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2,677,459

PAINT CAN

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FIG. 1

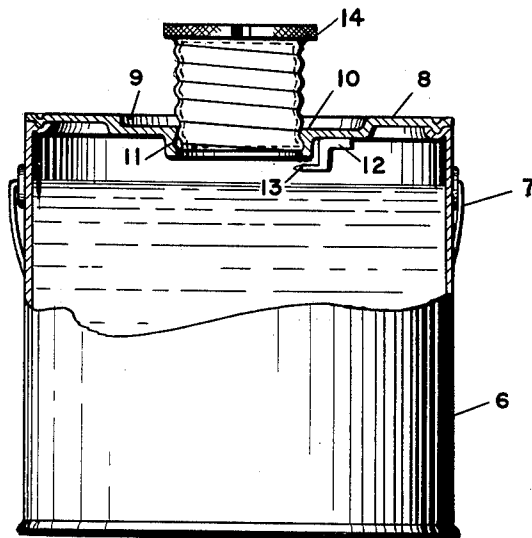


FIG. 2

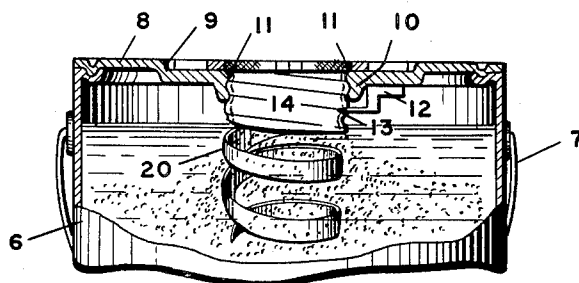
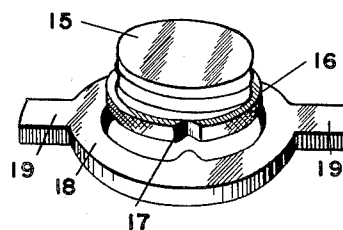
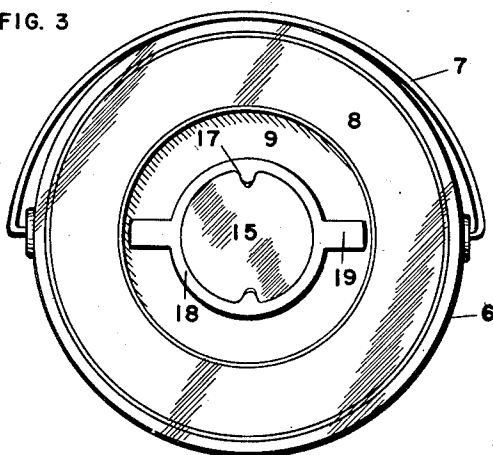


FIG. 4

FIG. 3



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## UNITED STATES PATENT OFFICE

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## PAINT CAN

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2 Claims. (Cl. 206-47)

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This invention relates to a can for paint.

The object of the present invention is to provide a can for containing a neutral liquid into which a smaller can containing a pigment can be screwed, the screwing operation opening the pigment containing can so that the contents of the two cans will be thoroughly mixed.

Heretofore, cans of paint colors are made by manufacturers and a dealer to satisfy his customers must carry several hundred cans of paint to maintain a stock of each color. With the present invention it is only necessary to carry the small different cans of pigment and a supply of the neutral vehicle carried in the larger cans.

It is a further object of the present invention to provide an opening means for the pigment containing can which will completely expose the contents of the can to the action of the neutral vehicle so that the two may be thoroughly mixed under the action of a mechanical paint mixing machine.

It is a still further object of the present invention to provide a container for pigment which will, when screwed into the larger can, fit flush with the surface so that the cans may be placed in the mechanical paint mixing machines now on the market.

It is a further object of the present invention to maintain the cutting apparatus and the pigment containing can wholly within the top so that the can may be mixed at the paint dealer's store and be carried from there to the place of use in the same neat condition as a factory mixed can.

The invention is shown in the accompanying drawing in which:

Figure 1 is a front elevation.

Figure 2 is a front elevation shown partially in cross section.

Figure 3 is a top view.

