

[54] MOP BUCKET

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2,564,043 8/1951 Ward 220/96
2,738,531 3/1956 Gerosa 15/264
3,331,527 7/1967 Kaas et al. 220/91

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[58] Field of Search 220/94 R, 94 A, 94 B,
220/96, 91; 15/260, 261, 262, 263, 264,
257.2; 248/110

[56] References Cited UNITED STATES PATENTS

2,895,522 7/1959 Bloch 220/96
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[57] ABSTRACT

A mop bucket is shown having a generally rectangular cross sectional configuration with a U-shaped retractable handle. The handle is so mounted that it may be secured in the vertical position. At an off-center location on the handle portion a mop handle holder is provided which engages the mop handle and holds the mop upright at a slight angle in the bucket when not in use to facilitate carrying, and positioning the mop handle so that it will not interfere with adjacent paraphernalia.

12 Claims, 6 Drawing Figures

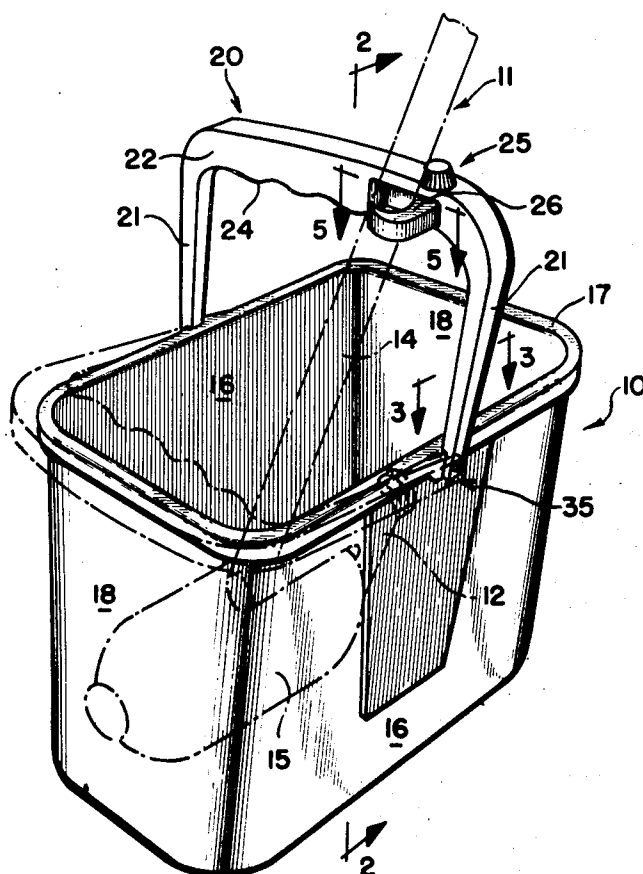


FIG. 1

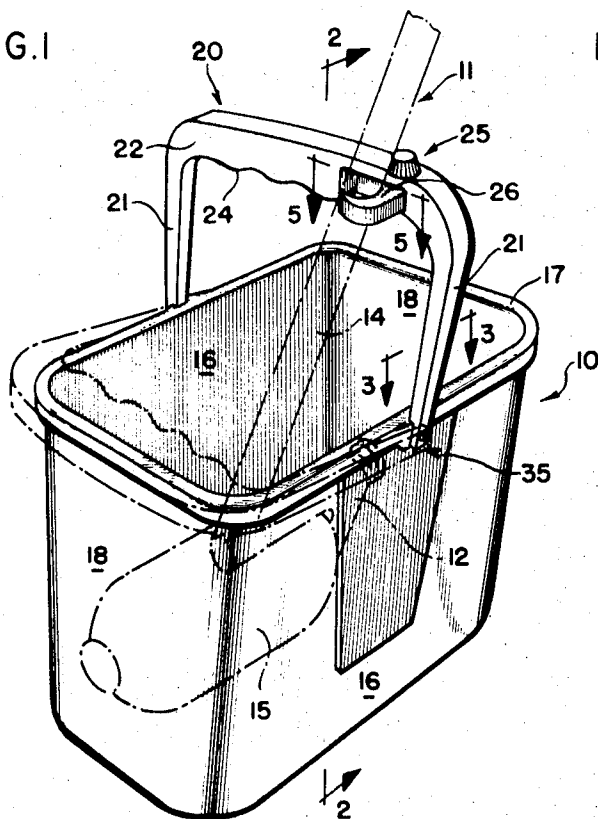


FIG. 3

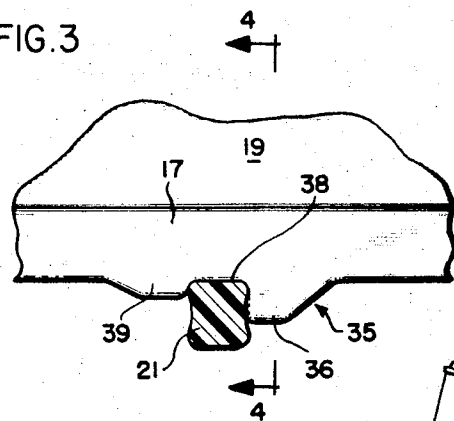


FIG. 4

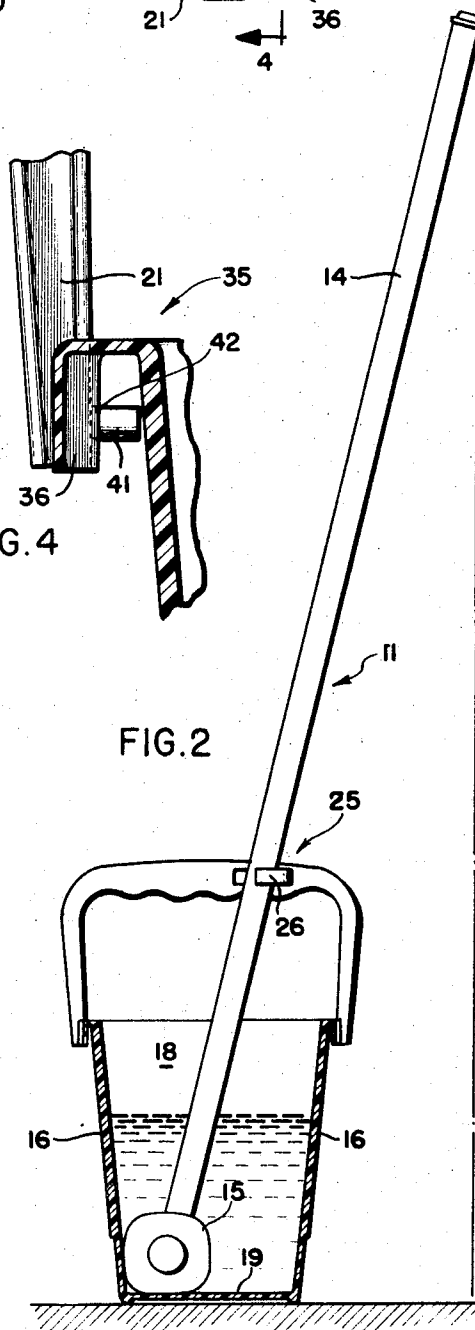


FIG. 5

