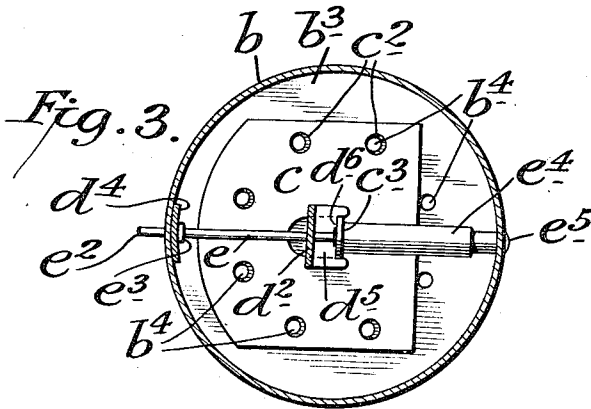
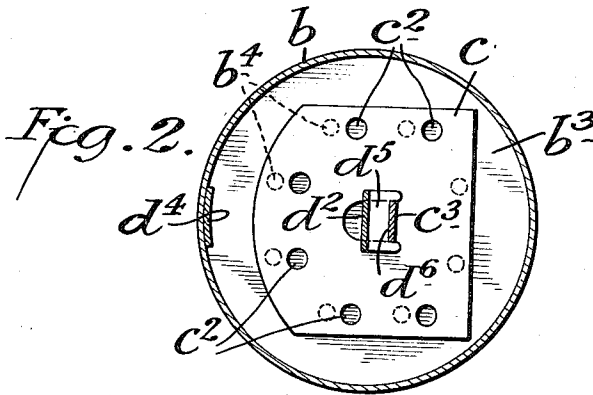
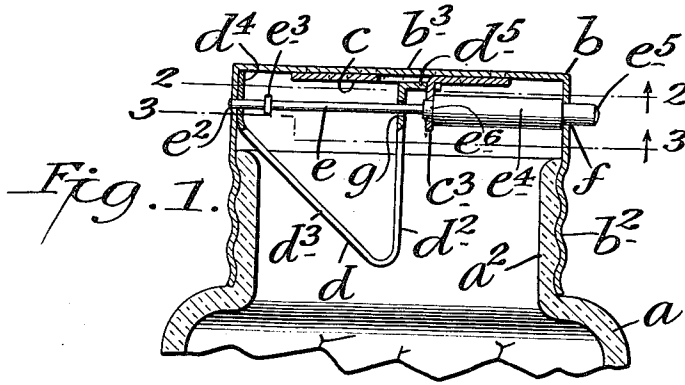


W. G. KENDALL & J. T. STAPLETON.
POWDER OR SHAKER RECEPTACLE.
APPLICATION FILED MAR. 16, 1912.

1,046,803.

Patented Dec. 10, 1912.



WITNESSES

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WILLIAM G. KENDALL AND JOHN T. STAPLETON, OF NEWARK, NEW JERSEY.

POWDER OR SHAKER RECEPTACLE.

1,046,803.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, WILLIAM G. KENDALL and JOHN T. STAPLETON, citizens of the United States, and residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Powder or Shaker Receptacles, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to receptacles of the class known as shaker receptacles and designed to contain powder or other finely divided substances and having means whereby such substances may be shaken therefrom in small quantities whenever desired, and the object of the invention is to provide a bottle, can, jar, or other receptacle with a cap which is normally closed and provided with means whereby the contents may be shaken from the said receptacle whenever necessary and in such quantities as may be desired.

In the accompanying drawing we have shown our improvement applied to a small bottle or jar, and the invention is fully disclosed in the following specification of which said drawing forms a part, in which the separate parts of our improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a central vertical sectional view of the top portion of a jar or similar receptacle provided with our improvement;—Fig. 2 a section on the line 2—2 of Fig. 1, and;—Fig. 3 a section on the line 3—3 of Fig. 1.

In Fig. 1 of the accompanying drawing we have shown a bottle or jar *a* provided with a neck *a*², and in the practice of our invention we provide the bottle or jar with a cap *b* having a skirt portion *b*² adapted to be screwed onto the neck *a*², but said cap may be connected with the neck *a*² in any desired manner. Mounted on the bottom of the top portion *b*³ of the cap is a movable valve plate *c* having apertures *c*² adapted to register with corresponding apertures *b*⁴ in the cap *b*, and the apertures *c*² in the valve plate *c* are preferably larger than those in the cap *b*.

