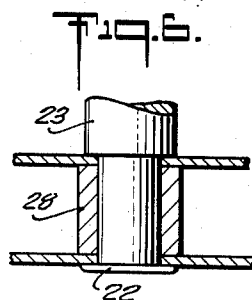
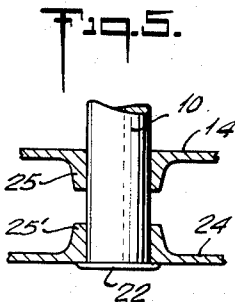
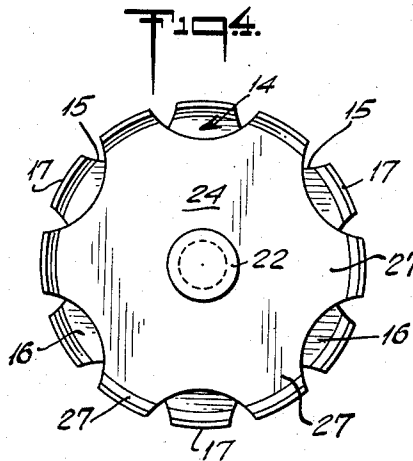
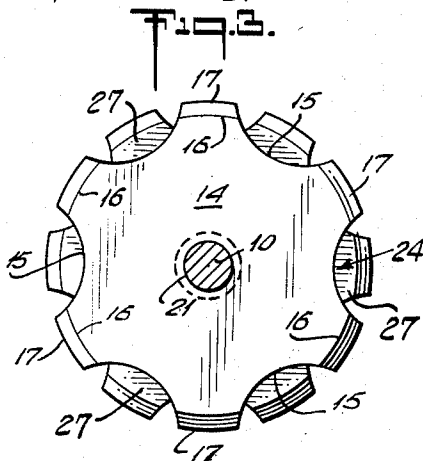
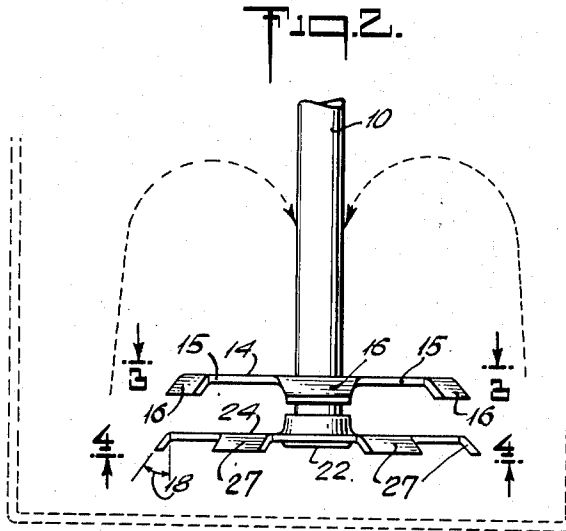
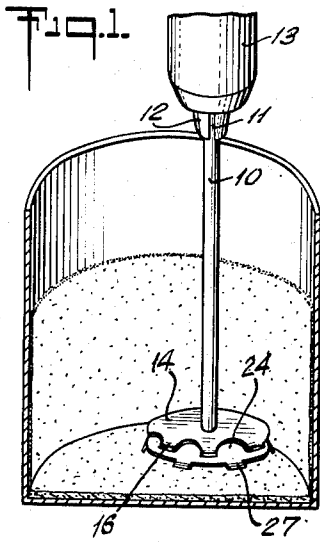


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J. MESSBAUER
PAINT MIXING DEVICE

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PAINT MIXING DEVICE

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2 Claims. (Cl. 259—134)

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This invention has particular application to use for the purpose of mixing paint, especially paint in cans or other containers, which has settled to the bottom and become hard. Home owners, painters and handymen faced with this problem usually attempt to mix the paint by hand with a rod or the like which is an awkward and time-consuming procedure; results which have been found to be highly unsatisfactory.

The tool provided by the present invention is adapted for use with the conventional portable drill or drill press or the like having a rotating chuck into which one end of the straight rod of the device of this invention may be inserted. The other end of the tool is so designed as to effectively cut into the pigment, break it up, and provide a whirlpool action to do a thorough job of mixing pigment and vehicle together, and without overflowing even in the case of a full can of liquid. The device is so designed that it will not cut through or damage the container, in which it is used. It is well adapted for mixing or reclaiming liquids, paints, enamels, lacquers, semi-paints, and the like, particularly after the same has been standing a while and settled. The device provides a neat and simplified procedure for reconditioning paint to its original factory-freshness, right in the original can or other container.

