

UNITED STATES PATENT OFFICE

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RECEPTACLE FOR GRANULAR OR PULVERULENT MATERIALS.

No. 887,760.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ARTHUR J. BLOOD, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Receptacles for Granular or Pulverulent Materials; and I do hereby 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.

The present invention relates to receptacles for containing and dispensing granular or pulverulent material, and more particularly to an improved so-called "sifting top" for such a receptacle.

The object of the present invention is to produce a simple and effective top or closure provided with a revolving disk and to so construct the disk that it may be readily turned for the purpose of opening and closing the receptacle without liability of injury to the fingers of the operator.

Further objects of the invention will appear in connection with the following description of its construction and mode of operation.

To the above ends the present invention consists of the improved receptacle which will be hereinafter described and claimed.

The present invention is illustrated in the accompanying drawing in which:—

Figure 1 shows a broken vertical sectional view, the line of cut being substantially parallel to the operating bar or handle. Fig. 2 shows a top plan view with portions of the revolving disk broken away to show the underlying construction. Fig. 3 shows a fragmental sectional view taken on the line $x-x$, Fig. 2. Fig. 4 shows a top plan view of a modified form. Fig. 5 shows a fragmental sectional view taken on the line $y-y$, Fig. 4. Fig. 6 shows a fragmental sectional view taken on the line $z-z$, Fig. 4.

Similar reference characters will be employed throughout the specification and drawing to designate corresponding parts.

In the drawing, 1 represents a receptacle, preferably cylindrical in form and made of tin or any other preferred material. The receptacle 1 is closed at the bottom and open at the top and the top opening is closed, after the receptacle has been filled, by the top 2, which is preferably struck up from sheet

metal and is provided with the vertical wall 3, which may be secured in any suitable manner, as by turning over the edge 4 and soldering it to the upper edge of the receptacle. By this construction it will be noted that the top 2 is depressed below the upper edge of the receptacle, leaving a chamber 5. The top 2 is provided with openings whereby the contents of the receptacle may be shaken therefrom and I preferably provide the top 2 with three different forms of opening, the circular opening 6, shown in dotted lines in Fig. 2, the group of small perforations 7 (see Fig. 2), and a group of slots 8 (see Fig. 2), these openings being arranged preferably at equal distances from each other and near the periphery of the receptacle.

It will be of course understood that when a large mass of material is desired at one discharge it will be permitted to escape from the opening 6. When less material is desired, it will be permitted to escape from the openings 8, and the openings 7 will of course be used when still less material is desired.

Coöperating with the openings 6, 7 and 8 is a valve disk 9, which is provided with an opening 10 and this opening 10 is arranged to be brought into register with one or the other of the openings 6, 7 and 8 by turning the disk 9. The disk 9 is formed of sheet metal and is provided diametrically across its center with a cross bar 11, standing vertically at right angles to the disk. The disk 9 and the cross bar 11 are preferably formed integral with each other and this is conveniently done by stamping the disk 9 from sheet metal substantially in the form of an ellipse, the central portions of which or the excess of the material sufficient to produce a circle, will be struck up and brought into close contact, thus forming the cross bar 11 and producing from the elliptical blank the circular disk 9, having the cross bar 11.

The disk 9 is pivotally connected to the top 2 and this may be secured by cutting from the walls of the cross bar 11 at its center the flaps or tongues 12, which are turned down and overlap each other upon the upper surface of the disk 9, as shown clearly in Figs. 1 and 2, and through these overlapping tongues is passed a rivet 13, which secures the revolving disk 9 to the top 2. In order that the disk 9 may be tightly held in contact with the upper surface of the top 2, the lower end of the rivet is passed through a

spring washer 14, the tension of which is sufficient to draw the disk 9 in close contact with the upper surface of the top 2.

If desired, in order to form a close union and to provide for the more effectual sealing of the device, the top 2 may be provided with a circular depression 15 and the disk 9 with a corresponding circular rib 16 arranged to take into the depression 15. This construction forms a guide and support for the turning of the disk 9.

It will be observed by the foregoing construction that the revolving disk 9 is provided with a strong and rigid cross bar which may be grasped by the fingers of the operator and readily turned for the purpose of moving the opening 10 into register with any one of the openings 6, 7 and 8, and this without liability of injuring the finger nails or fingers of the operator; and it will be further observed that by depressing the top 2 above the upper edge of the receptacle the cross bar 11 will be seated in a recess and thereby protected from injury.

If desired, the top of the receptacle after it has been filled and the top 2 and disk 9 secured therein, may be covered by a removable cap or cover (not shown) for shipment.

In Fig. 4 there is shown a modified form of the device in which the revolving disk 9 is provided with a cross bar 11 formed in the manner heretofore described, and is likewise provided with overlapping tongues 17 and adjacent to the tongues 17 the cross bar is cut out to form the wings 18 which are turned outwardly at right angles to the cross bar 11 and at their bases may be soldered to the upper surface of the disk 9, thus forming strengthening ribs or braces, all as clearly shown in Figs. 4, 5 and 6.

Having described my invention I claim as new and desire to protect by Letters Patent of the United States:—

1. A receptacle for granular or pulverulent material having a fixed top with an opening therein, a revolving disk pivotally mounted

thereon and provided with an opening and having a cross bar extending across the diameter of the disk and at right angles to the surface thereof, said cross bar and disk being formed from a substantially elliptical blank, substantially as described.

2. A receptacle for granular or pulverulent material having a fixed top with an opening therein, a revolving disk pivotally mounted thereon and provided with an opening and having a cross bar extending across the diameter of the disk and at right angles to the surface thereof, said cross bar and disk being formed of sheet metal struck up and compressed along one diameter, substantially as described.

3. A receptacle for granular or pulverulent material having a fixed top, a revolving disk struck up at its center along one diameter to form a cross bar, a tongue cut from the cross bar at its center and a rivet passed through the tongue and the fixed top, substantially as described.

4. A receptacle for granular or pulverulent material having a fixed top, a revolving disk struck up at its center to form a cross bar, overlapping tongues cut from the cross bar at its center and a rivet passed through the overlapping tongues and the fixed top, substantially as described.

5. A receptacle for granular or pulverulent material having a fixed top, a revolving disk struck up at its center to form a cross bar, overlapping tongues cut from the cross bar at its center, a rivet passed through the overlapping tongues and the fixed top and strengthening braces cut from the cross bar and turned outwardly therefrom and secured at their lower ends to the disk, substantially as described.

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

ARTHUR J. BLOOD.

Witnesses:

S. HART ANDERSON,
MARY AVENIL KENNEY.