N. R. THOMPSON.

CONTAINER CONTENTS HANDLING MECHANISM.

APPLICATION FILED APR. 15, 1918.

1,284,816. Patented Nov. 12, 1918.

FIG. 1

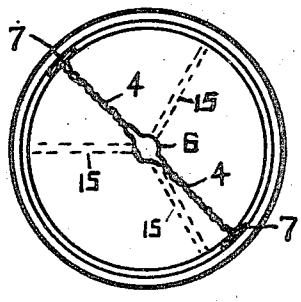


FIG. 2

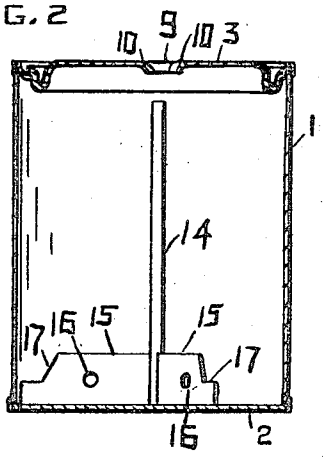


FIG. 3

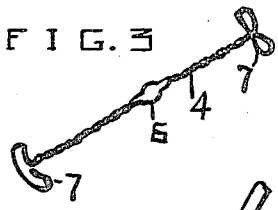


FIG. 4

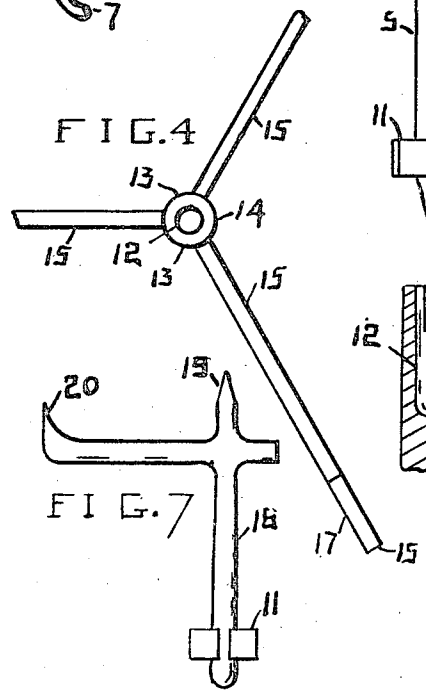


FIG. 5



FIG. 6

FIG. 7

FIG. 8

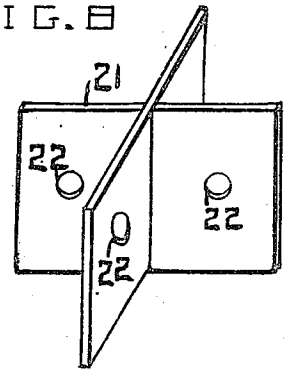
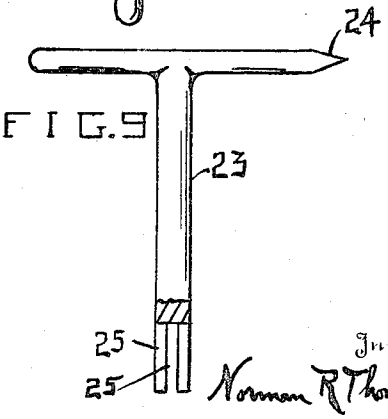


FIG. 9



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CONTAINER-CONTENTS-HANDLING MECHANISM.

1,284,816. Specification of Letters Patent. Patented Nov. 12, 1918.

Application filed April 15, 1918. Serial No. 228,747.

To all whom it may concern:

Be it known that I, NORMAN R. THOMPSON, a subject of the King of Great Britain, residing at Toledo, Lucas county, Ohio, have invented new and useful Container-Contents-Handling Mechanisms, of which the following is a specification.

This invention relates to opening containers and handling the contents thereof, particularly for getting precipitate back into suspension.

This invention has utility when incorporated in connection with cans of paint.

Referring to the drawings:

Figure 1 is a plan view of a slip cover paint can with mechanism of the invention incorporated therewith;

Fig. 2 is a vertical section of the can of Fig. 1;

Fig. 3 is a perspective view of the perforation guide and wipe edge providing device;

Fig. 4 is a fragmentary plan view on an enlarged scale of the stirrer of Fig. 1;

Fig. 5 is a detail view of the key or operating device for the stirrer of Fig. 4;

Fig. 6 is a fragmentary section of the axially disposed stirrer stem seat with which the operating device coacts;

Fig. 7 is a form of operating device having supplemental utility of providing a scribe for opening a soldered or seamed can top;

Fig. 8 is a perspective view of a stemless stirrer; and

Fig. 9 is a detail view, with parts broken away, of an operating device for rotating the stirrer of Fig. 8.

