May 23, 1950 C. F. EATON 2,509,086

HEADREST FOR OPERATING TABLES

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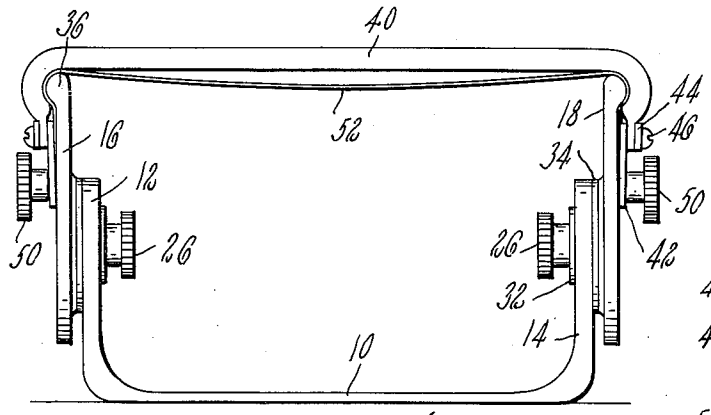


Fig. 1.

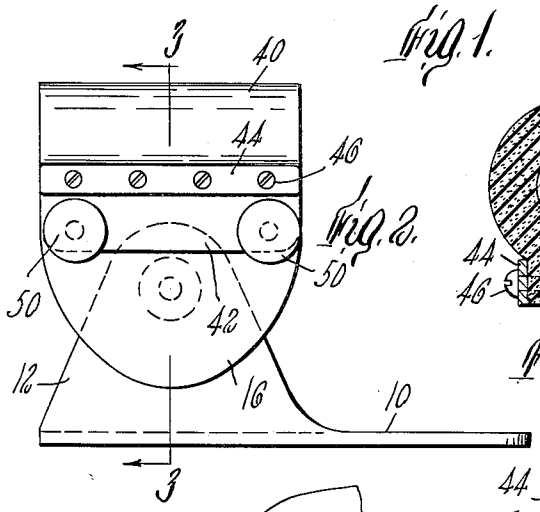


Fig. 2.

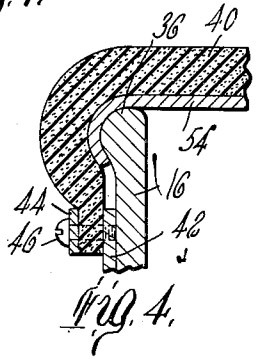


Fig. 4.

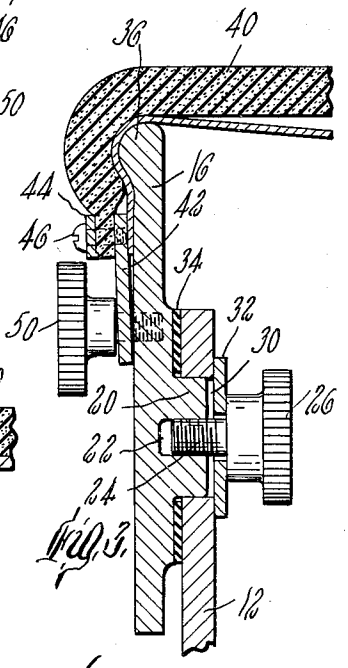


Fig. 3.

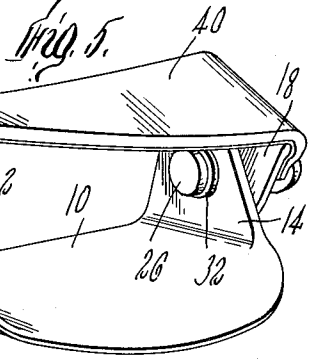


Fig. 5.

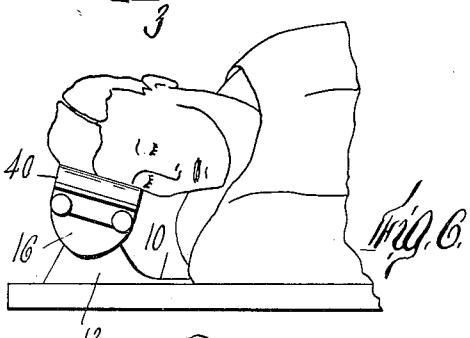


Fig. 6.

