

Feb. 17, 1953

J. E. KREWSON  
APPARATUS FOR USE IN SURGERY AND  
IN ADMINISTERING ANESTHETICS

2,628,803

Filed Aug. 10, 1949

2 SHEETS—SHEET 1

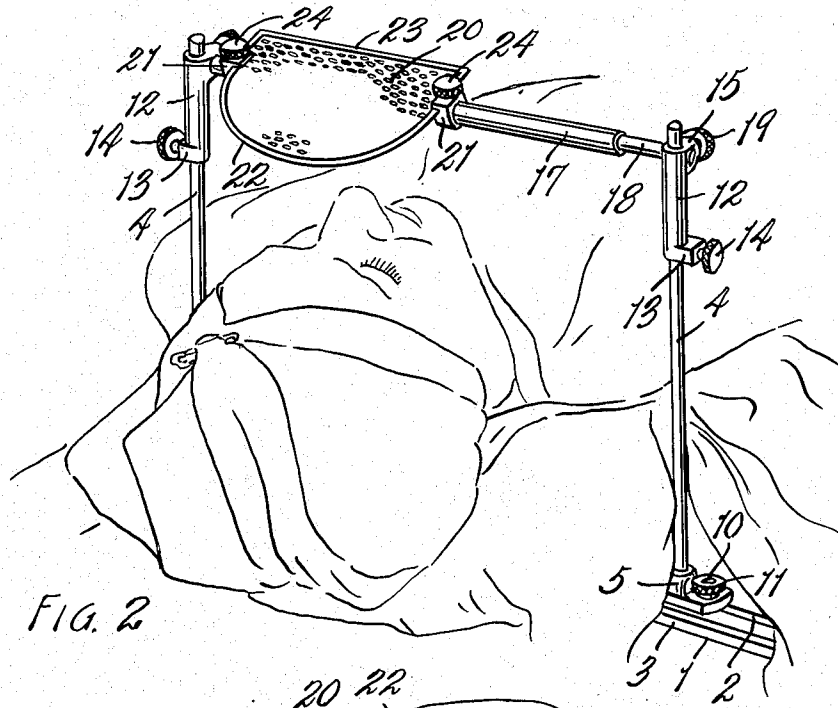


FIG. 2

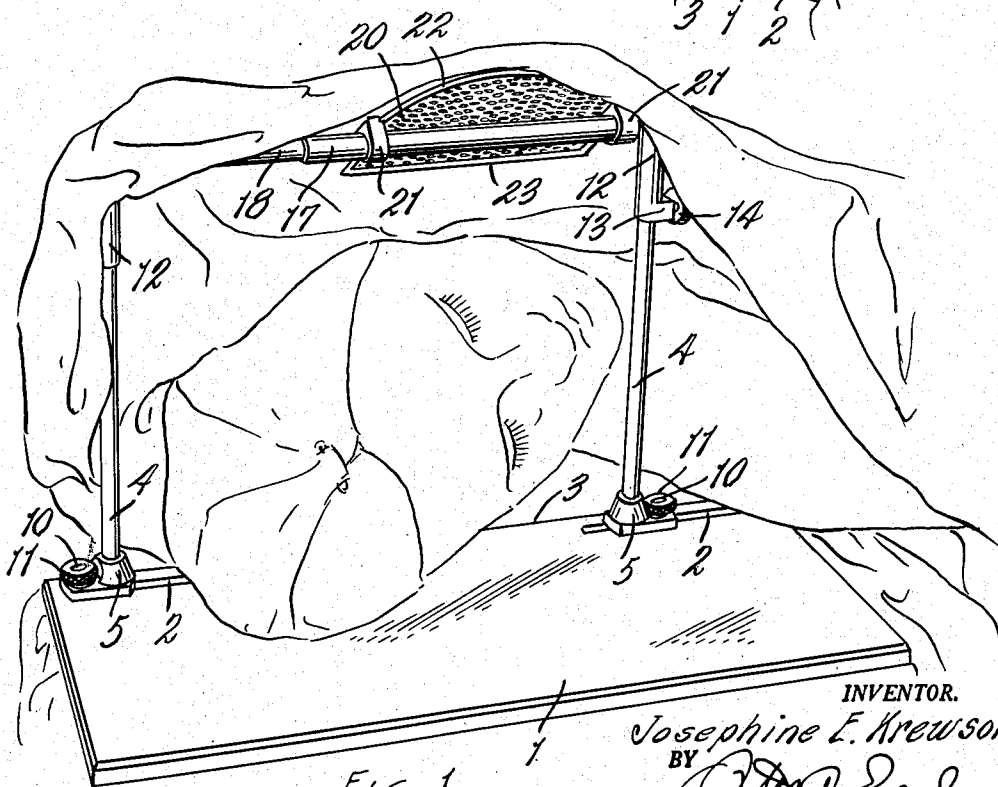


FIG. 1

