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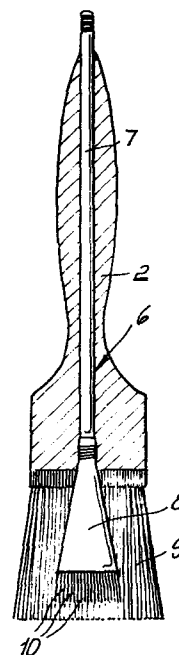
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64 Paint applicator supplied with a continuous paint flow.

57 The paint applicator comprises a brush (2) incorporating an element (6), for transporting paint to its bristles (9) in communication with a transporting channel (7). A paint container being also provided which is connected to said brush (2) and incorporates a pump for feeding paint from said container into said transporting channel (7).



"PAINT APPLICATOR SUPPLIED WITH A CONTINUOUS PAINT FLOW"

This invention relates to a paint applicator supplied with a continuous paint flow.

As is known, to paint walls and objects where the use of a spray gun would be difficult and generally expensive, either brushes, in various different sizes and shapes, or rollers must be used.

Commercially available prior paint brushes are generally provided with a shaft for gripping them which terminates in a plurality of bristles by means of which a sufficient amount of paint can be picked up to paint small surfaces of an object to be painted.

Where the surface area to be painted is quite large, brush painting requires frequent dipping of the brush into paint by the operator who must then apply the amount of paint picked up over the object to be paint coated.

Such reiterated dipping of the brush bristles into paint normally reflects in increased painting time and expenditure of energy by the operator, especially if the latter is obliged to work in confined spaces or at elevations involving the use of a ladder.

Furthermore, the problem is generally encountered that in the passage from where an amount of paint is picked up to where paint is applied over the object to be painted, paint is likely to be dripped inadvertently onto surfaces and objects, thereby damaging them.

For this reason, therefore, it is always necessary to adequately cover any parts that should not be soiled and are liable to becoming damaged, which results in additional waste of the

operator's time, and hence, added cost.

The aim underlying this invention is to obviate such prior disadvantages by providing a paint applicator supplied with a continuous flow of paint, which can provide for application of the same even over large surface areas without involving continued dipping of the brush into the paint.

Within the above aim, an important object of the invention is to provide a paint applicator which can effectively prevent objectionable drippings such as are produced in the passage from the paint can to the object to be painted.

A not unimportant object of the invention is to provide a paint applicator which can be readily formed from commonly available commercial materials and of limited cost, thus favoring its widespread use by the general public.

The above aim, and these and other objects, are achieved by a paint applicator supplied with a continuous flow of paint, characterised in that it comprises a brush incorporating an element for transporting paint to its bristles, a paint container being also provided which is connected to said brush and incorporates a pump for feeding into said transporting channel.

Further features and advantages will be more easily understood from the following detailed description of a paint applicator according to the invention, as illustrated by way of example in the accompanying drawing, where:

Figure 1 is a perspective view of the paint applicator according to the invention;

Figure 2 is a side elevation sectional view of the brush incorporating the element for transporting
5 paint to its bristles, according to the invention;

Figure 3 is a side elevation view of the element for transporting paint to the bristles of the brush according to this invention;

Figure 4 is a side elevation sectional view of
10 the paint container incorporating a pump, according to the invention.

With specific reference to Figure 2 of the drawing, a paint applicator according to this invention, as generally designated with the reference numeral 1,
15 comprises a brush 2 connected, through a tube 3 suitably formed from a flexible material, to a paint container 4 incorporating a pump, generally designated with the reference numeral 5 and operative to supply the brush 2 with paint.

20 More specifically, the brush 2 has, across its inner midsurface a transporting element, generally designated with the reference numeral 6, which comprises a channel 7 rigidly connected to a paint distributor 8 at one end, and to the tube 3 at the opposed end
25 thereof.

