Sept. 18, 1956 J. DI NICOLA 2,763,510

PAINT DROP FLINGER

Filed Dec. 9, 1954

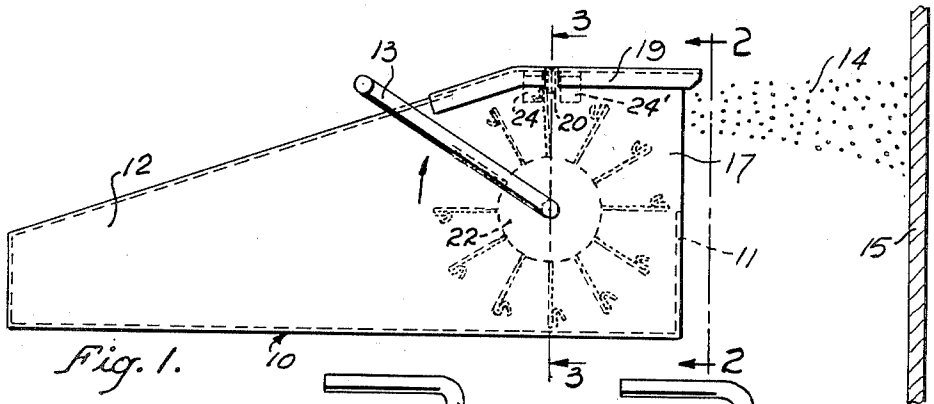

Fig. 1.

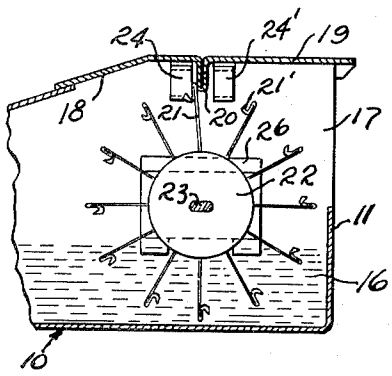

Fig. 4.

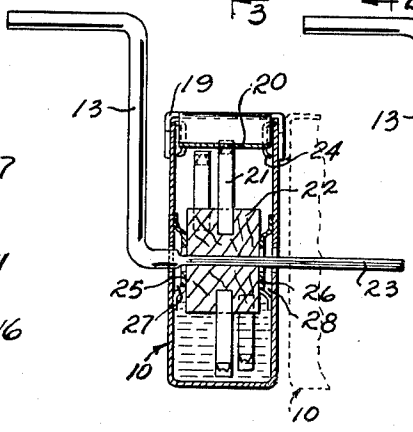

Fig. 3.

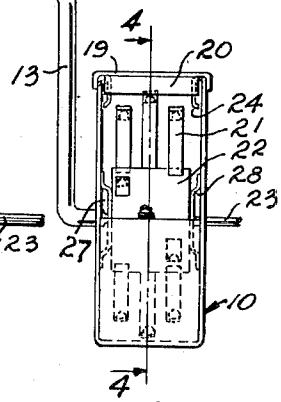

Fig. 2.

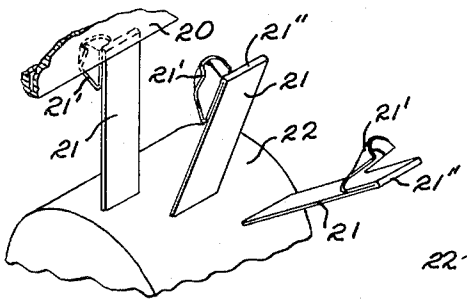

Fig. 5.

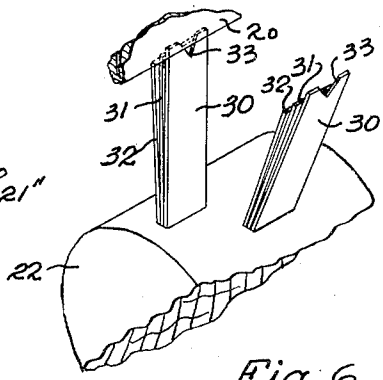

Fig. 6.

