Aug. 15, 1933. H. SMITH 1,922,504

CABINET CONSTRUCTION

Filed April 29, 1932

Fig. 1

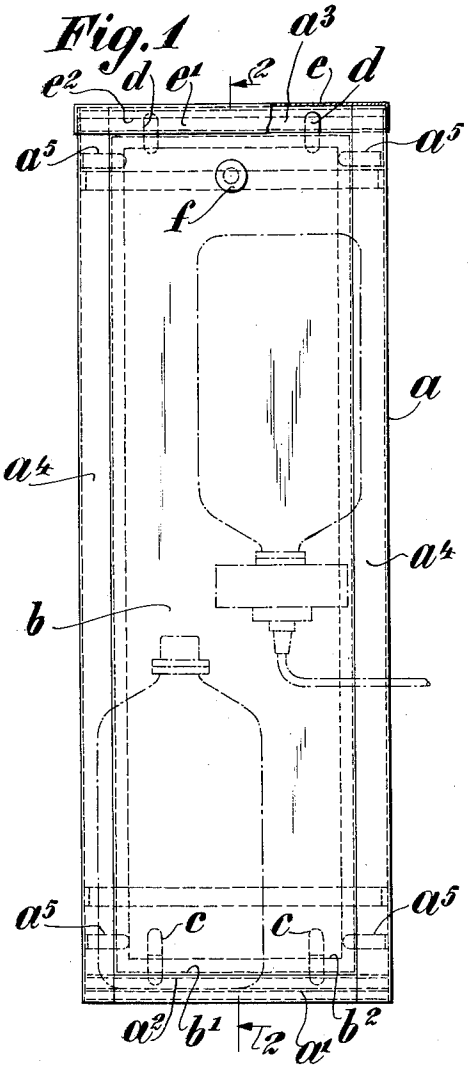


Fig. 2

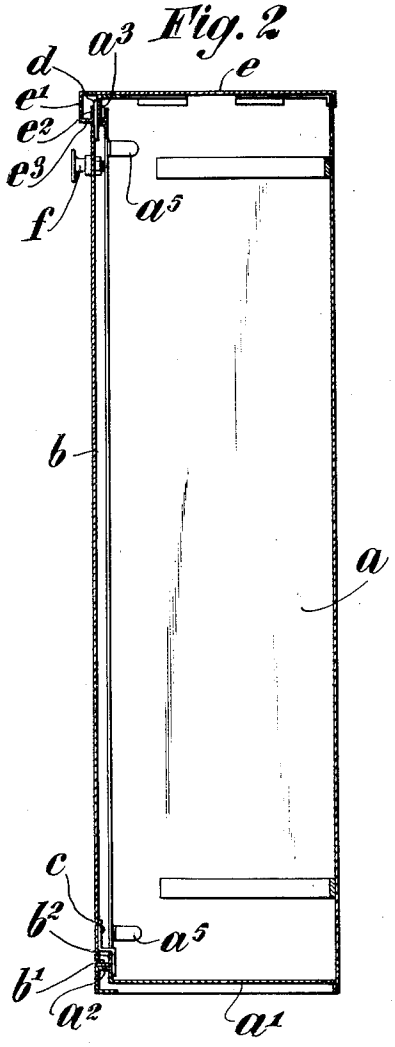
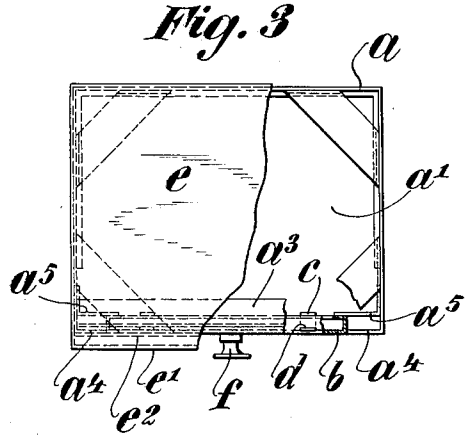


Fig. 3



INVENTOR
Herbert Smith,

BY
Redding, Greeley, O'Shea & Campbell
HIS ATTORNEYS

Patented Aug. 15, 1933

1,922,504

UNITED STATES PATENT OFFICE

1,922,504

CABINET CONSTRUCTION

Herbert Smith, Clinton, Mass., assignor to Edward C. Bowers and Charles L. Feldman, Receivers for Wickwire Spencer Steel Company, New York, N. Y., a Corporation of Delaware

