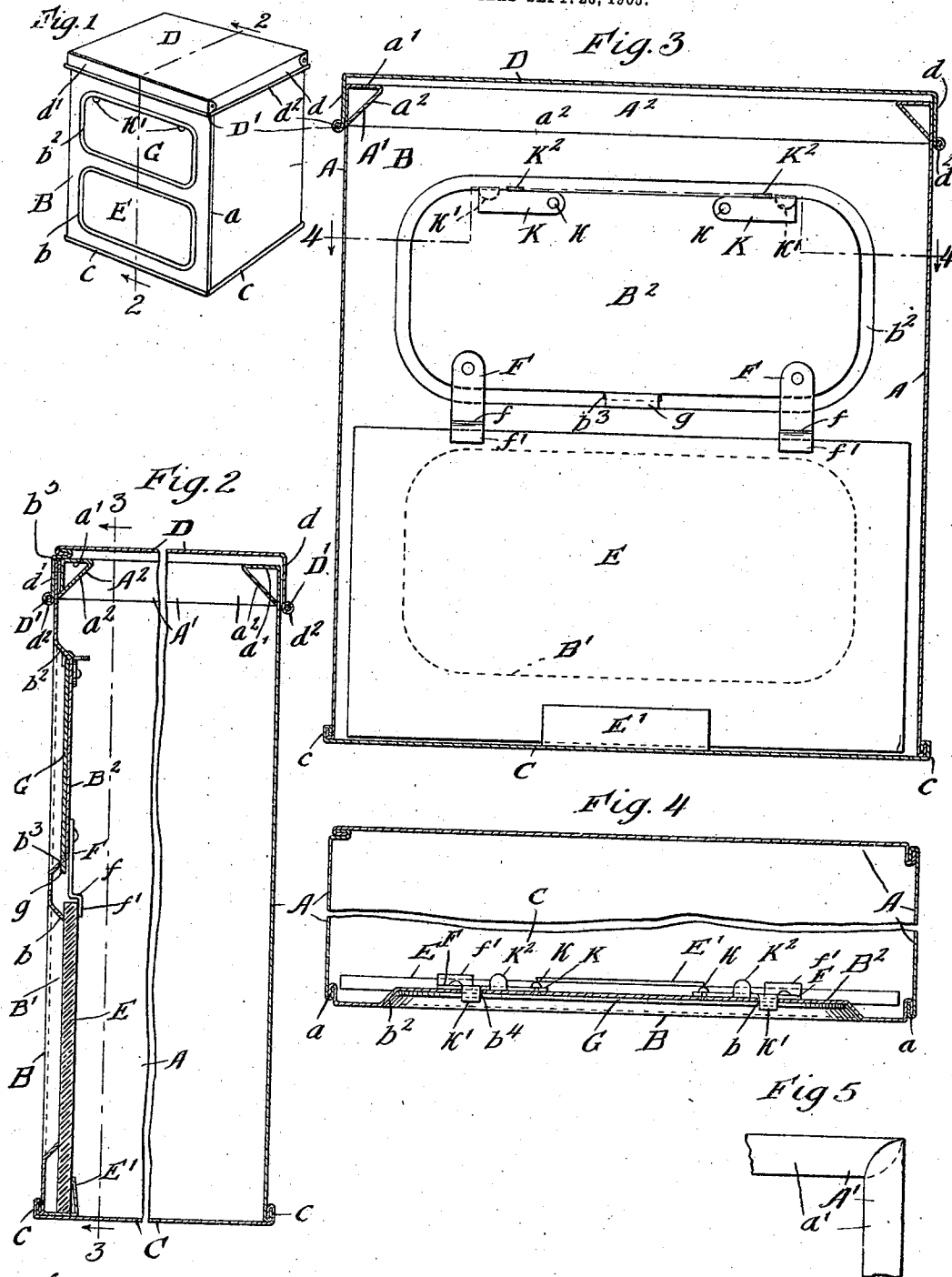


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F. RUDOLPHI.
SHEET METAL DISPLAY CAN OR BOX.

APPLICATION FILED SEPT. 23, 1905.



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UNITED STATES PATENT OFFICE.

