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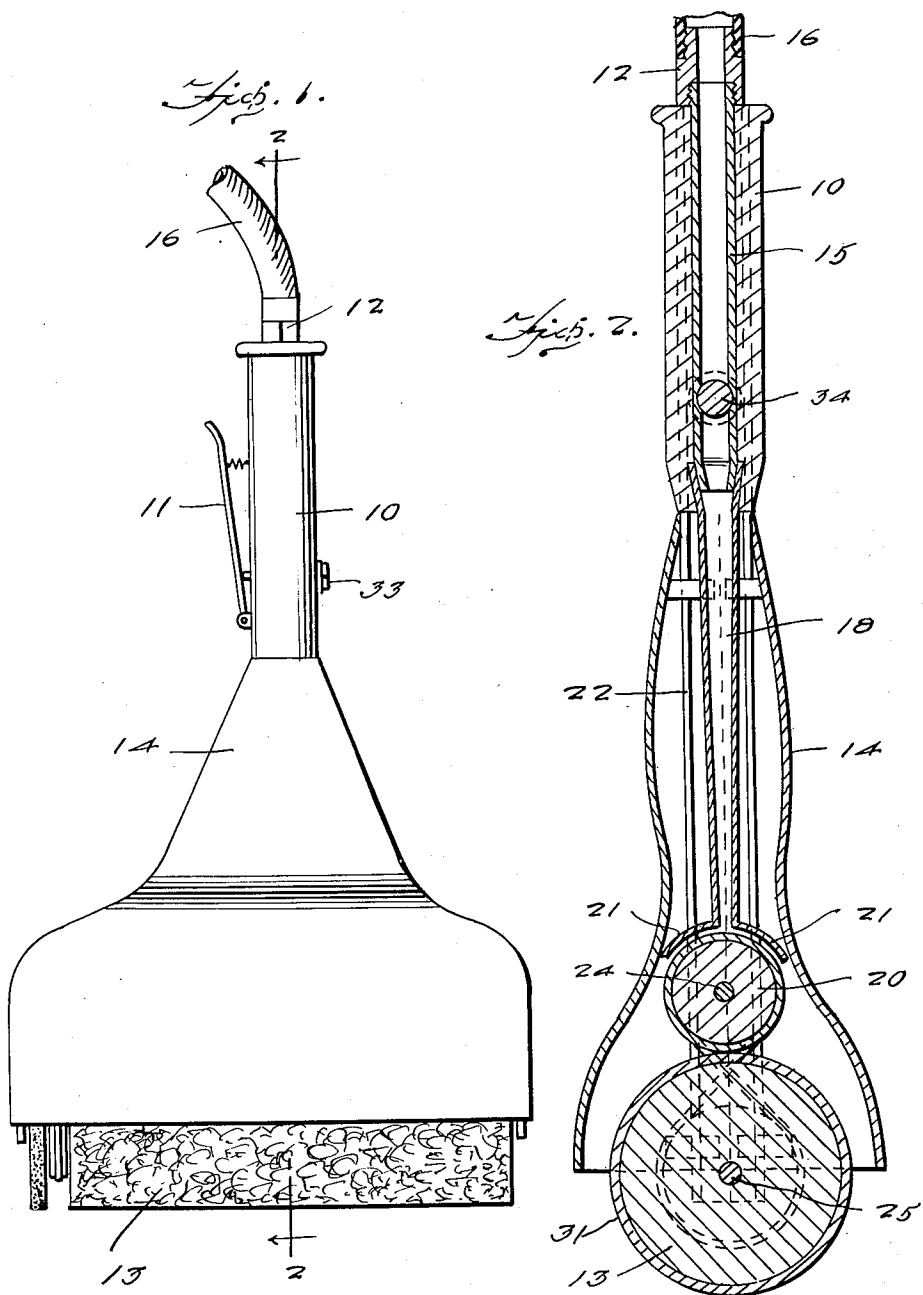
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2,536,291

