Aug. 22, 1967 R. L. CARLEE 3,336,625

PAINT ROLLER

Filed Sept. 17, 1965

Fig. 1.

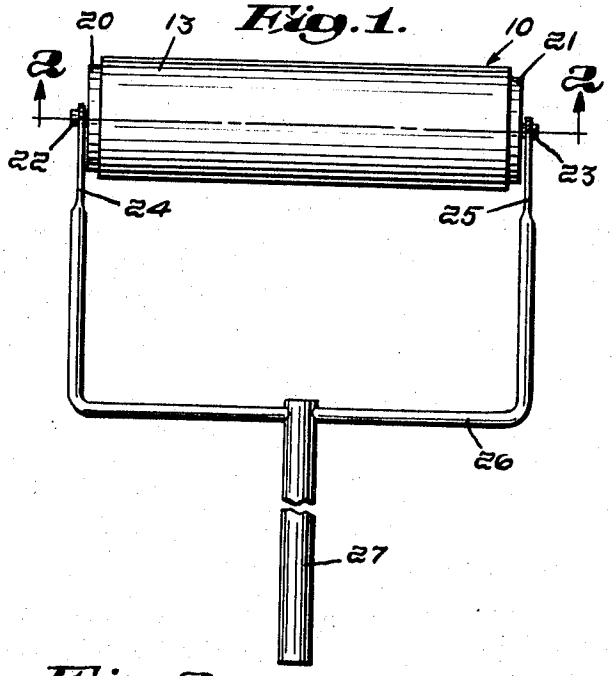


Fig. 2.

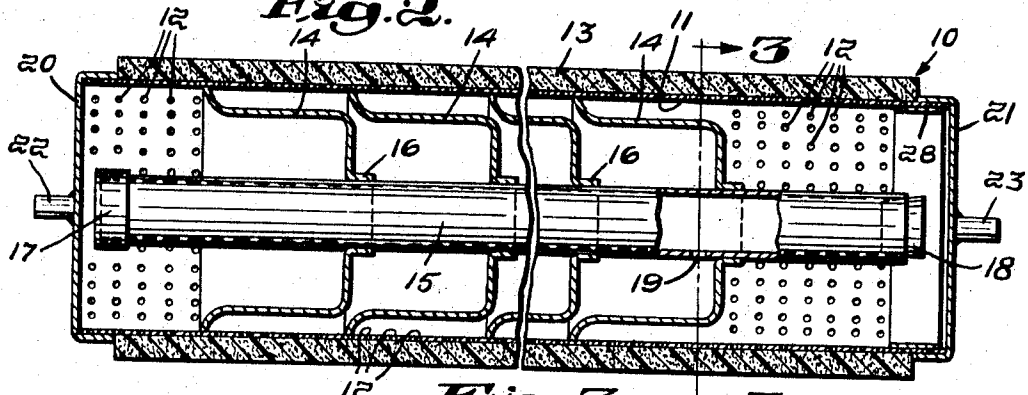
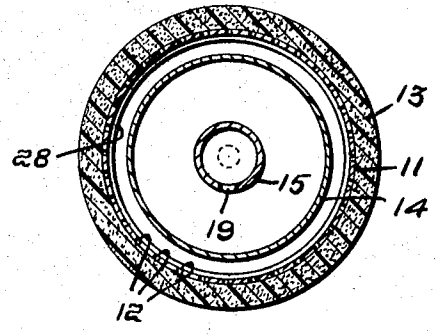


Fig. 3.



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PAINT ROLLER

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3 Claims. (Cl. 15—562)

This invention relates to improvements in paint rollers for applying paint to walls and other surfaces.

The principal purpose of the invention is to provide a conveniently operated paint roller which will rapidly and uniformly apply a coat of paint to the desired surface, which is easy and economical to manufacture and which may be readily and thoroughly cleaned after use.

The specific advantages of the improved paint roller will become apparent from the following description of the recommended embodiment of the invention as illustrated on the accompanying drawings, but it will be understood that the structural details of the roller herein shown and described may be varied to suit particular conditions without departing from the essence of the invention, as set forth in the appended claims.

In the drawings,

FIG. 1 is a plan view of the improved paint roller;

FIG. 2 is an enlarged section on line 2—2 of FIG. 1; and

FIG. 3 is a section on line 3—3 of FIG. 2.

In the form chosen for the purpose of illustration, the roller **10** comprises a cylinder **11** of metal or plastic material, having a plurality of closely spaced apertures **12** through its wall; and outer covering **13** of compressibly porous or permeable material, such as polyurethane foam; a series of axially spaced cups **14**, made of rubber or other suitably flexible material, each having an outwardly flared mouth having a frictional seal against the inner surface of the cylinder **11**; and a paint filling tube **15** disposed axially of the cylinder and passing through the bottoms of the respective cups **14** which have resilient flanges **16** frictionally embracing the tube **15**, or cemented to it, if desired.

Said tube has a cap **17** closing its inner end (at the left of FIG. 2) and a stopper **18** closing its outer end, after the reservoirs formed by the cups **14** have been filled with paint poured, preferably through a funnel, into the unstoppered outer end of tube **15** which has a series of openings **19** through which the paint may flow into the respective cups.

The opposite ends of cylinder **11** are fitted with closure caps **20** and **21**, each of which is provided with an axially projecting studs **22** and **23**, respectively, received in complemental openings of the arms **24** and **25** of a yoke **26** provided with a handle **27** for operating the roller.

A ring or collar **28** fits within the end of the perforated cylinder **11**, sealing any of the perforations at that end (the right of FIG. 2) which are also closed by the end

cap **21**, to prevent leakage of any excess paint within the cylinder.

In order to fill the paint roller, the end cap **21** is removed from the cylinder, the stopper **18** is removed from the tube **15**, and paint is poured into the tube when it flows hrough the openings **19** into the respective cups or reservoirs **14**. When so filled, the stopper **18** and cap **21** are replaced and the roller is ready for use when the yoke **26** is snapped onto the studs **22** and **23**.

In useful application, paint will flow from the respective reservoirs onto the inner surface of the perforated cylinder which acts as a screen in uniformly distributing the paint through the perforations **12** into the permeable foam cover **13** through which the paint will flow uniformly under pressure of the roller on the surface to be painted.

After use, the improved roller may be quickly and easily cleaned by removing cap **21**, manually withdrawing tube **15** and its associated cups **14** from the cylinder **11**, and washing the separated parts which may be reassembled with ease.

I claim:

1. A paint roller comprising a perforated hollow cylinder having an outer covering of porous material and caps on the ends thereof, a series of axially spaced cups disposed within the cylinder, the cups having rims bearing on the inner surface of the cylinder and providing reservoirs for paint, and an axial tube passing through the bottoms of the cups and having openings in the wall thereof communicating with each cup, one end of said tube having a closure thereon and the opposite end having a removable stopper therein, and handle means removably connected to the end caps of the cylinder for manipulating the roller.

2. A paint roller as described in claim **1**, the rims of said respective cups flaring outwardly in frictional contact with the inner surface of said cylinder, and the bottoms of said respective cups having flanges surrounding said tube and holding the cups in spaced relation on said tube.

3. A paint roller as described in claim **2**, said cylinder having a plurality of relatively small, closely spaced apertures therethrough, whereby paint flowed through said tube and into said reservoirs will flow outwardly through said apertures and through said porous covering, when the roller is pressed upon a surface to be painted.

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