Aug. 30, 1949. J. F. KENNEDY 2,480,411

HOLDER FOR CONTAINERS, SUCH AS JARS, BOTTLES, CANISTERS AND THE LIKE

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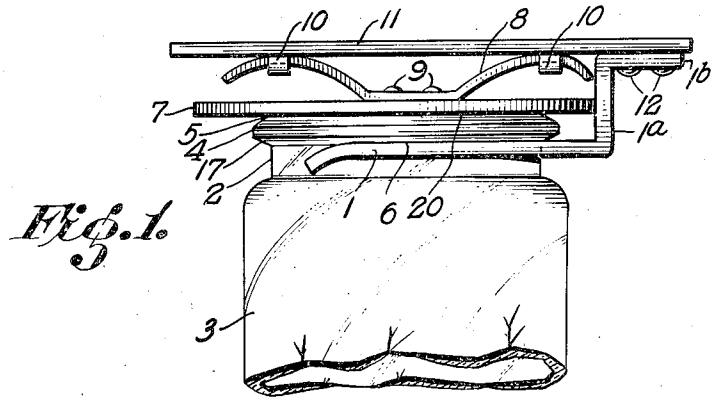


Fig. 1.

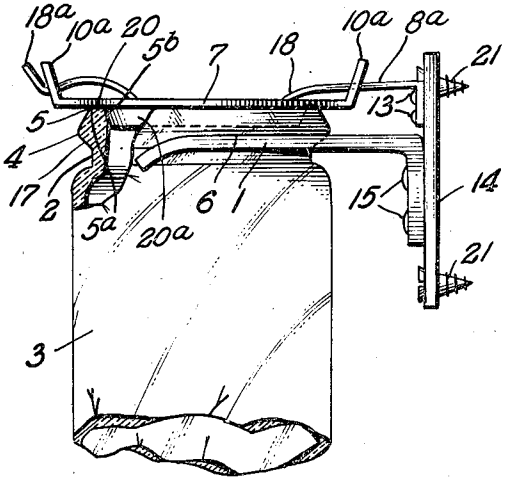


Fig. 2.

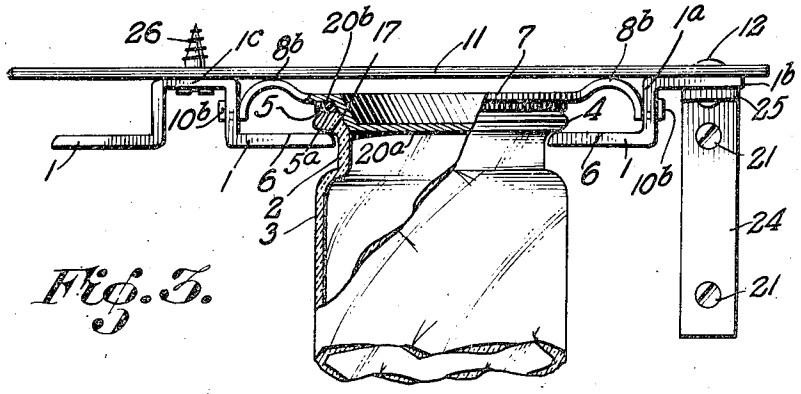


Fig. 3.

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HOLDER FOR CONTAINERS, SUCH AS JARS, BOTTLES, CANISTERS AND THE LIKE

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This invention relates to holders for containers, in particular for containers of the circular mouthed jar or bottle type, such as standard glass jam jars, kitchen cabinet condiment jars, druggist's chemical jars, and the like, normally used with a loose removable stopper or lid and having a downwardly facing bearing surface as an integral part thereof, capable of resting or sliding on a cooperating bearing surface, forming part of the said holder. Containers as just described are hereinafter referred to as "of the kind specified."

The invention has for an object the provision of an improved holder, embodying a means of closure, to replace the said normally removable loose stopper or lid for containers of the kind specified.

Another object is to provide means for enabling the mouth of the said container more readily to be opened or closed and moreover by the use of one hand only.

Another object is to provide means for promoting a more orderly appearance of the place where the said containers are kept, while ensuring the latter being readily at hand, when required.

