

Feb. 23, 1965

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3,170,183

ONE-PIECE DUSTPAN AND WASTEBASKET COMBINATION

Filed Jan. 25, 1963

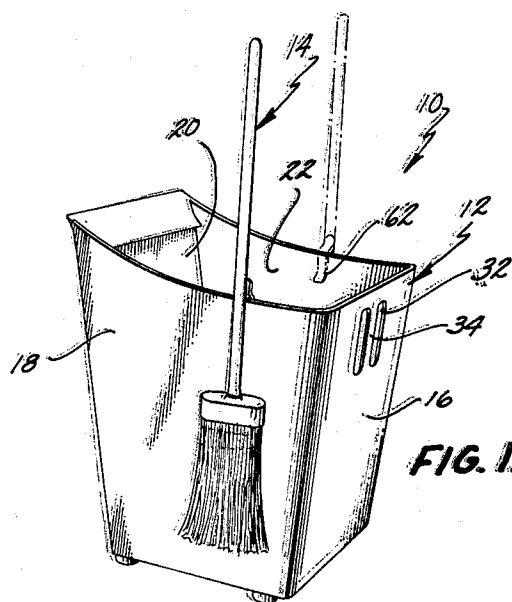


FIG. 1.

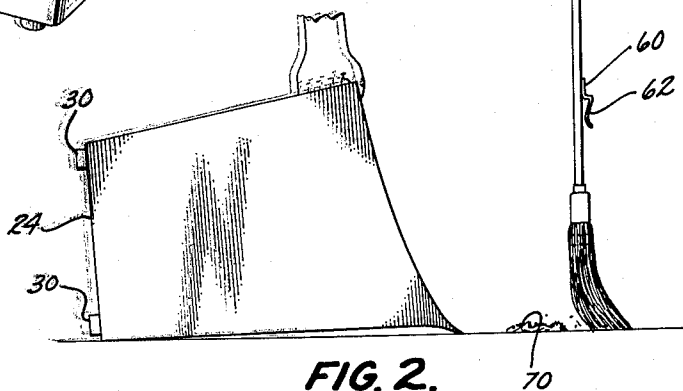


FIG. 2.

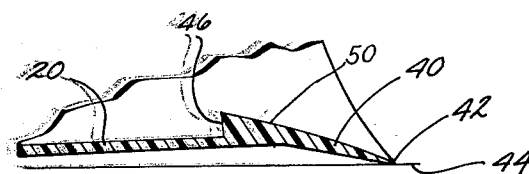


FIG. 3

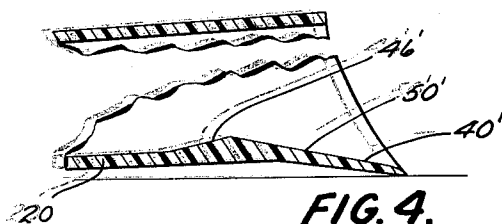


FIG. 4.

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## 3,170,183 ONE-PIECE DUSTPAN AND WASTEBASKET COMBINATION

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Filed Jan. 25, 1963, Ser. No. 253,892  
1 Claim. (Cl. 15—257.1)

This invention relates to a sweeping kit, and more particularly to a one-piece, open-top receptacle serving both as a dustpan and a dirt retainer.

Sweeping equipment normally needed for removing even the smallest amount of dirt from the floor includes a wastebasket, a dustpan, and a broom. Since the housewife or storekeeper must find and carry around all of these articles in order to sweep up anything at all, this often leads to neglecting of dirt when only a small portion of the floor area is concerned. Rather, the task is postponed until the entire floor is dirty, thereby making the efforts of going to the back room or the broom closet and collecting the equipment worthwhile. Conventional brooms, dustpans and wastebaskets also require a storage place of substantial size. Consequently, they are stored in special broom closets in the home, or in the backroom of the store. In house trailers, moreover, where all storage space is at a premium, sweeping equipment consumes an unreasonably large percentage of space.

