March 24, 1959 P. J. GUNAS 2,879,044

PAINT MIXING TOOL

Filed Nov. 13, 1956

FIG 1

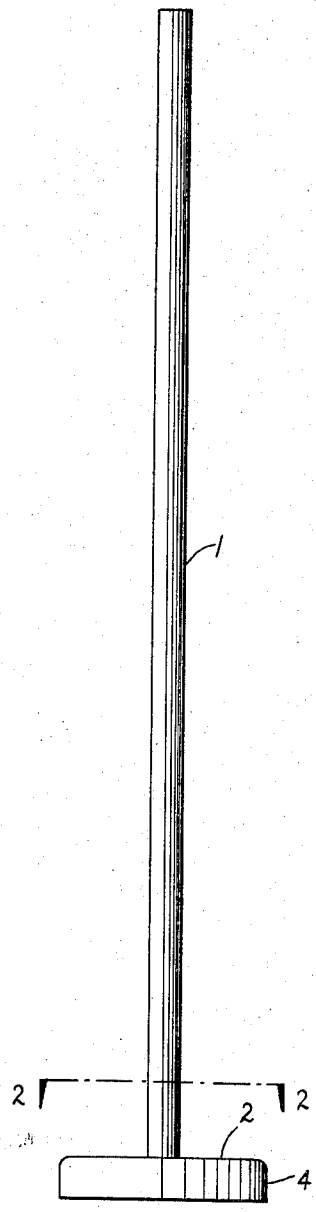



FIG 2

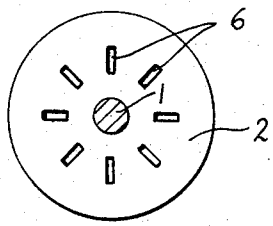



FIG 3

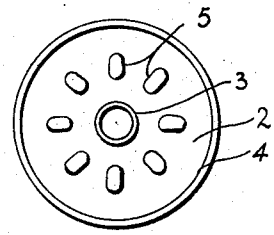
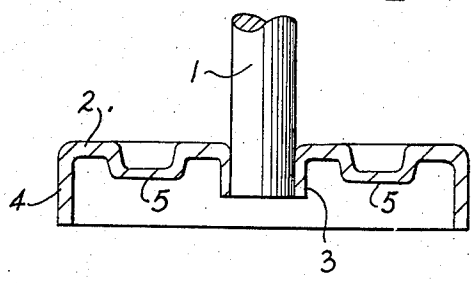



FIG 4




*INVENTOR.*

Peter J. Gunas

*BY* Chapin & Neal

Attorneys

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# PAINT MIXING TOOL

Peter J. Gunas, Manchester, Conn.

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1 Claim. (Cl. 259—134)

This invention relates to an improved mixing tool for use in containers of paint or the like.

The invention has for an object the provision of a mixing tool that is adapted to be rotated about its axis while inserted in a paint container, as by the motor of an electric drill, and manually moved around and across the can to traverse the heavier pigment contents and force them upwardly to mix with the lighter oil contents.

More particularly, it is an object of the invention to provide a tool of the kind described having a flat disk-like portion, fixed to a driving shank and located coaxially of and at right angles to such shank, and an annular rim integrally connected to the margin of the disk-like portion and extending away from the same in a direction opposite to the shank, the disk-like portion having a circular series of angularly-spaced projections, preferably radially disposed, extending into the space within the rim and acting, when the tool is rotating, to force the paint downwardly out of said space, from whence it passes upwardly around and outside the rim.

The invention has for a further object to provide a rotary paint-mixing tool of the class described which is substantially splash-proof in operation.

The invention will be disclosed with reference to the accompanying drawings, in which

Fig. 1 is an elevational view of the paint mixing tool;

Fig. 2 is a sectional plan view taken on the line 2—2 of Fig. 1;

Fig. 3 is a bottom plan view of the tool; and

Fig. 4 is an enlarged sectional elevational view of the tool.

