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SURGICAL ARMBOARD ATTACHMENT

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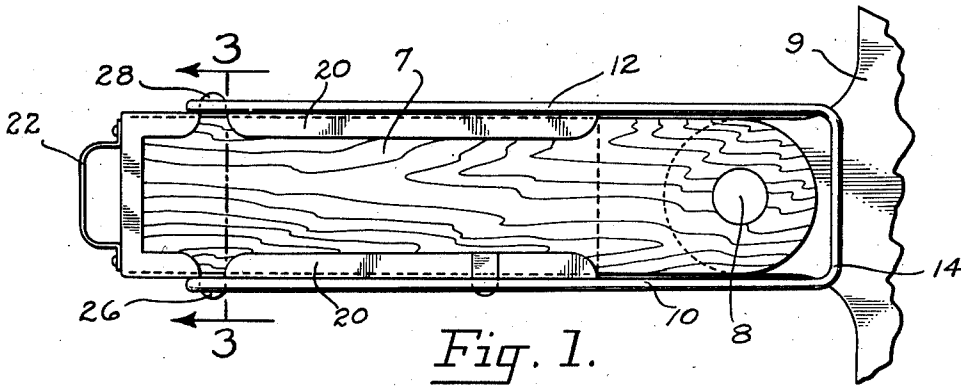


Fig. 1.

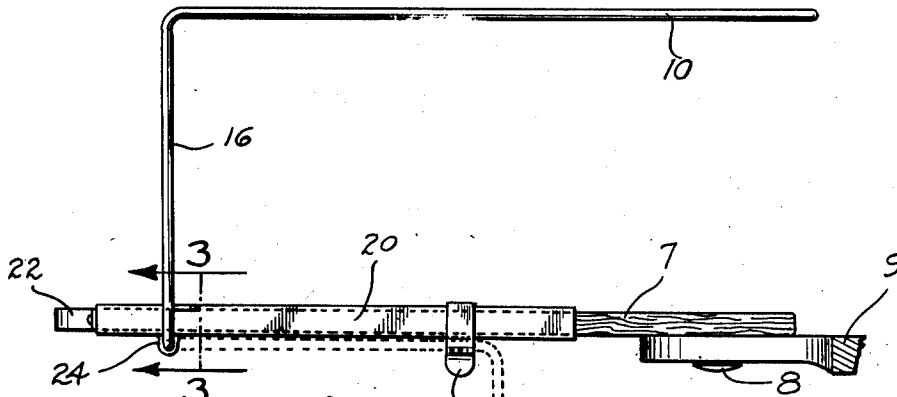


Fig. 2.

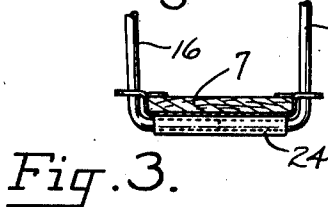


Fig. 3.

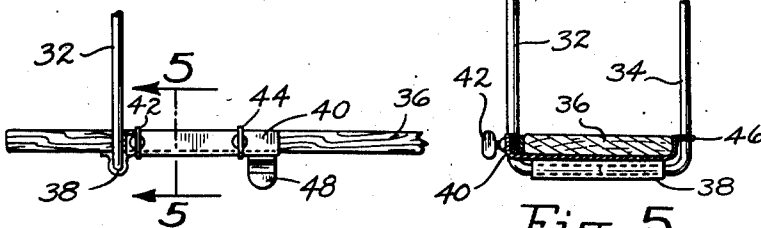


Fig. 4.

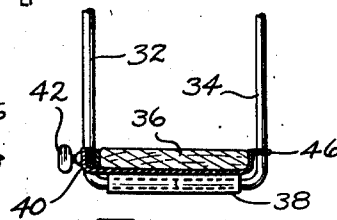


Fig. 5.

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SURGICAL ARMBOARD ATTACHMENT

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4 Claims. (Cl. 311-10)

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The present invention relates to an attachment for armboards associated with surgical operating tables and adapted to support the draping sheets over the armboard, out of contact with the arm of a patient placed thereon.

It is conventional procedure in hospitals to place a patient on an operating table provided with a laterally extending armboard. His arm then may be strapped to the board for the injection of dextrose, normal saline solution and other fluids, or for the introduction of blood, or of intravenous anesthetics such as pentathol. In such procedures, it is necessary that the arm be fully draped, i. e. covered with sterile sheets to keep it sterile and to separate the anesthetist or anaesthesiologist from the sterile, surgical area in which the surgeon works.

