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3,310,831 PAINT APPLYING ROLLER William J. Brinker, 308 E. 8th St., Cincinnati, Ohio 45202 Filed June 1, 1965, Ser. No. 459,988 4 Claims. (Cl. 15-575)

This invention relates to paint applicators and is particularly directed to improvements in paint applying roller devices to which a controlled supply of paint is continu- 10 ously applied for deposit on a surface to be painted.

An object of the invention is to provide a simplified, yet effective device for applying a controlled amount of paint to the surface of a manually operated painting roller.

Another object of the invention is to provide a paint 15 applying roller device capable of mechanical adjustments to accommodate paint rollers of various length and diameter sizes.

A further object of the invention is to provide a relatively simple paint applying device capable of producing 20 a smooth and even discharge of paint over the entire paint applying surface of a paint roller whilst not in the least interfering with the free rotation of the roller and manipulation of the applicator during use.

Other objects and advantages of this invention will be 25 apparent from the following specification showing a preferred embodiment of my invention when taken in conjunction with the accompanying drawings, wherein like reference numerals indicate similar parts throughout the several views, and in which:

FIG. 1 is a fragmental, top plan view of my paint applying roller, some parts thereof being broken away and shown in section and other parts shown somewhat diagrammatically.

FIG. 2 is a section taken on line 2-2 of FIG. 1.

FIG. 3 is a fragmental, detailed side elevational view showing a part of the handle for the applicator depicted in FIGS. 1 and 2 of the drawings.

In the drawings the numeral 5 indicates a manually operated paint applicator having a remotely situated supply 40 of paint under pressure that is generally indicated by reference numeral 6. The applicator has a handle portion 7 and an applicator portion 8, the former comprising an elongated, laterally extending mounting member 9 which is channel-shaped in section (FIG. 2). A pair of 45laterally spaced, handle extension members 10 and 11 have outwardly extending feet 12 and 13, respectively, fixed as by rivets 13 on opposite sides of the central portion of the mounting member 9. The outer free ends of the extension members 10 and 11 are fixed to and imbedded 50 in a handle grip member 15 which preferably is made of wood and has an outside configuration conforming best to the gripping condition of the human hand.

An L-shaped arm 16 and 17 is mounted for lateral adjustment on each end of the mounting member 9 and, 55 face 26 of the roller. as best shown FIG. 1, each L-shaped arm is channelshaped in section and has a sliding engagement in the respective end of the mounting member 9, said arms each having a screw 18 projecting through a hole 19 therein which moves in a slot 20 formed in the mounting mem. 60 ber 9, a wing nut 21 cooperating with the screw to lock the L-shaped arm in laterally adjusted positions on the mounting member.

The outer end of each arm 16 and 17 has a bearing hole 22 formed therethrough for mounting an end of 65 a roller axle 23, said axle having a head 24 formed on one end thereof and a nut 25 threaded to the opposed end for ready removal of the axle from the applicator. An elongated roller member 24 is rotatably mounted on the axle and has removably positioned thereon a paint ap- 70 plying tubular member 25 which has a soft, paint retaining cylindrical surface 26.

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Mounted on the handle between the L-shaped arms and closely adjacent the soft paint retaining and applicator surface 26 of the roller 25 is a laterally elongated manifold 260 having a concave, paint spreading surface 27 confronting the soft exterior roller surface 26, said manifold surface 27 being preferably formed on a slightly larger diameter than the roller and disposed in close, spaced relationship with said roller surface 26. A laterally extending through-hole 28 is formed in the manifold body and is closed at each end by a plug 29 and 30 preferably threaded in the body, each plug having a laterally extending pin 31 and 32, respectively, formed thereon which extends through a longitudinal slot 33 formed in each Lshaped arm. A lateral row 34 of paint discharge openings are formed in the manifold and communicate with the through-hole 28 and the concave surface 27 of the manifold.

A non-flexible pressure supply conduit 35 is threaded at 36 in the central part of the manifold 260 and extends freely through a hole 37 formed in the central portion of the member 9, said conduit extending rearwardly between the handle extension members 10 and 11 and into a slot 38 formed in the body of the handle 15. The end of the conduit communicates with a valve 39 which in turn is connected to an elongated flexible pipe 40 which is connected to the supply $\mathbf{6}$ of paint under pressure. A ring 41 is fixed to the rigid conduit 35 and has a threaded lug 42 thereon which extends through a slot 43 formed in the handle extension 10, said lug cooperating with a wing 30 nut 44 to fix the conduit and the manifold in longitudinally adjusted positions with respect to the paint applying roller device 26.

The supply of paint under pressure may comprise a paint container 45 (FIG. 1) that may be carried on a painter's 35 body by means of straps 46, paint being poured into the container 45 through a capped opening 47 of the container and a head pressure being applied upon the paint therein by an air pump 48, in any well known manner.

In operation it will be understood that paint under pressure supplied through line 40 to the valve 39 will be controlled or cut off by means of said valve and the pressure supply introduced to the manifold through the conduit 35 will be metered and controlled. The device may be adjusted to accept paint rollers of different lengths and diameters by adjusting the L-shaped arms on the mounting member 9 and regulating the longitudinal adjustment of the manifold relative to the periphery of the particular paint roller carried by the device. It will also be noted with reference to FIG. 2 that my manifold has a paint spreading surface 27 which will accept paint discharged through the openings 34 and spread such paint evenly across the face of the roller before it leaves the area located between the paint spreading surface 27 of the manifold and the soft paint retaining cylindrical sur-

What is claimed is:

1. A paint applicator comprising a roller having a soft paint applying surface, a handle having a lateral mounting member, an L-shaped arm mounted for lateral adjustment on each end of the mounting member, a roller axle mounted between the ends of the arms, a pair of laterally spaced apart handle extension members connected to opposite sides of the central portion of the mounting member, a handle grip secured to the free ends of the extension members, an elongated, laterally extending manifold mounted on the handle between the arms and having a concave, paint spreading surface thereon confronting the roller and in close spaced apart relation thereto, longitudinal guide means between the ends of the manifold and the arms, an elongated chamber disposed laterally within the manifold, a row of laterally spaced apart discharge openings formed in the manifold and

each opening extending from the chamber through the paint spreading surface thereon, a rigid conduit fixed to the central portion of the manifold and extending through the mounting member and between the handle extension members, releasable clamp means between the handle 5 and the conduit permitting longitudinal adjustment of the conduit and the attached manifold relative to the paint applying surface of the roller, a remote source of paint under pressure, and valved means connecting the remote source of paint to the conduit.

2. In a paint applicator as set forth in claim 1 characterized by the fact that the longitudinal guide means between the manifold and each L-shaped arm is a laterally extending pin mounted on an end of the manifold, and a longitudinal slot in each arm to freely receive the 15 pin.

3. In a paint applicator as set forth in claim 2 further characterized by the fact that the chamber extends laterally completely through the manifold and the pin mount-

ing is a plug threaded in a tapped end of the lateral chamber in the manifold.

4. In a paint applicator as set forth in claim 1 characterized by the fact that the releasable clamp means is a ring member fixed to the rigid conduit, said ring having a threaded lug formed thereon, and a longitudinal slot formed in one of the handle extension members, said threaded lug extending through the slot and movable therein, and a wing nut threaded to the end of the threaded 10 lug.

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