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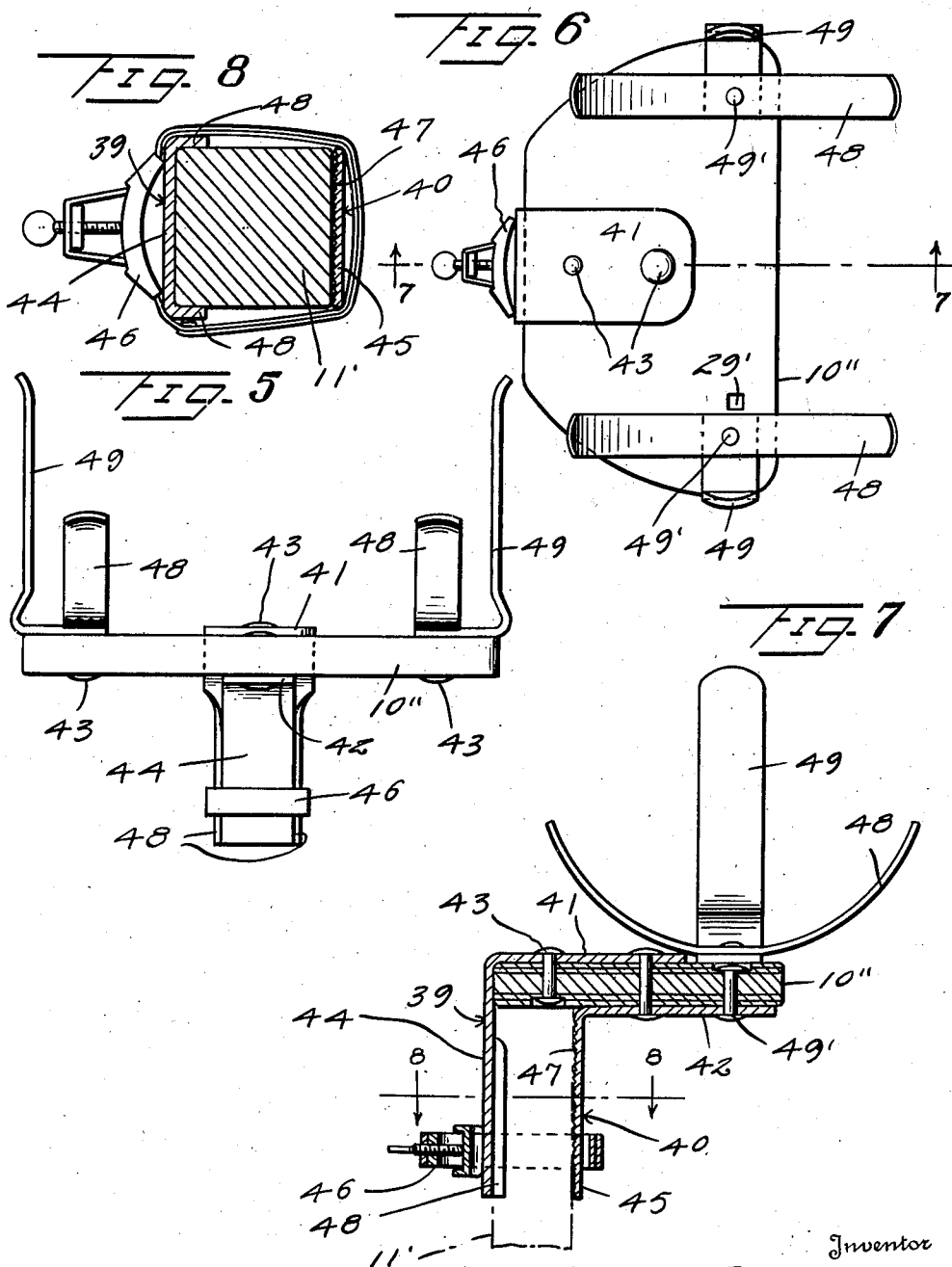
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MIXING APPARATUS

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MIXING APPARATUS

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5 Claims. (Cl. 259—1)

This invention relates to a mixing apparatus especially adapted for attachment to and actuation by the spindle of a domestic clothes washing machine or the equivalent.

It is aimed to construct a novel means which is attachable to a clothes washing spindle and which carries elements effective to mount containers of paints or other materials requiring agitation or mixing.

In addition, it is aimed to provide a construction which is relatively simple, inexpensive to manufacture and which is durable in operation.

The more specific objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawings illustrating operative embodiments by way of example.

In said drawings:

Figure 1 is a top or plan view of one form of the invention;

Figure 2 is an end elevation of such form;

Figure 3 is a central vertical longitudinal sectional view through the form of Figures 1 and 2;

Figure 4 is a cross sectional view taken on the line 4—4 of Figure 3;

Figure 5 is an end elevation of a modified form of the invention;

Figure 6 is a top or plan view of such modified form;

Figure 7 is a vertical cross section taken on the line 7—7 of Figure 6, and

Figure 8 is a cross section taken on the line 8—8 of Figure 7.

