J. WEBER.

POWDER CAN.

APPLICATION FILED AUG. 21, 1907.

898,944. Patented Sept. 15, 1908.

Fig. 1.

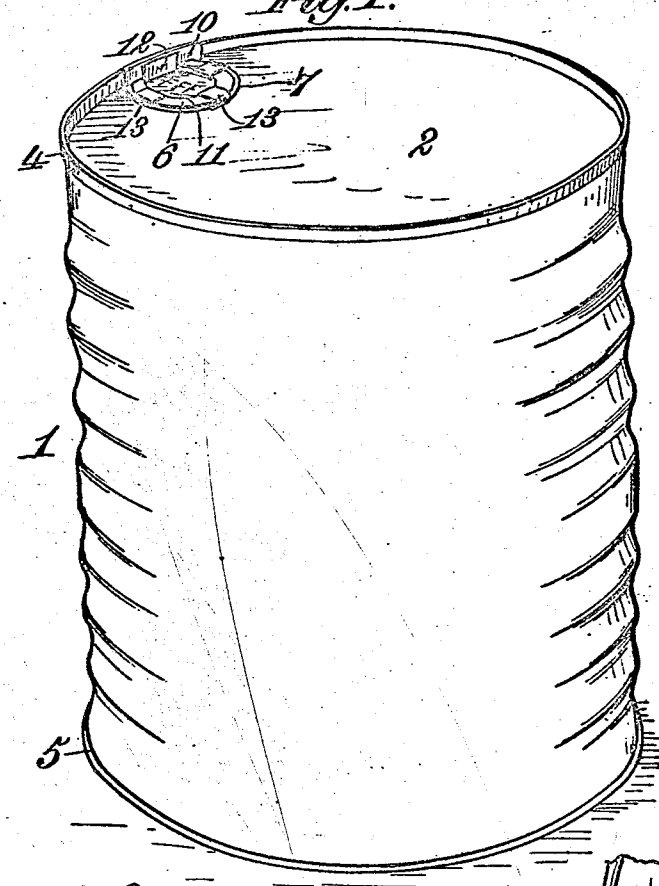


Fig. 2.

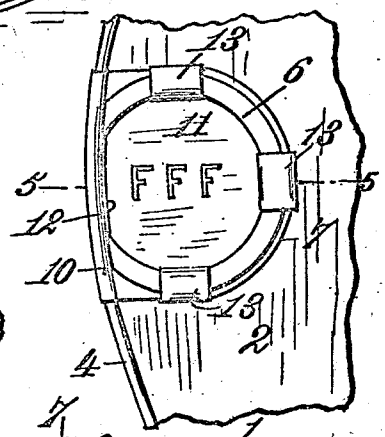


Fig. 3.

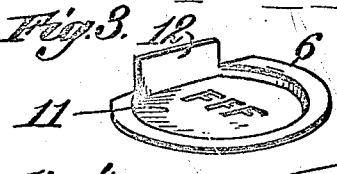


Fig. 4.

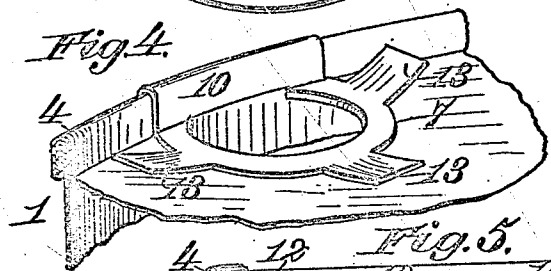
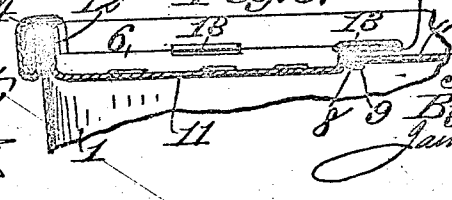


Fig. 5.



Witnesses.
Robt Everett.
J. B. Kelly

Inventor.
Joseph Weber.
By James L. Norris
Atty.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH WEBER, OF JASONVILLE, INDIANA, ASSIGNOR OF ONE-HALF TO ALFRED G. CUMMINGS, OF TERRE HAUTE, INDIANA.

POWDER-CAN.

No. 898,944. Specification of Letters Patent. Patented Sept. 15, 1908.

Application filed August 21, 1907. Serial No. 389,473.

To all whom it may concern:

Be it known that I, JOSEPH WEBER, a citizen of the United States, residing at Jasonville, in the county of Greene and State of Indiana, have invented new and useful Improvements in Powder-Cans, of which the following is a specification.

My present invention relates to improvements in cans or receptacles, and especially of the character adapted to contain powder and the like, and it has for its object to provide an improved can of this character wherein the entire contents may be poured or removed therefrom with facility, and furthermore to provide an improved closure that may be applied to the can without unduly increasing the cost thereof, and which in practice is capable of effectually sealing the contents of the can from moisture or leakage, the closure being so fastened that accidental opening thereof cannot occur, although the fastening and unfastening thereof may be easily accomplished.

To these and other ends, the invention consists in certain improvements and combinations and arrangements of parts, all as will be hereinafter more fully described and pointed out particularly in the claims at the end of the specification.

In the accompanying drawings:—Figure 1 is a perspective view of a powder can constructed in accordance with the present invention. Fig. 2 is a top plan view of a portion thereof showing the closure. Fig. 3 is a perspective view of the closure removed from the can. Fig. 4 is a perspective view of a portion of the can with the closure removed therefrom, and Fig. 5 represents a section on the line 5—5 of Fig. 2.

