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ARM AND LEG SUPPORT

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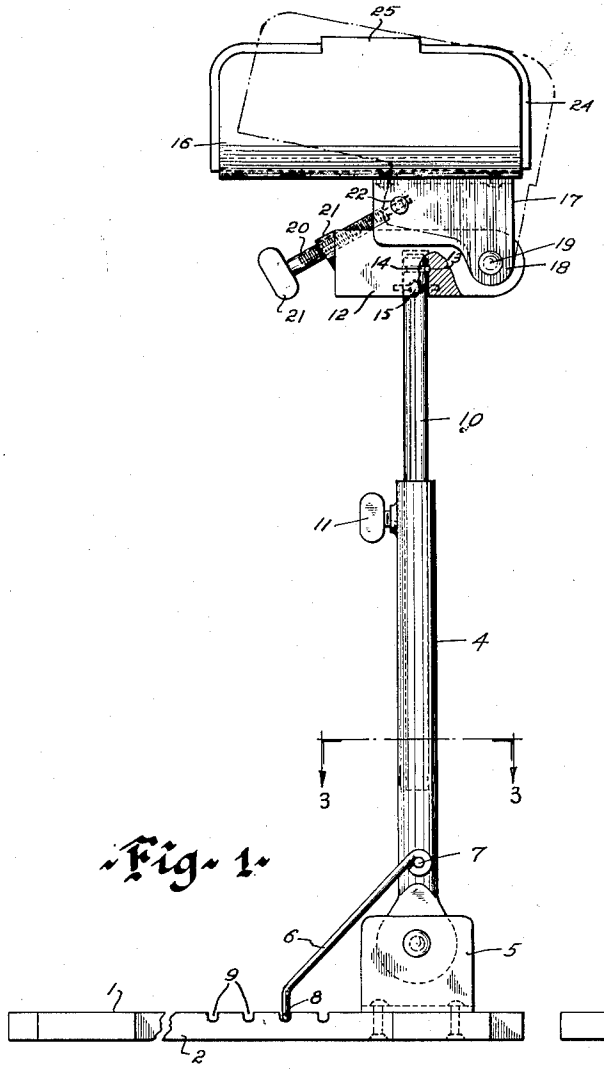


Fig. 1.

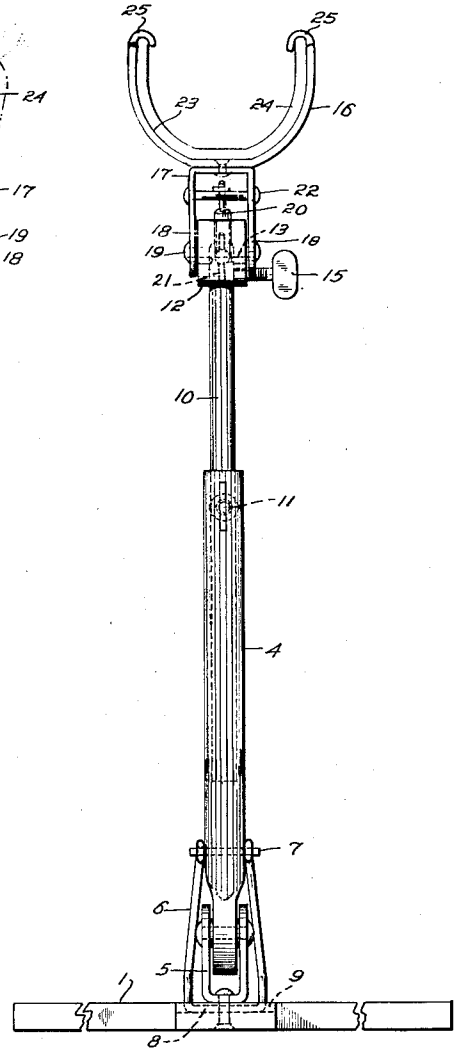


Fig. 2.

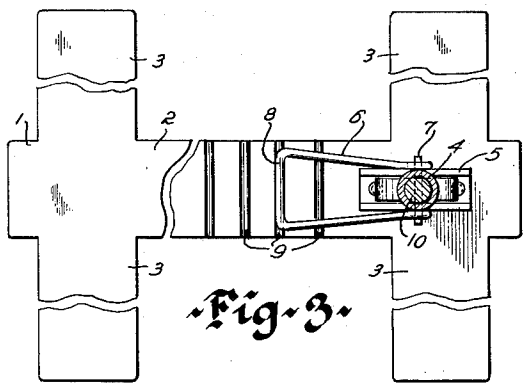


Fig. 3.

INVENTOR.
Leo M. Astroff
BY Alex. E. MacRae
Attorney.

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ARM AND LEG SUPPORT

Leo M. Astroff, Ste. Agathe des Monts, Quebec, Canada

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2 Claims. (Cl. 311—11)

This invention relates to an arm or leg rest or support and more particularly to an arm or leg rest for use in surgical operations such as thoracentesis, setting of fractures and the like.

