April 26, 1960 W. P. WRIGHT 2,934,390

CABINET WITH BUILT-IN GARBAGE RECEPTACLE

Filed Nov. 25, 1958 3 Sheets-Sheet 1

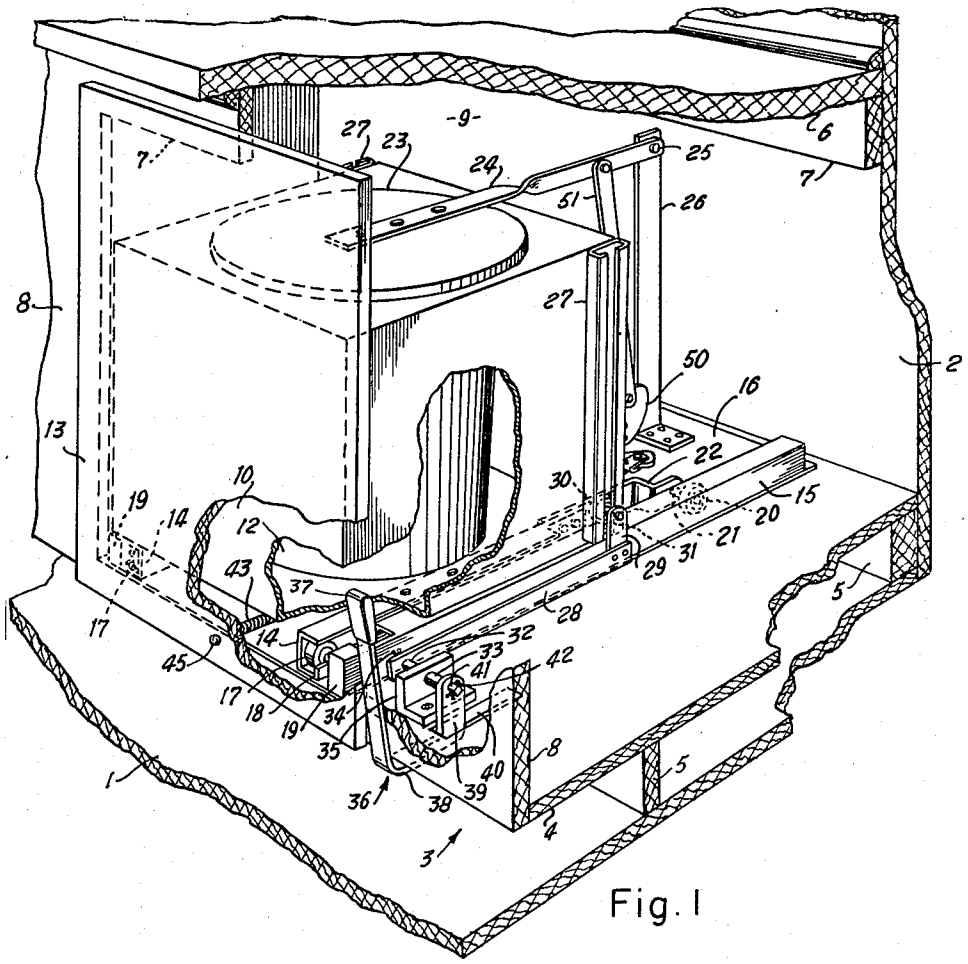


Fig. 1

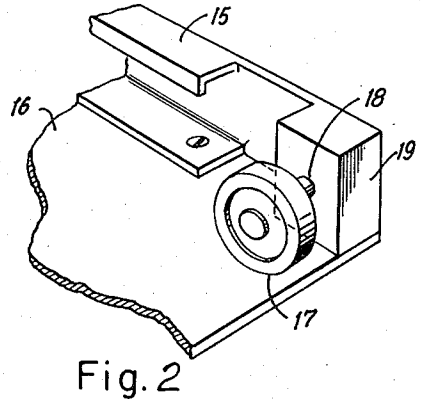


Fig. 2

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CABINET WITH BUILT-IN GARBAGE RECEPTACLE