With these ends in view I provide, according to this invention, a holder for containers of the kind specified, embodying a support with upper and lower elements and a separate movable lid positioned therebetween, the said lower support element, consisting of runners which engage beneath opposite sides of a peripheral flange near the top of a container to support the latter when the flange is pushed into the runners. The said support elements and lid are so shaped and arranged that, when the container flange is pushed onto the runners, the lid will be forced into position to seal the container mouth, and conversely, when the container is withdrawn from off the runners, the disengagement of the container mouth from the seating surface of the lid is effected, so that the container is removable while the lid remains normally in the holder.

The engagement of the lid upon the container mouth may be produced either by resilient reaction between the parts as by providing spring action between the lid and the upper support element, effective to seat the lid upon or within the mouth of the container when the latter has been pushed back sufficiently far upon the runners, or by suitably shaping the coacting support parts and lid or means secured thereto to effect the closure by wedging action. Means are also provided to prevent removal of the lid from the holder with the container and at all times when such

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removal is not desired. It is also a feature of the invention in its preferred form that when circular mouthed containers having downwardly inclined peripheral flanges at their upper ends are supported in the holder, the runners of the holder will engage at points only on opposite sides of such a flange thereby giving a rocking support to the container. This rocking support enables the mouth of the container to adapt itself to the general plane of the seating area on the under surface of the lid, when the lid has been forced into seating engagement between the container mouth and the upper support element, as the container is pushed back upon the runners, thus ensuring a tight seal of the container.

When the said holder is clipped, screwed or otherwise attached to a shelf, cupboard door, wall or other substantially fixed object, the said holder remains in situ thereon, on the container being removed therefrom.

From the foregoing it will be appreciated that, in the first place, the containers require no lids other than the means of closure embodied in the holder and consequently, the lid is thus not liable to be mislaid in use. In the second place, since the lid is anchored to the holder, the withdrawal of the container from the holder simultaneously opens the mouth of the container, and vice versa, i. e. the replacement similarly closes the mouth. Further, the attachment of the holders to a substantially fixed object enables the containers to be opened or closed by the use of one hand only.

Finally, when several units of the holder are combined or are attached in rows, as they normally will be, to some substantially fixed object, a more orderly appearance of the place, where the containers are kept, is thereby achieved, while the containers are likewise always readily at hand, and, by attaching a battery of holders to the inside of a cupboard door, or under the front edge of a shelf, for example, considerable space economy can also be effected.

In order that the invention may be understood more clearly attention is directed to the accompanying drawings, illustrating some of the forms in which the invention may be carried into effect. In the drawings,

Fig. 1 is a side elevation of a single unit of one form of holder adapted to be secured to the underside of a shelf or the like.

Fig. 2 is a similar view of a modified form of holder adapted to be mounted on a wall or other vertical surface and Fig. 3 is a front elevation of another modified form of holder in which a num-

ber of containers can be supported, one complete unit and part of the next being shown.

Referring to Fig. 1, a pair of parallel runners 1 are provided, which are adapted to straddle the neck 2, of a container 3 which is herein depicted as a glass jam jar with a peripheral flange 4. The runners 1 are shown as extending forwardly from and being integral with a bracket, having an upwardly extending portion 1a, having an horizontal extension 1b, which is fixedly secured, as is indicated at 12 to the underside of a horizontal strip or shelf 11, which may be secured to any permanent horizontal surface such as the underside of a cupboard shelf. The shelf 11 and runners 1 constitute the upper and lower elements of the holder referred to above.

The container 3 is shown as having a circular peripheral flange 4, immediately below the mouth 5, this flange having a downwardly and inwardly curved or inclined lower surface as is indicated at 17, this constituting the bearing surface of the container which rests on the upper bearing surfaces 6 of runners 1. It will be seen that surface 17, of flange 4, will make virtually point contacts at opposite sides of the same with runners 1, so that the container is rockably mounted until the lid has seated firmly on the container mouth.

The lid 7, which may be of varying shapes, is shown in Fig. 1 as flat and is there shown as having upwardly bowed tongues 8 secured centrally thereto at 9, those tongues slidably engaging in lugs 10, 10 extending downwardly from the under surface of horizontal strip 11. These tongues are preferably resilient, and it will be evident that when a container is pushed into position with its lower flange surface 17, sliding over runners 1, coaction between these tongues and horizontal strip 11, will force the lid into firm seating engagement upon the mouth of the container.

