No. 887,851. PATENTED MAY 19, 1908.

G. W. ROWE.

SIFTER BOX.

APPLICATION FILED SEPT. 27, 1906.

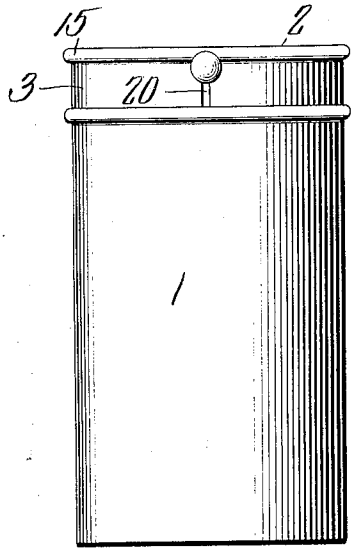


Fig. I.

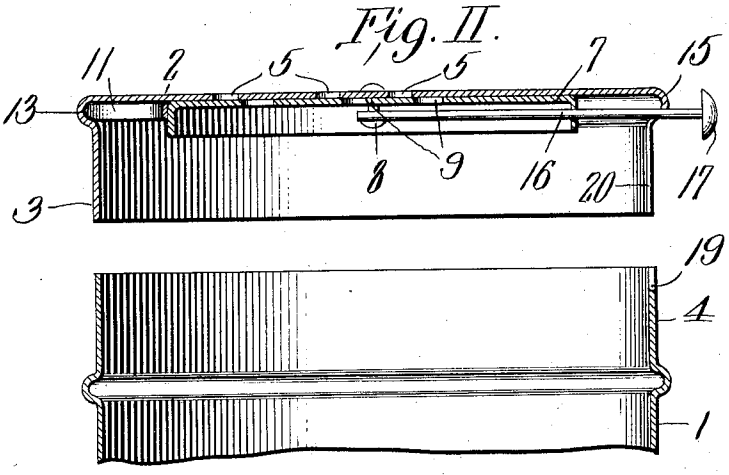


Fig. II.

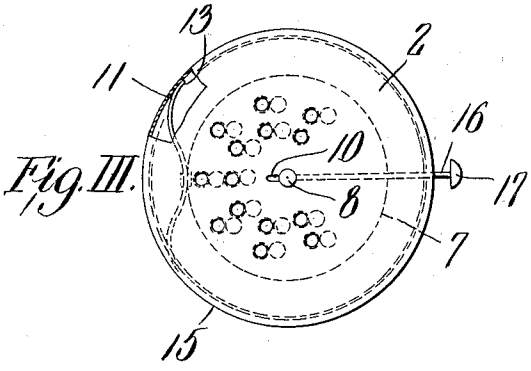


Fig. III.

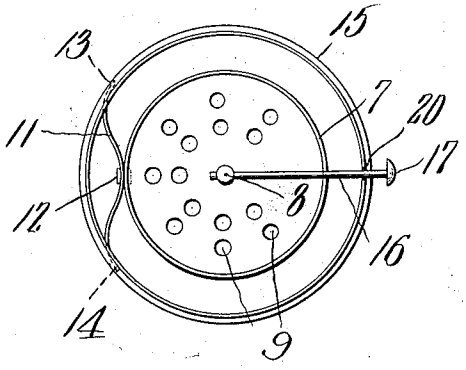


Fig. IV.

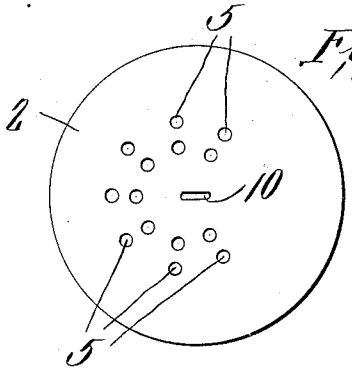


Fig. V.

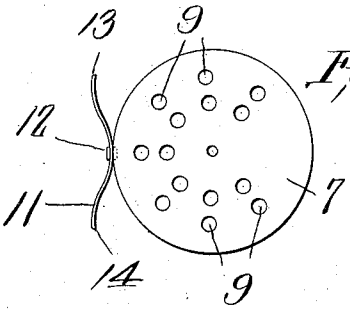


Fig. VI.

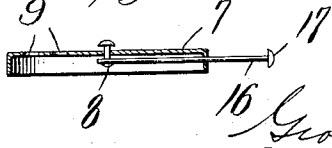


Fig. VII.

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. ROWE, OF HAMPTON, VIRGINIA.

SIFTER-BOX.

No. 887,851. Specification of Letters Patent. Patented May 19, 1908.

Application filed September 27, 1906. Serial No. 336,453.

To all whom it may concern:

Be it known that I, GEORGE W. ROWE, of Hampton, in the county of Elizabeth City, State of Virginia, have invented certain new and useful Improvements in Sifter-Boxes, of which the following is a specification.

My invention relates to containers for granular or pulverulent substances generally, and has for its object the provision of means for normally confining the contents of the receptacle within it and of discharging the contents therefrom, at will.