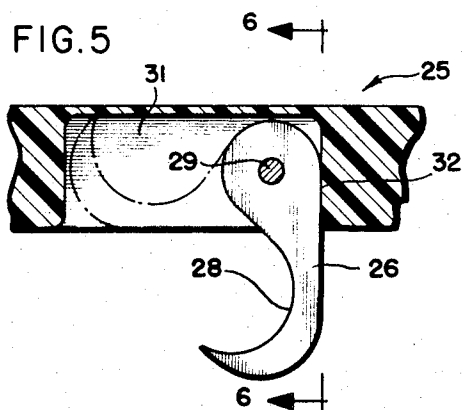
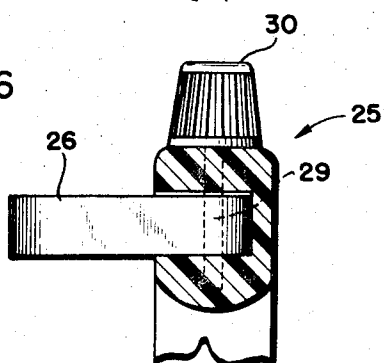


FIG. 6



MOP BUCKET

CROSS REFERENCES TO RELATED APPLICATIONS

The mop bucket illustrative of the present invention finds particular utility with the wringer mop construction disclosed in U.S. Pat. No. 3,699,603 in which applicant is the named inventor, and the common assignee is Popeil Brothers, Inc.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The field of the invention relates to mop buckets, and more particularly that style of mop bucket which is provided with means for supporting a mop with the mop handle generally angled slightly from the vertical while the mop is within the bucket.

2. Description of the Prior Art

Scrub buckets of the circular as well as rectangular cross section are known. U.S. Pat. No. 3,409,932 is exemplary of both. Handle portions for buckets have also been used for supporting auxiliary equipment, such as paint brushes as illustrated in U.S. Pat. Nos. 3,593,880; 1,024,841; 3,168,962; and 2,466,850. Mop handle supports, on the other hand, are shown as exemplified in U.S. Pat. No. 3,409,932, and paint roller supports have been shown such as in U.S. Pat. No. 2,932,838.