The under surface 20 of the lid is preferably of rubber or the like over which the mouth of the jar 3 will not glide readily, and in this case the lid will have a limited sliding movement with the container as the latter is moved on to or withdrawn from the runners. Thus, when the container is pushed on to the runners, the friction between the lid and the mouth of the jar will cause the lid to move a short distance rearwardly with the jar until both the lid and the container reach the position shown in Fig. 1. In so moving, the lid will be forced firmly against the mouth of the jar, partly by the resilience of the tongues 8, and partly by a wedging action, since the tongues are mounted in angular relation to shelf 11, so that, as the lid moves to the right in Fig. 1, the portion of tongues 8, which slide through lugs 10 and press against the underside of shelf 11, will be progressively higher.

Similarly, on withdrawal of the jar from the holder, the flange 4 of the jar slides along and so off the ends of the runners 1, and the jar is then free to drop out of the holder, but the lid is prevented from inadvertent separation from the holder, so that the withdrawal of the jar simultaneously opens it. It will be seen that lugs 10 act as detent means to prevent entire removal of the lid from the holder together with the jar because of the bowed shape of the tongues 8, which slidably engage within these lugs. If, however, the lid moves somewhat to the left with the jar, referring to Fig. 1, because of frictional engagement with the jar mouth, when the jar is withdrawn, the tongues 8 will slide through these lugs a short distance so that lower portions of the tongues, which are to the right of the lugs in the closed Fig. 1 position, will engage within the lugs.

In the modified structure shown in Fig. 2, the runners 1, are secured as indicated at 15 to a vertical strip 14 which may be secured to a wall, as by means of screws 21. In this case the tongue 8a, is secured as is indicated at 13 upon the vertical strip 14, and engages a pair of lugs 10a, which extend upwardly from the lid as shown, tongue 8a slanting downwardly from both ends towards its central portion. In this case the lid 7 is shown as dished at 20a so as to seat upon the upper edge 5a of the mouth of the jar and also center within the mouth 5, at 5b, whereby its retentive grip on the mouth 5 is increased. The central portion of the tongue 8a is downwardly curved to press on the center of the dished lid when the jar is in its supported position, as shown in Fig. 2. It will be seen that, when the jar is pushed upon the runners, its upper edge will slide under the lid until the dished portion 20a of the latter snaps into place within the mouth of the jar 5b, because of the resilient pressure of the central portion of tongue 8a upon the center of the lid. The withdrawal of the jar 3 from the holder will, of course, cause the lid to rise sufficiently against the resilient pressure of tongue 8a to permit the jar to pass the same. Tongue 8a is shown as provided with a downwardly bent portion 18 and an upturned forward end 18a to form a stop or detent means against which the interior edge of the dish 20a and the forward lug 10a, on the lid, respectively, are adapted to abut, when the jar is withdrawn from the holder to prevent unintentional withdrawal of the lid from the holder.

In the form of device shown in Fig. 3 a fitment is shown in which a plurality of similar holders for supporting containers side by side are provided, the right hand holder being shown and part of the next one. As shown the fitment may be secured to a vertical wall to which two or more L-shaped brackets 24, of which the right hand one is shown, are secured, as by screws 21. The right hand runner 1 as shown in Fig. 3, is part of an angular member, having an upwardly extending arm 1a with a horizontal extension 1b, from its upper end, which is supported upon the horizontal arm 25 of bracket 24, the top strip 11 of the holder being mounted upon that, these parts being secured together by bolts or the like 12. The construction will be the same at the opposite or left hand end of the fitment, while at intermediate points, as is shown at the left of Fig. 3, two runners 1, 1 are formed integral with a channel shaped member 1c, secured to the under side of, or integral with, strip 11.

If it is desired to attach the fitment to a horizontal surface such as the under side of an existing shelf instead of to a vertical surface, the brackets 24 will, of course, be superfluous, since strip 11 can be secured to the under side of the shelf, as by screws 26.

