(No Model.)

W. C. WALTER.

POWDER BOX.

No. 329,787. Patented Nov. 3, 1885.

Fig. 1.

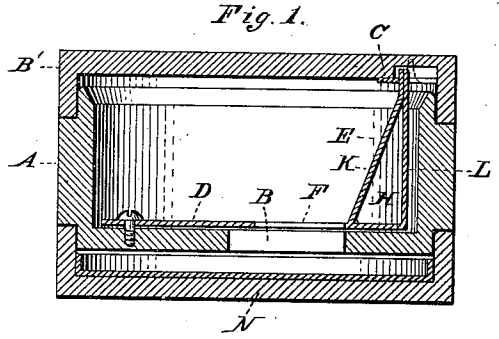


Fig. 2.

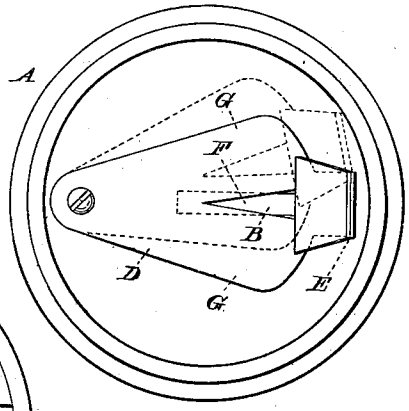


Fig. 4.

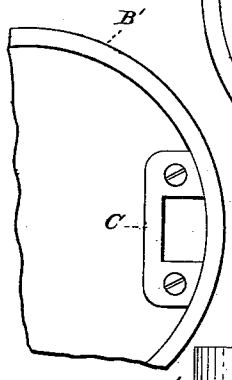


Fig. 5.

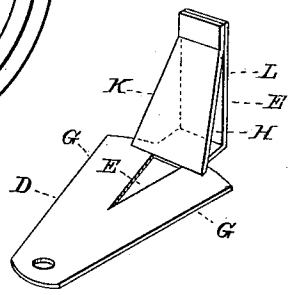
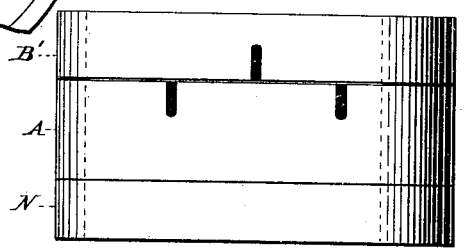


Fig. 3.



WITNESSES

Villette Anderson.
Philip C. Masi.

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his ATTORNEYS

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UNITED STATES PATENT OFFICE.

WILLIE C. WALTER, OF RICHMOND, VIRGINIA, ASSIGNOR OF TWO-THIRDS TO GEORGE B. McADAMS, OF SAME PLACE.

POWDER-BOX.

SPECIFICATION forming part of Letters Patent No. 329,787, dated November 3, 1885.

Application filed December 4, 1884. Serial No. 149,477. (No model.)

To all whom it may concern:

Be it known that I, WILLIE C. WALTER, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Powder-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical transverse section. Fig. 2 is a plan view, top removed. Fig. 3 is a side view. Fig. 4 is a detail of inside of-cover. Fig. 5 is a detail showing slide.

This invention has relation to boxes for delivering tooth-powder to brushes and for other purposes; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, the letter A designates a box of ordinary character, which is provided with a slot or opening, B, in its bottom.

B′ is the cover of the box, having a small recess or catch device, C, near its rim on one side.

D is the vibratory valve, which is entirely inclosed and hidden in the box. It is pivoted to the bottom of the box, and lies flat against it on the inside of the box. This valve is usually made of sheet metal, and is provided with an arm, E, which extends upward near the side of the box to engage the recess or catch C of the cover. In order to give the valve a long vibration approaching parallelism, it is preferred to pivot the valve near the side of the box, opposite to that side on which the arm of the valve works; and in order to provide means for moving the powder toward the discharge-opening and to prevent it from rolling up over the discharge-aperture the valve is preferably made with an opening, F, between lateral portions G of said valve. The arm E is usually made with a transverse passage, H, between branches K and L, so that the powder may be moved and thoroughly loosened at the point of discharge to prevent rolling, and thereby facilitating the passage of the powder through the discharge-opening. When the valve is pivoted at the side of the box, its radial length is greater than that of the box, and its arc of vibration is greater than the curvature of the box-wall, and in its movements it tends to cut into the powder on each side and to prevent it from rolling up at the limits of the path of the vibratory arm.

The box may be provided with marks or characters, as shown at *a* in Fig. 3, and the cover provided with a similar mark. These marks are designed to indicate when the valve is open and closed, respectively—as, for instance, when the cover has been turned so as to have its mark coincide with either of those on the box, the valve is in an open position, and when moved between the said marks the valve is closed.

N represents a false bottom, which may be applied under the main bottom of the box to protect the discharge-opening, as well as to receive powder for the brush; but the powder may be applied directly from the box to the brush without difficulty. When the cover is turned on the box, its engagement with the interior valve causes a movement of the latter within the box. In this construction the only opening in the box is the discharge-aperture in the bottom, so that there is no way for the powder to escape except by the operation of the discharging device.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the box having a discharge-opening in its bottom, of the vibratory valve pivoted to the bottom of the box and having an upwardly-extending arm, and the cover having a catch device adapted to engage said arm, substantially as specified.

2. The combination, with a box having a discharge-opening in its bottom and a movable cover, of a vibratory valve pivoted to the box-bottom, engaging the cover and having greater radial length than that of the box, substantially as specified.

3. The combination, with the box having an

opening in its bottom and a removable cover, of the valve pivoted to said bottom and having an upwardly-extending arm provided with a transverse passage, substantially as specified.

4. The combination, with a box having a discharge-opening and a movable cover, of an interior valve entirely closed and hidden in the box and operated by the movable cover, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIE C. WALTER.

Witnesses:
PHILIP C. MASI,
M. P. CALLAN.