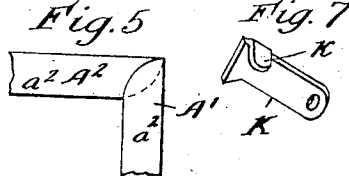
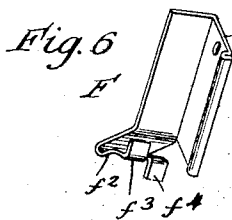
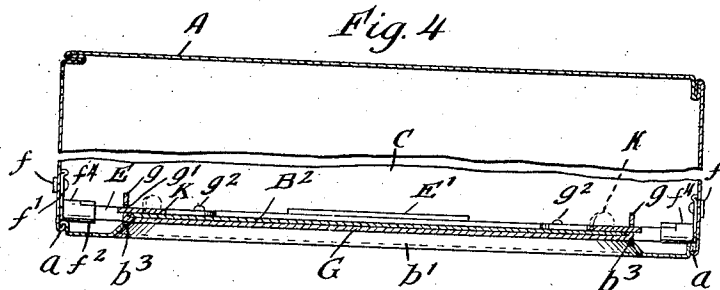
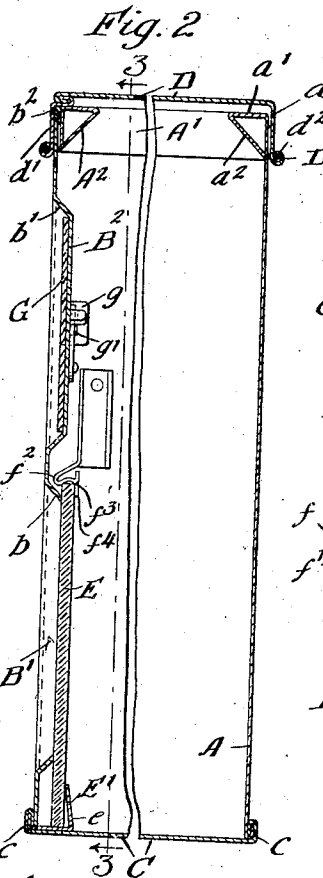
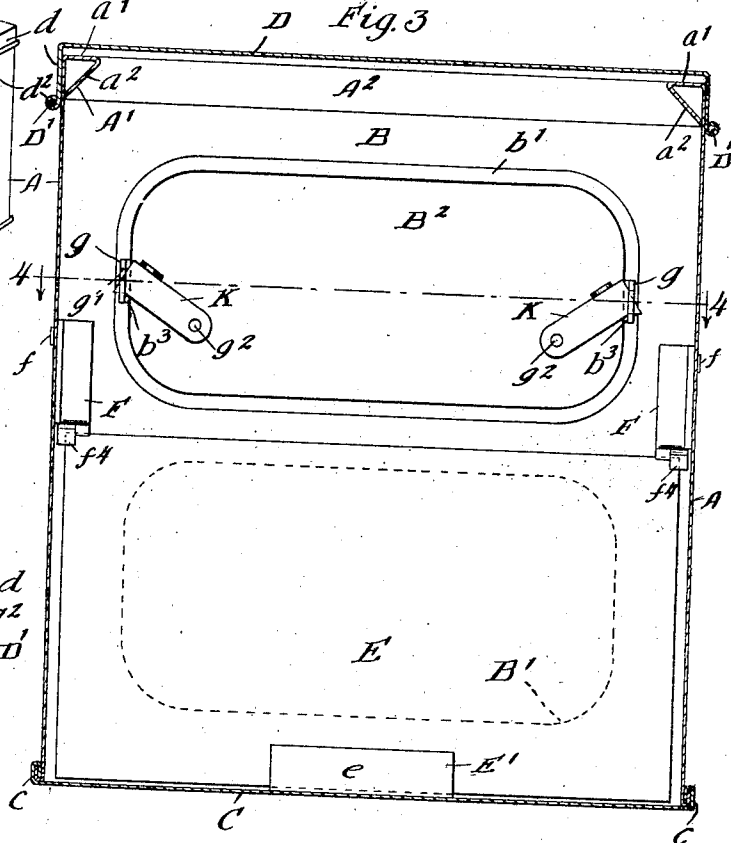
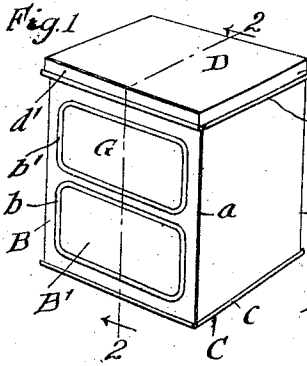


No. 846,351.