PAINT DISTRIBUTOR WITH ROLLER APPLICATOR

Filed May 7, 1946

2 Sheets-Sheet 1



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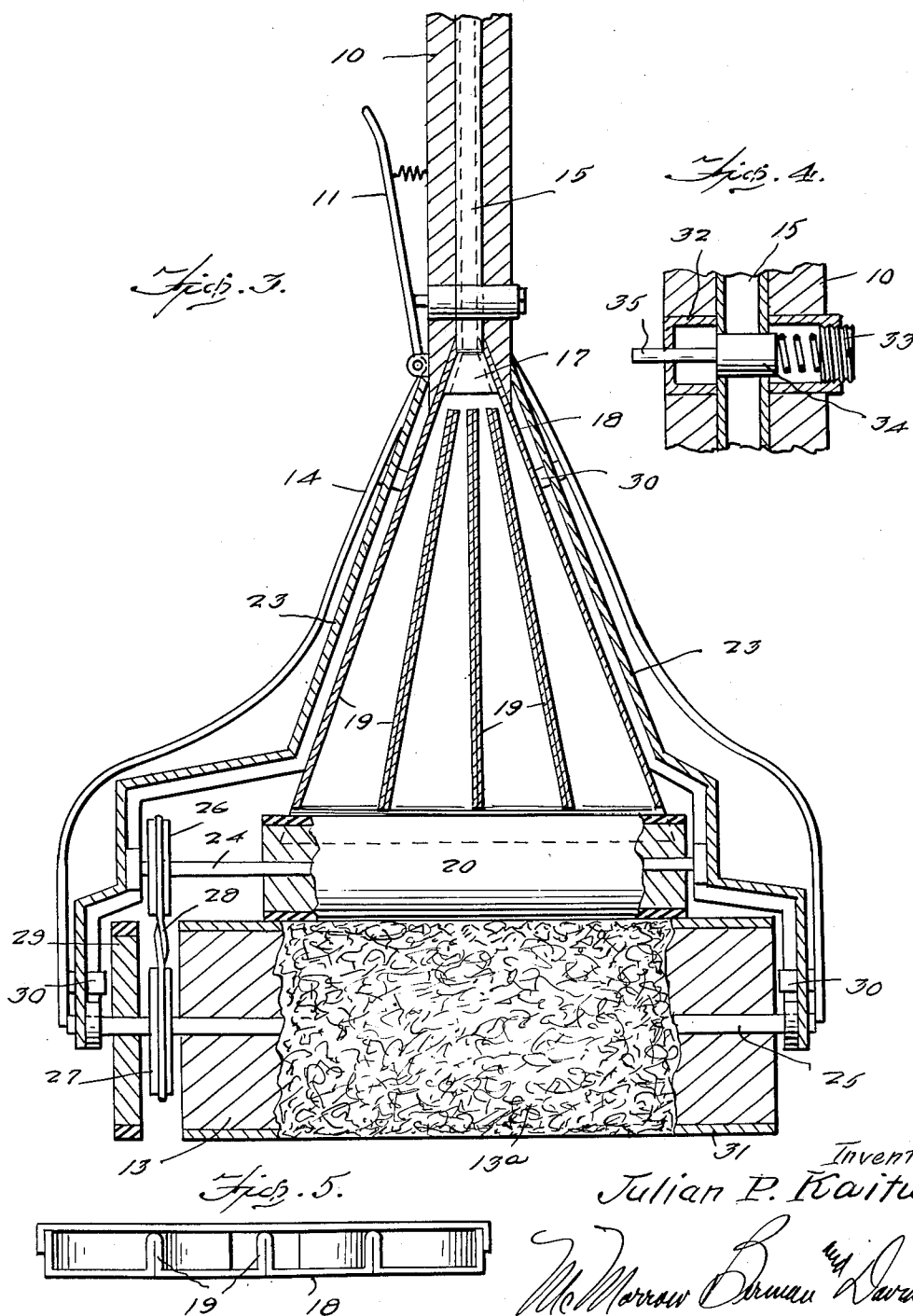
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UNITED STATES PATENT OFFICE

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PAINT DISTRIBUTOR WITH ROLLER
APPLICATOR

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Application May 7, 1946, Serial No. 667,888

3 Claims. (Cl. 15—128)

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The present invention relates broadly to paint brushes and is more particularly concerned with a paint applicator having a hand controlled feed from a paint reservoir to a distributor.

