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PAINT TRANSFER DEVICE

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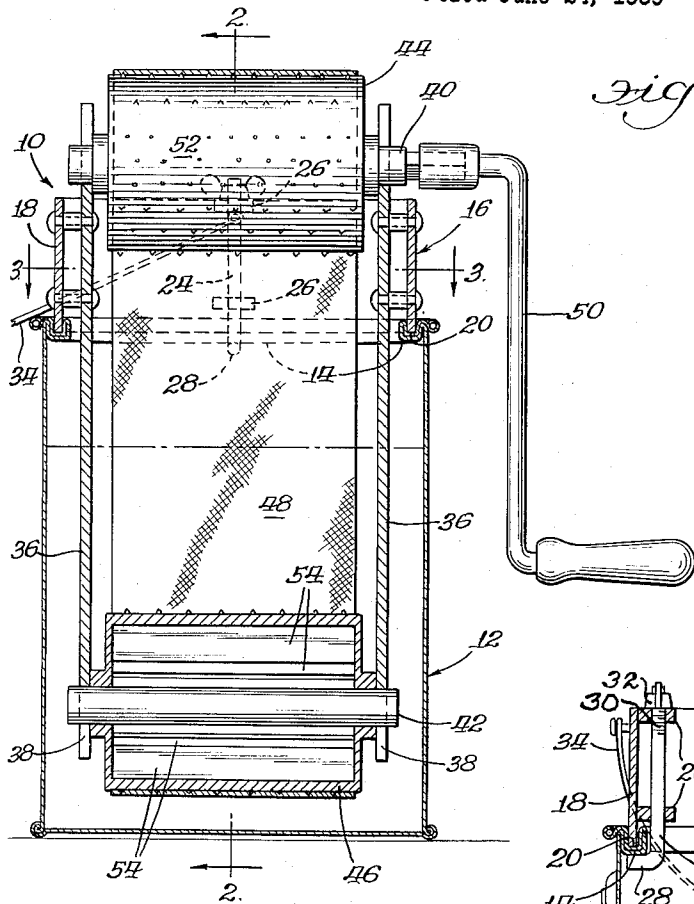


Fig. 1.

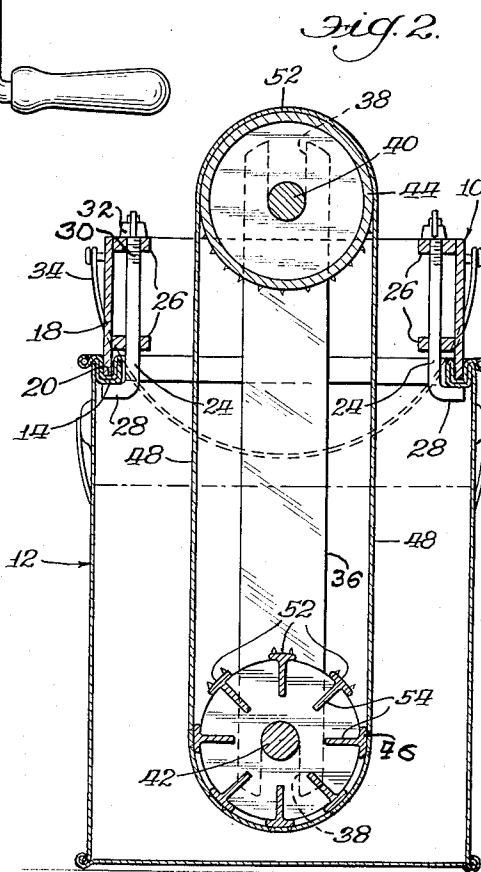


Fig. 2.

