Feb. 17, 1959 D. D'ANDREA 2,874,016

CONTAINER CABINET

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FIG. 1.

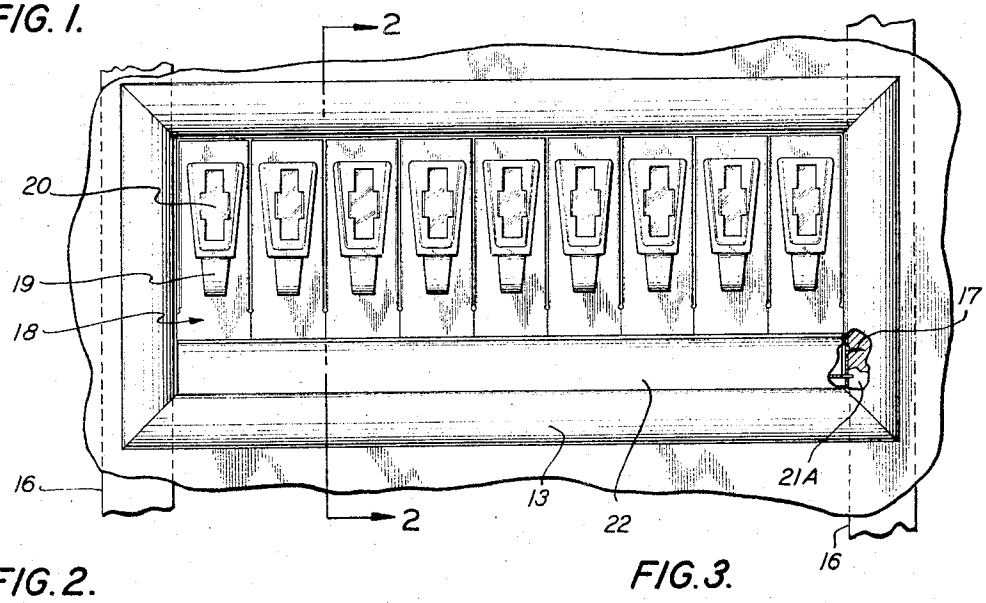


FIG. 2.

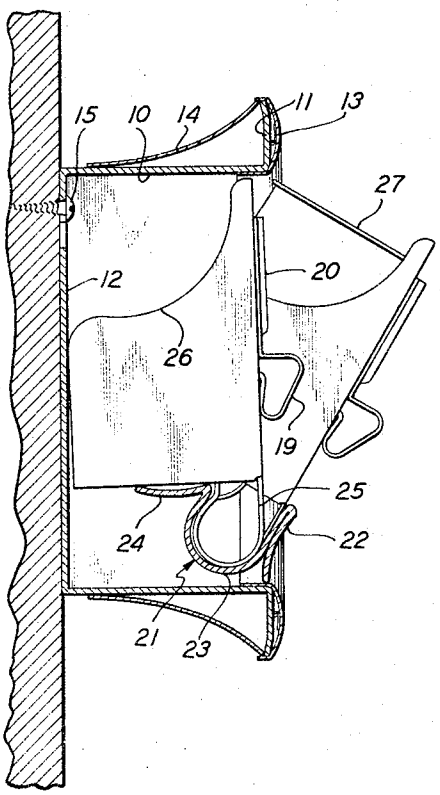


FIG. 3.

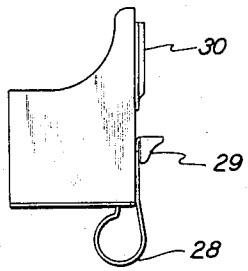
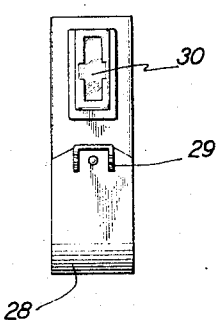


FIG. 4.



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FIG. 5.