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PAINT DROP FLINGER

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3 Claims. (Cl. 299—63)

This invention relates to a paint drop flinger, for decorating painted surfaces with paint drops of different colors.

It is an object of the present invention to provide a paint drop flinger into which paint is poured and wherein, by a simple operation of a crank, paint drops will be flung and directed toward a surface to be decorated, the flinger being held in one hand while turning the crank with the other and aiming the same at the surface to be decorated.

It is another object of the invention to provide in a paint drop flinger spring fingers or elements in which the ends are so fashioned and formed as to actually lift from the body of the paint within the flinger drops of the paint to an elevated point where the spring elements are deflected and released to deliver the paint drop to the surface being decorated and wherein the paint drops will be of equal size, the spring lifting fingers or elements being of the same size and so shaped as to contain similar amounts of the paint.

It is a still further object of the invention to provide a paint drop flinger with an operating crank having an axle portion sufficiently long to extend through the flinger and engage other flingers arranged side by side with the one flinger so that more than one different color of paint can be flung upon the surface treated, each of the flingers being self-contained and sufficiently narrow so that one or several can be conveniently held in the hand and operated by the one crank.

Other objects of the invention are to provide a paint drop flinger which is of simple construction, inexpensive to manufacture, has a minimum number of parts, light in weight, simple to operate, easy to fill with paint, easy to clean and maintain, of pleasing appearance, compact and durable, and efficient in operation.

For other objects and a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which:

Figure 1 is a side elevational view of the paint drop flinger embodying the features of the present invention, with illustration being made as to the manner in which it is used to fling paint drops on to a vertical surface;

Fig. 2 is an end elevational view of the flinger as viewed generally on line 2—2 of Fig. 1;

Fig. 3 is a vertical sectional view taken on line 3—3 of Fig. 1;

Fig. 4 is a fragmentary longitudinal sectional view taken of the front part of the flinger and as viewed generally on line 4—4 of Fig. 2;

Fig. 5 is an enlarged fragmentary perspective view of the spring finger elements and of the hub containing them with illustration made as to the manner in which the ends strike a fixed projection;

Fig. 6 is a perspective view similar to Fig. 5 of a modified form of the paint drop lifting spring.

Referring now to the figures, 10 represents an elongated sheet metal box or casing having a front part 11

and a tapering rear portion 12 to permit the easy grasping of the device with the hand so that it can be aimed while being worked by its handle 13 to fling paint drops 14 against a vertically extended surface 15. This casing is adapted to receive a body of paint 16 of any desired color and its front part has an opening 17 through which the paint drops are flung. The top part of the casing has an opening 18 which is closed by a cover 19 having a depending projection 20 against which drop lifting spring fingers 21 are arranged on a hub 22 are directed and depressed in order that the fingers will be spun, and upon being released, will fling a paint drop through the opening 17 in the front part 11 of the elongated box 10. The crank 13 has an axle portion 23 that extends through the hub 22 to effect the turning of the hub and the spring fingers 21. Guide members 24 and 24' are spaced from one another and disposed on each side of the casing 10 so as to help retain the cover and prevent its longitudinal displacement over the opening 18.

The fingers 21 are formed of flat spring material and their outer ends are double bent to provide a pocket structure 21'. This pocket structure will collect and pick up drops of the paint and carry it to the elevated position and hold it until it is flung under the spring action of the bent drop lifting finger 21 on striking the depending projection 20 of the cover 19 and being released therefrom. The pocket structure is open at the top and sides and the drops are guided outwardly therefrom. The spring finger 21 is bent at 21'' upon itself to provide an outer edge which engages the depending projection 20. The hub 22 has openings into which the lower ends of the spring fingers 21 are fixed.

