

1,017,962.

Patented Feb. 20, 1912.
2 SHEETS—SHEET 1.

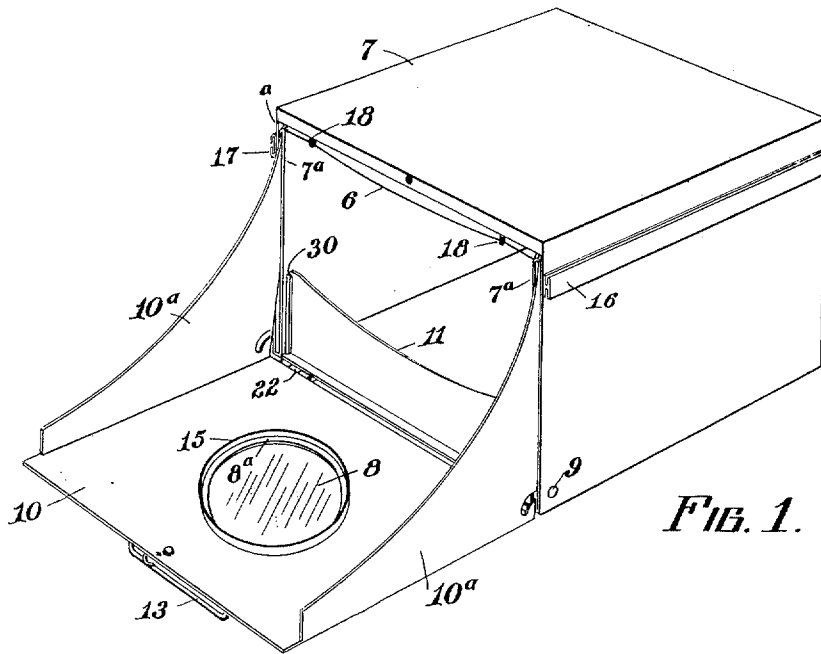


FIG. 1.

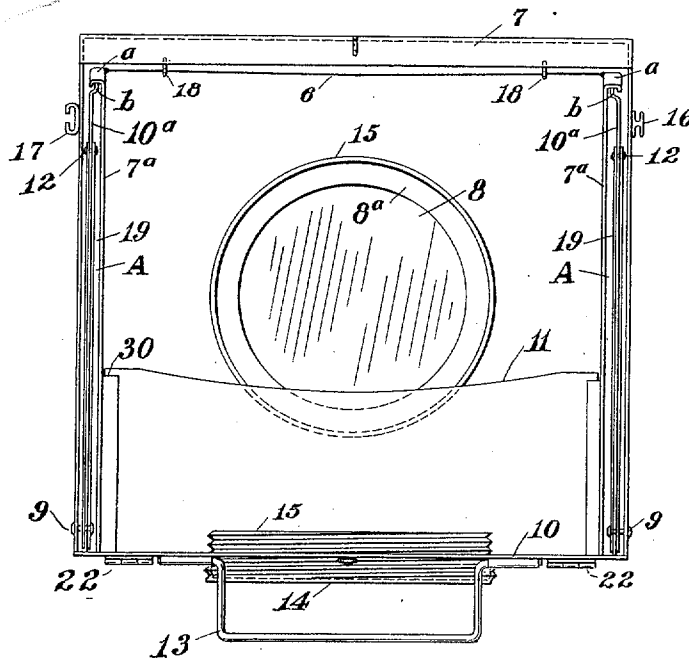


FIG. 3.

