Dec. 10, 1935. F. MUCKLER 2,024,010

FOOD CONTAINER

Filed Nov. 30, 1934

Fig. 1

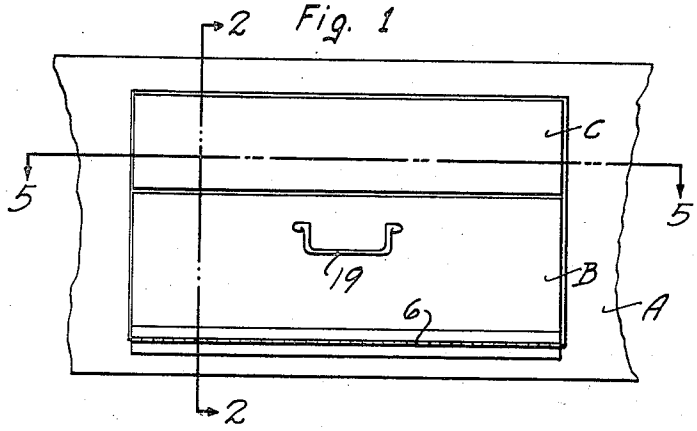


Fig. 2

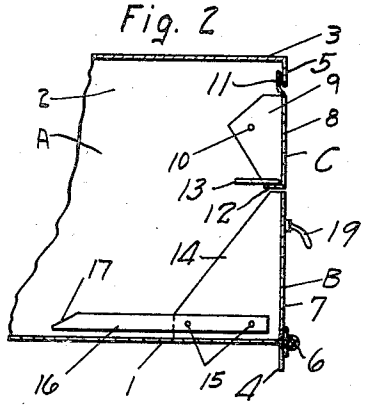


Fig. 3

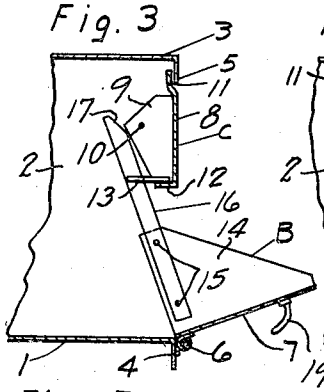


Fig. 4

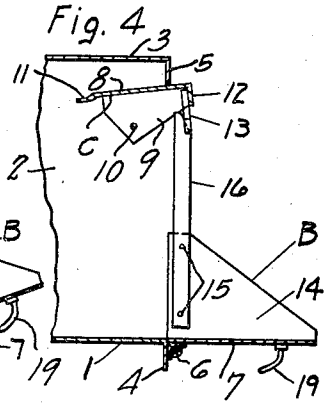
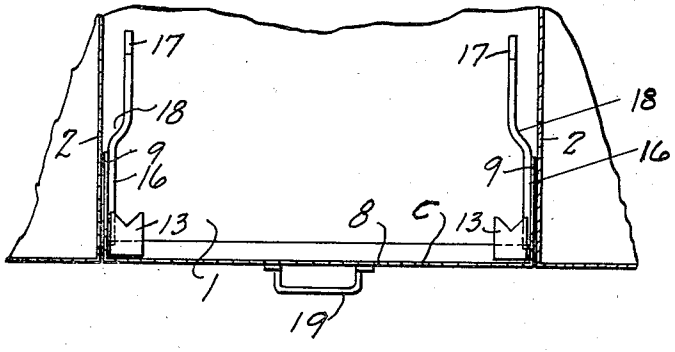


Fig. 5



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Patented Dec. 10, 1935

2,024,010

UNITED STATES PATENT OFFICE

2,024,010

FOOD CONTAINER

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Application November 30, 1934, Serial No. 755,454

4 Claims. (Cl. 126—191)

This invention relates generally to containers. More particularly, my invention relates to a certain new and useful improvement in containers or receptacles of the type comonly known as warming-ovens, food-conveyers, and the like, and has for its chief object the provision upon the container or conveyer of a closure in the form of a pair of doors vertically aligned when in closed position and oppositely disposed relatively to the container when in open position, the doors being so co-operable that, upon movement of the one door outwardly of the container to open position, the other door will be automatically swingably actuated inwardly of the container to corresponding open position and the latter door returning automatically to closed position on reverse swingable movement of the first door to closed position.

