

F. REUTTER.
HINGED CAP FOR POWDER CANS.
APPLICATION FILED MAR. 17, 1911.

1,021,483.

Patented Mar. 26, 1912.

2 SHEETS—SHEET 1.

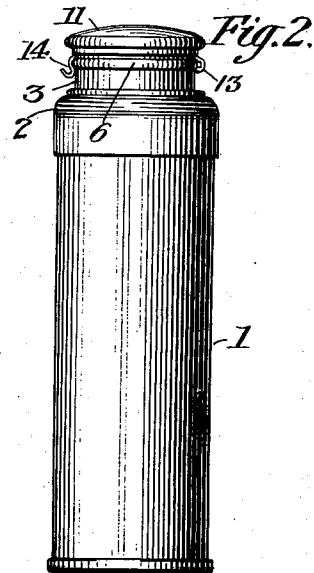
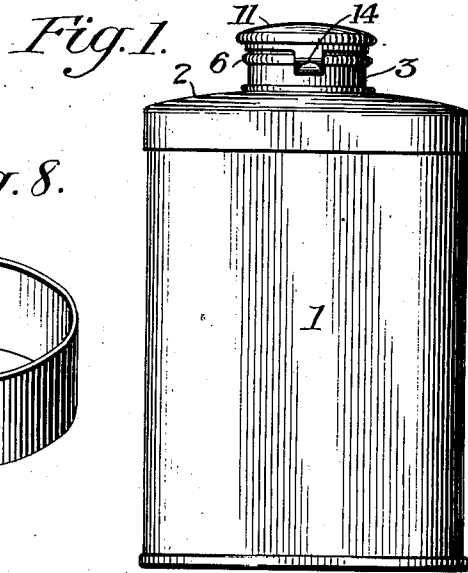


Fig. 8.

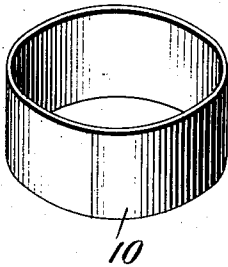


Fig. 3.

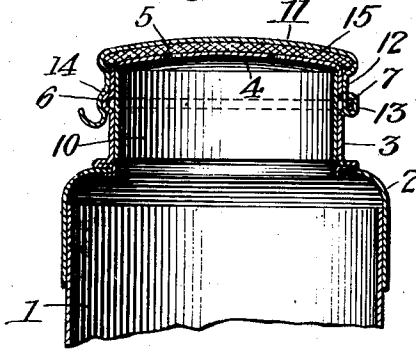


Fig. 4.

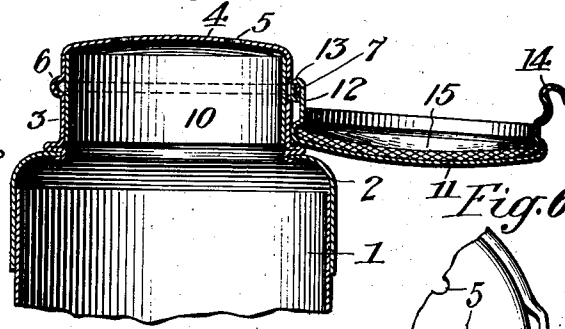


Fig. 6.

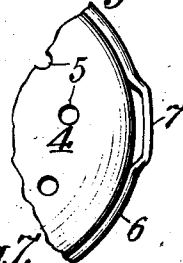


Fig. 5.

