June 3, 1952 C. BELSKY 2,599,362

KITCHEN REFUSE RECEPTACLE

Filed April 24, 1946 3 Sheets-Sheet 1

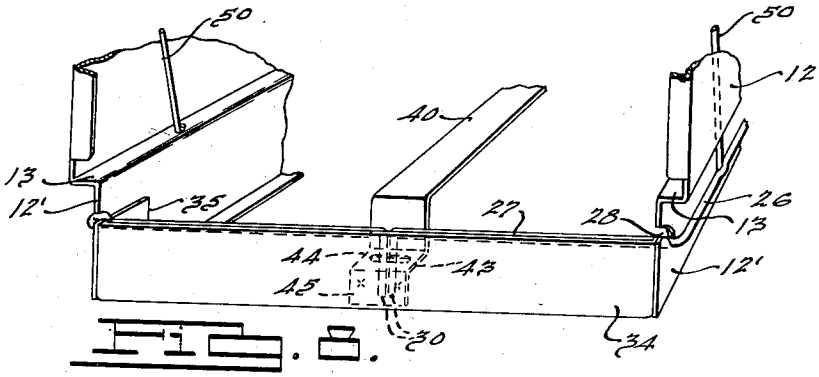


FIG. 3.

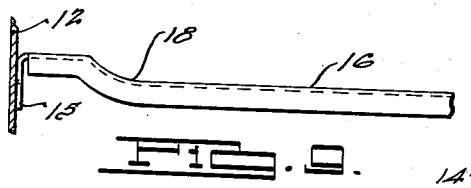


FIG. 2.

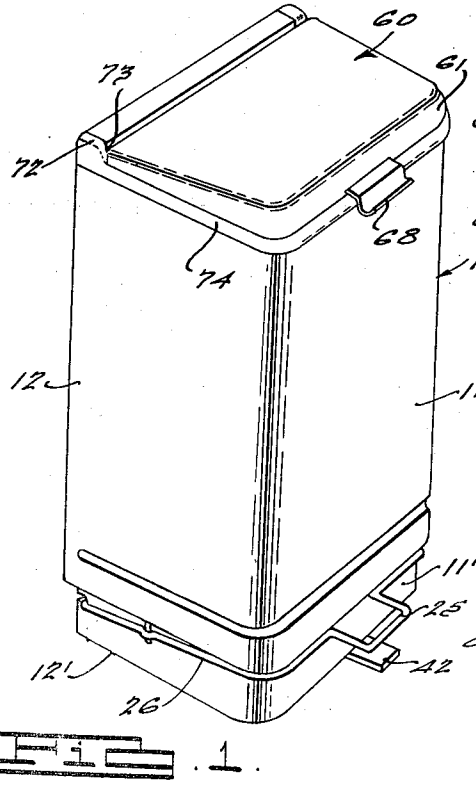


FIG. 1.

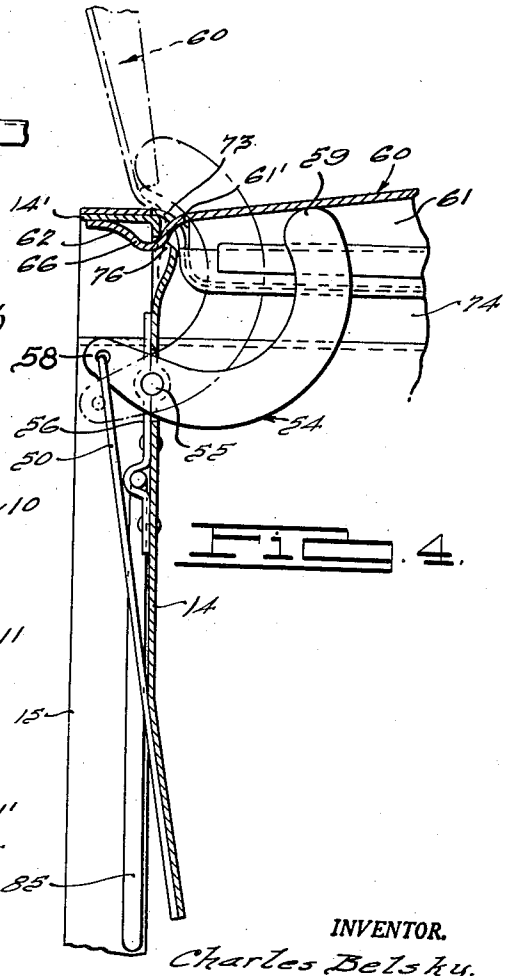


FIG. 4.

