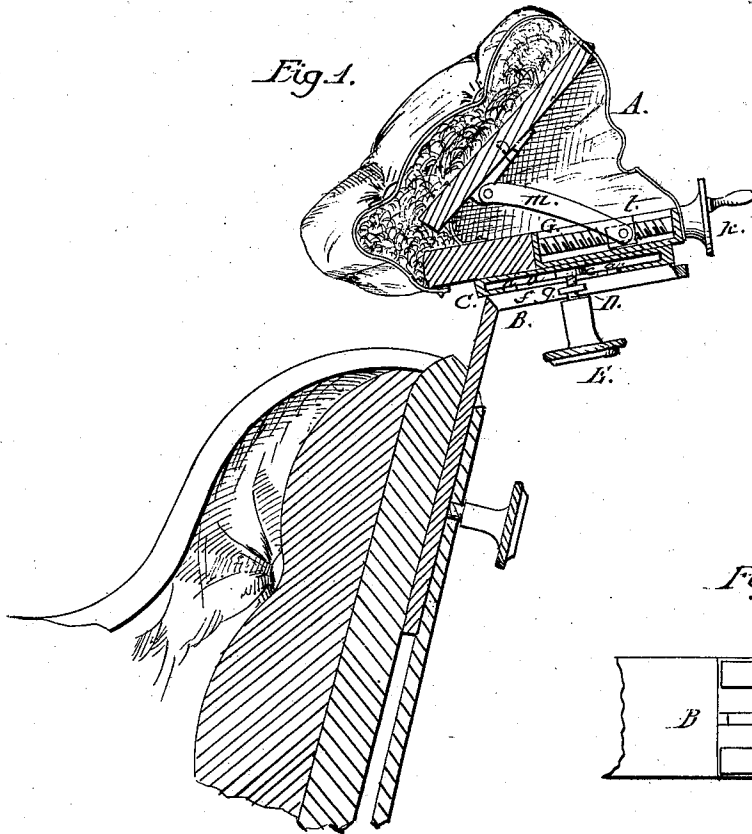


*R. W. Archer,  
Dentist's Chair.*

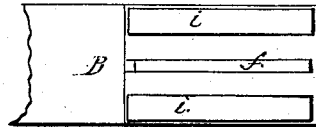
*No. 23662,*

*Patented Aug. 17, 1869.*

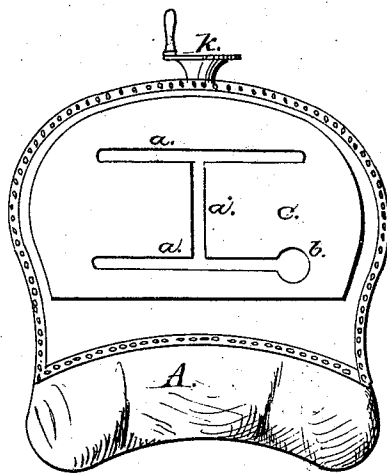
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses:  
R. F. Osgood  
Geo. W. Mott*

*Inventor:  
R. W. Archer  
By J. Fraser & Co.  
attys.*

# United States Patent Office.

ROBERT W. ARCHER, OF ROCHESTER, NEW YORK.

Letters Patent No. 93,662, dated August 17, 1869.

## IMPROVED HEAD-REST FOR DENTISTS' AND BARBERS' CHAIRS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ROBERT W. ARCHER, of the city of Rochester, in the county of Monroe, and State of New York, have invented a certain new and useful Improvement in Head-Rests for Dental and Barbers' Chairs; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a sectional view of my improved head-rest as applied to a dental chair.

Figure 2, a top view of the bearing of the standard.

Figure 3, a bottom view of the head-rest, detached.

Figure 4, a perspective view of the clamping-screw, inverted.

Like letters of reference indicate corresponding parts in all the figures.

My invention consists in the arrangement of the parts for producing the necessary horizontal and vertical adjustment of the head-rest, as hereinafter described.

In the drawings—

A indicates the head-rest proper, and

B, the standard-bearing on which it rests; the said bearing sliding up and down in the back of the chair, as shown.

On the under side of the head-rest is secured a metallic plate, C, having three slots, *a a a*, two running crosswise and the other longitudinally, and all connecting, as shown.

At one end of one slot is made an enlarged opening, *b*, to allow the head *c* of the clamping-screw D to pass.

The head of this screw being of larger diameter than the slots, it holds on top when clamped down by the nut E, which screws on shank *d* beneath.

The bearing B has also a longitudinal slot, *f*, through which screw D passes; and in this slot rests a square cross-arm, *g*, of the screw, which prevents it from turning as the clamping-nut is turned.

On top of the bearing B are placed two rubber or equivalent strips, *i i*.

The employment of the slots *a a a* allows any desired degree or kind of horizontal adjustment by simply loosening the clamping-nut.

The head-rest can be adjusted clear to one side, or to any angle desired, and tightened again by turning the nut.

A special advantage is secured by the employment of the cross-arm *g* and the packing-strips *i i*.

The cross-arm prevents the turning of the screw when the nut is turned, so that the adjustment of the

head-rest above may be accomplished with the use of both hands, if desired.

The cross-arm in no wise interferes with the sliding of the screw B in the slots *a a a*.

The packing-strips not only prevent noise in the adjustment of the head-rest, but they specially serve to retain the head-rest from slipping when once adjusted, and with but a slight pressure of the clamping-nut.

This is of much importance, as thereby the head-rest is firmly held, and no undue strain comes upon the screw.

The vertical adjustment of the head-rest is produced as follows:

A fixed turning-screw, G, is located in the bed, having a crank-head, *h*, outside, by which it is turned. On this is situated a loose nut, *l*, having pivoted thereto a forked connecting-arm, *m*, jointed at the opposite end of the upper leaf of the head-rest.

As the screw is turned in one direction or the other, the top of the head-rest will be correspondingly raised or depressed as it moves around the hinge.

This arrangement for producing the vertical adjustment of the head-rest has special relation to that before described, for producing the horizontal adjustment, since there is no projection of either part through the bed of the device to interfere with the other.

Heretofore, a curved ratchet-bar has been generally used to produce the vertical adjustment, projecting down through the bed and operated from beneath.

Such a device could not be used in my head-rest, as it would interfere with the lower adjustment, and, in fact, prevent its use altogether.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The arrangement, with the bearing B and slotted plate C, as described, of the packing-strips *i i* and screw D, provided with the cross-arm *g* and head *c*, the whole operating in the manner and for the purpose specified.

2. In combination with the above, the arrangement of the screw G, nut *l*, and connecting-arm *m*, for producing the vertical adjustment, substantially as described.

In witness whereof, I have hereunto signed my name, in the presence of two, subscribing witnesses.

ROBERT W. ARCHER.

Witnesses:

R. F. OSGOOD,  
GEO. W. MIATT.