

Feb. 20, 1940.

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2,190,803

CONTAINER

Filed Sept. 10, 1937

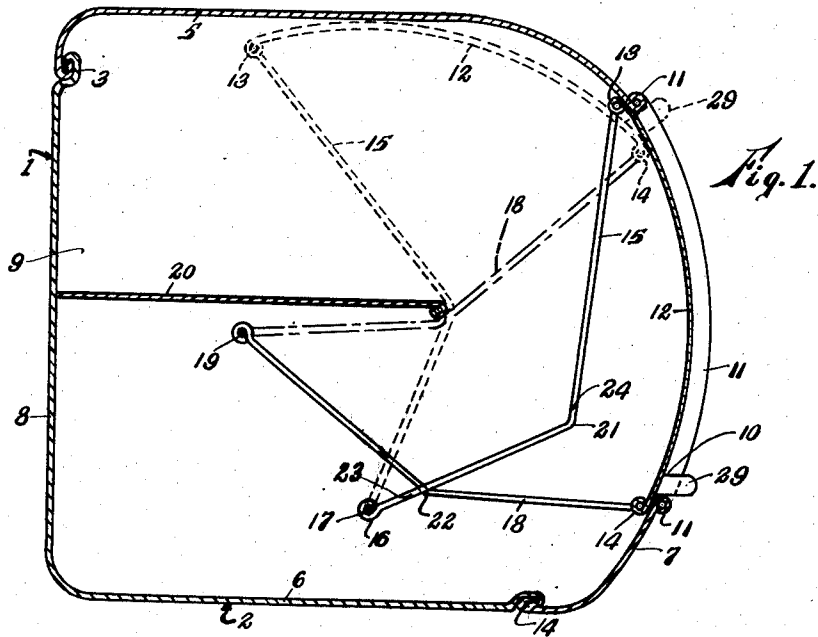
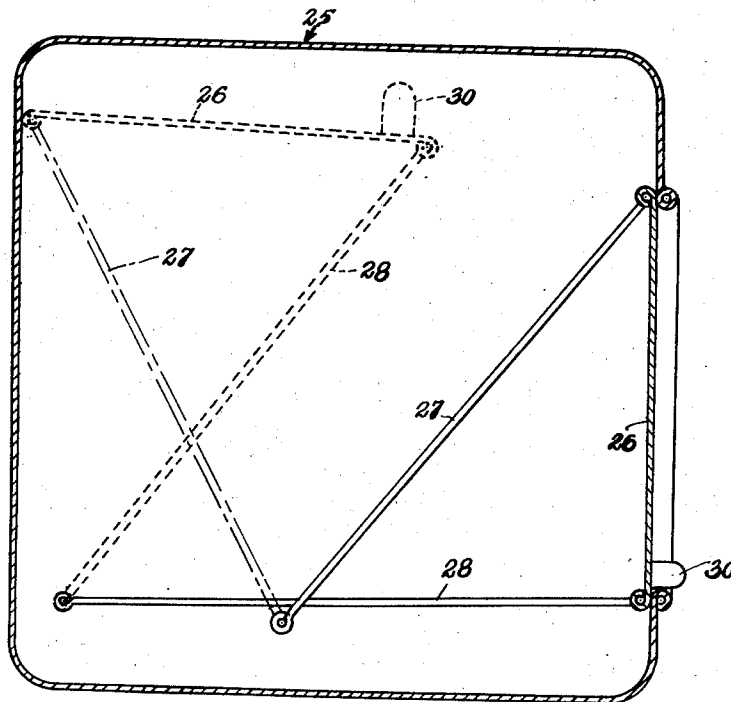


Fig. 2.



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UNITED STATES PATENT OFFICE

2,190,803

CONTAINER

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Application September 10, 1937, Serial No. 163,275

2 Claims. (Cl. 220—34)

This invention relates to a novel type of closure means adapted for use with a wide variety of structures but particularly disclosed herein as associated with a container such as a bread box.

5 An object of the invention is to provide a closure means which, upon opening thereof, moves into an opened position close to the top of the structure, box or container with which it is associated, so that the space within is conserved for storage and other suitable purposes.

Another object is to provide closure means of this kind of extremely simple construction so that the device embodying said means is adapted for low manufacturing cost and for low consumer cost commensurate with the usual prices on relatively cheap articles such as bread boxes.

These and other objects are attained by the means described herein and illustrated in the accompanying drawing in which:

20 Fig. 1 is a vertical cross-sectional view through a bread box having associated therewith a closure means of this invention.

Fig. 2 is a similar view showing the closure means as adapted to a box of different shape.

25 Heretofore, closure means of the type herein contemplated have involved simply the pivoting of the door or panel at one point at each side of the door so that the opening and closing movement thereof was a simple arc concentric with the pivot points. In a receptacle particularly adapted for storage, the arcuate movement of the door resulted in the opened door projecting rearwardly and downwardly through the receptacle to a considerable extent thereby restricting the storage space within.

30 The present invention provides for mounting a door for hinged movement upon an eccentric arc so that the door, in opened position, lies close to and generally parallel with the upper or top structure with which the door may be associated.

