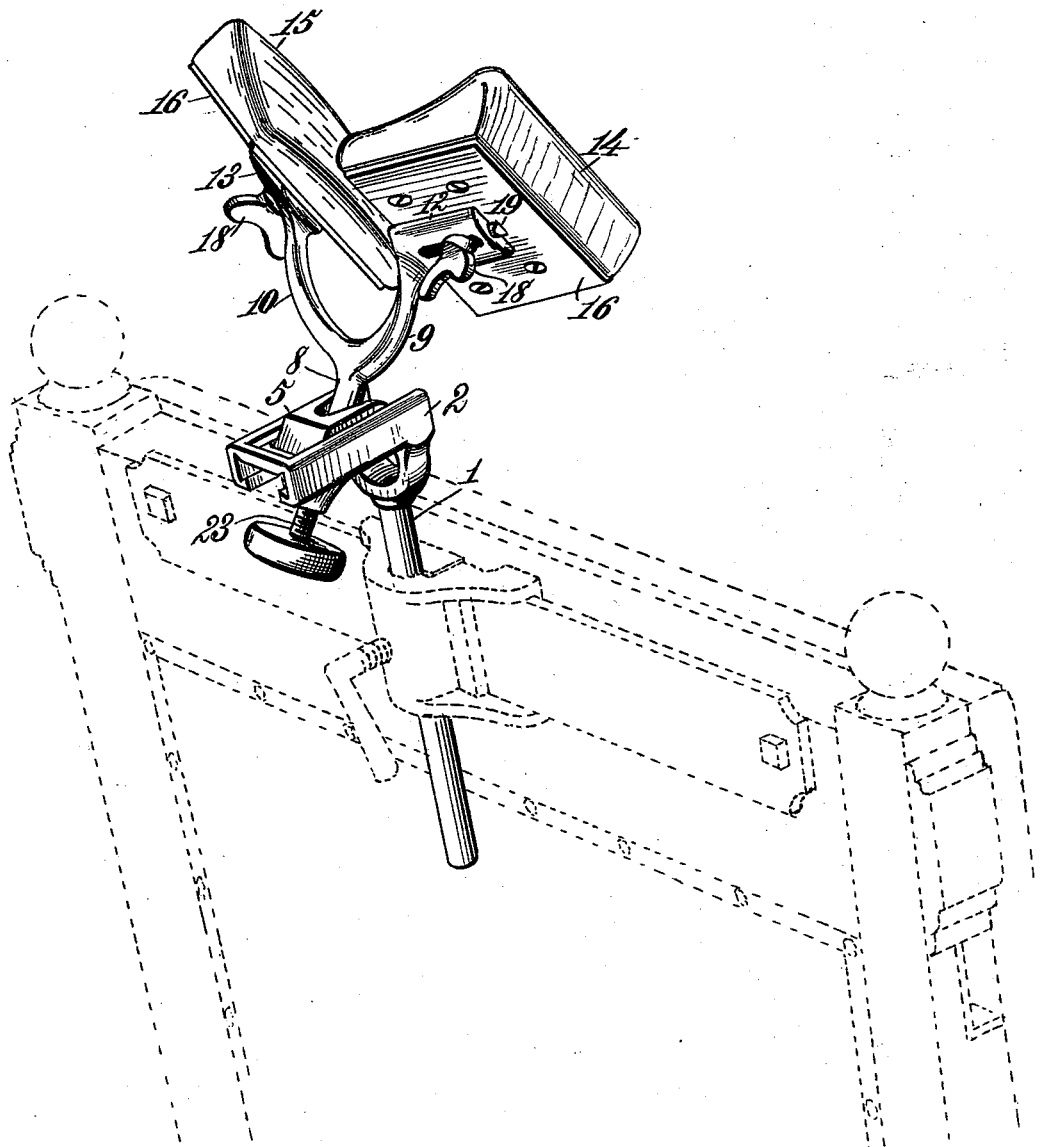
(No Model.) 2 Sheets—Sheet 1.

F. E. CASE.

HEAD REST.

No. 490,541. Patented Jan. 24, 1893.

Fig. 1.



