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3,312,441

SUPPORT FOR LIQUID CONTAINER

Filed June 13, 1966

2 Sheets-Sheet 1

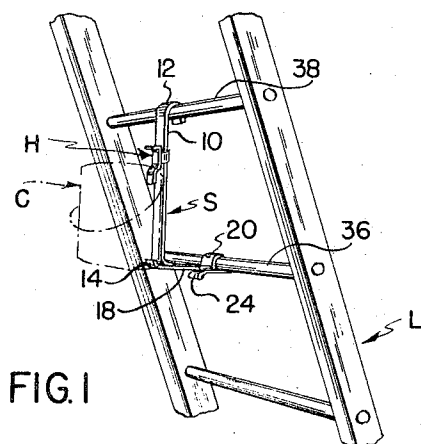


FIG. 1

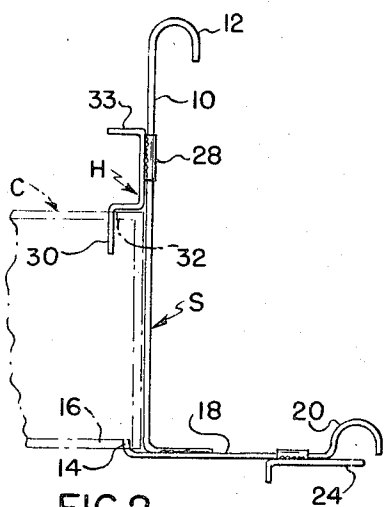


FIG. 2

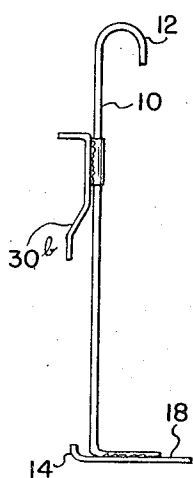


FIG. 3

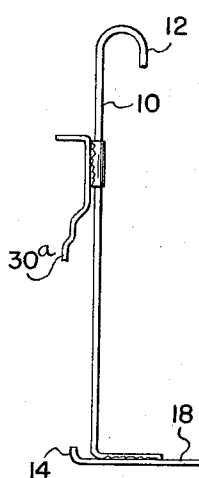


FIG. 4

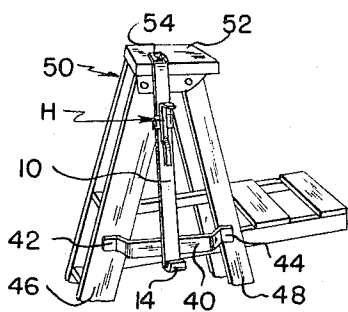


FIG. 5

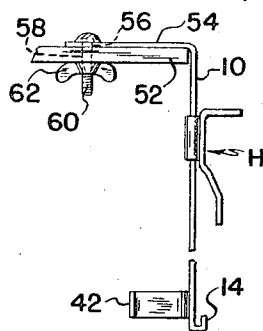


FIG. 6

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2 Sheets-Sheet 2

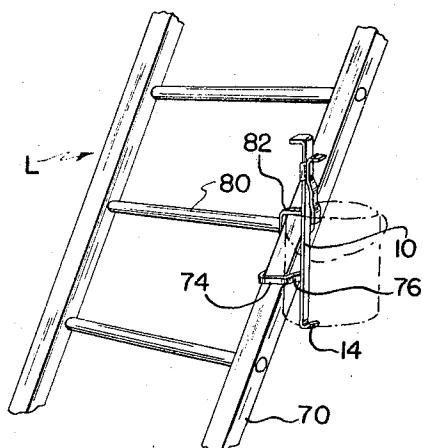


FIG. 7

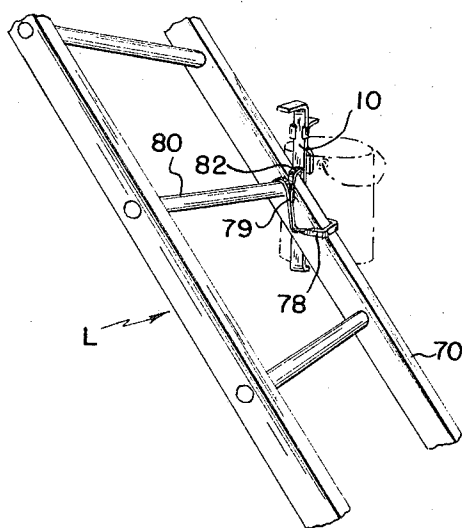


FIG. 8

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SUPPORT FOR LIQUID CONTAINER

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4 Claims. (Cl. 248-210)

This invention relates to supports for liquid containers and more particularly to a ladder support for paint cans.