The problem involved, however, relates to a simple mechanism which will permit the use of a mop to support the same vertically in a scrub bucket while temporarily undertaking another activity, or while carrying the same from place to place, or filling the same. Also such a construction should not impede the use of the bucket independently for carrying fluids, nor add considerably to the weight or the cost of the bucket.

SUMMARY OF INVENTION

The invention contemplates a bucket, preferably rectangular in cross section, with a generally U-shaped handle which is pivotally secured to opposed sides of the bucket at their upper portion, and having mounting means which secure the handle in an upright position. Offset from a midposition of the handle, a mop handle holder is provided adjacent the hand grip portion of the bucket handle which is partially retractable into the handle, or extendable therefrom in order to engage the upstanding mop handle. The base of the bucket is a width preferably less than double the width of the mop which is being supported, and a length at least the length of the mop being supported. The mop handle holder is preferably actuated by means of a knob, and when in its extended position is supported against further rotation by stop means thereby cradling the mop handle in a crotch-like portion of the mop handle holder. A specific form of the invention looks to a generally rectangular cross sectional configuration of the mop bucket portion which is twice as long as it is wide, and is one and a half to two times as high as it is wide. Also more specifically the mop bucket handle is a unitary molded member of U-shaped configuration secured to the sides of the mop bucket in flexing relationship therewith to assist in the removable engagement with a saddle provided at the upper portion at the sides of the bucket to engage the inner faces of the legs of the mop bucket handle.

It is a principal object of the present invention to provide a mop bucket, the handle portion of which bears

the additional function of supporting the mop handle in an upright position angled slightly from the vertical thereby facilitating storage, handling, and manipulation of the mop in cooperation with the bucket.

A more specific object of the present invention is to retain the strength of the handle by operating a knob and mop handle holder mechanism in a single direction to thereby permit the mop bucket handle a strong configuration. Nevertheless the holder nests within the handle when out of use to not interfere with carrying, storage, and the like.

More specifically, the mop bucket handle swings in but one direction, and the mop handle holder also swings in operation in but one direction thereby insuring that the mop employed fits in only one position within the mop bucket. This orientation insures habitual repetitive usage in only one position which results in stability of the supported mop handle, and the positioning of the mop handle as a function of the proportion of the units in an optimum position angled from the vertical.

Still another object of the present invention is to provide a mop bucket with a handle having a finger grip which reduces the risk of slipping when the hands are wet. A related object of the invention includes the provision of a mop handle holder with a configuration which will support round or oval-shaped mop handles, and will also hold a variety of handle diameters and thicknesses.

Another aspect of the present invention and important object relates to the geometrical relationship of parts in which the width of the base of the bucket is approximately double the width of the mop head, and at least as long as the mop head thereby rendering the unit stable when filled with water and holding the mop, capable of carrying a significant amount of water adequate for use with the mop in the usual intended mopping operation, and providing an optimum storage angle for the mop handle while the mop is stored within the mop bucket.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view showing a mop bucket illustrative of the present invention, and illustrating in phantom lines a mop positioned therein, and also showing the two positions of the mop bucket handle.

FIG. 2 is a transverse sectional view taken generally along section line 2—2 of FIG. 1 in enlarged scale illustrating the relationship between the mop handle and mop bucket when the mop is stored in the bucket substantially filled with water.

FIG. 3 is an enlarged broken partially sectioned view of the lower portion of the mop handle taken along section line 3—3 of FIG. 1.

FIG. 4 is an enlarged broken view partially sectioned showing the attachment of the lower portion of the mop handle to the mount pocket of the bucket taken along section line 4—4 of FIG. 3.

FIG. 5 is an enlarged broken partially sectioned view of the mop handle holder taken along section line 5—5 of FIG. 1.

FIG. 6 is a view in the same scale as FIG. 5 taken in transverse section along section line 6—6 of FIG. 5 further illustrating the mop handle holder.

DESCRIPTION OF PREFERRED EMBODIMENT

The mop bucket 10 illustrative of the present inven-

tion is intended to hold a mop 11 of the character known in the trade as the "HAV-A-MAID" mop. The mop bucket 10, however, will hold other well known mops such as the "O-CEDAR"-type squeeze sponge mops, and the like. The mop 11 as shown has a mop head mount 12 which is generally U-shaped in configuration, and terminates in a mop head 15 which fits in the bottom of the mop bucket 10, as illustrated in FIGS. 1 and 2. The mop handle 14 extends upwardly out of the water in the mop bucket 10, and is supported at a slight angle as illustrated in FIG. 2.