Heretofore, it has been conventional practice simply to place the sterile sheets over and upon the arm after the introduction of intravenous fluids has been started. This has the pronounced and serious disadvantage, however, that the arm is obscured from view so that the anaesthetist cannot inspect continuously the apparatus being employed for the injections. Furthermore, since it is necessary to raise the sheets to make this inspection, there is the very real possibility of causing the inadvertent withdrawal of the needle from the vein. Still further, the draping sheets are subject to repeated handling and disturbance with consequent likelihood of contaminating the areas which it is desired to maintain sterile.

It therefore is the general object of the present invention to provide an attachment for surgical armboards which will support the draping sheets out of contact with the patient's arm and with the intravenous injection apparatus being employed.

It is another object of the present invention to provide a surgical armboard attachment for supporting the draping sheets, which attachment is easily transferred from operative to inoperative positions, or which may readily be removed entirely from the armboard when this is desired even when the patient's arm is resting thereon.

Still another object of the present invention is the provision of an attachment for supporting draping sheets above a surgical armboard which will protect from contamination the areas to be maintained sterile while affording the anesthetist or other technician free access to the patient's arm at all times.

Still another object of the present invention

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is the provision of a surgical armboard attachment for supporting the draping sheets, which attachment is easy to clean, sanitary, universally applicable to any armboard on either side of the operating table, and which holds the sheet securely.

The manner in which the foregoing and other objects of this invention are accomplished will be apparent from the following specification and claims considered together with the drawings wherein:

Figure 1 is a plan view of the surgical armboard attachment of this invention in one of its embodiments;

Figure 2 is a view in side elevation of the surgical armboard attachment of Figure 1;

Figure 3 is a sectional view taken along the lines 3-3 of Figures 1 and 2;

Figure 4 is a fragmentary view in side elevation of the presently described surgical armboard attachment in another of its embodiments; and

Figure 5 is a sectional view in elevation taken along the lines 5-5 of Figure 4.

Generally stated, the presently described surgical armboard attachment comprises a sheet supporting bracket extending longitudinally of the armboard together with means for detachably securing the bracket to the armboard and for maintaining it when in operative position a spaced distance thereabove. Thus the bracket may be hingedly attached to a base or sleeve adapted to slip over the armboard, permitting the bracket to swing upwardly to an operative position in which it is maintained longitudinally of the armboard a spaced distance above it, and downwardly to an inoperative position below the armboard and out of the way. Stop means are associated with the hinge means for arresting the pivotal movement of the bracket when it is in the selected operative position. Clip means may be associated with the base or sleeve for engaging the bracket when it is swung downwardly to its inoperative position, thereby securing it pending a subsequent use.

In the embodiment of Figures 1 to 3, the presently described armboard attachment is illustrated in position on an armboard 7 which is pivotally attached through a pivot 8 to the operating table, a fragment of which is indicated at 9.

The bracket portion of the attachment for supporting the draping sheet preferably is designed to support the same over substantially the entire width of the armboard in order to cover the patient's arm more effectively. Thus it

may be formed in sections, there being the substantially parallel, horizontal sections 10 and 12 which may be connected through section 14 to form an elongated U-shaped bracket extending over substantially the entire area of the armboard. This normally horizontal section is supported a spaced distance above the armboard by means of an upright section comprising the standards or legs 16, 18 attached respectively to the horizontal members 10, 12. Preferably all of these various sections are formed from a single length of wire or other suitable material bent into the illustrated form.

Means also are provided for detachably securing the sheet-supporting bracket to the armboard. In the illustrated form, such means comprise a base member in the form of a sleeve 20 which may be continuous on its bottom surface but which is discontinuous on its top surface to leave exposed the major portion of the armboard surface. This makes possible slipping the sleeve on and off the armboard even when a patient's arm is resting thereon, a handle 22 being provided on the sleeve to facilitate this purpose.

The sheet supporting bracket preferably is hingedly attached to the base through the hinge 24 which may comprise, for example, a collar affixed to the under side of the sleeve 20 and adapted to receive the free ends of standards 16, 18, these being bent toward each other substantially normal to the body of the standards.