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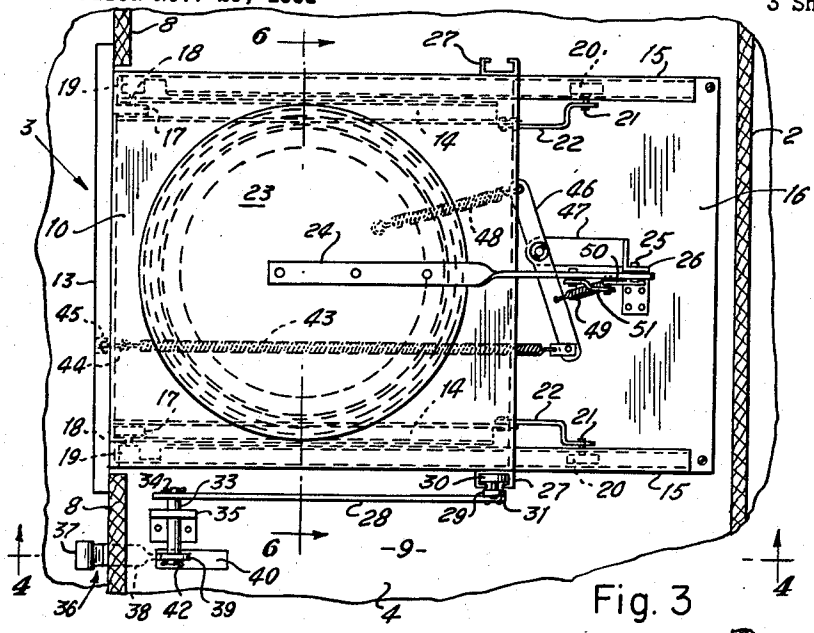


Fig. 3

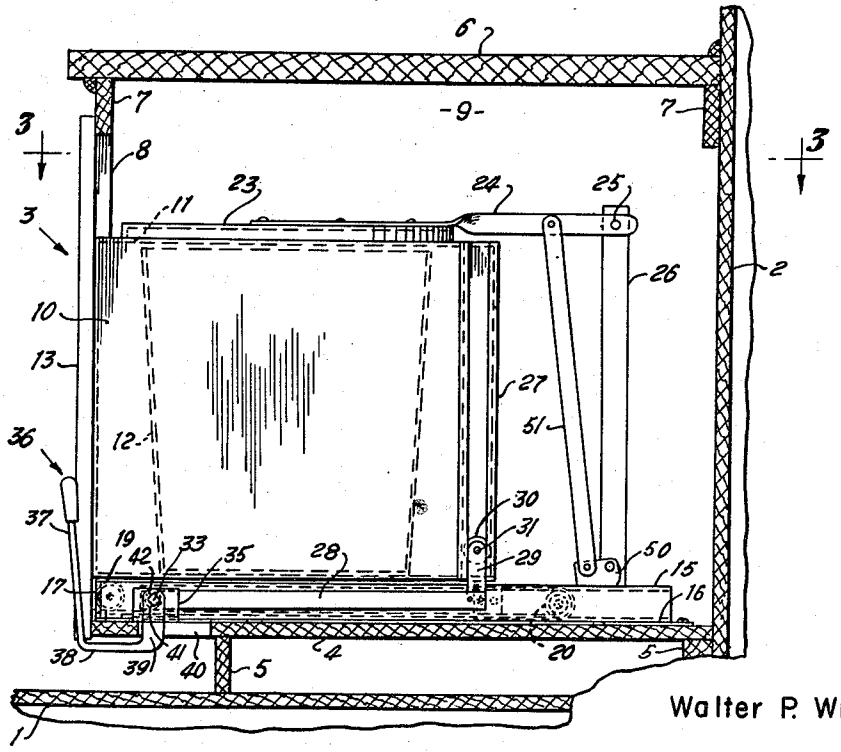


Fig. 4

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CABINET WITH BUILT-IN GARBAGE RECEPTACLE