Witnesses.
Robert Everett.
J. A. Rutherford.

Inventor.
Frank E. Case.
By James L. Norris.
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(No Model.) 2 Sheets—Sheet 2.

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HEAD REST.

No. 490,541. Patented Jan. 24. 1893.

Fig. 3.

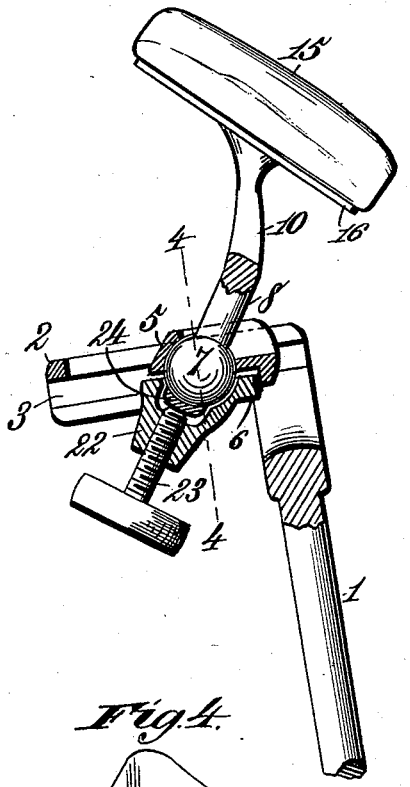


Fig. 2.

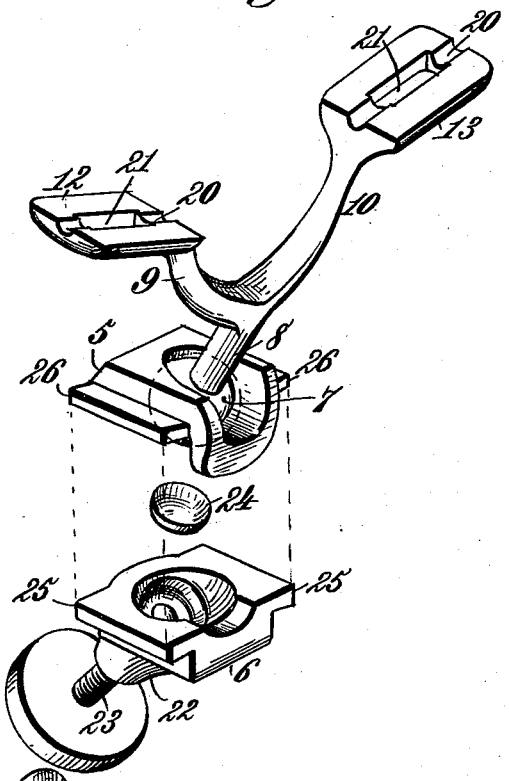


Fig. 4.

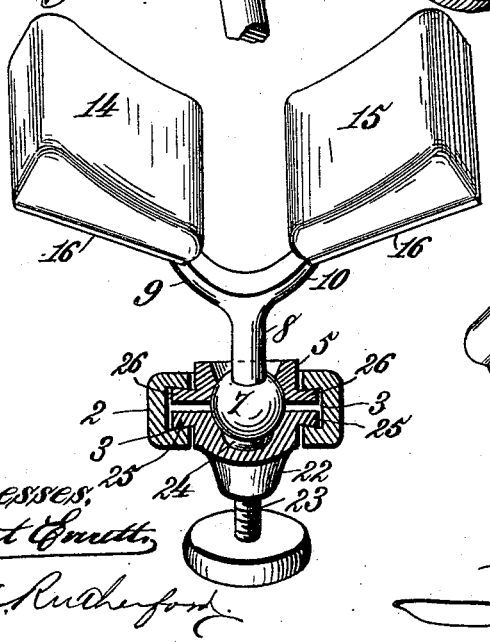
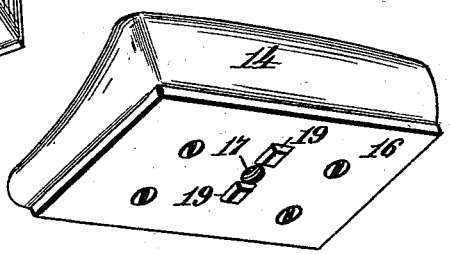


Fig. 5.



