Oct. 25, 1966 D. W. BECKLIN 3,281,066

MOUNTED RECEPTACLE

Filed June 29, 1964

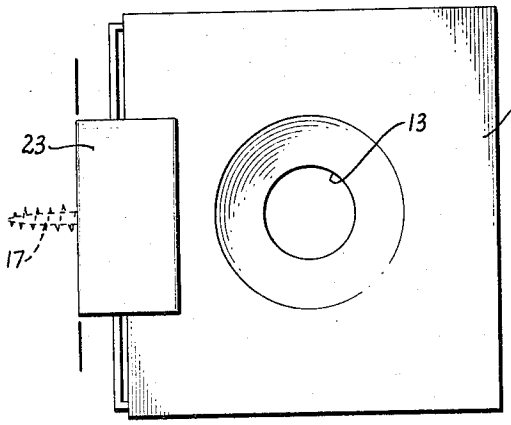

FIG. 2.

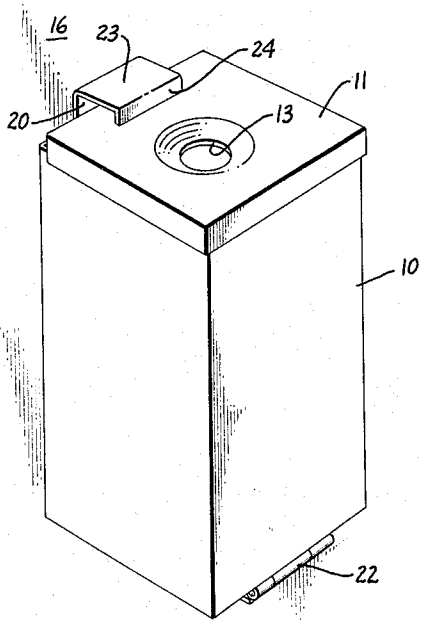

FIG. 1.

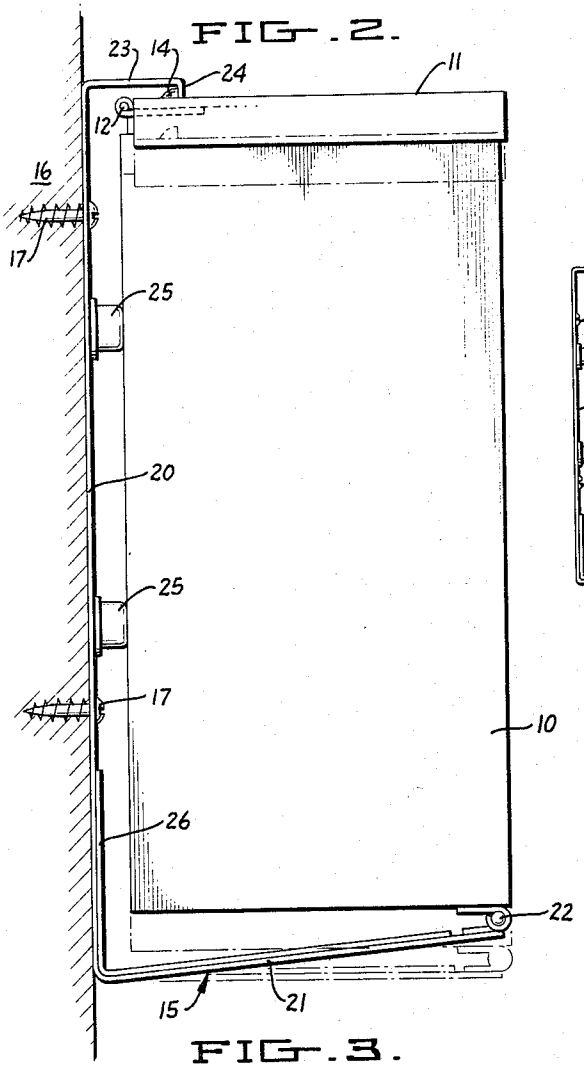

FIG. 3.

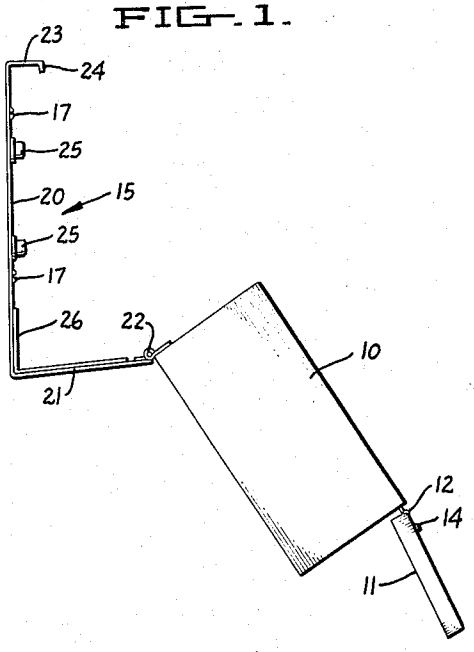

FIG. 4.

