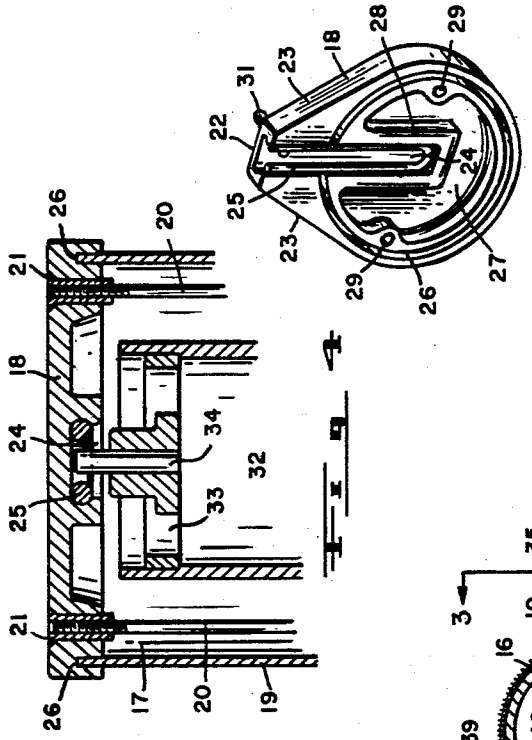
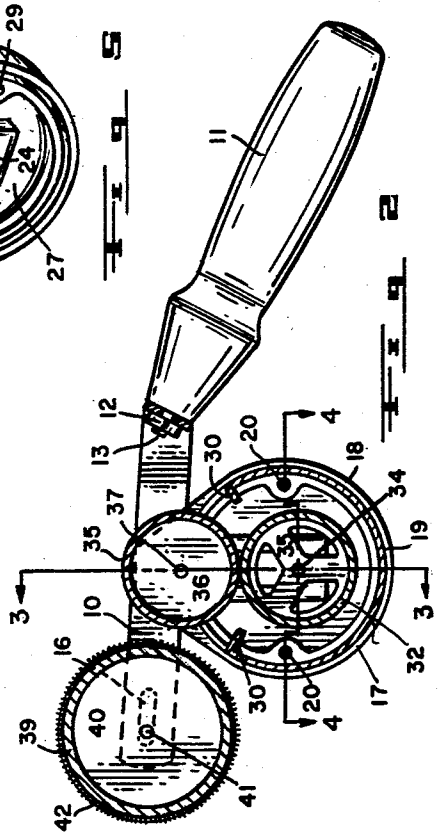
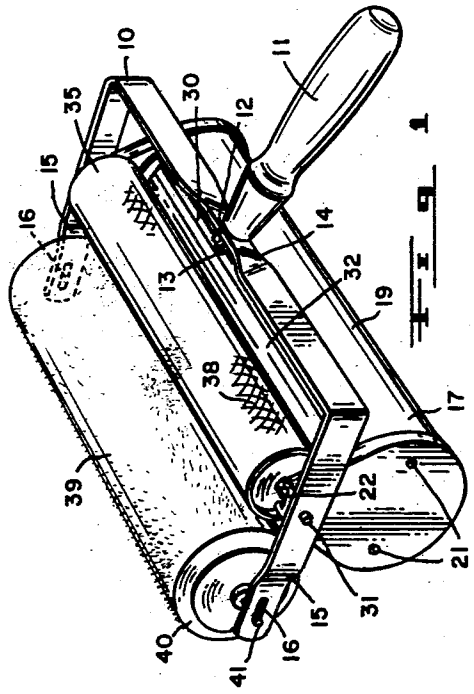
Sept. 15, 1964 J. GARABON 3,148,402

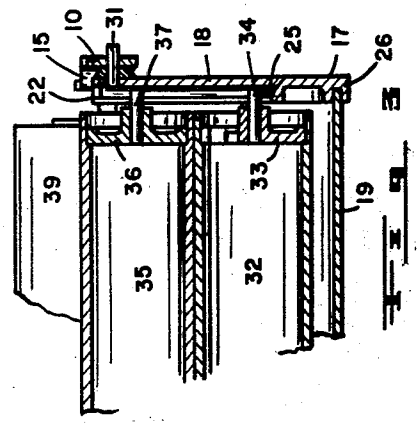
PAINT APPLICATORS

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PAINT APPLICATORS

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1 Claim. (Cl. 15—573)