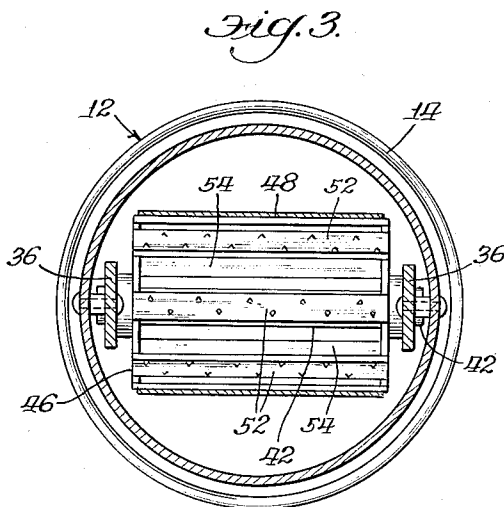


Fig. 3.

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2,982,984

PAINT TRANSFER DEVICE

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4 Claims. (Cl. 15—257.06)

This invention relates to devices used in painting and more particularly to a device for transferring paint or the like from a container to a roller type applicator.

The invention comprehends an attachment which can be demountably secured to a conventional paint container, such as a gallon can of the type in which paint is normally sold, and which is operable to transfer paint from the interior of the container directly to a roller type paint applicator.

As is known by those familiar with the art of painting and paint applicators, the conventional method of applying paint to a roller type applicator is to first pour the paint from its original container into a relatively low flat pan or tray, and then dip the applicator into the tray and roll it back and forth until it is covered with paint.

Although this type of an arrangement is satisfactory for a painting operation wherein the paint container and the tray can be conveniently located on the floor or on a table, the use of the tray is far more inconvenient on jobs requiring a scaffold or a single ladder. The inconvenience of using a roller type applicator and tray while working on a single ladder renders this type of painting operation highly impractical.

In addition to the disadvantage of carrying or supporting the tray from the ladder, there is the added necessity of periodically pouring the paint from its original container to the tray. Also, when the large surface of the paint in the tray is exposed to the air, it tends to thicken or congeal far more rapidly than does paint kept in an ordinary gallon paint can.

Accordingly, it is a primary object of this invention to provide a device for transferring paint or the like from an original paint can or container directly to a roller type applicator without requiring the use of a tray or pan.

A further object of the invention is the provision of a device for transferring paint to a roller type applicator which can be demountably attached directly to the can in which the paint is acquired.

A more specific object of the invention is the provision of a device which includes a housing attachable to a paint can and mounting a pair of rollers and a belt carried by the housing and operable to transfer paint or the like from the interior of the can to a roller type paint applicator.

These and other objects of the invention will be apparent from an examination of the following description and drawing, wherein:

Figure 1 is a fragmentary side elevational view, with portions of the structure shown in vertical section, of a paint can and a paint transfer device embodying features of the invention;

Figure 2 is a vertical sectional view taken on line 2—2 of Figure 1, and

Figure 3 is a plan view, partly in horizontal section, of the structure illustrated in Figure 1.

It will be understood that certain elements have been

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intentionally omitted from certain views where they are illustrated to better advantage in other views.

Referring now to the drawing for a better understanding of the invention, it will be seen that a paint transfer device embodying features of the invention, and indicated generally at 10, is shown as attached to a conventional paint container indicated generally at 12. The container may be of any type such as a pail or bucket, but the container illustrated in the drawing is a container of the type in which paint or the like is normally sold in retail channels, that is a one-gallon can having a lid (not shown) which seats on an annular rim or lip 14.

The paint transfer device 10 is adapted to be mounted on the can 12 and it includes a frame or housing structure 16 having a cylindrical wall 18, the lower edge of which is adapted to be received within an annular recess 20 presented in the upper side of the paint can lip 14. If desired, the lower edge of the frame wall 18 may be provided with a rubber gasket (not shown) to insure a more liquid tight fit between the frame 16 and the can 12.

In order to facilitate its rigid attachment to or removal from a paint can, the frame 16 may be provided with a pair of J-hooks 24 which are disposed within sleeves or eyelets 26 presented on opposite sides of the frame wall 18.

As best seen in Figure 2, each J-hook 24 has at its lower end an out-turned portion 28 which is engageable with the under side of the can lip 14. At its upper end, each J-hook is provided with a threaded portion 30 adapted for engagement with a wing nut 32. Thus, the frame can be demountably attached to a paint can merely by placing the frame wall 18 within the recess 20 of the can lip 14, threading the J-hooks until their lower portion engages the under side of the can lip, and then tightening the wing nuts 32.

