Oct. 30, 1956 E. S. GIFFORD 2,768,851

RECEPTACLE LID FASTENER

Filed April 23, 1954

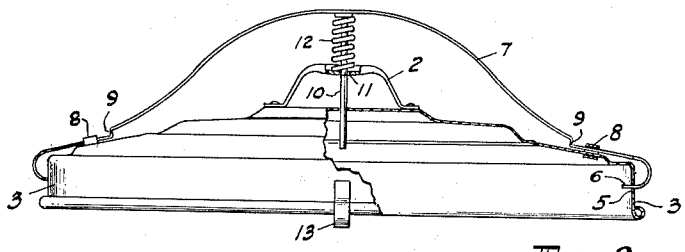


Fig. 2

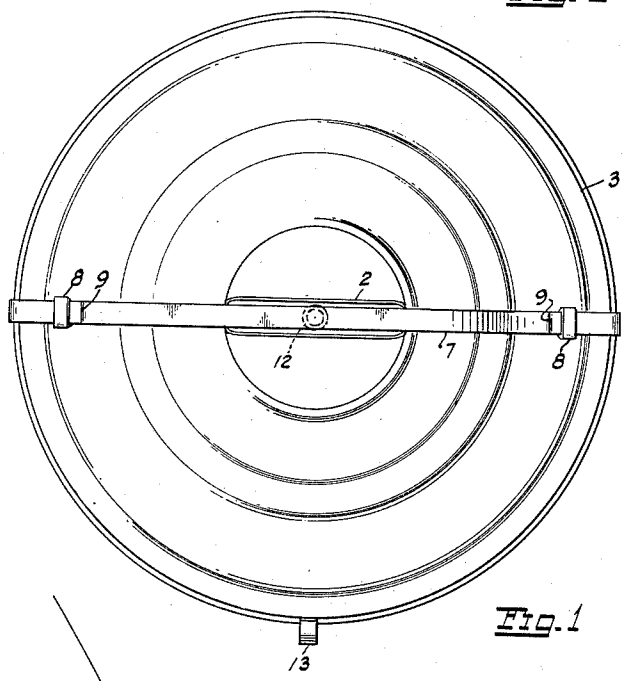


Fig. 1

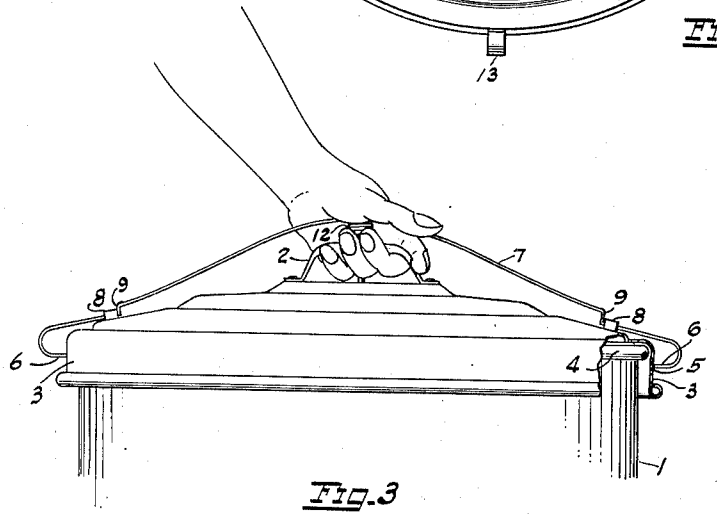


Fig. 3

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RECEPTACLE LID FASTENER

Elmer S. Gifford, Eugene, Oreg.

Application April 23, 1954, Serial No. 425,165
1 Claim. (Cl. 292—30)

This invention relates to improvements in closure lids for receptacles and more particularly to new and novel means for locking a lid to a garbage can or the like to prevent its unintentional opening or removal by strong winds or by prowling animals and the like.

It is one of the principal objects of the invention to provide a lid of the class described having in combination therewith a simple, efficient and effective locking mechanism operable by a natural squeeze of the hand of the user to unlock the lid when gripping the handgrip in a normal manner to lift the lid from the receptacle.

