

Jan. 20, 1953

A. WEKERLE

2,626,084

TOOTH POWDER DISPENSER

Filed Nov. 20, 1950

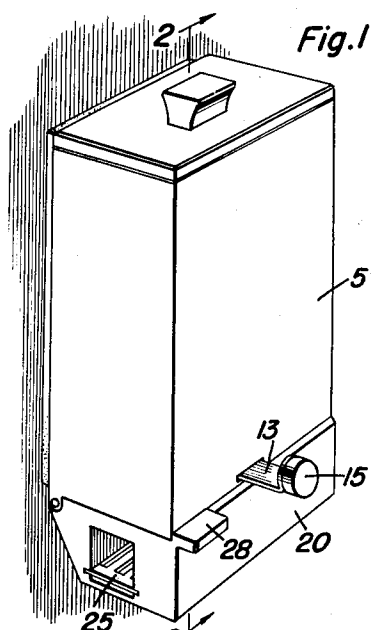


Fig. 1

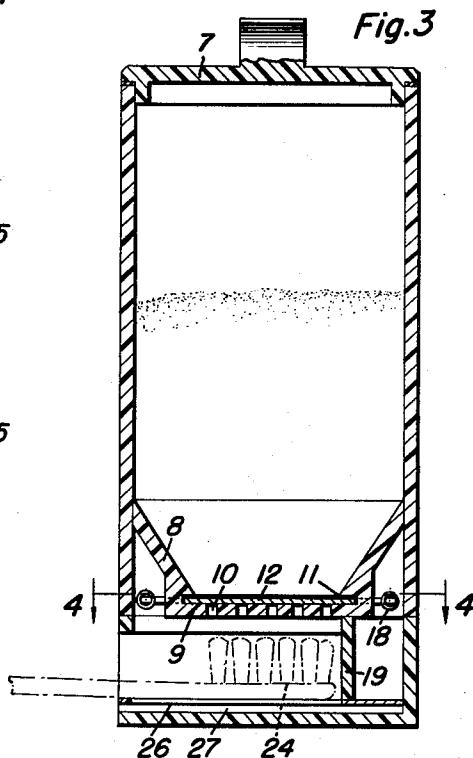


Fig. 3

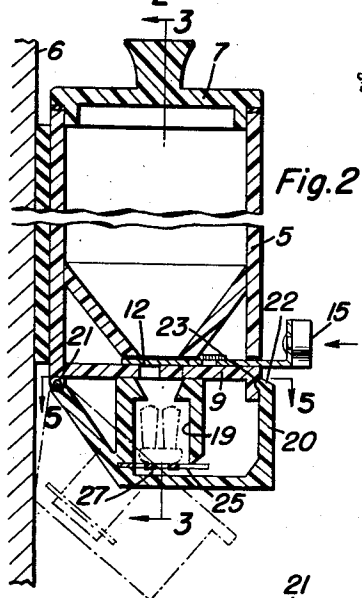


Fig. 2

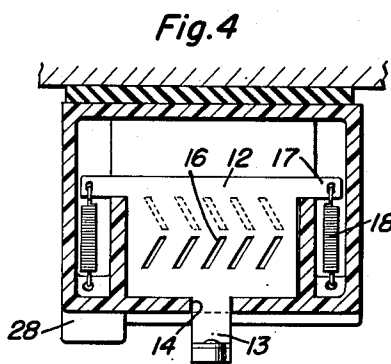


Fig. 4

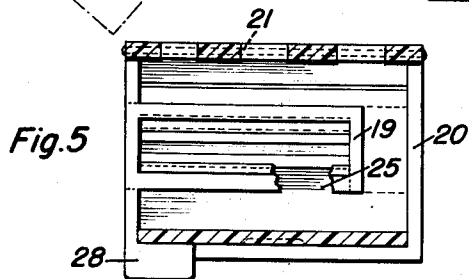


Fig. 5

Adam Wekerle
INVENTOR.

BY *Chance A. O'Brien*
and *Harvey E. Jacobson*
Attorneys

UNITED STATES PATENT OFFICE

2,626,084

TOOTH POWDER DISPENSER

Adam Wekerle, St. Louis, Mo.

Application November 20, 1950, Serial No. 196,587

4 Claims. (Cl. 222-126)

1

2

The present invention relates to new and useful improvements in dispensers for tooth powder and wherein the powder may be dispensed in regulated quantities by means of a plurality of discharge openings in the bottom of the dispenser directly onto the tooth brush.

An important object of the invention is to provide a wall attached container having a plurality of discharge openings in its bottom controlled by a sliding valve also having discharge openings to register with the openings in the bottom of the container.

Another object is to provide the registering discharge opening inclined in a manner whereby the openings will remain in registry to dispense a uniform quantity of powder while permitting a relatively wide range of movement of the valve.

A still further object is to provide a brush receiving chamber hinged to the bottom of the container for placing a tooth brush directly under the discharge opening, the brush container being swung downwardly into an open position to facilitate cleaning thereof.

A still further object is to provide a device of this character of simple and practical construction, which is efficient and reliable in operation, neat and attractive in appearance, relatively inexpensive to manufacture and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view;

Figure 2 is a vertical sectional view taken on line 2-2 of Figure 1;

Figure 3 is a vertical sectional view taken on line 3-3 of Figure 2;

Fig. 4 is a transverse sectional view taken on line 4-4 of Figure 3; and,

Figure 5 is a similar view taken on line 5-5 of Figure 2.