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SHEET-METAL DISPLAY CAN OR BOX.

No. 847,441.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed September 23, 1905. Serial No. 279,806.

To all whom it may concern:

Be it known that I, FRANK RUDOLPHI, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Sheet-Metal Display Cans or Boxes, of which the following is a specification.

My invention relates to improvements in sheet-metal display cans or boxes for containing, shipping, storing, and displaying for sale crackers, bakery goods, and other like articles.

The sheet-metal display-cans to which my invention relates are large, square, or rectangular returnable cans, usually some ten or twelve inches in each dimension, having the bottom, three sides, and cover ordinarily made of tin plate and the front plate of sheet-brass or other burnishable metal, so that when the can is returned to the bakery, after its contents have been sold, to be refilled with fresh crackers, its front plate may be subjected to the action of a buffing-wheel and reburnished to give the can a new and bright appearance suitable for containing the fresh crackers or bakery goods with which it is to be refilled. For a good many years past these cracker display-cans have ordinarily had the letters of the sign or name of the bakery whose goods are put into them stamped up in raised letters on the sheet-brass front plate itself of the can in the advertising mat or space left therefor just above the display-opening in the front plate, which is closed by the glass or transparent plate of the display-can; but in the past two years or such matter, however, these display-cans have been largely made with an additional opening in the brass front plate and with a removable sheet-metal sign-plate, which fits inside the front plate and closes the upper or sign opening therein, and which inside fitting sign-plate is held removably in place by cleats or pocket-pieces soldered to the brass front plate on the inside thereof adjacent to the sign-opening therein, as shown, for example, in the Bernard H. Larkin Patents Nos. 764,296 and 764,297, of July 5, 1904. While this Larkin construction of display-can with inside fitting removable sign-plate possesses

many advantages over the old construction, where the letters of the sign were stamped upon the brass front plate in raised or embossed letters, (doing away as it does entirely with the obstruction offered by the raised letters to the buffing operation and to the lodgment of buffing-powder around the raised letters at the bases thereof,) it is nevertheless open to certain objections, such as the weakening of the brass front plate by reason of the additional opening therein, increased cost incident to numerous additional parts or pieces required in its manufacture, and it was also open to serious sanitary objection incident to the fact that the sheet-metal cleats or guide-pieces which form the pocket to secure the removable inside fitting sign-plate cannot be practically soldered on the inside of the brass front without great danger of producing verdigris or other poisonous compounds, due to the action of flux necessary for soldering the sheet-metal, tin guide, or pocket-pieces on the brass front plate of the can in the practical manufacture thereof, as it is well known that the ordinary fluxes used in can making produce verdigris when the soldering is done on brass, and however careful the manufacturer may be in his endeavors to subsequently clean off the verdigris or poisonous compounds from the inside of the brass front plate there is always danger that some may be left and come in contact with the crackers placed in the can.

The object of my invention is to produce a sheet-metal display-can for crackers or other bakery goods which may be cheaply manufactured and be of a simple, strong, and durable construction and be composed of few parts, and which shall have a movable sheet-metal sign-plate upon which the name or sign may be conveniently printed or lithographed in colors, and in which the sign-plate may be readily removed from the front plate when it is desired to buff or reburnish the same, and easily and quickly replaced without danger of injury, which will be snugly and securely held in place, in which the brass or burnishable metal front of the can will not be unduly weakened, in which the brass front plate will require no cleats or guides to be soldered thereto and thus pro-

duce verdigris or poisonous compounds on the inside of the front plate, and in which the can as a whole will present a neat and fine appearance, as required in display-cans.