In many surgical operations and treatments it is necessary to place the arm or leg of the patient in an awkward position, and it is very desirable to provide means for support of the arm or leg during such treatment. For instance, in the removal of fluid from the pleural cavity it is necessary to have the patient in a sitting position with the arm held across the chest and the hand resting on the opposite shoulder. It is a great strain for the patient to attempt to hold the arm in such a position especially since many of such operations are of an hour or more duration and in many cases it is necessary for a nurse to support the patient's arm or leg in the correct position during the interval.

It is an object of this invention to provide a device of simple construction which is easily adjustable and adaptable to support the arm or leg of a patient in a variety of positions for surgical operations and treatments without causing any undue strain to the patient.

Other objects and advantages of the invention will be apparent from the following description with particular reference to the accompanying drawing, in which:

Figure 1 is a front elevation of a support in accordance with the invention,

Figure 2 is a side elevation of the support, and

Figure 3 is a sectional plane view taken along the line 3—3 of Figure 1.

Referring to the drawing, 1 is a flat base having an elongated plate 2 and a pair of supporting wings 3 extending laterally from each end portion of the plate. The base may be of not substantially more than one-half inch in thickness whereby a patient may sit thereon without discomfort.

A single leg 4 is pivotally mounted adjacent one end of the base, preferably between the lateral wings 3, by means of a bracket 5 fixed to the base, for swinging movement in the longitudinal direction of the base. Means for locking the leg in perpendicular relation to the base or in a plurality of inclined positions with respect thereto comprises a brace 6, U-shaped as shown, having one end pivoted to the post at 7 and its other end 8 arranged to engage one of a plurality of transverse grooves 9 in the plate 2. The end 8 of the brace is preferably of such a width that it engages the major portion of the length of a respective groove 9.

The leg 4 is preferably adjustable as to length as by means of a telescopic upper section 10, a thumb screw 11 being provided to lock the section 10 in any desired position.

A supporting block 12 is mounted on the uupper end of the leg section 10 and preferably such block has pivotal movement about the axis of the leg as by means of a pin 13 in the block which engages an annular groove 14 in the leg section 10. A thumb screw 15 is provided in the block

12 to lock the latter in any desired position with respect to the leg.

An arm or leg receiving tray 16 is adjustably carried by the block 12 by means of a bracket 17. As shown, the bracket 10 is U-shaped with a depending arm 18 on each side of the block pivoted thereto by means of a pin 19 adjacent one end of the block. Thus, the tray is swingable upwardly and downwardly about the axis of pin 19. Means for moving the tray into desired inclined or parallel relation to the block comprises a threaded inclined rod 20, threadedly engaging a portion 21 of the block at the other end thereof. The lower end of rod 20 is provided with a turning handle 21 and a pin 22 extends transversely through the upper end thereof and the bracket 17 to pivotally attach such end to the bracket.

The tray 16 has an upper concave surface 23 to receive an arm or leg and conform with the contour thereof. The tray is of any desired length but preferably is of a length not greater than that of the forearm. A padding 24 of any suitable soft material such as sponge rubber or the like is provided in the tray 16 and should extend slightly beyond the peripheral edges thereof, as shown, to protect the arm or leg from contact with the edges of the tray. A pair of pad retaining clips 25 may be provided on the tray to extend over a portion of the upper edges of the pad.

The operation of the device will be apparent from the foregoing description.

When used for arm support, the patient may sit upon the base either astride or to one side of the leg 4 with one or both of the adjacent wings 3 under the patient's legs. Thus, the device is conveniently supported in an upright position. In many cases, it is desirable that the tray be free to pivot freely about the axis of the leg 4.

When used either as an arm or leg support, the length of leg 4, its angular relation with respect to base 1, and the angular relation of tray 16 with respect to leg 4, may be adjusted as desired to provide optimum comfort for the patient during treatment. When it it desired that the tray support, for instance, a leg in a cast, in a fixed position, the screw 15 is actuated to lock the tray against rotation about leg 4.

It will thus be seen from the foregoing that there is provided a simple and inexpensive device readily adjustable to support the arm or leg of a patient in a wide variety of positions during surgical operations or treatments, which require the arm or leg to be supported in an elevated position.

I claim:

1. In a device for supporting a patient's arm or leg in surgical treatments having a single supporting leg and an arm or leg receiving tray mounted on one end thereof, an elongated flat base, the other end of said leg being pivotally attached to said base adjacent one end thereof for swinging movement in the longitudinal direction of the base, said base having a plurality of transversely extending grooves therein located between said leg and the other end of said base, and a brace having one end pivoted to said leg and its other end engageable with one of said grooves to lock the leg in fixed position with respect to said base.

2. In a device for supporting a patient's arm or leg in surgical treatments having a single supporting leg and arm or leg receiving tray mounted on one end thereof, an elongated flat base having a pair of transversely extending supporting wings extending laterally from each end portion of said base, the other end of said leg being pivotally attached to said base adjacent one end thereof between one of said pair of wings for swinging movement in the longitudinal direction of the base, said base having a plurality of transversely extending grooves therein, located between said leg and the other end of said base, and a U-shaped brace having one end pivoted to said leg and a web portion

engageable with one of said grooves to lock the leg in one of a plurality of fixed positions with respect to said base, said leg being in perpendicular relation to said base in one of said fixed positions, and in inclined relation to said base in the others of said fixed positions.

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