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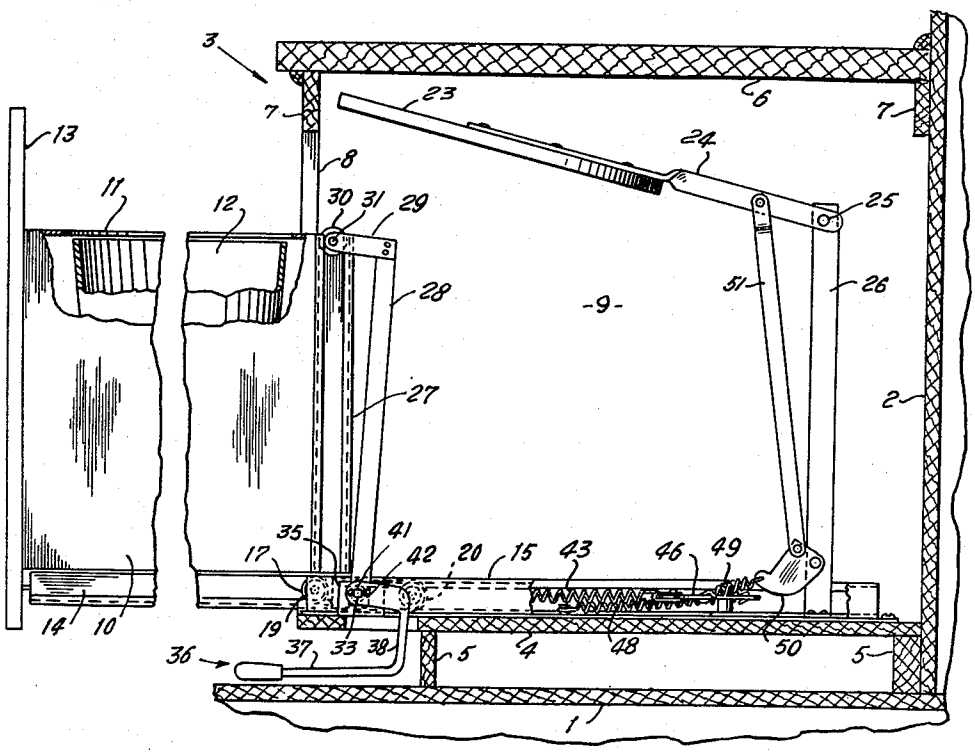


Fig.5

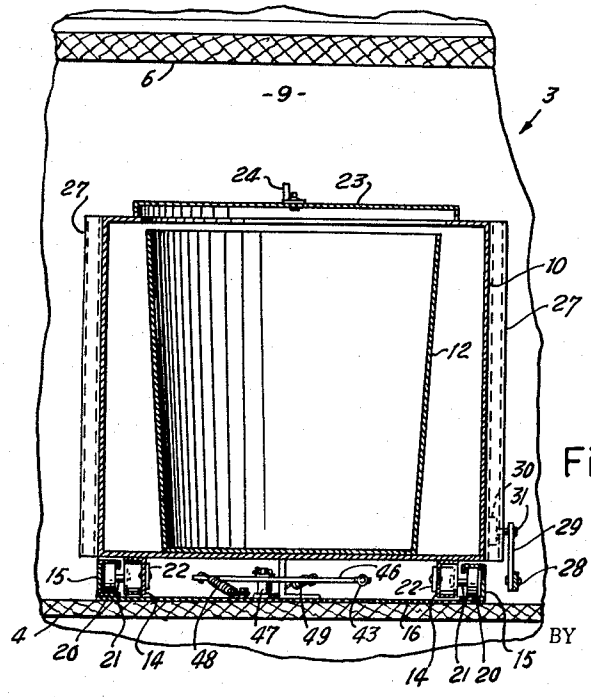


Fig.6

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CABINET WITH BUILT-IN GARBAGE RECEPTACLE

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3 Claims. (Cl. 312—270)

This invention relates to a cabinet with built-in garbage receptacle, and it concerns more particularly a cabinet structure, such as a kitchen cabinet, having a compartment therein for a garbage receptacle.

An object of the invention is to provide, in a cabinet structure having a compartment therein for a garbage receptacle, a receptacle having a top opening, extensible means supporting the receptacle for reciprocal horizontal movement in and out of the compartment, a panel comprising the front wall of the compartment attached to one side of the receptacle and movable therewith, a cover providing a closure for the top opening of the receptacle, means in the compartment pivotally supporting the cover whereby it may be raised and lowered, pedal-operable means for moving the receptacle from a normal position inside the compartment to an extended position outwardly of the compartment, while at the same time raising the cover from a closed position in engagement with the top of the receptacle to an open position above the normal position of the receptacle, and spring-actuated means for returning the receptacle to its normal position and the cover to its closed position upon releasing the pedal operable means.

The invention will be readily understood by referring to the following description and the accompanying drawing, in which:

Figure 1 is a perspective view, partly broken away, of a cabinet with built-in garbage receptacle embodying the invention;

Figure 2 is a fragmentary perspective view, on an enlarged scale, of a portion of the apparatus;

Figure 3 is a sectional plan view taken on the lines 3—3 of Figure 4;

Figure 4 is a sectional elevational view taken on the lines 4—4 of Figure 3, showing the receptacle in its closed position;

Figure 5 is a view similar to Figure 4, showing the receptacle in its open position; and

Figure 6 is a sectional elevational view taken on the lines 6—6 of Figure 3.

Referring to the drawing, the numeral 1 designates the floor of a room, and the numeral 2 indicates a wall thereof. A cabinet structure, such as a kitchen cabinet, is indicated generally by the numeral 3.