In this form of construction, the tongues 8b are integral with the lid 7 and take the form of upwardly bowed portions thereof or ribs, which extend rearwardly beyond the rear of the runners 1, 1, and are adapted to press against the under side of the strip 11. The rear ends of these ribs are shown as having lugs 10b, 10b projecting outwardly therefrom and as engaging behind the upwardly extending arms 1a, 1a of the runners 1, 1 to act as detent means for preventing unintended removal of the lid 7 with the container.

Also, in this construction, the lid 7 is dished

as shown at 20a to center or seat within the mouth of the container, the lid being provided with a rubber ring 20b encircling the base of the dished portion and adapted to seat upon the rim of the mouth of the container; an additional rubber ring may be provided to cover the edge of the dished portion of the lid at 20a to provide an alternative or additional seat for the lid.

It will be evident that a plurality of holders, similar to the one shown at the right of Fig. 3 may be provided by this construction, for supporting an equal number of containers side by side and that the containers may be inserted in position and withdrawn from the holders in the same manner, as above described, with a dished lid being forced into firm position in, on or around the mouth of the container when the latter is pushed back on the runners, and being freed from the mouth of the container when the latter is withdrawn. Holders, according to the embodiments illustrated in Figs. 1 and 2 can similarly be joined together in a series of holders by means of the horizontal strip 11 or vertical strip 14.

It will be seen that in all of the embodiments of the invention described, means are provided for causing one or each of the co-acting seating surfaces 5a, on the mouth 5, and 20, 20b on the lid 7, respectively to adapt itself to the general plane of the other, when the container flange is pushed on to the runners 1.

Thus, for example, in the embodiments described, with reference to Figs. 1 and 2, the lid is so mounted in the holder above the runners and below the upper support element (such as strip 11), as to be capable of limited swinging and linear movements, so that its under seating surface may more readily adapt itself to the general plane of the seating area of the mouth of a supported container. Also, when a container having a downwardly sloping circular top flange (as shown in all three figures) is supported on flat runners, substantially point contacts between the runners and the flange on diametrically opposite points of the latter will be provided so that the container, (until clamped into position by the lid) is adapted to rock about an axis extending through such points, so that the mouth of the container is to that extent enabled to adapt itself to the general plane of the seating surface of the lid. It is thus possible through the different movements of the lid and the container, which occur automatically when the container is pushed into position on the runners, to ensure a very close seating of the lid on the container mouth with consequent sealing of the container even where the thickness of flange or the interior surface of the mouth of different containers are not uniformly the same.

Such automatic adjustments of position of the co-acting parts will be seen, for example, in Fig. 1, when the container is adapted to rock in the plane of the paper, about supports on the runners on the axis of the container, while the lid is adapted to rock at right angles to the plane of the paper about an axis extending through lugs 10, 10, the lid also being able to swing somewhat in other planes as well as to move up or down, when the tongues 8 are resilient.

It will be observed that in all forms of the device means are provided above the lid comprising an abutment (such as strip 11 in Fig. 1), which have a reactive relation with the lid and also with the runners, (through the intermediary of the lid and the flange of the container), to force the lid into firm seating engagement with the container mouth when the container is pushed into supported position all of the said parts being constructed and shaped to cause this effect to take place.

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

1. In a holder for containers having downwardly facing peripheral flanges near the tops thereof, the combination of a support, a pair of runners extending therefrom adapted to engage beneath the peripheral flange of a container when said flange is pushed thereon to support the container at opposite sides of said flange, a lid positioned for sliding movement forward and back above said runners, coacting means on said lid and support for forcing said lid down into close seating engagement with the mouth of a container when the latter is pushed into supported position with its flange engaging said runners, and detent means for preventing inadvertent removal of said lid from the holder when the container is withdrawn from said runners.

2. In a holder for containers, having downwardly facing peripheral flanges near the tops thereof, the combination of a support, a pair of runners extending therefrom adapted to engage beneath the peripheral flange of a container when said flange is pushed thereon to support the container at opposite sides of said flange, a lid positioned for sliding movement, forward and back above said runners, said support having a portion extending above said lid, resilient means interposed between said portion and lid and secured to one of the same, for forcing said lid down into close seating engagement with the mouth of a container when the flange of the latter is pushed onto said runners, and detent means for preventing inadvertent removal of said lid from the holder when the container is withdrawn from said runners.

