Nov. 17, 1964 T. J. TOMAIUOLO 3,156,941

COMBINATION DUSTPAN-WASTE RECEPTACLE COVER

Filed Aug. 20, 1963

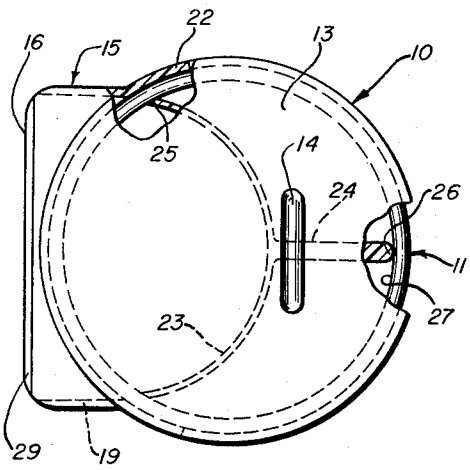


Fig_2

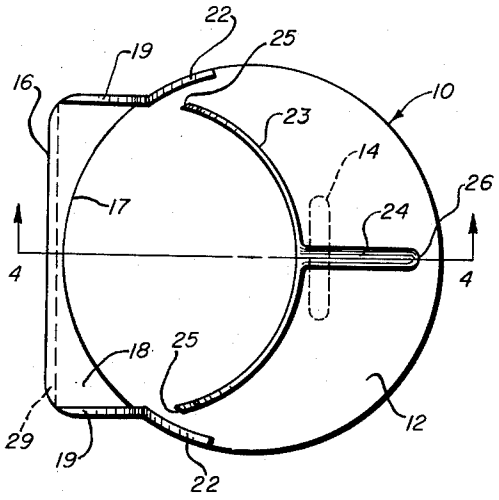


Fig_3

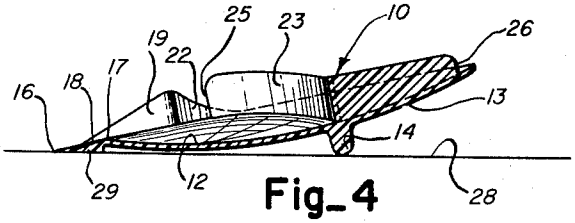


Fig_4

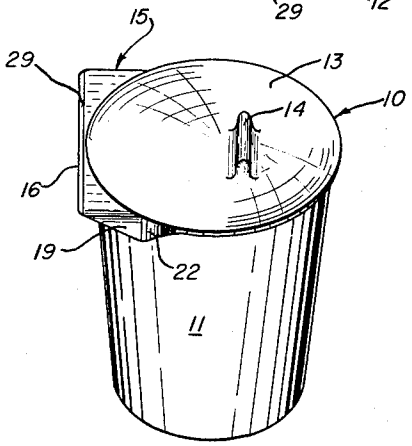


Fig_1

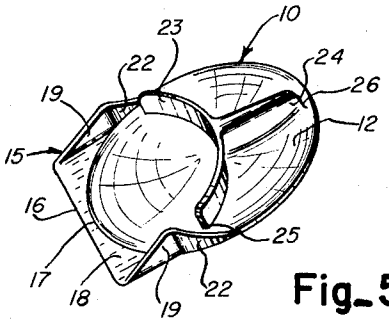


Fig_5

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COMBINATION DUSTPAN-WASTE RECEPTACLE COVER

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This invention relates generally to a combination dustpan-waste receptacle cover, more particularly it relates to a dustpan-waste receptacle cover characterized by a spade type edge to facilitate the movement of debris toward the central or pan area of the cover.

It may be safely assumed that the majority of households contain dustpans which are usually stored in some recess until the necessity for their use arises. When needed they must be retrieved from storage, serve their function, and be returned to storage after having been emptied into some waste receptacle. This is often a bothersome and time consuming chore. Accordingly, an object of the invention is in the provision of a dustpan constructed to serve as the cover of a waste receptacle whereby it is always handy at the final point of use.

