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WASTE CONTAINER

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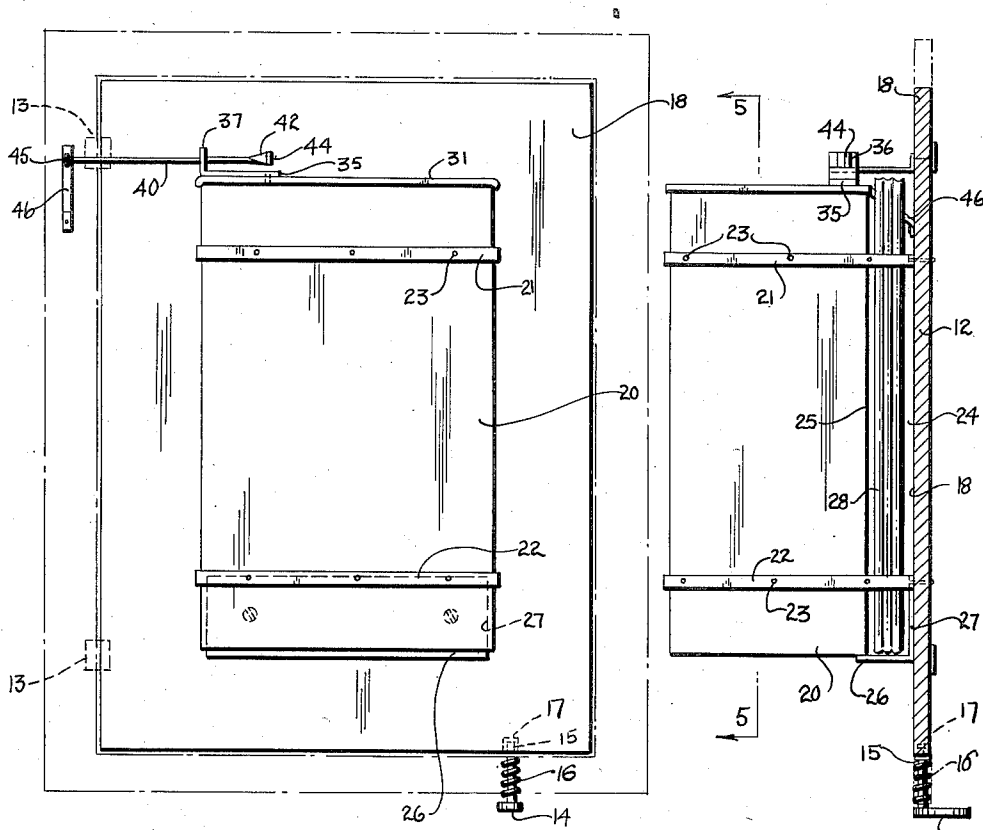


