

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2006/0032828 A1 Chiu

(43) Pub. Date:

Feb. 16, 2006

(54) HOLDER FOR ORGANIZATION AND **STORAGE**

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(21) Appl. No.: 11/141,249

Filed: May 31, 2005 (22)

Related U.S. Application Data

(60) Provisional application No. 60/575,688, filed on May 29, 2004.

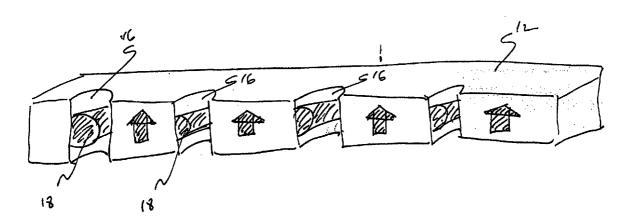
Publication Classification

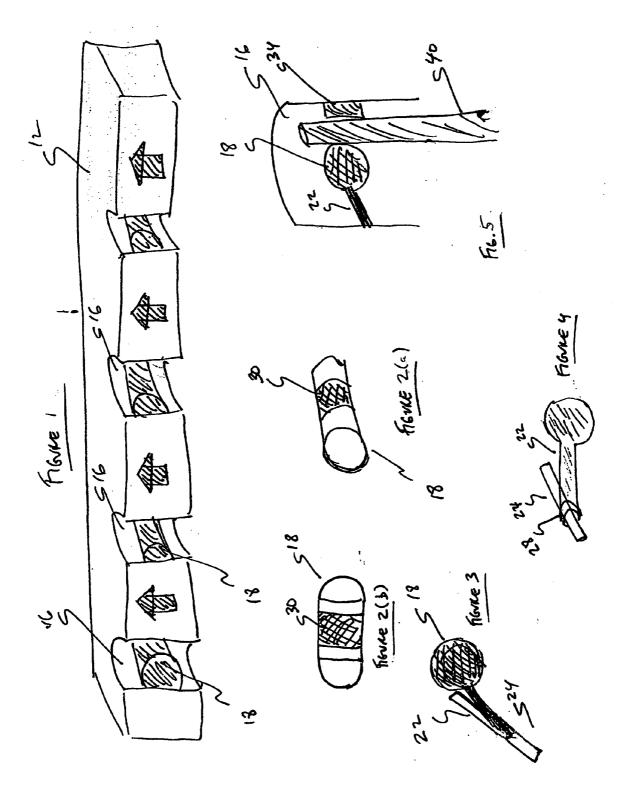
(51) Int. Cl. A47B 81/02 (2006.01)

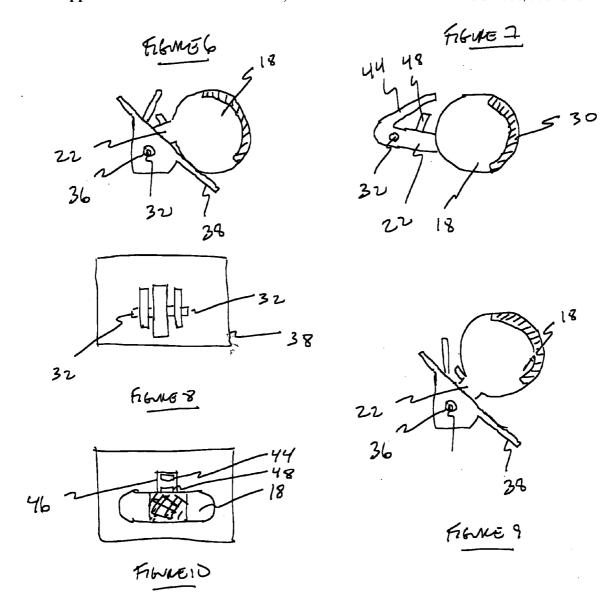
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ABSTRACT

A holder including a movable component such as a cylinder mounted to pivot about a fixed point or axis. The movable component rotates from a resting position to a raised position, wherein the movable component and a side mount are utilized to hold the handle of various household, work or other articles, such as brooms, mops, garden rakes, hammers, and so forth.







HOLDER FOR ORGANIZATION AND STORAGE

RELATED APPLICATIONS

[0001] This application claims the priority of U.S. Provisional Patent Application Ser. No. 60/575,688 filed May 29, 2004, which is fully incorporated herein by reference.

FIELD OF THE INVENTION

[0002] The present invention relates to a holder for organizing and storing articles with a handle, such as, but not limited to, brooms and mops.

BACKGROUND OF THE INVENTION

[0003] Frequently, households have numerous brooms, mops, and other tools and articles having a handle, those articles being used for cleaning purposes, sports activities, or so forth. In practice, these articles are frequently leaned against a wall, or piled in a closet in disarray or so forth. Accordingly, there is a need in the art for improved holders for storing those articles in an organized and efficient fashion.

