

(No Model.)

C. E. AKELEY.
HEAD REST.

No. 547,389.

Patented Oct. 1, 1895

Fig. 1.

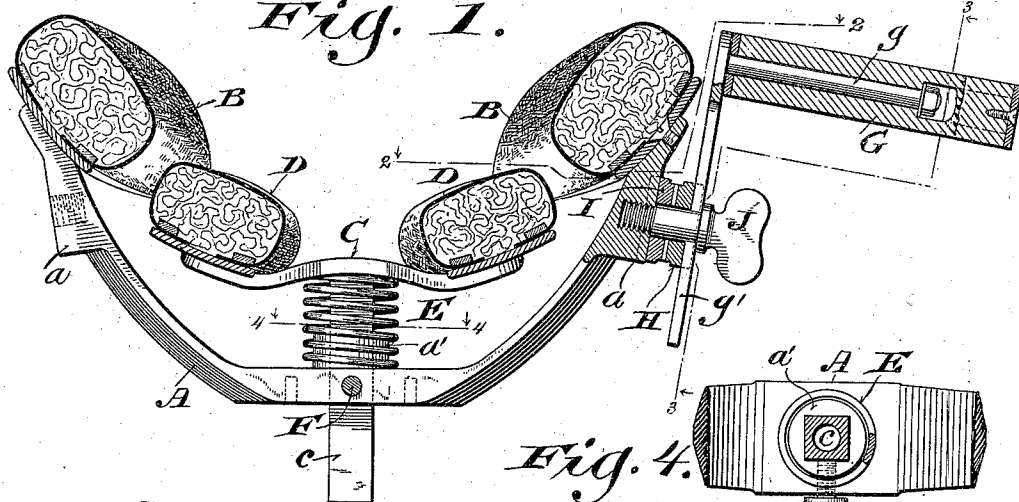


Fig. 4.

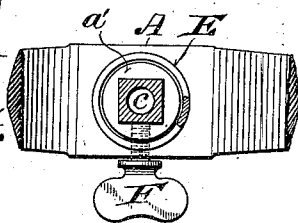


Fig. 2.

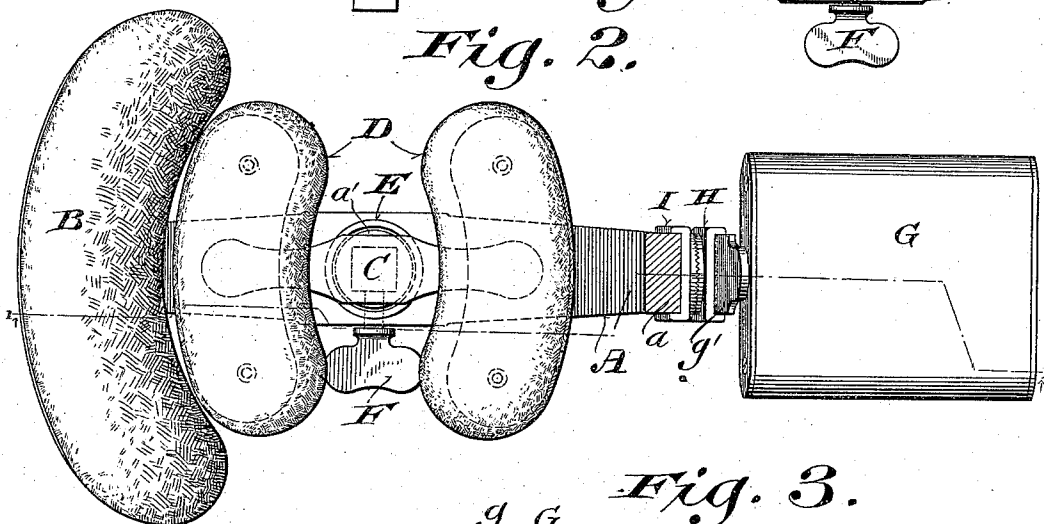
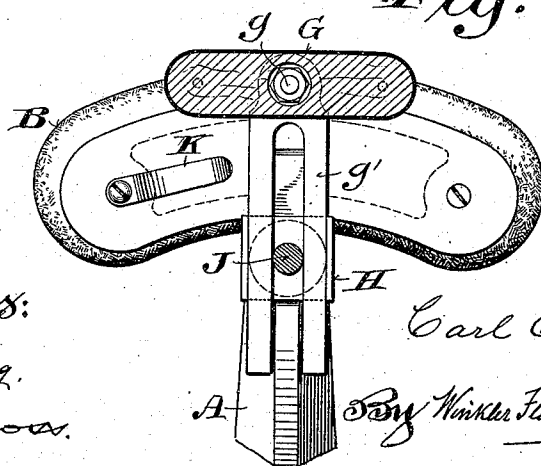


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

CARL E. AKELEY, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO
EDWIN H. VAN OSTRAND, OF SAME PLACE.

HEAD-REST.

SPECIFICATION forming part of Letters Patent No. 547,389, dated October 1, 1895.

Application filed July 16, 1894. Serial No. 517,714. (No model.)

To all whom it may concern:

Be it known that I, CARL E. AKELEY, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Head-Rests for Surgical Chairs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The main object of my invention is to provide a comfortable head-rest for dental, surgical, or other chairs, which may be readily adjusted to fit heads of different shapes, and particularly to accommodate ladies' hair, to provide such a head-rest with an arm-rest for the operator, and generally to improve the construction and operation of devices of this class.

It consists, essentially, of certain peculiarities in the construction and arrangement of the component parts of the device, as hereinafter particularly described, and pointed out in the claims.

In the accompanying drawings like letters designate the same parts in the several figures.

