No. 850,086. PATENTED APR. 9, 1907.

J. H. GOSS.

POWDER CAN TOP.

APPLICATION FILED JUNE 9, 1906.

Fig. 1.

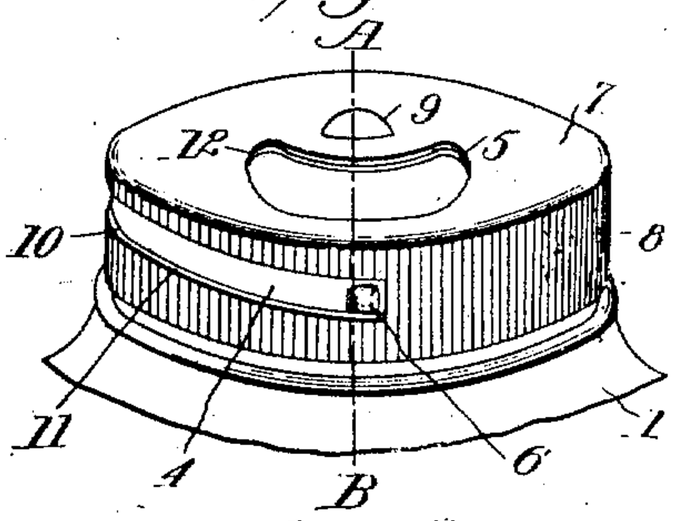


Fig. 2.

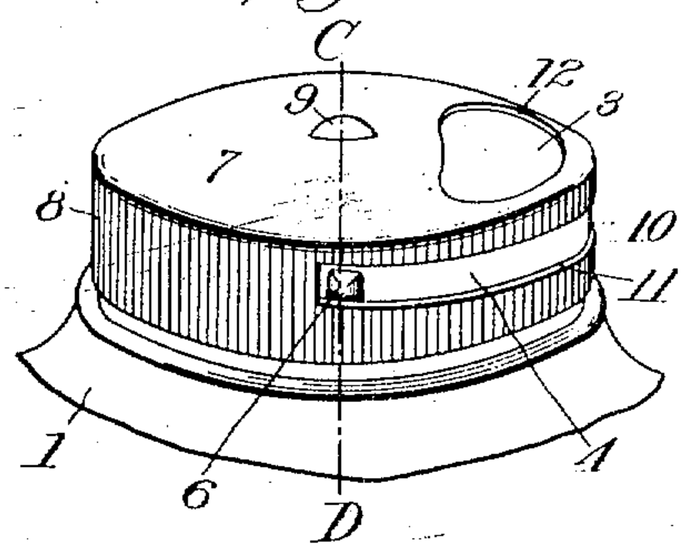


Fig. 3.

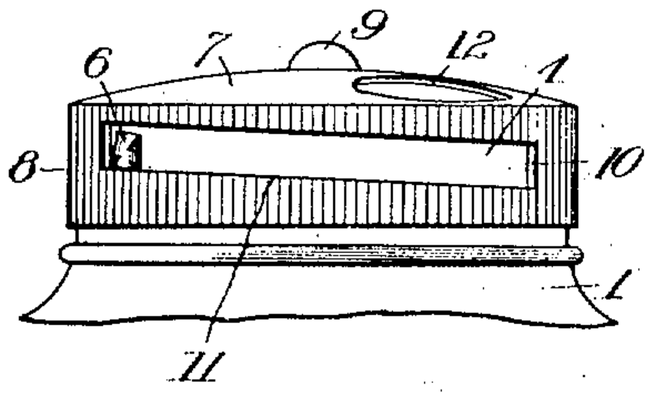


Fig. 4.

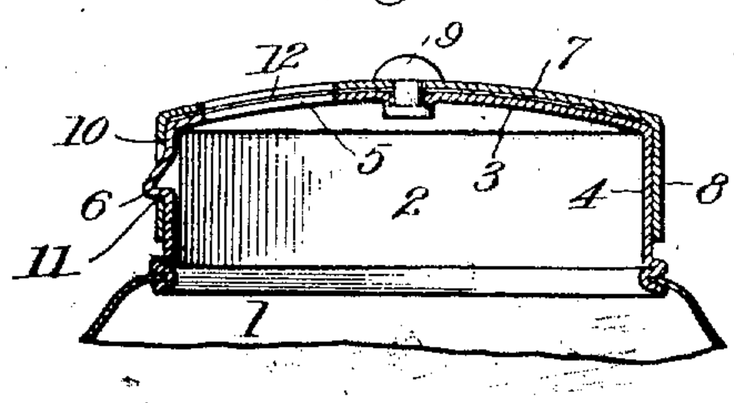


Fig. 5.