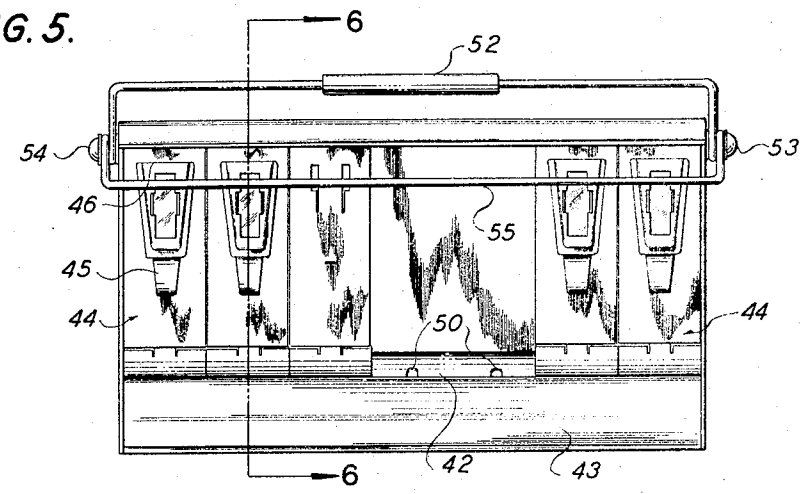
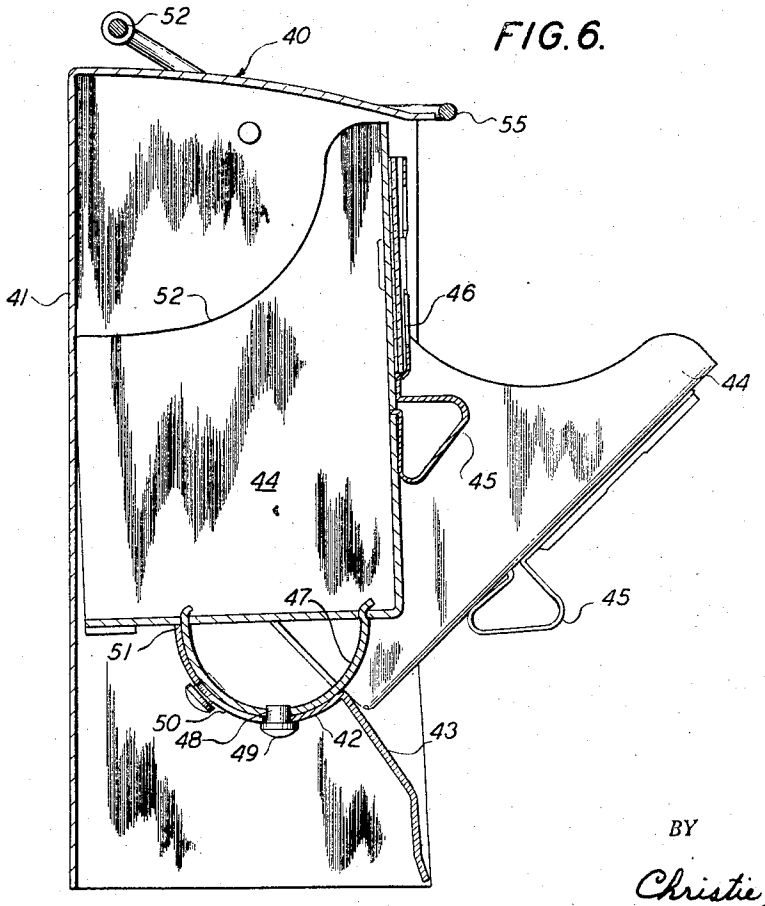


FIG. 6.



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CONTAINER CABINET

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5 Claims. (Cl. 312—328)

This invention is concerned with container cabinets and particularly with cabinets for spice containers and the like. The invention provides improved cabinets of simple and rugged design that are convenient for storage of and easy access to the containers.