Witnesses

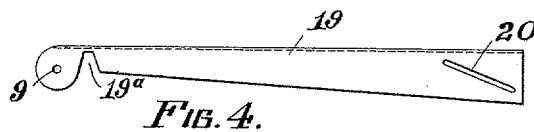
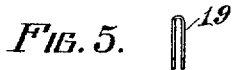
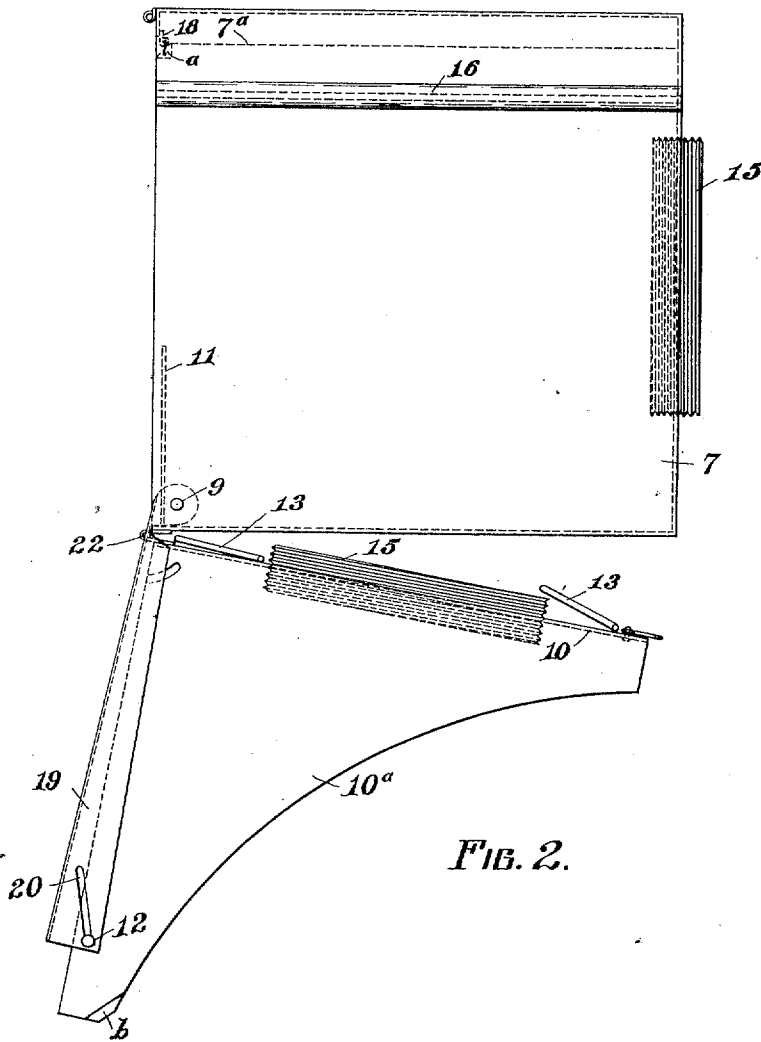
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

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BOX.

1,017,962.

Specification of Letters Patent.

Patented Feb. 20, 1912.

Application filed December 10, 1910. Serial No. 596,717.

To all whom it may concern:

Be it known that we, BENJAMIN F. FLIEDNER, ALBERT O. FLIEDNER, and LOUIS FLIEDNER, citizens of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented an Improvement in Boxes, of which the following is a specification.

This invention relates to metal boxes or receptacles, and is especially adapted and intended for use as a box for containing crackers, cakes, or the like, for use in stores.

An object of the invention is to provide a box the contents of which will be readily accessible for removal when desired.

The box has a hinged or swinging lid which can be partly opened to allow access to the box and to form a shelf in front of the same, and which can be fully opened to permit the box to be refilled. It is intended that the box will be filled by the baker or manufacturer of the goods to be sold, and then supplied in filled condition to the retailer, and used as a shelf box until empty, when it will be returned to the baker for refilling. The lid is hinged to the bottom of the box at the front edge thereof, and is provided with side walls or wings perpendicular to the lid, and when the box is opened the lid lies on a level with the bottom of the box thus forming a kind of shelf. When the lid is closed the side wings, thereof slide into a recess between double walls of the box. When the box is to be refilled the lid is swung entirely out, and around against the bottom of the box, so that the front of the box is unobstructed and the goods can be conveniently and quickly placed therein.

The lid, and also the rear end of the box, may be provided with an improved window through which the goods are displayed, the window devices serving to protect the glass when the box is being transported and to form a fastening preventing breakage of the

glass and injury to the hands of the person handling the box.

The box may be used as a container for various kinds of package groceries. When delivered by the packer to the retailer it can be slid directly into place and the article sold directly from the box, saving unpacking by the grocer and repacking onto the shelf. The box is dust and vermin proof and forms a receptacle for general purposes, and its display feature will obviate the necessity for show cases in many instances.

Various other advantages will be apparent from the following description and the drawings.

In the drawings—Figure 1 is a perspective view of the box with the lid open to service position. Fig. 2 is a side view with the lid swung around against the bottom of the box. Fig. 3 is a front view with the lid open. Figs. 4 and 5 are details of one of the guides.

Referring specifically to the drawings indicates a rectangular box made of sheet metal or the like and having false sides within the same, forming a recess A to receive the wings of the lid. The lid is hinged to the front of the bottom of the box as indicated at 22, and has wings or sides 10^a, perpendicular to the lid, and when the lid is closed these wings swing into the recess A between the sides of the box and the false sides 7^a. The lid may be swung completely around against the bottom of the box as shown in Fig. 2, in which position the opening to the box is entirely clear and unobstructed.