INVENTOR.
Charles Belsky.
BY
Harness, Dickey & Pierce
ATTORNEYS.

June 3, 1952 C. BELSKY 2,599,362

KITCHEN REFUSE RECEPTACLE

Filed April 24, 1946 3 Sheets-Sheet 2

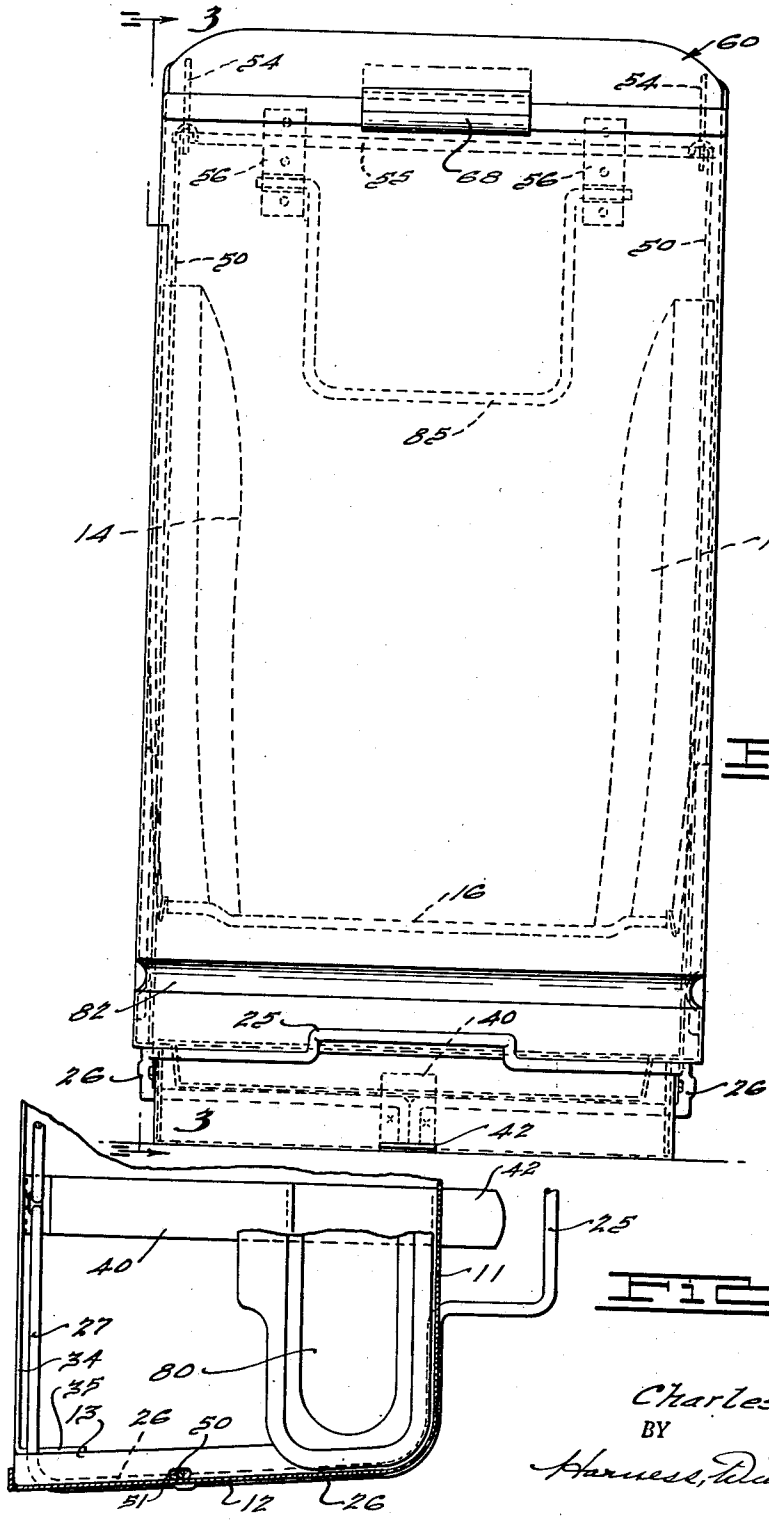


Fig. 2.

