UNITED STATES PATENT OFFICE

2,485,428

SELF-FEEDING PAINT ROLLER DEVICE

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Application August 7, 1947, Serial No. 766,942

1. Claim. (Cl. 91—62.5)

This invention relates to roller devices for applying paint to wall surfaces in the form of designs, figures, etc., and the main object is the provision of certain new and useful improvements whereby the utility, practicability and efficiency in handling or operating the device are substantially enhanced.

Another object of the invention is the provision of means whereby a constant and continuous coating of the applicator roller with paint is at all times assured, so that as the roller is moved along the wall the intensity of the paint on the wall remains constant at all times.

The above broad as well as additional and more detailed objects will become apparent in the following description, wherein characters of reference refer to like-numbered parts in the accompanying drawings. It is to be noted that the drawings are intended for the purpose of illustration only and that it is neither desired nor intended to limit the invention to any or all of the specific details of construction shown, excepting insofar as they may be deemed essential to the invention.

Referring briefly to the drawings, Fig. 1 is a front elevational view of the device.

Fig. 2 is a side elevational view of the same.

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 1.

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 2.

Fig. 6 is a perspective view illustrating the application of the device in applying a painted design to a wall.

Referring in detail to the drawing, the numeral 10 indicates a housing or container which is shown substantially rectangular in horizontal cross-section, whose rear wall 11 rises to a higher level than the front wall 12, and whose side walls 13 are symmetrically elongated in an upward and forward direction to provide ears 14 extending forward of the container 10. Aligned slots 15 are cut at an angle, substantially as shown, into the ears 14, and are receptive of axial pins 16 extending from a roller 17. The roller 17 may be termed the applicator roller, and is provided in the manner of such rollers with a raised tread or design, which in the drawing, consists of raised rubber bosses 18 so arranged that as the wetted roller is moved along the wall the continuous design represented by the bosses is printed on the wall.

In the inner sides of the opposed side walls 13, vertical grooves 19 are provided, open at the top and terminating at points or stops 22 positioned above the container bottom 23. Two rollers 20 and 24 having axial pins 21 extending therefrom, are mounted one above the other in the container 10 with the pins 21 registering loosely in the grooves 19, whence the lower roller 20 has its cylindrical surface supported above but close to the bottom 23. Owing to the length of the ear slots 15, and the length of the side grooves 19, and the diameters of the rollers 20 and 24, when the rollers 20 and 24 are positioned in the container, the treads of the design on the roller 17 will rest by gravity against the surface of the upper roller 24. A removable handle 25 is provided on the rear wall 11 of the container, and preferably slopes downward substantially in the manner shown.

When paint in the container is at a level sufficient to reach the roller 20, rotation of the latter will coat its entire surface with the paint. When the device is used as illustrated, the roller 17 will be in constant contact with the roller 24, and as the latter will also be in constant contact with the roller 20, it is apparent that a continuous supply of paint will pass from the paint in the container onto the tread of the roller 17. Both rollers 20 and 24 are shown as solid in the drawing; however, the lower roller could be made hollow, not shown, and open at the ends, with its pins 21 supported on spindles, not shown, in which case the container would be able to hold a greater quantity of liquid paint.

The construction above described permits of ready removal of all the three rollers from the container for any purpose, for instance, in order to clean either the rollers or the container, or both.

Obviously, modifications in form and structure may be made without departing from the spirit and scope of the invention.

We claim:

1. A device of the class described comprising a substantially rectangular container having a bottom wall, front and rear walls, and side walls, said front wall being of lesser height than said rear wall, each of said side walls having a vertical groove extending down the inner surface thereof, said grooves lying in a common vertical plane and having limit stops at their lower ends spaced equidistant above said bottom wall, a plurality of rollers having axial pins extending therefrom, said rollers being mounted in the container one above the other with said pins registering loosely in said grooves, said side walls having ears extending upward and forward thereof beyond the
plane of said front wall, each of said ears having a slot extending therethrough, said slots lying in a common plane sloping downwardly at an angle of approximately forty-five degrees to said vertical plane, an applicator roller having axial pins extending therefrom, said applicator roller being mounted between said ears with the said pins thereof registering loosely in said slots, the lower extremities of said slots being positioned between the outer extremities of said ears and said vertical plane, the sum of the radii of said applicator roller and the topmost of said plurality of rollers being greater than the distance between said lower extremities of said slots and said vertical plane measured along said downwardly sloping plane, said applicator roller thereby being normally urged by gravity into relatively loose steady contact with said topmost of said plurality of rollers, said container being adapted to hold a liquid, said rear wall having a handle extending rigidly from the upper edge thereof at an angle to said rear wall and lying substantially in said downwardly sloping plane, said downwardly sloping plane being positioned substantially at the top of the device and above the axis of said topmost of said plurality of rollers whereby the center of gravity of the device lies appreciably below said downwardly sloping plane.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,713,750</td>
<td>Dow</td>
<td>May 21, 1929</td>
</tr>
<tr>
<td>2,118,719</td>
<td>Wraal</td>
<td>May 24, 1938</td>
</tr>
<tr>
<td>2,424,323</td>
<td>Milholland</td>
<td>July 22, 1947</td>
</tr>
</tbody>
</table>