The modern method of interior decorating is to use a roller for applying a paint material to the flat surfaces of walls and ceilings. These rollers usually have a nap covering which easily picks up the paint from suitable pans when rolled therein and will hold this paint until released on said surfaces. The pressure of the roller against the surface will squeeze-release the paint therefrom. As the amount of paint picked up by the roller nap is limited, it naturally follows that the roller has to be repeatedly inserted in the paint pan for a fresh supply, and the operator is continually bending up and down during such operations. A further disadvantage is, that a freshly coated roller delivers too much paint at the point of first contact, so must be operated several times over the same surface, to spread the paint evenly.

The principal object of the present invention is: to provide a paint applicator which combines a roller with a reservoir, so a continuous supply of paint is being received by the roller during operation.

A further object of the invention is: to construct the applicator such that the reservoir is self-balancing, so that the paint will not spill while being applied.

A further object of the invention is: to provide an even paint feed between the reservoir and the applying roller, as the applicator is being used, said feed being operable by the rotation of the applying roller.

A further object of the invention is: to construct the feed mechanism and applying roller for quick removal from the applicator to permit cleaning, repairs or/and replacements, and for paint re-filling of the applicator.

A further object of the invention is: to attach a handle to the applicator, and at an angle thereto, for easier operation and to clear the supporting hand from contact with the ceiling.

Still further objects of the invention are: to design the applicator in a simple and easily assembled manner; for low cost manufacture; quick understanding of its use, including the feed mechanism removal; so it can be readily operated and serviced by unskilled persons; and for production of a sturdy construction, having durability in use, over a long period of time.

With the above important and other minor objects in View, which will become more apparent as the description proceeds, the invention consists essentially in the design, arrangement and assembly of the various parts hereinafter more particularly described, reference being had to the accompanying drawings, wherein like characters of reference indicate corresponding parts in the several figures, and wherein:

FIGURE 1 is a perspective view of the complete applicator.

FIGURE 2 is an enlarged vertical central cross section therethrough.

FIGURE 3 is a longitudinal section through one end of the reservoir and feed rolls, and taken on the line 3—3, FIGURE 2.

FIGURE 4 is an enlarged horizontal section taken on the line 4—4 of FIGURE 2.

FIGURE 5 is a perspective view of one of the headers forming the ends of the reservoir.

A U-shaped strap frame **10** receives a central rear projecting handle **11**, which is secured thereto by a nut **12**, which screws onto a central bolt **13** of the handle. The central part of the frame **10**, at this fastening, is bent in an offset **14**, so the said handle will be positioned at a

downward angle, as best shown in FIGURE 2. The forward projecting ends of the forked frame **10** are both inwardly bent in an ogee curve **15**, to reduce the width therebetween, and each is provided with an endwise slot **16**, for a purpose later explained.

A paint receiving reservoir **17** is centrally positioned between the forks of the frame **10**, and is pivotally supported thereby. This reservoir comprises two cast headers **18**, having a sheet metal trough **19** therebetween, the three being held together by a pair of interior lengthwise extending rods **20**. The rods have their ends threaded to receive countersunk nuts **21**, which are carried in the headers. The headers **18** are relatively flat, and somewhat of a pear-shape profile, the lower portions being semi-circular while their upper central apexes **22** are rectangular in plan, and connected to the lower sides of the semi-circular portions by downwardly and outwardly tapering walls **23**. The interior sides of each header is slotted, as shown at **24**, and this slot extends from the apex downwardly to the center of the semi-circular portion. A U-shaped wire **25** is slid down each of these slots **24**, ends upward, as a guide. The inner face of the semi-circular portion has a circular groove **26** cut therearound, the upper portion of which is interrupted by the slot **24**. The general area between the groove **26** and the slot **24** is hollowed-out, as shown at **27**, to save material. A pair of holes **29** are also provided through the headers, one on each side thereof, to receive the nuts **21** which are circular. The trough **19** of the reservoir is formed from a rectangular plate of sheet metal, suitably rolled. The two ends of this trough are each received in one of the grooves **26** of the headers, while their side edges **30** are turned inwardly and downwardly. When the interior rods **20** are tightened by their end nuts **21**, a paint-tight connection results at the headers. The outer upper ends of the headers are also each provided with an outwardly extending pin **31**, which are received in the forks of the frame **10**, so that the reservoir can pivot thereon as explained.

