

(No Model.)

S. C. G. WATKINS.
HEAD REST.

No. 490,090.

Patented Jan. 17, 1893.

Fig: 1.

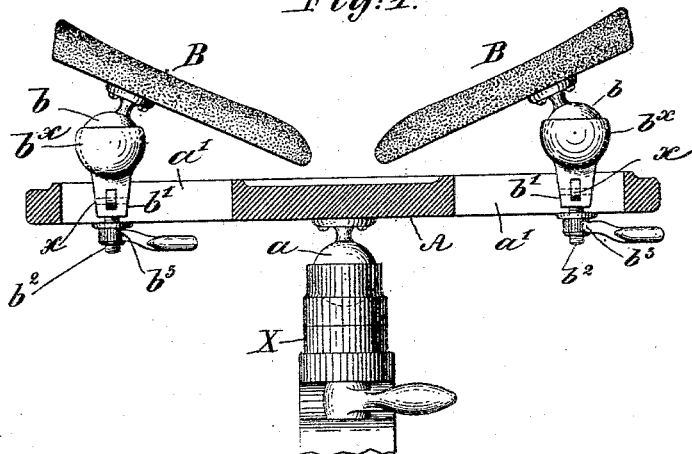


Fig: 2.

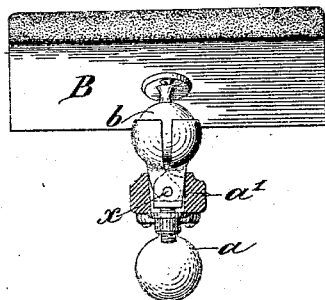


Fig: 3.

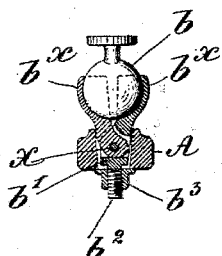


Fig: 4.

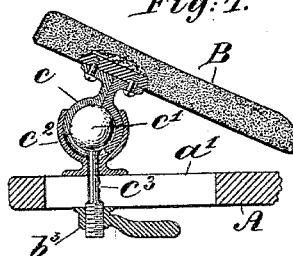


Fig: 5.

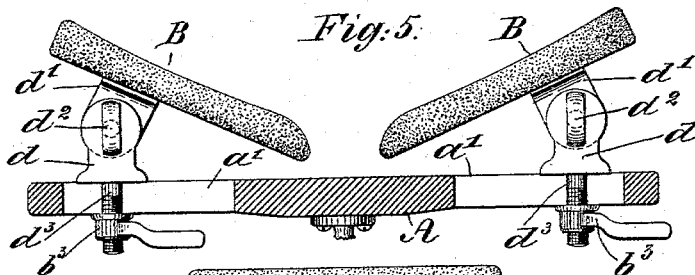
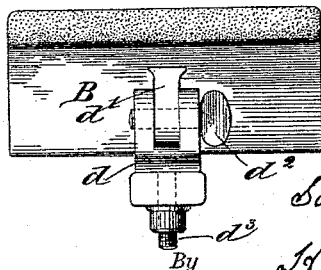


Fig: 6.



INVENTOR:

WITNESSES:
Herbert Bloforn.
J. W. Wiman

Samuel C. G. Watkins
Henry Connors
Attorney.

UNITED STATES PATENT OFFICE.

SAMUEL C. G. WATKINS, OF MONTCLAIR, NEW JERSEY.

HEAD-REST.

SPECIFICATION forming part of Letters Patent No. 490,090, dated January 17, 1893.

Application filed October 21, 1891. Serial No. 409,365. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL C. G. WATKINS, a citizen of the United States, and a resident of Montclair, in the county of Essex and State of New Jersey, have invented certain Improvements in Head-Rests, of which the following is a specification.

My invention relates to an adjustable head-rest which is designed in the main for use on chairs used by dentists, but which may be used for other and kindred purposes, as for example, on invalid chairs.