Referring specifically to the drawings and first to the form illustrated in Figures 1 to 4, the device or attachment has a support at 10. Such support may be made in any desired shape and of any suitable material and for instance of laminated wood. The support is adapted to be mounted in a substantially horizontal position on and to be driven from the vertical oscillating spindle of a domestic clothes washing machine or any equivalent machine. Such a spindle is suggested at 11. As such spindles 11 are of different forms in cross section, for instance, cylindrical, rectangular and otherwise polygonal, the means for attaching the support will vary accordingly. As shown, I may use a pair of V-shaped metallic or other bars 12 of any suitable width. These bars 12 include lateral portions 13 fastened against the under surface of the support 10 by means of rivets or other fastenings 15 which are passed through the support. Depending from the inner ends of the portions 13 are upright clasp portions 16, the same being

preferably curved in cross section to better fit the cylindrical spindle shown. Portions 16 embrace the spindle and they are effectively clamped to the spindle by means of a suitable endless clamp 17. The clamp 17 may consist of a metallic band 18 which is endless and looped as at 19 to enclose a nut 20, through which a screw 21 is mounted and which bears against a saddle 22, in direct contact with one of the clasp members 16. Due to the bearing of the screw 21 against the saddle, tightening will tighten and tension the clamp.

Said bars 13 also have vertical arms 23 rising therefrom to engage the ends of a can or container suggested in dotted lines at 24.

Said container or can 24 is also adapted to be seated or rest in arcuate brackets 25 which are fastened to the top of the support 10 by two of the aforesaid rivets 15.

The can or container 24 is representative. It may be a paint container but the invention is equally applicable regardless of the material within the container that is adapted to be agitated or mixed according to the invention. Also, the tensions of the parts of the invention will depend upon the size of the container to be mounted or accommodated.

It will be clear that in use, with the device attached to a spindle 11, that as the latter oscillates, its motion will be imparted to the contents of the container 24 so that the latter will be effectively agitated, vibrated or mixed.

The device may also accommodate smaller sized cans by using a filler frame 26. Such frame is generally of U-shape and resilient with one leg 27, in contact with one of the arms 23 and the other leg having an anchor extending below the same at 28 and detachably engaged in an opening or socket 29 in the support 10, which anchor 28 and socket 29 are preferably square in cross section as shown. When used with the smaller sized cans, one end of the latter abuts the inner or anchored leg of the bracket 26 while the other end abuts the remote arm 23 and rests in the adjacent arcuate bracket 25.

Another form of the invention is disclosed in Figures 5 to 8. This form has a support at 10' of the same material as that at 10 and which may be of any suitable shape. Coacting L-shaped brackets 39 and 40 are used to mount this support on the spindle 11' of a domestic clothes washing machine. Brackets 39 and 40 have horizontal arms 41 and 42 fastened by means of rivets 43 to the support 10'. They also have, respectively, depending clasp or jaw members 44

and 45, respectively, which embrace the spindle 11' and are tightly clamped thereto by a suitable endless clamp 46 similar to that employed at 17 or any equivalent. Since the spindle 11' is rectangular or square in cross section, the jaws 44 and 45 are flat for the most part to conform thereto, jaw 40 preferably being serrated at 47 to better increase the degree of engagement and jaw 44 preferably having retaining flanges 48 at its sides.

The can or container of paint or the like is supported by means similar to those employed in the form of Figure 1 in that I use arcuate brackets 48 and arms 49 to engage the ends of the container, which brackets and arms are fastened together and to the support by one of the rivets 43. In case a container is to be agitated the distance is shorter than the distance between the arms 49, I employ the filler device 26 illustrated in Figures 1 and 3, detachably anchoring the end 28 thereof in a socket 29' in the support.

Attention is called to the fact that the can mounting means 48 and 49 and the can will be agitated while in a position eccentric with respect to the axis of the spindle 11'. This enables a greater throw and more violent agitation to be effected than is true of the form of Figures 1 to 4.

It is clear that various forms may be made of any desired dimensions according to the size of the cans or containers of paint or other material adapted to be agitated or mixed according to the invention.

I claim as my invention:

1. A device of the class described comprising a support, bars fastened thereto having jaws de-

pending below the support in spaced relation and movable one relatively to the other for clamping attachment to a spindle for operation, and means to secure a container to the support including arms engageable with the container and integral with said jaws.

2. A device of the class described comprising a panel-like support, L-shaped brackets secured to opposite faces of said support, said brackets having depending jaws movable one relatively to the other for clamping engagement with a spindle, and means eccentric with respect to said jaws to mount a container on the support for agitation of its contents.

3. A device of the class described comprising a panel-like support, L-shaped brackets secured to faces of said support, said brackets having depending jaws movable one relatively to the other for engagement with a spindle, clamping means surrounding said jaws to attach them rigidly on the spindle, and means to mount a container on the support for agitation of its contents.

4. A device of the class described comprising a panel-like support, L-shaped brackets secured to said support, said brackets having depending jaws spaced from and movable one relatively to the other for engagement with a spindle, clamping means surrounding said jaws operable to clamp them to the spindle, and means to mount a container on the support for agitation of its contents.

5. A device according to claim 3 having marginal flanges along vertical edges of one of the jaws extending toward the other jaw.

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