May 29, 1928. 1,671,547

H. W. ROTHERA

RECEPTACLE LID FITTING

Filed Sept. 21, 1927

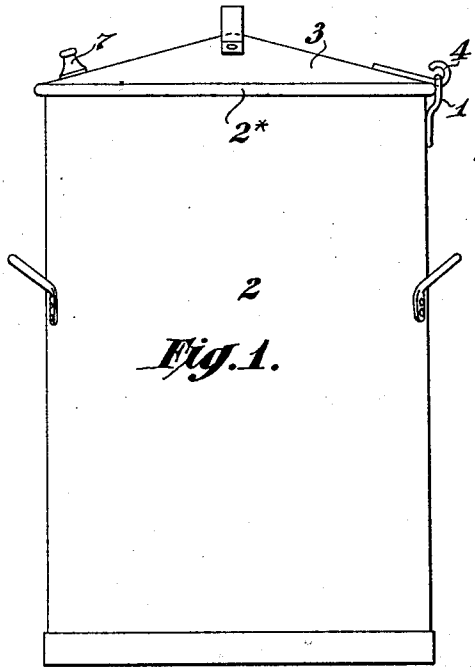


Fig. 1.

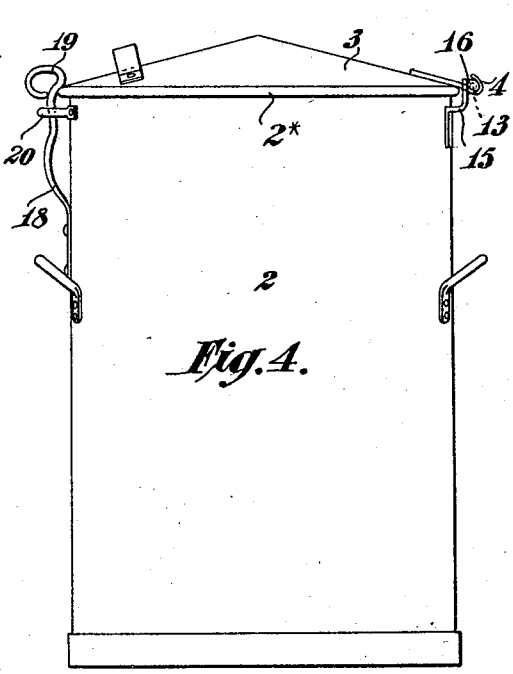


Fig. 4.

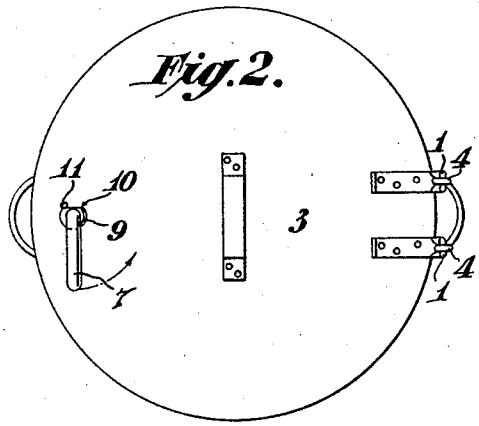


Fig. 2.

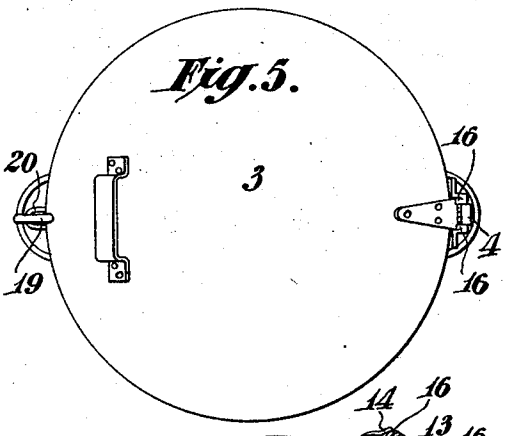


Fig. 5.

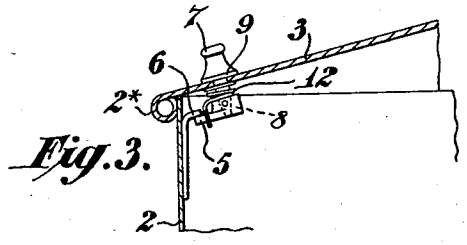


Fig. 3.

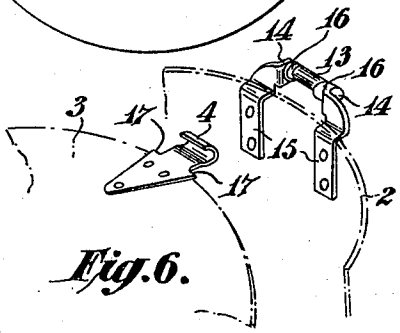


Fig. 6.

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Patented May 29, 1928. 1,671,547

UNITED STATES PATENT OFFICE.

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RECEPTACLE LID FITTING.

Application filed September 21, 1927, Serial No. 221,000, and in Great Britain September 9, 1926.