Referring to these drawings; the tool includes a suitable shank 1, herein shown as cylindrical, that is adapted at one end for attachment to a suitable driving means, such for example, as an electric motor used with drills, and to be rotated by such means about its axis. The mixer includes a circular disk-like portion 2 which is located coaxially of the shank and fixed to the other end thereof in any suitable way and as herein shown by a drive fit. The portion 2 is preferably pressed inwardly to form a hub or rim 3 for shank 1 which is inserted within the sole opening in the portion 2 (Fig. 4). The rim 3 is concentric of rim 4. Encompassing the disk-like portion 2 is an annular rim 4 which is integral with the outer margin of portion 2 and extends outwardly therefrom substantially at right angles and in a direction opposite from shank 1. The rim 4 is concentric of the shank 1 and has smooth inner and outer faces. The mixer further consists of a circular series of angularly-spaced projections 5 displaced from the plane of the portion 2 into the space within rim 4 and in a direction



opposite from shank 1 and the projections 5 extend downwardly from the disk-like portion 2*a* distance less than the length of the rim 4. These projections 5 blend with the undersurface of the portion 2 by way of smooth curved surfaces (Fig. 4) and are conveniently formed by indenting, as at 6, the upper face of disk-like portion 2 in an elongated fashion extending radially of the shank 10 and spaced from the rim 4, as indicated in Fig. 2.

In operation, the mixer is inserted into a container of paint and rotated. It may be first run around the bottom of the can with the lower edge of the rim engaged therewith in order to loosen the pigment adhering thereto. Then the tool may be raised up and down at changing angles to circulate the pigment. The projections 5 force the paint downwardly out of the space within rim 4 and then upwardly outside the rim 4. The pigment that tends to settle to the bottom of the container is thus moved upwardly to mix with the oil in the upper part of the container. The tool may be moved across the entire cross sectional area of the can to move all of the pigment upwardly. Also, the mixer may be rotated with the outer periphery of rim 4 engaged with the inner peripheral wall of the container for the purpose of loosening any pigment adhering to such wall. The smooth outer surface of the mixer, and particularly its rim 4 which is cylindrical, and coaxial with shank 1 make the tool substantially splash-proof in operation.

What is claimed is:

A tool for mixing paints and the like, comprising a shank adapted for attachment at one end to and to be rotated by a driving means, and an integral mixer fixed to the other end of said shank, said mixer comprising a circular disk-like portion disposed coaxially of said shank and at right angles thereto, said disk-like portion being perforated solely at the center thereof to receive said shank and an annular rim depending from the periphery of the disk-like portion substantially at right angles thereto, said annular rim being concentric of said shank and having smooth inner and outer faces and said disk-like portion having a circular series of angularly spaced radially elongated projections displaced from the plane of the disk-like portion with indentations being formed on the upper surface of the disk-like portion opposite the projections, each projection blending with the disk-like portion by way of smooth curved surfaces, said projections extending downwardly from said disk-like portion a distance less than the length of the rim, said projections being radially disposed relative to said shank and radially spaced from said rim, said mixer being provided with a second rim concentric of the first rim and defining the central perforation in said mixer receiving the other end of said shank and facilitating its attachment thereto.

**References Cited in the file of this patent**

UNITED STATES PATENTS

| | | |
|---|---|---|
| 1,516,792 | Ruggles | Nov. 25, 1924 |
| 1,655,447 | Wait | Jan. 10, 1928 |
| 1,698,363 | Gilbert | Jan. 8, 1929 |
| 1,816,046 | Johannes | July 28, 1931 |
| 2,733,900 | Wobensmith | Feb. 7, 1956 |

FOREIGN PATENTS

| | | |
|---|---|---|
| 11,328 | France (First addition to No. 404,726) | Jan. 19, 1910 |
| 391,614 | France | July 24, 1928 |