Application April 29, 1932. Serial No. 608,155

1 Claim. (Cl. 312—189)

This invention relates to an improved metal cabinet of simple and inexpensive construction suitable for a variety of uses. By way of illustration, there has been shown in the drawing such a cabinet for use in housing a container for oil for an oil burning stove. In such a cabinet it is understood that cost is an important consideration but there also enters in the equally important consideration of providing a door for access to the interior which door preferably is to be effectively retained against surreptitious opening as by children. It is these requirements which have been difficult to reconcile heretofore in that considerable hardware is ordinarily required in connection with a door and suitable retaining elements therefor. In accordance with the present invention the cabinet itself may be formed of sheet metal by simple blanking and forming operations, strength being added where necessary by known practices. The front of the improved cabinet has an opening therein to receive a plain panel constituting a closure and the top of the cabinet is fitted with a removable top having depending flanges adapted to engage the panel and retain it in place. In such a construction the panel itself need have no special hardware or fittings of the type ordinarily used on a door but on the contrary has only retaining clips of the simplest form secured adjacent its top and bottom edges and a knob to facilitate convenient handling. Since the panel can be removed only by first removing the top it will be understood that the closure is quite effective as to children.

The construction will be described in greater detail in connection with the embodiment shown in the accompanying drawing, in which:

Figure 1 is a view in front elevation of a cabinet embodying the improvements, a part of the flange of the top being broken away in the interest of clearness.

Figure 2 is a view in vertical section through the cabinet shown in Figure 1 and taken on the plane indicated by the line 2—2 of Figure 1 and looking in the direction of the arrows.

Figure 3 is a view in plan of the cabinet shown in Figure 1, parts being broken away in the interest of clearness.

The invention is not limited to the details of construction of the body of the cabinet as such since the particular novel improvements may be incorporated in cabinets of various forms. Accordingly, it is sufficient to point out that the cabinet a, as illustrated, is formed of sheet metal having an open top and with an opening in the front. The bottom a' of the cabinet is preferably formed with a sill a^2 extending across the lower edge of the opening in the front wall. At the top of the cabinet there is provided a transversely extending plate a^3 which likewise defines the upper extremity of the opening in the front wall. At each side of the opening are vertically extending flanges a^4 which define the side edges of said opening. Angle pieces a^5 may be secured to the opposite side walls of the cabinet adjacent the top and bottom of the opening and their ends extend inwardly beyond the side flanges a^4 to constitute stops for the panel as will presently appear.

The improved closure is formed as a plain panel b, the lower edge of which may be formed as a channel having a rearwardly extending web b' and a vertically extending flange b^2. The rearwardly extending web b' may rest on the sill a^2 when the panel is in place. On the rear face of the panel adjacent the flange b^2 is secured a clip c which may be of Z form extending over and down along the face of the flange b^2. Two such clips may be carried by the panel. These clips engage the rear edge of the sill a^2 so as to prevent forward movement of the panel on the sill while the angle pieces a^5 on the cabinet engage the rear edge of the panel and prevent rearward movement thereof. The channel on the panel will be of such depth and the relation of the clips c and the angle pieces a^5 to the panel will be such, that the front face of the panel will be held flush with the forward flanges a^4 of the cabinet. At the upper edge of the panel are secured two straight clips d. These clips rest against the front face of the cross plate a^3 at the upper edge of the opening in the cabinet. The top of the cabinet is indicated at e. Its upper face is flat and is formed with a downwardly extending peripheral flange of sufficient depth to insure proper nesting of the top with the cabinet walls. This flange e' across the front edge of the top may extend downwardly for an appreciable distance and be reversely bent to form a channel, the rear flange e^2 of which will bear against the clips d and thereby clamp them in place against the cross plate a^3. The web e^3 of the channel is aligned with the lower edge of the cross plate a^3 and may rest on the top edge of the panel b when the latter is in place.

The panel is provided with suitable hand fittings for its convenient operation, a knob f being shown for this purpose.

From the description given it will be evident that the top e must be lifted from the cabinet when the panel b is to be inserted or removed. When the panel b is inserted the lower clips c are

engaged with the sill a^2 and the clips d pressed against the cross plate a^3. The top e is then put in place to engage the clips d and thereby retain the panel. In order to remove the panel for access to the interior of the cabinet the reverse operation is required. The consequence is that a child might not readily gain access. Further, the entire construction is extremely simple and inexpensive to manufacture. While the cabinet is suitable for oil containers for an oil stove it will lend itself to a variety of uses.

What I claim is:

A cabinet having an opening in its front wall, a sill across the bottom of the opening, a cross member at the top of the opening, vertically disposed flanges at opposite sides of the opening, stops behind said flanges and extending into the opening, a closure for the opening formed as a plain panel adapted to rest against said stops when in position, clips at the lower edge of the panel engaging the sill, clips at the upper edge of the panel engaging the cross plate, and a removable cover for the cabinet having a depending flange to engage said last named clips and retain the panel in place.

HERBERT SMITH.