This invention, which relates to improvements in lid fittings for various receptacles, more particularly sanitary dust-bins, has reference to the kind of lid fitting which comprises a removable lid member, provided with a hinge whereof the components are readily separable, and also with a locking clamp disposed opposite the hinge, said hinge consisting of an eye member carried by the receptacle and a hook member carried by the lid for detachable engagement together.

The present invention consists in that the hook member on the lid projects upwardly, in a vertical plane, from the periphery thereof and faces inwardly of said lid to engage with the eye or equivalent member on the receptacle in such manner that the lid has to be swung through a large angle before the hook member can be disengaged from the eye or equivalent member by a backward movement of the lid.

For a clear understanding of the invention, reference is to be had to the following description and accompanying sheet of drawings illustrative of practical embodiments of the invention, and wherein:—

Figure 1 is an elevational view of a dust-bin with hook-and-eye fitted hinge and locking clamp.

Figure 2 is a top plan view thereof.

Figure 3 is a fragmentary vertical sectional view illustrative of the locking clamp of said dust-bin.

Figure 4 is an elevational view of a dust-bin fitted with a modified arrangement of hinge and locking member.

Figure 5 is a top plan view thereof.

Figure 6 is a view, drawn to an enlarged scale, showing the components of the hinge separated from one another.

In carrying out the invention and referring to Figures 1 and 2 of the drawings, a pair of eyes 1, 1 are slightly spaced apart and erected vertically from the mouth of the bin 2, and these constitute one of the hinge components. On the lid 3, which is formed with a rolled over or beaded rim 2*, a pair of hook-like members 4, 4 project from the periphery of the lid 3 in a vertical plane so that said hooks 4, 4, which constitute the other component of a hinge, can be engaged by the eyes 1, 1 by an upward hooking movement.

Diametrically opposite the aforesaid two-part hinge there is provided the clamping member, the same consisting of a swivelling clamp of the nature where a handle on the lid imparts an angular movement to a more or less horizontally disposed projection 5 located underneath the lid 3, see Figure 3, said projection 5 being adapted to ride under a radial or other lug 6 secured to the bin 2.

The handle member, for convenience of assembly, consists of two parts, viz:—the handle proper 7 and the projections 5, said handle 7 extending from a vertical spindle 8 which drops through a hole in the lid 3, said spindle 8 being provided with a collar 9 to rest on top of the lid 3 aforesaid, said collar 9 being formed with a cutaway portion 10 which engages a stop pin 11 on said lid 3 to maintain the projection 5 in engagement with the lug 6 on the bin 2, and prevent over-turning of said projection 5 under the action of the spring 12 connected to said projection 5 and to the lid 3 aforesaid, the cutaway portion 10 of the collar 9 allowing of the handle 7 being swung to one side to disengage the projection 5, into which the spindle 8 fits and is pinned or otherwise secured thereto, from the lug 6 aforesaid.

Referring now to the arrangement of lid fitting shown in Figures 4, 5, and 6 of the drawings, the hinge component on the bin 2 is constituted by a horizontally disposed spindle 13 formed in one with or conveniently affixed to the vertically disposed upper ends 14 of a pair of brackets 15 affixed to the bin 2, said spindle 13 being, at each end, formed with an eccentric 16. The hinge component on the lid 3 consists of a hook-like member 4 projecting from the periphery of the lid 3 in the horizontal plane, said hook-like member 4 being formed with opposite and horizontally disposed shoulders 17.

Diametrically opposite the hinge aforesaid is the clamping member, the same consisting of a springy rod 18 affixed by its lower part to the bin 2, and at its upper end provided with a vertically disposed loop-like handle 19 which, when the lid 3 is shut down over the mouth of the bin 2, projects inwardly and over the rolled over or beaded rim 2* of the lid 3 aforesaid, said springy rod 18 being movable in and guided by a horizontally disposed eye 20 projecting perpendicular from the bin 2.

To engage the components of the hinge together, the lid 3 is held in a more or less

vertical position, and the hook 4 of said lid is then hooked under the horizontally disposed spindle 13 carried by the brackets 15 of the bin 2. The lid 3 is then swung over, using said spindle 13 as a pivot, till the shoulders 17 of the said hook 4 engage with the eccentric portions 16 of said spindle 13 and turn therearound, thus locking the component parts of the hinge together, at the same time, the rolled over or beaded rim 2* of the lid 3 snaps past and engages under the loop-like handle 19 aforesaid.

I claim:—

1. A hinge comprising two members one of which includes a spindle formed at each end with an eccentric portion, and the other member of which consist of a body portion formed with an offset hook adapted to engage the intermediate portion of the spindle, and shoulders formed at each side of the hook and adapted to engage with the eccentric portions of the spindle.

2. A hinge adapted to connect a closure member to a support including an eyed component constituted by a horizontally disposed spindle formed at each end with an eccentric portion and brackets disposed vertically of the support for carrying said spindle, and a hook component of the hinge adapted to project from the periphery of the closure member in a horizontal plane and provided at each side of the hook portion with opposite and horizontally disposed shoulders, the hook engaging the spindle and the shoulders engaging the said eccentric portions of the spindle.

In testimony whereof I have affixed my signature hereto this seventh day of September, 1927.

HAROLD WESTWOOD ROTHERA.