United States Patent

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[54] **MOP AND BROOM HOLDER**
6 Claims, 5 Drawing Figs.

[52] **U.S. Cl.** **248/113,** 24/254, 211/65
[51] **Int. Cl.** **A47b 81/02**
[50] **Field of Search** ..... 248/113, 111; 211/65; 24/249 FP, 249 PP, 254

[56] **References Cited**

UNITED STATES PATENTS

1,982,482	11/1934	Rhodes	24/254
3,095,092	6/1963	Magarin	24/254 X
988,180	3/1911	Engelberg	24/249 PP
1,958,772	5/1934	Stewart	211/65 X
3,210,037	10/1965	Christensen	24/254 X

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ABSTRACT: An L-shaped mounting bracket has slots formed in a horizontal flange portion for receiving an article to be held. Confrontingly positioned jaw members are pivotally mounted on the bracket and are spaced over lateral edges of the slots to allow the passage of an article through the slots. Bias means are connected to the jaw members for automatically urging them into clamping engagement with the article as it passes between the jaw members.

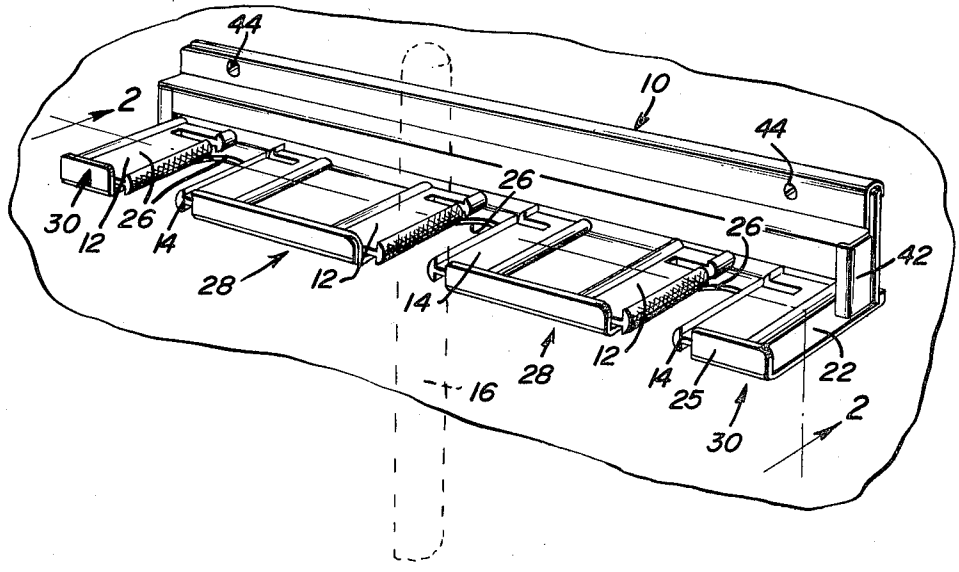


Fig. 1

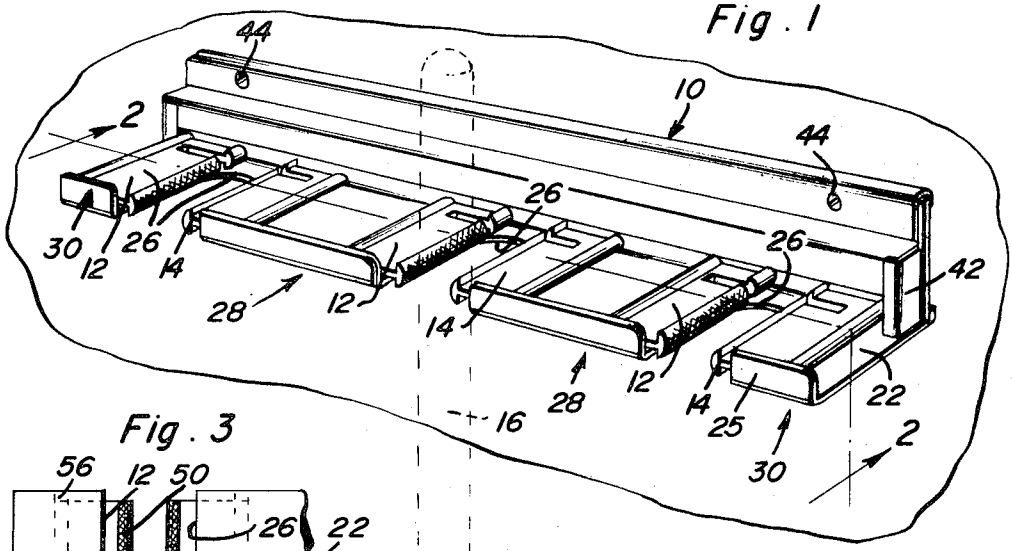


Fig. 3

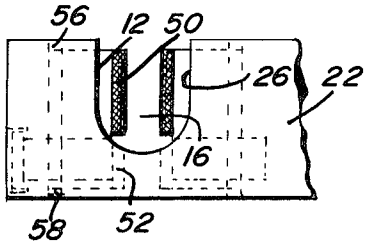


Fig. 2

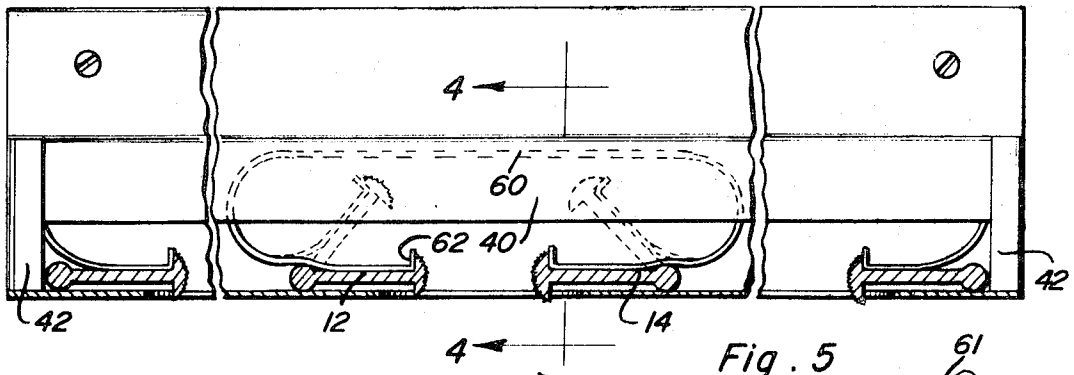


Fig. 5

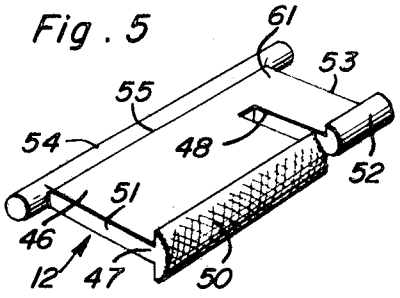
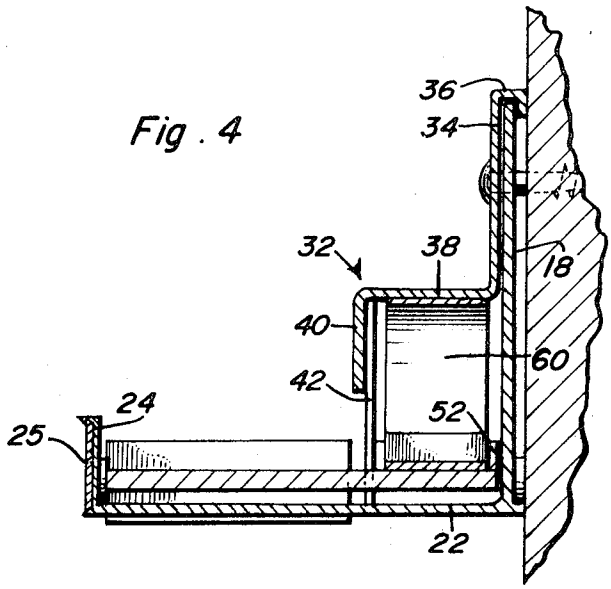


Fig. 4



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MOP AND BROOM HOLDER

The present invention relates to bracket holders and more particularly to a holder adapted to support handles of brooms and mops.