A roller **32** is provided within the reservoir **17**. Each end of this roller is partially closed by an openwork disk **33** which carry central outer pins **34**, which are receivable in the slots **24** of the headers, and rest on the rolled lower ends of the U-shaped wires **25** (see FIGURE 3). These wires support the roller **32** at an elevation slightly above the bottom of the reservoir. When paint, or other liquid material is poured into the reservoir, it can pass inside the roller **32**, at the ends, for a maximum filling of the reservoir. A further roller **35**, having closed ends **36**, and central outwardly extending pins **37** at each end, is positioned on top of the roller **32**, with the pins **37** in the slots **24** and within the wire guides **25**. The outer surface of this latter roller is knurled therearound, as indicated at **38** in FIGURE 1, to retain paint. A third roller **39**, of slightly larger diameter, has closed ends **40**, which are each provided with central outwardly extending pins **41**, which are receivable in the lengthwise slots **16** of the frame forks. The exterior circular surface of this latter roller is provided with a napped covering **42** for receiving and holding paint, and applying same to a surface when rolled thereover. This latter roller is free turning in the slots **16**, and when handle pressed against the surface to be painted, it will move therealong and into surface contact with the roller **35** to receive paint there from, and to drive same, when rolled along said surface to be painted. The roller **35** in turn is in contact with and will rotate the roller **32**, which picks up paint from the reservoir, rolls it onto the roller **35**, and this latter roller delivers it to the applying roller **39**, the nap of which holds the paint until it is squeezed against the surface to be painted as it rolls thereover.

In summing up; the roller **32**, being hollow and open at the ends, occupies a minimum of paint space in the

reservoir, so a large amount can be carried. The roller 35 rests on the roller 32 and is merely held thereon by the guides 25, so both rollers are free turning. When driven by the applicator roller 39, an even surface flow of paint passes from one to the other by line contact, for steady application as the device is used, and no spilling can result as the reservoir is free swinging, and the sides of the reservoir opening are turned inwardly and downwardly. The angular handle permits perfect operation right up to and across a ceiling, without the operator's hand touching same, while the delivery of paint can be varied by the amount of hand pressure exerted by the applicator against the surface being painted, as this regulates the amount of nap squeeze. When the supply of paint is exhausted, it is a simple matter to lift and remove the roller 35 from the reservoir for a re-fill, right over the roller 32. And all rollers can be removed for cleaning or repairs, including the applicator roller 39, by spring spreading the forks of the frame. As there are no bearings for the rollers, they are self levelling for full line contact with each other, so a perfect even feed results, and while there is very little wear, a long life for the device is assured. While I have shown a nap covered paint applying roller 39, it will be appreciated that other covering, such as rubber, could be used, including variations in diameter, as the slots 16 will accommodate same. And said coverings could also be molded, if desired, in fanciful designs, for specific decorating effects.

What I claim as my invention is:

A paint applicator, comprising: a handle supported forked frame; an open-top, elongated paint reservoir lengthwise positioned across said frame, with each end pivotally suspended from one of the forks thereof; a paint applying roller mounted between the forks, with each end rotatable and slidable in a lengthwise slot on one of the forks; said reservoir formed from dismountable parts and consisting of a pair of spaced headers, separated by a U-shaped trough; said headers circularly slotted on their facing sides, each to receive one of the ends of the trough therein, and so provide a container for paint; rods connecting the headers, through said trough; screw means on said rods for clamping the headers against the trough ends in a paint-tight fit, and for release from the rods, when the reservoir is to be dismounted; pins between the outer sides of the headers and the forks for pivotally mounting said reservoir; a vertical slot down each of the interior walls of the headers; feed rollers positioned one above the other in the reservoir, each having the ends thereof slidably and rotatably mounted in said vertical slots; said lower feed roller being adapted to feed paint from the reservoir to the upper feed roller by contact, when said feed rollers are rotated; said paint applying roller movable in the fork slots for surface contact with the upper feed roller, to receive paint therefrom and drive same, when said paint applying roller is manually rolled over a surface; and the upper sides of the reservoir turned inwardly at a downward slope, to reduce the width of said open-top and direct droppings from the upper feed roller back into the reservoir.

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