For service use the lid is swung partly open as shown in Fig. 1, in which position it forms a shelf in front of the box, and is ordinarily stopped or held in such position by means of a catch, consisting of lips *a* bent over at the upper front corners of the false sides 7^a, which lips are engaged by lips *b* at

the rear ends or corners of the wings 10^a, said ends swinging to upper position when the lid is opened as in Fig. 1, and normally the lips *b* engage the lips *a* and so stop any further swing of the lid. The false sides 7^a are loose at the top or front corners, and when it is desired to open the lid to the full extent these corners are pulled in by a wire 6 fastened at its ends thereto, to bring the lips *a* out of position for engagement by the lips *b*. Said wire 6 works in hangers 18 depending from the top of the box. By pulling down on the wire at the middle thereof the corners of the side walls 7^a having the lips *a* are drawn inwardly or toward each other, and then when the lid is swung out and down the lips *b* will not catch in the lips *a* but will pass the same, permitting the lid to be swung around against the bottom of the box, as shown in Fig. 2.

To assist in guiding the wings 10^a into the recesses A, and to hold the parts in position, swinging guide pieces 19 are provided. These consist of sheet metal pieces folded around the rear edges of the wings 10^a and are pivoted at 9 to the side walls of the box near the lower front corner thereof, and have slots 20 extending lengthwise, and the wings 10^a are connected to the guides 19 by means of rivets 12 which work in said slots. The guide pieces are notched as indicated at 19^a to allow the edge of the bottom of the box to enter said notches when the lid is fully opened, as shown in Fig. 2. The slots 20 are provided to allow for the difference in movement incident to the different pivotal points on which the lid 10 and guides 19 turn, the pivot in the former case being the hinges 22 and in the latter case being the rivets 9, and when the lid is opened the guides swing with it to either its service position as shown in Fig. 1, or its full open position as shown in Fig. 2.

The lid is provided on the front side with handles 13. In order to prevent the contents of the box from dropping out when the lid is opened a false front or shield 11 is provided, consisting of a metal piece retained at its ends in grooves at 30 on the inner side of the side walls 7^a, and this false front can be slid in or out as desired. The lid of the box, and also the back wall if necessary, is provided with a window 8 consisting of a piece of glass held between rubber rings in a threaded ring 8^a which screws into a threaded collar 15 set in the front, or back wall as may be. A screw cap 14 may be provided, to screw onto the collar, to prevent breakage of the glass.

To eliminate the use of a stand, each box has interlocking strips 16 and 17 fastened

along its sides, so that when a tier of boxes are slid into place they interlock with each other successively, and can thus be slid in or out as desired. The boxes are set in tiers one above the other, and any box can be slid out without removing the boxes above the same, the upper boxes being prevented from falling or dropping by the interlocking engagement of said strips or flanges with those of the boxes beside the same. Therefore a set of shelves is unnecessary, and inasmuch as the lid closes into the box instead of around the rim thereof, there will be no protruding rims or lids to catch and hang onto each other. This feature is of importance, as it avoids shelving and the lifting off of upper boxes in placing or removing any box.

It is intended that the boxes shall be filled by the packer and transported and put in position in the store or retail establishment, and the contents served directly from the box.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:—

1. A box provided at one end with a lid hinged thereto and having wings adapted to swing into the box, and guide pieces pivotally connected at their lower ends to the sides of the box on the inside thereof and having a sliding connection to the rear edges of the wings, and adapted to swing into the box with the wings.

2. A box provided at one end with a lid hinged thereto and having wings adapted to swing into the box, and guide pieces pivotally connected at their lower ends to the sides of the box on the inside thereof and having pin and slot connections to the rear ends of the wings and adapted to swing therewith into and out of the box.

3. A box provided with opposite double side walls, and a lid hinged to one of the other side walls and having wings which swing into the spaces between said side walls when the lid is closed, and catches on the side walls of the box arranged to engage the wings when the lid is partly opened and hold the same in such position.

4. A box provided with opposite double side walls, and a lid hinged to one of the other side walls and having wings which swing into the spaces between said side walls when the lid is closed and catches arranged to hold the lid partly opened, said catches comprising projections on the inner side walls of the box, normally located in position to engage and stop said wings when swung outwardly, and means to withdraw said projections from such position.

5. A box provided with opposite side walls, and a lid hinged to one of the other side walls and having wings which swing into the spaces between said side walls when the lid is closed and catches arranged to hold the lid partly opened, said catches comprising projections on the inner side walls of the box, normally located in position to engage and stop said wings when swung outwardly, and means to withdraw said projections from such position, consisting of a wire connected to the said inner side walls and adapted to spring the same inwardly for the stated purpose.

15 In testimony whereof, we BENJAMIN F.

FLIEDNER and ALBERT O. FLIEDNER, affix our signatures in presence of two witnesses.

BENJAMIN F. FLIEDNER.
ALBERT O. FLIEDNER.

Witnesses:

JOHN A. BOMMHARDT,
STEDMAN J. ROCKWELL.

In testimony whereof I, LOUIS FLIEDNER affix my signature in the presence of two witnesses.

LOUIS FLIEDNER.

Witnesses:

C. W. GEURING,
C. S. NORTH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."