

(No Model.)

J. HOGAN.

ADJUSTABLE HEAD REST FOR CHAIRS.

No. 342,830.

Patented June 1, 1886.

Fig. 1.

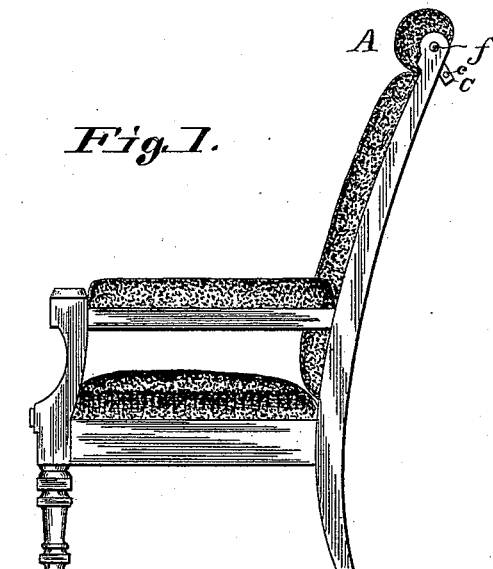


Fig. 2.

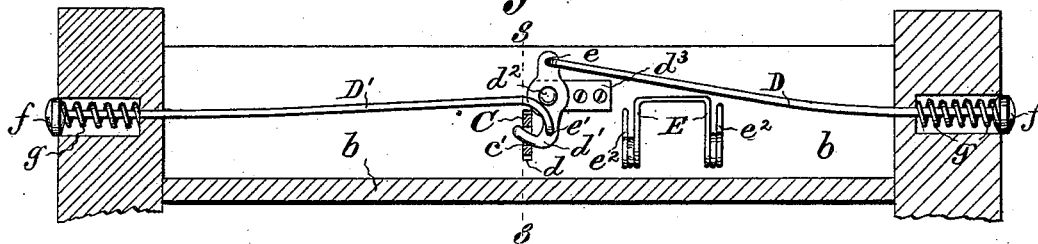


Fig. 3.

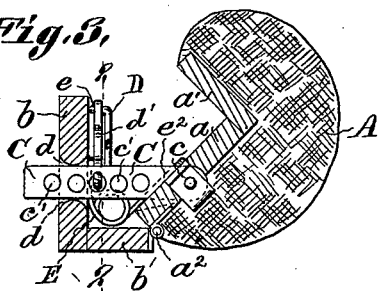
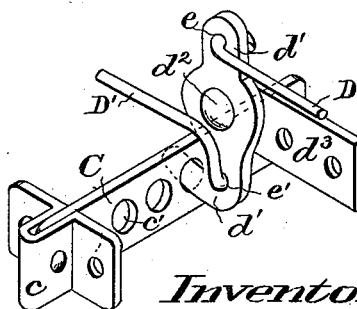


Fig. 4.



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ADJUSTABLE HEAD-REST FOR CHAIRS.

SPECIFICATION forming part of Letters Patent No. 342,830, dated June 1, 1886.

Application filed November 20, 1885. Serial No. 183,453. (No model.)

To all whom it may concern:

Be it known that I, JOHN HOGAN, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Adjustable Head-Rests for Chairs, of which the following is a specification.

My improvements relate to head-rests which are placed on the top of the back of chairs, and especially reclining and easy chairs, and it has special reference to the construction and arrangement of movable or adjustable head-rests.

It has for its main object, first, to provide means whereby the rest will move of itself to the desired position when released from the locking devices; and to this end it consists in combining with a movable head-rest having a variable locking mechanism a spring or springs for automatically moving the head-rest forward when released from the locking devices, whereby the position of the rest can be controlled by the head of the occupant of the chair.

A secondary object is to render the locking mechanism accessible, so that it can be operated readily by the occupant of the chair without his having to materially change his position or assume any strained or unnatural position; and to this end it consists in arranging the devices for actuating the lock in substantially the axial line of the movable rest and within easy reach of the raised hand; and this feature of the invention is further elaborated by duplicating the devices which move the locking mechanism, so that either hand may be used at will of the occupant of the chair.

A third object is to so box the locking and spring mechanism as to permit of the upholstering of the chair so that the mechanism is substantially concealed at all times, and this I accomplish by forming the top rail of the chair-back of L shape and the head-rest frame of an inverted-L shape, the pivots being at the lower forward angle of the parallelogram or box.

In addition to said general features, there are other minor features relating to the specific construction of the locking mechanism, all of which will hereinafter more fully appear.

To more fully describe the construction of

my improved adjustable head-rest and its operating parts, reference is had to the accompanying drawings, in which—

Figure 1 is a side view of an easy-chair with my head-rest attached to the top of the chair-back. Fig. 2 is a section on line 2 2 of Fig. 3, showing the locking devices and one spring for throwing the head-rest forward. Fig. 3 is a cross-section of the head-rest on line 3 3 of Fig. 2. Fig. 4 is a perspective view of the locking devices.

Similar letters refer to similar parts throughout the several figures.

A represents the head-rest proper, which consists of a wooden frame of two pieces, *a* and *a'*, fastened together to form the 7 shape. (See Fig. 3.) Around the top and front of this frame is formed the cushion or upholstery.

The object of making the wood frame of the 7 shape shown is to allow of a cushion about three-fourths round, so that in whatever position it may be its contour will be the same. *b* is the upper rail of the chair-back, which I make of the L shape shown in Fig. 3 by attaching to the lower front edge of it the horizontal piece *b'*.

