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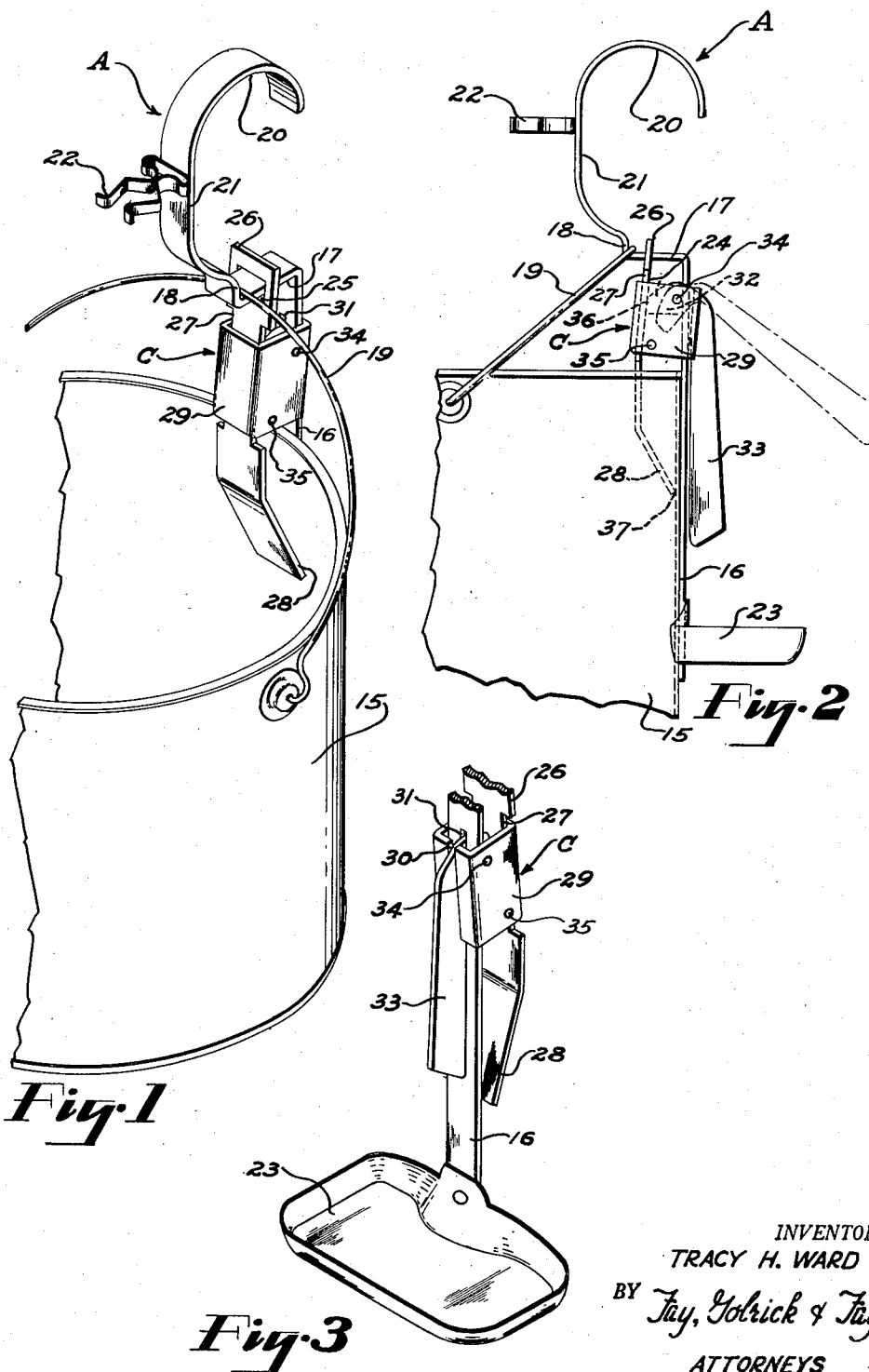
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2,564,043