In greater detail it will be seen that the mop bucket 10 has a pair of generally rectangular sidewalls 16 and endwalls 18 terminating at their upper portion in a coplanar curled rim 17. The bottom 19 of the bucket is also generally rectangular, as will be particularly observed in FIG. 2, its width is approximately double that of the mop head 15 of the illustrative mop 11. The length of the bottom 19, as seen in FIG. 1, is at least the width of the mop head 15 and its associated mop head mount 12.

The mop bucket 10 is carried by means of the bucket handle 20 which is generally U-shaped in configuration having a pair of opposed bucket handle legs 21, and a base portion 22 which includes at the underneath side the hand grip 24 formed of a plurality of undulations to assist picking up and carrying of the mop bucket 10.

The mop handle holder 25 is positioned slightly off center of the bucket handle base 22 as clearly illustrated in both FIGS. 1 and 2. The mop handle holder 25 comprises primarily an arm 26 (see particularly FIGS. 5 and 6) which has a crotch portion 28 to engage the mop handle 14. The mop handle holder arm 26 is secured by means of a pin 29 in position in the recess 31 provided in the bucket handle base 22 for retraction and extension from the positions as shown in FIG. 5. The retraction and extension is accomplished by the rotation of the mop handle holder knob 30 which manually extends the mop handle holder arm 26 to the position where it is flush against the stop wall 32 of the mop handle holder recess 31 particularly as shown in FIG. 5. Thus the weight of the mop handle 14, which is not great, causes the mop handle 14 to rest in the mop handle holder crotch 28 particularly as shown in FIGS. 1 and 2. The assembly of the mop handle holder 25 is such that they are frictionally snug, and when the actuating knob 30 is rotated to retract the mop handle holder arm 26 into the recess 31, the same will remain there until the knob 30 is rotated in the opposite direction.

Important to insuring the stability of the holding of the mop handle 14 is the bucket handle lock 35 provided at opposed stations on the rim 17 at the upper portion of the side walls 16. The construction is shown in greater detail in FIGS. 3 and 4 where it will be seen that the bucket handle lock 35 is an integral extension of the rim 17. It will be appreciated, of course, that the bucket handle lock 35 may also be separately formed and fixed to the mop bucket rim 17. The bucket handle lock 35 has an extending latch portion 39 and a stop portion 36 defining a saddle 38 therebetween. The saddle 38 receives and holds the legs 21 of the bucket handle 20 in the vertical position. As will be observed particularly in FIG. 4, the lower end of the bucket handle leg 21 has a mount pin 41 which is fitted within the hole 42 provided in the mount pocket 40 thereby removably securing the mop bucket handle 20 to the bucket. It

will be appreciated that there is some flexibility of the material of the bucket side walls 16 as well as the mop bucket handle 20 which permits the assembly in the fashion as shown, and further facilitates the locking and unlocking of the legs 21 of the mop bucket handle 20 with the bucket handle lock 35.

The proportions and size of the mop bucket 10 materially assist in the support of the mop 11 as shown in FIG. 2. In a particular commercial embodiment the mop bucket bottom 19 is 6 inches wide and 12 inches long on its inside dimension, and the side walls 16 are approximately 9 inches high, thus the side walls 16 are half again as high as the bottom 19 is wide, and the bottom 19 is twice as long as it is wide. In addition, the particular mop head 15 shown is approximately three inches in width, and thus the mop bucket bottom 19 is approximately double the width of the mop head 15 of the mop 11. A slight taper is provided, in a desirable commercial embodiment, the same being approximately 1 inch extending taper toward the rim 17 of the end walls 18, and approximately $\frac{1}{4}$ inch along the rim 17 of the side walls 16. When the bucket is molded of plastic, the same weighs approximately 16 ounces, and the handle weighs approximately 4 ounces, making a total weight of 20 ounces, or $1\frac{1}{4}$ lbs. This is a quite light-weight construction and, of course, without the coordinated relationship between the mop handle holder 25, the proportions of the bucket handle 20, and the bucket bottom 19 as shown in FIG. 2, the unit would be unstable when the water supply is low. By hewing to proportions of the optimum configuration as set forth above, however, the instability of the illustrative mop bucket 10 with the mop 11 in place is held to a minimum.

