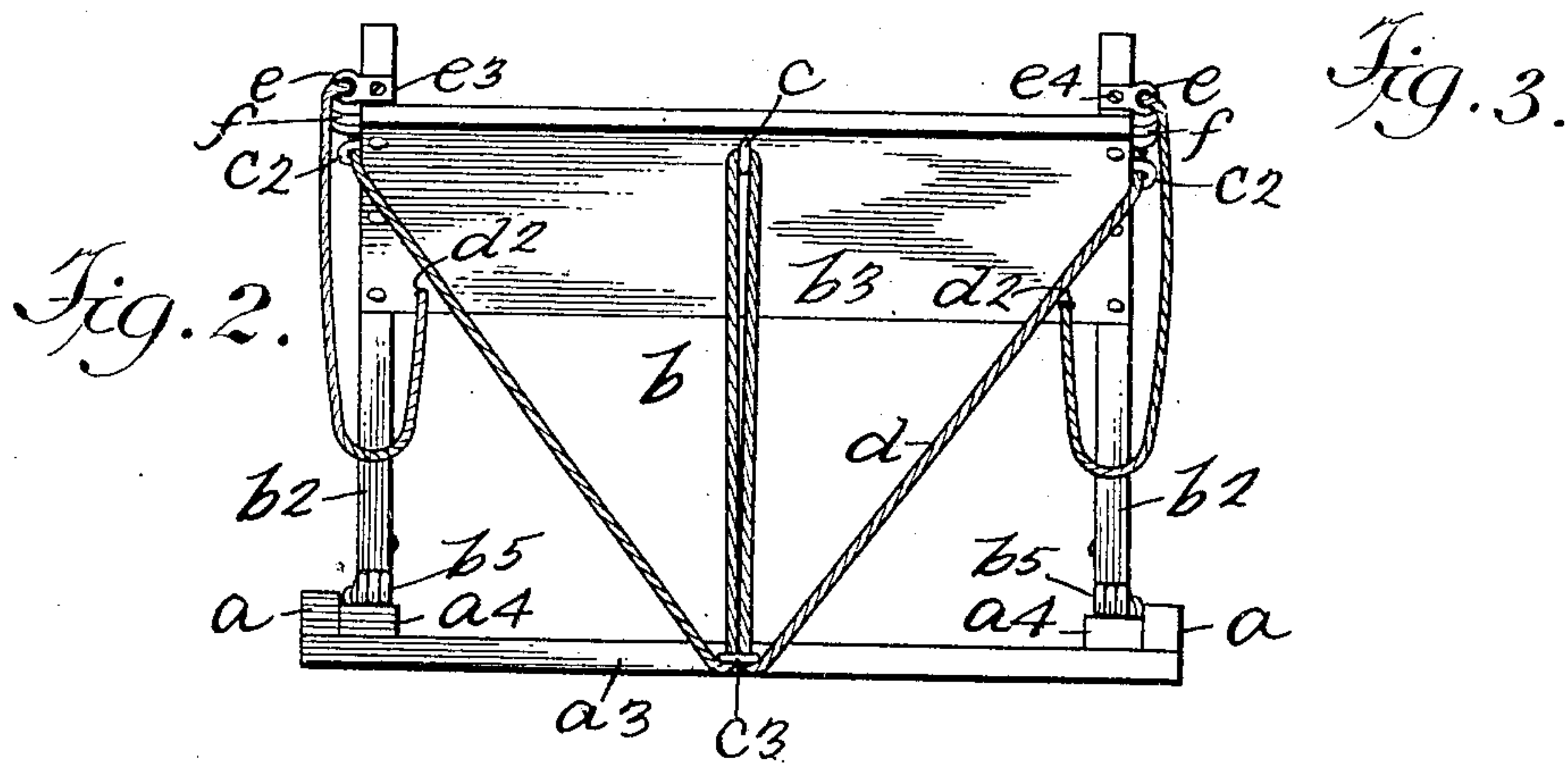
