Feb. 14, 1967 E. L. ELLIOTT 3,304,112

DETACHABLE HANDLE FOR RECEPTACLES

Filed April 13, 1965

Fig. 1.

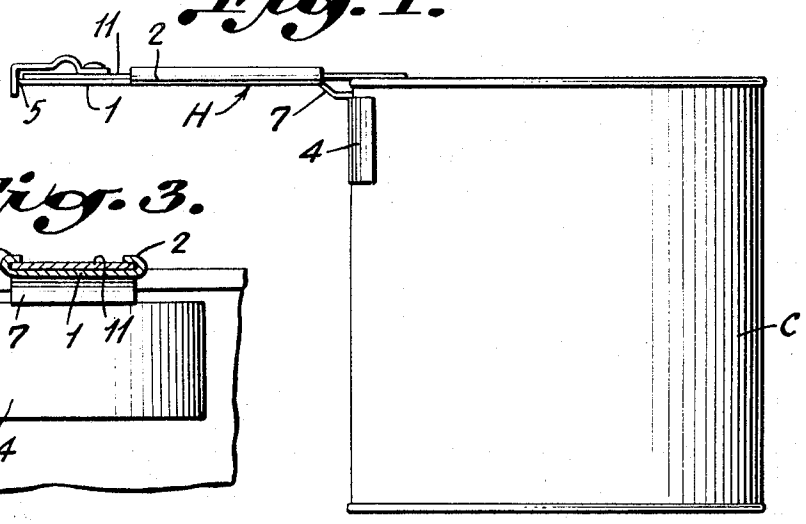


Fig. 3.

Fig. 2.

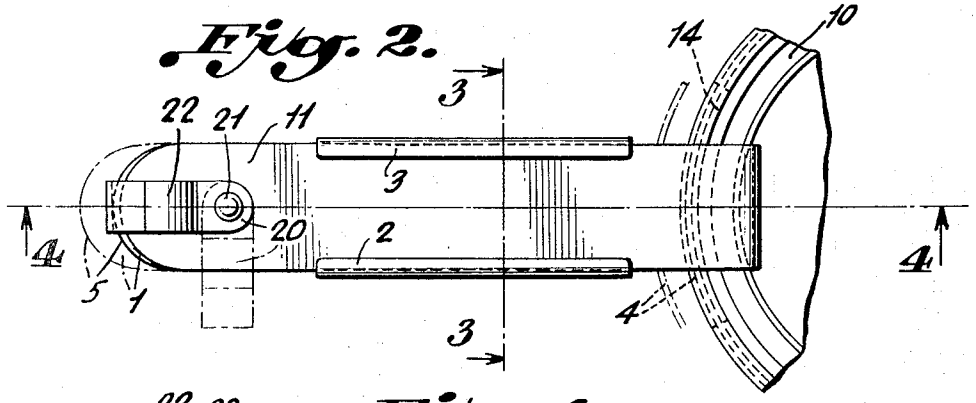


Fig. 4.

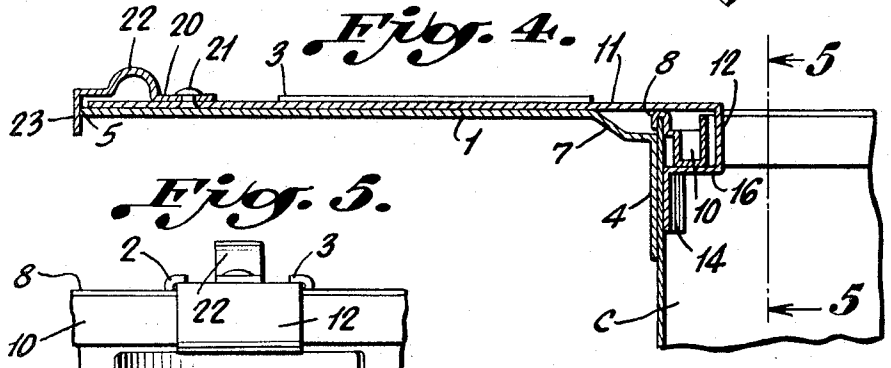
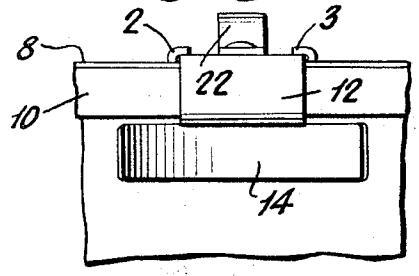


Fig. 5.



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DETACHABLE HANDLE FOR RECEPTACLES

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3 Claims. (Cl. 294—34)

This invention relates to a detachable handle for receptacles and more particularly to a handle which may be engaged with paint receptacles in the course of their use to facilitate the transporting and handling thereof.

It is the object of the present invention to provide a handle of few parts which may be assembled in an inseparable manner so that the assembly may be quickly and conveniently engaged and disengaged with a receptacle without posibility of any loss of parts.

The handle in its engaged position with the receptacle assures a secure attachment to the receptacle without possibility of shifting or undesirable movement.

It is another object of the invention to provide a handle of rugged construction and low cost which is well adapted to general distribution as an advertising item in conjunction with the sale of paint products.

It is a further object of the invention to provide a handle assembly which may be fabricated of sheet material of metal, plastic, or analogous materials and which may be shaped into the desirable form and assembled thereafter, at minimum cost.

Other objects and purposes will appear from the detailed description of the invention following hereinafter, taken in conjunction with the accompanying drawing, wherein

FIG. 1 is a front elevation of the handle in accordance with the invention in engaging position with a receptacle;

FIG. 2 is a plan view of the left portion of FIG. 1 with the parts of the handle in the alternate disengaged position shown in dotted lines;

FIG. 3 is a vertical section view along line 3—3 of FIG. 2;

FIG. 4 is a vertical section view along line 4—4 of FIG. 2; and

FIG. 5 is a vertical sectional view along line 5—5 of FIG. 4.