3. In a holder for containers, having downwardly facing peripheral flanges near the tops thereof, the combination of a support, a pair of runners extending therefrom, adapted to engage beneath the peripheral flange of a container when said flange is pushed thereon to support the container at opposite sides of said flange, a lid, positioned for sliding movement, forward and back above said runners, said lid and support having portions inclined with relation to each other, said portions being positioned to force said lid into close seating engagement with the mouth of a container when the flange of the latter is pushed onto said runners, and detent means for preventing inadvertent removal of said lid from the holder when the container is withdrawn from said runners.

4. In a holder for containers, having downwardly facing peripheral flanges at their upper ends, the combination of a support adapted to be secured to a fixed surface and having upper and lower elements, one above the other, said lower elements comprising a pair of runners adapted to engage beneath opposite sides of the peripheral flange of a container when said flange is pushed thereon to support said container at opposite sides of said flange, a separate lid positioned between said upper and lower support elements for limited sliding movement therebetween, said lid and one of said support elements having surfaces inclined with relation to each other positioned, to force said lid progressively into close seating engagement with the mouth of a container when the flange of said container is pushed onto said run-

ners, beneath said lid, with an upper bearing surface of said lid engaging against an under bearing surface of said upper support element and detent means to prevent inadvertent removal of said lid from the holder.

5. In a holder for containers having downwardly facing peripheral flanges near the tops thereof, the combination of a pair of runners rigidly secured to a fixed support and adapted to engage under opposite sides of the peripheral flange of a container when said flange is pushed thereon to support said container at opposite points of said flange, a separate lid mounted above said runners for limited rocking and linear movements above the same, and means above said lid comprising an abutment engaged by an upper surface of said lid, when said flange of the container is pushed onto said runners, said means, lid and runners, being constructed and shaped to force the lid into close seating engagement with the mouth of a container when the flange of said container is pushed onto said runners beneath said lid.

6. In a holder for containers having downwardly facing peripheral flanges at their upper ends, the combination of a support adapted to be secured to a fixed surface and having upper and lower elements, said lower elements comprising a pair of runners adapted to engage beneath opposite sides of the peripheral flange of a container when said flange is pushed thereon to support the same, and a separate lid positioned between said upper and lower support elements for limited movement between the same, said lid and support elements constituting three members at least one of which is resiliently yieldable in a plane approximately normal to said support elements, said lid being of suitable thickness to fill the space between said upper support element and the mouth of a container and to seat closely upon the latter with an upper surface thereof contacting against the under surface of said upper

support element when the flange of the container is pushed onto said runners beneath said lid and the said yieldable member has yielded sufficiently to enable such position of said lid to be taken.

7. In a holder for containers having downwardly facing peripheral flanges at their upper ends, the combination of a support adapted to be secured to a fixed surface and having upper and lower elements, said lower elements comprising a series of pairs of runners for supporting an equal number of containers, each pair being adapted to engage beneath opposite sides of the peripheral flange of a container when such flange is pushed thereon, said upper support element comprising a substantially horizontal strip extending above said pairs of runners, said runners being supported from said upper support element, and a separate lid positioned above each pair of runners for limited movement between said runners and upper support element, said upper support element constituting an abutment engaged by an upper surface of any one of said lids when the flange of a container is pushed onto the pair of runners beneath said lid, said upper and lower support elements and lids being constituted and shaped to force any one of said lids into close seating engagement with the mouth of a container when the flange of said container is pushed onto the runners beneath the same.

JEROME FRANCIS KENNEDY.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,200,207	McAdam	Oct. 3, 1916
1,825,975	Patenge	Oct. 6, 1931
1,902,354	Corke et al.	Mar. 21 ,1933

Certificate of Correction

Patent No. 2,480,411 August 30, 1949

JEROME FRANCIS KENNEDY

It is hereby certified that error appears in the above numbered patent requiring correction as follows:

In the grant, line 16, and in the heading to the printed specification, line 8, date of expiration of patent, for "January 23, 1963" read *January 23, 1965*;

and that the said Letters Patent should be read as corrected above, so that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 3rd day of October, A. D. 1950.

[SEAL]

THOMAS F. MURPHY,
Assistant Commissioner of Patents.