My device is adapted, for culinary and other uses, to contain salt, pepper or other powdery substances, and provides means for holding the contents securely in place, or for liberating them by sifting, through a number of perforations provided, as usual, for that purpose.

In the accompanying drawing, which constitutes a part of this application, Figure I is a side elevation of my invention, in one form of embodiment, complete. Fig. II is a diametrical, vertical section of the subject matter of Fig. I. Fig. III is a top plan view of the discharge end of the box, showing in full lines the apertures therein closed, and in dotted lines, the same open. Fig. IV is an inside view of the subject matter of Fig. III. Fig. V is an inside view of the discharge end or cover of the box, with the discharge-controlling-plate removed. Fig. VI is a view of the flat side of the discharge-plate, detached. Fig. VII is a side elevation of the push-rod assembled with its discharge-plate, but with the discharge end of the box or cover removed.

Referring to the numerals on the drawing, 1 indicates an ordinary cylindrical box, presented by way of example of any container of any preferred shape and material. This container is provided with a perforated discharge end 2, which, in the form of embodiment illustrated, preferably consists of a detachable cover, whose skirt 3 telescopes upon the end 4 of the box 1. In this form of embodiment frictional engagement between the members 3 and 4 is relied upon to secure the cover to the box, but any preferred method of uniting the cover and the box, if the cover be made separable from the box, may be employed. The cover 2 is preferably provided with a series of perforations 5, which may be disposed in any preferred form or order of arrangement.

Fitting snugly against the inner face of the cover 2, I provide a discharge-plate 7, which is held to place as by a rivet 8. The discharge-plate 7 is so constructed with reference to the perforations 5 in the cover as by its reciprocatory movement to alternately cover and uncover the aperture 5 in the cover. For this purpose, it may be provided with a series of apertures 9, preferably a little larger in diameter than the apertures 5, but corresponding to the apertures 5 in their relative disposition; but it is obvious that the apertures 9 may be widely modified in shape, provided only that the form of the discharge-plate be such as may adapt it to the function of covering and uncovering the apertures 5 in the cover through the reciprocatory movement of the discharge-plate. The reciprocatory movement of the discharge-plate with reference to the cover is conveniently provided for by the employment of a slot 10 in the cover, through which the rivet 8 passes.

The discharge-plate 7 is normally but yieldingly held by suitable means for the purpose in the position to close the apertures 5. The means which I prefer to employ is a bow-spring 11, which may lie snugly against the inside of the cover 2 adjacent to an edge of the discharge-plate. The bow-spring is preferred, chiefly, because it lies unobstructively out of the way, occupies no considerable space, and is not liable to become clogged by the contents of the box, whatever they may be. The spring is preferably secured, as indicated at 12, to the discharge-slide 7 in diametrical alinement with the slot 10, its ends 13 and 14 being preferably movably secured by any suitable means to the cover 2, preferably within a bead 15 formed between the cover proper and its skirt 3.

Opposite to the point of connection 12 and in alinement with it and with the slot 10, I provide means of actuating the discharge-plate against the force of its spring, said means preferably consisting of a rod 16, secured to the rivet 8 and projecting through the side wall of the cover of the box where it terminates in a push button 17. For the accommodation of the rod 16, if a detachable cover be employed in connection with the box, suitable recesses 19 and 20 may be provided in the box and the cover, respectively, to accommodate the rod and to afford a suit-

able bearing support for it adjacent to the push button 17.

The operation of my device may be described as follows: The parts being assembled, as shown, for example, in Fig. I, the discharge-plate 7 is kept driven by the force of its spring 11 in the direction of the push button 17, thereby perfectly closing the apertures 5 in the cover 2. In this, which is its normal position, the contents of the box are securely confined within it. Whenever the operator wishes to discharge a portion of the contents of the box, it is necessary only to press the push button 17 to its limit of movement, said limit of movement being predetermined to that position in which the apertures 5 and 9 respectively will register with each other. Thereupon, by inverting the box its contents may be sifted out through the apertures 5 after the ordinary manner of manipulating a pepper box or salt shaker.

What I claim is:

1. The combination with a box provided with a perforated portion and with a bead, of a discharge-plate adapted to cover and uncover said perforations, a bow-spring secured to an edge of the discharge-plate, and having its ends disposed in said bead, and means upon the discharge-plate, operative from the outside of the box, for actuating said discharge-plate in opposition to the force of the spring.

2. The combination with a box and its perforated cover, of a discharge-plate adapted to cover and uncover said perforations, a slot in the cover, a rivet passing through said slot and through the plate, a rod connected with said rivet, a spring adapted to actuate the plate to its limit of movement defined by engagement of said rivet with one end of said slot, and a push button on the outside of the cover adapted to actuate the plate to drive it to the other end of its movement defined by engagement between the rivet and the other end of the slot.

3. In a sifter box of the kind described, the combination with a perforated cover, spring-actuated plate, rod connected with the plate, and push button upon the outside of the cover, of corresponding recesses in the box and cover, respectively, adapted to afford a bearing for said rod, substantially as and for the purpose specified.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEORGE W. ROWE.

Witnesses:

H. D. M. HOWARD,

C. MONTIETH GILPIN.