May 14, 1968 F. L. PARSISSON 3,382,523

DUSTPAN AND BRUSH COMBINATION

Filed Sept. 23, 1966

Fig. 1.

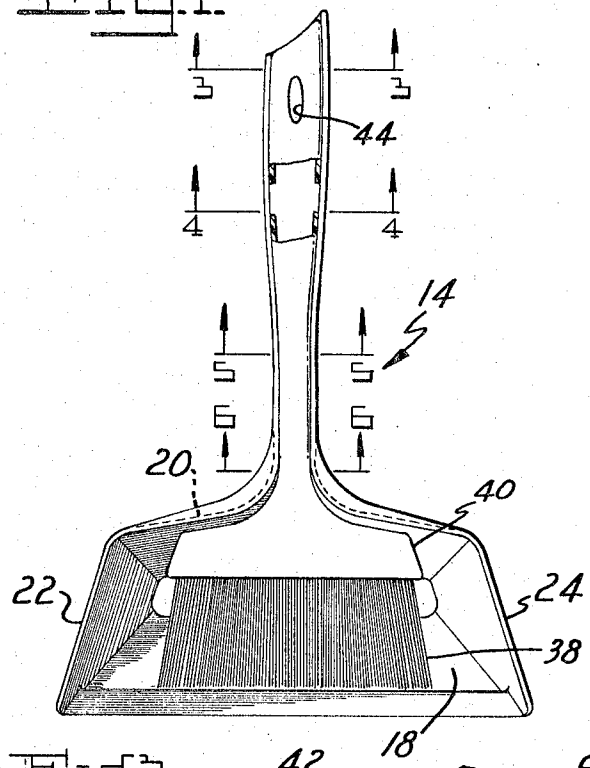


Fig. 2.

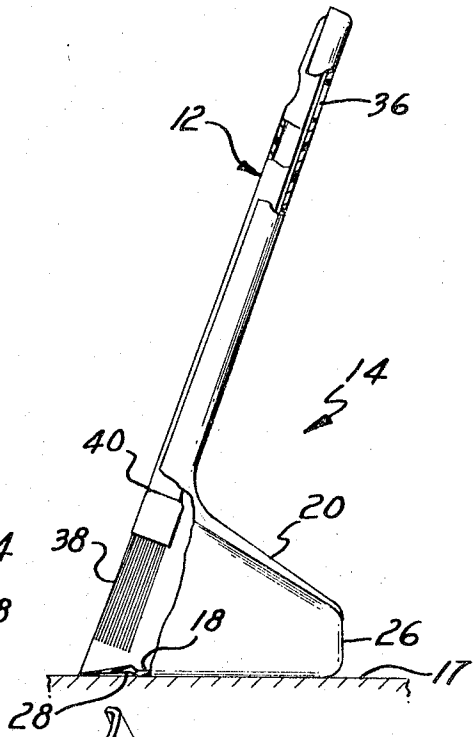


Fig. 3.

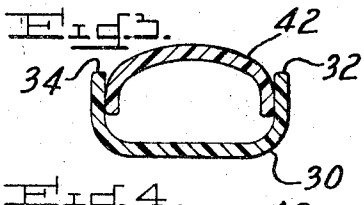


Fig. 4.

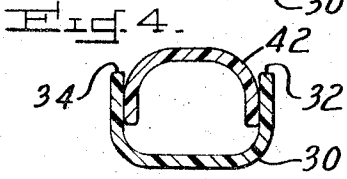


Fig. 5.

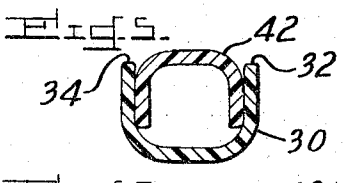


Fig. 6.