FIG. 2

FIG. 3

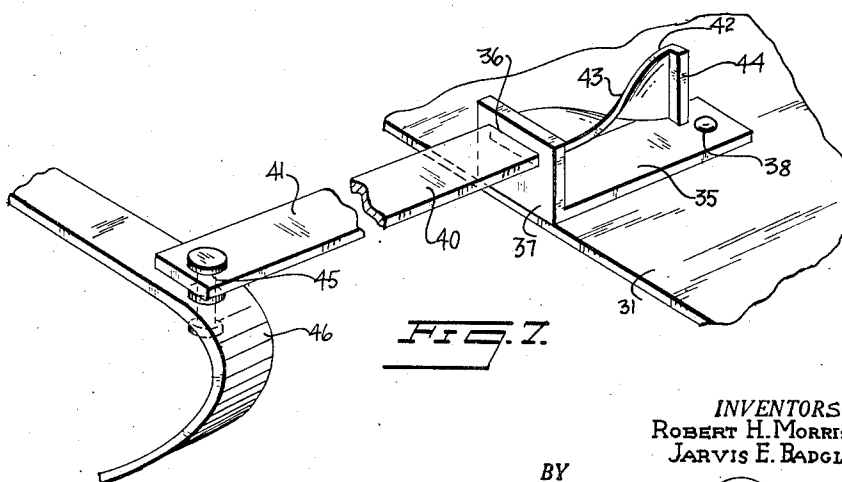


FIG. 7

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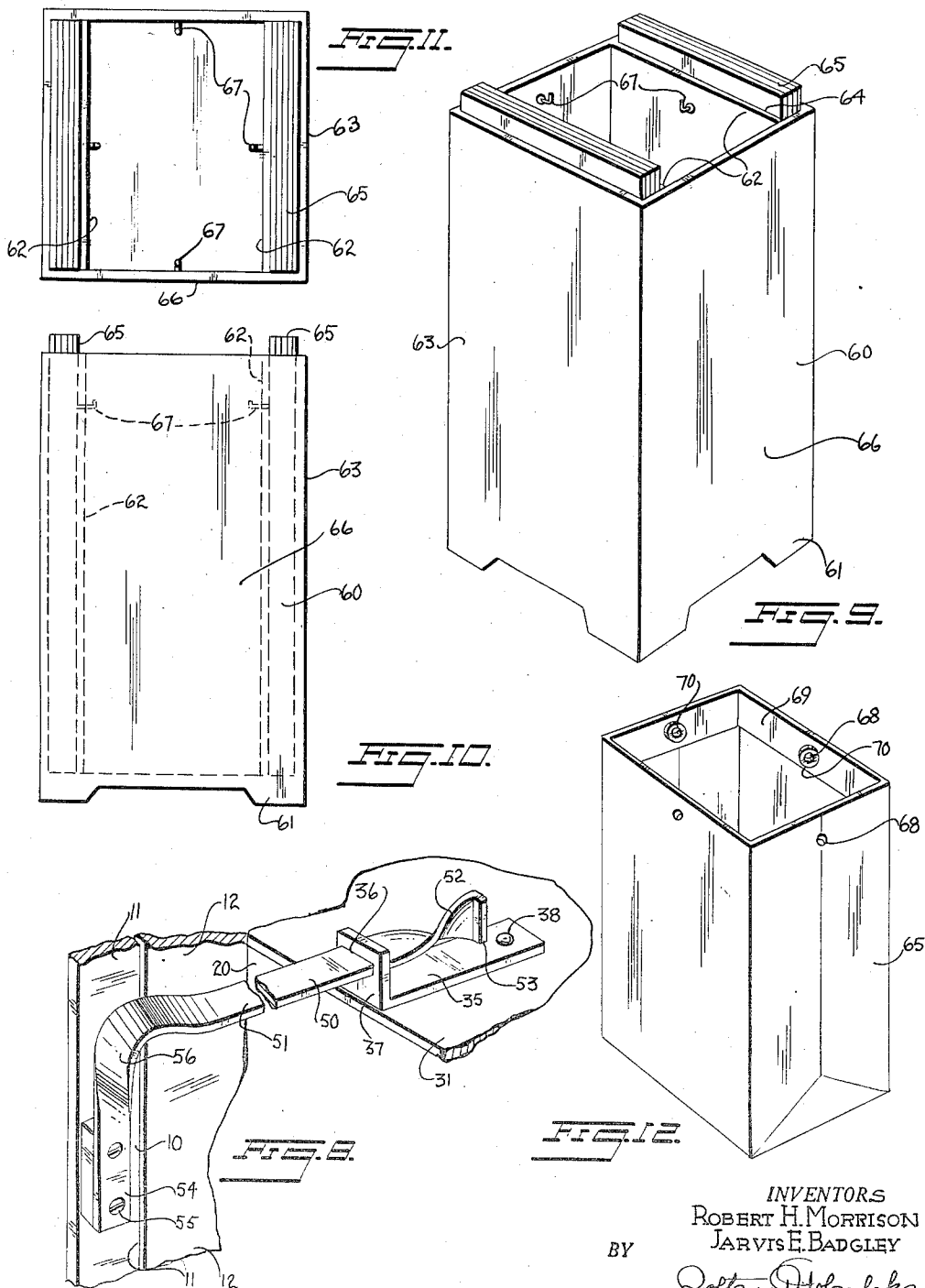
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WASTE CONTAINER

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6 Claims. (Cl. 312-319)

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This invention relates to containers and in particular to ones which are adapted for household use to receive waste or refuse.

A particular object of the invention is to provide a container referred to which can be mounted on a panel that forms a part of a wall or the apron of a cabinet such as a sink or other kitchen furnishing so that the receptacle will be in position for convenient use, can be kept out of sight, is readily accessible and in which a number of liner bags can be arranged for storage to be placed in open position in the receptacle for use in receiving the waste.

A still further object of the invention is to provide a simplified mechanism for opening and closing the lid of the container at the same time that the container itself is swung outwardly through an opening in the panel on a door on which it is mounted.

Other important objects of the invention are to provide a refuse holder having hooks for holding liner bags within the receptacle and storage bins or compartments therein in which supplies of liner bags may be contained which are ready for use by hanging inside the receptacle to provide a lining therefor in which the refuse may be held, the bag being removed when filled so that the inside of the receptacle can be kept in a clean and sanitary condition; to provide an automatic operating means in the form of a single twisted bar member which will serve the purpose of automatically opening the lid when the receptacle is moved to a position for use; and a bar member which will serve as a combination spring and lid raising member.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a view in front elevation of a frame or panel member in which is mounted an improved receptacle.