INVENTOR.
DONALD W. BECKLIN
BY Naylor & Neal
ATTORNEYS

United States Patent Office 3,281,066
Patented Oct. 25, 1966

3,281,066

MOUNTED RECEPTACLE

Donald W. Becklin, Castro Valley, Calif., assignor to Crate-Rite, Incorporated, Oakland, Calif., a corporation of California

Filed June 29, 1964, Ser. No. 378,916
6 Claims. (Cl. 232—1)

The present invention relates to a mounted receptacle and more particularly is directed to an ash receiving receptacle which is adapted to be permanently installed on a wall or the like for ready movement between receiving and discharging positions.

In the prior art various types of receptacles for permanent mounting on walls and the like have been provided. These receptacles generally have the common characteristic that they are relatively complex both as their structure and mounting and, accordingly, expensive both to purchase and install. For example, the structure of such receptacles which facilitates their movement between receiving and discharging positions often includes involved hinge and detent elements. Furthermore, the installation of such receptacles often requires the assembly of a plurality of parts and major modification of the wall on which the receptacle is mounted. The latter modifications are typically necessary to facilitate the movement of the receptacle at least partially into the wall.

It is, accordingly, a principal object of this invention to provide a mounted receptacle which avoids disadvantages, such as those enumerated above, of the type encountered with prior art devices.

Another and more specific object of the invention is to provide a unitary mounting bracket for an ash receiving receptacle which supports the receptacle for movement between receiving and discharging positions and at the same time provides for the retention of the receptacle in the receiving position.

Yet another and related object of the invention is to provide such a bracket with functions to both retain the receptacle in the receiving position and to secure a lid in closed condition on the receptacle in this position.

Still another object of the invention is to provide a receptacle and mounting bracket combination wherein the receptacle is so supported on the bracket that the forces of gravity tend to retain the receptacle in upright receiving position.

In its broadest aspects, the present invention may be defined as a closing and supporting combination for use in the mounting of a receptacle having an open top. The combination includes a lid mounted on the open top of the receptacle for movement between open and closed conditions and a bracket adapted to be secured to a wall or the like to support the receptacle. The bracket comprises: a first element adapted to be mounted adjacent to the receptacle; a second element secured to the first element and extending laterally therefrom; a hinge securing the receptacle to the second element for pivotal movement bewteen an upright receiving position and a downwardly disposed discharging position; and a detent adapted to engage and hold the lid in the closed condition while at the same time maintaining the receptacle in an upright position. The second element of the bracket is adapted to resiliently deflect with respect to the first element to afford movement of the lid into and out of engagement with the detent when the receptacle is in the upright position.

The foregoing and other objects of the invention and its specific structure and operation will become more apparent when viewed in light of the following detailed description and accompanying drawings, wherein:

FIG. 1 is a perspective elevational view of the receptacle mounted on a wall as retained in the upright position;

FIG. 2 is a top plan view of the receptacle mounted on a wall, as retained in the upright position;

FIG. 3 is a side elevational view of the receptacle mounted on a wall, as retained in upright position, showing the receptacle in depressed position in phantom lines; and,

FIG. 4 is a side elevational view of the receptacle mounted on a wall. as released to the discharging position.

Referring now to the drawings, the receptacle therein is designated in its entirety by the numeral **10** and comprises an open topped box of generally square configuration as viewed from the end and rectangular configuration as viewed from the side. It is noted that the particular shape of the receptacle illustrated may be varied without departing from the invention. The open top of the receptacle **10** is closed by a lid **11** pivotally secured to one edge thereof by a hinge **12** for movement between the closed condition illustrated in FIGS. 1–3 and the open position illustrated in FIG. 4. The lid **11** has formed therethrough a recessed opening **13** for the insertion of ashes, cigarettes, cigars, etc., into the receptacle. A detent protrusion **14** is formed in and extends upwardly from the lid **11** adjacent the connection of the hinge **12** thereto. The function of the protrusion **14** will become apparent from the following discussion.

The mounting bracket to which the present invention is primarily directed is designated in its entirety by the numeral **15** and is shown secured to a wall **16** by screws **17**. The bracket **15** is fabricated of an integral piece of sheet metal and comprises: a first element **20** adapted to be secured in juxtaposition to the wall **16** by the screws **17**; a second element **21** extending laterally from the first element to a hinge connection **22** with the lower forward end of the receptacle **10**; and a third element or detent member **23** having a downturned end **24** positioned so as to extend into engagement with the lid **11** and the protrusion **14** thereof when the receptacle **10** is in the upright position illustrated in FIGS. 1–3. The element **20** has secured thereto resilient spacers or bumpers **25** which function to space the receptacle **10** therefrom by a distance such that the end **24** will engage the inner side of the protrusion **14** when the receptacle is in the upright position. It is to be understood that openings (not illustrated) are provided in the element **20** for the passage of the screws **17** and that the bumpers **25** may be secured to the element **20** by any suitable means. Although not illustrated, it is believed apparent that the screws **17** could be passed through the bumpers **25** and element **20** to perform the dual function of securing both the bumpers and the element in position.