Another object of the invention is to provide a locking mechanism which is of durable and inexpensive construction and which can be readily incorporated in a lid during the process of its manufacture.

The foregoing and other objects will appear as my invention is more fully hereinafter described in the following specification, illustrated in the accompanying drawings, and finally pointed out in the appended claims.

In the accompanying drawing:

Figure 1 is a top plan view of a closure lid and locking mechanism made in accordance with my invention.

Figure 2 is a side view of Figure 1 with fragments broken away for convenience of illustration.

Figure 3 is a view similar to Figure 2 showing the lid applied to a receptacle with the locking mechanism in an unlocked position.

Referring now more particularly to the drawing:

I have shown the invention applied to a more or less standard lid for a garbage can indicated by reference numeral 1 in Figure 3 but it will be understood that the invention is readily adaptable to any closure lid having a centrally disposed handgrip indicated at 2 and a depending annular flange 3 to encircle the top end of any receptacle having a rolled rim 4. In applying the invention to a lid of the type described I form diametrically opposed slots 5 in the flange 3 to slidably accommodate the inwardly turned or hook-shaped ends 6 of a locking bar 7 preferably made of spring steel or the like so as to normally maintain its shape shown in Figure 2 wherein said hooked ends of the bar are in position for locked engagement with the upper end of the receptacle beneath the rolled rim 4 thereof as aforesaid.

The outer end portions of the locking bar are slidably attached to the top surface of the lid by means of looped bands of metal 8 extending through appropriate slots formed in the lid. From these points of attachment the locking bar is turned upwardly as at 9 to form limit stops for outward movement of its end portions, then upwardly and over in alignment with the handgrip

2. To the underside of the center of the locking bar I secure, by welding or the like, a guide pin 10 which slidably extends downwardly through an aperture 11 formed in the handgrip and is surrounded by a compression spring 12 whose bottom end bears against the top of the handgrip and whose top end bears against the underside of the locking bar, as shown.

A hook 13 is secured to the flange 3 and extends downwardly therefrom for convenience in hanging the lid onto the side of the receptacle when removed from the top end thereof.

Upon gripping the handgrip and locking bar simultaneously when in the locked positions shown in Figure 2 and forcing them toward one another by a natural tightening of the hand as shown in Figure 3 the resultant downward and outward flexing of the locking bar toward a flattened position will move its hooked ends 6 outwardly from beneath the rolled rim 4 of the receptacle to release the lid for easy removal. When replacing the lid upon the receptacle the hooked ends 6 will re-engage with the underside of the rolled rim upon releasing the handgrip which will allow the locking bar to resume the position shown in Figure 2 by its own resiliency aided by the expansion force of the spring 12.

While I have shown a particular form of embodiment of my invention I am aware that many minor changes therein will readily suggest themselves to others skilled in the art without departing from the spirit and scope of the invention. Having thus described my invention what I claim as new and desire to protect by Letters Patent is:

A closure lid having a handgrip with a vertical opening formed therethrough and means for locking the lid to a receptacle having a rolled rim at its open end, said lid including a downwardly depending annular flange having diametrically opposed single openings therein, a pair of looped metallic bands secured to the lid at diametrically opposed points, a one-piece resilient locking bar normally of arcuate shape in side elevation and turned downwardly near the inner ends of said looped bands to form limit stops with respect thereto then outwardly through the bands and thereby being slideably attached to the lid, the outer ends of the band being turned downwardly and inwardly into hook members extending through the openings in said flange for normally engaging with the upper end of the receptacle beneath said rolled rim, a stabilizing pin secured to the locking bar at the center thereof and extending downwardly through said opening in the handgrip, whereby downward pressure applied to the locking bar intermediate its ends will extend it longitudinally to remove said hook members from beneath said rolled rim to release the lid for removal from the receptacle, and whereby said limit stops will prevent said hook members from being extended outwardly beyond said openings in the annular flange of the lid and whereby said locking bar when released will by its inherent resiliency retract said hook members into locking position.

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