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B. VOTAW ET AL  
DOOR BOTTOM PAINTER  
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2,257,316

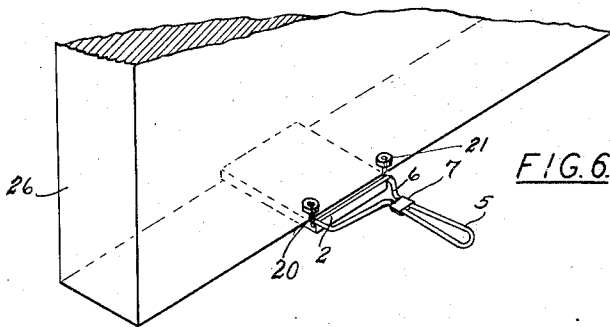


FIG. 6

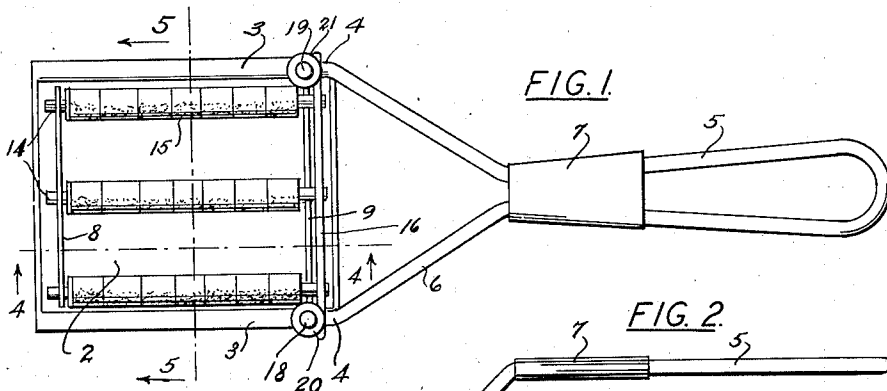


FIG. 1

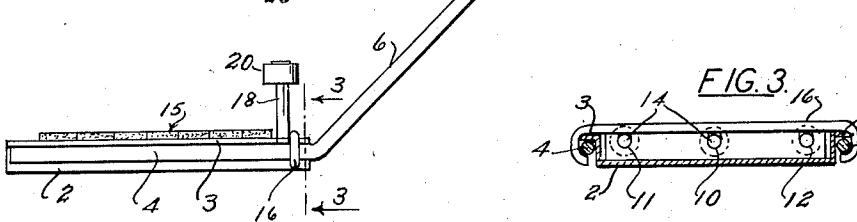


FIG. 2

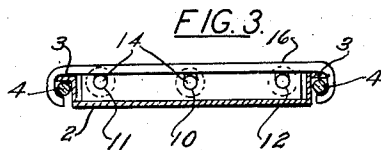


FIG. 3

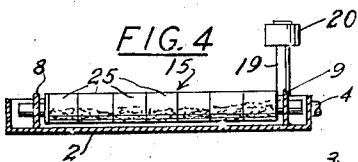


FIG. 4

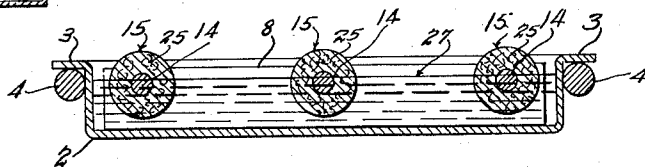


FIG. 5

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## DOOR BOTTOM PAINTER

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### 4 Claims. (Cl. 91-62.5)

This invention pertains to devices for painting the bottoms of doors without removing them from their hinges. Heretofore, it has been the practice, when painting doors and the like, to remove them from their hinges in order to paint the bottom edges. There is no question but that the bottom edge of the door (as well as all other parts) should be thoroughly painted, since otherwise moisture will enter the wood and it will not be equally or properly preserved.

In view of this, we have produced the device, hereinafter described, which has for its objects—

First, the provision of a tool, instrument or device which will enable the user to quickly and easily paint the bottom of a door or the like without removing it from its hinges;

A second object is to provide such a device which is simple in construction and economical to manufacture and operate; and

A third object is to provide such a device wherein the parts are easily disassembled for necessary cleaning and repair.

We attain the foregoing objects by the construction of the device illustrated in the accompanying drawing in which—

Figure 1 is a plan view of the device;

Figure 2, a side elevation thereof;

Figure 3, a cross sectional elevation taken substantially on lines 3-3, Figure 2;

Figure 4 is a longitudinal vertical section taken substantially on line 4-4, Figure 1;

Figure 5 is a mid-cross sectional view taken substantially on line 5-5, Figure 1, drawn on a somewhat enlarged scale; and

Figure 6 is a semi-diagrammatic perspective view of the device as used.

A shallow tray 2 acts as a paint receptacle. It is made sufficiently shallow so that it may be easily slid under a door when hung in position on the frame. Ordinarily there is a one-fourth ( $\frac{1}{4}$ ) inch clearance under any door. Where doors are hung with thresholds this clearance is even greater. With this in view, the tray is made approximately three-sixteenths ( $\frac{3}{16}$ ) inch deep and long enough to slightly exceed the greatest thickness of any doors on which the device may be used. Flanges 3 are formed on each of the lateral edges of the tray to aid in its retention in a handle.

