July 24, 1962 R. W. RYAN 3,045,873

WALL RECEPTACLE FOR AN AEROSOL BOMB

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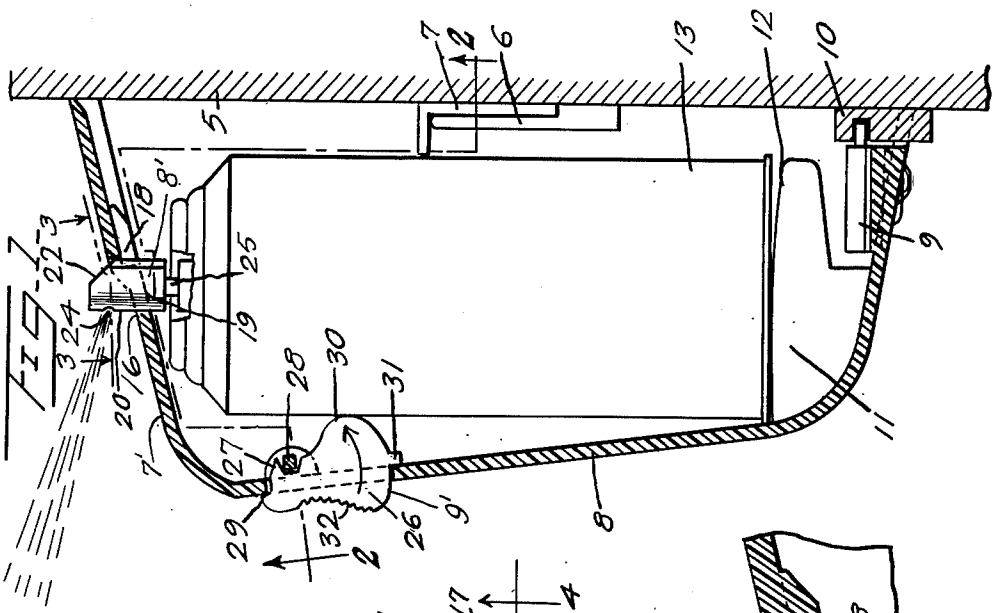


FIG. 1.

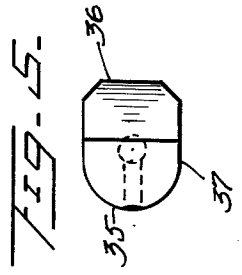


FIG. 5.

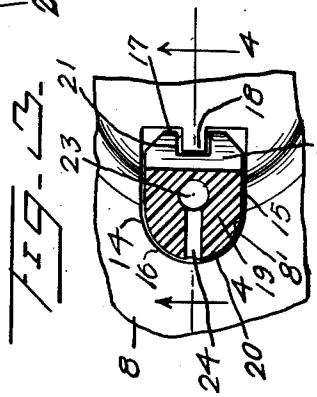


FIG. 3.

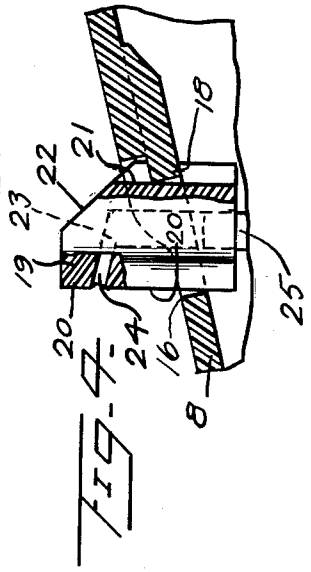


FIG. 4.

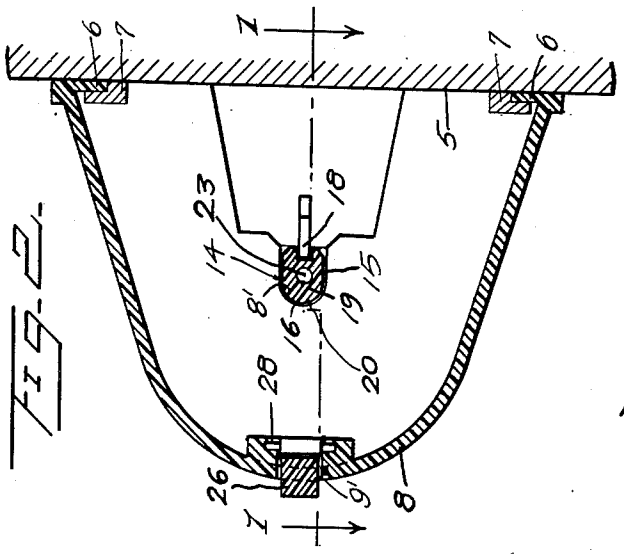


FIG. 2.