It is therefore an object of this invention to provide a handy sweeping kit enabling dirt to be swept directly into the retention receptacle without the use of an additional dustpan. The receptacle can be readily handled with one hand to tip it on its side to receive dirt over a special edge, and to tip it back up again to retain the dirt. The refuse swept inside moreover cannot roll or fall back out again when the receptacle is on its side, and retains the dirt in the manner of a conventional wastebasket when upright. The unit is integral, including no hinges, flaps, linkages, shifters or the like. It retains a large amount of dirt to accommodate many sweepings without requiring dumping after each.

The device accommodates smooth floors or uneven, rougher floors or surfaces. A sharp lip to receive the dirt always contacts the floor in an optimum manner even if the floor is rough. The kit is attractive and assumes only a relatively small amount of space. Therefore, it can be kept directly in the room, requiring no broom closet or backroom for storage. It blends nicely with the decor of a home or housetrailer since it can be made in attractive colors and styles. It normally serves as a wastebasket, and is handy for use at all times to be tipped over to sweep up even small amounts of dirt in a moment. A small broom can be attached directly to the receptacle due to a unique connection therebetween, so that both elements are at once handy for sweeping. The receptacle can be molded from plastic under mass production conditions, thereby being relatively inexpensive. Since it includes no hinges elements or other moving parts, manufacture is rapid and requires a minimum of manual labor. All components are integrally connected to provide a stable, rigid construction. These and several other objects of the invention will be apparent upon studying the following specification in conjunction with the drawings in which:

FIG. 1 is a perspective view of the sweeping kit;

FIG. 2 is a side elevational view of the kit shown with the receptacle tipped on its side to receive dirt;

FIG. 3 is an enlarged fragmentary side elevational sectional view of one form of the receiving lip, sharp edge, and dirt retention ledge of the receptacle in FIGS. 1 and 2; and

FIG. 4 is a fragmentary side elevational enlarged sectional view of a modification of the lip and ledge.

Basically, the inventive receptable and kit comprises an open top container having four side walls and a bottom, with handle means in one wall to tip the container on its side and upright it again, and an upwardly, outwardly projecting lip on a second wall opposite said first wall and on the upper edge thereof, including a sharp terminal edge to contact the floor and hold the second wall off the surface to be swept so that the sharp edge always makes optimum contact with the surface. An integral inner retention ledge retains the dirt in the receptacle. A broom having a friction engaging clip on its side removably engages a wall of the receptacle for storage.

Referring now specifically to the drawings, the sweeping kit 10 includes receptacle 12 which is an integral combination of wastebasket and dustpan, and broom 14.

The receptacle 12 is an integral, generally rigid unit, preferably formed from molded plastic such as polyethylene or any other equivalent. It includes four closed side walls 16, 18, 20, and 22, a supporting closed bottom 24 and an open top. The bottom preferably includes a plurality of four feet 30. In wall 16 of the receptacle is a handle means which may include one or two slots 32. If two slots are included with a web 34 therebetween, a thumb is placed in one slot and four fingers in the other slot to tip the receptacle from the upright position in FIG. 1 to the position in FIG. 2 on its side, and vice versa. If only one slot is used, the thumb is placed over the top edge of the basket and four fingers are placed in the slot to tip the basket. A substitution of an equivalent handle means could conceivably be made. The use of openings enables molding of this basket from plastic with minimum expense, and without complicating the molding dies unduly.

The upper edge portion of wall 20 (opposite wall 16) protrudes upwardly and outwardly beyond that of the remaining three walls. This upwardly protruding and outwardly protruding wall portion forms a lip 40 or 40' (FIGS. 3 and 4) which terminates in a sharp edge 42 adapted to contact surface 44 to be swept. Wall 20 is formed with respect to lip 40, to cause all portions of the wall except its bottom edge and this lip to be held off the surface. Then, if the surface is rough, contact of the wall with the surface does not prevent proper contact of the sharp edge 42 with the surface. Conceivably, wall 20 could be inwardly concave to further effectuate this feature.