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UNITED STATES PATENT OFFICE.

FRANK E. CASE, OF CANTON, OHIO.

HEAD-REST.

SPECIFICATION forming part of Letters Patent No. 490,541, dated January 24, 1893.

Application filed June 28, 1892. Serial No. 438,325. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. CASE, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented new and useful Improvements in Head-Rests for Chairs, of which the following is a specification.

This invention relates to head-rests for chairs, particularly dental and surgical chairs, and it has for its objects to provide novel means for enlarging the range of adjustment of the head-rest-pads to meet all the conditions required for surgical operations or other treatment; to provide means whereby a universal or ball and socket connection for a pad-support is susceptible of forward and rearward adjustment to adjust the head rest-pad or pads toward and from the front portion of the chair to accommodate the patient; to provide head-rest-pads which are laterally adjustable independent of each other, and to provide novel means for guiding the head-rest-pads in their independent adjustment and preventing them from turning or moving out of proper position relatively to each other.

To accomplish all these objects the invention involves the features of construction and the combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1, is a perspective view looking at the rear of the improved head-rest applied to a chair-back, a portion of the latter being indicated by dotted lines. Fig. 2, is a detail perspective view of the pad-support and the carrier-block, the head-rest-pads being omitted. Fig. 3, is a central vertical sectional view. Fig. 4, is a vertical sectional view taken on the line 4—4 Fig. 3; and Fig. 5, is a detail perspective view looking at the under side of one of the head-rest-pads.

In order to enable those skilled in the art to make and use my invention I will now describe the same in detail, referring to the drawings wherein

The numeral 1, indicates a cylindrical standard having at its upper end a head 2, the opposite side walls of which are constructed with parallel, rectilinear grooves or guideways 3, in which the carrier-block is adapted to slide. The carrier block is composed of upper and lower sections 5 and 6, each of which is constructed with a hemispherical socket to accommodate a ball or sphere 7, applied to the shank 8 of a forked pad-support comprising arms 9 and 10 which branch from the shank 8 and are constructed with enlarged flattened extremities 12 and 13 for carrying the head-rest-pads 14 and 15. The ball or sphere 7 may be detachably secured to the shank 8 in any suitable manner, but I prefer to first apply the ball or sphere to the section 5 of the carrier block and to then permanently fasten the shank 8 thereto as by securing the end of the shank in a socket in the ball or sphere.

The upholstered or otherwise suitably constructed head-rest-pads are provided with metallic or other base plates 16 having screw threaded sockets 17 to receive adjusting screws 18, and guide tongues or ribs 19, one or more, to fit grooves or guideways 20 in the extremities of the forked pad-support. The flattened extremities 12 and 13 of the forked pad-support are each provided with a slot 21, for the passage of a thumb screw 18, which engages the socket 17 of a head-rest-pad. By this construction it is possible to adjust the head-rest-pads in a lateral direction independent of each other according as circumstances may require.

The lower section 6 of the sliding carrier-block is provided with a screw threaded socket 22, to receive a thumb screw 23, which bears at its inner end against a cup shaped washer 24, on which the ball or sphere 7 is seated. The ball and socket connection of the pad-support with the carrier-block renders it possible to adjust the head-rest-pads to any angle relatively to the chair-back after which the pad-support can be rigidly held in a fixed position by tightening up the thumb screw 23 which presses the washer 24 against the ball or sphere and operates to force the carrier-block section 5 upwardly, and the carrier-block-section 6 downwardly, thereby clamping the lateral flanges 25 and 26, of the carrier-block sections against the upper and lower walls of the rectilinear guideways or grooves 3, for the purpose of rigidly clamping the carrier-block in a stationary position.

By constructing the carrier-block in the manner described and engaging it with the head-rest-support composed of the head 2 and standard 1, it is possible to adjust the carrier-block forward or rearward for the purpose of adjusting the head-rest-pads toward and from the front portion of the chair to accommodate the patient.