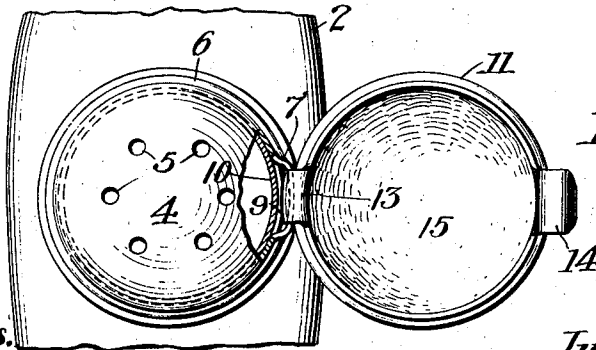
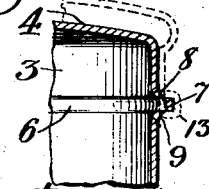


Fig. 7.



Witnesses.
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2 SHEETS—SHEET 2.

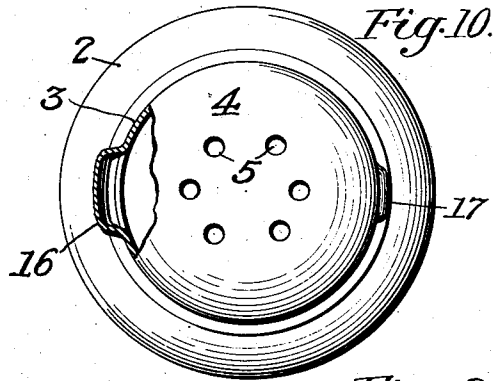
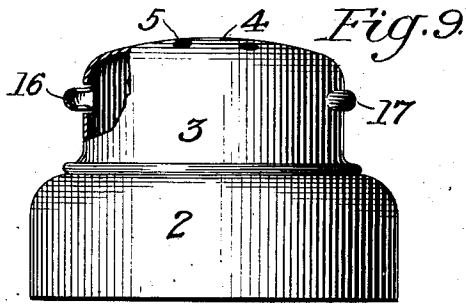


Fig. 11.

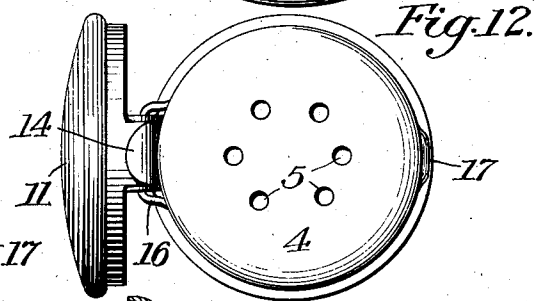
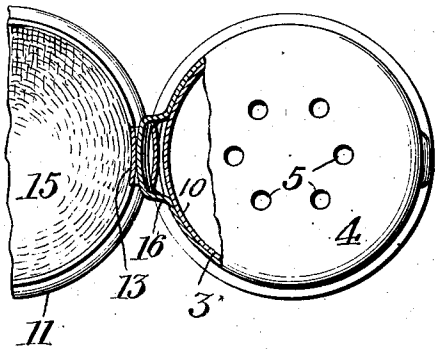
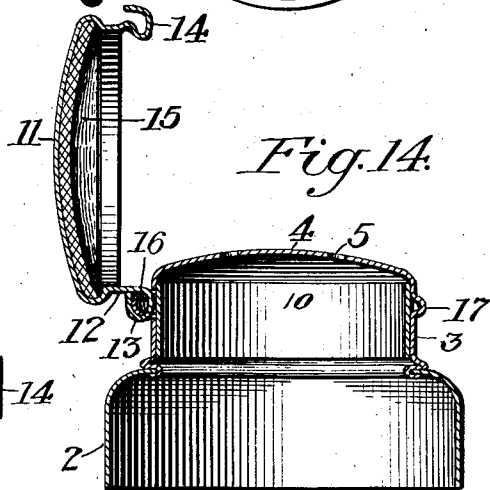
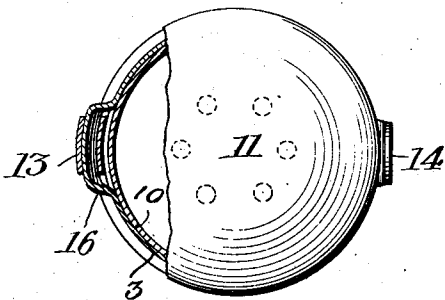


Fig. 13.



