

G. T. HACKLEY, DEC'D.
S. C. HACKLEY, ADMINISTRATRIX,
CONTAINER.

APPLICATION FILED NOV. 30, 1914.

1,244,324.

Patented Oct. 23, 1917.

Fig. 1

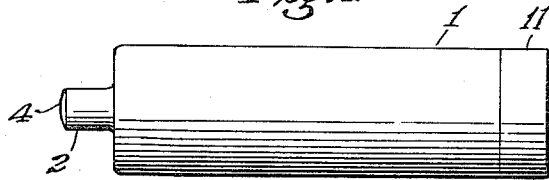


Fig. 2

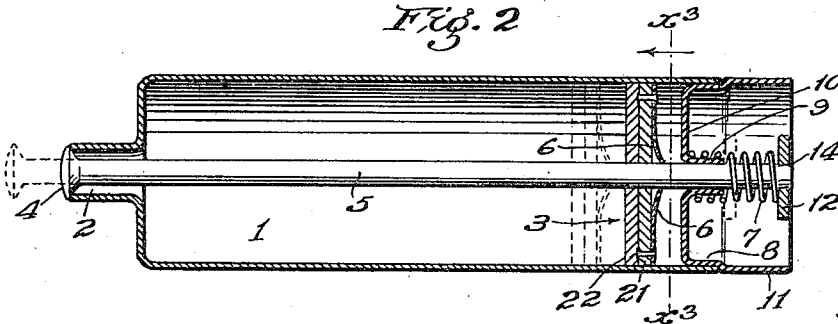
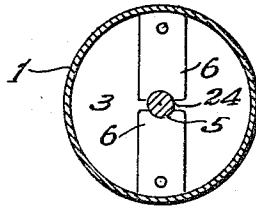


Fig. 3.



Witnesses
C. C. Holly.
Estella Hill.

Inventor
Sarah C. Hackley
Administratrix of the Estate of
George T. Hackley, deceased.

By James R. Townsend
her atty.

UNITED STATES PATENT OFFICE.

GEORGE T. HACKLEY, DECEASED, LATE OF LOS ANGELES, CALIFORNIA, BY SARAH C. HACKLEY, ADMINISTRATRIX, OF LOS ANGELES, CALIFORNIA, ASSIGNOR OF ONE-HALF TO MARCUS E. COVINGTON, OF MEMPHIS, TENNESSEE.

CONTAINER.

1,244,324.

Specification of Letters Patent.

Patented Oct. 23, 1917.

Application filed November 30, 1914. Serial No. 874,918.

To all whom it may concern:

Be it known that GEORGE T. HACKLEY, late a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, now deceased, invented certain new and useful Improvements in Containers, of which the following is a specification.

The object of this invention is to provide a container from which the contents may be discharged a little at a time without collapsing the container; and the invention consists of the novel features herein shown, described and claimed.

An object is to provide a superior convenience for dressing case or toilet appliance to make the use of toilet pastes and powders more convenient and agreeable to the user.

The accompanying drawings illustrate the invention.

Figure 1 is a side view of a container constructed in accordance with this invention.

Fig. 2 is an axial section of such container.

Fig. 3 is a cross-section on line x^3 , Fig. 2.

The shell 1 is straight and smooth inside from end to end and has integrally a flat head at one end, said head being provided with a straight nozzle 2, and the extreme outer end of said nozzle forming a valve seat. The follower 3 fits to slide tight in the shell 1. The valve 4 fits against the valve seat on the outer end of the nozzle 2 so as to make a clean cut-off of the exuding material and so that the material so cut-off will be entirely outside of the nozzle and outside of the valve and may be wiped away to leave the nozzle and valve clean. For this purpose the nozzle is large enough to fit the extreme rim of the valve, and the contacts are sharp and the valve operates entirely outside of the container. The plunger 5 is rigid with the valve 4, extends through the nozzle 2, through the shell 1, slidingly through the follower 3, and beyond the other end of the shell 1.

The shell 1 is preferably cylindrical with the plunger 5 at the center or axis. The shell 1 may be placed in an upright position with the valve 4 resting upon a table so as to hold it closed, then the shell may be filled to the desired extent, and then the follower 3 may be applied.

The follower 3 comprises a flat plate 21

closely fitting the shell 1, clutch dogs 6 being secured to the plate 21 and adapted to allow the follower to slide on the plunger 5 toward the valve 4 and adapted to clutch the follower to the plunger when the tendency is to move the follower away from the valve.