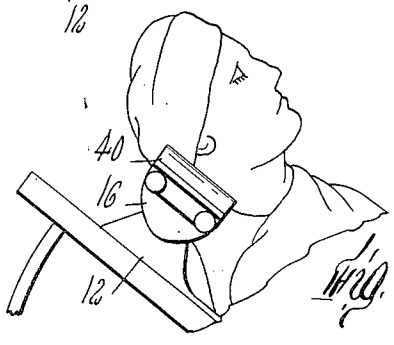


Fig. 7.

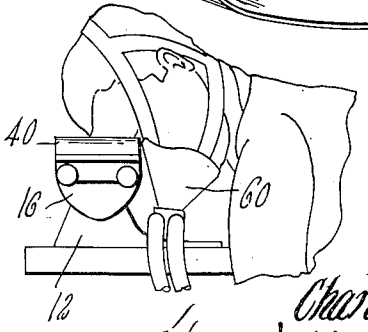


Fig. 8.

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HEADREST FOR OPERATING TABLES

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7 Claims. (Cl. 128—1)

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This invention relates to a head rest for supporting the head of a patient on an operating table. When an operation is to be performed on some parts of the head of a patient, such as the skull or ear, for example, it has been found difficult to support and maintain the head in a suitable position for access to the particular part to be operated on. According to the present invention, a support is provided which is simple, rugged, and easily adjustable to hold the head in a variety of positions best suited for different operations.

For a more complete understanding of the invention, reference may be had to the following description thereof and to the drawing, of which—

Figure 1 is a front elevation of a head rest embodying the invention;

Figure 2 is a side elevation of the same;

Figure 3 is a fragmentary, sectional view on the line 3—3 of Figure 2;

Figure 4 is a fragmentary, sectional view, showing a modified form of the invention;

Figure 5 is a perspective view of the head rest, showing a different position of adjustment; and

Figures 6, 7 and 8 are elevational views, showing various ways in which the head rest can be used.

The head rest illustrated on the drawing comprises a base 10 which is preferably in the form of a flat, rigid plate having lateral extensions 12 and 14 which are bent up to form vertical uprights at opposite sides of the base plate 10. Attached to the uprights 12 and 14 are side plates 16 and 18 which may be similar to each other in structure so that a description of one will serve also for the other. Each of these side plates is provided with a boss 20 projecting from its inner face, the boss having a central hole 22 which is screw-threaded to receive the threaded shank 24 of a screw 26 having a knurled head to serve as a finger piece. The boss 20 is cylindrical and fits in a hole 30 through the corresponding upright 12 or 14 so that each plate can be angularly adjusted about the axis of its boss. Each side plate is clamped in adjusted angular position by the screw 24, the head of which engages a washer 32 which extends over the inner end of the hole 30 and bears against the inner face of the corresponding upright. A washer 34 of some frictional material, such as rubber, leather or the equivalent, is interposed between the outer face of the upright and the abutting inner face of the side plate so that when the bolt is set up tightly by manipulation of the finger

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piece 26, the side plate is firmly gripped. This feature is of great practical importance, since a surgeon must be sure that there will be no unexpected shift in the position of the head-supporting member when a delicate operation is in progress.

The upper edge of each side plate is straight and normally horizontal. This edge is preferably provided with a rounded bead 36 over which passes an end portion of a band 40 of soft, resilient material such as sponge rubber or the like. This band is preferably of a width substantially equal to the length of the upper edge of a side plate. As indicated in Figure 1, the band 40 spans the space between the side plates 16 and 18, the ends of the band being anchored against the outside faces of the side plates. For convenience in anchoring the ends of the band 40, each end may be clamped between two metal strips 42 and 44, these metal strips being drawn together by a suitable number of screws 46. The plate 42 projects beyond the end of the band 40 and is provided with one or more holes to receive screws 50, two such screws being shown in Figure 2. The screws 50 have knurled heads and threaded shanks, the latter passing freely through holes in the metal strip 42 for threaded engagement in holes in the side plate, as indicated in Figure 3. If a firmer support is desired than that afforded by the soft band 40, a stiffer plate 52 of semi-rigid material, such as a metal like aluminum, a synthetic plastic material, or an equivalent, is mounted under the band 40 so as to extend over and around the beads 36 of the side plates. To ensure adequate stability of the head rest when in use, the base 10 is extended in one direction substantially beyond the head-supporting band 40, as indicated in Figures 2, 6 and 7. This elongation of the base prevents the device from tipping over either toward or away from the patient, and such stability is an additional safety factor.