These and other advantageous objects, which will appear from the drawings and from the description hereinafter, are accomplished by the structure of my invention, of which an embodiment is illustrated in the drawings. It will be apparent, from a consideration of said drawings and the following description, that the invention may be embodied in other forms suggested thereby, and such other forms as come within the scope of the appended claims are to be considered within the spirit and scope of the instant invention.

In the drawings:

Fig. 1 is a vertical elevational, partly sectional, view of the device of the invention, shown positioned in a paint can, the latter being indicated sectionally,

Fig. 2 is a similar view of the lower end of the device, positioned in the can indicated in dotted lines, the whirlpool effect attained being indicated by dotted lines,

Fig. 3 is a horizontal plan view, taken on line 3—3 of Fig. 2,

Fig. 4 is a bottom plan view, taken on line 4—4 of Fig. 2,

Fig. 5 is an enlarged medial sectional view of

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the lower end of the device of the invention, illustrating one form thereof, and

Fig. 6 is a similar view of another form thereof.

As shown in the drawings, the device of the invention comprises an elongated straight rod 10 adapted at one end 11 to be inserted into a rotatable chuck 12 of a portable hand-drill, drill press, or the like, generally indicated at 13, or other source of power for rotating the chuck 12 and thus also rotating rod 10. A plate 14 is fixed to the other end of the rod, said plate having a plurality of preferably equidistantly circumferentially spaced recessed portions having arcuate edges 15, defining therebetween a plurality of radially equidistantly spaced fingers 16. The free end portions of said fingers are flanged downwardly and outwardly disposed as indicated at 17, being disposed at acute angles 18 (Fig. 2) to the axial plane of the rod 10. The plate may be fixed to the rod by providing the plate with a medial aperture 21 through which the rod is passed and an enlarged head 22 on the end of the rod overlying the aperture of the plate. The end of the rod may be provided with a shouldered portion 23 of greater diameter than the aperture 21, against which the plate may be positioned. As shown in the drawings, the device preferably comprises a pair of plates 14 and 24; the plate 24 preferably corresponds with the structural features of the plate 14 as described above and as will be apparent from an examination of the drawings. The plate 24 is positioned on the rod in parallel relation with the plate 14, with the fingers 27 of the plate 24 disposed out of registry with the fingers 17 of the plate 14, the parts being so proportioned that when so arranged the fingers 27 of the plate 24 will effectively register with the recessed portions 15 of the plate 14; thus the fingers of each plate will be out of registry with the fingers but in registry with the recessed portions of the other plate.

By reason of this special plate construction, the fingers cooperate with the arcuate edges of the notches to cause the liquid in the container to be agitated rapidly and moved downwardly, as indicated by the dotted lines in Fig. 2.

In Fig. 6, the lower end of the rod 10 is shown provided with a shouldered portion 23 against which the plate 14 may be positioned and held by the enlarged head 22 of the rod 10.

The plates are preferably provided with means to maintain them on the lower end of the rod in spaced relation. The means in the construction shown in Fig. 5 comprise open medial bosses 25, 25' on the plates 14, 24 force-fitted onto the

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lower end of the rod 10 and preferably directed toward each other. In the construction shown in Fig. 6, a separate spacer ring 23 is positioned intermediate the plates 14, 24 to maintain them on the rod in spaced relation.

The end of the rod may be welded or soldered to the plower plate if desired; other securing means suitable for the purpose may be used.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A mixing device comprising an elongated rod adapted to be disposed vertically and have its upper end gripped in a rotary chuck, a plate mounted about the lower end portion of said rod to turn therewith, said plate being circular and formed of stiff sheet material and having its marginal edge portions formed with circumferentially spaced recesses elongated circumferentially of the plate and having arcuate edges, portions of the plate between the recesses defining fingers extending radially of the plate, said fingers being disposed in the horizontal plane of

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the plate and having free outer ends bent downwardly and forming depending flanges disposed diagonally at an outward incline.

2. The structure of claim 1, wherein the rod carries a second plate of the same construction as the first mentioned plate, both plates being disposed about the lower portion of the rod near and in spaced relation to each other, the fingers of one plate being disposed in staggered relation to the fingers of the other plate.

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References Cited in the file of this patent

UNITED STATES PATENTS

15	Number	Name	Date
	1,025,396	Hasburg -----	May 7, 1912
	1,074,397	Westby -----	Sept. 30, 1913
	2,008,106	Lawrence -----	July 16, 1935
	2,464,588	Knudsen et al. ----	Mar. 15, 1949
20	2,530,455	Forss -----	Nov. 21, 1950
	2,564,887	Ernst -----	Aug. 21, 1951