

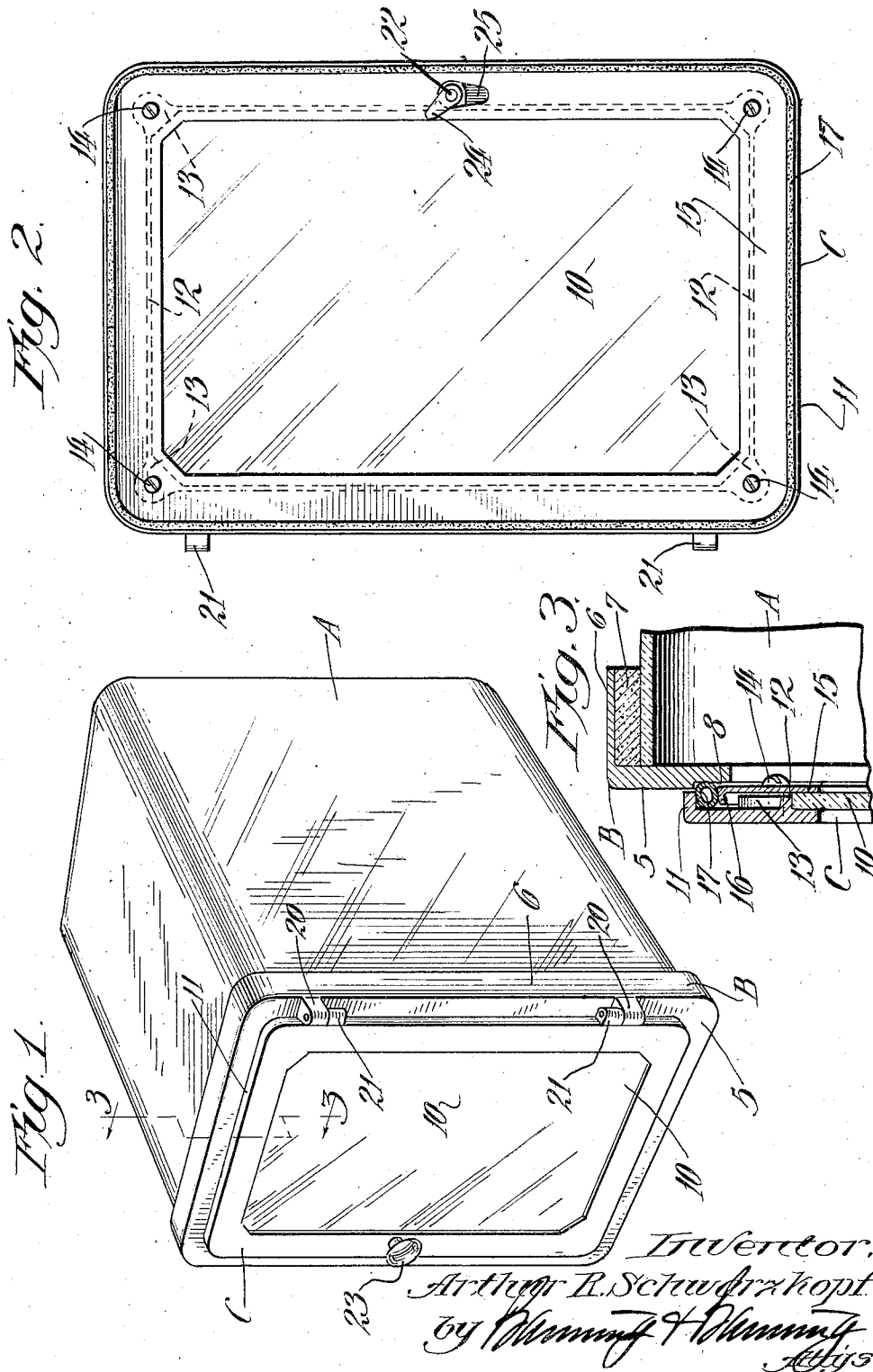
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STERILIZING CABINET

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UNITED STATES PATENT OFFICE

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STERILIZING CABINET

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This invention relates to a cabinet in which tools and small articles may be sterilized for sanitary purposes. More particularly it is concerned with two frames constituting the door for such a cabinet and the mounting for the door, the object being to provide a construction which is advantageous on account of its simplicity, sturdiness, economy, and perfect closure. A suggestive embodiment of my invention appears in the accompanying drawing wherein—

Figure 1 is a perspective view of the cabinet in its entirety;

Fig. 2 is an elevation of the inner face of the cabinet door; and

Fig. 3 is an enlarged detail in section on line 3—3 of Fig. 1.

The cabinet A shown may be formed of glass, one-piece, in the general shape of a box having one open side. Applied to the edge, which defines this open side of the cabinet, is a rectangular frame B consisting of a front face 5 from which are rearwardly extended flanges 6 lapping the cabinet exterior on each of its adjacent sides. The space between the cabinet and these flanges is sealed with an appropriate cement or packing 7. Extending around the front face of the frame adjacent its inner edges is a seat 8 in the form of a recess, the purpose of which will presently appear.