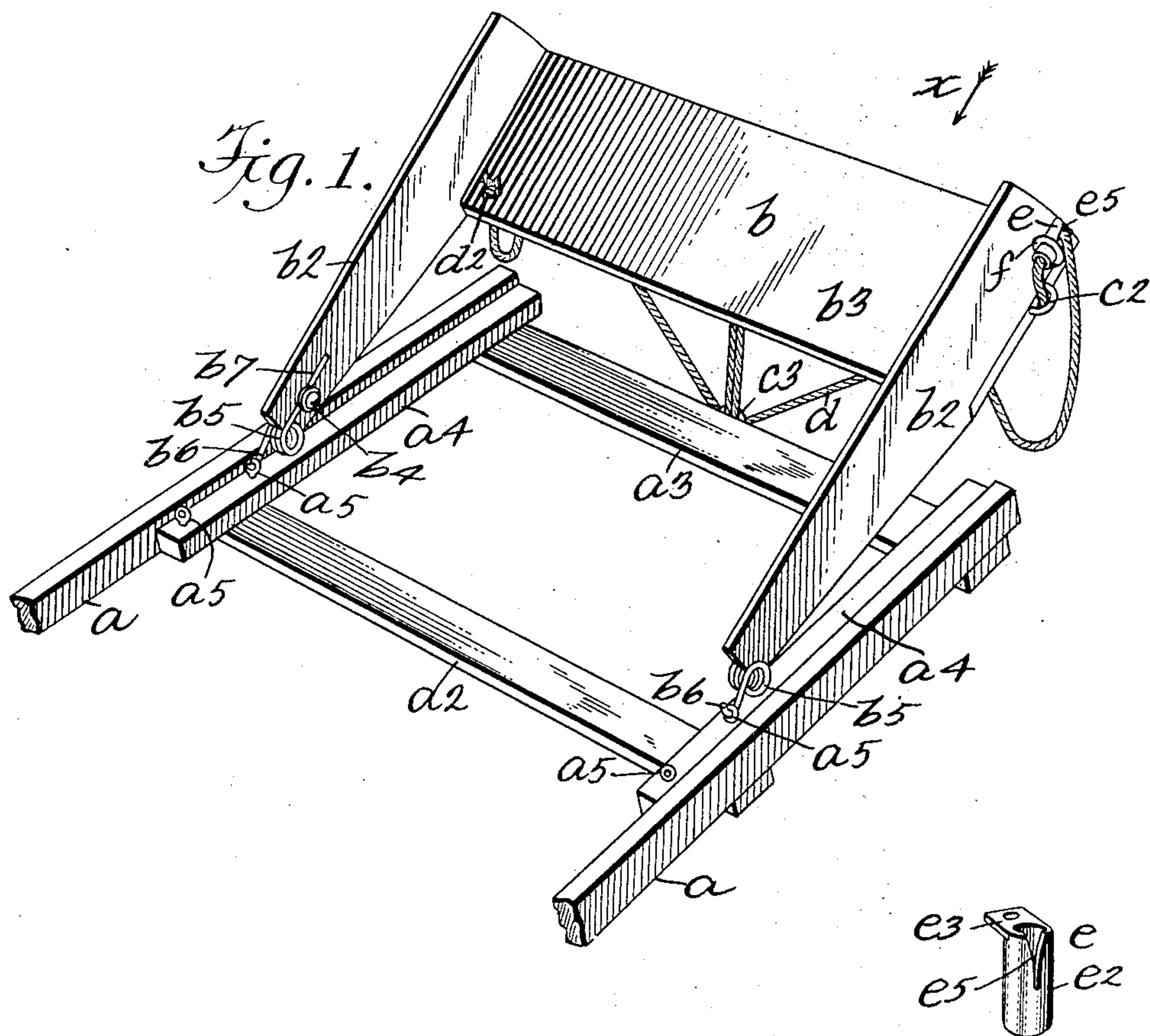