PATENTED MAR. 5, 1907.

F. RUDOLPHI & E. BRAUNINGER.
SHEET METAL DISPLAY CAN OR BOX.

APPLICATION FILED NOV. 13, 1905.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRANK RUDOLPHI AND EMIL BRAUNINGER, OF CHICAGO, ILLINOIS, ASSIGNORS TO AMERICAN CAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

SHEET-METAL DISPLAY CAN OR BOX.

No. 846,351.

Specification of Letters Patent.

Patented March 5, 1907.

Application filed November 13, 1905. Serial No. 287,159.

To all whom it may concern:

Be it known that we, FRANK RUDOLPHI and EMIL BRAUNINGER, citizens 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.

This 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-can to which this invention relates are large rectangular returnable cans, usually some ten or twelve inches in each dimension and having the bottom, three upright 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 re-burnished to give the can a new and bright appearance suitable for containing the fresh goods with which it is to be refilled. Heretofore these cracker-display cans have ordinarily had the letters of the sign or name stamped up in raised or embossed 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 removable inside-fitting glass plate. More recently, however, the construction of these display-cans has been improved by providing the brass front plate of the can with a second opening above the display-opening and combining there-
with a removable sheet-metal sign-plate, which is removably mounted on the inside of the front plate by sheet-metal cleats or pocket-pieces soldered to the brass front plate on the inside adjacent to the sign-opening therein, as shown, for example, in the Larkin patents, Nos. 764,296 and 764,297 of July 5, 1904. While this Larkin construction of display-can with the removable inside-fitting sheet-metal 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 the numerous additional parts or pieces required in its manufacture, and to the difficulty of soldering such additional parts to the brass front plate, and it was also open to a more 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 in place cannot be practically soldered on the inside of the brass front plate without great danger of producing verdigris or poisonous compounds, due to the action of the flux necessary for soldering the tin-plate 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 our invention is to produce a sheet-metal display-can having a removable inside-fitting glass plate and all the advantages of a removable sheet-metal sign-plate, which will be of a simple, strong, and durable construction, composed of few parts and capable of being cheaply manufactured and in which both the glass plate and the sign-plate may be removably mounted one on the inside and the other on the outside of the front plate without the necessity of soldering onto the brass front plate of the can any holding devices for either the removable glass plate or the removable sign-plate. Our invention consists in the means we employ to practically accomplish this object or result—that is to say, it 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 per-

spective view of a display-can embodying our invention. Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a section on line 3 3 of Fig. 2. Fig. 4 is a horizontal section on line 4 4 of Fig. 3. Fig. 5 is a detail top or plan view of one corner of the can-body. Fig. 6 is a detail perspective view of the glass-plate holder, and Fig. 7 is a detail perspective view of the removable sign-plate keeper.

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 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 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 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 A², having a corresponding horizontal flange *a'* and angle-flange *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' A² overlap 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 surrounded by an intumed angle-flange *b* and a countersunk portion B², surrounded by a marginal wall or angle-flange *b'* and forming an external seat or recess to receive the externally-fitting removable sheet-metal sign-plate G. The brass front plate B has a fold *b''* at its upper edge to give a smooth finish thereto, and it fits snugly against and is soldered directly to and supported by the hollow triangular strengthening-bar A² 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 produced than those heretofore used where a slot or passage-way is left between the bar A² and the front plate B for the removal and insertion of an inside-fitting sign-plate. The hinged cover D has a right-angle integral flange *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 rolls or coils *d''*, embracing a wire D', which completely surrounds the cover and forms