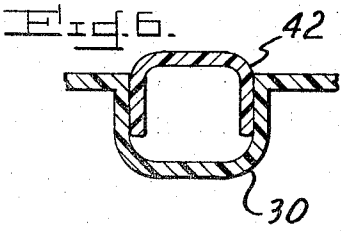
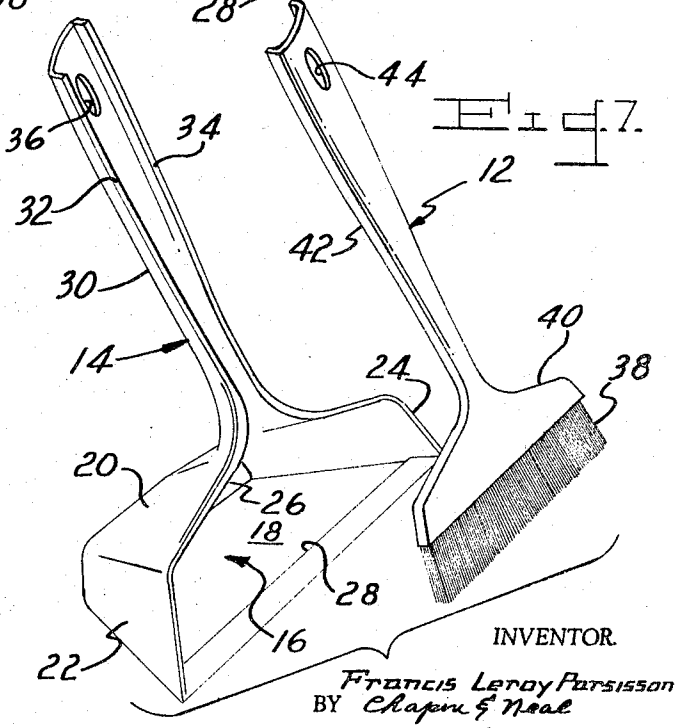


Fig. 7.



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DUSTPAN AND BRUSH COMBINATION

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ABSTRACT OF THE DISCLOSURE

A dustpan and brush combination, each having an elongated handle of generally channel-shaped cross sectional configuration. The handles of the brush and dustpan fit together to form a tubular handle, and when so fitted the brush is disposed in the debris receiving chamber of the dustpan. The handles of the brush and dustpan are approximately equal in length and each has an opening registered with the opening of the other for the purpose of hanging up the combination together, or the elements separately.

Background

This invention relates to household cleaning utensils, in particular, it relates to a unique dustpan and brush combination.

Heretofore, dustpans and the brushes or brooms with which they were used were generally separate and unrelated items in that they were more apt to be stored individually, thus resulting in situations which gave rise to time being wasted trying to locate either the broom or dustpan to accomplish a clean-up job.

Therefore, it is an object of this invention to provide a new dustpan and brush combination constructed to readily fit together for storage so that the combination can be hung up or otherwise conveniently stored as a unit.

Another object of this invention is to provide a dustpan and brush combination that is light, sturdy and appealing to the eye.

Another object of this invention is to provide a dustpan and brush combination that may be inexpensively manufactured from high impact strength plastic materials.

A further object of this invention is to provide a dustpan and brush combination that may be employed without the necessity of excessive bending, squatting or kneeling.

Other objects and advantages of the present invention will become readily apparent from the following description along with the accompanying drawings, in which:

FIG. 1 is a front elevational view of a dustpan and brush combination embodying the present invention;

FIG. 2 is a side elevational view of the pan and brush with sections of the pan broken away;

FIG. 3 is an enlarged sectional view taken along the line 3—3 of FIG. 1;

FIG. 4 is an enlarged sectional view taken along the line 4—4 of FIG. 1;

FIG. 5 is an enlarged sectional view taken along the line 5—5 of FIG. 1;

FIG. 6 is an enlarged sectional view taken along the line 6—6 of FIG. 1; and

FIG. 7 is a perspective view of the dustpan and brush combination in separated condition.

Referring to the drawings in detail and particularly to FIGS. 1, 2 and 7, it will be seen that the present invention involves a brush or broom **12** and a dustpan **14**. As shown, the dustpan **14** has a debris receiving chamber **16** which is defined by a bottom wall **18**, an arched top wall **20**, two side walls **22** and **24** and a rear wall **26**. As depicted, the leading edge of the bottom wall **18** is angularly displaced upwardly into the debris receiving chamber **16**.

This displacement forms the dust retaining lip **28** which prevents collected dust and debris from falling out of the chamber **16** during use of the dustpan when placed on a flat horizontal surface or a floor **17** as seen in FIG. 2.