The primary object of the invention is to provide a device of the character referred to which can be handled like an ordinary paint brush and the paint feed controlled during the painting operation.

Another object of the invention is to provide an appliance of the character referred to which will feed and evenly distribute paint from a supply conduit.

Still another object of the invention is to provide an appliance with a manually controlled feed, of simpler and more compact construction than that in prior devices.

With the foregoing and other objects and advantages in view the invention consists of the novel construction and arrangement of parts hereinafter described and claimed.

In the accompanying drawings illustrating the preferred embodiment of the invention;

Figure 1 is a front elevation of the appliance.

Figure 2 is a longitudinal section on line 2—2 of Figure 1.

Figure 3 is a longitudinal section taken at a right angle to the view in Figure 2.

Figure 4 is an enlarged sectional detail of the feed control valve.

Figure 5 is a transverse section of the fan-shaped feed and distribution member.

Like numerals are used in the description and drawings to designate the same structural parts.

Referring particularly to Figure 1, the appliance comprises, among other elements, a tubular handle 10 with the outside, hand manipulated control lever 11, which actuates the interiorly contained feed valve; coupling 12 for hose to the reservoir of paint; a painting roll 13 and a removable guard or shield 14 to protect the painter and obviate dripping when the appliance is used on vertical or overhead surfaces.

The handle, which may be either wooden or plastic, is tubular and contains a section of tubing 15. This has an exterior thread on the upper extremity which protrudes sufficiently to engage the coupling connection of the hose 16 from a container, operating by gravity or pressure. The construction thereof forms no part of the invention and therefore is not shown.

The lower extremity of tube 15 is flared as at 17 and fits inside the neck of a feed and distribution member 18 which is flared to fan shape and is substantially oblong in cross-section. This

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member is open at the bottom and comprises two flanged sections which fit together, as shown in Figure 5. One section is provided with longitudinal ribs 19 which diverge from the upper orifice and subdivide the chamber of member 18 into gradually expanded channels to induce even distribution of the paint to a flexible feed roll 20 positioned longitudinally in close proximity to the lower orifice of member 18. The two sections of 18 are provided at the bottom with arcuate laterals 21, which are substantially concentric with feed roll 20 to effectually direct the flow of paint to the top thereof.

A forked frame 22 of suitable material, such as aluminum, with side flanges to add strength as in a channel beam, is fitted on the lower extremity of the handle in rigid attachment and the branches 23 of this forked component are formed to fit around the narrow sides of component 18 and then diverge, as shown in Figure 3, to contain the feed roll 20 and applicator roll 13. The latter is positioned beneath the former with their peripheries in contact and the rotatable shafts or spindles 24 and 25, on which they are respectively secured, are journaled in slots in the lower extremities of the fork prongs to provide adjustment.

Pulleys 26 and 27 are fixedly mounted on the shafts 24 and 25 between the rolls 13 and 20; and a crossed belt 28 connects said pulleys. Outside of pulley 27, and between same and the fork prong, is mounted a traction wheel 29 which is designed to run on the work surface and power the two pulleys, thus rotating the two rolls.

The guard or shield 14 is split longitudinally to form two sections which are designed to encase the frame and rolls, except for sufficient exposure of the painting roll, as well the traction wheel 29, to facilitate the work.

These two sections, when joined, fit around the handle 10 and are clasped in union by spring clasps 30 which are spaced at suitable intervals along the meeting edges and engage the fork between its flanges.

Feed roll 20 is preferably made of rubber while the applicator roll 13 is fitted with an absorbent jacket 31, of porous rubber, or felt, or a fabric, as desired. The kind of jacket will depend largely on the kind of paint to be used.

The valve which is operated by spring lever 11 and controls the supply of fluid to the distributor 18, is set transversely in handle 10 and comprises a tubular case 32 which is apertured to allow the feed tube 15 to pass through. The case is interiorly threaded where it projects out-

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side and a plug 33 threads into this end and contains a spring pressed cylindrical valve 34 which fits two registering apertures in pipe 15 and normally seals both. A centered pin 35 projects from the valve 34 and through the end of valve case 32 to contact the spring lever 11.