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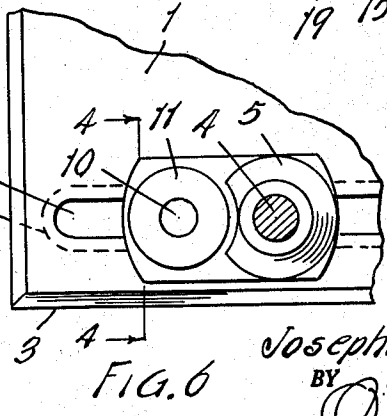
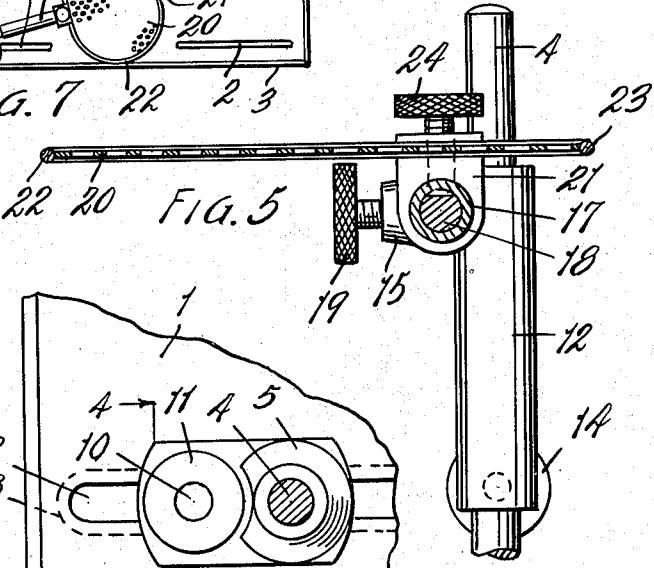
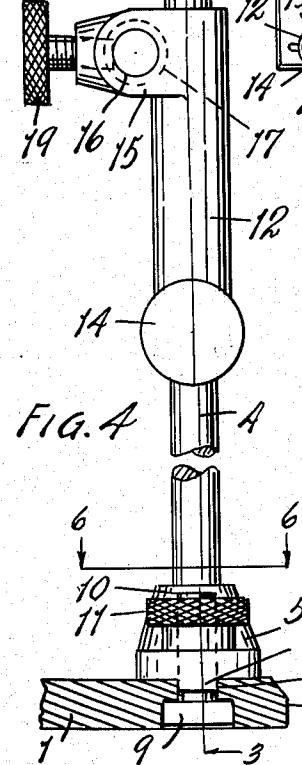
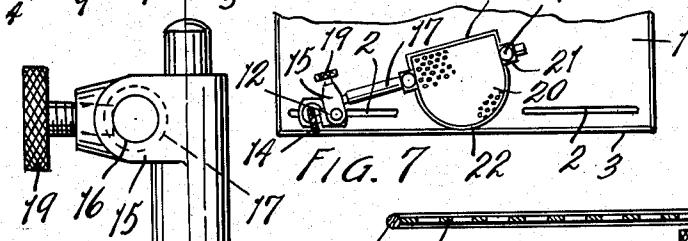
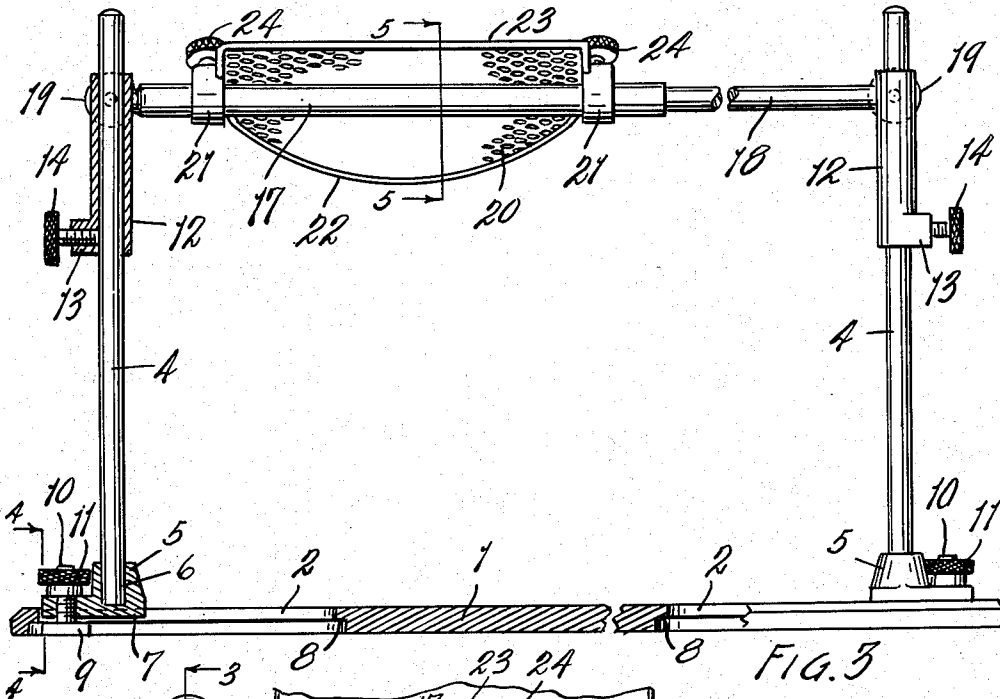
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2 SHEETS—SHEET 2