SUMMARY OF THE INVENTION

[0004] In accordance with the present invention, a holder is provided to store articles in an organized fashion. Preferably, the holder includes a recess having a movable component therein which rotates about a fixed point or axis of the holder. In a lowered position, the movable component rests in contact with a first surface of the holder, and is also in proximity to a second surface of the holder, with the second surface preferably being provided with a surface of frictional material, such as rubber.

[0005] In use, the movable component is rotated to a raised position in which it is no longer in contact with the holder's first surface. In this raised position, the movable component is at an increased distance from the first surface and from the second surface, the component being raised for insertion of the handle of the article in the gap between the movable component and the second surface. The movable component can then be lowered, moving it closer to the handle and to the first and second surfaces. In this manner, the movable component rests against one side of the handle, with the other side of the handle resting against the second surface, resulting in a suspension of the handle, and thus the article, within the holder.

[0006] Further objects and advantages will be apparent in conjunction with the detailed disclosure provided herein.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 is a perspective view of a holder of the present invention.

[0008] FIG. 2(a) is a perspective view of a movable component of the holder, with FIG. 2(b) being a front view of the component of FIG. 2(a).

[0009] FIG. 3 is a perspective view of the movable component of FIG. 2 in a raised position.

[0010] FIG. 4 is a perspective view of the movable component of FIG. 2 in a lowered position.

[0011] FIG. 5 is a front view of the recess of the holder of the present invention, when the holder is in use to hold an handle of an article in accordance with the invention.

[0012] FIG. 6 is a side view of a further embodiment of the present invention, with the movable component resting on an inclined surface.

[0013] FIG. 7 is a further side view of the movable component of the embodiment of FIG. 6.

[0014] FIG. 8 is a back view of the embodiment of FIG. 6.

[0015] FIG. 9 is a further side view of FIG. 6, wherein the movable component has been raised off of the inclined surface.

[0016] FIG. 10 is a front view of the embodiment of FIG.

DETAILED DESCRIPTION OF THE INVENTION AND THE PREFERRED EMBODIMENTS

[0017] In accordance with the present invention, an apparatus is provided to hang, store and organize articles having a handle. The apparatus is particularly useful for objects having a handle in the shape of a rod. Preferably, a plurality of such articles can be stored in a secure and organized fashion, to ease the organization and storage of numerous items such as household and work materials. These include, but are not limited to, cleaning utensils, garden tools, work tools, sports equipment, and so forth.

[0018] Cleaning utensils that can be used with the invention, include, for example, mops, brooms, dusters, squeegees, toothbrushes, hair brushes, and so forth. Garden tools that can be used with the invention include, for example, hoes, and rakes. Work tools that can be used with the invention include, for example, hammers, screwdrivers, pliers, and wrenches. Sports equipment that can be used with the invention include, for example, baseball bats, hockey sticks, tennis rackets, squash rackets, ping pong paddles, golf clubs, and so forth.

[0019] Examples of the preferred embodiments of the holder of the invention and its components are shown in the various figures attached hereto. As shown in FIG. 1, holder 12 includes a series of recesses 16. Each recess has a left and right side extending from the holder, and is provided to preferably hold a single article. Although four recesses are shown in the figure, as many or as few recesses can be provided as desired.

[0020] Each recess 16 of holder 12 includes a movable component 18. Preferably, movable component 18 is a cylinder, as shown in FIG. 2. In a preferred embodiment, the end of the cylinder is hemispherical as shown in FIGS. 2(b), although the end can alternatively be flat, if desired. Further alternatively, the entire movable component 18 can be spherical or of another desired shape.

[0021] Cylinder or movable component 18 is mounted to a fixed portion of holder 12 such as a point or an axis. For example, as shown in FIGS. 3 and 4, cylinder 18 can have an arm 22 extending therefrom, the arm being provided with a semicircular or circular terminal end 28, such as a washer or hollow cylinder. A bar 24 or another fixed object is

inserted through the hole in terminal end 28, such that the cylinder 18 can easily pivot or rotate around the axis formed by bar 24. Alternatively, as shown in FIGS. 6-8, cylinder 18 can be provided with small rods or nubs 32 extending out of arm 22, with the rods or nubs 32 being inserted into holes 36, allowing rotation of the cylinder.

[0022] In the resting position, cylinder 18 preferably rests on a lower surface of the holder, whether an edge of the holder or otherwise. In one embodiment, cylinder 18 rests on an inclined surface, such as incline 38, as shown in FIG. 6. In this embodiment, arm 22 of cylinder 18 extends through a slot 46 in incline 38, with rods 32 of arm 22 being inserted into holes 36 provided on the side of the incline.

[0023] Although FIG. 6 shows cylinder 18 sitting on the bottom of incline 38 in the resting position, cylinder 18, however, cannot roll up or down incline 38 at any time. Rather, the cylinder 18 is lifted up off of the incline (or other lower resting surface of the holder), when an article's handle is inserted into the recess 16, as described below.