Witnesses.

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UNITED STATES PATENT OFFICE.

FREDERICK REUTTER, OF WATERBURY, CONNECTICUT, ASSIGNOR TO SCOVILL MANUFACTURING COMPANY, OF WATERBURY, CONNECTICUT, A CORPORATION OF CONNECTICUT.

HINGED CAP FOR POWDER-CANS.

1,021,483.

Specification of Letters Patent.

Patented Mar. 26, 1912.

Application filed March 17, 1911. Serial No. 615,140.

To all whom it may concern:

Be it known that I, FREDERICK REUTTER, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Hinged Caps for Powder-Cans, of which the following is a full, clear, and exact description.

The primary object of this invention is to provide a talcum powder or toilet powder can with a cap that is capable of being closed and held down over the perforated discharge end of the can, so as to close such end when the can is not in use and prevent the escape of the contents, and which cap may be swung back from the discharge end and held in such open position while the can is being manipulated to discharge the contents. While this is the primary object of the invention, it is to be understood that the invention is not limited to this one particular use, but is capable of being used on other cans and vessels where such provision is necessary or desirable.

Hinged caps for cans of various sorts have heretofore been produced, and the hinging of the cap has been effected by placing the knuckle of the hinge on the cap and the pintle element on that portion of the can containing the discharge medium. In some instances, the said pintle has been an added part, and in other instances the pintle has been an integral part. It is deemed advantageous to have such a hinge connection as will insure the retention of the cap in open position when the can is being used to discharge the contents.

While I am aware that the pintle element has been made integral with the discharge element, some means must be used to close in the opening made therein so as to avoid spilling the contents. Soldering up such opening is undesirable, because unsightly, and because it tends to discolor the metal.

In order to obtain the advantages of an integral hinge pintle and avoid the disadvantages enumerated, the present invention consists in providing a discharge end or neck and slotting the metal thereof and stretching out the metal of the neck between the slots so as to form an offset portion, and this offset portion is utilized as the hinge pintle, to be engaged by the hinge knuckle depending from the cap; this hinge knuckle

being so formed that when the cap is thrown wide open it coöperates with the hinge pintle to hold the cap against movement while the contents of the vessel are being discharged. The cap also has a depending spring tongue, which engages a projection on the neck at the opposite side from the pintle, to hold the cap in closed position, all as hereinafter more particularly set forth and finally claimed.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a front elevation of a conventional form of talcum or toilet powder can, with one form of my improvement applied thereto; Fig. 2 is a side elevation; Fig. 3 is a transverse section, on a larger scale, with the cap closed; Fig. 4 is a similar view with the cap open, and Fig. 5 is a top plan view with the cap open; Fig. 6 is a top plan view of a portion of the discharge neck to illustrate the offsetting of the pintle, and Fig. 7 is a vertical section of the same parts, but showing a portion of the cap in dotted lines. Fig. 8 is a perspective view of the lining to close the pintle opening. Fig. 9 is a side elevation with the hinge side partly broken out, and Fig. 10 is a top plan view, with the hinge side similarly broken out, of a top showing a modified construction, and omitting the cap. Fig. 11 is a top plan view of the neck, similarly broken out, to show the hinge, and with a portion of the cap thereon in open position; Fig. 12 is a top plan view with the cap standing up at right angles; Fig. 13 is a top plan view with the cap closed and the hinge side broken out; and Fig. 14 is a vertical section with the cap half open, further illustrating the modification shown in Figs. 9 and 10.

1 is the body of the can, of any approved construction; 2 is the breast, and 3 is the discharge element or neck, having its top 4 closed excepting for the discharge holes 5.

