

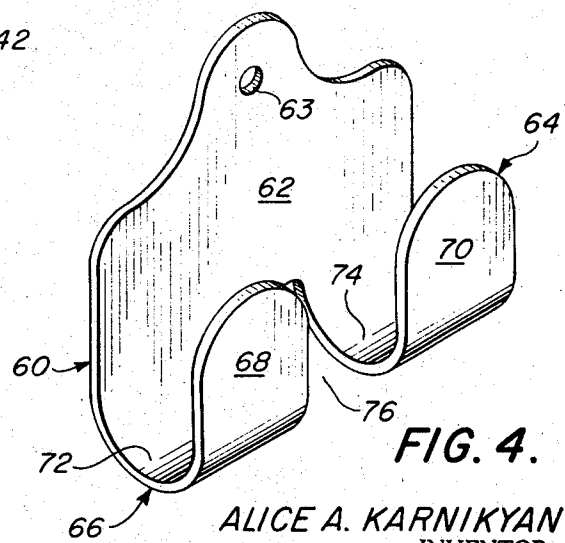
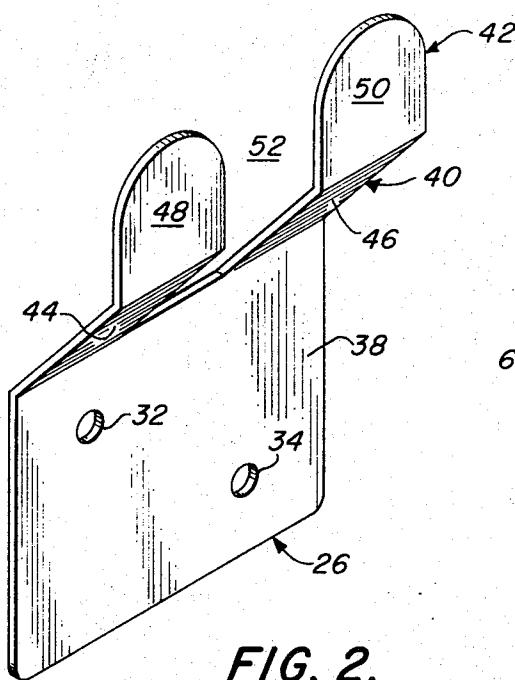
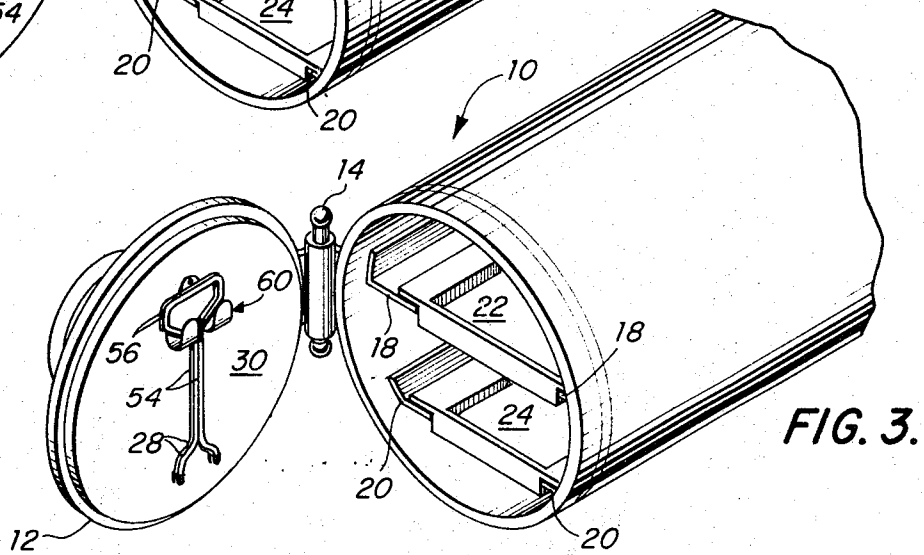
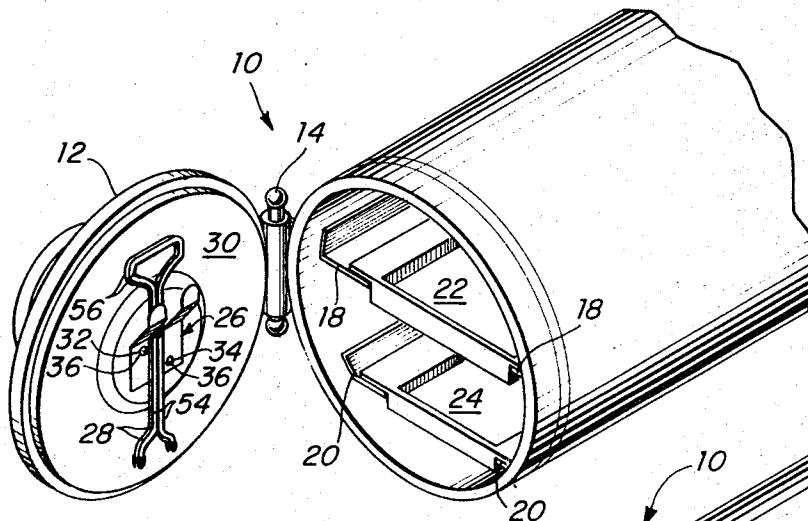
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A. A. KARNIKYAN