HANDLE ATTACHMENT FOR CONTAINERS

Filed July 22, 1947

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

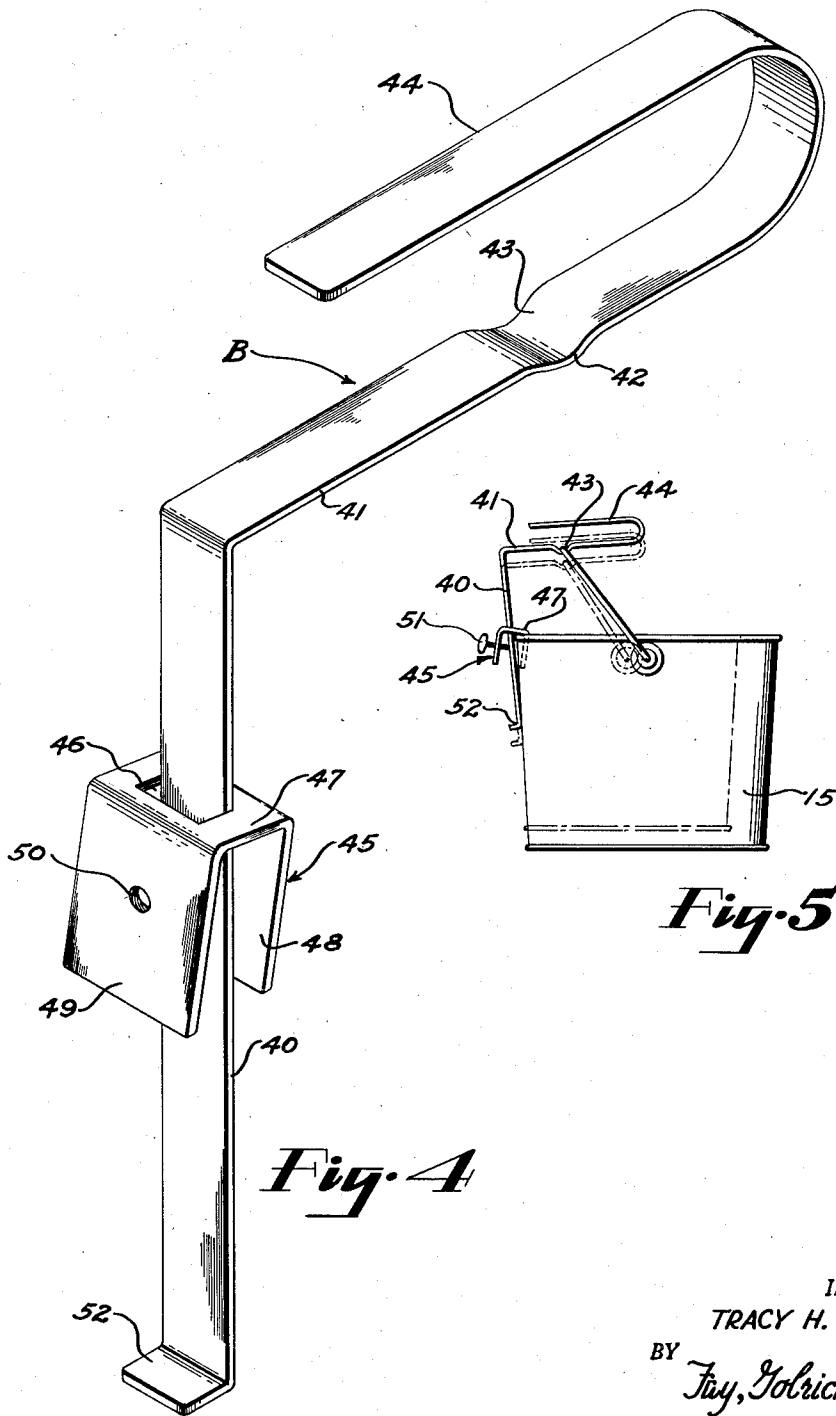


Fig. 5

Fig. 4

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HANDLE ATTACHMENT FOR CONTAINERS

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3 Claims. (Cl. 248—113)

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This invention relates to a holder attachment for use in connection with containers, such as paint cans, water pails, and the like.