It will also become apparent that the mop bucket handle 20 is secured for locking by the bucket handle lock 35 in such a fashion that it can only retract in the direction of the mop handle 14, since the mop handle 14, in turn, can only be positioned on the retracting side of the mop bucket handle 20. Also to be noted is the configuration of the crotch 28 of the arm 26 of the mop handle holder 25 which is generally J-shaped, and therefore would accommodate circular handles, elliptical handles, and other mop handles of differing configuration.

It will be appreciated that various alternative constructions and materials may be employed in the formation of the various elements and components of the illustrative mop bucket 10. Such substitution of materials will result in making two parts of one, and in some instances one part out of two.

Although particular embodiments of the invention have been shown and described in full here, there is no intention to thereby limit the invention to the details of such embodiments. On the contrary, the intention is to cover all modifications, alternatives, embodiments, usages and equivalents of a mop bucket as fall within the spirit and scope of the invention, specification and the appended claims.

What is claimed is:

1. A mop bucket comprising, in combination, a bucket portion having a bottom, side walls, and end walls, said bottom having four edges joining the said end walls and side walls, said end walls and side walls terminating at their upper portion defining a generally coplanar top

- rim, the end walls and side walls being joined at their edge portions,
- a handle having a generally U-shaped configuration comprising a pair of opposed legs, and a handgrip base portion,
- a handle mount for pivotally mounting the open end portion of the U-shaped handle legs at the free end of said legs to the side portions of said bucket at a position beneath the top rim,
- a lock closely adjacent the top rim of the bucket for removably and lockingly securing the legs and handle generally in the upright position,
- a mop handle holder secured to said handle at a point offset from the center thereof and operatively opening toward one side of the bucket, thereby providing a handle portion on the bucket which when elevated locks in place in the approximately vertical position, and thereafter the holder for the mop handle receives the same and holds it at an angle.
2. In the mop bucket of claim 1 above, said bucket bottom having a width not exceeding twice the width of the mop intended for use therewith.
3. In the mop bucket of claim 2 above, said bucket bottom having a length substantially double its width.
4. In the mop bucket of claim 1 above, said mop handle holder being pivotally secured within a recessed portion provided in the base portion of the bucket handle.
5. In the mop bucket of claim 1 above, said handle mount being secured to said side portions of said bucket at a portion immediately beneath the rim,
- said lock being provided with a latch portion offset from a stop portion defining a gap therebetween to nestingly receive the adjacent leg portion of said bucket handle.
6. In the mop bucket of claim 1 above, said mop handle holder comprising an arm having a crotch and terminating in a pivotal portion at its end,
- said pivotal portion having means for securing the same to a knob extending from the hand grip portion of said handle, whereby upon rotating the knob portion the holder can be extended from the handgrip portion of the handle to receive the handle of a mop positioned within the mop bucket, and, remove back into a recessed nesting relationship within the handle when the bucket is not being used with the mop handle.
7. In the mop bucket of claim 4 above,

- said holder being secured to the handle of the mop bucket at a position between the midportion thereof and the adjacent leg.
8. In the mop bucket of claim 6 above, said holder being secured to the handle of the mop bucket at a position between the midportion thereof and the adjacent leg.
9. A mop bucket comprising, in combination, a bucket portion having a bottom, side walls, and end walls,
- said bottom having four edges joining the said end walls and side walls,
- said end walls and side walls terminating at their upper portion defining a generally coplanar top rim, the end walls and side walls being joined at their edge portions,
- a handle having a generally U-shaped configuration comprising a pair of opposed legs, and a handgrip base portion,
- mounting means for pivotally mounting the open end portion of the U-shaped handle legs at the free end of said legs to the side portions of said bucket at a position beneath the top rim,
- locking means closely adjacent the top rim of the bucket for removably and lockingly securing the legs and handle generally in the upright position, and stopped against movement beyond the upright position from one end portion of said bucket,
- mop handle holder means secured to said handle at a point offcentered from the handgrip portion thereof and operatively opening toward that end of the bucket opposite the stop on the lock mechanism and adjacent which the handgrip portion of the bucket handle retracts, thereby providing a handle portion on the bucket which when elevated locks in place in the approximately vertical position, and thereafter the holding means for the mop handle receives the same in the half of the bucket above the retractable portion of the handle of the bucket.
10. In the mop bucket of claim 9 above, said bucket bottom having a width not exceeding twice the width of the mop intended for use therewith.
11. In the mop bucket of claim 10 above, said bucket bottom having a length substantially double its width.
12. In the mop bucket of claim 9 above, said mop handle holder means being pivotally secured within a recessed portion provided in the base handgrip portion of said bucket handle.

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