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STERILIZED TRAY HOLDER RACK

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ALICE A. KARNIKYAN
INVENTOR.

BY *Joseph D. Sandiorio*

ATTORNEY.

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STERILIZED TRAY HOLDER RACK

Alice A. Karnikyan, 138 Kingston Road,
Waltham, Mass. 02154

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8 Claims

ABSTRACT OF THE DISCLOSURE

A sterilizer tray holder rack for mounting on an interior surface of a sterilizing chamber for carrying one or more tray holders for sterilization with the tray in a position which is easily accessible when the chamber is opened.

BACKGROUND OF INVENTION

This invention relates to sterilizer tray holder racks for supporting tray holders in a sterilizing chamber.

Trays of operating room instruments are sterilized in an autoclave or other type of sterilizing chamber and are removed from the autoclave after sterilization by a pair of tongs or holders the lower ends of which engage the tray. Because the lower ends of the tongs must contact the sterile tray, those lower ends must be sterile also. The extreme upper ends or hand grips need not be sterile.

Usually these tongs are placed in the autoclave for sterilization with the tray of instruments. However, due to the large mittens generally used by the sterilizer operator or nurse and the confined space within the autoclave, the tongs or instruments are often contaminated during removal and must be re-sterilized. Independent sterilization of the tongs in devices other than the autoclave containing the tray has been attempted but very often the tongs are forgotten and when a sterile tray is ready, there are no sterile tongs available and a lengthy delay ensues while tongs are sterilized.

SUMMARY OF INVENTION

It is therefore a primary object of this invention to provide a rack for supporting a sterilizer tray holder or holders in an easily accessible position on the interior of a sterilization chamber.

It is a further object of this invention to provide such a rack by means of which the tray holder or holders are sterilized in the same chamber with the tray at a position apart from the tray and easily accessible after sterilization before the tray is removed.

The invention may be accomplished by a sterilizer apparatus including a sterilizing chamber having sterilizing tray support means and a closure member for sealing the chamber during sterilization. The closure member is movable to provide access to the interior of the chamber and the chamber has a portion of its interior surface spaced from the area of the tray support and accessible to an operator when the closure member is opened. A tray holder rack for carrying a tray holder device to be sterilized with the tray has a first section for mounting on the portion of the interior surface remote from the area of the tray support means. Two additional sections are combined with the first section to form a cradle for supporting tray holders.

DISCLOSURE OF PREFERRED EMBODIMENTS

Other objects, features and advantages will occur from the following description of preferred embodiments and the accompanying drawings, in which:

FIG. 1 is an axonometric view of a portion of an autoclave with its door open to show the tray holder rack of this invention;

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FIG. 2 is an enlarged axonometric view of the rack of FIG. 1;

FIG. 3 is a view similar to FIG. 1 showing an alternative form of the tray holder rack;

FIG. 4 is an enlarged axonometric view of the rack of FIG. 3.