No. 805,863.

PATENTED NOV. 28, 1905.

C. H. KNIGHT.  
ADJUSTABLE HEAD REST FOR RECLINING CHAIRS.  
APPLICATION FILED MAR. 16, 1905.



Witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLES H. KNIGHT, OF KINGSTON, NEW YORK.

## ADJUSTABLE HEAD-REST FOR RECLINING-CHAIRS.

No. 805,863.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed March 16, 1905. Serial No. 250,380.

*To all whom it may concern:*

Be it known that I, CHARLES H. KNIGHT, a citizen of the United States, residing at Kingston, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Adjustable Head-Rests for Reclining-Chairs, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide a head-rest for chairs which may be readily adjusted in any desired position, a further object being to provide a head-rest of this class which when so adjusted may be depressed by the weight of a person's head and upon the release of said pressure will return to the position in which it was adjusted, and a still further object being to provide a head-rest of the class hereinafter described and claimed which is adjustable by a person in a chair provided with my invention without the necessity of arising therefrom, and also to provide a head-rest which is simple in construction and operation, comparatively inexpensive, and well adapted for the purpose for which it is intended.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a perspective view of a head-rest constructed according to my invention; Fig. 2, a view thereof in the direction of the arrow *x*, and Fig. 3 a detail view of a fastening device which I employ.

In the drawings forming part of this specification I have shown at *a* the ordinary side rails employed in the back of a reclining-chair, said rails being shown in the position which they occupy when the back of which they form a part is in a lowered position, and secured to the said rails *a* are transverse brace members *a*<sup>2</sup> and *a*<sup>3</sup>, to which are secured, adjacent to the said side rails *a*, supplemental members *a*<sup>4</sup>, which serve as a support for my head-rest, and the supplemental members *a*<sup>4</sup> are provided with a plurality of screw-eyes *a*<sup>5</sup>, any number of which may be employed, but only two of which are shown on each of the members *a*<sup>4</sup>.

My head-rest consists of a frame *b*, comprising side members *b*<sup>2</sup> and a transverse brace member *b*<sup>3</sup>, and in practice the frame *b*

is upholstered, as will be readily understood, the side member *b*<sup>2</sup> and brace member *b*<sup>3</sup> serving as a support for said upholstering, and secured to each of the side members *b*<sup>2</sup> by means of screws *b*<sup>4</sup> or in any other desired manner are strong coil-springs *b*<sup>5</sup>, provided with an extending hook member *b*<sup>6</sup>, which is adapted to enter and be engaged by the corresponding screw-eyes *a*<sup>5</sup>, and the coil-spring *b*<sup>5</sup> rests on the supplemental frame members *a*<sup>4</sup> and within the side rails *a* of the chair-back.

Secured adjacent to the top of the brace member *b*<sup>3</sup> and centrally thereof is a staple *c*, and said brace member *b*<sup>3</sup> is also provided with a similar staple *c*<sup>2</sup> at the opposite ends thereof, and the brace member *a*<sup>3</sup> of the chair is provided with a staple *c*<sup>3</sup>, and a wire, cord, or cable *d* is adapted to move freely through the staples *c*, *c*<sup>2</sup>, and *c*<sup>3</sup>, the ends of said cord or cable being passed through the brace member *b*<sup>3</sup> and provided with a knot or other device for holding the same therein as clearly shown at *d*<sup>2</sup>.

Secured to each of the side members *b*<sup>2</sup> of the frame *b*, adjacent to the outer ends thereof, is a securing device *e* for the cord or cable *d*, and said securing device, as shown in the drawings, consists of a tube *e*<sup>2</sup>, through which the cable *d* is adapted to pass freely, said tube being provided with a transverse flange at the top thereof, through which passes a screw *e*<sup>4</sup>, serving to hold the securing device *e* to the side members *b*<sup>2</sup>, and the tube *e*<sup>2</sup> is also provided with a V-shaped slot *e*<sup>5</sup>, adapted to hold the cable *d* securely therein when said cable is forced thereinto, and in practice I prefer to hold the tube *e*<sup>2</sup> in a screw-eye *f*, secured in the side members *b*<sup>2</sup>, said screw-eye serving as a supplemental means for holding the securing device *e* firmly in position, and, as shown in Fig. 2, the cable *d* passes from the brace member *b*<sup>3</sup> to and through the securing device *e* and through the staples *c*<sup>2</sup>, *c*<sup>3</sup>, and *c*, and in Fig. 1 of the drawings the cable *d* is shown firmly held in the V-shaped slot *e*<sup>5</sup>.

