J. XAVIER.

SHEET METAL DISPLAY CAN.

APPLICATION FILED NOV. 6, 1907.

922,832. **Patented May 25, 1909.**

Fig. 1

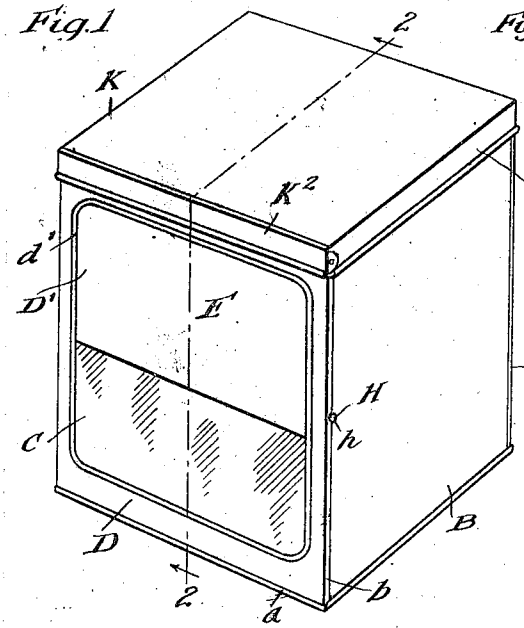


Fig. 2

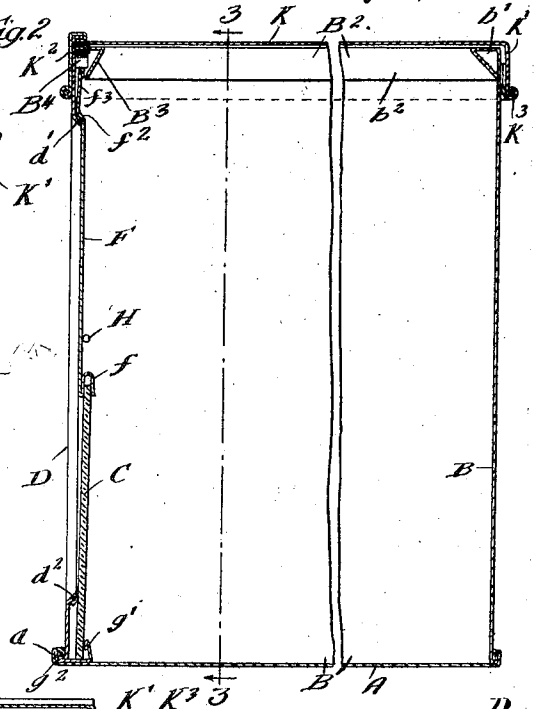


Fig. 3

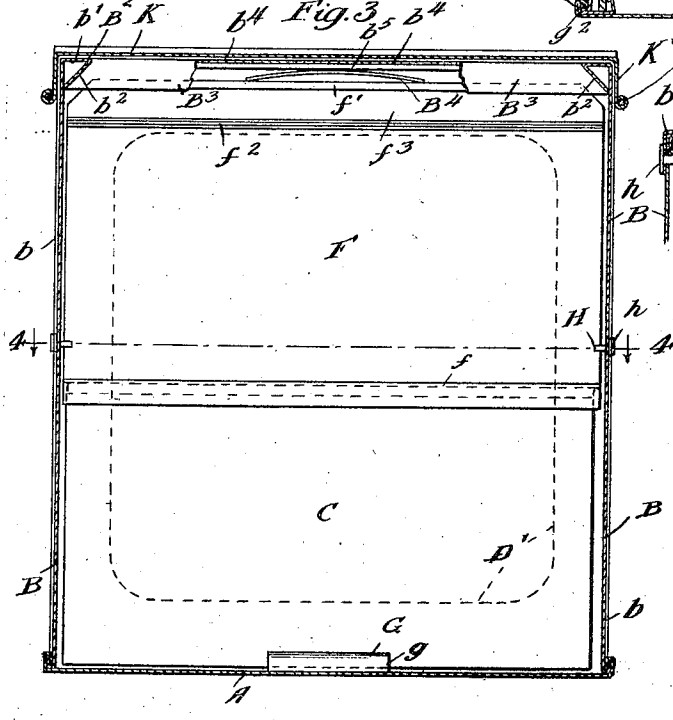


Fig. 4

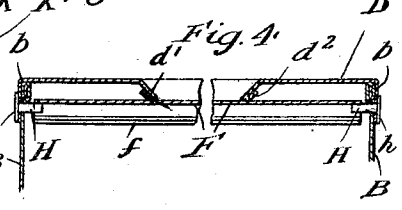


Fig. 5

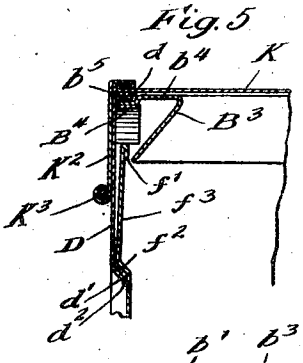
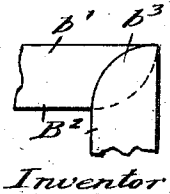


Fig 6



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UNITED STATES PATENT OFFICE.