Fig. 2 is a view in rear elevation of the receptacle illustrated in Fig. 1.

Fig. 3 is a view in side elevation of the receptacle illustrated in Fig. 2.

Fig. 4 is a plan view in section taken on the line 4-4 of Fig. 1 and illustrating in outline the various operating positions of the receptacle.

Fig. 5 is a vertical section on the line 5-5 of Fig. 3 showing the construction of the receptacle.

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Fig. 6 is an enlarged fragmentary section on the line 6-6 of Fig. 5 illustrating the use of a gasket member for sealing the cover.

Fig. 7 is a view in perspective of the operating bar that is used in raising the lid of the receptacle.

Fig. 8 is a view similar to Fig. 7 illustrating a modified form of bar member which serves the double purpose of lifting the lid and swinging the door open when the latter is unlatched.

Fig. 9 is a view in perspective of a modified form of receptacle in which liner bags are held at opposite sides of the receptacle in bag holding pockets.

Fig. 10 is a view in side elevation of the receptacle illustrated in Fig. 9.

Fig. 11 is a top plan view of the receptacle as shown in Fig. 10 and illustrating the bag hanging hooks therein.

Fig. 12 is a view in perspective of one type of bag that may be used to provide a liner for holding waste in the receptacle.

Referring to the drawing in detail, 10 indicates the panel of a cabinet or a portion of a wall that may form the front of any article of kitchen or other furniture or a frame to be mounted in a wall. The member 10 is provided with a central rectangular opening 11 in which the door 12 is hinged as at 13. The door 12 is retained in closed position flush with the panel or frame 10 by a foot operated latch 14 whose pin 15 is arranged to engage under pressure of a spring 16, a suitable bolt opening 17 in the bottom edge of the door 12. In Fig. 1, the device is shown as it would appear to anyone in the room and in Fig. 2 the reverse or inner side thereof is shown and upon the inner wall 18 of the door 12 there is mounted a substantially rectangular receptacle 20 which is secured in place on the door by upper and lower straps 21 and 22 respectively. The straps are secured as by rivets or other fastening means 23 to the receptacle 20 so that the latter may be held away from the inner surface 18 of the door 12 to provide a space 24 between the vertical wall 25 of the receptacle and the inside surface 18 of the door 12. The receptacle 20 is provided with a removable bottom for the purpose of cleaning.

The bottom of the pocket 24 is closed by the foot portion 26 of a bracket 27 which underlies the edge of the receptacle 20 and is secured in any suitable manner to the lower strap 22. The space 24 is for the storage of a number of liner bags 28, one of which, as shown in Fig. 4, may be mounted on suitable hooks 30 inside the recep-

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tacle 20. The top of the receptacle 20 is provided with a cover 31 which is hinged thereto as at 32, the receptacle being sealed, if desired, by the use of a rubber gasket 33 extending about the upper edge of the receptacle 20 and against which the cover 31 may make sealing contact to prevent the escape of odors from the receptacle.

When the latch 14 is depressed by the foot to release the door 12, a compression spring 45^a forces the door to swing outwardly to provide access to the receptacle 20, and in order that manual opening of the lid 31 may be unnecessary the latter is provided with a bracket 35 having a horizontal slot 36 in an upstanding or vertical portion 37 thereof. The bracket 35 may be secured to the lid 31 in any suitable manner but is preferably secured as at 38 for alignment with a horizontally disposed lid lifting bar 40 which, throughout the greater portion of its length, is horizontal as at 41 and passes through slot 36 and at its free end 42 is twisted at right angles to assume a vertical position as at 43 which terminates in a lip 44. The lift bar 40 is pivoted as at 45 to a bracket 46 mounted in any suitable manner on the inside surface of the panel or frame 10.

As the door 12 swings open, the twisted end 43 of the lift bar 40 will swing the bracket 35 vertically and with it the lid 31 to open position, the outward swinging movement of the door 12 being limited by the lip 44 coming into engagement with the vertical portion 37 of bracket 35. The pivot 45 of the bar 40 permits it to swing with the door as illustrated in outline in Fig. 4 and the bracket 35 permits it to align itself with the bar 40 so that as the receptacle passes through the opening 11 in the panel or the frame it will swing to open position and in this respect it will be noted in Fig. 1 that the receptacle is of smaller dimensions than the opening 11 through which it passes, so that, at the top of the receptacle there is left a space that permits the lid to be lifted without striking the panel, as the receptacle is swinging out with the door.