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# UNITED STATES PATENT OFFICE

2,628,803

## APPARATUS FOR USE IN SURGERY AND IN ADMINISTERING ANESTHETICS

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Application August 10, 1949, Serial No. 109,504

### 4. Claims. (Cl. 248—124)

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This invention relates to improvements in apparatus for use in surgery and in administering anesthetics.

The main objects of this invention are:

First, to provide an apparatus for use in surgery and in administering anesthetics, particularly eye, ear and other head surgery which has a wide range of adjustment to meet particular conditions and facilitate the work.

Second, to provide an apparatus having these advantages which may also be used as an arm rest for the anesthetist or assistant without interference with or discomfort to the patient.

Third, to provide an apparatus of this character which may be adjusted to support the anesthetic guard or support at varying heights and also in which the guard or support may be laterally or tiltingly adjusted and secured in adjusted position by simple manipulation of thumbscrews.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of the apparatus embodying my invention adjusted to one position relative to a patient and the patient and covering being conventionally illustrated.

Fig. 2 is a fragmentary perspective view illustrating another adaptation of my invention.

Fig. 3 is an enlarged rear elevational view partially in vertical section on a line corresponding to line 3—3 of Fig. 4.

Fig. 4 is an enlarged fragmentary view partially in vertical section on a line corresponding to line 4—4 of Fig. 3.

Fig. 5 is an enlarged fragmentary view in section on a line corresponding to line 5—5 of Fig. 3 with the support shown in a horizontal position.

Fig. 6 is a fragmentary plan view in section on a line corresponding to line 6—6 of Fig. 4.

Fig. 7 is a fragmentary plan view of substantially reduced dimensions illustrating still another adaptation of the apparatus of my invention.

The embodiment of my invention illustrated comprises a plate-like base 1 which is desirably formed of metal and quite heavy so that once positioned upon an operating table or the like it will not be easily tipped over or pushed out of position. The plate 1 is provided with aligned longitudinal slots 2 adjacent one edge 3.

The rod-like posts or uprights 4 are provided with bases 5 having sockets 6 therein in which

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the posts are secured. These post bases are provided with longitudinal ribs 7 which slidably fit within the slots as shown in Fig. 4. The slots 2 are dove-tailed or under cut at 8 to receive the noncircular heads 9 of the post clamping bolts 10 which are provided with clamping nuts 11 having knurled portions to facilitate adjustment. It will be noted that these clamping nuts 11 are accessible from the top of the base plate so that the posts may be independently adjusted longitudinally of the base plate and relative to each other with the base in upright position. This enables adjustment to meet various conditions one of which is illustrated in Fig. 1 in which one post is at the outer end of its slot while the other is adjusted to a position closely adjacent the inner end of its slot.

Each post is provided with a crossbar supporting bracket 12, the brackets illustrated being tubular in form and sleeved upon the posts for vertical adjustment. These brackets illustrated have laterally projecting bosses 13 into which the setscrews 14 are threaded to clampingly engage the posts. The brackets 12 are provided with laterally projecting ears 15 having holes 16 therein adapted to receive one end of the crossbar which is made up of telescoping sections 17 and 18; the section 17 being tubular to permit the section 18 being telescoped therein. The crossbar is secured to the brackets by means of the thumbscrews 19. The forming of the crossbar of telescoping sections permits the posts being adjusted to or from each other throughout the full range of adjustment of the apparatus.

The anesthetic screen or support 20 is provided with ears 21 which are rotatable and slidable on the crossbar for adjustment longitudinally thereof and for tilting adjustment thereon. This foraminate support is desirably formed with a curved outer edge 22 and with a straight inner edge 23; the ears 21 extending downwardly from the support and being provided with setscrews 24 by means of which the support 20 can be secured in its adjusted position. In Figs. 1, 2 and 3 the support is illustrated in tilted positions. In Fig. 5 it is shown in a horizontal position.