Fig. 6.

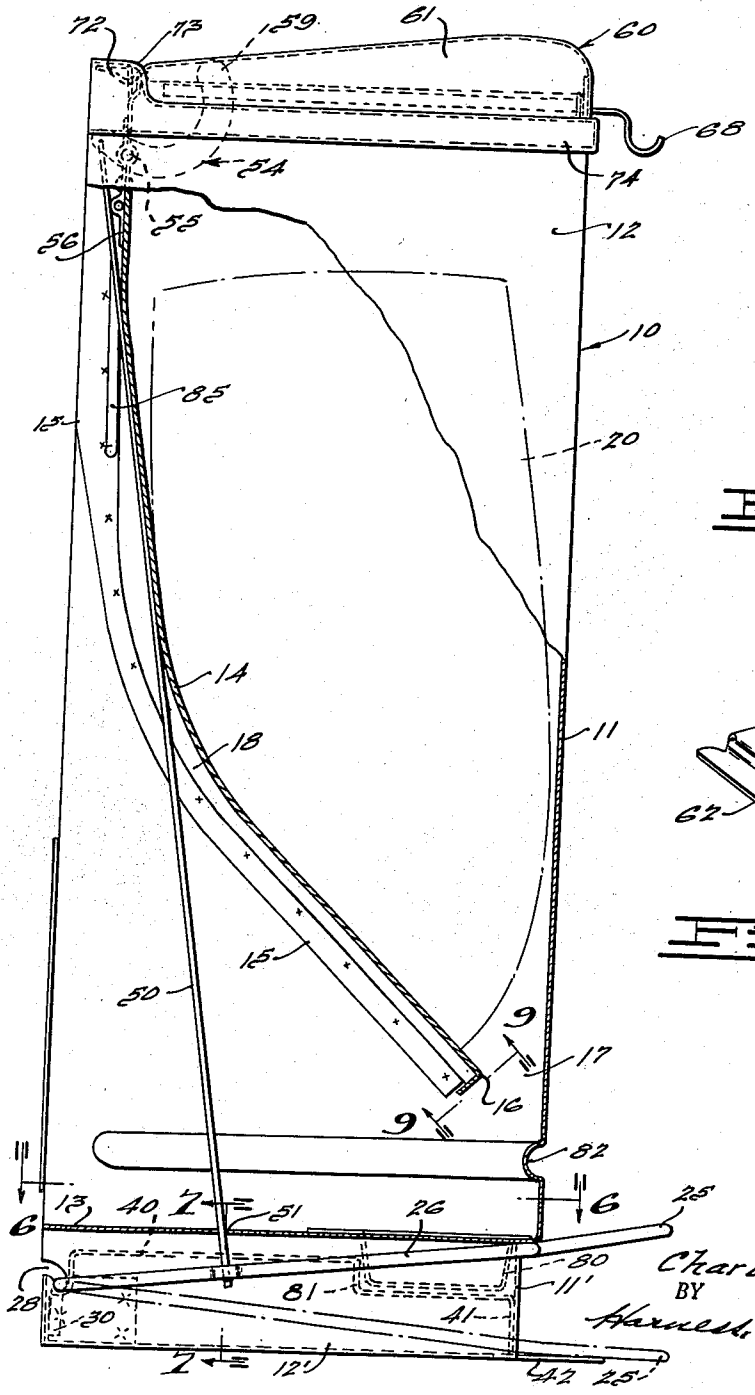
INVENTOR.
Charles Belsky.
BY
Harness, Dickey & Pierce.
ATTORNEYS.