Spices and the like are packaged in rectangular cans of standard size and shape. It is convenient to use them in the original packages, but there is a need for cabinets in which these may be stored for easy access. I have developed such cabinets. In one form these are portable, for use at outdoor barbecues and the like. In another form they may be mounted between studs in a wall or fastened to the outside of the wall, as convenience may dictate.

In general, my invention contemplates the combination in a container cabinet which comprises a box having an open front, a trough extending along the bottom of the box, the interior of the trough being of round concave cross section. Preferably the curvature of the trough is circular and uniform throughout its length. A plurality of containers fit side by side in the box. Each container has affixed to its bottom a round convex roller member that fits in the trough and supports the container therein and permits the container to be tipped forward out of the open front of the box while the roller rotates through a restricted angle in the trough. Stopping means is provided for retaining the rollers in the trough when the containers are tipped forward through the restricted angle. The stopping means preferably comprises an extension at the rear of the trough which rises above the front edge of the trough and overhangs the rear of the trough slightly. Such means permits the container with its attached roller to be withdrawn from the box by pulling it upward, so that the roller comes out of the trough when the container is tilted forward.

In another form of my invention the stopping means comprises a stud on the bottom of each roller. An arcuate slot is provided in the trough for each container. The stud passes into this slot and rides back and forth in it as the container is tipped. When the container is tipped forward the shank moves upward in the slot until it abuts its upper end, when it and the container are stopped, further forward tipping of the container being thus prevented. If desired, the stud may have a head that is wider than the slot except at one point along the length of the slot. In such case, the stud may be inserted and removed from the slot when it is disposed at the wide point, but not otherwise.

In the form of cabinet adapted for mounting in a wall between studs, the length of the box on the outside corresponds to the distance between studs, say 14 inches. A box of this length will accommodate nine containers, each adapted to hold a standard spice package or can. This form of cabinet may also be fastened to the outside of the wall by means of nails or screws driven through the rear of the box.

In the cabinet adapted for mounting in a wall, it is convenient to provide a flange around the open front of the box. This flange may be removable and held in place by catches or snaps. Then, flanges of different colors (to match kitchen decor) may be snapped into place around the boxes. In those cases in which this form of cabinet is merely fastened to the outside of the wall it is convenient to provide a removable shield around the outside of the box to the rear of the flange. This shield conveniently fits against the outside of the flange and tapers to the rear, where it fits the back of the box. The shield, like the flange, can be made in a variety of colors. Similarly, the handles and the label holders may be demountable, so that colors can be matched.

The portable model of my cabinet is not provided with a flange around its open front, since this would interfere with proper seating. Instead, this model has a flat bottom and is provided with a handle which extends above the top. This handle is pivoted to pins at both ends of the box and carries a lock bar which extends down across the open front of the box when the handle is raised, thus preventing the containers from tipping forward.

The containers have thin walls and are open at the top. They may be formed of sheet metal or molded from plastic. The preferred form of container is provided with a handle and a label holder on the front and is of such size as to hold an ordinary spice can. In this form of container it is not necessary to provide a back, and the two sides may be cut down toward the rear in order that the spice cans can be grasped and pulled out of the containers when these are tilted forward.

These and other aspects of my invention will be understood more thoroughly in the light of the following detailed description of presently preferred forms. The detailed description is illustrated by the accompanying drawings in which:

Fig. 1 is a front view of one form of my cabinet mounted in a wall;

Fig. 2 is a vertical cross section through the cabinet of Fig. 1 showing it mounted on the outside of a wall with one of its containers enclosed in the cabinet and another tilted forward for access or withdrawal;

Fig. 3 is a side view of a modified form of container adapted to fit the cabinet of Figs. 1 and 2;

Fig. 4 is a front view of the container of Fig. 3;

Fig. 5 is a front view of a portable form of my cabinet with two out of seven containers removed; and

Fig. 6 is a vertical cross section taken along the line 6—6 of the cabinet of Fig. 5.