Figure 4 is a detail of the plug which is normally carried in the can.

Referring particularly to the drawing, a paint can 6 having an ordinary handle 7 is formed with a top 8 having an annular depression 9 and provided with a thickened central rim 10 formed with interior screw threads 11.

Fastened to the underside of the top is a blade 12 whose cutting edge 13 projects in the path of movement of a container 14 adapted to be threaded in the thickened portion 10. The blade 12 may be riveted or soldered or in any manner secured to the underside of the can top 8.

Referring particularly to Figure 4, a plug 15 formed with an upper cap 16 having V-shaped notches 17 at diametrically opposite points ordinarily fits in the screw threads 11. A key 18 hav-

ing handles 19 is used to remove the plug and to insert the container 14. The handles 19 are the thickness of the depression 9 so that with the container 14 screwed in innermost position the surface of the cap 3 is substantially flat.

In use the buyer selects a color from a color chart and the paint dealer removes the plug 15 and inserts the designated pigment container 14. With the insertion, the pigment container engages the point 13 of the blade 12 cutting a spiral, as shown at 20 in Figure 2. The pigment container 14 is screwed tight and the key 18 left in position. The can is then clamped between the flat plates of a mechanical paint mixing machine and the contents thoroughly mixed. The cut spiral 20 of the container 14 will move up and down under the influence of the vibration of the paint mixing machine and serve as a mechanical beater or comminuter of the paint. This action mixes the paint faster, smoother, and extracts the pigment completely from the container 14.

It would be possible to remove the cover of a can and insert the pigment in bulk instead of the elaborate setup of the invention. This, however, has not proved satisfactory in the past as the removal of the lid always distorts the lid and a refitting of the lid leaves sufficient opening so that when the can is put in the paint mixing machine, there is always leakage during the rapid vibration in the mixing operation. With applicant's idea the seal around the rim of the can is not distorted or broken and the paint thoroughly mixed, the screwed in container allowing no leakage around its edges.

With an apparatus such as described, it will eliminate a dealer carrying many dozens of cans of different colors for which there is very little call, allowing him to keep a fresh supply of vehicle to be mixed with different cans or tubes of pigment to produce any color desired, thus assuring the customer of a freshly mixed can of paint.

What is claimed is:

1. A sealed paint can having a cover and being partially filled with a paint vehicle, said cover being formed with a central depression and a concentric internally threaded central opening smaller in diameter than said depression, a pigment container partially threaded into said central opening, a rim on said pigment container equal in thickness to the depth of the cover depression, said pigment container being adapted to be manually turned into the screw threaded opening, and means for spirally cutting the pigment container throughout its entire length during the threading operation to expose the entire contents of the pigment container to the paint

3

vehicle, the rim of said pigment container being seated wholly within the cover depression, when said pigment container is completely threaded into said opening, presenting a substantially smooth and level cover.

2. A sealed paint can having a cover and being partially filled with a paint vehicle, said cover being formed with a central depression and a concentric internally threaded central opening smaller in diameter than said depression, a pigment container partially threaded into said central opening, a rim on said pigment container equal in thickness to the depth of the cover depression, said pigment container being adapted to be manually turned into the screw threaded opening, and a cutting blade riveted to the underside of said cover and engaging the side of said pigment container during the threading operation to spirally cut said pigment container throughout its entire length to expose the entire contents of

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the pigment container to the paint vehicle, the rim of said pigment container being seated wholly within the cover depression when said pigment container is completely threaded into said opening, presenting a substantially smooth and level cover.

## References Cited in the file of this patent

## UNITED STATES PATENTS

| Number    | Name         | Date          |
|-----------|--------------|---------------|
| 928,033   | Douilly      | July 13, 1909 |
| 1,031,775 | Cox          | July 9, 1912  |
| 1,150,596 | Hollingshead | Aug. 17, 1915 |
| 2,463,981 | Lee          | Mar. 8, 1949  |
| 2,528,530 | Machleder    | Nov. 7, 1950  |

## FOREIGN PATENTS

| Number  | Country     | Date        |
|---------|-------------|-------------|
| 138,378 | Switzerland | May 1, 1930 |