5 My invention consists in the means I employ to practically accomplish this object or result—that is to say, it consists in a display-can having a brass or burnishable metal front plate furnished with the customary
10 display-opening in its lower portion and removable inside fitting glass plate for closing the same, and provided with a countersink or recessed portion above the display-opening, in combination with a removable sheet-
15 metal sign-plate having the sign printed or lithographed thereon in colors and fitting on the outside of the front plate in the countersink or recess formed therein to receive it, and provided with an integral holding device,
20 preferably a tongue adapted to fit in a slot formed in the countersink-wall or angle-flange surrounding the recessed portion of the front plate, the front plate itself being provided on the inside thereof with movable sign-plate-
25 holding devices, preferably latches pivotally mounted on the back of the recessed portion of the front plate and furnished with lips projecting through slots in the front plate and engaging the edge of the removable sign-plate
30 opposite the edge thereof which bears the integral holding device, to hold the sign-plate in place while enabling it to be readily removed when it is desired to burnish the front plate of the can. In my invention the external
35 removably fitting sign-plate thus has an integral holding device at one end engaging slots or holding devices on the front plate, and the front plate has on the inside thereof movable holding devices adapted to be projected through the front plate and engage the
40 opposite edge of the externally-fitting sign-plate. My invention also consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described.

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.
50 Fig. 3 is a section on line 3 3 of Fig. 2. Fig. 4 is a section on the broken line 4 4 of Fig. 3, and Fig. 5 is a detail top or plan view of one of the corners of the can-body.

55 In the drawing, A represents the three sheet-metal upright side plates, and B the sheet brass or burnishable metal front plate forming the body of the can, C the bottom plate and D the hinged cover. The bottom
60 plate C is secured by external folded seams *c* to the lower edges of the sides A and B. At the upright corners of the body the sheet-metal sides A and front side B are united by internal folded seams *a*. The upright side

plates A of the body have at their upper ends 65 horizontal right-angle flanges *a'*, preferably about one-half inch in width, and angle-flanges *a''*, the lower edges of which meet and are soldered to the vertical sides A, thus forming hollow triangular stiffening bars or
70 braces A' at the upper end of the body at three sides thereof, and at its remaining or front side a similar hollow triangular stiffening and strengthening bar A'', having a corresponding horizontal flange *a'* and angle-flange
75 *a''* is provided. At the corners of the body the meeting horizontal flanges *a'* and the meeting angle-flanges *a''* of the hollow strengthening bars or braces A' A'' overlap
80 each other and are securely soldered together, thus forming a continuous hollow strengthening bar or brace all around the upper end of the body.

The sheet-brass front plate B of the body has a display-opening B' in its lower portion 85 surrounded by an inturned angle-flange *b* and closed by a removable glass plate E, held in place at its lower edge by a fixed guide E' and at its upper portion by plate-holders F, preferably of sheet metal, and pivotally connected to the recessed portion B² of the front
90 plate B and provided with integral folds or shoulders *f* to engage the upper edge of the glass plate E, and lips *f'* to engage the inside face of the glass plate E at the upper edge
95 thereof. The sheet-brass front plate B has at its upper portion a countersunk or recess B², surrounded by a marginal wall or angle-flange *b''*, and forming a recess or seat to receive the exteriorly-fitting sheet-metal sign-
100 plate G, which is provided with an integral tenon *g* at its lower edge and projects through a slot *b''* at the base of the angle-flange *b''* of the countersunk or sign-receiving recess B² in the brass front B. The sheet-metal sign-
105 plate G fits snugly in its recess B² at both its ends, edges, and upper and lower edges and is held removably in place by sign-plate latches or holders K, which are pivotally
110 mounted on the inside of the recessed portion B² of the front plate B, being pivotally connected thereto by rivets *k*. The sign-plate holders or latches K are preferably of sheet metal and are furnished each with an integral bent lip or hook *k'*, which projects through a
115 slot *b''* at the base of the angle-flange or wall *b''*, so as to engage and fit over the extreme upper edge of the sign-plate. Each of the sign-plate holders or latches K is further provided with a right-angle lip or thumb-piece
120 K² for turning the latch on its pivot to release the sign-plate. The brass front plate B has a fold *b''* at its upper edge to give a smooth finish thereto and it fits snugly
125 against and is soldered directly to and supported by the hollow triangular strengthening-bar A'' at the front side of the can. The thin brass-front plate is thus given a strong

support at its upper end by the bar A² and a much stronger and better construction than those heretofore used, where a slot or passage-way is left between the bar A² and the front plate for the removal and insertion of an inside fitting sign-plate.