The primary purposes of my invention are to provide a rigid holder attachment of simple, inexpensive construction which may readily be fitted upon a container having a bail to give a rigid handle for the container in lieu of the bail and to retain the bail to one side of the container opening, thus permitting easy access to the container contents.

A secondary purpose is to provide with such a holder integral auxiliary conveniences needed by a painter in order effectively to coordinate his various tasks. One such feature is the provision of a brush handle clamp on the handle of the holder device to facilitate carrying the brush and container in ladder work and the like. Another convenience is the provision of a putty tray as an integral part of the holder.

To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims; the annexed drawings and the following description setting forth in detail certain structure embodying the invention, such disclosed structure constituting, however, but two of various forms in which the principle of the invention may be used.

In said annexed drawings:

Fig. 1 is a perspective view of a holder attachment fitted upon a container shown in fragment;

Fig. 2 is a side view of the holder with the locking handle shown in two positions as shown by the solid and dotted lines;

Fig. 3 is a fragmentary perspective view from the front of the holder and tray;

Fig. 4 is a perspective view of a modified form of a holder for water pails; and

Fig. 5 is a side view of the holder shown in Fig. 4 fitted upon pails of two sizes.

In Figs. 1, 2 and 3 there are shown various views of a preferred form of my invention in conjunction with a conventional paint can 15.

The principal structural element of the holder is a rigid strap, normally of metal, and identified generally by the letter A. This strap is of sufficient dimension, cross section, and stiffness to retain its form when suspending containers of paint, of say, one half and one gallon sizes, and of a weight of approximately 25 pounds. An upright portion 16 of this strap A is adapted to bear against the outside wall of a container.

Extending laterally from the upright portion 18 is a shoulder portion 17 of the strap which is

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adapted to project above the interior of the container 15. The portion 17 has a vertical part 18 adapted to retain the bail 19 of the container 15 to one side of the opening thereof, as shown in Figs. 1 and 2.

The upper part of the strap A provides a hook or handle portion 20 in the form of a loop projecting above the laterally extending segment 17 and opening outwardly of the container.

To the closed portion 21 of the hook or handle 20 there is securely attached (by welding or other suitable means) a brush handle holder 22 in the form of a spring clamp.

At the lower end of the upright portion 16 of the strap I have attached a putty tray 23. The inner side of this tray which fits against the side of the container may be curved to conform to the container shape as indicated by the view shown in Fig. 2.

In the clamping mechanism, generally identified by the letter C, employed to secure the strap A to the side of a container, I have provided a vertically depending clamping jaw 24 having its lower portion angularly inclined toward the container wall opposite the strap upright, means for pivotally hinging the jaw upon the upright in vertical alignment, and pressure exerting means to forcibly separate the jaw and upright in braced relationship above the pivot thereby rotating the jaw about the pivot means to bring the lower end of the jaw in braced frictional engagement with the container wall opposite the upright.

In the specific embodiment of the clamping mechanism shown in Figs. 1, 2 and 3, an elongated clamping jaw 24, adapted to depend vertically into the container, is slidably mounted by means of a horizontal slot 25 in its head 26 on the shoulder portion 17 of the strap. Below the head 26 of the jaw is a neck portion 27 of reduced width adapted to accommodate a collar 29. In the lower part of the jaw, the end portion 28 departs from the verticality of the upper jaw to extend angularly toward the container wall. Jaw and upright extend in vertical alignment.