The handle H in accordance with the invention is formed of a pair of superposed plate members which are reciprocable relative to each other for the purpose of engaging and disengaging a receptacle such as a paint can C adjacent to the upper edge thereof.

The handle member H is formed of a lower plate **1**, having a rounded end **5** at one end thereof and an arcuate flange **4** extending downwardly at the opposite end thereof. The flange **4** extends from an off-set portion **7** from the plane of plate **1** in order that the flange may contact firmly the outer cylindrical wall of the receptacle wall by clearing the upper edge **8** of the receptacle C.

The upper plate member **11** is disposed for reciprocable movement above member **1** and is confined in this movement by up-turned lips **2** and **3** extending from the opposite sides of member **1** and overlying the edges of plate member **11** as clearly shown in FIGS. 2 and 3. The end of plate member **11** adjacent to the arcuate flange **4** of member **1** is provided with a re-entrant channel **12** which is of sufficient depth to embrace the annular rim **10** which is generally provided on paint cans for receiving tightly the cover therefor. The base **16** of the channel **12** extends inwardly towards the inner wall of the receptacle, wherefrom extends an arcuate flange **14** for contacting the inner wall of the can. The depth of the flange may be varied as desired and as shown in FIG. 4, the same is slightly less than the depth of the flange **4** on the outside of the receptacle. While the width of the flange **14** is illustrated as being coextensive with that of flange **4**, the same may be of lesser extent and may be of the same width as the plate **1**. A flange of lesser width could accommodate itself to lateral walls of greater curvature so that the handle would be well adapted to the handling of paint cans of different sizes.

A latching device is provided at the end of the handle remote from the flanges to attain a secure positioning of the parts as clearly shown in FIG. 4, or alternatively to permit a disengagement of the parts so that the handle may be released from the paint can when this is desired.

In the preferred embodiment of the invention the latching device is formed of a plate **20** having one end thereof riveted to the upper member **11** so that the plate may assume the alternate positions illustrated in FIG. 2. The plate **20** is formed with a convex deformation **22** beyond its pivotal axis and terminates in a locking flange **23** extending downwardly beyond the plane of plate **1** for cooperation with the rounded end **5** of the latter. The deformation **22** is of sufficient depth to permit the passage of either confining lips or flanges **2** or **3** when the latch plate is turned in a position transverse to the longitudinal axis of the handle, which permits a complete disengagement of the two component parts thereof, when this is desired for the purpose of cleaning. When the latch plate **20** is turned to the position indicated by dotted lines in FIG. 2, the lower plate **1** may may shifted to the left so that the flange **4** is separated from the flange **14** to permit the release of the handle from the paint can. On the other hand, when the latch plate **20** is turned in the direction of the longitudinal axis of the handle, the locking finage **23** rides along the rounded end **5** of plate member **1** to effect a camming locking action between the two plate members. Of course the pivotal axis **21** is displaced from the extreme end of handle **1**, a distance corresponding to the thickness of the wall of the paint can. This placement is not critical since the re-entrant channel **12** provides a support for the rim of the paint can in the event one of unusual wall thickness is encountered.

While I have described my invention as embodied in a specific form and as operating in a specific manner for purposes of illustration, it should be understood that I do not limit my invention thereto, since various modifications will suggest themselves to those skilled in the art without departing from the spirit of my invention, the scope of which is set forth in the annexed claims.

I claim:

1. A detachable handle for a receptacle having an open top and a lateral cylindrical wall wherefrom a rim extends inwardly, said handle formed of a pair of juxtaposed plate members reciprocably movable with respect to each other, the lower one of said members having a downwardly extending arcuate flange at one end thereof for contacting the outer wall of said receptacle adjacent to the upper edge thereof and a rounded end at the opposite end thereof, the upper one of said members having a re-entrant channel at the end thereof adjacent to said first-mentioned end and terminating in a downwardly extending arcuate flange for contacting the inner wall of said receptacle opposite said first-mentioned arcuate flange, guide means on the edges of said lower member for confining the reciprocating movement of the upper member thereon, and a pivoted latch on the end of said upper member remote from the arcuate flange for engaging the rounded end of said lower member and thereby locking said members against movement in the engaging position of said handle with the receptacle, the pivotal axis of said latch being so displaced from said rounded end as to exert a locking camming action when the latch is turned into locking position.

2. A detachable handle for a paint receptacle having an open top and a lateral cylindrical wall wherefrom a rim extends inwardly, said handle formed of a pair of superposed longitudinally extending plate members reciprocably movable with respect to each other, the lower one of said members being rounded at one end and having a downwardly extending arcuate flange at the opposite end thereof for contacting the outer wall of said receptacle adjacent to the upper edge thereof, the upper one of said members having a re-entrant channel at the end thereof adjacent to said last-mentionel end and terminating in a downwardly extending arcuate flange for contacting the inner wall of said receptacle opposite said first-mentioned arcuate flange, guide lips on the edges of said lower member overlying the edges of said upper member for confining the reciprocating movement of the upper member thereon, a pivoted latch on the end of said upper member above the rounded end of said lower member and terminating in a downwardly extending locking flange for engaging said rounded end and thereby to lock said members against movement in the engaging position of said handle with the receptacle.

3. A device as set forth in claim 2 wherein said pivoted latch is provided with a deformation between said locking flange and the pivotal axis thereof to form a void space in the latch above the plane of said upper plate member, said latch member adapted to be rotated transversely to the longitudinal axis of said plate members to permit passage of one of said guide lips through said void space and thereby to permit a disengagement of the pair of plate members from each other.

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