also the pivot of its hinge. E is the removable inside-fitting glass plate held in place at its lower end against the angle-flange *b*, surrounding the opening B' in the brass front plate B, by a fixed guide E', preferably of sheet metal, and secured immovably in place by an angle-flange *e* thereof, which is embraced in the folds of the seam *c*, which unites the bottom plate C with the front plate B of the can. The removable glass plate E is held in place at its upper end by movable holders F, hinged by a pivot-pin or rivet *f* to the adjacent upright sides A A of the can and each provided with an integral angle-flange *f'*, fitting against the upright side A of the can. Each of the hinged glass-plate holders F is provided with a laterally-projecting integral spring-lip *f''*, which is adapted to snap and spring over the upper edge of the glass plate E, and thus hold the same snugly down against the bottom plate of the can. The integral spring-lip *f''* on the holder F has a rounded or cam-shaped nose *f'''* to enable it to be forced or sprung over the upper edge of the glass plate, while at the same time permitting the hinged pivot *f* of the holder to be located slightly to one side of the glass plate, so that the spring-lipped holder will have a toggle action when in its closed position or shut past the center. The spring-lipped toggle-acting holder F is also furnished with a depending lip *f''''*, engaging the rear face of the glass plate at the upper end thereof.

G is a sheet-metal external removable sign-plate snugly fitting in the seat or recess formed by the inclined wall or angle-flange *b'* of the countersunk portion B² of the front plate B. This external removable sign-plate G is furnished at each end with integral right-angle tongues *g*, which are inserted through slots *b''*, formed in the recess portion B² of the front plate B at the base of the angle-flange *b'*. These right-angle tongues or integral extensions *g* of the sign-plate are furnished with slots *g'*, adapted to receive movable keepers K, which are preferably pivoted to the countersunk portion B² of the sign-plate B by rivets *g''* somewhat below the tongues *g*. The keepers K are preferably of sheet metal and furnished with integral lips or flanges *k*, projecting at right angles thereto to enable the same to be conveniently turned. The inter-engaging sign-plate-holding devices *g K*, the former, *g*, being integral with or conveniently secured to the sign-plate and the latter movably mounted on the countersunk portion of the front plate, thus constitute a very firm and secure means of removably mounting the externally-fitting sign-plate on the front plate and at the same time adds very little to the cost of the can.

We claim—

1. In a sheet-metal display-can, the combination with a front plate furnished with a

display-opening, and a removable inside-fitting glass plate, and provided with an integral countersunk portion above the display-opening to form an outside recess or seat to receive a sign-plate, of a removable external sheet-metal sign-plate fitting in said recess or seat of the front plate and provided at its ends with integral right-angle tongues projecting through slots in the front plate and movable keepers mounted on the inside of the front plate and projecting through the slots in the tongues of the sign-plate to hold the external sign-plate removable on the front plate, substantially as specified.

2. In a sheet-metal display-can, the combination with a front plate furnished with a countersunk portion forming an external recess or seat for a sign-plate, the angle flange or wall of said countersunk portion having slots through the base thereof, of a removable sheet-metal sign-plate provided with bent and slotted tongues projecting through said slots in the front plate, and movable keepers pivotally mounted on the inside of the countersunk portion of the front plate and engaging the slotted tongues of the sign-plate to hold the sign-plate in place, substantially as specified.

3. In a sheet-metal display-can, the combination with the front plate, of a removable externally-fitting sign-plate having bent and slotted tongues projecting through the slots in the front plate and movable keepers

mounted on the inside of the front plate and engaging the slotted tongues of the sign-plate to hold the same in place, substantially as specified.

4. In a sheet-metal display-can, the combination with the front plate having an external seat for a sign-plate and a slot through the same, of a removable external sign-plate having a bent tongue projecting through said slot in the front plate, and a movable keeper mounted on the inside of the front plate and engaging the tongue of the sign-plate, substantially as specified.

5. In a sheet-metal display-can, the combination with the can-body having upright sheet-metal side plates and a front display-plate of brass provided with an external sign-plate seat surrounded by a marginal wall, of a removable sheet-metal sign-plate fitting in said external seat on the front plate with its marginal edges abutting against the marginal wall of said seat, and provided with integral bent tongues projecting through slots in the front plate, and movable keepers mounted on the inside of the front plate and engaging the bent tongues of the sign-plate, substantially as specified.

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