The basic structure of the bracket **15** is completed by an angular leaf spring **26** secured in juxtaposition to both the elements **20** and **21**, as by spot welding. The spring **26** permits the element **21** to deflect resiliently between the positions illustrated in solid and phantom lines in FIG. 3 and thus facilitates rectilinear movement of the lid **11** out of engagement with the end **24** when the receptacle is in the upright position. This movement facilitates swinging of the receptacle **10** between the upright position illustrated in FIGS. 1–3 and the discharging position illustrated in FIG. 4. It is to be understood that the leaf spring **26** may be omitted from the bracket **15** where the elements **20** and **21** are fabricated of sufficiently resilient material.

From the foregoing description, the operation of the receptacle **10** is believed apparent. Specifically, when in the upright position the receptacle is readily used by simply inserting ashes, etc., through the opening **13**. If desired, the receptacle **10** may be partially filled with some extinguishing medium, such as water or sand. To

empty the receptacle **10**, it is merely necessary to depress it to the phantom line position illustrated in FIG. 3 and swing it to the discharging position illustrated in FIG. 4. Once discharged, the receptacle can be readily returned to the upright position by reversing this procedure.

At this point it is noted that the relationship of the third element **23** and hinge connection **22** with respect to the receptacle **10** are particularly significant to the inventive structure. Specifically, the element **23** and the end **24** thereof are so positioned that they function to both maintain the receptacle **10** in the upright position and hold the lid **11** in the closed position. The positioning of the hinge connection **22** forward of the center of gravity of the receptacle **10** in the upright position helps assure that the receptacle will swing against the bumpers **25** when in the upright position. Furthermore, positioning the hinge connection **22** diagonally across the receptacle with respect to the corner thereof engaged by the element **23** maximizes the radius of the arc through which said corner swings. Thus, the degree to which the receptacle **10** must be depressed to facilitate swinging of said corner out from under the element **23** is minimized.

To conclude, from the foregoing description it is believed apparent that the present invention enables the accomplishment of the objects initially set forth herein. In particular, an improved support of simpilfied construction is provided whereby a receptacle may be mounted for ready movement between receiving and discharging positions. It is to be understood, however, that the invention is not intended to be limited to the specific embodiment illustrated and described, but rather as defined by the following claims.

What is claimed is:

1. In a receptacle having an open top, an improved closing and supporting combination comprising:

(a) a lid mounted on said top for movement between open and closed conditions;

(b) a first element adapted to be mounted adjacent to said receptacle;

(c) a second element secured to said first element and extending laterally therefrom;

(d) hinge means securing said receptacle to said second element for pivotal movement between an upright receiving position and a downwardly disposed discharge position;

(e) detent means fixed relative to said first element to engage said lid when said receptacle is in the upright position and said lid is in the closed condition and thus hold said lid in closed condition and maintain said receptacle in said position; and wherein,

(f) said second element is resiliently deflectable to afford movement of said receptacle, when in the upright position, with the lid in closed condition, to a location wherein the lid disengaged from said detent means.

2. A combination according to claim **1** wherein said hinge means is secured to said receptacle at substantially the lower forward extremity thereof when in the upright position and said detent means is adapted to engage the top of said lid at substantially at the upper rearward extremity thereof when said receptacle is in said position.

3. A combination according to claim **1** wherein said detent means comprises a third element secured to said first element and extending above said lid when said receptacle is in said upright position.

4. A combination according to claim **3** wherein said first, second and third elements are integrally formed of sheet metal.

5. A combination according to claim **4** wherein said lid has an opening therethrough for the insertion of material into said receptacle.

6. A combination according to claim **5** wherein said lid is hingedly secured to said receptacle for pivotal movement between said open and closed conditions.

References Cited by the Examiner

UNITED STATES PATENTS

1,340,377	5/1920	Cott	232—1
1,610,861	12/1926	Knight	211—89 X
2,445,164	7/1948	Worthman	211—150
2,919,096	12/1959	Cohen	131—241 X
3,197,130	7/1965	Mott et al.	232—43.1

FOREIGN PATENTS

1,064,741	9/1959	Germany.

OTHER REFERENCES

Germany, Klein, printed application, K20,115, April, 1956.

FRANK B. SHERRY, *Primary Examiner.*

CASMIR A. NUNBERG, *Examiner.*

R. B. FARLEY, F. K. ZUGEL, *Assistant Examiners.*