There is shown in FIG. 1 a portion of a sterilization chamber, autoclave 10 with the door 12, swingable on hinge 14 in an open position. Within autoclave 10 are sets of runners 18 and 20 for supporting sterilizing trays 22, 24 which will contain instruments to be sterilized.

A rack 26 for supporting a pair of tray holders or tongs 28, with which the trays 22, 24 must be handled after sterilization, is mounted on a portion of the interior surface of the autoclave which is easily accessible to the operator or nurse who must remove the trays. Preferably, in view of the limited space in the autoclave when the trays are in place, the rack is mounted on the inner surface 30 of door 12.

Rack 26 may have mounting holes 32, 34 formed in it so that it may be secured to the door 12 with screws or bolts 36 already located in the door 12 or supplementary fasteners. It may also be secured to the surface 30 by an adhesive agent.

Rack 26 is structured to permit one or more sets of tongs 28 to be hung in it. The mounting plate 38, FIG. 2, is shaped to fit on surface 30 or any other interior surface to which it is mounted and joins with a connector portion 40 at its upper end. Portion 40 is transverse to plate 38; in FIG. 2 an inclination of approximately 45° is indicated. Joined at the outer end of portion 40 is an upturned portion 42 which is generally parallel to plate 38 and extends in the opposite direction to plate 38 from portion 40. Preferably, portions 40 and 42 each contain two separate members 44, 46 and 48, 50, respectively, which form a slot 52 through both portions 40, 42 to receive the stems 54 of the tongs 28. With the type of tongs such as shown in FIG. 1 which have open handles 56, the slot 52 may appear superfluous because portions 40, 42 may be sized to fit through the loop of the handles 56 of the tongs. However, when the operator using large heat protective mittens attempts to remove the tongs from such an arrangement, there is more difficulty than when the tongs 28 are supported beneath the handle 56 portion and the loop of the handle is left free. This slot arrangement therefore is desirable because if an operator were unable to grasp the handle 56 and in haste inadvertently grasped the stem 54 of the tongs the tongs may become contaminated.

A second form of the invention is shown in FIG. 3 where like numbers refer to like parts. Rack 60 is secured to door 12 by means of an adhesive or bolt and has mounting plate 62 with a bolt hole 73 and upturned portion 64 extending in the same direction from transverse connecting portion 66, FIG. 4. Each of portions 64 and 66 may be formed in two parts 68, 70 and 72, 74 to form a slot 76 similar the slot in rack 26.

Other embodiments will occur to those skilled in the art and are within the following claims:

What is claimed is:

1. In a sterilizer apparatus including a sterilizing chamber having sterilizing tray support means and a closure member for sealing said chamber during sterilization and movable to provide access to the interior of said chamber before and after sterilization, said chamber having a portion of its interior surface spaced from the area of said tray support means accessible to an operator when said closure member is opened, a tray holder rack for carrying a tray holder device to be sterilized with the tray comprising a first section for mounting on said portion of an interior surface, a second section extending transversely away from said first section and a third section ex-

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tending transversely away from said second section to form a cradle for said tray holder device.

2. The apparatus of claim 1 in which said portion of said interior surface is on the inside surface of said closure member.

3. The apparatus of claim 1 in which said first section includes mounting means for securing said rack to said portion of said interior surface.

4. The apparatus of claim 1 in which said first and third sections are substantially vertical and said second section is substantially horizontal.

5. The apparatus of claim 1 in which said first and third sections extend in the same direction from said second section.

6. The apparatus of claim 1 in which said first and third sections extend in opposing directions from said second sections.

7. The apparatus of claim 1 in which said third section includes first and second segments separated from each other to form a slot therebetween extending through said third section from its edge furthest removed from said second section to said second section.

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8. The apparatus of claim 1 in which said second section includes third and fourth segments separated from each other to form a slot therebetween extending through said second section from said third section, said first and second segments and slot therebetween being aligned with said third and fourth segments and slot therebetween respectively to form a continuous slot.

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DENNIS L. TAYLOR, Primary Examiner

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