Referring now to the drawings in detail wherein for the purpose of illustration are disclosed a preferred embodiment of the invention the numeral 5 designates a powder container of a plastic or other suitable material and which may be of rectangular or other suitable shape. The back of the container is adhesively or otherwise suitably attached to a wall or other supporting structure 6 and a removable cover 7 is fitted in the top of the container to place a quantity of tooth powder therein.

A chute 8 having sloping walls is supported on the bottom 9 of the container and the bottom 9 is formed with a plurality of spaced parallel inclined discharge openings or slots 10.

The lower side edges of the chute 8 are formed with guide panels 11 in which the side edges of a sliding valve 12 are engaged, the valve having a handle 13 projecting outwardly at the front of the container through an opening 14 therein and a push button 15 is secured in a vertically edgewise position to the outer end of the handle 13.

The valve 12 is also formed with a plurality of spaced apart parallel discharge openings or slots 16 which are adapted to register with the slots 10 and inclined oppositely with respect thereto so that following an initial opening or inward movement of the valve 12 the discharge openings or slots will register and remain in registry to provide discharge openings which remain uniform during a continued opening or inward movement of the valve. The discharge slots 10 and 16 thus remain in registry during a relatively wide range of movement of the valve to dispense a uniform volume of powder during the entire movement of the valve.

The side edges of the valve are formed with outwardly projecting tongues 17 to which coil springs 18 are attached to pull the valve forwardly into its closed position and with the discharge openings 10 and 16 out of registry.

A substantially rectangular shaped chamber 19 is formed at the inside of a cover 20 which is hinged at its rear edge to the lower edge of the rear wall of the container 5 by a hinge pin 21 to swing the lower cover 20 downwardly into an open position. The lower cover 20 is held in a closed position by an inwardly projecting lip 22 at the front edge of the cover adapted to snap into a recess 23 at the lower portion of the front wall of the container.

The chamber 19 is open at its top to register with the discharge openings 10 of the container and the chamber 19 is also open at one end to receive a tooth brush 24 supported on a rack 25 in the bottom of the chamber. The rack 25 is of grill construction to provide opening 26 by means of which excess powder will drop into a collecting chamber 27 under chamber 19. The front edge of lower cover 20 is formed with a finger gripping tongue 28 to facilitate opening and closing thereof.

In the operation of the device, a tooth brush 24 is inserted in the open end of chamber 19 under bottom 9 of the container 5 and valve 12 is pushed rearwardly by push button 15. Slots 16

3

of the valve will then register with slots 10 in bottom 9 to provide dispensing openings which remain constant during the movement of the valve to thus discharge a uniform amount of powder onto the brush. Springs 18 close the valve 12 when push button 15 is released.

Excess powder falls into the chamber 27 and may be removed by swinging lower cover 20 downwardly into the position shown by dotted lines in Figure 2 and the interior of cover 20 may then be cleaned.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A tooth powder dispenser comprising a container having a discharge opening in its bottom, valve means for the opening, a hinged member at the bottom of the container, and a chamber in said member spaced from the bottom thereof and having an open top held in registry with the discharge opening and also having an open end adapted to receive a tooth brush for supporting in the chamber under the discharge opening, said chamber having a grilled bottom for the passage of excess powder therethrough to the bottom of said hinged member.

2. A tooth powder dispenser comprising a container having a discharge opening in its bottom, valve means for the opening, a hinged member at the bottom of the container normally covering said discharge opening, said member having a chamber provided with an open top registering with the discharge opening and an open end communicating with said chamber adapted to receive a tooth brush, and a rack in the chamber above its bottom supporting the tooth brush under the discharge opening and providing a collecting chamber under the rack for excess powder dispensed from the container.

4

3. A tooth powder dispenser comprising a container having a discharge slot in its bottom, and a sliding valve supported at the bottom of the container and also having a discharge slot in its bottom adapted to register with the first named slot, said slots being inclined from the path of movement of the valve and inclined oppositely with respect to each other to provide a constant discharge port during entire range of opening and closing movement of the valve, a hinged member at the bottom of the container and a chamber in said member having an open top held in registry with the discharge opening, said hinged member having an open end communicating with said chamber to receive a tooth brush in the chamber under the discharge opening.

4. A tooth powder dispenser comprising a container having a discharge slot in its bottom, and a sliding valve supported at the bottom of the container and also having a discharge slot in its bottom adapted to register with the first named slot, said slots being inclined from the path of movement of the valve and crossed one with the other to provide a constant discharge port during entire range of opening and closing movement of the valve, a hinged member at the bottom of the container normally covering said discharge slot, an open topped tooth brush holding chamber disposed in spaced relation to the bottom of said hinged member in registry with said discharge slot, said chamber having a grilled bottom whereby excess powder may pass through the chamber to the bottom of the hinged member.

ADAM WEKERLE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
117,718	Arey	Aug. 8, 1871
873,497	Buell	Dec. 10, 1907
934,182	Jopling	Sept. 14, 1909
2,389,683	Page	Nov. 27, 1945
2,552,817	Ross	May 15, 1951

FOREIGN PATENTS

Number	Country	Date
467,174	Great Britain	June 9, 1937
819,294	France	July 5, 1937