The head-rest is hinged or pivoted with the bottom edge of the frame-piece *a* at *a''* to the front edge of the horizontal piece *b'* of the top rail, *b*, of the chair-back. (See Fig. 3.) The object of making the top rail, *b b'*, of the L shape shown is to permit the head-rest to be hinged as described, in order to bring and keep the cushion or upholstery of both the chair-back and the head-rest flush against each other at the point of hinging, and so that the hinge is entirely concealed at all times, no matter in what position the head-rest may be, thereby adding neatness and beauty to the chair. Further, by hinging the parts together as described, a L 7-shaped box is formed by the 7-shaped frame of the head-rest and the L-shaped rail of the chair-back for the reception of the operating mechanism, (hereinafter described,) so that it will be entirely out of sight, and fully protected from interfering with the upholstery or any other parts of the chair, as well as the occupant of the chair.

In the middle of the frame-piece *a* of the head-rest is countersunk a U-shaped metal

bracket, *c*, into which is hinged or pivoted a bar, *C*, provided with pin-holes *c'*. (See Figs. 3 and 4.) This bar *C* passes through a slot, *d*, in the vertical top piece of the top rail, *b*, of the chair-back, and a pin or pawl, *d'*, turning on a pin, *d''*, of the plate *d''*, secured on the inside face of the said top rail, *b*, and to one side of the slot *d*, engages these holes *c'* of the bar *C* from one side, as shown in Figs. 2 and 4. This pawl *d'* has eyelets *e* and *e'*, one of which is above and the other below the point *d''*, upon which the pawl turns.

D and *D'* are rods, one engaging the upper eyelet, *e*, and the other the lower eyelet, *e'*, the former passing to the right and the latter to the left side of the chair-back frame, and are each provided with a push-button, *f*, at this end.

g are coil-springs around the ends of the rods, and are incased in the frame of the chair-back. One end of these springs *g* acts against the wood of the casing, and the other against the push-button, and by their action keep the rods in the position shown in Fig. 2, the buttons protruding out at the sides of the chair-back frame, and the pawl in engagement with the bar *C*, the head-rest being thus locked and firmly held in the desired position. More or less tension may be given these springs by means of the push-buttons which move in and out on the threads on the ends of the rods. By pushing in either or both buttons the pawl is withdrawn from engagement with the bar *C*, thereby unlocking the head-rest, and allowing same to be thrown forward through the action of one or more springs, *E*, secured to the top rail, *b*, (see Figs. 2 and 3,) and acting with arms *e''* against the head-rest frame-piece *a*, as clearly shown in Fig. 3. Upon releasing the buttons *f f* the coil-springs *g g* return the same with the rods *D* and *D'* into original position, and the pawl *d'* into engagement with one of the holes *c'* of the bar *C*, again locking the head-rest firmly and in the new position. Upon again releasing the pawl by means of the push-buttons, and unlocking the head-rest, the latter is pushed back again as far as desired by means of the head of the occupant of the chair.

To prevent the arms *e''* of the spring *E* from wearing into the wood of the head-rest frame, a metal plate may be provided as an intermediate between the arms and frame. This head-rest, as just described, is easily operated by any person while occupying the chair, and made to assume any position to suit the comfort of the occupant, and may be applied or attached to any easy, reclining, dentist's, physician's, or barber's chair, and may be made to extend across the entire width of the chair-

back, as shown in the drawings, or narrower, if desired, for smaller head-rests, such as are used in dentist's and barber's chairs.

I do not limit myself to the style of spring shown and described, as any other style may be used to adapt itself for this same purpose with any locking mechanism, the spring I have shown, however, adapting itself best with my construction of a head-rest and means for locking it, as it takes up little space and is cheap as well as durable.

I am aware that a locking device for an adjustable head-rest has been devised wherein are combined a shaft having two segmental ratchets, a pawl cross-bar adapted to engage the ratchets, and two bow-springs attached to the pawl cross-bar and adapted to hold the pawl-bar in the notches of the segment-ratchets and thus secure the head-rest after it has been adjusted, and I do not herein claim such a combination of devices.

What I claim is—

1. The combination, with the top rail of a chair-back, of a movable head-rest, a spring for actuating the movable head-rest, and a graded or variable locking mechanism for securing the head-rest in different positions, whereby the head-rest will adjust itself to the head of the occupant of the chair, substantially as and for the purposes specified.
2. The combination, with a chair-back having an L-shaped top rail, of an inverted-L-shaped rest-frame pivoted thereto at the lower forward angle to form a box for the locking mechanism of the movable head-rest, and the locking mechanism concealed therein, substantially as and for the purposes specified.
3. The combination, with the top rail of a chair-back, of a movable head-rest pivoted thereon, a locking mechanism for securing the movable head-rest, and one or more transverse rods for actuating the locking device, said rods arranged in the axial line of the movable head-rest, so as to be in reach of the hand of the occupant of the chair, substantially as and for the purposes specified.
4. The combination, with the top rail of a chair-back, of a pivoted head-rest, a spring for actuating the same, and locking mechanism composed of a bar having pin-holes, said bar pivoted on the head-rest, a hook or locking-pin pivoted on the chair-back, and a rod for actuating the pivoted locking-pin, substantially as and for the purposes specified.

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Witnesses:

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CHAS. E. METZ.