In the modified form of the device illustrated in Fig. 8 the parts of the bracket are numbered substantially the same as they are in Fig. 7, the lift bar 50 being in slightly different form but being twisted as at 52 at an inflexibly tempered end, at right angles to a horizontal body portion 51, and being also provided with a limiting lip 53 which functions in the same manner as the lip 44. In the use of the bar 50 the same is rigidly attached at a flexible end 54 to the panel 10 as by the screws or other fastening media 55. In mounting the bar 50, the fixed end 54 thereof will be flatwise with respect to the panel 10 but will be edgewise or horizontal in the portion 51 thereof with respect to the door 12, this being caused by a twist 56 therein, where the strip is bent at right angles to parallel the door and engage the bracket 35.

The twist 56 places the flexible end 54 of bar 50 under a torsional stress so that the outer end of the bar, where it passes through the slot 36, has a tendency to swing toward the door and consequently will swing the door open when the foot latch 14 is operated. This bar 50 serves the double purpose of furnishing spring means for opening the door and lifting the lid by passage of the twisted portion 52 thereof through the slot 36 of the bracket.

In the forms of the invention illustrated in the Figs. 9 to 12, use is made of a receptacle 60 of rectangular form shaped to provide corner feet

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61 and inner walls 62, spaced from the sides 63 of the receptacle to provide wells 64 in which a supply of liner bags 65 may be stored. The opposite side walls 66 and panels or partitions 62 are provided on the inner faces thereof with hooks 67 upon which a receptacle liner bag 65 may be supported, the hooks passing through suitable openings 68 in the opposite sides of the bag, the tops of which are turned over as at 69 to provide a reinforced edge, the openings 68 being provided with reinforcing grommets 70 if necessary. If desired, the form of the receptacle illustrated in Fig. 9 may be employed in connection with the door 12 in which event the cover can be dispensed with. Also, if preferred, any suitable type of bag may be used in place of the one herein described.

While we have illustrated and described the preferred embodiments of our invention, it is to be understood that we do not limit ourselves to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described our invention, what we claim as new, and desire to secure by United States Letters Patent is:

1. In a waste holder, the combination with a panel having an opening therein and presenting inner and outer walls; of a door pivoted in said opening, a receptacle, means for mounting the receptacle on the inner wall of the door, a lid hinged to said receptacle and lid raising means mounted on the inner wall of the panel for engaging said lid to lift the latter as the door is opened, including a bar on the wall panel and having a twisted end portion, and a slotted bracket on the lid and through which the end portion of the bar is moved when the door is opened, said bar and bracket being pivotally mounted for aligned swinging movement.

2. In a waste holder, the combination with a panel having an opening therein and presenting inner and outer walls; of a door pivoted in said opening, a receptacle, means for mounting the receptacle on the inner wall of the door, a lid hinged to said receptacle, lid raising means mounted on the inner wall of the panel for engaging said lid to lift the latter as the door is opened, including a bar having a twisted end portion, a slotted bracket through which the end portion of the bar is moved when the door is opened and the opposite end of said bar from the bracket engaging end being twisted and fixed to the inner wall of the panel to be maintained under torsional stress to swing the door open when the latch is released.

3. The combination with a door for closing an opening in a panel; of a receptacle mounted on the inside of the door, a lid hinged on said receptacle, a flat horizontally disposed lid lifting bar secured to the panel and having one end twisted from horizontal to vertical position, and a bracket on the lid having a horizontal slot through which the twisted end of the bar moves to turn the bracket from horizontal to vertical position and lift the lid as the door opens.

4. The combination with a door for closing an opening in a panel; of a receptacle mounted on the inside of the door, a lid hinged on said receptacle, a flat horizontally disposed lid lifting bar secured to the panel and having one end twisted from horizontal to vertical position, a bracket on the lid having a horizontal slot through which the twisted end of the bar moves to turn the bracket

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from horizontal to vertical position and lift the lid as the door opens, the end of the bar being bent vertically for attachment to said panel and being flexed in said bent portion to provide a twist of ninety degrees therein whereby the bar is under torsional stress and constitutes a spring for urging said door to open position.

5. In a waste holder, the combination with a panel having an opening therein and presenting inner and outer walls; of a door pivoted in said opening, a receptacle, means for mounting the receptacle on the inner wall of the door, a spring for urging said door to open position, a latch for releasing the door and lid raising means mounted on the inner wall for engaging said lid to lift the latter automatically as the door is swung open by the spring when the latch is operated, and a sealing gasket about the upper edge of the receptacle.

6. The combination with a door frame and a door hinged thereto, of a container mounted on one side of the door to swing with the door, a cover hinged to the top of the container, a bracket pivoted on said cover at one end and provided on the other with an upstanding flange formed with a slot, and a lifting bar of flat metal having

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an end secured to the door frame and the other end slidable in the slot, said slidable end being twisted to cause a lifting motion to the cover when said slotted flange slides on said twisted end, and a terminal stop on said lifting bar.

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