In painting the side of a house or like structure, where it is necessary to use a ladder, one of the inconveniences to which the painter is subjected is that the can of paint is disposed in an inconvenient and partially inaccessible location.

A common expedient, when using such ladder, is to hang the pail or can from a ladder rung on an S-hook. This obviously requires a bail on the can and disposes the pail in an undesirable location in that the bail is in the way of the painter as he repeatedly extends his paint brush into the can. Cans without bails, such as quart cans, create a special problem as an S-hook cannot be used.

In using a step ladder, the can or pail may be placed on a step or on the movable platform, or on the top platform with which such ladders are usually provided. However, it is very easy to knock off and spill the contents of these cans from these locations.

None of the above devices holds the paint can firmly and securely to the ladder and in an unobstructed location that is easily accessible to the painter.

Therefore, it is an object of the invention to provide a more versatile holder for firmly and securely supporting a paint can or a like container on a ladder in an upright position.

Another object of the invention is to provide a ladder paint can holder of the above type which is readily disengageable from the ladder for subsequent engagement therewith at a different elevation while remaining secured to the paint can.

A further object of the invention is to provide a ladder paint can holder of the above type which securely supports the can in a highly convenient location, prevents accidental dislodgement of the can, and has a minimum number of parts.

A further object of the invention is to provide a ladder paint can holder of the above type that is simple in construction, inexpensive to manufacture, and highly effective in operation.

Briefly, the foregoing objects are accomplished by the provision of a ladder paint can holder comprising a vertically disposed bracket having at its lower end an outwardly extending lip for engaging the bottom flange of the paint can, and having a vertically adjustable, tapered wedge hook member slidably disposed on the bracket and adapted to releasably hook onto the upper rim of the paint can with a tight fit.

When used with a conventional ladder, which is disposed in an operative position at an angle against the side of a building, the holder may be provided with releasable ladder attaching means including a horizontally disposed bar secured to and extending away from the bottom end of the bracket and having a downwardly facing hook at its outer end for engaging a rung of the ladder. A lock bar assembly may be slidably disposed on the bar to slide under the rung and thus secure such hook to the rung. The bracket also includes a top hook for engaging the next highest rung of the ladder which, in conjunction with the bottom hook and its lock bar assembly, firmly and securely attaches the holder to the ladder at any desired location thereon.

Ladder attaching means are also provided for securing the paint can holder to the side rail of the ladder. Such

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ladder holder includes a U-shaped bracket secured to the vertical bracket of the holder intermediate the ends thereof for embracing the side rail of the ladder, said U-shaped bracket containing a hook member on its outer leg for engaging the adjacent rung of the ladder, with a horizontal brace connecting the top portion of said last-named hook member with the bracket for reinforcing purposes.

The U-shaped bracket may be made of heavy gauge wire so that it can be bent with a pair of pliers to position the container at a slight angle to the vertical as may be required by the user.

Additionally, attaching means for securing the paint can holder to a step ladder may also be provided. Such attaching means may include a horizontally disposed bar secured to the lower end of the bracket, the ends of said bar having inwardly extending offset feet for resting against the adjacent legs of the step ladder, with bolt means at the top of the holder for bolting the top portion of such holder onto the top platform of the step ladder.

In all of the above structures, there is provided a paint can holder that firmly and securely attaches the paint can to the ladder at any desired location. The holder positions the can in a substantially upright position and is readily disengageable from the ladder for subsequent positioning at a different elevation thereon. The present structures clearly prevent any inadvertent dislodgement of the paint can from its holder. The slidable wedge hook enables the holder to adapt itself to any size paint can from a small half pint size can up to and including the large ten quart pail, if necessary. The slidable wedge hook also makes itself adaptable to different types of punched rim and rimless containers. The present holder also prevents the can from wobbling or swaying from side to side once it is positioned in the holder. Once the entire assembly is secured, the holder, container and ladder can be moved as a unit without dislodging the container. The holder is not limited to one size or type of container.