It will be understood that the action of the coil-spring *b*<sup>5</sup> is always to force the frame *b* upwardly or away from the brace member *a*<sup>3</sup> of the chair-back, and when a person is using a chair provided with my invention the weight of his head is taken up by the coil-springs *b*<sup>5</sup>, said springs being made strong enough to accomplish this result, and if he desires to lower the head-rest all that is necessary is to exert slight additional pressure



thereon by means of his head and draw the cable  $d$  out of either or both of the securing devices  $e$ , thereby shortening the amount of cable passing through the staples  $c^2$ ,  $c^3$ , and  $c$ , and when the cable  $d$  is again forced into the V-shaped slots  $e^5$  the frame  $b$  is held against upward movement; but the coil-springs  $b^5$  permit, according to the person's position, slight depression, thereby giving an easy spring movement, and if the frame  $b$  be drawn downwardly too far all that is necessary is to release the cable  $d$  from the securing devices  $e$ , remove the weight of the head from the head-rest, and permit the coil-springs  $b^5$  to force the head-rest upwardly until the desired position is reached, at which time the cable  $d$  may be again locked in the securing device  $e$ . It will also be understood that the head-rest, or the frame  $b$  thereof, may be adjusted longitudinally of the back of the chair by moving the hook members  $b^6$  of the coil-springs  $b^5$  from the screw-eyes  $a^5$ , in which they may be placed, and arranging the same in another set of said screw-eyes, thereby accommodating the head-rest to persons of varying heights, and any number of the screw-eyes  $a^5$  may be employed for this purpose.

In practice I prefer to secure the coil-springs  $b^5$  in the side members  $b^2$  by means of a projecting member  $b^7$ , the said coil-springs  $b^5$  resting in suitable grooves in the side members  $b^2$  and being held therein by means of the screws  $b^4$ , and this arrangement of the coil-spring  $b^5$  with reference to the side members  $b^2$  prevents any lateral or transverse movement of the springs  $b^5$  or members  $b^7$  thereof in said side members  $b^2$ ; but the coil-spring  $b^5$  may be secured to the side member  $b^2$  in any desired manner, and various other changes in and modifications of the construction herein shown and described may be made within the scope of my invention without departing from the spirit thereof or sacrificing its advantages.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A head-rest for reclining-chairs the back of which is provided with side rails, said head-rest comprising a frame, coil-springs secured to said frame and detachably connected with said side rails, and a cable in operative connection with said chair-back and said frame for adjustably securing said frame against the action of said coil-springs, substantially as shown and described.

2. In a reclining-chair the back of which is provided with side rails, a head-rest comprising a frame consisting of side members and a transverse member, a coil-spring secured to the inner end of each of said side members and

detachably and adjustably connected with said side rails, and a cable connected with said chair-back and said frame for adjustably holding the same in any desired position, substantially as shown and described.

3. In a chair the back of which is provided with side rails, a head-rest consisting of a spring-operated frame in operative connection with said side rails, said chair-back and frame being provided with a plurality of guides or staples, a cable passing through said guides or staples and a securing device for holding said cable in any desired position, substantially as shown and described.

4. In a chair the back of which is provided with side rails, a head-rest comprising a frame consisting of side and transverse members, a spring secured to the inner end of each of said side members, said springs being detachably and adjustably connected with said side rails, a guide or staple in said chair-back and centrally thereof, a guide or staple in said transverse member and centrally thereof, a guide or staple at each end of said frame and adjacent to the top thereof, a cable passing through said staples, and securing devices for said cable, substantially as shown and described.

5. In a chair the back of which is provided with side rails, a head-rest comprising a spring-operated frame, said springs serving to force said frame upwardly, a cable in operative connection with said chair-back and said frame, and securing devices for said cable comprising a tube through which said cable passes, a V-shaped slot in said tube adapted to bind and hold said cable, and means for securing said securing devices to said head-rest, substantially as shown and described.

6. In a chair the back of which is provided with side rails, a head-rest comprising a spring-operated frame, said springs serving to force said frame upwardly, a guide or staple in said chair-back and centrally thereof, a guide or staple in said frame and centrally thereof, a guide or staple at each end of said frame and adjacent to the top thereof, a cable passing through one of said end staples, said chair-back staple, said centrally-arranged staple, said chair-back staple and the other of said end staples, and securing devices for holding the free ends of said cable, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 14th day of March, 1905.

CHARLES H. KNIGHT.

Witnesses:

WALTER N. GILL,  
DAVID H. WINTER.