The object of the invention is to provide a head-rest which shall not only be adjustable as a whole, in the manner of the rests now in use, but which shall have the cushion which supports the head, made up of parts or sections separately adjustable relative to the supporting bar and to each other.

It is well known by dentists that owing to the manner of dressing hair, and for other reasons, it is difficult, if not impossible, to provide a comfortable support for the head of the person under treatment with the ordinary concave head-rest, which is only adjustable as a whole, and this difficulty in properly supporting the head is often disadvantageous to the practitioner as well as irksome to the person being treated. My invention provides a sectional head-rest, and a separate and universal adjustment for each section, so that, if desired, these sections may be separated far enough to leave a space between them; and so that the sections may be set at different angles of inclination.

In the accompanying drawings, which illustrate several embodiments of my invention—Figure 1 is a sectional, rear elevation of the rest, the supporting bar being in longitudinal section. This view shows the usual adjusting mechanism by which the head-rest is connected with the chair. Fig. 2 is an end view of the head rest, the supporting bar A being in transverse section at the slotted part. Fig. 3, is a sectional view of the divided clamping socket which embraces the ball to be attached to the section of the cushion or part which supports the head. Fig. 4 is a sectional view showing a slightly different form of the ball-

and-socket connection of the section of the cushion with the supporting bar. Figs. 5 and 6 are views corresponding to Figs. 1 and 2, respectively, and illustrating a modified form of the mechanism for connecting the section of the cushion with the supporting bar.

I will first describe the construction illustrated in Figs. 1, 2 and 3, premising that as my head-rest may be mounted on a dentist's chair of the ordinary kind well known to the trade, I have not deemed it necessary to illustrate such a chair in the drawings.

A is the supporting bar, which is provided with a ball, *a*, like or similar to the ball ordinarily used on head-rests. This ball is clamped in a socket on the ordinary jointed and adjustable arm, X, now used on dentists' chairs, for effecting the general adjustment of the head-rest. This arm forms no part of my invention and is not essential thereto. The bar A has, in itself, all the adjustment found in the head-rest of the ordinary dentist's chair, and it has in its opposite end slots *a'*, in which are mounted the ball-and-socket supports of the sections B, of what I call the cushion, for supporting the head. These sections represent, in some degree, halves of an ordinary head-rest cushion and they may be padded, or upholstered, in the usual way or in any way desired. Each section B has secured to its under side a ball, *b*, which fits in a clamping sectional socket, composed of two sections (see Fig. 3) *b^x*, hinged together at X, and having shanks *b'*, which engage or extend down into the slot *a'* in the bar A. One of the sections *b^x* has a screw threaded stem, *b²*, which extends below the bar A, and receives a clamping or tightening nut, *b³*, which may have a handle, as seen in Fig. 1, for convenience in turning it. I prefer to give the slot *a'* in the bar A, slightly converging sides, as seen in Figs. 2 and 3, and to slightly taper the shanks of the sections *b^x* to fit the same, so that when the hinged sections of the socket are drawn down by the nut in clamping the socket to the bar, the said sections will also clamp on the ball *b*. Thus the nut *b³* serves the double purpose of clamping the socket to the bar at any point along the slot that may be desired,

and of clamping the divided socket on the ball *b*, so as to fix the section B of the rest in any position in which it may be set.

The ball-and-socket connection between the section B of the cushion, and the bar A, enables me to set the said section in any position desired, within limits, and to set each section B independently of the other. The sections may thus be set at different distances from each other along the bar, and their upper surfaces may be set at different inclinations.

Fig. 4 shows a construction like that described except that the ball-and-socket device is somewhat different. In this construction the ball *b*, is replaced by globular socket *c*, which embraces a ball *c'*, and is embraced by a socket *c²*, which rests at its base on the bar A. The ball *c'*, has a stem *c³*, which extends down through the base of the socket *c²* and through the slot in bar A, and has a clamping nut *b³* similar to that before described. When the nut is tightened up, the ball *c'* is drawn down, and this serves to clamp all the parts to the bar A.