In assembling the head rest, the stiffening plate 52 is first mounted on the side plates 16 and 18, and the band 40 is thereafter secured in place by fastening one end to one of the side plates and then stretching the band sufficiently to bring the holes of the end strip 42 into registry with the screw holes in the other side plate so that the screws 50 may be put in place.

In some cases, a greater degree of rigidity may be desired. In such case, a heavier plate 54, of metal or other rigid material, may be used instead of the semi-flexible plate 52, as indicated in Figure 4.

The head rest serves to elevate the head of the patient above the level of the operating table and to provide an easy, conveniently adjustable support therefor. By loosening the screws **24**, one or both of the side plates can be rotatively adjusted, as indicated in Figures 5 and 6. In Figure 6, the patient is arranged on his side, the head being held in a substantially horizontal position, convenient for an operation on the patient's ear. Figure 7 shows the head rest on a sloping portion of the operating table so as to hold the head in position for an operation on the nose. Figure 8 shows the use of the head rest to support the head of the patient who is lying face down, in position for an operation on the back of the skull, the head rest being convenient for use with anaesthetizing apparatus which is held in place by suitable harness **62** over the patient's head.

I claim:

1. A head rest comprising a base, a pair of standards extending up from opposite sides of said base, a side plate pivotally attached to each said standard, said side plates being rockably adjustable about a common horizontal axis, a band of soft resilient material extending between said plates, and means releasably securing the ends of said strip to the respective plates.

2. A head rest comprising a base, two upright members extending up from opposite sides of said base, said members having parallel upper edges, a band of soft resilient material extending between said edges and releasably secured to said members, and a band of stiffer material extending between said edges and underlying the first said band.

3. A head rest comprising a flat rigid base plate with two lateral extensions bent up to form parallel uprights, a side plate adjustably secured to each said upright, said side plates having normally parallel and horizontal top edges, a band of soft rubber-containing compound extending around said top edges and spanning the space between them, and means on the mutually remote faces of said plates securing the ends of said band thereto.

4. A head rest comprising a base, two uprights extending up from opposite sides of said base, two parallel side plates secured to respective uprights and rotatively adjustable about a common horizontal axis, each said plate having a straight upper edge with a rounded bead, a band of soft resilient material spanning the space between said plates and extending over said beads, and means on said plates releasably securing the ends of said band to the respective plates.

5. A head rest comprising a flat base having lateral extensions upturned to form spaced parallel uprights, a side plate secured to each upright, said side plates being adjustable rotatively about a common axis and having normally parallel upper edges of equal length, a band of sponge rubber extending over said edges and spanning the space between them, a rigid clamp secured to each end of said band, each clamp having perforations therethrough, and screws extending through said perforation and into the outer faces of said plates to secure said band releasably to said plates.

6. A head rest comprising a base, two upright members extending up from opposite sides of the base in parallel planes, each said member having a circular aperture therethrough, a side plate mounted on each said member, each side plate having a circular boss fitted into the aperture of the corresponding upright member, means for clamping each plate in a position of angular adjustment about the axis of its boss, a soft resilient band spanning the space between said plates, and means for securing the ends of said band to the outer faces of said plates.

7. A head rest comprising a base, a pair of standards extending from opposite sides of said base, a side plate pivotally attached to each said standard, a washer having a high coefficient of friction disposed between each standard and corresponding side plate, means releasably clamping said standards and side plates against their respective friction washers, and a band of soft resilient material extending between said side plates and releasably secured thereto.

CHARLES F. EATON.

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The following references are of record in the file of this patent:

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