When this lever is depressed by the painter the valve is forced back against spring and opens the conduit of tube 15 and thus opens the conduit for flow of paint from the reservoir to the feed and distribution member 18. The operator can interrupt the flow at any time by merely releasing lever 11.

As different embodiments may be made of this inventive concept and modifications may be made in the embodiment herein before shown and described, it will be understood that the matter herein is to be interpreted as illustrative merely, and not in a limiting sense.

What I claim is:

1. In a paint distributing device, a hollow handle having one end adapted to be connected to a source of liquid paint, an open-ended distributor flaring from one end to the other end thereof and having said one end surrounding the other end of said handle and secured thereto, an open-ended hollow frame enclosing said distributor and having one end fixedly secured to said handle, the other open end of said frame terminating at a point spaced beyond said other end of said distributor, a compressible feed roller positioned transversely within said frame adjacent said other end of said distributor and mounted on the sides of said frame for rotation about an axis extending transversely of said frame, a distributing roller positioned in alignment with said feed roller and mounted adjacent the other open end of said frame for rotation about a second axis extending transversely of said frame, said axes being spaced from each other such that the periphery of said distributing roller contacts the periphery of said feed roller, and means operatively connected to said feed and distributing rollers for effecting simultaneous rotation thereof as said distributing roller traverses a surface to be painted.

2. In a paint distributing device, a hollow handle having one end adapted to be connected to a source of liquid paint, valve means disposed within said hollow handle and operable exteriorly thereof to control the flow of liquid paint therethrough, an open-ended distributor flaring from one end to the other end thereof and having said one end surrounding the other end of said handle and secured thereto, an open-ended hollow frame enclosing said distributor and having one open end fixedly secured to said handle, the other open end of said frame terminating at a point spaced beyond said other end of said distributor, a compressible feed roller disposed transversely within said frame adjacent said other end of said distributor and mounted on the sides of said frame for rotation about an axis extending transversely of said frame, a distributing roller positioned in

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alignment with said feed roller and mounted adjacent the other open end of said frame for rotation about a second axis extending transversely of said frame, said axes being spaced from each other such that the periphery of said distributing roller contacts the periphery of said feed roller, and means operatively connected to said feed and distributing rollers for effecting simultaneous rotation thereof as said distributing roller traverses a surface to be painted.

3. In a paint distributing device, a hollow handle having one end adapted to be connected to a source of liquid paint, valve means disposed within said hollow handle and operable exteriorly thereof to control the flow of liquid paint therethrough, an open-ended distributor flaring from one end to the other end thereof and having said one end surrounding the other end of said handle and secured thereto, rib means extending longitudinally within said distributor and secured therein for effecting even flow distribution of said paint through said distributor, an open-ended hollow frame enclosing said distributor and having one open end fixedly secured to said handle, the other open end of said frame terminating at a point spaced beyond said other end of said distributor, a compressible feed roller disposed transversely within said frame adjacent said other end of said distributor and mounted on the sides of said frame for rotation about an axis extending transversely of said frame, a distributing roller positioned in alignment with said feed roller and mounted adjacent the other open end of said frame for rotation about a second axis extending transversely of said frame, said axes being spaced from each other such that the periphery of said distributing roller contacts the periphery of said feed roller, and means operatively connected to said feed and distributing rollers for effecting simultaneous rotation thereof as said distributing roller traverses a surface to be painted.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
397,091	Mortimer	Jan. 29, 1889
664,791	Stow	Dec. 25, 1900
823,458	Abbott	June 12, 1906
840,308	Garrecht	Jan. 1, 1907
860,078	Binks	July 16, 1907
913,189	Bary	Feb. 23, 1909
1,014,618	Buck	Jan. 9, 1912
1,075,941	Reed	Oct. 14, 1913
1,461,947	Sporer	July 17, 1923
1,559,105	Johnson	Oct. 27, 1925
2,118,719	Wraal	May 24, 1938
2,229,707	Testi	Jan. 28, 1941
2,281,773	Kollman	May 5, 1942
2,325,123	Isenberg	July 27, 1943