In the average home and institution, several mops and brooms are available to efficiently perform various cleaning jobs. Usually, these mops and brooms are stored in a closet in a disorderly manner. Further, by grouping mops and handles together a substantial amount of closet floor space is needlessly encumbered. The present invention relates to a mounting bracket which clamps the handles of mops and brooms to the bracket. The invention allows the housewife or institutional cleaner to neatly hang up the various mops and brooms collected haphazardly in a closet. Further, by utilizing the present invention the cleaning portions of the mops and brooms can be elevated over a floor surface when the bracket is secured to a wall. Therefore, this floor surface can be used more advantageously, such as for storage.

These together with other objects and advantages which will become apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a perspective view of the present holder device.

FIG. 2 is a longitudinal sectional view taken along a plane passing through section line 2—2 of FIG. 1.

FIG. 3 is a partial bottom plan view of the invention illustrating the opening through which an article passes.

FIG. 4 is a transverse sectional view taken along a plane passing through section line 4—4 in FIG. 2.

FIG. 5 is a perspective view of a single jaw member as utilized in the present invention.

Referring to the figures and more particularly FIG. 1, the present invention is seen to include a generally L-shaped bracket 10 which mounts a plurality of longitudinally spaced confronting jaw members 12 and 14 that are adapted to clampingly engage the handle 16 of a received mop or broom.

Considering FIG. 4, the structure of the bracket includes a vertical flange 18 extending to a lower horizontal flange 22 that extends at the forward end thereof to an upturned vertical flange 24. As indicated in FIGS. 1 and 3, the horizontal flange 22 includes a number of longitudinally spaced D-shaped slots 26 that receive the handle 16. Flange 24 has a central recess for flush mounting a dressing plate 25 which is glued in the recess.

As will be noted from FIG. 1, the slots 26 divide the horizontal flange 22 into a series of intermediate flange sections 28 and end flange sections 30. Each end flange section is seen to support a single jaw member 12 or 14 while the intermediate flange sections 28 support two laterally outwardly extending jaw members 12 and 14. However, when the entire structure is considered as a whole, each jaw member is disposed in confronting spaced relation with an adjacent jaw member to form a pair of members capable of clampingly engaging a handle 16 positioned in a slot 26 therebetween.

The bracket 10 further includes a step shaped spring enclosing iron or shield 32 having a vertical flange 34 suitably attached in overlying relation to the upper portion of flange 18 as seen in FIG. 4. The upper end portion of flange 34 if rolled over the top edge of flange 18 to produce a smooth edge 36. The lower end of flange 34 articulates to a horizontal flange 38 which turns downwardly to form a vertical flange 40. End plates 42 are positioned at the outward ends of the step-shaped iron 32 and extend downwardly into contacting relation with the horizontal flange 22. Openings 44 are formed through the upper portion of the bracket 10 to allow mounting of the bracket against a wall surface.

FIG. 5 illustrates the particular configuration of a single jaw member 12. The member includes a central rectangular body portion 46 having a transversely extending rectangular recess 48 formed inwardly from a lateral edge 47 of the jaw member. This recess receives the bottom edge of flange 40 when the jaw is pressed upwardly as seen in phantom in FIG. 2, thereby extending the capability of the holder to receive large handles. A vise face 50 having a substantially semicircular cross section is integrally attached to the lateral edge 47 of the jaw member. The vise face 50 extends from a first transverse end 51 of the member to the recess 48. The remainder of the lateral edge 47, which attaches the vise face 50, integrally connects an elongated projection 52 that extends between recess 48 and a second transverse edge 53 of the member. As will be explained hereinafter, the vise face 50 grips handle 16 while projection 52 serves as an abutment for jaw member biasing means. The opposite lateral edge 55 of the jaw member integrally attaches a pivot pin element 54 that is adapted to be inserted at opposite ends thereof in aligned apertures 56 and 58 formed in the flanges 24 and 18 of the bracket, as shown in FIG. 3.