A feature of the invention resides in the cooperative relationship between the knife edge of the dustpan-cover and a cover handle element whereby the assembly is automatically positioned at the most efficient angle for the retrieval of debris. Accordingly another object of the invention is to provide a more efficient dustpan.

A further object of the invention is in the provision of a waste receptacle cover formed to serve as a dustpan and with a dust dam and handle integral with its concave undersurface that also serve to securely retain the cover on a waste receptacle.

A still further object is to provide a large capacity dustpan cover which has a pan area which is lower than a dust ramp when the dustpan is operatively positioned in use thereby to positively retain debris brushed thereinto.

Other objects and many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

FIGURE 1 is a perspective view showing a dustpan-waste receptacle cover mounted on and covering a waste receptacle;

FIGURE 2 is a cutaway top view of the dustpan-waste receptacle cover showing the relationship between cover element and the receptacle when serving as a receptacle cover;

FIGURE 3 is a bottom view of the cover-dustpan;

FIGURE 4 is a cross sectional view taken along lines 4—4 of FIGURE 4 showing the cover dustpan in an operative attitude during use as a dustpan; and

FIGURE 5 is a perspective view of the cover-dustpan.

Referring now to the drawings wherein is shown a preferred embodiment and wherein like reference numerals designate like elements throughout the several views, there is shown in the FIGURE 1 a dustpan waste receptacle cover generally designated by reference numeral **10** adapted to fit over and within the opening of a waste receptacle **11**. While the waste receptacle **11** is shown of cylindrical form of the type whose diameter decreases from top to bottom, it is to be understood that straight cylinders, or square, or rectangular waste receptacles may be provided with combination dustpan-covers in accordance with the invention.

As shown in FIGURES 1 and 5 the dustpan cover **10** takes the form of a circular concave disk adapted to be placed over the receptacle opening with its concave side **12** facing the bottom of the receptacle.

The convex upper side **13** of the disk is provided with an off-center rod type handle **14** to permit removal of the cover from the receptacle whereby it may be employed as a dustpan. Toward the latter use a spade-like projection generally designated by reference numeral **15** coplanar with the plane of the circular edge of the disk and extending outwardly from an edge portion of the disk is provided. As viewed in FIGURES 2 and 3 the straight edge **16** of the spade like projection is parellel to the long dimension of the rod like handle **14** and is parallel to and spaced from a line tangent to the periphery **17** of the disk; the spade like projection providing a dust ramp **18** defined by the circular periphery of the disk and the straight edge **16**. The length of the straight edge **16** is less than the diameter of the disk and the side edges defining the spade-like projection **15** perpendicular to the straight edge **16** are formed and provided with, as viewed in FIGURE 1, depending dust guard plates **19** which increase in width from the straight edge **16** toward the periphery **17** of the disk and are joined adjacent the receptacle **11** to contour pieces **22** depending from the periphery of the disk.

As viewed in FIGURE 3, the concave underside **12** of the disk is provided with an off-center arcuate dust guard **23** facing the dust ramp **18**. On the side of the dust guard opposite the dust ramp, the underside of the disk is formed with a dust pan handle **24** which is integrally joined to the arcuate dust guard **23** at right angles to the dust ramp. The ends **25** of the arcuate dust guard and the end **26** of the dust pan handle **24** extend toward but short of the periphery of the disk and are adapted to fit within the opening **27** (FIGURE 2) of the waste receptacle **11** to retain the cover dustpan element **10** securely over the receptacle. Further toward this end the contour pieces **22** also serve to securely retain the dustpan-cover element **10** on the waste receptacle **11**.