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WALL RECEPTACLE FOR AN AEROSOL BOMB

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This invention relates to a combined operating and dispensing nozzle for aerosol bombs, used in spraying fragrance material.

By way of explanation, it might be stated that aerosol bombs used in dispensing fragrance material are provided with nozzles which when pressed laterally, discharge a fine spray of material through a discharge opening located in the front wall of the nozzle.

It frequently happens, unless the attendant exercises the proper precaution in positioning the bomb within the bomb container bracket, the bomb is positioned with the discharge opening facing rearwardly or laterally, resulting in the material dispensed being directed against the bracket supporting wall or into the face of the person controlling the operation of the nozzle.

It is therefore the primary object of the present invention to provide a combined container and bracket for supporting an aerosol bomb which is so constructed and arranged to make it impossible to mount the bomb within the container improperly, and to insure the discharge of the spray being directed forwardly and upwardly away from the face of the operator of the nozzle.

A still further object of the invention is to provide a combined operating and dispensing nozzle which is supported within a supporting cabinet, the container being so constructed that the bomb may be readily and easily positioned when properly inserted within the holder, without the use of tools.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel features and procedures hereinafter described in the claims.

Referring to the drawing:

FIGURE 1 is a longitudinal sectional view through a combined support and cabinet for an aerosol bomb, equipped with a nozzle constructed in accordance with the invention.

FIGURE 2 is a sectional view taken on line 2—2 of FIGURE 1.

FIGURE 3 is a sectional view taken on line 3—3 of FIGURE 1.

FIGURE 4 is a sectional view taken on line 4—4 of FIGURE 3.

FIGURE 5 is a plan view of a modified form of nozzle.

Referring to the drawing in detail, the reference character 5 indicates a supporting surface, which may be a wall, door or the like, on which are arranged brackets 6, which brackets cooperate with the bracket members 7 which are a part of the housing or support for the aerosol bomb, so that the housing or support, which is indicated by the reference character 8 may be readily and easily removed and replaced.

A lock indicated by the reference character 9 is secured within the lower end of the housing or support 8 and cooperates with the keeper 10 in locking the housing or support to the supporting surface, as clearly shown by FIGURE 1 of the drawing.

Mounted within the housing or support 8, is an arm 11 which has its upper surface curved slightly downwardly as at 12 providing a clearance, for the ready insertion of the bomb, which in the present showing is indicated by the reference character 13.

As better shown by FIGURE 1 of the drawing, the upper wall 7' of the housing or support 8, is inclined upwardly and is provided with an opening 14 arranged in a line with the vertical axis of the housing or support, the

opening 14 being formed with substantially straight side walls 15, a curved end edge 16, and an end edge 17 formed with an inwardly extended lug 18.

The nozzle, forming an important feature of the present invention, is indicated generally by the reference character 19 and is formed with straight side walls 8' which closely fit the straight side edges 15 of the opening 14, the nozzle having also a curved edge portion 20 that fits within the curved end edge 16. The nozzle is also formed with a longitudinal groove in the front edge thereof, the groove being indicated by the reference character 21, the groove being designed to accommodate the lug 18 as clearly shown by FIGURES 3 and 4 of the drawing.

The upper end of the nozzle 19 is inclined as at 22, and is provided with a bore 23 disposed axially thereof, the bore terminating in a discharge opening 24 extending at right angles to the bore 23 the bore being arranged within the curved surface of the nozzle, as shown by FIGURE 4 of the drawing, so that the nozzle may be so arranged with respect to the discharge tube 25 of the bomb, that the discharge through the nozzle will be in a forward direction and upwardly, away from the face of the person operating the device.

It will of course be understood that the aerosol bomb is provided with a discharge tube 25 which is flexible and is of the conventional structure so that as it is bent laterally, the valve not shown, will be operated to open the bomb and allow the discharge of the fragrance material in spray-like form, through said nozzle.

The reference character 26 indicates a pivoted actuating finger piece or lever which is mounted within an elongated opening 9' formed in the front inclined wall of the housing or support 8 as shown by FIGURE 1 of the drawing. This pivoted finger piece or actuating bar is of a construction to accurately fit within the opening of the front wall of the housing or support and is provided with a notch 27 that fits over the lug 28 that is a part of the housing or support, thereby providing a pivot for the finger piece or actuating lever.