FIG. 2 shows the deposition of a generally oblong or looped leaf spring within the bracket 10 for biasing the jaw members 12 and 14 in a normally horizontal position. Particularly, the upper central section of the leaf spring 60 is seen to lie in abutting relation with the lower surface of flange portion 38 of the step shaped iron 32. The outward end portions 62 of the spring are turned up perpendicularly and terminate in overlying spaced relation with the rearward edges of associated jaw members. More particularly, the spring end contacts the central body portion of the jaw member indicated by 61 in FIG. 5 which is bounded between the transverse edge 53 and the recess 48 in the jaw member. The ends of the spring are perpendicularly offset to contact the edge of intersection between vise face 50 and the central body portion 12. This engagement between the spring ends and their associated jaw members is sufficient to bias the jaw members when they reside in non-engaged relation as well as when they engage a handle. The latter engaged position of the jaw members is illustrated in phantom in FIG. 2. As will be seen in FIG. 2, when a handle 16 is urged upwardly through slot 26, the jaw members are pivoted upwardly and outwardly into clamping engagement with the body of the handle 16. The tension applied by the leaf spring is sufficient to clamp the handle in a vertically supported position. When the handle is to be withdrawn from the bracket, it is merely pulled downwardly causing its disengagement with the jaw members. After disengagement, the jaw members are urged into their normal illustrated horizontal positions. Accordingly, in view of the above description, it will be appreciated that utilization of the present invention to neatly and compactly store mops and brooms is accomplished quickly and efficiently.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A holder device comprising a mounting bracket having at least one slot formed therein for receiving an article to be held, spaced jaw members mounted on the bracket in alignment with the slot, at least one jaw member being pivotally mounted, and biasing means connected between the bracket and the pivotally mounted jaw member for urging said jaw members into clamping engagement with the article as it passed through the slot, each jaw member including a central body portion, a vise face formed along an edge of the body portion, and a pivot pin element integrally attached to an opposite edge, the pin element being received in the bracket to secure the pivotal mounting of the member, said biasing means comprising a looped leaf spring having a central section abutting the bracket, the spring terminating in free ends which engage associated vise member body portions.

2. The structure of claim 1 wherein each jaw member has a recess formed inwardly of the vise face edge for receiving a bracket flange when the member is pivoted to a fully opened position, said position enabling holding of larger articles than would be possible without the recess.

3. The structure of claim 2 wherein an abutment projection is formed along the vise edge to engage an associated end of the leaf spring.

4. A mop and broom holder comprising a bracket, said bracket being L-shaped in transverse section and embodying a vertical mounting flange and a horizontal article suspending flange projecting at right angles and forwardly from a lower portion of said vertical flange and having at least one D-shaped slot which has a closed inward end and an outward open end opening through a free marginal edge of said horizontal flange, a pair of complemental rigid jaw members pivotally mounted atop said horizontal flange and having opposed antislipping viselike article clamping grips overhanging oriented edge portions of said slot and disposed in spaced parallel confronting relationship, said jaw members having spring abutment means, a leaf spring cooperable with a coacting portion of said vertical flange and having free ends cooperatively engaging said abutment means, and a leaf spring

shield mounting on an accessible face of said vertical flange and enclosing, positioning and retaining said leaf spring in a given functioning locale.

5. The mop and broom holder defined in and according to claim 4, and wherein each jaw member embodies a platelike body portion having longitudinal edges, one edge being provided with said viselike grips, the other edge being provided with pivot pin elements for pivotally mounting said jaw member,

6. The mop and broom holder defined in and according to claim 5, and wherein said shield embodies an upstanding vertical flange which is opposed to and detachably fastened on the vertical flange of said bracket and also embodies an outstanding horizontal flange provided with a downwardly extending flange, said last named flanges serving to properly position and retain said leaf spring properly in place.

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