

Feb. 20, 1934.

G. A. SMITH ET AL

1,948,401

PAINT MIXER

Filed Aug. 15, 1929

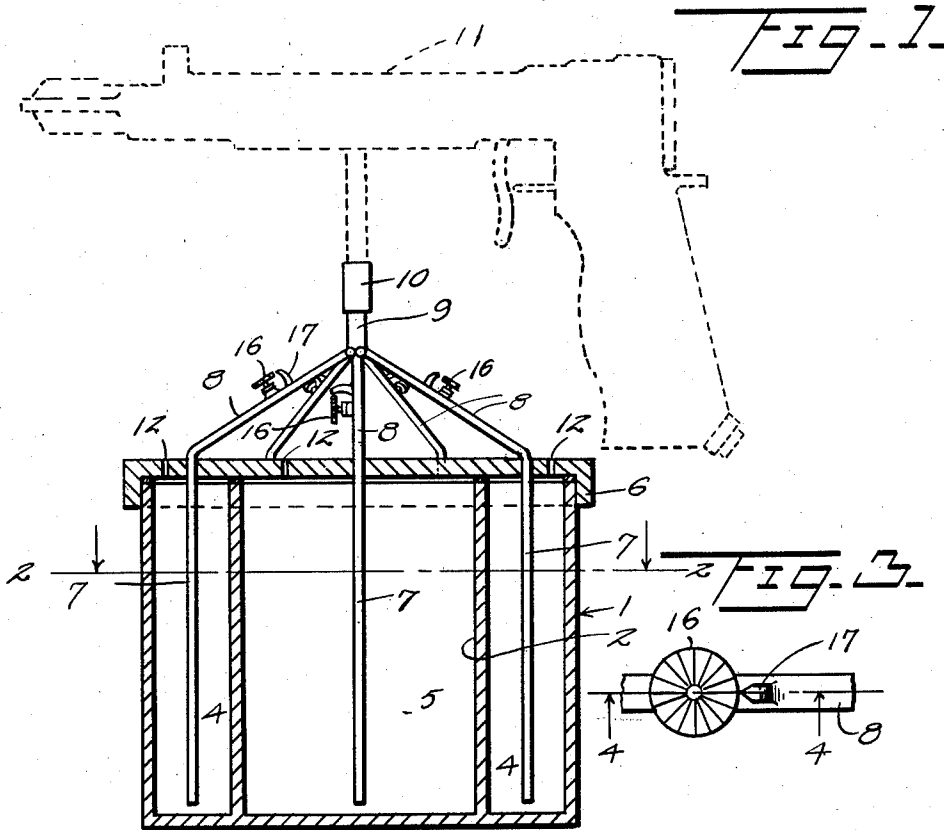


Fig. 2.

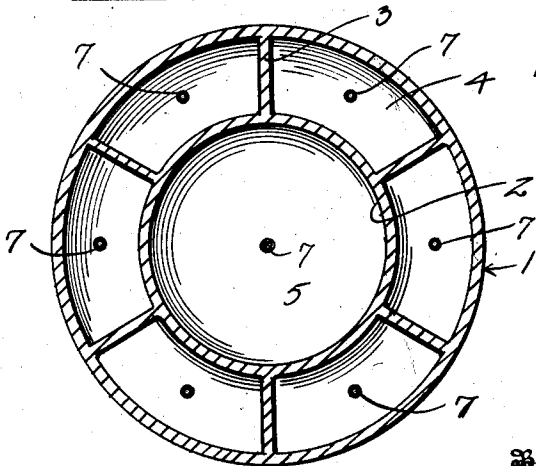


Fig. 4.

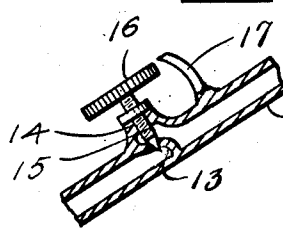
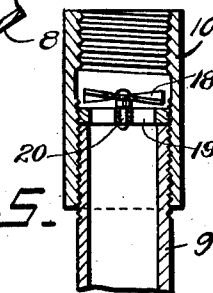


Fig. 5.



Inventor

G. A. Smith
J. F. Foster

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Watson E. Coleman

UNITED STATES PATENT OFFICE

1,948,401

PAINT MIXER

George A. Smith and John F. Foster,
Rawlins, Wyo.

Application August 15, 1929. Serial No. 386,111

3 Claims. (Cl. 91-45)

This invention relates to improvements in paint receptacles designed for use in connection with air brushes or spray guns.

The primary object of the invention is to provide a multiple compartment receptacle from each of which a lead-off tube extends to a common pipe which is adapted to be coupled with the inlet pipe of a spray gun. Each of the tubes is controlled by a valve having a head provided with a graduated top surface which is manipulated in accordance with a fixed pointer to open the valve the required amount.