Figure 1 is a partial rear elevation and vertical section on the line 1 1, Fig. 2, of a head-rest embodying my improvements. Fig. 2 is a plan view and partial vertical section on the line 2 2, Fig. 1. Fig. 3 is a vertical section on the line 3 3, Fig. 1; and Fig. 4, a section on the line 4 4, Fig. 1.

A designates the main frame of the head-rest consisting, essentially, of two diverging arms, to the ends of which are attached the pads B B for supporting the sides of the head. The frame is provided with the usual or any suitable means (not shown) for attaching it adjustably or otherwise to a chair. Each of its arms is formed on the outside with a seat *a* and an outwardly-opening threaded hole or socket for the attachment of the arm-rest, as hereinafter explained.

C designates a cross-piece provided at the ends on the front or upper side with pads D D between and back of the side pads B B

and affording an adjustable support for the back of the head. The cross-piece C is formed or provided at the center of the back or under side with a squared stem *c*, which is fitted to slide in a corresponding hole made for its reception in the center of frame A. E is a spiral-spring placed around said stem between the frame A and cross-piece C and made of sufficient strength to automatically move the cross-piece C and pads D D forward or upward according to the position of the head-rest. A hub *a'*, formed on frame A around the squared hole therein, affords a wider bearing-support for the sliding stem *c* and a guiding-bearing for one end of spring E.

F is a thumb-screw threaded in frame A and arranged to engage at its tip with the sliding stem *c* and secure the pads D D in any desired position.

G represents the arm-rest swiveled on a pin *g*, which is formed with or rigidly attached at one end to a longitudinally-slotted shank *g'* at right angles thereto.

H is a centrally-perforated flanged jaw, between the flanges of which the shank *g'* is fitted to slide lengthwise. I is a similar jaw, the flanges of which are adapted to embrace opposite sides of the seats *a a* of frame A.

J is a shouldered thumb-screw adapted to pass through the slotted shank *g'* and the jaws H and I into one of the threaded holes or sockets provided therefor in frame A, and by engagement therewith to hold the arm-rest G in any desired position. By slightly unscrewing said thumb-screw the shank *g'* may be readily adjusted lengthwise in the jaw H, or said jaw H may be turned with the arm-rest around said screw as a pivot. A longitudinally and pivotally adjustable connection is thus provided between the shank of the arm-rest and either side of the frame. Each of the side pads B B is provided, as shown in Fig. 3, on the back or outer side near the upper end with a spring-clasp K, which serves as a napkin-holder.

In operation the head of the patient or other person is moved back, carrying the pads D D with it against the tension of spring E until it rests firmly at both sides against the pads B B, the thumb-screw F having been turned out of engagement with the stem *c*.

In this position the operator secures the pads D D by means of the thumb-screw F. It will be observed that the head-rest is thus adjusted automatically to any head, affording a firm, comfortable support therefor, and is permanently secured in place when so adjusted by a simple manipulation of the operator.

It will be noticed that the slot in the shank *g'* of the arm-rest opens through one end thereof, thus permitting the withdrawal of said shank from the thumb-screw J and the detachment and attachment of said arm-rest from or to the frame of the head-rest without each time removing said thumb-screw. The arm-rest being free to turn on the pin *g* readily adapts itself to any position of the operator's arm, and by means of its connections with the frame of the head-rest may be raised or lowered and moved forward or backward into any desired position, in which it is secured by simply tightening the thumb-screw J.

I do not wish to be understood as limiting myself to the exact details herein shown and described, particularly pertaining to the adjustable head-support afforded by the pads D D and their connections, inasmuch as various changes in the details of construction and arrangement may be made, and any support adjustable forward and backward between and independently of the side pads B B and capable of being fastened in any desired position with reference to them may be substituted in place of the pads D D within the spirit and intended scope of my invention.

I claim—

1. In a head rest for surgical chairs the combination with a suitable frame of two side pads or supports attached to said frame with a clear space between them, and an intermediate support having an adjustable connection with said frame independent of said side supports, whereby the intermediate support may be moved toward and from the plane of the side supports without moving the latter, substantially as and for the purposes set forth.

2. In a head rest for surgical chairs, the combination with a suitable frame provided with side pads or supports, of an intermediate pad or support yieldingly connected with said

frame, independently of said side supports, and means of fastening said intermediate support in any desired position with reference to the side pads or supports substantially as and for the purposes set forth.

3. In a head rest for surgical chairs, the combination with a suitable frame consisting of diverging arms and side pads or supports attached to the ends of said arms, of a cross piece provided with pads or supports between and behind said side pads or supports, and with a stem fitted to slide lengthwise in a hole in said frame, a spring interposed between said cross piece and frame, and a screw for securing said stem in said frame, substantially as and for the purposes set forth.

4. In a head rest for surgical chairs the combination with a suitable frame having two diverging arms, of two padded supports rigidly attached to the ends of said arms and adapted to bear against opposite sides of the head, and an intermediate padded support having an adjustable connection with said frame between and independent of the side supports, whereby the intermediate support may be adjusted transversely to the side supports to fit the head without moving the side supports, substantially as and for the purposes set forth.

5. In a head rest for surgical chairs the combination with the frame provided on opposite sides with seats having screw-threaded holes and arranged in approximately vertical planes transversely to the plane of the head rest, of a detachable and reversible arm swiveled on a pin having at one end a transverse longitudinally slotted shank, perforated flanged jaws adapted to embrace opposite edges of said shank and of either seat, and a single screw adapted to adjustably secure the supporting parts of the rest together and to the frame on either side thereof, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CARL E. AKELEY.

Witnesses:

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M. L. EMERY.