Other objects and advantages of the invention will be apparent from the following description taken in conjunction with the drawings wherein:

FIGURE 1 is a perspective view of a paint can holder of the invention shown secured to a conventional ladder, with the can of paint being shown in dot-dash lines;

FIGURE 2 is a side elevational view of the holder shown in FIGURE 1 and showing the paint can in dot-dash lines;

FIGURE 3 illustrates a modification of the holder shown in FIGURE 2;

FIGURE 4 illustrates a further modification of the holder shown in FIGURE 2;

FIGURE 5 is a perspective view of a holder of the invention attached to a step ladder;

FIGURE 6 is a side elevational view of the holder shown in FIGURE 5;

FIGURE 7 is a right-hand perspective view of a modified holder of the invention secured to the side rail of a ladder; and

FIGURE 8 is a left-hand perspective view similar to FIGURE 7.

Although the invention has been shown and described herein with reference to holders for paint cans, it will be understood that the invention is adapted to hold a liquid container of any size or type—square, round or otherwise—and that such holder may be attached to structures other than ladders.

Referring to the drawings, there is shown a paint can holder or support S of the invention detachably secured to a ladder L and holding an open-top paint can C shown in dot-dash lines. In all of the figures herein, like parts are identified by the same letters or numbers.

Referring first to FIGURES 1 and 2, the holder or support S is generally L-shaped in configuration and includes an elongated vertically disposed bracket 10 having a downwardly facing hook 12 at its upper end, and having at its lower end portion a lip 14 which extends outwardly and then upwardly from the brackets 10 for detachably receiving the bottom flange 16 on the lower edge of the can C.

Extending away from the lower end of the bracket 10 in a direction opposite to the lip 14 is a horizontally disposed bar 18 which terminates in a downwardly facing hook 20, said hooks 20 and 12 forming the attaching means for securing the holder to the ladder. Slidably disposed on the bar 18 for horizontal displacement thereon is a lock rod 24 which is adapted to selectively close the open side of the hook 20 in a manner to be hereinafter described.

Slidably disposed on the vertical bracket 10 is a hook member, generally designated as H, which includes a band 28 which encircles the bracket 10 and is vertically slidable thereon, and includes a wedge hook 30 which is secured to the band 28 and extends downwardly and outwardly from the bracket 10 and is adapted to detachably hook onto the upper rim 32 of the container C when the hook member is slid downwardly on the can. A handle 33 is provided to facilitate movement of the hook member H on the bracket 10.

In operation, the ladder L is first disposed at an operative angle against the side of an associated building or like structure (not shown). The paint can holder or support S is then detachably secured to the ladder by placing the hook 20 over the ladder rung 36, for example, and, at the same time, placing the hook 12 over the next highest ladder rung 38. The holder or support S is then rigidly secured to the ladder by sliding the lock rod 24 under the rung 36 to close the open end of the hook 20. Next, the paint can C is placed on the holder so its lower flange 16 engages the lip 14 after which the hook member H is slid down onto the can to engage the upper rim 32 thereon. With this structure, the can is very firmly and rigidly secured to the holder and to the ladder. Thus positioned, the can cannot sway from side to side.

The wedge hook 30 shown in FIGURE 2 is of single step construction, in that it has one stepped portion and is adapted to receive an upper can rim 32 of one size only. With the two step construction shown in FIGURE 4, the wedge hook 30a is adapted to receive two sizes of can rims. With the tapered wedge construction of FIGURE 3, the wedge hook 30b is adapted to receive a wide range of sizes of can rims with a rigid, secured (yet releasable) fit.