The cabinet of Figs. 1 and 2 comprises an elongated box **10** having an open front and an integrally formed front flange **11** that extends clear around the opening. For mounting on the inside of the wall as shown in Fig. 1 or on the outside of a wall as shown in Fig. 2, a removable decorative flange **13** is provided. This snaps on to and covers the integrally formed flange **11**. When the cabinet is mounted on the outside of a wall it is convenient to provide a shield **14** which meets the decorative flange at the front, but tapers to fit the box at the rear. This shield is slid into place from the rear before the cabinet is installed on the outside of a wall by means of mounting screws **15** passing through holes in the rear wall **12** of the box (see Fig. 2).

When the cabinet is installed in a wall the shield is omitted and the cabinet is fitted in a hole in the wall and secured at its ends to studs **16** by screws **17** (see Fig. 1).

As shown in Fig. 1, the cabinet contains nine spice containers **18**. Each has a handle **19** and a label carrier **20** on its front. The containers fit side by side and completely fill the open front of the cabinet. A trough member **21** (best seen in Fig. 2) extends along the bottom of the box near the front. Tabs **21A** on the ends of the trough extend through the side wall of the box and hold the trough in place. It is bent from sheet metal or the

like and has a front wall **22**, a trough section **23** of circular cross section and a roughly horizontal rear portion **24** upon which the containers rest when disposed entirely within the cabinet. Each container is provided with a roller member **25** which fits in the trough. The rear of the trough is higher than the front of the trough and overhangs the trough slightly, to prevent the containers from falling out when they are tipped forward, as shown in Fig. 2. The overhang, however, is so slight that it does not interfere with the removal of the rollers from the trough by moving them upward.

The several containers have no rear walls, and their side walls **26** are cut away at the top to permit grasping a spice can placed in the container. When a spice can **27** is required for use, the handle on the appropriate container is pulled so that the container tilts forward, when the spice can may be removed by pulling it upward. If desired, the spice can and the container can both be removed by pulling upward on the handle.

The containers shown in Fig. 1 are made of sheet metal and the rollers **25** thereon are formed integrally with the front of the container. In the form of container illustrated in Figs. 3 and 4 a roller **28** generally similar to the rollers **25** is provided, but this is made integrally with a handle portion **29**, the two being fastened to the front of the container. As shown in Fig. 3, however, the roller projects a little forward of the face of the container. This improves balance of the empty container, so that it stays more firmly in place when it is in the cabinet in an empty condition. The label holder **30** in the form of container shown in Figs. 3 and 4 is made separately and fastened to the front of the container, and the container itself is bent from a single piece of sheet metal.

The operation of the device illustrated by Figs. 1, 2, 3 and 4 should be self-apparent. Spice boxes are placed in the respective container and the containers are then tilted backward so that they close the front of the cabinet or box. Any one of the containers may be tilted forward without disturbing the others and lifted out with its enclosed spice can, or, the spice can may be pulled out by itself.

The form of my invention shown in Figs. 5 and 6 is portable. As in the previous case, it comprises an open face box **40** which has a rear wall **41** formed integrally with the top and sides. A trough member **42** extends lengthwise of the box near the bottom and toward the front and is formed integrally with a lower front support section **43** that is fastened to the ends of the box and also to the bottom. The trough section is a segment of a circle, but has no overhanging rear portion as in the case of the trough of Figs. 1 and 2. A plurality of generally rectangular containers **44** have individual handles **45** and label holders **46** on their front faces and the containers fit in the box side by side to fill its open front. Each container has a roller **47** on its bottom. This defines the arc of a circle and fits in the trough. It rolls in the trough when the spice container is tilted forward. Since the trough of Figs. 5 and 6 has no overhang at its rear, other stopping means are provided. This comprises a stud **48** having an enlarged head **49** on the end of its shank. The stud is fastened to the roller and slides back and forth in an arcuate slot **50**. The lower portion of the slit is wide enough to accommodate the head, but the rear portion is smaller so that when the container is tilted forward the stud prevents the container from tilting forward beyond the slanting position shown in Fig. 6 while the head prevents the stud from being withdrawn. When the containers are tilted backward their rears rest on rear edge **51** of the trough toward the rear of the box. As in the former case, the containers of Figs. 5 and 6 are open at the rear and have cut way sides **52** to facilitate grasping the spice boxes.