To associate jaw and upright in hinged or pivotal relationship, a box-like collar 29 is provided to embrace both jaw neck and upright 16 as shown in Figs. 1, 2 and 3. Through the side of the collar 29 adjacent the upright, a vertically extending slot 30 allows access to a corresponding slot 31 in the upright. Through these slots a cam 32 having an operating arm 33, is pivotally mounted on a journal pin 34 which extends transversely through the collar and is secured to the ends thereof. Adjacent the jaw 24 and below the

journal pin 34 is a second transverse spacer pin 35 in the collar which serves a dual purpose. This pin 35 keeps the jaw a spaced distance from the upright 16 and also acts as a pivot point for the jaw when the latter is opened to permit positioning of the holder attachment upon a container. When the head 26 of the jaw is slidably moved along the shoulder 17 toward the upright, the lower part 28 of the jaw will be separated from the upright through the rotating action of the jaw on the pin 34.

The manner of operation of the cam 32 and arm 33 is illustrated in Fig. 2. When this integral cam element is in the position indicated by the dot-dash lines, the clamping mechanism is open and the holder may be inserted upon or removed from the container. When the cam is moved to the position indicated by the dotted lines (with the visible arm being shown in solid outline), the clamping mechanism is locked.

The cam in this latter position is at its maximum extension, and thereby forcibly spreads jaw and upright in co-operation with the collar. Pressure exerted by the cam against the jaw at 36 urges the upper part of the jaw away, and thereby forces the lower end against the container wall at 37 with the collar 29 acting as a pivot or fulcrum. Thus it will be seen that the upright 16 and clamping jaw 24 are rigidly braced against each in opposed relationship on each side of the embracing collar and above and below the container rim, thereby providing a rigid mount for the strap A on the container side.

Variation in the structure of an appropriate clamping mechanism may, of course, be made but in essence the mechanism should include a clamping jaw pivotally associated with the upright or hinged relationship, and means to spread jaw and upright above the hinged junction point to force the upper part of the jaw away from the upright and the lower end portion against the container wall in braced opposing relationship.

The form of the invention described above and illustrated in Figs. 1, 2 and 3, is designed primarily for use in conjunction with conventional one-half and one gallon paint cans and for twelve and one-half pound white lead cans. It is also adaptable for quart and intermediate size cans. It will be seen that the clamping mechanism is adapted to operate either over a straight edge container or over one with an annular lip.

In the modified form of my invention shown in Figs. 4 and 5, I have provided a simplified holder more particularly intended for use on larger containers such as two gallon paint cans, fifty pound white lead pails and water pails.

In Fig. 4 there is illustrated a holder in the form of a rigid strap identified generally by the letter B. The upright portion 40 thereof is adapted to bear against the side of a container as shown in Fig. 5. Extending laterally from the upright portion 40 is a shoulder portion 41 which projects over the interior of the container 15. There is provided in this shoulder portion 41 a depending recess 42, the inner side 43 of which has sufficient angularity relative to the plane of the shoulder 41 to retain the bail 19 of the container in a fixed position on the shoulder to one side of the opening thereof as shown in Fig. 5.

The handle portion 44 of the holder is formed by folding the strap B over the shoulder 41 as a reverse loop opening outwardly of the container, with the handle and shoulder in approximate axial parallelism.

While I have shown the handle 44 of this holder

as an individual part over the shoulder 41, the latter portion is in itself well adapted to be used as a handle, with consequent elimination of the need for the upper fold portion 44 if such simplification is desired.

In attaching this version of the holder to a container I have employed an inverted U-shaped clamping member 45 having a centrally located slot 46 in the web portion 47. The member 45 is slidably mounted upon the strap upright 40 and is designed to fit upon the rim of the container with the inner leg 48 bearing against the inner wall of the container. In the outer leg 49 of the member 45 there is a threaded aperture 50. Through this aperture 50 a manually operable wing bolt 51 is engaged to exert pressure upon the strap upright 40 to clamp the inner leg 48 against the container wall and thus secure the holder upon the container. To prevent the member 45 from sliding off the upright 40 when the holder is not attached, there is provided an outwardly extending flange 52 at the lower end of the upright. As will be clearly seen in Fig. 5, the holder is adaptable for use on different size containers, since the clamping member 45 is slidably movable on the upright 40.