[0024] Thus, in use, the cylinder 18 is lifted off of its resting surface so that the cylinder no longer makes contact with that surface in the raised position. As shown in FIG. 9, for example, movable component 18 has been lifted into the raised position wherein it is no longer in contact with incline 38

[0025] Cylinder 18 can be lifted either with the user's hands or with the handle 40 of the article to be secured. To secure and store the article, handle or rod 40 is inserted between cylinder 18 and side mount 34. Once the handle 40 is between cylinder 18 and side mount 34, the user lowers and/or lets go of the handle 40 (and the cylinder 18 if he or she lifted it directly). Upon releasing the handle, the force of gravity pulls the handle 40 downward, while also pulling downward on cylinder 18, so that the cylinder can fall downward against the handle. The cylinder thus rests against the handle with the handle wedged between the cylinder and side mount 34. Friction between the cylinder 18 and handle 40, and likewise friction between the handle 40 and the side mount 34, further assist in keeping the handle in position, preventing it from sliding downward. As a result, the article to be stored is suspended above the ground and secured to the wall in a secure and organized manner.

[0026] When the handle 40 of the article is being held, cylinder 18 is generally suspended away from contact with the lower surface or incline 38, although it may return to rest against a lower surface of the holder such as incline 38 depending on the diameter of the diameter or thickness of the handle. Preferably, the cylinder further includes a frictional surface thereon. As shown in the figures, for example, a pad 30 can be provided made of a material such as rubber which increases the coefficient of friction between the cylinder and the rod 40, further preventing slipping. Pad 30 can fully extend around cylinder 18, or can extend around just that portion of the cylinder which comes into contact with the handle 40. Alternatively, the cylinder could itself be made of rubber or another frictional material. Likewise, side mount 34 is also preferably made of rubber or another material which securely rests against the handle with sufficient friction such that the handle is securely gripped and does not slip.

[0027] In this manner, the easy rotation and movement of the cylinder 24, and the positioning of the cylinder and the

side mount 34, allow objects to be securely and neatly suspended from the holder. They further allow easy removal of the hanging object by directly lifting the cylinder 18 off of the incline or other surface 38 or by lifting the handle to move the cylinder 18 upward. Thus, objects can be easily suspended and removed from the holder 12 when desired.

[0028] In a further embodiment of the invention, holder 18 can be further provided with two components that contact or hit each other upon sufficient rotation of the movable component, to limit that movable component's upward rotation. These two components can, thus, be used to prevent the movable component from rotating back too far into the holder's recess, and/or from rotating back sufficiently to hit the top of the holder, or so forth. For example, movable component 18 can be provided with a stop 48 as shown in FIG. 7, with a segment 44 which extends back toward the cylinder 18 being provided to arm 22. When arm 22 is inserted through slot 46 in incline 38 to attach the arm to the holes in the incline, segment 44 extends through the slot toward the cylinder 18, as shown in FIG. 6. When movable component or cylinder 18 is raised, segment 44 hits the top edge of slot 46, and flexes slightly, such that when cylinder 18 is raised sufficiently, segment 44 hits stop 48 preventing further raising of the cylinder 18.

[0029] In the preferred embodiment, holder 12 is primarily made of plastic, or another suitably light and inexpensive material, with a suitably frictional material such as rubber or the like being preferably used for the surface of the cylinder, and for the side mount 34 as discussed above.

[0030] In a home, office, work area, or so forth, the apparatus can be mounted to a wall, a door or other desired surface. To mount the apparatus, a user begins by selecting an empty wall area for the holder, positioning the holder high enough so that items hang unobstructed. The holder is placed level against the wall with the arrows in FIG. 1 pointing towards the ceiling. A nail or thin pencil is then used to press through the screw holes in the holder to mark the position of the holes on the wall. The holder is then removed from the wall and holes are drilled to the marked positions (e.g. 1/4 inch holes). Plastic plugs can then be hammered into the wall to hold the subsequent screws in the wall. (For wood surfaces, 1/8 holes can be drilled without using the plastic plugs). The holder is then positioned with the screw holes aligned with the wall plugs. The screws can then be inserted through the screw holes of the holder and into the wall plugs to affix the holder to the wall. Alternatively, the holder can be screwed directly into the wall. Once the holder has been secured, it can then be used to suspend household articles or other hanging articles in an organized

[0031] Having described this invention with regard to specific embodiments, it is to be understood that the description is not meant as a limitation since further embodiments, modifications and variations may be apparent or may suggest themselves to those skilled in the art. It is intended that the present application cover all such embodiments, modifications and variations.

What is claimed is:

- 1. A method comprising:
- providing an article for use as a holder of an object having a handle, said holder comprising a movable component and a side mount;
- wherein said movable component is mounted to a fixed portion of said holder;
- said movable component having a lowered position in which said movable component contacts a surface of said holder, said movable component further having a raised position;
- wherein said movable component can be rotated around said fixed portion of said holder and away from said

- side mount to move said movable component from said lowered position to said raised position;
- said raised position being a position wherein said movable component moves away from said side mount, and wherein said movable component no longer contacts said surface;
- and wherein a user can insert the handle of the object between said side mount and said movable component and let go of the handle of the object, such that the handle is gripped between said side mount and said movable component, to suspend the object.

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