The clutch dogs 6 are thin spring sheet metal strips secured to the follower, their free ends having arc-shaped notches 24 to fit the plunger, and said dogs are bent away from the follower so as to slip one way and clutch the other way.

A gasket 22 is placed against the opposite side of the plate 21 from the dogs 6, so as to form a friction tight joint between the shell and the follower and a close joint around the plunger.

The pressed cupped base has a cylindrical portion 8 adapted to fit tightly in the opposite end of the shell from the nozzle, the diaphragm 10 forming a flat bottom for the shell, the hub 9 forming a bearing for the plunger 5, and the extension housing 11 being of the same size as the shell 1.

After the shell has been filled and the follower applied the cupped base is applied, then the expansive coil spring is applied around the hub 9 and the end of the plunger, and finally the thumb-piece or push button 12 is fixed upon the end of the plunger 5 against the spring 7 and held as by an up-set 14. The tension of the spring 7 holds the valve 4 normally closed. The push button 12 is within the cup of the base.

When pressure is applied to the push button the contents of the shell will be pressed by the follower toward the nozzle and the valve will be opened, thus allowing the contents to exude to the desired extent. When the push button is released the follower will be held stationary by friction and the valve will be closed thus making a cut-off. At each operation the follower will move toward the nozzle until the container is practically empty. This form of container is practically non-refillable from the end of the nozzle when the follower has been moved close to the integral head, as there is no way of moving the follower back to the starting point.

It should be observed that the bearing 9 is in axial alinement with the nozzle 2, and that the follower 3 is always held true to this axial alinement upon the plunger 5 by

means of the clutch dogs 6, the arc-shaped notches 24 in the latter preventing the follower from assuming an untrue position relative to the plunger. A free longitudinal movement of the follower is thus assured from the time the follower is in its initial position close to the cuped base end of the shell 1 until the follower has been moved close to the integral head at the other end of the shell. Moreover, it must also be observed that the space between the plunger and the side wall of the nozzle is small, so that if the plunger should have an abnormal play in its bearing, the nozzle will prevent too great a lateral movement of the valve end of the plunger and thus further assure the free movement of the follower longitudinally within the shell. In this manner, a most effective device for the purpose of dispensing paste or powder is produced.

I claim:—

1. A container comprising a straight shell; a flat top head at one end of the shell; a straight nozzle extending from the head; all pressed integral; a plunger extending through the shell and through the nozzle; a valve upon one end of the plunger outside of the nozzle and fitting against the end of the nozzle, the points of contact being sharp and at the rim of the valve; a follower in the shell on the plunger; a clutch connection between the plunger and follower to advance the follower toward the nozzle; and a pressed cupped base inserted into the other end of the shell and forming a flat bottom and a cylindrical housing extending downwardly from the flat bottom; a spring upon the plunger below the bottom; and a push button upon the plunger against the spring.

2. A step-by-step paste and powder dispenser comprising a body having heads, a straight-walled container between the heads;

one of said heads being integral with the container and having an orifice through which the contents of the container may be discharged; the other head being provided with a guide-way axially aligned with said orifice; a movable piston head in the container; said piston head fitting the straight walls of the container friction tight, the end of the piston head toward the integral head substantially conforming to the interior shape of said integral head; a valve rod extending through said orifice, said piston head and said guideway, said valve rod being smooth and of a uniform thickness throughout its length; a valve on one end of the valve rod and outside of said orifice to close the same, there being an outlet formed by said orifice about the valve rod when the rod is extended to open the valve; clutch means connected with the piston head and adapted to grip the valve rod for the purpose of moving the piston head toward said orifice when the valve rod is moved in that direction and to release the rod to allow it to return without returning the piston head; and resilient means outside of said guideway to return the valve rod to cause the valve to close the orifice, the piston head being adapted to eject virtually all of the contents of the container, and the dispenser being virtually non-fillable through said orifice when the piston head has been moved close to said integral head.

In testimony whereof, I have hereunto set my hand at Los Angeles, California this 24th day of November, 1914.

SARAH C. HACKLEY,
Administratrix of the last will and testament of George T. Hackley, deceased.

In presence of—

JAMES R. TOWNSEND,
M. BEULAH TOWNSEND.