More detailedly, the distributor 8 is advantageously formed from a flexible material in order for it to flex together with the bristles 9 of the brush 2 enclosing it.

30 The distributor 8 has a frusto-conical shape, and

its surface portion defining the outlet port for the paint is provided with plural flexible filaments 10 which permit of an improved distribution of the paint to the interspaces between bristles 9.

5 It should be specified that the outlet port of the distributor 8 is located at a middle portion of the bristles of the brush 2, which may be configured in accordance with requirements imposed by its intended use.

10 The pump, generally designated with the reference numeral 5, and advantageously supplying the channel 7, comprises a bored stem 12 slidably connected internally to a cylinder 13 against the bias of an elastic means, specifically a spring 14.

15 The bored stem 12 has a seal 15 at one end, which by sucking paint from the container 4, forces it, via a valve 16, into the interior of the cylinder 13, and whence, through a valve 17, into the interior of the stem 14 and to the distributor 8 for final application
20 to the object to be painted.

 It should be further noted that the two valves 16 and 17 admit paint alternately therethrough.

 The operation of the applicator according to the invention may be appreciated from the above description
25 and illustration: with particular reference to Figures 2 and 4, it may be seen that by sliding the stem 12 within the cylinder 13, the spring 14 is compressed, and the valve 16 is closed and valve 17 opened, and upon the spring returning to its initial position, the
30 seal 15 will suck, through the valve 16 which is opened

in the meantime whilst the 17 is closed, an amount of paint which, during successive sliding movements of the bored stem 12 inside the cylinder 13 and with the same method as described above, will travel through
5 the tube 3 to the channel 7, and hence be distributed by the distributor 8 and flexible spreading filaments 10 to the bristles 9 for application over the object to be painted.

It has been found that in actual practice the
10 applicator of this invention is specially advantageous in considerably reducing working times since dipping of the brush into a can of paint at frequent intervals is no longer necessary.

Further, the amount of paint will be controlled
15 by the bored stem 12 sliding within the cylinder 13, thereby the bristles 9 of the brush 2 will be always soaked with the desired amount of paint.

In practicing the invention, any materials and dimensions, may be selected and used
20 to meet individual requirements and the state of the art.

CLAIMS

1 1. A paint applicator supplied with a continuous
2 flow of paint, characterized in that it comprises a
3 brush (2) incorporating an element (6) for transport-
4 ing paint to its bristles (9), in communication with
5 a transporting channel (7) a paint container (4) being
6 also provided which is connected to said brush (2) and
7 incorporates a pump (5) for feeding into said trans-
8 porting channel (7).

1 2. A paint applicator according to Claim 1,
2 characterized in that said transporting element (6)
3 comprises at least one channel (7) having one end
4 rigidly connected to a paint distributor (8) and the
5 opposed end to a tube (3) for connection to said
6 pump (5).

1 3. A paint applicator according to Claims 1 and
2 2, characterized in that said distributor (8) has its
3 surface portion defining the paint outlet port
4 provided with flexible spreading filaments (10).

1 4. A paint applicator according to one or more of
2 the preceding claims, characterized in that said
3 distributor (8) is formed from a flexible material and
4 has a frusto-conical configuration.

1 5. A paint applicator according to one or more of
2 the preceding claims, characterized in that said outlet
3 port is accommodated in a middle portion of the
4 bristles (9) of said brush (2).

1 6. A paint applicator according to one or more of
2 the preceding claims, characterized in that said pump
3 (5) comprises a bored stem (12) slidably connected

4 against the bias of an elastic means internally to a
5 cylinder (13).

1 7. A paint applicator according to one or more of
2 the preceding claims, characterized in that said
3 bored stem (12) and said cylinder (13) each comprise
4 a valve (16,17) for admitting or blocking a flow of
5 paint therethrough.

1 8. A paint applicator according to one or more of
2 the preceding claims, characterized in that said
3 valves (16,17) for admitting or blocking the flow of
4 paint are operated alternately.