The cabinet 3 includes a floor 4, which is supported on a pair of sills 5. The sills 5 are arranged parallel to the wall 2, in spaced relation to each other. One of the sills 5 is positioned rearwardly of the cabinet 3, adjacent the wall 2, and the opposite sill 5 is spaced inwardly from the forward edge of the floor 4, so that the front of the cabinet 3 is suspended above the floor 1.

The cabinet 3 has a top 6, which is supported on a pair of rails 7. The rails 7 are arranged parallel to the wall 2, in spaced relation to each other. One of the rails 7 is positioned rearwardly of the cabinet 3, adjacent the wall 2. The opposite rail 7 is positioned adjacent the forward edge of the top 6, and may comprise a portion

of the front wall of the cabinet 3, which is indicated by the numeral 8.

The cabinet 3 has a compartment 9 therein for a garbage receptacle 10. The receptacle 10 is substantially square, and has a top opening 11. The receptacle 10 is supported by extensible means as hereinafter described for horizontal movement in and out of the compartment 9. A container 12 is removably inserted in the receptacle 10. The compartment 9 is formed in part by side walls (not shown), and partly by a panel 13, which comprises at least a portion of the front wall of the compartment 9. The panel 13 is attached to one side of the receptacle 10, and is movable therewith.

The receptacle 10 has a pair of outwardly facing elongated members 14, which are channel shaped in transverse section, attached to its under side in spaced, parallel relation to each other. A pair of inwardly facing channel-shaped elongated members 15 are attached to a base plate 16, which in turn is attached to the floor 4 of the cabinet 3. The elongated members 14 and 15 are arranged transversely relative to the sills 5, in mutually opposed relation to each other.

A pair of rollers 17, which are journaled on pins 18 carried by lugs 19 extending upwardly from the base plate 16, and each positioned adjacent the forward end of one of the elongated members 15, each engage one of the elongated members 14 to support the receptacle 10 for reciprocal horizontal movement in and out of the compartment 9.

A pair of rollers 20, which are journaled on pins 21 carried by metal straps 22 each connected at one end to one of the channels 14 and extending rearwardly therefrom, each engage one of the elongated members 15 to additionally support the receptacle 10 for reciprocal horizontal movement in and out of the compartment 9.

A cover 23, which normally closes the top opening 11 of the receptacle 10, is attached to one end of an arm 24, which is pivotally connected at its opposite end, as at 25, to the upper end of an upstanding support 26, which is connected at its lower end to the base plate 16.

The elongated members 15 are aligned with one side of the receptacle 10, and the elongated members 14 are positioned inwardly relative thereto.

An outwardly facing elongated, channel-shaped member 27 is arranged vertically along at least one side of the receptacle 10 adjacent a rearward edge thereof. A crank arm 28, which is normally disposed horizontally in parallel relation to the elongated members 14 and 15, has a normally upstanding lug 29 on one of its ends. A roller 30 is journaled on a pin 31 which is connected to the lug 29. The roller 30 engages the elongated member 27, upon pivotal movement of the crank arm 28 about its opposite end as hereinafter described, to move the receptacle 10 from a normal position inside the compartment 9 to an extended position outwardly of the compartment 9.

A square opening 32 is formed in the end of the crank arm 28 opposite the lug 29 for engagement with a correspondingly shaped end portion of a crank shaft 33, to which it is removably connected by a cotter pin 34. The crank shaft 33 is disposed horizontally, at right angles to the crank arm 28, and is passed through an opening in an upstanding leg of an angular bracket 35, which forms a bearing therefor. The bracket 35 is attached to the floor 4.

A pedal lever 36, which is bent angularly intermediate its ends, has a normally upwardly and outwardly inclined end portion 37 which is positioned outside the compartment 9 for engagement by the foot, a normally horizontally disposed intermediate portion 38 which is passed below the floor 4, and a normally vertically dis-

posed portion 39 which is passed upwardly through an opening 40 provided therefor in the floor 4. A square opening 41 is provided in the upper end of the vertically disposed portion 39 for engagement with a correspondingly shaped end portion of the crank shaft 33, to which it is secured by a cotter pin 42.

A tension spring 43 has one of its ends connected to a hook 44. The hook 44 has a threaded end portion which is inserted through an opening provided therefor in the panel 13, and has a nut 45 applied thereto whereby it is secured to the panel 13. The spring 43 is passed rearwardly below the receptacle 10, and is secured at its opposite end to one end of a lever 46. The lever 46 is pivotally connected intermediate its ends to a bracket 47, which is attached to the upstanding support 26, whereby the lever 46 is capable of being swung in a horizontal plane. The end of the lever 46 opposite the spring 43 is connected to one end of a tension spring 48, the opposite end of which is secured to the base plate 16.