The can or cylindrical container 1 is shown as provided with a flat bottom 2 and a slip friction sealing cover 3. Spanning the top of the can 1 is the member 4 having medially of its extent the guide opening 6 and the terminal arc-shaped downwardly extending can curvature embracing wings 7. With the wings 7 yieldably mounting the member in position by engaging the curvature of the can walls, exteriorly adjacent the top, or by entering the groove of the slip cover 3, the opening 6 is positioned axially of the can 1.

The key or operating device 5 may have its pointed end 8 forced through the cover 3 as the key is guided by the opening 6 in thus locating the perforation 9 in the cover 3. Diametrical cuts 10 may be made from the opening 9 to permit entrance of the wings 11 of the key, after the member 4 is removed. The one desiring to open the can of paint may now thrust the key 5 to have the pointed end 8 enter the seat 12, with the wings 11 in the diametrically disposed slots 13 of the upstanding axially disposed stem 14 of the stirrer. Turning of the key will rotate the stem 14 and its radially disposed wings 15 with openings 16 therethrough. This insures a positive loosening up of any settled out portions of the pigment, and with a little operation brings such mass into suspension without any danger of slopping over of the can contents even with violent operation of the stirrer. The lowered free end portions 17 of the stirrer wings allows for convenient removal of the stirrer from the can, as well as its insertion into the can having an overhanging lip at the open end.

In operation, for use of the fully agitated can contents, the cover may be removed from the can and the member 4 again brought to position to provide an overhanging edge across the can opening away from the edge of the can. This member 4 thus serves as a guide for rotation of the key 5 in continued stirring operations during the use of the paint, while the member 4 provides a wiping edge against which the paint brush may be readily drawn in removing paint from the can, minimizing dripping from the brush and insuring that all wiping off of paint runs back into the pan instead of smearing about the can top and running down the outside of the can to be wasted. This member 5 is readily mounted into wiper providing position, even without the stirrer. As such wiper, it is designed in itself to provide can coaction independently of any requirement for special can configuration. The curvature of the terminal wings 7 of the wiper member 4 complete the feature of its detachable mounting.

In instances of soldered or seamed in closures for cans, or supplemental sealing tin or sheet metal tops, the convenience of the mechanism herein may be readily enhanced by providing the key 18 having the perforation forming pointed end 19 and the radial arm therefrom forming the scribe 20, which may be swung from the end 19 as an axis and operated to cut the sheet metal for opening the can after the stirring. With

the cut out sheet metal removed, the member 4 may be used as stirrer guide and wiping edge.

For a stirrer, wings 21, herein shown as intercepting (Fig. 8), may be provided. For allowing more thorough mixing during rotation, openings 22 may be provided in these wings 21. This stemless stirrer may be rotated by the key 23. This key 23 has the pointed end 24 for forming the perforation axially of the cylindrical container as located by the member 4 having the opening 6. The one thrust of this end 24 completes the perforation for the key 23 which does not have the extension wings of the key 5, but has the notches 25 forming seats to be shoved down over the stirrer wings 21 adjacent the interception point thereof. With this key thus in position, agitation of the paint contents of the can to bring the precipitate back into supension is quickly possible with no danger of slopping any of the can contents out.

The device of this disclosure is one having adaptation for production and use independent of special type of container, and is readily conformable to stock containers over a wide range of sizes and shapes.

What is claimed and it is desired to secure by Letters Patent is:

1. A stirrer apparatus complete in itself in adapting to vessels independently of the vessels, embodying stirrer wings having a central seat, and means for rotating the stirrer wings including a key having coaction with the seat and protruding from such seat in the vessel to beyond the vessel top for access in rotating the key in operating the stirrer wings.

2. A vessel provided with a top opening and configured as a container complete independently of special coaction with a stirrer, and a stirrer therefor embodying wing means disposed for vertical axis rotation in the vessel, the stirrer wing means having a central seat, and a manually operable key for registering with the seat and protruding from such seat in the vessel to beyond the top opening.

3. The combination with a container, of a stirrer therein provided with a central upwardly accessible seat disposed in the container, a key detachably connectible to said stirrer by protruding into the container to engage said seat for rotating the stirrer in the container, and a detachable guide extending transversely of the container and independent of the key for centering the key and through which the key extends from exterior of the container to engage the stirrer seat.

In witness whereof I affix my signature.

NORMAN R. THOMPSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."