My invention has for a further object the provision of a container of the type stated which is simple, durable, sturdy, and inexpensive in structure, in which the closure-doors may with little effort be manipulated to open or closed position, into which convenient access to the contents of the conveyer may be had when the doors are in open position, and which is efficient in the performance of its intended functions.

And with the above and other objects in view, my invention resides in the novel features of form, construction, arrangement, and combination of parts presently described and pointed out in the claims.

In the accompanying drawing,—

Figure 1 is a front elevational view of a food-warming or conveying container or receptacle embodying my invention;

Figure 2 is a vertical sectional view of the container taken approximately on the line 2—2, Figure 1, the companion closure-doors of the container being in fully closed position;

Figure 3 is a similar view of the container with its companion doors in partially open position;

Figure 4 is also a similar view of the container with its companion doors in fully open position; and

Figure 5 is a longitudinal sectional plan view of the container taken approximately on the line 5—5, Figure 1.

Referring now more in detail and by reference characters to the drawing, which illustrates a preferred embodiment of my invention, the container A, which is constructed of preferably any suitable sheet metal and which is preferably of rectangular or oblong-rectangular form, is of box-like formation and includes a back-wall (not shown), a base-wall 1, opposed side-walls 2, and a top-wall 3, the walls 1 and 3 being formed at their forward margin with downwardly presented extensions or flanges 4, 5, respectively, disposed preferably in the same vertical plane.

Forming part of the front wall of the container A, is a swingable closure in the form of a door B so hinged, as at 6, to the base-flange 4 that the door body-portion 7, when in closed position, as seen in Figure 2, is disposed in the vertical plane of the top-flange 5 and when in open position, as seen in Figure 4, is disposed in the horizontal plane of the base-wall 1, the hinge 6 being in the nature of a rule-joint for limiting the opening and closing movements of the door A, and the door A, when in open position, affording a shelf-like outwardly-presented continuation of the container bottom-wall 1.

Co-operable with the lower door B in forming the front wall of the container A, is a companion closure in the form of an upper door C, whose body-portion 8 is provided upon its inner face and at its opposite side margins with right-angularly presented ears 9 so hinged, as at 10, 10, to the opposite container side-walls 2 that the upper door body-portion 8, when in closed position, is in vertical registration and alignment with the lower door B, as seen in Figure 2, and when in open position is disposed for the most part angularly within the container A with its upper margin presented obliquely downwardly, as seen in Figure 4, the upper door body-portion 8 having its upper margin offset, as at 11, for approximately flatwise impinging the inner face of flange 5 when the door C is in closed position, as seen in Figures 2 and 3.

Along its lower margin, the upper door-portion 8 is formed with an inwardly presented right-angular flange 12, and projecting from, and fixed at an end-portion flatwise upon, the flange 12 at or adjacent its opposite side margins, are preferably notched plate-sections 13, 13, for purposes presently appearing.

At or adjacent its opposite side margins and upon its inner face, the lower door body-portion 7 is provided with right-angularly projecting re-enforcing sections or side-ears 14, riveted or otherwise fixed to which, as at 15, and extending approximately in parallelism with the base-wall 1 when the door A is in closed position, as seen in Figure 1, and at approximately right angles to the base-wall 1 when the door B is in open position, as seen in Figure 4, are rods 16 preferably beveled or chamfered, as at 17, at their respective upper ends, offset inwardly, as

at 18, and of suitable length for door-actuating engagement with the notched plates 13.

Now, in use and operation, the companion or co-operable doors B and C normally, through the pull of gravity, occupy their closed position, as shown in Figure 2, and when in such position, the lower door B at its upper or free margin approximately abuts the flanged lower margin of the upper door C, the doors B and C co-operably providing substantially a complete closure or wall for the front end of the container A.