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SHEET-METAL DISPLAY-CAN.

No. 922,832. Specification of Letters Patent. Patented May 25, 1909.

Application filed November 6, 1907. Serial No. 400,999.

To all whom it may concern:

Be it known that I, JOHN XAVIER, a citizen of the United States, residing in Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Sheet-Metal Display-Cans, of which the following is a specification.

My invention relates to sheet metal display cans.

The object of my invention is to provide a sheet metal display can of a strong, simple, efficient and durable construction having a display opening in its front plate, closed in part by a removable glass plate so that the contents of the can may be seen or displayed and in part by a removable sign plate, the lower edge of which interlocks with or engages the upper edge of the glass plate so that the two removable plates will coöperate with each other in holding each other in place, and in which the angular strengthening bar at the upper edge of the front plate may serve as a fixed holder for the upper edge of the sign plate, and which, while exceedingly strong and durable, may be manufactured at small cost.

My invention consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described, and by which this object or result is accomplished.

In the accompanying drawing forming a part of this specification, Figure 1 is a perspective view of a sheet metal display can embodying my invention. Fig. 2 is an enlarged vertical section on line 2—2 of Fig. 1. Fig. 3 is a vertical section on line 3—3 of Fig. 2, certain parts appearing in elevation being partly broken away. Fig. 4 is a horizontal section on line 4—4 of Fig. 3. Fig. 5 is an enlarged detail vertical section. Fig. 6 is a detail plan view showing one corner of the can body.

In the drawing, A represents the bottom plate of the can, B, B, B the upright side plates of the can body, D the brass front plate of the can body, C the removable glass plate and K the hinged cover.

The upright side plates B and front plate D are united together at the upright corners of the can by internally folded lock seams b and to the bottom plate A by externally folded lock seams a. The upright side plates B of the can body are furnished at their upper ends with integral hollow triangular strengthening bars B^2 formed by integral horizontal flanges b^1 and angle flanges b^2, the horizontal flanges overlapping each other at the corners, and soldered or otherwise secured together as indicated at b^3 in Fig. 6. And the upper end of the can body at the front adjacent to the front plate D is furnished with a similar hollow angular strengthening brace B^3, the horizontal flange or member b^4 of which is secured by a lock or folded seam b^5 to the flange d at the upper marginal edge of the front plate D.

The sheet brass front plate D of the can is provided with a combined display and sign plate opening D^1 therein, preferably surrounded by a marginal bevel or angle flange d^1 provided with a fold d^2 at its extreme edge to further stiffen and strengthen the front plate and give a smooth finish to the opening D^1 therein.

The removable glass plate C is held removably in place at its lower edge on the inside of the can so as to snugly close the lower portion of the combined display and sign plate opening D^1 in the front plate by means of a fixed guide or holder G of sheet metal, having an upwardly projecting lip g, furnished with a folded edge g^1 and having at its lower part a seaming flange g^2 which is interfolded with a lock seam a at the front lower corner of the can, and which seam unites the lower edge of the front plate D with the front edge of the bottom plate A.

The removable sheet metal sign plate F is preferably made of tin plate, suitably printed or decorated in colors with the name letters or other configuration of the desired sign, while the sheet is in the flat in the usual method of printing or decorating tin plate or other sheet metal. After being thus printed or decorated, the sheet metal sign plate is formed or shaped up with a reversely folded and grooved or channeled holding flange or guide f at its lower edge adapted to receive and fit over the upper edge of the glass plate C. At its upper edge, the sign plate is preferably furnished with a marginal fold or flange f^1, and it is also provided at its upper portion with an angle bend or flange f^2 corresponding to the upper angle flange or bend d^1 at the upper edge of the opening D^1 in the front plate D so that the upper part f^3 of the sign plate above the angle bend or flange f^2 may more snugly fit the upper part of the brass front plate D.

The upper edge of the removable sign plate F fits within the angular strengthening bar B^3 at the upper edge of the front plate D so that the strengthening bar B^3 thus serves as a fixed guide or holder for removably holding the sign plate F at its upper edge in place.

The hollow strengthening bar B^3 at the upper edge of the brass front plate D is furnished with a spring B^4, preferably a flat spring, and secured at its middle portion to the hollow strengthening bar B^3 by solder. The spring B^4 with which the hollow strengthening bar B^3 is provided, presses against the upper edge of the removable sign plate F and thus holds its lower grooved edge in proper engagement with the removable glass plate C; so that the sign plate itself serves as the means, by its interengagement with the upper edge of the glass plate, for holding the glass plate in place at its upper edge.