The construction illustrated in Figs. 5 and 6 differs from those already described in that no balls and sockets are employed, and therefore the facilities for adjustment are not so perfect; and two clamping screws are employed with each section of the cushion one for clamping the section of the rest at the desired inclination, and the other for clamping to the bar A. In these views, each section B is hinged to a stand *d*, through the medium of a lug *d'*, and a clamping hinge-screw *d²*, which passes through the cheeks on the stand and through the said lug and serves to clamp the parts in any position in which they may be set. The stand *d* rests on the slotted bar A, and has a screw-stem *d³*, which extends down through the slot in the bar and receives a nut *b³*, whereby the stand is clamped to the bar in any position in which it may be set. The stand *d* may, if desired, be turned about the axis of the screw-stem *d³*, the latter rotating in the slot in the bar.

In Figs. 5 and 6 I have not shown the ball *a*, but it will be understood that in this respect the bar A will have a ball like that seen in Fig. 1.

I would call attention to certain peculiar features of my head rest in which, as I believe, it is clearly distinguishable from all others. In my rest, the cushion or support has its upper surface so arranged as to take under and bear up the head, and this cushion is in sections, which are independently adjustable; that is, each may be set with its supporting surface at an angle different from that of the other or others, and it may be set toward or from the center of the rest without disturbing the other section or sections. I am aware, of course, that head-rests have been provided with movable clamps or jaws, having substantially vertical faces, for embracing

and clamping the head to hold it steady, and I am also aware that a head-rest of this character has been provided with an ordinary, stationary support or cushion for the head to rest on, in addition to the side clamps. This construction, which I disclaim, would defeat the purpose I have in view, as it does not furnish two supports which take under the head and leave a clear space between them.

Having thus described my invention, I claim:

1. An adjustable head-rest having a sectional cushion with the surfaces to support the head facing upward so as to take under and support the head, each section of said cushion being pivotally mounted, independently of each other on a support at its underside and provided with a clamp at the pivot, whereby the upper surfaces of said cushion sections may be set and held at different inclinations, as set forth.

2. A head-rest having the cushion on which the head lies composed of two sections mounted adjustably in the bar of the rest, whereby the distance between them may be varied, and each of said sections mounted pivotally on its support, and provided with a clamp whereby the upper surfaces of the same may be set at different inclinations.

3. In adjustable head-rests the combination with a bar A, having slots *a'*, of the two sections B, forming the cushion or support for the head, each of said sections having a ball-and-socket mounting and being mounted adjustably in one of the slots of the bar, substantially as and for the purposes set forth.

4. In a head-rest, the combination with the bar A, having slots *a'*, of the hinged sectional sockets mounted in the respective slots, the screw-stems on said sockets, the nuts on said screw-stems, the sections B, of the cushions, and the balls *b*, secured to the respective sections B and clamped by the respective sockets on the bar.

5. The combination with an arm and clamp to support a head-rest, of the said rest, comprising a supporting bar, having a universal pivoted connection with said arm, and a sectional cushion on said bar, each section of said cushion being pivotally and independently attached to its support and provided with clamps at the pivots, substantially as set forth.

6. The combination with an arm and clamp to support a head-rest, of the head-rest, comprising a bar having a ball which is clamped in a socket in the arm so as to form a ball-and-socket joint, and two cushion-sections on said bar, each of said sections being pivotally mounted on its support and provided with a clamp at the pivot, substantially as set forth.

7. The combination with an adjustable arm to support a head-rest of the said rest, comprising a supporting bar having a universal

pivotal connection with said arm, and two
cushion sections mounted on said bar and in-
dependently and pivotally adjustable there-
on, said adjustable connections having clamps
5 for fixing the cushion sections in position when
set, substantially as described.
In witness whereof I have hereunto signed

my name in the presence of two subscribing
witnesses.

SAMUEL C. G. WATKINS.

Witnesses:

HENRY CONNETT,

CHARLES A. WALSH.