As best seen in FIGS. 1 and 2, the rear wall **26** is substantially perpendicular to the bottom wall **18** while the top wall converges toward said bottom wall and the side walls **22** and **24** converge towards one another. This particular design imparts a funnel-like effect to the debris receiving chamber **16**.

An elongated handle **30** extends upwardly from the top wall **20** and with the pan resting on its bottom wall **18** is offset rearwardly about 20°–25° from the vertical. As shown, the handle **30** has a channel-shaped cross sectional configuration which is substantially wider at the top than at the bottom portion thereof. The side edges **32** and **34** of said channel are generally in the same plane as the opening into the debris receiving chamber **16**. At its lower end the channel-shaped handle opens into and communicates with the interior of the debris receiving chamber **16**. Finally, an elongated hole **36** is disposed near the outermost end of the handle **30**.

The broom or brush **12** is composed of bristles **38** of either natural or synthetic material embedded in a bristle head or block **40** and an elongated handle **42**. The handle **42** which may or may not also be channel-shaped in cross sectional configuration generally corresponds in length and width configurations to the handle **30** of the dustpan **14** and is dimensioned to removably fit the dustpan handle **30**. An elongated hole **44** is also disposed near the outermost end of the handle **42**.

As mentioned above, the brush handle **42** is dimensioned to removably fit the dustpan handle **30**. In order to insure a snug fit, the overall width of the dustpan handle **30** at any particular point is necessarily greater than that of the brush handle **42** at the corresponding point, and the overall outside width of the brush handle **42** is but slightly greater than the inside width of the dustpan handle **30** as defined by the walls of the channel. This being the case, the brush handle **42** may be placed in the dustpan handle **30**. When so placed, the walls of the dustpan handle **30** are flexed outwardly, while the walls of the brush handle are flexed inwardly, thus "snapping" the brush handle **42** securely in place. It will be further noticed in FIGS. 3, 4, 5 and 6 that the depth of the channel of the dustpan handle **30** is sufficient to receive the major portion of the channel walls of the brush handle **42**. This arrangement when assembled provides a composite unit that may be easily grasped and carried about.

As shown most clearly in FIGS. 1 and 2, the brush **12** when snapped into place in the dustpan handle **30** is positioned so that the bristles **38** are disposed in a position above the bottom wall **18**, i.e. suspended in the opening of the debris receiving chamber **16**. By having the corresponding wide portions of the dustpan handle **30** and the brush handle **42** at their respective upper portions, the bristle block **40** and bristles **38** are suspended in the opening to the debris receiving chamber **16** and the brush **12** is restrained from sliding downward. This particular design prevents injury by bending to the bristles **38**. It should also be noted that when the brush **12** and the dustpan **14** are in the joined position, the elongated holes **44** and **36** of the brush handle **42** and the dustpan handle **30** respectively are in registration with each other, thus providing means by which the composite unit may be hung against a wall or other vertical surface on a nail or hook.

While the brush and dustpan may be made of any suitable material, and produced by a number of methods, their particular design lends itself to the use of plastics and plastic molding techniques. It is preferred that high impact synthetic plastics be employed; however, it is also desirous to employ a plastic with some degree of resiliency.

This latter quality comes into play in regard to the "snap" holding action between the two handles 30 and 42.

What is claimed is:

1. A dustpan and brush combination, said dustpan comprising a debris receiving chamber and an elongated handle having a channel-shaped cross sectional configuration extending upwardly therefrom, said handle at its lower end opening into said debris receiving chamber, said brush comprising a bristle block and an elongated, channel-shaped handle extending upwardly from said block and approximately equal in length to the handle of the dustpan, said brush handle being dimensioned to removably fit into said channel-shaped cross sectional dustpan handle and to be held snugly thereby, said channel-shaped handles, when fitted together, forming a tubular handle for said combination and each handle having an opening therethrough for receiving a supporting hook member registered with a similar opening in the other handle, the depth of the channel forming the handle of said dustpan being not substantially less than the thickness of the bristle block of said brush whereby said block is disposed substantially entirely within said debris receiving chamber.

2. The dustpan and brush combination as set forth in claim 1 wherein said dustpan handle and said brush handle are wider at their top portions than at their bottom portions respectively, so that said brush handle, when being held by said dustpan handle, maintains said bristle block suspended in the opening to said debris receiving chamber.

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