To hold the removable sign plate F in place at its lower part, the upright sides B B of the can body adjacent to the front plate D are furnished with inwardly projecting guide pins or rivets H, preferably having flat heads *h* fitting outside the can. These guide pins or rivets H are preferably secured in place by solder. This affords a very neat and cheap guide or holder for the lower part of the sign plate F.

To remove the glass plate C and sign plate F from the can, the sign plate is first slipped slightly upward, thus compressing the spring B^4 until the lower grooved edge of the sign plate is disengaged from the upper part of the glass plate. Then the glass plate is tilted inward and removed and then the sign plate F is slipped downward until its upper edge passes the guide pins or rivets H, when it may also be removed. To insert the removable plates C and F, the sign plate F is first inserted and the spring B^4 sufficiently compressed to permit the grooved lower edge of the sign plate to slip over the upper edge of the glass plate C.

When the glass plate and sign plate are in place, they coöperate together to hold or retain each other in position, the sign plate serving to prevent the glass plate from slipping upward or from tilting inward, and the glass plate serving to prevent the sign plate from slipping downward.

As in my invention the angular strengthening bar B^3 at the upper edge of the brass front plate serves as the guide or holder for the upper edge of the removable sign plate, as well as a strengthening bar for the can body at its upper front corner, and to stiffen and strengthen the upper edge of the front plate to which this angular strengthening bar is firmly and rigidly united by a folded seam, the construction of the can is much simplified and its cost of manufacture materially reduced.

The hinged cover K is or may be of any usual or customary construction. Its flange K^1 is preferably integral at three sides, but at the front of the can the flange is preferably of brass K^2. The cover preferably has a marginal stiffening wire K^3 at the lower edge of its depending flanges, this wire also serving at the back of the can as the pintle of the hinge.

I claim:—

1. In a sheet metal display can, the combination with a front plate having a single combined-display-and-sign-plate opening therein, of an angular strengthening bar seamed to the upper edge of said front plate and forming with said front plate a hollow channel closed at its top and open at its bottom to receive the upper edge of a removable sign plate, a spring inside said angular strengthening bar, a removable glass plate closing the lower part of said opening, and a removable sign plate closing the upper part of said opening, said sign plate fitting at its upper edge within said angular strengthening bar and bearing against the spring therein, and provided at its lower edge with a groove or channel to receive the upper edge of said glass plate, substantially as specified.

2. In a sheet metal display can, the combination with a front plate having a single combined-display-and-sign-plate opening therein, of an angular strengthening bar seamed to the upper edge of said front plate and forming with said front plate a hollow channel closed at its top and open at its bottom to receive the upper edge of a removable sign plate, a spring inside said angular strengthening bar, a removable glass plate closing the lower part of said opening, and a removable sign plate closing the upper part of said opening said sign plate fitting at its upper edge within said angular strengthening bar and bearing against the spring therein, and provided at its lower edge with a groove or channel to receive the upper edge of said glass plate, guides engaging the upright edges of said sign plate and a holder for the lower edge of said glass plate, substantially as specified.

3. In a display can, the combination with the front plate having a single opening therein, of a strengthening bar secured to the front plate at its upper edge and provided with a downwardly projecting flange, a spring within said strengthening bar, a removable glass plate and a removable sign plate said removable plates together closing said opening, said removable sign plate having a grooved flange at its lower edge to receive the upper edge of the glass plate, said angle bar being seamed at its front upper edge to the upper edge of said front plate, and forming a closed housing therewith to receive the upper edge of the sign plate, substantially as specified.

4. In a display can, the combination with the front plate, having a single opening there-

in, of a strengthening bar secured to the front plate at its upper edge and provided with a downwardly projecting flange and forming a housing closed at its top and open at the bottom to receive the upper edge of a removable sign plate, a spring within said strengthening bar, a removable glass plate and a removable sign plate said removable plates together closing said opening, said removable sign plate having a grooved flange at its lower edge to receive the upper edge of the glass plate, the upper edge of the sign plate fitting within said strengthening bar at the upper edge of the front plate, substantially as specified.

5. In a display can, the combination with the front plate, having a single opening therein, of a strengthening bar secured to the front plate at its upper edge and provided with a downwardly projecting flange and forming a housing closed at its top and open at the bottom to receive the upper edge of a removable sign plate, a spring within said strengthening bar, a removable glass plate and a removable sign plate said removable plates together closing said opening, said removable sign plate having a grooved flange at its lower edge to receive the upper edge of the glass plate, the upper edge of the sign plate fitting within said strengthening bar at the upper edge of the front plate, and a holder for the lower edge of the glass plate, substantially as specified.

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