The hinged cover D has right angle integral flanges *d* at three of its edges and a front flange *d'* of a separate piece and preferably of brass to correspond to the brass front B. The lower edges of the cover-flanges *d* *d'* have curves or coils *d²*, embracing a wire D', which completely surrounds the cover and forms also the pivot of its hinge.

In my invention the removable externally fitting sign-plate thus has an integral holding device at one end engaging slots or holding devices on the front plate, and the front plate has on the inside thereof movable holding devices adapted to be projected through the front plate and engage the opposite edge of the externally-fitting sign-plate.

I claim—

1. In a display-can a sheet-metal front plate, and provided on the outside thereof with a countersink or recess to receive a sheet-metal sign-plate, and a removable externally-fitting sheet-metal sign-plate fitting in said recess or countersink of the front plate, and provided at one edge thereof with an integral holding device engaging the front plate, said front plate being provided on its inside with a movable holding device adapted to project through the front plate and engage the opposite edge of the sign-plate from that bearing the integral holding device, substantially as specified.

2. A display-can having a front plate furnished on its outside with a countersink to receive a sign-plate, the angle-flange or wall of the countersink having slots therethrough to receive sign-plate-holding devices, a removable sheet-metal sign-plate provided with a fixed holding device thereon, and a movable holding device inserted on the inside of the front plate and provided with a lip projecting through a slot in the front plate and engaging the sign-plate, substantially as specified.

3. In a display-can, the combination with a front plate having a recess or countersink thereon surrounded by an angle-flange or wall furnished with slots through the same, of a removable sign-plate having an integral tongue projecting through one of said slots, and a movable holding device or latch pivoted on the inside of the recessed portion of the front plate and projecting through another of said slots to engage the sign-plate, substantially as specified.

4. In a glass front display-can, the combination with the sheet-metal front plate provided with a countersink or recess above its

glass plate opening, of a removable external sheet-metal sign-plate fitting in said recess or countersink of the front plate, said sign-plate having a fixed holding device at one edge thereof, and said front plate having on the inside thereof a movable holding device engaging the opposite edge of the outside fitting sign-plate, substantially as specified.

5. In a display-can, the combination with the sheet-metal front plate having a display-opening and an external sign-plate seat surrounded by a marginal wall provided with an opening therethrough, of a removable external sign-plate fitting in said external seat of the front plate, and a movable holder mounted on the inside of the front plate, provided with a lip projecting through said opening in the marginal wall of the sign-plate seat and engaging and overlapping the edge of the sign-plate for holding it removably in place, substantially as specified.

6. In a display-can, the combination with the sheet-metal front plate having a display-opening and an external sign-plate seat surrounded by a marginal wall provided with an opening therethrough, of a removable external sign-plate fitting in said external seat of the front plate, and a movable holder mounted on the inside of the front plate, provided with a lip projecting through said opening in the marginal wall of the sign-plate seat and engaging and overlapping the edge of the sign-plate for holding it removably in place, said holder being pivotally connected to the front plate only, substantially as specified.

7. In a sheet-metal display-can, the combination with a front plate having a display-opening therein, and a countersink surrounded by a marginal wall to receive an externally-fitting sign-plate, of a removable external sign-plate fitting in said countersink of the front plate, and a movable holder for the sign-plate, having a member projecting through an opening in the marginal wall of the countersink of the front plate, and engaging the edge of the sign-plate, substantially as specified.

8. In a display-can, the combination with a front plate having a display-opening therein, and a countersink surrounded by a marginal wall to receive an external sign-plate, said marginal wall being provided with a slot through the same, of a removable external sign-plate fitting in said countersink on the front plate, and a movable latch or holder pivotally connected to the front plate on the inside thereof and provided with a lip or member which is projected through the slot in the marginal wall of said countersink to overlap and engage the edge of the sign-plate, substantially as specified.

9. In a display-can, the combination with

a front plate having a recess to receive an external sign-plate, of a removable externally-fitting sign-plate, a movable latch or holder for removably securing the sign-plate on the
5 front plate, said movable latch or holder being pivotally mounted on the inside of the recessed portion of the front plate and provided with a lip projecting through a slot in the front plate to engage the sign-plate, substantially as specified.

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Witnesses:

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