The shaft portion 23 of the crank 13 extends through the hub 22 in a hole of elongated cross section so that a turning action is effected upon the hub portion. The hub is held against lateral displacement by opposing spacing members 25 and 26 that are secured to the respective sides of the elongated casing 10 and which have openings in the bottom as indicated at 27 and 28 respectively to permit the paint to drain back into the bottom of the casing 10.

As illustrated in Fig. 3, the shaft 23 can be extended to pass through two flingers located side by side and containing different paint. By holding the two flingers together and operating the same crank 13, the different paint colors can be flung. It will be understood that any number of such flingers can be arranged side by side by merely having an extended shaft portion 23 of the crank.

In Fig. 6, there is shown a modified form of the spring flinging fingers or elements. This finger comprises three spring strips 30, 31 and 32 assembled together and having their lower ends embedded or fixed in the surface of the hub. The forward spring strip 30 has a V-notch 33 in its outer end and this outer end engages with the depending projection 20 to effect a spring action. The notch 33 shapes the paint drop as it passes over the outer end of this strip 30. The spring strips 31 and 32 are free at their outer ends and are located behind the strip 30. They are shorter and do not engage the projection 20. Between these strips and the strip 30 the paint is collected as the hub 22 in which these assemblies are mounted is turned by the crank 13. Drops of the paint will be flung from the strips and through the notch 33 and over the end of the strip 30 as it is released from the projection 20.

It should now be apparent that there has been provided a paint drop flinger which will, as it is operated, direct small drops of paint toward a surface to be treated therewith. The paint drop lifting fingers in both forms of the invention are staggered on the surface of the hub 22 so that only one of the same engages the projection 20 at a time. Since these spring flinging fingers are

staggered, there are provided three rows of elements across the hub.

It will be understood that these spring flinging fingers or assemblies in both forms are so constructed as to pick up drops of the paint for the purpose of flinging them as the spring fingers are released from the projection **20**.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

What is claimed is:

1. A paint drop flinger comprising an elongated casing having side walls and a vertical discharge opening at its forward end, said casing being adapted to contain paint and the top part thereof having a filling opening, a hub member extending between the side walls of the casing and lying therewithin, a crank member having a shaft extending through the side walls and fixed to the hub and journalled in the side walls whereby said hub may be turned by the crank, spring paint drop lifting fingers in multiple rows extending from the surface of the hub member and angularly spaced thereabout and lifting fingers of one row being staggered with relation to the lifting fingers of the other row, said spring fingers or flinging elements being longitudinally aligned with the front opening so that the paint picked up therefrom may be flung therethrough, a cover adapted to be extended over the top opening through which the hub and the finger elements can be assembled into said casing as the crank shaft is extended through the side walls of the casing and hub for rotational movement therein, said cover having a depending projection adapted to be engaged by the ends of said spring paint drop lifting fingers, said paint drop lifting fingers being formed at their outer ends to collect and pick up drops of paint and to retain the same adjacent to the ends of the fingers for immediate and high force expulsion upon release of the fingers in succession from the depending projection through the opening, whereby as the crank is turned the end of the spring paint drop lifting fingers will pass over the depending projection to cause the paint to be flung through the front discharge opening.

2. A paint drop flinger as defined in claim 1, and each of said spring paint drop fingers being formed of a single strip of flat spring material double bent at its upper end to provide an end edge for contacting said depending projection and to ride thereover and a pocket structure on the trailing face of said blade adjacent to its upper end adapted to pick up and lift a paint drop.

3. A paint drop flinger as defined in claim 1, and each of said spring paint drop lifting fingers being an assembly of three spring flat strips overlying one another, the leading strip being longer than the other strips and adapted to engage with said projection, said other strips being free to separate themselves from the leading strip so as to receive and contain paint therebetween, said forward strip having a notch in its upper end through which paint drops may be directed and formed as the spring fingers are sprung from the projection.

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