The valve plate *c* is provided approximately centrally thereof with a downwardly directed ear *c*³, which in the form of con-

struction shown, is cut from the material of the valve plate and bent downwardly, and we also provide a triangular spring *d* having an arm *d*² at right angles to the valve plate and another arm *d*³ which extends to one side of the cap and is provided with a foot piece *d*⁴ adapted to bear on said side of the cap, and the arm *d*² is provided with a foot piece *d*⁵ adapted to bear on the valve plate *c* and said foot piece *d*⁵ is provided with a recess *d*⁶ in which the ear *c*³ exactly fits.

We also provide a securing and operating pin *e* one end *e*² of which passes loosely through the foot piece *d*⁴ of the arm *d*³ of the spring *d* and through the corresponding side of the cap *b* and adjacent to said end *e*², the pin *e* is provided with a collar *e*³. The end portion of the pin *e* opposite that on which the collar *e*³ is mounted is enlarged to form an oblong cylindrical body *e*⁴ having a reduced cylindrical head *e*⁵ at its outer end which passes loosely through the corresponding side of the cap *b* at *f*, and the part *e*⁵ forms a push button for manipulating the valve plate *c* as hereinafter described.

The inner end of the part *e*⁴ of the pin *e* is provided with a hub portion *e*⁶ which passes through the ear *c*³ of the valve plate *c*, and the pin *e* is passed loosely through the arm *d*² of the spring *d*, as shown at *g*, and when the valve plate *c*, the spring *d* and the pin *e* are connected and mounted in the cap *b*, as shown, the push button *e*⁵ will move the valve plate *c* so that the apertures *c*² thereof will register with the apertures *b*⁴ in the cap *b* and the contents of the bottle or jar may be shaken out, as will be readily understood, and in the same manner as in other receptacles of this class.

It will be observed that the valve plate *c*, the pin *e* and the spring *d* are all formed independent, and in practice these parts are first assembled, as shown in Fig. 1, and before the cap *b* is connected with a bottle, jar or other receptacle the said assembled parts are inserted into the cap *b*, and in this operation the said parts are manipulated so as to first pass the end *e*² of the pin *e* through the corresponding side of the cap after which the pin *e* is moved to the limit of its movement in the direction of the foot *d*⁴ of the arm *d*³ of the spring *d*, after which the end *e*⁵ of the pin *e* is forced down into

the cap until it registers with aperture at *f* in said cap.

When the parts of the pin are thus assembled and connected with the bottle or jar they cannot be detached and will remain in position for use, and it will be understood that the collar *e*³ limits the movement of the pin *e* when said pin is operated to manipulate the valve plate *c*, and said collar prevents the head *e*⁵ from being forced inwardly too far and the disconnection thereof with the corresponding side of the cap *b*.

It will be seen that one end of the enlarged cylindrical portion *e*⁴ of the pin *e* forms a stop which bears on the ear *c*³ of the valve plate *c*, and the other end thereof a stop which bears on one side of the cap and limits the movement of the pin *e* in one direction, while the collar *e*³ limits the movement of said pin in the opposite direction, and our improvement may be applied to the caps of cans or other receptacles, of any kind or class used for or designed for the purpose specified, and changes in, and modifications of the construction described, may be made, within the scope of the appended claim, without departing from the spirit of our invention or sacrificing its advantages.

Having fully described our invention what

we claim as new and desire to secure by Letters Patent is:—

A cap for bottles, jars or other receptacles, said cap being provided with apertures, a valve plate movable on the bottom of said cap and provided with corresponding apertures and with a downwardly directed ear, a triangular spring mounted in said cap and one arm of which is provided with a foot piece which bears on the valve plate and having a recess to receive said ear and the other arm of which is provided with a foot piece which bears on one side of the cap and a pin passed through the ear of the valve plate and through one arm of the spring and through the foot piece of the other arm thereof, and the ends of which are movable through the opposite sides of the cap, said pin being provided with a stop which bears on said ear and means for limiting its movement in opposite directions.

In testimony that we claim the foregoing as our invention we have signed our names in presence of the subscribing witnesses this 15th day of March, 1912.

WILLIAM G. KENDALL.
JOHN T. STAPLETON.

Witnesses:

C. E. MULREANY,
A. C. STARCK.