Upon its outer face, the lower door B is provided with a projecting manipulating hook or handle 19, and when it is desired to open the doors B, C, the lower door B, through engagement with its handle 19, is hingedly swung outwardly and downwardly, in which movement, the rods 16 are first obliquely elevated or tilted into engagement with the notched plates 13, as shown in Figure 3. On continued outward swingable movement of the lower door B, pressure through the rods 16 is exerted on the upper door C and the same thereby swingably actuated or tilted until, on completion of opening movement of lower door B, the upper door C is swung to fully open position or into the position shown in Figure 4, in which position the door C, in substantial opposition to the fully open position of lower door B, is disposed obliquely inwardly and downwardly within the container A and widely spaced from the door B, ready and convenient access to the container contents being thereby afforded.

Further, when the doors B and C are in such fully open position, the rods 16 are disposed, as stated, approximately at right angles to the container base-wall 1 and so evenly engaged at their respective beveled ends 17 with the plates 13, as shown in Figure 4, as to efficiently and firmly retain the upper door C in its described open position.

Reversely, on the lower door B being swingably shifted to closed position, the rods 16 are moved out of retaining and lifting engagement with the plates 13, and the upper door C simultaneously and automatically, as it may be said, returns or swings to closed position.

The structure fulfills in every respect the objects stated, and it is to be understood that changes in the form, construction, arrangement, and combination of the several parts of the container and its closure front wall may be made and substituted for those herein shown and described without departing from the nature and principle of my invention.

Having thus described my invention, what I claim and desire to secure by Letters Patent is,—

1. In combination with a container having an open end and including opposed top and bottom-walls and opposed side-walls, of a closure for the open end of the container comprising a first door hinged at a margin to said bottom-wall and swingable at its opposite margin outwardly of the container to open position and a second door hingedly connected to said side-walls at a point intermediate the height of the door, said doors being in aligning registration when in normal closed position, and means including a rod on the first door engageable, on swingable movement of the first door to open position, with the lower margin of the second door for concurrently swingably tilting the second door to open position with its upper portion disposed inwardly of the container.

2. In combination with a container having an open end and including opposed top and bottom-walls and opposed side-walls, of a closure for the open end of the container comprising a first door hinged at a margin to said bottom-wall and swingable at its opposite margin outwardly of the container to open position, and a second door having laterally and rearwardly presented ears hingedly connected to said side-walls at respective points intermediate the height of the door, said doors being in aligning registration when in closed position, and means including a rod fixed on, and disposed at a right angle to, the first door engageable, on swingable movement of the first door to open position, with the lower margin of the second door for concurrently swingably tilting the second door to open position with its upper portion disposed inwardly of the container.

3. In combination with a container having an open front end and comprising opposed side-walls and opposed top and bottom-walls having opposed lateral flanges at their respective forward margins, of a closure for said open end comprising a first door hingedly connected at a margin to the flange of the base-wall and a second door having laterally and rearwardly presented ears flatwise disposed in parallel relation with, and at respective points intermediate the height of the door hingedly connected to, said side-walls, said doors when in normal closed position being in aligning registration and said second door flatwise at its upper margin abutting the inner face of the flange of the top-wall, plates inwardly presented from the lower margin of the second door, and rods fixed to the first door and engageable with said plates, on movement of the first door to open position, for concurrently swingably tilting the second door to open position with its upper portion disposed inwardly of the container.

4. In combination with a container having an open front end and comprising opposed side-walls and opposed top and bottom-walls having opposed lateral flanges at their respective forward margins, of a closure for said open end comprising a first door hingedly connected at a margin to the flange of the base-wall and a second door having laterally and rearwardly presented ears flatwise disposed in parallel relation with, and at respective points intermediate the height of the door hingedly connected to, said side-walls, said doors when in normal closed position being in aligning registration and said second door flatwise at its upper margin abutting the inner face of the flange of the top-wall, plates inwardly presented from the lower margin of the second door, and rods fixed to the first door and engageable with said plates, on movement of the first door to open position, for concurrently swingably tilting the second door to open position with its upper portion disposed inwardly of the container, said rods being spaced from, and out of engaging relation with, the plates when the doors are in normal closed position and having continuing engagement with said plates for retaining the second door in its said tilted position while the first door remains in open position.

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