Referring now more particularly to the form of the invention shown in Figs. 1 to 7, 6 is a circumferential, outwardly projecting bead on the neck, from which is offset the hinge pintle 7. As shown more particularly in Fig. 7, the slots or slits 8 and 9 are made upon opposite sides of the bead 6, and then the bead is forced outwardly for a portion of its length, as shown particularly

in Figs. 5 and 6, to an extent sufficient to form the pintle for the hinge. The width of the bead being somewhat wider than the thickness of the metal, the pintle as thus formed will be oblong in cross-section, as clearly shown in Figs. 3, 4 and 7. This construction of the pintle will leave an opening in the neck through which the contents of the vessel may readily escape, and in order to provide against this, I insert an independent lining or sleeve 10 which may be driven into and frictionally held in place within the neck of the can and thus form a sufficiently tight union with the neck to prevent the leakage or waste of the contents of the vessel. The cap 11 may be of any desired design or shape, and upon one side is provided a depending portion 12 whose end is bent around the pintle 7 so as to substantially conform to the oblong shape of the pintle to form the hinge knuckle 13; and this knuckle as thus formed coöperates with the pintle, when the cap is opened, to effect a binding action between the knuckle and pintle, to prevent the cap from closing when the vessel is inverted or turned sidewise and shaken in order to discharge the contents. A little force is required to overcome this binding action of the knuckle with the pintle in order to open and close the cap. In order to hold the cap closed, it is provided with a tongue 14 which has sufficient springiness to snap over the bead to hold the cap closed against accidental opening. The cap may be provided with an interior pad 15 of any suitable material to prevent leakage of the contents of the can, especially in transportation and handling.

Instead of cutting the hinge pintle from a bead, as already described, it may be cut from the body of the neck, without a bead, and then drawn out or offset, as shown at 16 in Figs. 9 to 14; and in order to provide a catch for the tongue 14, I may make a nib or outward projection 17 on the opposite side of the neck. Otherwise than for these variations, the construction shown in Figs. 9 to 14 may be essentially the same as that shown in Figs. 1 to 8, and corresponding parts are similarly designated.

By the constructions described, a very economical and efficient hinged cap for powder cans is provided.

What I claim is:—

55 1. A powder can, having a hinged cap for

closing its discharge end, the pintle for said hinged cap being oblong in cross-section and located on the discharge end of the can, and the knuckle located on said cap and comprising a depending portion bent about said pintle and conforming substantially to the cross-sectional shape thereof, to thereby cause a binding action between said pintle and knuckle in the opening and closing movements of the cap.

2. A powder can, having a hinged cap for closing its discharge end, the pintle for said hinged cap being oblong in cross-section and formed by an offset integral portion of the discharge end of the can, and the knuckle located on said cap and formed by a depending portion thereof bent about said pintle and conforming to the cross-sectional shape thereof, to thereby cause a binding action between said pintle and knuckle in the opening and closing movements of the cap.

3. A powder can, having a discharge neck fixed to and projecting from the body of the can, a portion of the neck of the can being slitted to form a hinge pintle, an independent lining adapted to be inserted into and frictionally held upon the inside of the neck of the can and covering the slitted portion of said neck, and a cap hinged to the pintle of said neck.

4. A powder can, having a discharge neck, a circumferential bead on said neck of greater width than the thickness of the metal of the can, a portion of the neck at the opposite edges of the bead being slitted and the portion of the bead between said slits forced outwardly to form a hinge pintle oblong in cross-section, a lining within the neck covering the opening at said slitted and offset portion, and a cap having a knuckle hinged to said pintle and substantially conforming to the cross-sectional shape thereof, to thereby cause a binding action between said pintle and knuckle in the closing and opening movements of the cap, said binding action serving to hold the cap open when the contents of the can are being discharged.

In testimony whereof I have hereunto set my hand this 14th day of March A. D. 1911.

FREDERICK REUTER.

Witnesses:

L. H. BASSETT,

CHAS. W. KELLOGG.