June 2, 1925. 1,540,122

H. W. HARDER

PREDETERMINED BULK DISCHARGING COVER

Filed June 28, 1923

Fig. 1

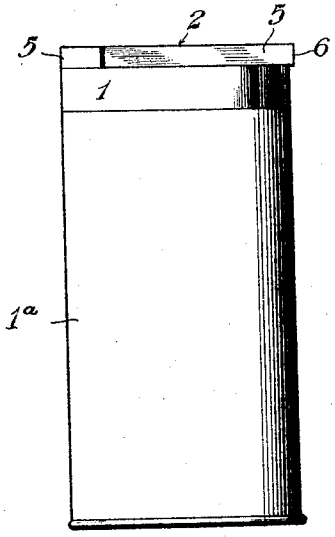


Fig. 2

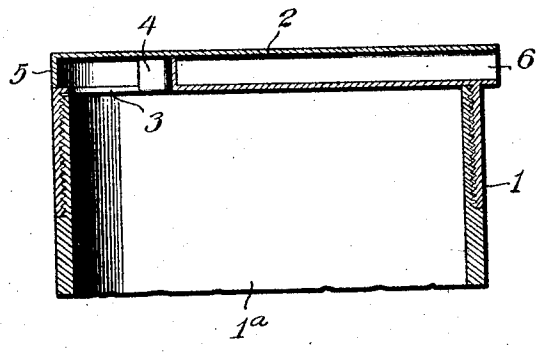


Fig. 4

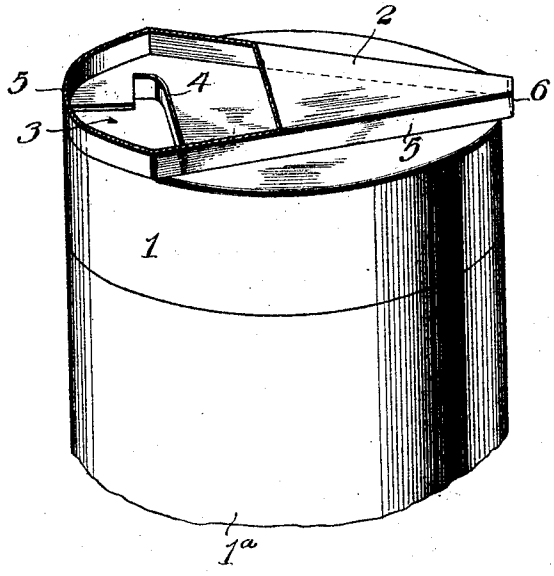
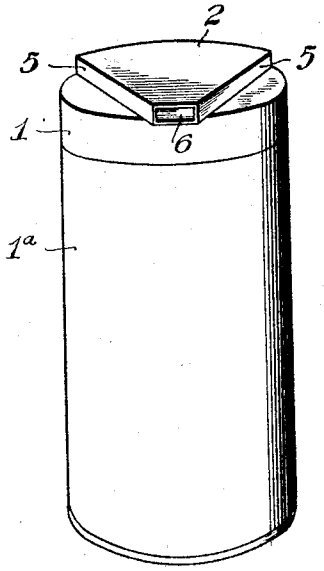


Fig. 3.



Inventor
Howard W. Harder

By Lewis A. Clarkson
Attorney

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UNITED STATES PATENT OFFICE.

HOWARD W. HARDER, OF INDEPENDENCE, MISSOURI.

PREDETERMINED BULK DISCHARGING COVER.

Application filed June 28, 1923. Serial No. 648,297.

To all whom it may concern:

Be it known that I, HOWARD W. HARDER, a citizen of the United States, residing at Independence, in the county of Jackson, State of Missouri, have invented certain new and useful Improvements in Predetermined Bulk Discharging Covers, of which the following is a specification.

It is very advantageous, as well as convenient and economical, to provide means for discharging from containers in predetermined quantities granular or powdered substances such as salt, tooth powder, etc., and it is the object of my invention to provide a cover for containers whereby a predetermined amount of material may be discharged from a container at one time; and I have so constructed this cover that the contents of the container may be discharged through the cover in a natural movement of the hand; and with this and other objects in view my invention consists of a part and combination of parts as will hereinafter be more fully set forth:

In the drawings:

Figure 1 is a side elevation of a container embodying my invention.