In using the paint supply receptacle above described a central compartment is provided with white paint and each of the other compartments is provided with a paint of a basic color. Any one of the basic color compartments of the gun can be drawn upon to paint with that color alone or the valves controlling the various tubes can be manipulated to permit a combination of colors to be drawn from the various compartments which combination of colors becomes well mixed before passing through the gun, thus leaving the same with the desired color which a mixture of the selected combination would give. With this outfit a painter, as for example a vehicle body finisher, need have on hand seven or eight different colors of paints and with this stock he can produce a paint of any desired color by the proper manipulation of the valves of the device.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming a part of the present invention with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:—

Figure 1 is a vertical sectional view through the paint receptacle embodying the present invention showing in dotted line a spray gun attached thereto.

Figure 2 is a sectional view taken upon the line 2—2 of Figure 1.

Figure 3 is a plan view of one of the valves.

Figure 4 is a sectional view taken upon the line 4—4 of Figure 3.

Figure 5 is a longitudinal sectional view through the coupling used to join the device to an air gun, showing a mixing blade therein.

Referring more particularly to the drawing

wherein like numerals of reference indicate corresponding parts throughout the several views, the numeral 1 indicates generally the receptacle embodying the present invention, the interior of which is divided into a plurality of compartments, preferably by forming an inner circular wall 2 concentric with the main wall of the vessel and extending partition walls 3 radially of the vessel between the wall 1 and the wall 2. There is thus provided an annular series of chambers 4 and a central chamber 5.

A cover 6 is provided from the underface of which there extends a series of tubes 7 corresponding in number to the number of chambers in the receptacle and each of these tubes extends through the top and upwardly in convergent relation, as indicated at 8 to join a common outlet pipe 9 which terminates in a coupling 10. This coupling 10 is employed to connect the series of tubes with the inlet pipe of a spray gun which is here shown in dotted outline and indicated generally by the numeral 11.

Adjacent each of the tubes 7 there is formed through the cap 6 of the vessel a vent tube which opens into the underlying chamber and thus permits air to enter to prevent creation of a vacuum therein as the paint is drawn therefrom, it of course being understood that the fit between the cap 6 and the top of the vessel being sufficiently tight to prevent escape of the contents in the event that the vessel becomes overturned.

That portion of each of the tubes 7 lying above the cap 6 is provided at a convenient point with an apertured partition wall 13 and upon the outer face of each tube adjacent this wall an apertured boss 14 is provided which has threads formed upon the inner wall thereof to receive the stem of a needle valve 15, the point of this valve extending into the tube and into the apertured partition wall 13, in the manner shown.

Upon the outer end of each needle valve a relatively large flat head 16 is placed, the top surface of which is provided with a series of radial markings which may be numbered or otherwise suitably graduated and adjacent this head the tube carries an upstanding pointer member 17, the top of which terminates in substantially the same plane as the top of the head, in the manner shown.

As previously described, when the present receptacle is in use each of the outer chambers thereof is provided with a paint of a basic color and the central chamber may be provided with black or white paint, as desired. Upon setting the various valves in accordance with a prede-

terminated chart which may be provided with the device to show just how much each valve must be opened with respect to the other valves to obtain a desired combination of paints for a particular color, the attached spray gun may then be operated in the usual manner to obtain the desired paint color.

While we have particularly shown and described a round receptacle it is of course to be understood that we do not wish to be limited to this particular form for it will be readily apparent that a receptacle of any design may be employed without in any manner interfering with or changing the operation of the device.

In order to prevent any streaking of the paint due to an incomplete mixing of the colors employed there is positioned at a suitable point in the outlet pipe 9, an agitator in the form of one or more blade members 18 mounted preferably upon a spider 19 which, in the present case, is shown as being threadably engaged in the coupling 10. This mixing blade is rotatably mounted upon the spider upon a pin 20 so that it will be rotated as the paint passes through the outlet pipe and will thus thoroughly mix the same so that an unstreaked paint will issue from the gun.

Having thus described our invention, what we claim is:—

1. The combination with a spray gun having a fluid inlet pipe, of an attachment removably

secured to said pipe and comprising a plurality of liquid containers, conduits placing the liquid in each container in communication with said pipe, and an independent valve for each conduit allowing the liquid to be discharged therethrough after being opened until the same is manually closed whereby the liquid can be independently and selectively discharged from each container or in various combinations.

2. A spray gun attachment comprising a common outlet pipe, a plurality of containers, a conduit leading from each container to the pipe, and an independent valve for each conduit allowing the liquid to be discharged therethrough after being opened until the same is manually closed whereby the liquid can be independently and selectively discharged from each container or in various combinations.

3. A spray gun attachment comprising a member in the shape of covers, containers removably attached to the covers in the disposition of a circular cluster, a common discharge conduit having branches extending into each of the containers, and an independent valve in each branch allowing liquid to be discharged therethrough after being opened until the same is manually closed.

GEORGE A. SMITH.
JOHN F. FOSTER.

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