June 3, 1952 C. BELSKY 2,599,362

KITCHEN REFUSE RECEPTACLE

Filed April 24, 1946 3 Sheets-Sheet 3

Fig. 3.



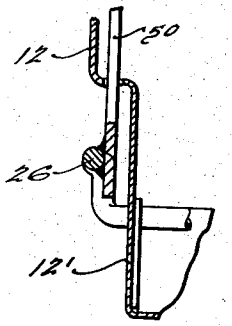


Fig. 7

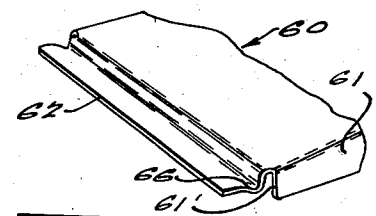


Fig. 5.

INVENTOR.
Charles Belsky.
BY
Harness, Dickey & Pierce.
ATTORNEYS.

Patented June 3, 1952

2,599,362

UNITED STATES PATENT OFFICE

2,599,362

KITCHEN REFUSE RECEPTACLE

Charles Belsky, Detroit, Mich.

Application April 24, 1946, Serial No. 664,502

4 Claims. (Cl. 220—31)

1

The present invention relates to receptacles, particularly for refuse, such as garbage, which may contain considerable moisture. An important object of the invention is to provide such a receptacle which is of neat appearance, compact construction, and which is convenient to use.

A further object is to provide such a receptacle constructed entirely of sheet metal and wire parts which are quick, simple, and inexpensive to fabricate and to assemble.

Another object of the invention is to provide such a receptacle having a lid conveniently operable by means of a foot treadle, the lid being quickly and easily removable and contoured to serve as a dustpan.

An object related to that last stated is to provide novel hinging and actuating means for such a combined dustpan and cover, so designed and arranged that the combined dustpan-cover may be removed and replaced with one hand, simply by pulling the same from a slot in which its forward edge or lip is fitted, without the necessity for manipulation of any special holding or fastening means.

Still another object is to provide novel combined foot treadle and spring means, and additional novel co-operating parts, for actuating the cover, limiting the travel of the treadle and other elements of the mechanism, and returning the parts to their normal positioning when the treadle is released.

Still another object is to provide such an improved receptacle adapted to hold a disposable inner container such as a paper bag within which garbage and other refuse may be placed, the inner container being effectively ventilated so that moisture tends to evaporate from its surface and from its contents.

A further object is to provide novel drip-catching means for any moisture which fails to evaporate, the drip-catching means being easily removable for emptying and cleaning.

Other objects and advantages will be apparent upon consideration of the present disclosure in its entirety.

In the drawings,

Fig. 1 is a perspective view of a receptacle constructed in accordance with the present invention,

Fig. 2 is a front elevational view thereof,

Fig. 3 is a view partly in side elevation and partly in substantially vertical section, taken substantially on the line 3—3 of Fig. 2 and looking in the direction of the arrows,

Fig. 4 is a fragmentary, vertical sectional view upon a larger scale, showing portions of the cover lifting mechanism and adjacent parts of the receptacle and cover,

2

Fig. 5 is a fragmentary, perspective view of the hinged edge portion of the cover assembly,

Figs. 6 and 7 are sectional views taken substantially on the lines 6—6 and 7—7 respectively of Fig. 3, and looking in the direction of the arrows,

Fig. 8 is a fragmentary, perspective view of the lower rear portion of the receptacle, with parts broken away, and

Fig. 9 is a sectional elevational view taken substantially on the line 9—9 of Fig. 3 and looking in the direction of the arrows.