In Fig. 7 one of the posts is removed which permits the crossbar being swingingly adjusted on the other post, the brackets 12 being rotatable on the post and secured in adjusted positions by the setscrew 14. This is desirable for in some conditions the post might obstruct the surgeon.

The apparatus can be placed in various posi-

tions on a surgical table to meet the particular conditions, the adjustable anesthetic screen or support can be adjusted for particular conditions and at the same time enable the anesthetist to observe the patient without interfering with the surgeon or the operative field. The device is sufficiently strong and rigid to permit use by the anesthetist or surgeon as an arm rest. The apparatus is particularly desirable for use in eye, mastoid and thyroid surgery but may be used to advantage for other types of surgery.

I have illustrated a highly practical embodiment of my invention. I have not attempted to illustrate other embodiments or adaptations as it is believed that this disclosure will enable those skilled in the art to embody or adapt my invention as may be desired and also to use it in an effective and efficient manner under varying conditions for which it is adapted for use.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In an apparatus of the class described, the combination of a plate-like base of substantial area and weight having undercut longitudinal slots positioned adjacent one longitudinal edge thereof and extending inwardly from adjacent the ends thereof, posts provided with bases slidably supported on said base, said bases having ribs on their undersides slidably engaging said slots, clamping bolts disposed through said post bases and having noncircular heads disposed within the undercuts of the slots whereby rotation thereof is prevented, said bolts being provided with clamping nuts at their upper ends accessible from above the base and alongside the post whereby the post may be independently adjusted longitudinally of the slots and are removably attached to the base, crossbar brackets sleeved upon said posts for vertical adjustment thereon and provided with transverse openings and with setscrews for securing them in their adjusted positions, a crossbar comprising inner and outer telescoping section disposed with their outer ends in said openings in said brackets, said brackets being provided with setscrews for securing the rod sections thereto, and a semicircular foraminated support provided with ears located adjacent its straight edge and rotatable and slidable upon said outer crossbar section, said ears being provided with setscrews for securing the support in its adjusted position longitudinally of the crossbar and in its tiltably adjusted position thereon.

2. In an apparatus of the class described, the combination of a plate-like base of substantial area and weight, upstanding posts laterally adjustably supported on said base, crossbar brackets sleeved upon said posts for vertical adjustment thereon and provided with transverse openings and with setscrews for securing them in their adjusted positions, a crossbar comprising inner and outer telescoping sections disposed with their outer ends in said openings in said brackets, said brackets being provided with setscrews for securing the rod sections thereto, and a semicircular foraminated support provided with ears located adjacent its straight edge and rotatable and slidable upon said outer crossbar section, said ears being provided with setscrews

for securing the support in its adjusted position longitudinally of the crossbar and in its tiltably adjusted position thereon.

3. In an apparatus of the class described, the combination of a base of substantial area and weight having undercut longitudinal slots positioned adjacent one longitudinal edge thereof and extending inwardly from adjacent the ends thereof, upstanding posts provided with bases slidably supported on said base, said bases having ribs on their undersides slidably engaging said slots, clamping bolts disposed through said post bases and having noncircular heads disposed within the undercuts of the slots whereby rotation thereof is prevented, said bolts being provided with clamping nuts at their upper ends accessible from above the base and alongside the post whereby the posts may be independently adjusted longitudinally of the slots and are removably attached to the base, crossbar brackets sleeved upon said posts for vertical adjustment thereon and provided with transverse openings and with setscrews for securing them in their adjusted positions, a crossbar in said openings in said brackets, said brackets being provided with setscrews for securing the rod sections thereto, and a support slidably and tiltably mounted on said crossbar.

4. In an apparatus of the class described, the combination of a plate-like base of substantial area and weight having slots formed therein extending inwardly from opposite sides thereof, upstanding posts supported on said base and having clamping bolts secured to their lower ends and projecting through said slots with the heads of the bolts underlapping the base at the sides of the slots, said bolts extending upwardly through said slots and having clamping means at their upper ends accessible from above the base and coacting between said bolts and said posts to clamp said posts and said heads on the top and bottom of said base whereby the posts are releasably clamped to said base and are independently adjustable thereon, a telescopically adjustable cross bar mounted on said posts for vertical adjustment thereon, and a foraminated plate rotatably and slidably mounted on the cross bar and provided with means for securing it in its adjusted positions thereon, said foraminated plate being narrower along the portion thereof connecting to said cross bar than the length of said cross bar.

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