The washer 24 interposed between the ball or sphere and the inner end of the thumb screw 23, relieves the ball or sphere from the grinding or wearing action which would be incident to the inner end of the screw bearing directly against the ball or sphere.

The standard 1 is preferably connected with the chair-back by a clamping mechanism substantially as described and shown in my application for Letters Patent filed February 2, 1887, Serial No. 226,217 in such manner that the standard and parts composing the head-rest can be raised or lowered and also adjusted toward either side of the chair, but any known devices may be employed for supporting the standard and therefore I do not deem it necessary to more fully describe the same.

The independent lateral adjustment of the head-rest-pads is a very desirable feature and in conjunction with the ball connection of the pad-support with an adjustable carrier-block provides a head-rest which is susceptible of a wide range of adjustment to meet all the conditions required for surgical operations or other treatment.

The connection of the head-rest-pads with the pad-support through the medium of tongues and grooves enables the rest-pads to be adjusted laterally without liability of turning or moving out of proper position relatively to each other.

The rest pads can be secured in fixed positions after adjustment by the independent thumb screws 18, which is important in surgical operations. The independent lateral adjustment of the rest-pads is a useful feature in surgical chairs, in that either rest-pad can be adjusted to accommodate the head where the latter must be held or supported in different positions, as for instance when resting on the face or the side of the head and the like, to more accurately fit the head and to comfortably accommodate the rest-pads to heads of varying size or shape.

Having thus described my invention what I claim is—

1. The combination with a suitable head-rest-support, adapted for adjustable connection with a chair back and a pad support, carried by the head rest support of a pair of rest-pads both slidable on said pad-support to laterally adjust them thereupon independent of each other, and independent devices for rigidly securing the rest-pads in fixed positions after adjustment, substantially as described.

2. The combination with a suitable head-rest-support, adapted for adjustable connection with a chair back and a pad-support, carried by the head rest support of a pair of rest-pads indedendently adjustable in a lateral direction on the pad-support and having tongue and groove connections with the latter, and independent devices for rigidly securing the rest-pads in fixed positions after adjustment, substantially as described.

3. The combination with a suitable head-rest-support, and a sliding carrier-block mounted thereupon, of a bifurcated pad-support provided with a shank having a ball and socket connection with the carrier-block, means for holding the latter in different positions on the head-rest-support, rest-pads mounted on the extremities of the bifurcations of the pad-support and independently adjustable thereupon, and independent devices on the extremities of the bifurcations for clamping the rest-pads in fixed positions after adjustment, substantially as described.

4. The combination with a suitable head-rest-support, of a sliding carrier-block mounted on said support, a pad-support having a ball and socket connection with the carrier-block, a screw for clamping the carrier-block in different positions on the head-rest-support, a pair of rest-pads having tongue and groove connections with the pad-support and slidable thereupon for their independent lateral adjustment, and independent devices for rigidly clamping the rest-pads in fixed positions after adjustment, substantially as described.

5. The combination with a head-rest-support, of a carrier-block adjustable on said support, a pad-support provided with laterally adjustable rest-pads and having a ball and socket connection with the adjustable head-rest-support, and means for clamping the carrier-block in different positions of adjustment, substantially as described.

6. The combination with a head-rest-support, of a divided carrier-block slidable on said support, a pad-support provided with rest-pads laterally adjustable independent of each other and having a ball located between the carrier-block sections, and means for clamping the ball and carrier-block sections in different positions, substantially as described.

7. The combination with a head-rest-support, of a divided carrier-block slidable on said support, a pad-support provided with laterally adjustable rest-pads and having a ball located between the carrier-block sections, and a screw which clamps the ball and also the carrier-block sections in different positions, substantially as described.

8. The combination with a suitable head-rest-support adapted for adjustable connection with a chair-back, of a pad-support carried by the head-rest-support and provided with slots, a pair of rest pads having tongue and groove connections with the pad support

and slidable on the slotted parts thereof to laterally adjust said rest-pads independent of each other, and independent screws extending through the slots of the pad-support for clamping the rest-pads in fixed positions after adjustment, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

FRANK E. CASE. [L. S.]

Witnesses:
FANNIE LEVINGER,
S. D. MCKELVEY.