Referring now to the drawings, reference character 10 designates generally the body of my improved receptacle. The body may be formed of a single piece of sheet metal bent along vertical lines to provide a front wall 11 and side walls 12 at right angles to the front wall. An inset back wall is formed by a separate panel 14 fitted between and secured to the side walls 12, the upper portion of the back wall being vertical while its lower portion is inclined forwardly toward the bottom, as best shown in Fig. 3, to a position such that its lower extremity 16 lies relatively close to the front wall 11, an opening 17 being left between edge 16 and the front wall 11 to permit drainage and free air circulation. The wall 14 also serves as a support for an inner receptacle such as the paper bag shown in dotted lines at 20. In the preferred construction illustrated, the panel 14 forming the combined back wall and bag supporting member is provided with marginal flanges 15 bearing against the inner faces of the side walls 12 and suitably secured thereto as by spot welding. The central portion of the panel 14 is formed with a trough-like depression extending lengthwise thereof as indicated at 18 to provide a vertical channel for drainage and air circulation. The inner receptacle or bag 20 is thus held away from the inner face of the panel 14, permitting air to circulate beneath the bag and promoting evaporation of moisture, which is of course advantageous when the receptacle is used for garbage.

At their lower extremities the front and side walls are inset, as indicated at 11', 12' respectively, such inset portions being formed as integral vertical continuations of the walls 11, 12, and forming an inwardly directed ledge 13 along these walls. An operating treadle comprising a single length of relatively heavy wire of generally rectangular form is pivoted upon a transverse axis in and near the rear extremities of the inset side wall portions 12' and extends forwardly beside and close to the inset side walls 12' and across the inset front wall portion 11', a central portion of the section of the treadle wire which

extends across the front being bent forwardly in a loop designated **25** to provide a section conveniently engageable by the foot to enable depressing the treadle. The rear ends of the side legs **26** of the treadle wire are bent inwardly, extend through slots **28** formed at the back of the inset wall sections **12'** and project approximately to the center of the rear of the assembly, where they terminate in abutting downturned extremities **30**.

The rear lower portion of the body assembly is braced by a transverse metallic strap **34** connecting the rear lower extremities of the wall section **12'** and provided with forwardly turned flanges or extremities **35** welded to the inner faces of such wall sections. Flanges **35** are provided with slotted portions registering with the slots **28** in the wall sections **12'**, thereby serving to reinforce such slots. A co-operating bracing member which may also be formed of strap metal, designated **40**, is welded or otherwise secured at its rear end to the central area of the cross bracing strap **34**, and at its forward extremity provided with a downturned portion **41** welded or otherwise suitably secured to the inner face of the inset front wall section **11'**. Portion **41** does not terminate at its lower extremity, but projects horizontally forwardly from the bottom of the assembly to provide a foot **42** bearing against the floor or other support beneath the pedal loop **25** and bracing the entire receptacle assembly against tipping forwardly.

A portion of the strap **40** adjacent the rear cross brace **34** is provided with a horizontal wall section or ledge **43** having a slot **44** through which the downturned ends **30** of the treadle wire project. It will be noted that the slots **28** extend forwardly and downwardly and that the lower extremities of such slots are approximately centered with respect to the vertical dimension of the inset wall section **12'**. The downturned extremities **30** of the treadle wire lie at an angle somewhat exceeding 90° with relation to the side legs **26** of the treadle wire, as viewed in transverse elevation (Fig. 3), and bear against the downturned rear extremity **45** of the central bracing strap **40** with sufficient force so that the reaction of this engagement maintains the front of the treadle wire elevated to the full line position shown in Fig. 3 in which it bears against the underside of the ledge **13**. The treadle may be formed of cold rolled wire or the like and when depressed to the position shown in dot-dash lines in Fig. 3, the cover is raised through the agency of connecting means presently to be described and when the treadle is released the treadle returns to its original position, but the cover will remain in the dot-dash position shown in Fig. 4 until it is tilted over by hand. In other words, the cover will remain open if fully opened, until closed by moving it by hand. Flexure of the treadle wire occurs through torsion in the transversely extending rear legs **27**, and as bending of the side legs **26** so that it tends to return to its elevated position.