Further down on the inside surface of wall 20 is an integral dirt retention ledge or ridge. This may be a sharp ledge formed by surface 46 (FIG. 3) at an acute angle to lead-in or ramp surface 50 of the lip to prevent the dirt from falling or rolling back out of the basket once it is swept inside.

Alternately, instead of the sharp ledge shown in FIG. 3, the surface 46' (FIG. 4) may be at an obtuse angle to surface 50' to form a retaining ridge therebetween. Surface 46' is purposely made generally parallel to wall 16 opposite thereto. Therefore, the die used for molding the basket does not have to have a cam actuated portion to be removed from the basket after it is molded since it can be readily slid out without passing through any restricted areas. Surface 46' could be slightly upwardly divergent with respect to wall 16, thereby allowing the die to be readily removed without being parallel thereto. However, this decreases the dirt retaining capacity of the ridge since the angle between surfaces 46' and 50' approaches 180°. In FIG. 3, either a cam actuated die portion or its equivalent would have to be used to retract the die past surface 46. Briefly therefore, the smaller the angle, the greater its retention capacity, and the larger the angle, the greater its molding ease.

The broom 14 may include a conventional handle and

bristle construction like that shown. Mounted to the handle, as by screws, is a clip which may be of plastic, for example. It includes a flange 60 abutting and attached to the handle, and a leg 62 which projects outwardly away from the handle and then inwardly again to form a gripping surface which flares out at the bottom as shown in FIG. 2 to facilitate attachment to the wastebasket. This broom is retained on the side wall of the receptacle 12 by sliding the clip down over the edge as shown in solid and phantom in FIG. 1. The flared bottom on the clip enables the broom to be readily pushed down on the sidewall while the inwardly projecting surface closest to the broom handle fits tightly on the wall which is squeezed between the handle and this surface. The upper edge of the side walls of the wastebasket may have a rolled configuration also, if desired.

In use, the receptacle is placed in a convenient place in the room and used as a wastebasket. If needed to sweep up debris, the broom is lifted off the sidewall, and the receptacle is tipped on its side so that the outwardly protruding lip is placed in contact with surface 44 to be swept. The receptacle so tipped on its side is held in place while broom 14 is used to sweep debris 70 up over the sharp edge 42 and behind the dirt retaining ledge or ridge. The basket is then tipped up, the broom is attached, and the two are set in the corner until needed again.

Certain obvious structural modifications may be apparent to those in the art to suit a particular use or purpose. These obvious modifications, falling within the principles of this invention, are deemed to be part of this invention, which is to be limited only by the scope of the appended claim and the reasonably equivalent structures to those defined therein.

I claim:

An integral, one-piece, open top, molded, plastic combination wastebasket and dustpan, comprising: four integral walls and an integral bottom of molded plastic;

the upper edges of said walls defining an open top; one of said side walls projecting upwardly beyond the other side walls and including an upwardly and outwardly protruding integral lip terminating in a sharp edge and an adjacent ramp surface; said one side, lip, and edge being configured to cause only said sharp edge and another portion of said one side near the bottom of said receptacle to contact a floor surface when said receptacle is tipped on its side to place said edge into close contact with the floor to act as a dirt ramp; the wall opposite said one wall having opening means therein providing handle means to enable a user to grasp said basket at said handle means, and tip said receptacle temporarily on its side for sweeping dirt over said lip, and back up again; said ramp surface being at an obtuse angle substantially less than 180° to the adjacent wall portion of said one side to form a dirt retention ridge; said adjacent wall portion being substantially parallel to the inner surface of the opposite side wall and the remainder of said one wall portion being outwardly inclined with respect to the opposite side wall.

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