The portable spice cabinet of Figs. 5 and 6 is provided with a handle **52** which is journalled on pins **53**, **54** at the ends of the box. The handle carries a front extension

or lock bar **55**. When the handle is pushed toward the rear the lock member is elevated permitting the containers to be tilted forward. When the handle is grasped so that the weight of the cabinet is suspended from it, it rotates forward and drops the lock bar **55** into the position shown in Fig. 5, thus keeping the containers in place when the cabinet is carried about by means of the handle.

The portable cabinet of Figs. 5 and 6 can, of course, be mounted on the wall, if desired, in the same manner as the other examples.

I claim:

1. In a container cabinet, the combination which comprises a box having an open front, a trough extending along the bottom of the box, the interior of the trough being of rounded concave cross section, and a plurality of containers adapted to fit side by side in the box above the trough, each container having fixed on its bottom a convex rounded roller member that fits in the trough and supports the container therein and permits the container to be tipped forward out of the open front of the box while the roller rotates through a restricted angle in the trough, said trough and each roller member including cooperating portions forming stopping means for retaining the rollers in the trough when the containers are tipped forward through the restricted angle.

2. In a container cabinet, the combination which comprises a box having an open front, a trough extending along the bottom of the box, the interior of the trough being of rounded concave uniform cross section, a plurality of containers adapted to fit side by side in the box above the trough, each container having fixed on its bottom a convex rounded roller member that fits in the trough and supports the container therein and permits the container to be tipped forward out of the open front of the box while the roller rotates through a restricted angle in the trough, and stopping means for retaining the rollers in the trough when the containers are tipped forward through the restricted angle comprising an extension at the rear of the trough which rises above the front of the trough and overhangs the rear of the trough.

3. In a container cabinet, the combination which comprises a box having an open front, a trough extending along the bottom of the box, the interior of the trough being rounded and of rounded concave uniform cross section, and a plurality of containers adapted to fit side by side in the box above the trough, each container having fixed on its bottom a convex rounded roller member that fits in the trough and supports the container therein and permits the container to be tipped forward out of the open front of the box while the roller rotates through a restricted angle in the trough, said trough and each roller including cooperating portions forming stopping means for retaining the rollers in the trough when the containers are tipped forward through the restricted angle, the cooperating means in the trough being a series of arcuate slots and the cooperating means on the rollers being studs fastened respectively to the bottoms of the rollers and riding in the arcuate slots in the trough.

4. In a container cabinet, the combination which comprises a box having an open front, a trough extending along the bottom of the box, the interior of the trough being rounded and of rounded concave uniform cross section, a plurality of containers adapted to fit side by side in the box above the trough, each container having fixed on its bottom a convex rounded roller member that fits in the trough and supports the container therein and permits the container to be tipped forward out of the open front of the box while the roller rotates through a restricted angle in the trough, said trough and each roller member including cooperating portions forming stopping means for retaining the rollers in the trough when the containers are tipped forward through the restricted angle, and a flange extending around the front of the box.

5. In a container cabinet, the combination which comprises a box having an open front, a trough extending along the bottom of the box, the interior of the trough being rounded and of rounded concave cross section, a plurality of containers adapted to fit side by side in the box above the trough, each container having fixed on its bottom a convex rounded roller member that fits in the trough and supports the container therein and permits the container to be tipped forward out of the open front of the box while the roller rotates through a restricted angle in the trough, said trough and each roller member including cooperating portions forming stopping means for retaining the rollers in the trough when the containers are tipped forward through the restricted angle, a handle extending along the top of the box and pivoted adjacent the two ends of the box, and a keeper extending along the top of the box near the front and fastened to the handle so that it drops over the front of the box and locks the containers in place when the handle is raised.

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