As viewed in FIGURE 4, when the cover dustpan is placed on a flat surface **28** the height of the off-center cover handle **14** from the disk is such that it stably and firmly supports the dustpan **10** with a flat **29** of the straight edge **16** parallel with the flat surface **28**, thereby assuring that the dustpan will be automatically placed at the most efficient angle, whereby dust may be swept up the ramp **18**. The dustpan handle **24** may be held by the hand of an operator to prevent movement of the dustpan due to the force of a dustbroom against the dust ramp **18** as dust is being swept into the pan area. It is to be noted in FIGURES 3 and 4 that the periphery **17** of the disk defining the rear edge of the dust ramp **18** is above the interior of the dustpan due to the concave configuration of the disk such that dust swept over the ramp **18** is trapped within the interior of the concavity between the dust ramp and the arcuate dust guard **23**. The side dust guards **19** as is apparent prevent dust from falling over the side edges of the spade-like projection **15**.

In accordance with the invention, the entire cover-dustpan element may be integrally molded from any suitable plastic.

It should be understood that the foregoing disclosure relates to only a preferred embodiment of the invention and that it is intended to cover all changes and modifications of the example of the invention herein chosen for the purposes of the disclosure which do not constitute departures from the spirit and scope of the invention as set forth in the claim.

The invention claimed is:

1. A fixture operative as a cover for a waste receptacle having an upper open end or as a dustpan comprising,

a concave-convex lid portion dimensioned to cover said open upper end with its concave surface facing downwardly,

a straight edged portion integral with said lid portion

and extending therefrom and forming a ramp leading into the concave side of said lid portion whereby when said fixture is removed from said receptacle and inverted, it may be used as a dustpan, means on the concave side of said lid portion having terminal portions spaced from the perimeter of said lid portion adapted to fit within and thereby locate said fixture on said receptacle when used as a cover, and handle means for said fixture accessible when said lid portion is in either of its operative positions.

2. The combination with a waste receptacle of a fixture adapted to be placed over the open end of said waste receptacle, said fixture comprising a concave-convex disk dimensioned to cover said receptacle opening with its concave side facing downwardly,

a straight edge integrally formed with the edge of a portion of said disk, said straight edge forming a dust ramp leading into the concave side of said disk,

handle means on the concave side of said disk,

and an arcuate dust guard formed on the concave side of said disk and facing said dust ramp, said handle and dust guard extremities extending toward the periphery of said disk and adapted to fit within and securely hold the disk within the opening of said waste receptacle when serving as a cover therefor.

3. A fixture operative as a cover for a waste receptacle having a circular upper open end or as a dustpan comprising,

a concave-convex disk dimensioned to cover said open upper end with its concave surface facing downwardly,

a straight edged portion integral with said disk and extending therefrom and forming a ramp leading into the concave side of said disk whereby when said fixture is removed from said receptacle and inverted, it may be used as a dustpan,

an arcuate dust guard extending from and across the concave side of said disk spaced from and facing said straight edged portion and having terminal portions

spaced from the perimeter of said disk adapted to fit within and thereby locate and retain said fixture on said receptacle when used as a cover, and

handle means for said fixture accessible when said lid portion is in either of its operative positions.

4. A fixture operative as a cover for a waste receptacle having an upper open end or as a dustpan comprising,

a concave-convex lid portion dimensioned to cover said open upper end with its concave surface facing downwardly,

a straight edged portion integral with and extending beyond the periphery of said lid portion and coextensive with the plane of the periphery of said lid portion to form a ramp leading into the concave side of said lid portion whereby when said fixture is removed from said receptacle and inverted it may be employed as a dustpan,

a dust guard extending from the concave side of and substantially across said lid portion and facing said straight edged portion,

first handle means on the concave side of said lid portion and on the side of said dust guard opposite said straight edge adapted for use as the dustpan handle,

said dust guard having terminal portions spaced from the perimeter of said lid portion and being adapted to fit within and together with said first handle means thereby to locate said fixture on said receptacle when employed as a cover,

and second handle means on the convex side of said lid portion adapted to maintain said fixture in an inclined position when employed as a dustpan.

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