In the modifications shown in FIGURES 5 and 6, the ladder attaching means includes an elongated horizontally disposed bar 40 which is secured to the lower end of the bracket 10 and having the inwardly extending offset feet 42 and 44 for resting against the adjacent legs 46 and 48, respectively, of the step ladder 50. Means are provided at the top of the bracket 10 for securing the same to the top platform 52, such means including the intumed attaching lug 54 formed on the top end of the bracket 10 and extending inwardly over the platform 52, such lug having the bolt-receiving square aperture 56 therein. The platform 52 contains the bolt aperture 58 in line with the aperture 56 for receiving the carriage bolt 60.

In practice, the holder is placed on the side of the step ladder with the lug 54 passing over and resting on the top of the platform 52. The bolt 60 is then passed through the apertures 56 and 58 and fastened therein by the wing nut 62 to secure the holder to the ladder. The paint can is then secured to the holder as aforescribed.

In the modification of FIGURES 7 and 8, the paint can holder of the invention contains attaching means for securing the same to the side rail 70 of the ladder L. Such attaching means includes a U-shaped bracket 74

having the legs 76 and 78 for embracing the side rail 70 as shown. The bracket 74 is secured to the bracket 10 intermediate the ends thereof. The U-shaped bracket 74 contains an upwardly and outwardly extending hook member 79 on the outer leg 78 for engaging the adjacent rung 80 of the ladder. A horizontal brace 82 is provided to connect the top portion of the hook member 79 with the bracket 10.

The U-shaped bracket 74 may be made of heavy gauge wire and selectively bent to conform to the various angles above mentioned and joined by a tac weld to the hook member 79.

It will be understood that the present holder may be made of any suitable substantially rigid material such as metal, plastic, heavy gauge steel wire, etc.

Thus, with the present invention, there is provided a ladder paint can holder that firmly retains a paint can or like container on a ladder in a convenient location. The holder maintains a very rigid grip on the can such that any inadvertent side sway is prevented. Such stability enables easy dipping and wiping of the paint brush on the can rim. The holder may receive many different sizes of cans from the very small one-half pint can up to the large ten quart pail. In fact, the holder may be made large enough to accommodate a container of any type configuration, round, square, etc., and may accommodate other types of containers such as pails, nail cans, etc.

The terms and expressions which have been employed are used as terms of description, and not of limitation, and there is no intention, in the use of such terms and expressions, of excluding any equivalents of the features shown and described, or portions thereof, but it is recognized that various modifications are possible within the scope of the invention claimed.

I claim:

1. A holder for supporting liquid containers on ladders comprising, an elongated vertically-disposed bracket containing an outwardly extending lip on the lower portion thereof for detachably receiving the bottom flange on the lower end of an associated open-topped liquid container, an outwardly extending hook member disposed on said bracket and vertically slidable thereon for detachably hooking the upper rim of the container, attaching means for detachably securing the bracket to an associated ladder, said ladder being a step ladder, said attaching means including an elongated horizontally-disposed bar secured to the lower end of the bracket, the ends of said bar having inwardly extending offset feet for resting against the adjacent legs of the step ladder, and means at the top end of the bracket for securing the same to the top platform of the step ladder.

2. The structure of claim 1 wherein said last-named means includes a horizontally disposed attaching lug formed on the top end of the bracket and adapted to extend inwardly over the top platform of the ladder, said lug having a bolt-receiving aperture therein, said top platform having a bolt-receiving aperture therein in line with said first-named aperture, and a bolt passing through said apertures for securing the upper end of the holder to the step ladder top platform.

3. A holder for supporting liquid containers on ladders comprising, an elongated vertically-disposed bracket containing an outwardly extending lip on the lower portion thereof for detachably receiving the bottom flange on the lower end of an associated open-topped liquid container, an outwardly extending hook member disposed on said bracket and vertically slidable thereon for detachably hooking the upper rim of the container, attaching means for detachably securing the bracket to an associated ladder, said attaching means including a U-shaped bracket secured to the first-named bracket intermediate the ends thereof for embracing the side rail of the ladder, said U-shaped bracket containing a hook member on the outer leg thereof for engaging the adjacent rung of the ladder, and a horizontal brace connecting the top por-

tion of said last-named hook member with the first-named bracket.

4. The structure of claim 3 wherein the lower lip on the first-named bracket extends outwardly and thence upwardly.

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