A tension spring 49, which is connected at one end to the end portion of the lever 46 nearest the spring 43, is connected at its opposite end to one end of a lever 50. The end of the lever 50 opposite the spring 49 is pivotally connected to the upstanding support 26, whereby the lever 50 is capable of being swung in the vertical plane. The lever 50 is pivotally connected intermediate its ends to one end of a link 51. The end of the link 51 opposite the lever 50 is pivotally connected to the arm 24 intermediate its ends, whereby the cover 23 may be raised and lowered upon movement of the lever 50 about its pivot.

The arrangement is such that the receptacle 10 is moved from a normal position inside the compartment 9 to an extended position outwardly of the compartment 9 upon depressing the pedal lever 36, whereby the crank shaft 33 is rotated about its axis and the crank arm 28, which is movable pivotally about the crank shaft 33, is swung in the vertical plane and the roller 30 engages the elongated member 27. At the same time the cover 23 is raised from a closed position in engagement with the top of the receptacle 10 to an open position above the normal position of the receptacle 10 by the action of the tension spring 43 on the lever 46 and the action of the tension spring 49 on the lever 50.

Upon releasing the pedal lever 36, the receptacle 10 is returned to its normal position, and the cover 23 is returned to its closed position, by the action of the tension spring 48 on the lever 46 and the action of the tension spring 43 on the panel 13.

The invention may be modified in various ways without departing from the spirit and scope thereof.

I claim:

1. In a cabinet structure having a compartment therein for a garbage receptacle, a receptacle having a top opening, extensible means supporting the receptacle for reciprocal horizontal movement in and out of the compartment, a panel comprising the front wall of the compartment attached to one side of the receptacle and movable therewith, a cover providing a closure for the top opening of the receptacle, means in the compartment pivotally supporting the cover whereby it may be raised and lowered, pedal operable means for moving the receptacle from a normal position inside the compartment to an extended position outwardly of the compartment, while at the same time raising the cover from a closed position in engagement with the top of the receptacle to an open position above the normal position of the receptacle, and spring actuated means for returning the receptacle to its normal position and the cover to its closed position upon releasing the pedal operable means, the extensible means supporting the receptacle for reciprocal horizontal movement in and out of the compartment comprising two pairs of relatively movable channels in the compartment positioned below opposite sides of the receptacle, the channels being arranged parallel to each other and perpendicular to the front wall of the compartment, one of the channels of each pair being secured to the under side of the receptacle, a base plate supported on the floor of the compartment below the normal position of the receptacle, the other channel of each pair being secured to the base plate, a pair of rollers rotatably mounted on the base plate and each engaging said one channel of a pair, and a pair of rollers each rotatably mounted on said one channel of a pair and engaging said other channel of the pair, the pedal operable means comprising a vertically disposed channel attached to one side of the receptacle, a crank arm normally disposed horizontally parallel to said one side of the receptacle, a crank shaft mounted on the floor of the compartment and rotatable about a horizontal axis, the crank shaft whereby the crank arm is movable pivotally in the vertical plane, a roller rotatably mounted on the end of the crank arm opposite the crank shaft for engagement with the channel, whereby the receptacle is moved from a normal position inside the compartment to an extended position outwardly of the compartment upon pivotal movement of the crank arm, and a pedal lever connected at one end to the end of the crank shaft opposite the crank arm, the pedal lever being bent angularly intermediate its ends and extending outwardly beyond the front wall of the compartment.

2. The structure of claim 1, the cover supporting means comprising an upstanding support secured to the floor of the compartment and an arm connected at one end to the cover and pivotally connected at its opposite end to the upstanding support, the pedal operable means further including a first lever pivotally connected intermediate its ends to a fixed support and movable pivotally in the horizontal plane, a second lever pivotally connected at one end to the upstanding support and movable pivotally in the vertical plane, means connecting the end of the second lever opposite the upstanding support to an end portion of the first lever, means connecting said end portion of the first lever to the front panel of the compartment and extending below the receptacle, and a link connected at one end to the cover supporting arm intermidate its ends and connected at its opposite end to the second lever intermediate its ends.

3. The structure of claim 2, the means connecting the end of the second lever opposite the upstanding support to an end portion of the first lever and the means connecting said end portion of the first lever to the front panel of the compartment each being spring tensioned, and a tension spring connected at one end to the end of the first lever opposite said end portion and connected at its opposite end to the floor of the compartment.

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