An upwardly extending cover-actuating wire or rod **50** is secured to an intermediate portion of each side leg **26** of the treadle wire as by arc welding. The lower portion of each wire **50** lies outside and beside the adjacent inset wall portion **12'**, while the portion of such wire above the ledge **13** lies inside the receptacle body, slots **51** being provided in the ledges through which the lifter wires **50** project. At its upper extremity each wire **50** is pivotally connected to a lifting

lever **54**. One such lever is located near and parallel to each side wall **12**, the levers being pivoted upon opposite ends of a transverse rod **55** extending across the back panel **14** and attached thereto by sheet metal bracket clips **56** riveted or otherwise attached to the rear face thereof near the top. Rod **55** is laid in an embossed channel (undesignated) in the rear panel to promote rigidity and uniform loading of the supporting parts. Each lifter includes a rearwardly extending arm **58** which projects behind the rear wall **14**, as shown, and a forwardly extending arm or finger **59** which is curved upwardly and projects above the open top of the receptacle body to engage the under surface of the cover assembly generally designated **60**. The upper extremity of the finger portion **59** of the lifter is rounded to reduce sliding friction and take advantage of the partial rocking engagement which takes place between the lifter and cover during raising of the latter.

At its upper extremity the rear wall **14** is turned rearwardly to provide a horizontal top flange **14'** which terminates at its ends adjacent the upper ends of flanges **15**. Such ends of the flanges **14'** and **15** are covered by upwardly extending integral continuations **72** of the side walls **12**, formed at the upper rear corners of the side walls and marginally flanged inwardly to overlap the corners defined at the ends of such flanges **14'** and **15**. The marginal flanges impart a convex configuration to the portions **72** and are smoothly contoured, the portions **73** thereof facing the front of the receptacle being convexly curved about a transverse axis to assist in the pivotal support of the cover in a manner which will presently be more particularly described. An embossed continuation of the portions **72** extends forwardly as a continuous convex bead **74** circumscribing the sides and front of the receptacle near the top to provide an outwardly projecting shoulder or lip adapted to serve as a seat for and limit the downward movement of the cover assembly **60**. The cover assembly is so shaped and proportioned that its side walls **61** embrace and extend downwardly over the upper extremities of the front and side walls **11**, **12** and when closed the cover thus rests upon the lip portion **74**. The cover assembly is also contoured to serve as a dustpan, the sides of which are formed by the wall portions **61** thereof just referred to, the cover being adapted to be removed and inverted to permit its use as a dustpan. Hinged connection between the cover-dustpan assembly and the receptacle body is provided by rockable engagement between a rearwardly projecting lip **62** which is contoured to serve as the dust-collecting edge of the assembly when used as a dustpan and which when the device is assembled with respect to the receptacle serves as a part of the cover hinging means. When attached to the receptacle, lip **62** of the cover projects through a horizontal slot **76** formed longitudinally in the upper end portion of wall **14**. Such slot may be formed by a sheared line, the metal of the wall below such line being pressed forwardly out of the plane of the wall, as shown in Fig. 4. The lip portion **62** is provided with an offset rounded bead portion **66** extending along and near its free edge and of such radius as to be freely rockable with respect to the slotted channel portions against which it fits, as shown in Fig. 4. It will be seen that by virtue of this arrangement, the cover portion may quickly and easily be removed from the remain-

der of the receptacle, simply by pulling its lip 62 out of the slot 76, since it is not connected to the lifter fingers 59 or otherwise attached to the receptacle in any manner which would prevent its removal simply by partially raising it and pulling it free of the slot. A handle 68 may be provided for the cover-dustpan assembly, and this may also be used for lifting the cover if desired, as will be apparent.

A drip pan 80 is provided beneath the gap 17 and the front lower extremity or edge 16 of the sloping back plate 14, so as to catch any liquid that may escape from the inner bag or receptacle without evaporating. Such pan is provided with a rim which rests on the ledge 13 on the front wall 11 and side walls 12 and in order to hold the pan in place, the strap 40 is upwardly offset as indicated as 81 at the rear side of the pan. The pan may easily be removed by reaching into the body from the rear and lifting it and then withdrawing it. The front and side walls 11, 12 are embossed inwardly as indicated at 82 to provide a bead overhanging the rim of the pan and this bead is adapted to deflect inwardly and into the pan any liquid which may run down the walls. The portion 82 also serves to reinforce and add to the ornamental appearance of the casing.