Thus the bracket may be swung about hinge 24 upwardly to an upright, operative position and downwardly to an inoperative position. It may be maintained in its upright position a spaced distance above the armboard 7 by means of one or more stop members 26, 28 adapted to engage the standards when the bracket is in the desired position. Such stop members may be formed as projecting tabs 26, 28 formed integrally from the substance of the sleeve.

The bracket may be maintained in its lowered or inoperative position, i. e. its dotted line position in Figure 2, by clip means associated with the sleeve and adapted to engage the bracket. Hence there may be provided one or more clips 30 affixed to the edge or under side of the sleeve and stationed in such a position as to engage the bracket when it is swung downwardly.

An alternate means for detachably securing the bracket to the armboard is illustrated in Figures 4 and 5. In this embodiment, the bracket portion may correspond in design to that of the previously described embodiment and thus may include the standards 32, 34 which support the horizontal section in the manner described above. The standards may be hingedly attached to the armboard 36 by means of the hinge 38 affixed to a sleeve or base member 40. The sleeve 46 may be somewhat wider than the armboard and has in a side thereof one or more thumb-screws 42, 44 which penetrate the side of the sleeve and engage an edge of the armboard, exerting clamping pressure thereon.

Sleeve 40 may also be provided with a stop 46 and clip 48. Stop 46 serves the function similar to that of stops 26, 28 in the previously described embodiment in that it maintains the bracket arm a spaced distance above the armboard when in operative position. Clip 48 serves a purpose similar to that of clip 30 in the previously described embodiment in that it engages the bracket arm when the latter is swung down

to inoperative position and maintains it in such position until it is desired to use it again.

Thus, when a patient is placed on the operating table with an arm stretched outwardly on the armboard, the draping sheets may be arranged in the usual manner and also may be extended to rest upon the bracket arm of the presently described attachment, being held there preferably by means of suitable clips. The anesthetist or anaesthesiologist stationed adjacent the head of the patient then may start the intravenous fluids or intravenous anesthesia as desired. During this procedure, the arm area is shielded by the drapes and, at the same time, the area where the surgeon is operating is protected from contamination. This desirable situation is maintained during the entire period of the operation, the arm remaining accessible and visible to the anesthetist all the while without the necessity of disturbing or rearranging the sheets. Furthermore, when the operation has been completed, the bracket may be swung downwardly to an inoperative position on the armboard, or, if desired, the entire assembly may be removed therefrom, without disturbing the patient's arm.

It is to be understood that the form of my invention, herewith shown and described, is to be taken as a preferred example of the same, and that various changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of my invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A surgical armboard attachment for supporting draping sheets out of contact with a patient's arm placed on the armboard comprising a sheet-supporting bracket extending longitudinally of the armboard and comprising an elongated, horizontal portion extending longitudinally of the armboard and a substantially vertical standard portion for maintaining the longitudinal section a spaced distance above the armboard, a sleeve adapted to slip over the end of the armboard and having the central portion of its upper surface open to permit the patient's arm to rest directly on the armboard, and means for attaching the standard portion of the bracket to the sleeve.

2. A surgical armboard attachment for supporting draping sheets out of contact with a patient's arm placed on the armboard comprising a sheet-supporting bracket formed in an elongated U-shaped horizontal section and a pair of vertical standards, one attached to each of the ends of the horizontal portion, a sleeve adapted to be slipped over the armboard, hinge means for hingedly attaching the vertical standard portions of the bracket to the sleeve, and stop means associated with the hinge means for maintaining the bracket in operative position above the armboard.

3. The surgical armboard attachment of claim 2 wherein the stop means comprise a pair of tabs affixed to the sleeve on opposite sides thereof and adapted to engage the standard portion of the bracket when the latter is in upright position.

4. A surgical armboard attachment for supporting draping sheets out of contact with a patient's arm placed on the armboard, comprising a sheet-supporting bracket formed in an elongated U-shaped horizontal section and a pair of vertical standards, one attached to each of the ends of the horizontal portion, a sleeve adapted to be slipped over the armboard, hinge

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means for hingedly attaching the vertical standard portions of the bracket to the sleeve, stop means associated with the hinge means for maintaining the bracket in operative position above the armboard, and clip means on the sleeve for engaging the bracket when swung downwardly to the inoperative position.

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