The tray 2 is supported on a handle frame made by bending a bar of metal to form a looped handle portion 5, an upsweep or riser portion 6 and a pair of tines 4 at its outer end. These extend along the lateral sides of tray 2 and beneath flanges 3, to which they are soldered, 55

brazed or otherwise attached. The riser portion 6 of the handle extends angularly rearwardly and upwardly from the rear ends of the tines to the junction with the handle portion. This latter is formed to extend in a horizontal plane above and parallel to the plane of the tines and the tray. The upsweep of the riser is sufficient so that a user of the device, grasping the handle, will have ample clearance for his hand when the tray is moved beneath the bottom of a hung door, as hereinafter described. Usually two inches is an ample upsweep.

At the forward portion of the handle, a metal band 7 is shaped around the bars of the handle and welded or otherwise attached. This forms a somewhat triangular shaped thumb rest, and tends to draw the bar members of the upsweep portion 6 together at their top and thus bind the parts together.

Within the tray there are two transversely extending bearing plates 8 and 9. These are soldered or welded to the bottom of the tray and preferably do not extend entirely to the side edges of the tray, since it is desired to permit the free flow of paint throughout the entire tray and not to have these bearing plates act as baffles. Within bearing plate 8 there are three holes, drilled as shown particularly in Figure 3. Preferably there is a central hole 10 and two holes 11 and 12 equally spaced on either side thereof. These constitute bearings for the outer ends of spindles 14 of paint applying rollers 15. These bearing holes are drilled substantially larger than the journaling portion of the bearing spindles to provide a rather loose fit.

Rear bearing plate 9 is provided with notches rather than holes, to receive the inner ends of spindles 14. The spindles are removably held in place by a bearing clamp 16 which hooks over tine bars 4 near the inner edge of the tray and extends across the tray just above the inner ends of the spindles. This clamp is made of spring wire and is held in place by downwardly extending hooks 17 at each end which engage over the tines. This construction enables the clamp to be sprung slightly and slid backward and upward from its holding position, as shown in Figures 1 and 2, so that the inner ends of spindles 14 will be released. The rollers can then be lifted up and out of bearing plate 8 and easily removed.

The paint applying rollers are preferably made by forcing a number of felt washers 25 onto spindles 14. These washers are made with a hole in the center sized to tightly fit onto the

spindles on which they are forced. Shellac, or other cement, may be used to secure a better bond if necessary. The outside diameter of the washers is sufficient so that their peripheries extend from the bottom of tray 2 to a position slightly above the top edges of the tray so as to bear and roll along the bottom of a door on which the device is used.

While we have specified felt as an applying medium, it is to be understood that any other semi-pliant absorptive substance may be used. Small cylindrical bristle brushes have been found unsatisfactory. But a rubber substitute, resistant to paint solvents, and formed into a sponge-like structure can also be used to form the rollers.

Near the inner ends of each of the tines upright posts 18 and 19 are attached by spot welding, or by other suitable means. The upper ends of these posts are shouldered and provided with bearings to carry fiber rollers 20 and 21. These rollers act as guides when rolled against the face of the door adjacent the user of the device. This provides a means for accurately maintaining the correct lateral position of rollers 15 and the door bottom.

In use, a small quantity of paint is placed in the tray. The tray is ordinarily filled to a level indicated by numeral 27, Figure 5. This may be efficiently supplied by using a squirt can or similar device. Obviously it is undesirable to retain any great amount of paint within the shallow tray at any one time. The device is then held under the door 26 with the rollers 15 bearing against its bottom and with rollers 20 and 21 bearing against its adjacent face. It is then rolled and moved along the bottom of the door back and forward until rollers 15 have picked up sufficient paint from the tray and thoroughly applied it to the bottom edge of the door.

If the rollers 15 become worn they may be easily replaced by removing the clamp 16 and lifting them from bearing plate 9 and sliding them out of engagement with bearing plate 8. They are likewise removed when it is desired to clean the device or change the color of paint used.

It is to be understood that the above description is illustrative only, and that the device is subject to many variations and substitutions of parts. To those familiar with the art, various modifications will suggest themselves, all of which may well remain within the spirit of the invention, therefore, we wish to be limited only to the following claims.

We claim:

1. A door bottom painter, including a shallow paint tray, a handle attached thereto, shaped to permit movement of said tray beneath the door when hung, and paint applying rollers operative in said tray and extending above the edges of said tray sufficiently to afford contact with a door bottom against which said tray may be held.

2. A door bottom painter comprising, in combination, a shallow paint holding tray, a handle attached thereto extending outwardly therefrom and provided with an upsweep to place its gripping portion above the level of said tray, and a plurality of paint applying rollers longitudinally positioned in said tray having a diameter sufficient to extend from below the edges of said tray to substantially above said edges.

3. A door bottom painter comprising, in combination, a shallow paint holding tray, a bearing plate having a plurality of bearing holes therein extending transversely across the forward portion of the interior of said tray, a bearing plate having a plurality of bearing notches extending transversely across the rear interior of said tray, a plurality of paint applying rollers longitudinally positioned and having spindles journaled in said bearing plates, a removable rear bearing clamp adapted to hold the rear ends of said rollers in said notches, a handle attached to said tray having an upsweep relative to the level of said tray, and means for maintaining said tray and rollers in a predetermined lateral position relative to the bottom of a door on which it is used.

4. A door bottom painter comprising, in combination, a shallow paint holding tray, a bearing plate having a plurality of bearing holes therein extending transversely within the forward portion of said tray, a bearing plate having a plurality of bearing notches extending transversely within the rear of said tray, a plurality of paint applying rollers, supported on spindles journaled in and extending between said bearing plates, said paint applying rollers consisting of cylinders of pliant paint absorptive material surrounding said spindles, a handle for supporting said tray having an upsweep to provide an upwardly off-set position therefor, together with guide rollers, adapted to roll on the face of the door being painted, supported on vertically extending posts affixed to the rear portion of said tray.

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