Figure 2 is an enlarged detail vertical sectional view through the ports of the container.

Figure 3 is a front elevation of Figure 1.

Figure 4 is an enlarged detail perspective view with the cover on the ports broken away.

The reference numeral 1^a designates a container of any suitable construction to which I secure, in any suitable manner, my improved cover, said cover comprising a cap 1 of a shape and perimeter adapted to fit on the container for which it is made, said cover comprising a preferably flat plate. 3 is an opening through said cover 1 near its perimeter, the inner edge of said opening being provided with a bulkhead or flange 4, said bulkhead or flange being slightly curved toward the perimeter of the cover 1 as clearly shown in the several views of the drawings.

Mounted upon this cover is a discharge member 2, preferably wedge shape, and provided with an exit or discharge port 6 therefrom, said discharge member having depending flanges 5, one of these flanges 5 being shaped to coincide with the perimeter of the cover 1.

The flanges 5 space the top of the port 2 from the top of the cover 1 thereby forming a channel or port through which the contents of the container 1^a may pass. This discharge member 2 is secured to the cover 1 by any suitable means, such as solder. The flange 4 may be struck up from the cover 1.

It will be noted from the drawings that the vertical height of the flange 4 is such that when the discharge member 2 is secured to the cover the top of the flange 4 is in contact with, and preferably sealed to, the under face of the member 2 whereby the flow of the material from the container through the port 3 is directed to the restricted throat formed between the curved end of the flange 4 and the curved flange 5 of the member 2.

In operation, the container is grasped with the left hand in such a manner that the open end of the port 6 is toward the right hand, in which is held the tooth brush; it is then tipped backward until the top of the container 1^a is slightly below the horizontal position; the top of the container is then swung back to the vertical position and on over toward a horizontal position, when it is brought close to the tooth brush and a predetermined amount of the contents of the container is distributed on the bristles of the brush. The size of the charge is regulated definitely by the position of the device with respect to the container as it is being brought back to the vertical or upright position, namely, tipping the top of the container slightly away from the operator will increase the charge and vice versa. As the container is tipped backward the contents of the container will flow through the member 3 and the said restricted throat into the discharge port 2 and when the container is brought to the vertical position the contents of the container cease to flow through the port 3, and that portion of the contents which has passed into the member 2 only will be discharged when the container is tilted toward the tooth brush.

It is obvious that changes may be made in the details of construction without departing from the scope of the appended claims.

What I claim is:

1. In a predetermined bulk discharging cover, a cap adapted to be secured to a container, an opening from said container through said cap near one side of the cap, a discharge member mounted on said cap and open at one end, and a flange extending par-

tially around the perimeter of said cap opening to direct the discharge of contents of the container directly into said discharge member transversely of the longitudinal axis of said member.

2. In a device of the character described, a cap adapted to be secured to a container, an opening through said cap, communicating with the interior of said container, and located near one side of the cap, an elongated discharging member mounted on said cap, open at one end and in communication with cap opening at its other end, and a flange extending partially around the perimeter of said cap opening cooperating with the opening in said cap to discharge the contents of the container directly into the elongated discharging member transversely of the longitudinal axis of said member.

3. In a device of the character described, a cap adapted to be secured to a container, an opening through said cap near one side of the cap communicating with the interior of said containers, an elongated discharge member mounted on said cap open at one end communicating with the opening in the cap, and a bulk head extending partially around the perimeter of the said cap opening and transversely of the elongated discharging member.

4. In a device of the character described, a cap adapted to be secured to a container, an opening through said cap near one side of the cap, an elongated discharging member mounted on said cap in open communication with the said cap opening and having a restricted opening at its outer end, a flange extending partially around the perimeter on the said cap opening and transversely of the said elongated discharging member.

5. In a device of the character described, a cap adapted to be secured to a container, an opening through said cap near its perimeter, an elongated discharging member mounted on said cap in open communication with the said cap opening and a flange extending partially around the perimeter of the said cap opening and transversely of the elongated discharging member.

In testimony whereof I affix my signature.

HOWARD W. HARDER.