Similar parts are designated by the same reference numerals in the several figures.

One of the disadvantages experienced heretofore in the handling of powder cans and analogous devices of the usual construction has been the difficulty of removing the entire contents of the can, the discharge opening thereof being usually located at some distance from the periphery of the can so that when the latter was tilted, a considerable portion of the contents thereof remained within the can. This objectionable feature has been obviated by the present invention, and an improved form of closure and mode of fastening it in position has been provided.

The present embodiment of the invention is shown in connection with a powder can of the usual construction embodying generally a substantial cylindrical body 1 which constitutes the vertical sides, and the upper and lower heads, arranged at the top and bottom thereof. The heads may be secured to the body in any suitable way, but it is preferable to secure these parts in the manner shown, that is to say by interfolding the peripheral edges of the upper and lower heads with the upper and lower edges of the body to form seams 4 and 5 which surround the upper and lower peripheral edges of the can. According to the present invention the aperture through which the powder or other material is introduced is formed in the upper head 2 in immediate proximity to the periphery thereof, the wall of the aperture being arranged tangentially of the inner surface of the side of the can so that when the latter is tilted the powder or other material will have an unobstructed passage in leaving the can.

The device for closing and sealing the can comprises in the present instance a closure member 6 and a fastening member 7, the latter being arranged upon the upper surface of the head 2 and is secured thereto by an annular flange 8 which surrounds an aperture in the fastening member and is extended downwardly through the aperture in the head 2 and finally crimped against the under side of the upper head, as shown at 9 in Fig. 5. In order to further secure the fastening member, it is also provided preferably with a tang 10 that is formed integral therewith in the present instance and is secured to the can by folding it into the seam which unites the upper head to the body of the can. The fastening member may be so secured while the seam between these parts is being formed, and when so secured the tang lies in such close relation to the seam that leakage of moisture or the contents of the can is prevented, and the crimping of the flange on the under side of the fastening member in a similar way prevents leakage between the latter and the can body.

The closure shown in the present instance is preferably composed of a stamping of sheet metal having a central depressed portion 11 which snugly fits into the opening in the fastening member, the rim of the closure lying flatwise upon the upper surface of the fastening member. That side of the closure which rests opposite to the seam or

periphery of the can is provided with an upturned lip 12 which extends substantially perpendicularly from the upper side of the closure and has a curvature corresponding to that of the flange of the can so that when the closure is fitted to the can, the lip will lie in close relation to the tang 10 of the fastening member and thereby provide a moisture proof joint for the closure.

The closure may be fastened in place by any suitable means, but it is preferable to provide the fastening member with a set of out-turned fingers or lugs 13, which normally lie in the position shown in Fig. 4 before the closure is applied to the can, and are adapted to be bent to over-lap the closure, as shown in Figs. 1 and 2 after the closure has been applied. Access may be had to the can by re-bending or folding back the fingers on the fastening member and then removing the closure, and should it be desirable to use a part of the contents of the can only, the closure may be refastened by bending the fingers or lugs thereover, as previously described.

A powder can constructed in accordance with the present invention is capable of being entirely emptied of its contents with the greatest facility, for the reason that the aperture through which the powder or other material is discharged is located immediately adjacent to the side of the can so that there is no appreciable shoulder or other obstruction to retard or obstruct the flow of powder from the can, and it also embodies an improved closure and fastening device therefor which in practice serves to effectually seal the contents of the can from moisture and prevent leakage thereof, although the closure may be readily removed and replaced when so desired. Moreover, the fastening and closure members are capable of being punched and formed of sheet metal by the use of dies so that they are interchangeable one with the other and can be made cheaply, the fastening member being assembled during the seaming operation.

Claims—

1. A powder can having a discharge aperture formed in the top thereof in immediate proximity to its edge, an apertured fastening member secured to the top above the aperture therein and having a portion thereof secured in the seam uniting the top and sides of the can, and a closure adapted to coöperate with the said member.

2. A can of the character described embodying a body and top united by a folded seam, the top being provided with a discharge aperture tangential to the body of the can, a fastening member arranged on the top provided with an aperture registering with that of the top and having a surrounding depending flange extending through the aperture in the top and crimped against the latter, a tang on the outer side of the said member folded into the seam uniting the top and the body of the can, and a closure adapted to coöperate with the said member.

3. A can of the character described embodying a body and top united by a folded upwardly projecting seam, the top being provided with a discharge aperture adjacent to the seam, an attaching member secured to the top and having a tang thereon folded into the seam uniting the top and body of the can, and a closure adapted to coöperate with the said member and having an upturned lip arranged to lie against the tang thereof.

4. A powder can embodying a body and top united by a folded peripheral seam, the top having a discharge aperture therein adjacent to the peripheral seam thereon, a closure attaching member fitted on the upper surface of the top having a depending annular flange extending through the aperture in the top and crimped against the underside of the latter, a tang proceeding from the outer edge of the said member and folded in the seam uniting the top and body of the can, a closure member having a depressed portion fitting within the annular flange of the said member and provided with an upturned lip adapted to coöperate with the tang thereon, and flexible fingers proceeding from the edge of the said member and adapted to be folded into coöperative relation with the closure member to secure the latter.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH WEBER.

Witnesses:
EDW. W. BENNETT,
RICHARD P. IRWIN.