The cabinet door may also comprise a rectangular frame C in which is mounted a panel 10, preferably of glass. The door frame is provided along its outer margins with flanges 11 which extend rearwardly for a slight distance, and also with ribs 12 which project rearwardly for a distance somewhat less than the flanges 11 from which the ribs are appreciably spaced. These ribs, which extend around the door frame and slightly inset from its inner edges, afford protection and support to the glass panel whose edges lie proximate thereto. At the door corners the ribs join with gussets 13, in each of which is a threaded socket for the receipt of a screw 14 whose head rests against a thin plate 15 in the form of a rectangle. The inner edge of this plate about coincides with the corresponding edge of the door frame so as to co-operate therewith in

securing the glass panel in place. A flange 16 is turned forwardly from the outer edge of the plate in spaced relation to the door frame flange 11. Between the two flanges 11 and 16 is a slot wherein may be accommodated a sealing element, which, by preference, consists of a rubber tubing 17 of a size which requires transverse squeezing or distortion when fitted into place. One of the two flanges, desirably the plate flange 16, may be slanted relative to the other so that the entrance to the slot for the sealing element is slightly constricted, and by so relating the parts the sealing element will tend better to remain in place with a portion of its surface protruded exteriorly of the slot for engagement with the seat 8 on the frame B which is applied to the cabinet.

The door is mounted to swing upon hinge joints of simple character, and for this purpose I suggest the use of two lugs 20 projecting from the cabinet frame A in line with a pair of lugs 21 which are laterally extended from the door frame. Suitable aligned pins establish a hinge connection between each pair of lugs so that the door may, as required, be swung to open or closed positions relative to the cabinet. Also a combined knob and latch is provided adjacent the free swinging edge of the door, the same comprising a pin 22 which is extended therethrough for connection at its outer end with a handle 23 and at its inner end with an arm 24, which, when turned, will lie against the rear side of the front face of the cabinet frame B whereon is a cam (not shown) to hold the door tightly closed. A slot 25 is formed in the plate 15 adjacent the arm and of such a size as to permit complete detachment of the plate from the door when the screws 14 are taken out.

The sterilizing cabinet of this invention is advantageous in several ways. In the first place, the sealing means, i. e., the resilient tubing, is supported upon the inner face of the door within a slot which is defined in part by a demountable plate which secures the glass panel in position. Should it be desired to replace this tubing, the plate can, if necessary, be taken off to facilitate this operation. In the next place, the screws which bear against

the demountable plate are located upon the inside of the door, the outer side of which may be devoid of exteriorly projecting parts other than the knob and hinge lugs. And finally, the cabinet frame is formed with a seat which cooperates with the tubing to produce a perfect seal when the door is closed whereby a sterilizing operation may take place.

I claim:

1. A sterilizing cabinet having an open side to which is applied a frame having a seat extending continuously adjacent its inside edges, a door consisting of a frame hinged to the cabinet frame, a panel in the door frame resting against the inner face thereof, a plate bearing against the panel edges upon the inner face thereof, screws having their heads bearing against the plate and entered within threaded sockets proceeding within the door frame from the inner face thereof, flanges extended oppositely from the outer edges of the door frame and the plate defining therebetween a slot extending continuously around the inner face of the door frame adjacent its outer edges and opposite the seat in the cabinet frame, and resilient sealing means secured within said slot and protruding slightly therefrom adapted to enter the seat when the door is closed whereby to provide a tight closure for the cabinet.

2. A sterilizing cabinet having an open side the surrounding edges of which are provided with a seat, and a door hinged to the cabinet to provide a closure for the open side thereof, the door comprising a frame in which is carried a panel, a plate secured to the inner door side and engaging the panel to secure the same in place, co-acting means on the door frame and plate providing a slot on the inner door side extending continuously adjacent the edges thereof, and a resilient sealing means confined in part within the slot and protruding therefrom to engage the seat when the door is swung to closed position.

3. A sterilizing cabinet having an open side the surrounding edges of which provide a seat, a door hinged to the cabinet to close the open side thereof, the door comprising a frame, a plate removably applied to the inner side of the door frame and co-acting therewith to provide a slot on the inner door side extending continuously adjacent the edges thereof, a resilient sealing means confined within the slot and protruding therefrom to engage the seat when the door is swung to closed position, and screw means entered within threaded sockets in the frame extending inwardly from the inner side of the door a distance less than the thickness thereof, the screw means engaging the plate to secure the same in place.

4. A sterilizing cabinet having an open side the surrounding edges of which provide a seat, a door hinged to the cabinet to close the

open side thereof, a plate secured to the inner side of the door and co-operating therewith to provide a slot extending continuously adjacent the edges thereof, a sealing means confined in part within the slot and protruding therefrom to engage the seat when the door is closed, means for securing the plate detachably to the door, a pin extended through the door and plate, a knob carried on the outer pin end and an arm on the other, the arm being adapted to engage with the cabinet when the door is closed to lock the door in such position, there being an opening through the plate adjacent the arm of a size permitting the arm to pass therethrough when the plate is removed from the door.

5. A sterilizing cabinet having an open side the surrounding edges of which provide a seat, a door hinged to the cabinet to close the open side thereof, a sealing means carried on the inner side of the door and extending continuously adjacent the edges thereof adapted to engage with the seat when the door is closed, a plate applied to the inner side of the door and engaging the sealing means to secure the same in place, and a latch means for the door comprising a knob on the outer side thereof, a pin in connection with the knob extended through the door and the plate, and an arm carried on the inner end of the pin adjacent the plate adapted to swing into engaging position with the cabinet when the door is closed, there being an opening in the plate adjacent the arm of such size as to permit the arm to pass therethrough when the plate is removed from the door.

In witness whereof, I have hereunto set my hand this 9th day of April, 1929.

ARTHUR R. SCHWARZKOPF.