Although not shown in Figs. 4 and 5, a brush handle clamp and putty tray can be attached to the holder in the manner depicted on the first sheet of drawings and explained above.

As an alternative plan and method of attachment for a putty tray to be used for this holder on larger containers, I have provided a tray which is slidably attached to the upright 40, above the clamping mechanism and which rests upon the rim of the container in the manner of a chord segment.

To attach either of the holder forms described above to a container, it is only necessary to fit the shoulder portion of the strap under the bail, set the clamping means over the rim of the container, and raise the holder vertically until the bail is firmly retained by the vertical portions of the shoulder as at 18 and 43. The clamp means may then be tightened and the holder is ready for use.

It will be noted that when the holder is securely attached to the container, any upward force upon the handle exerted during lifting will make the bail of the container a fulcrum and tend to maintain the upright portion of the strap flush against the container side. While I have provided a vertical portion in the shoulder to retain the bail in a seat as it were, once the holder strap is clamped to the side of a container, the bail, being of a fixed radius, will retain a taut position on the shoulder even without such a vertical seat due to the weight of the container and the upward lifting force upon the handle.

The advantages of my invention to a painter are very considerable. Using my holding he will always have free access to the contents of the container since the bail is held to one side. The hook handle loop in the preferred embodiment for use with smaller containers is particularly advantageous in ladder work. The painter can hang his paint can by means of the hook from a rung of the ladder leaving both hands free. In mounting or descending a ladder his brush may be placed in the brush handle clamp and his putty will be carried in the tray provided.

I have found that an immense saving in time and an increase in efficiency results from the use of my invention. The convenience and satisfaction of arduous work more easily accomplished,

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together with the elimination of waste motion, combine to convince the user of the holder's efficiency and practicability.

It will be understood that the accessory features of putty tray and brush handle clamp may be eliminated by those individualists who prefer only the advantages of the handle and holder strap proper.

Other modes of applying the principles of my invention may be employed instead of the ones explained, changing being made as regards the structures herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means may be employed.

I therefore particularly point out and distinctly claim as my invention:

1. A bail holder and handle attachment for a container comprising, a unitary rigid strap having an upright portion thereof adapted to bear against the side of the container; a portion of the strap extending laterally from the upright portion and adapted to project over the interior of the container, said laterally extending portion having a vertical part adapted to seat and retain said bail to one side of the container, a handle consisting of the uppermost part of the strap in the form of a loop projecting above the laterally extending portion opening outwardly of the container, a brush holder in the form of a spring clamp attached to the closed portion of the loop and projecting over the interior of the container, a tray rigidly secured to the strap at the lower end of the upright portion, and manually operable pressure exerting means adapted to clamp the holder to the side of the container.

2. A holder attachment for a paint can or the like comprising a unitary rigid strap having an upright portion adapted to bear against the outside of the can, and having a portion of the strap extending laterally from the upright portion and being adapted to project above the interior of the can, and having a handle consisting of the upper portion of said strap in the form of a loop

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projecting above said laterally extending portion of the strap; and clamping means to secure said upright portion of the strap rigidly to the side of the can whereby the can may be supported solely by the strap when said handle is suspended on a support, said clamping means comprising a lever pivotally supported to said upright portion of the strap and being adapted to depend vertically into the can, and a cam member pivotally supported on said upright portion of the strap and engageable with said lever for forcing one end of the lever toward the upright portion of the strap whereby the wall of the can is gripped between said lever and said upright portion of the strap.

3. A holder and handle attachment for a container comprising, a unitary rigid strap having an upright portion adapted to bear against the side of a container, a portion of the strap extending laterally from the upright portion and adapted to project over the interior of the container, a handle consisting of the uppermost portion of the strap in the form of a loop projecting above the laterally extending portion and opening outwardly of the container, a pivoted clamp carried by said upright member, and manually operable pressure exerting means engaging said clamp and operable to move the clamp toward the upright member to clamp the holder to the side of the container.

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