The finger piece or actuating lever is also formed with a shoulder 29 which is designed to normally engage the outer surface of the inclined wall of the housing or support 8 to limit inward movement of the pivoted finger piece or actuating lever.

The lower portion of the finger piece or actuating lever is enlarged as clearly shown by FIGURE 1 of the drawing presenting a curved inner surface 30 that is so constructed that it normally rests against the front edge of the bomb 13. A lug extends downwardly from the lower edge of the pivoted finger piece or actuating lever and contacts the inner surface of the inclined wall of the housing or support 8, restricting outward movement of the lower or free moving end of the pivoted finger piece or actuating lever 26.

The forward edge of the finger piece is knurled as at 32 providing a roughened surface for the finger to contact in pressing the lever or finger piece inwardly to cause the operation of the nozzle.

In order to properly position the bomb within the nozzle opening of the housing 8, in the form of the invention as shown by FIGURE 3 of the drawing, it is necessary to align the groove 21 with the lug 18, and then force the lower end of the bomb 13 inwardly over the curved surface of the arm 11, whereupon the bomb is properly positioned for the operation of the nozzle, upon inward pressure of the finger piece or actuating lever 26, with the result that the valve is operated and the fragrance material is discharged forwardly and upwardly as is required.

With the form of the invention as shown by FIGURE 5 of the drawing the nozzle is provided with a curved front wall, rear straight wall 36 and side walls 37 which

are also straight. It might be here stated that this type of nozzle is used in a nozzle opening of complementary construction so that it would be impossible to insert the nozzle with the straight edge **36** aligning with the curved edge of the nozzle opening.

From the foregoing it will be seen that due to the location of the groove **21** and the lug **18**, it would be impossible to place the bomb within the housing or support in any way, except as shown by FIGURE 3 of the drawing. If a person should attempt to position the nozzle in the reverse as shown by FIGURE 3, the curved front edge of the nozzle would contact the lug **18** and consequently the bomb could not be inserted within the housing as shown by FIGURE 1.

In view of the foregoing detailed description, it is believed that further description as to the operation and construction of the device is unnecessary for a clear understanding of the invention.

Having thus described the invention what I claim is:

1. In combination, a wall receptacle having an open sided housing, a bracket support for said housing, said housing including a top wall having portions defining a centrally disposed opening therein, a lug on said top wall extending into the opening, an aerosol bomb removably positioned in said housing and having a discharge nozzle thereon positioned in the opening in the top wall of the housing, said discharge nozzle having portions defining a discharge opening in one side thereof and other portions defining a groove on a side opposite the discharge opening, and the lug on said top wall receivable in the groove in said discharge nozzle when the same is positioned in the opening in the top wall.

2. In combination, a wall receptacle having an open sided housing, a bracket support for said housing, said housing including a top wall having portions defining a centrally disposed opening therein, the opposite sides of the opening being in parallel relation, one end of the opening being arcuately curved and a lug on said top wall extending into the opening at the opposite end between the opposite sides thereof, an aerosol bomb removably positioned in said housing and having a discharge nozzle thereon positioned in the opening in the top wall of the housing, said discharge nozzle having parallel opposite side portions and an arcuately curved end portion complementary to the opposite sides and arcuately curved end of the opening in the top wall of said housing, the end portion of said discharge nozzle opposite the arcuately curved end including portions defining a groove longitudinally thereof and in which said lug is disposed when the nozzle is positioned in the opening in said top wall.

3. In combination, a wall receptacle having an open sided housing, a bracket support for said housing, said housing including top, bottom, and front walls, said top wall having portions defining a centrally disposed opening therein, the opposite sides of the opening being in parallel relation, one end of the opening being arcuately curved and a lug on said top wall extending into the opening at the opposite end between the opposite sides thereof, an aerosol bomb removably positioned in said housing and having a tiltable dispensing valve in the outlet opening thereof and a discharge nozzle on the dispensing valve, said discharge nozzle positioned in the opening in the top of said housing and including parallel opposite side portions and an arcuately curved end portion complementary to the opposite sides and arcuately curved end of the opening in the top wall of said housing, the end portion of said discharge nozzle opposite the arcuately curved end including portions defining a groove longitudinally thereof and in which said lug is disposed when the nozzle is positioned in the opening in said top wall to preclude rotative movement thereof, portions of said front wall defining an elongated opening therein adjacent said top wall, a lever pivotally mounted on said front wall and having a portion thereof extending through said opening and another portion in engagement with the aerosol bomb in said housing, and said lever pivotally movable to tilt the aerosol bomb whereby the dispensing valve is opened to allow a discharge of material through said discharge nozzle.

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