Once the frame is so attached to the paint can, both the frame and can can be lifted or supported as a unit by a bail or loop 34 which may be rigidly secured to an upper portion of the frame in any desired manner.

Additionally, frame 16 includes a pair of vertically extending support members 36 which may be formed integrally with or rigidly secured to opposite sides of frame wall 18.

The vertical support members 36 may be provided at their upper and lower ends with transversely extending aligned openings or slots 38 adapted to rotatably receive or journally mount the ends of shafts 40 and 42 of upper and lower rollers 44 and 46, respectively.

The rollers are held in position on the frame and are connected to each other by a preferably semi-elastic continuous annular belt or track 48 which is disposed to surround portions of the rollers so as to transfer paint from the interior of the can to a roller type applicator (not shown) which may be placed against the outer surface of the belt at the upper roller 44 as the upper roller is turned or rotated by any means, such as the detachable handle 50, which may be secured in any manner to the end of the roller shaft 40.

If desired, the handle may be replaced by a small battery operated electric motor (not shown) which can be mounted on the frame 16 so as to be operable to rotate the rollers 44 and 46 and thereby move the belt 48.

In order to prevent slippage between the rollers and the belt, the rollers may be provided with a roughened outer surface as indicated at 52.

The bottom roller may also be provided with a plurality of inwardly extending blades or paddles 54, best seen in Figure 2, which serve to agitate the paint in the can as the rollers are turned.

To assemble the device, one of the rollers is placed within the belt and its ends are disposed within slots 38 at one end of the frame, the other roller is then slipped

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within the belt and its shaft ends are mounted in the slots 38 at the other end of the frame. The use of a semi-elastic belt permits this simple mounting arrangement; however, if desired, any other journalling means may be provided for rotatably mounting the roller shafts within the slots of the frame.

After the rollers and belt have been mounted on the frame, the frame is then mounted on the can 12 with a cylindrical wall 18 of the frame seated in groove 20 of the paint can lip 14.

The J-hooks 24 are then moved into position to engage the under side of lip 14 and wing nuts 32 are tightened.

The device is then ready for use. To use the device, all that is necessary is to rotate the upper roller 44 by turning the crank and while the roller is being rotated placing a portion of the paint applicator roller against the belt so that the paint is transferred from the can to the applicator by means of the belt. If the applicator is wider than the roller 44, then the applicator can be applied to the belt in sections merely by moving the applicator axially as the belt is moving against it.

Although the arrangement illustrated in the drawing is adapted for use with a paint can having a lip 14, if it is desired to modify the device for use with containers having no lips, any suitable clamp means may be employed.

Thus, it will be seen that I have provided a device of relatively simple design and construction which may be readily attached to a conventional paint can and which is operable to transfer the paint directly to a roller type applicator without the need of any additional pans, trays, or other paint containers.

I claim:

1. In a device for transferring paint from a standard cylindrically shaped paint can, having an annular lip ex-

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tending inwardly from its upper edge, to a roller type applicator, the combination of: a frame, readily attachable to said can, including a pair of horizontally spaced vertically extending side members having upper and lower ends disposed for positioning without and within the can, respectively, and an integral annular member adapted to seat on said lip; releasable clamp means carried by said frame for engagement with the underside of said lip to secure the frame to the can and thereby permit the latter to be suspended from the former and transported therewith as a unit; a pair of vertically spaced upper and lower rollers rotatably carried by the upper and lower ends of their respective rollers for positioning without and within the can, respectively; an endless conveyor belt disposed to surround and snugly engage both rollers; and means to rotate the upper roller and thereby move the belt around the rollers into and out of the can.

2. A device according to claim 1, wherein said bottom roller includes paddle means disposed internally thereof for agitating paint as it rotates.

3. A device according to claim 1, wherein said mounting means includes a pair of J-clamps carried by the frame and adapted to engage the underside of the lip of the paint can.

4. A device according to claim 1, wherein said frame annular member is adapted to seat in an annular groove in the lip of the paint can.

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