When the treadle portion 25 is depressed, the lifters 54 are rocked through the agency of the pull wires 50 and the cover is swung upwardly by the resulting upward movement of the fingers 59. The rounded inner surface of the lip channel 66 of the cover rocks and slides about the upper edges of the slot 76 during opening movement of the cover and at the same time the end portions, designated 61', of the flanges 61 forming the sides of the cover (and the side walls of the dustpan) bear against and ride over the previously mentioned rounded guiding portions 73 which form part of the marginal flanges of side extensions 72. The rounded guiding portions 73 are approximately concentric with the axis of pivotal movement of the cover in opening. It will be appreciated that such axis need not be accurately fixed, but that it may correspond approximately to the upper edge of the slot 76 in wall 14.

The portion of the channel or bead 66 nearest the free edge of the cover-dustpan assembly slopes, gradually so that dust and debris may easily be swept over it when the assembly is inverted for use as a dustpan, while its side farther from the free edge may slope more abruptly, tending to retain its contents when used as a dustpan.

A swinging, bail type handle 85 may be pivotally attached to the rear face of back wall 14 by the same brackets 56 used to pivotally support the lifters 54. The entire assembly may be conveniently carried by this handle, which swings flat against the back wall when not in use. By virtue of the inset arrangement of the upper, vertical section of the back wall, all portions of the mechanism lie forward of the rear edges of the side walls so that the assembly may stand flat against a wall.

It will be apparent that variations may be introduced without departure from the spirit and scope of the subjoined claims.

I claim:

1. A receptacle for refuse comprising an open top container of substantially rectangular cross section having a flat rear wall provided with a slot extended substantially the full width of the wall, and a cover for the container having

a flat top and a straight-edge lip in coplanar relation with respect to the top and slidable in and removable from the slot and rockable in the slot to afford swinging movement of the cover.

2. Means as set forth in claim 1 in which said lip portion and the portion of said rear wall adjacent said slot are laterally offset to provide clearance for increased angular rocking movement of the cover, said offset means also tending to oppose accidental detachment of the cover without preventing its intentional removal.

3. Means as set forth in claim 1 in which said flat cover is provided with an offset groove adjacent and parallel to said lip portion, the groove having gradually inclined walls of rounded section and acting to provide clearance for said rocking movement and to oppose accidental detachment of the cover without preventing its intentional removal, said cover having side flanges extending downwardly therefrom and adapted to define the sides of a pan when the cover is removed and inverted, one side of the pan thus defined being open along the edge which carries said lip, the free edge of the lip lying substantially in the same plane as the flat surface of the cover, and the groove being offset toward the interior of the cover whereby the walls of the groove form a ridge inside the cover adjacent the lip adapted to retain dust when the cover is used as a dustpan.

4. A receptacle for refuse comprising a rectangular open top container, and a removable cover for the container, the rear wall of the container extended upwardly and provided with a transverse slot, a flange on the extension protruding rearwardly of the container, the wall adjacent the slot being offset inwardly of the container, the cover having a flat top and downwardly extended front, side walls and a rearwardly extended lip provided with a transverse offset bead received by the slot and serving to pivotally support the cover for swinging movement and the lip cooperating with the flange and offset of the wall to limit movement of the cover.

CHARLES BELSKY.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
160,995	Barager	Mar. 23, 1875
170,923	Whiteside	Dec. 7, 1875
226,788	Pyles	Apr. 20, 1880
685,747	Darrah	Nov. 5, 1901
1,225,540	Wells	May 8, 1917
1,637,859	Hilgers	Aug. 2, 1927
1,763,756	Casapollo	June 17, 1930
1,940,546	Hower	Dec. 19, 1933
1,990,026	Glen, Jr.	Feb. 5, 1935
2,216,279	Packer	Oct. 1, 1940
2,308,326	Calcagno	Jan. 12, 1943
2,320,556	Belshaw	June 1, 1943

FOREIGN PATENTS

Number	Country	Date
2,224	Great Britain	Jan. 26, 1884
119,285	Austria	Apr. 15, 1930
138,535	Switzerland	Mar. 15, 1930
627,164	France	May 30, 1927
662,951	France	Mar. 29, 1929