35 The problem solved by this invention, of course, has been encountered in numerous types of structures, to all of which the present invention has obvious application. However, it is particularly disclosed in connection with a bread box and as such will now be further described in detail.

40 The bread box or similar receptacle as disclosed in Fig. 1, may be formed of sheet metal comprising two sections 1 and 2 connected along suitable seams as at 3 and 4 and formed to provide top and bottom walls 5 and 6 respectively, front and rear walls 7 and 8 respectively, and end walls 9, only one of the latter being seen in the cross-sectional view. The structure associated with the end walls however, is the same on both

sides, as will be described, and hence the disclosure of the structure of the receptacle at one end will suffice for both.

The front wall 7 of the container is shown as arcuately formed and is provided with an access aperture 10, the portions of the front walls 7 bordering said aperture being preferably curled or rolled as indicated at 11.

A panel or door 12 for closing the aperture 10 is positioned within the receptacle and is arcuately formed to correspond with the front wall of the container. The door has its top and bottom edges preferably curled, as indicated at 13 and 14; whereby suitable bearings or journals are formed for the reception of arms which support the door, as will now be described.

45 These arms may consist of suitable lengths of wire, or the like, the wires being bent at one end for providing an insert to be introduced into the journals 13 and 14. A pair of arms 15 and 18 is thus provided at each side of the door, one arm adjacent the upper and the other adjacent the lower extremity of the door. The opposite ends of each pair of arms are connected to the end walls 9 of the receptacle, each pair of arms being attached to the end wall adjacent thereto. Thus, arm 15, pivotally connected to an upper corner of the door, has its opposite end pivotally attached as at 16 to the adjacent end wall 9. For this purpose, the arm 15 may have its end bent to form an eye which is mounted upon a suitable stud 17 secured to the end wall 9. Similarly, arm 18 associated with a lower corner of the door, may have its other end similarly connected as at 19 with the same end wall 9 but separate and independent from the end wall connection of the arm 15.

50 By means of these pivotal connections, the door 12 may be swung toward and away from the aperture 10 and at such times, the door moves upon an eccentric arc rather than upon an ordinary concentric arc, with the result that, in the opened position, the door 12, as seen in dotted lines, Fig. 1, lies relatively close to and generally parallel with the top of the container.

A handle 29, attached adjacent the bottom edge of the door 12, serves as an abutment for limiting upward and downward movement of the door by contact with the upper and lower rolled edges 11 of the access aperture.

The interior space is thus conserved for storage and ample room is provided for such additional equipment as a shelf 20 which may be attached to the end walls 9. As shown in Fig. 1,

the arms 15 and 18 are bent as at 21 and 22, intermediate their ends, in order to preclude interference with the shelf 20 when the door is open and the arms swung upwardly. It will likewise be seen that the innermost arm 15 may be slightly bent as at the points 23 and 24 in order to avoid frictional contact with the adjacent arm 18.

In Fig. 2, the container 25 is substantially square in cross-section, the door 26 is flat rather than arcuate and the arms 27 and 28 are shown straight rather than bent as in the first figure. In this instance too, the door 26, in its opened position, is permitted, by virtue of the characteristic pivotal mounting of this invention, to approach more closely the top of the container and to lie generally parallel therewith, in a manner which would not be possible if the door were provided, as in older methods, with the ordinary single pivot on each side.

The door, in this form of structure, enters entirely within the container, upon opening of the door. In this instance, the handle 30 serves merely as an abutment for limiting the door's movement to its proper closed position.

It is obvious that the form of the container may be varied in accordance with particular requirements, the two forms shown herein being merely suggestive. The structure of this invention is sturdy and simple, making for efficiency of manufacture and extended usefulness.

What is claimed is:

1. A bread box or the like comprising a container having top, bottom, front, rear and end walls, the front wall having an access aperture therein forming the major portion of the front wall area, a door adapted to close said aperture, and means to mount the door in the container

on said end walls for hinged movement toward and away from said aperture, the mounting means comprising two pairs of arms pivotally connected by one end to the door, one pair at each side edge thereof and one arm of each pair being attached adjacent the upper and the other arm adjacent the lower extremity of the door, the other ends of the arms being pivotally connected to the end wall adjacent thereto, said latter connections being separate and independent for effecting, upon upward swinging of the door, an eccentric arcuate movement thereof into opened position relatively close to the top wall of the container.

2. A bread box or the like comprising top and end walls and a front wall formed with an access opening, a one-piece door for said opening, and means to mount the door within the box for hinged movement toward and away from the opening and wholly within the box, said mounting means comprising two pairs of arms pivotally connected by one end to the door, one pair at each side edge thereof and one arm of each pair being attached adjacent the upper and the other arm adjacent the lower part of the door, and means for pivotally connecting the other ends of the arms to the end walls adjacent thereto, the end wall connections of the arms of each of said pairs being spaced apart and independent, the arms on the lower portions of the door having their end wall connections a substantial distance rearwardly of the similar connections of the other arms, whereby the door, upon upward swinging thereof, moves through an eccentric arc into opened position relatively close to the top wall of the box.

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