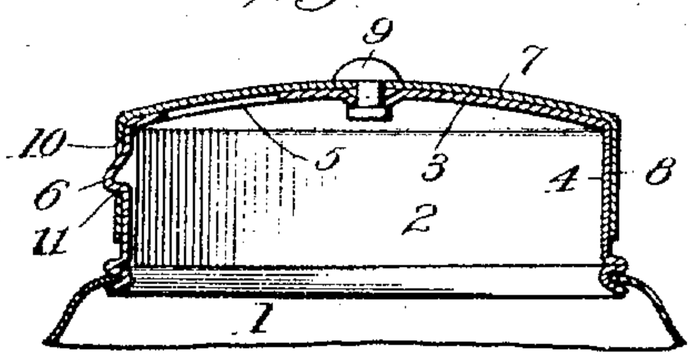


Fig. 6.

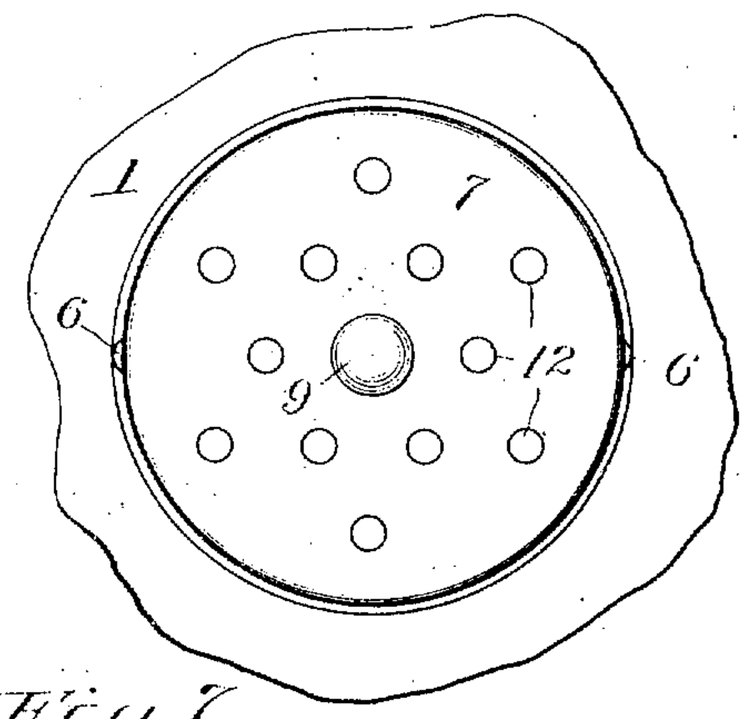


Fig. 7.

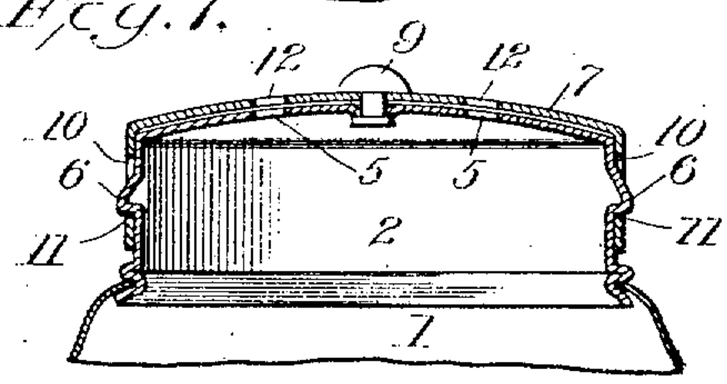
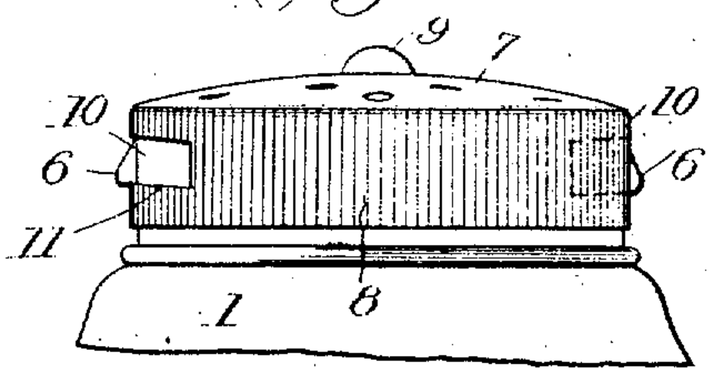


Fig. 8.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN H. GOSS, OF WATERBURY, CONNECTICUT, ASSIGNOR TO SCOVILL MANUFACTURING COMPANY, OF WATERBURY, CONNECTICUT, A CORPORATION OF CONNECTICUT.

POWDER-CAN TOP.

No. 850,086. Specification of Letters Patent. Patented April 9, 1907.

Application filed June 9, 1906. Serial No. 321,012.

To all whom it may concern:

Be it known that I, JOHN H. GOSS, 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 Powder-Can Tops, of which the following is a full, clear, and exact description.

This invention relates to cans and other receptacles for containing tooth-powder and other powdery substances from which the powder is discharged through a hole in the end rather than in the side of the top; and the object of the invention is to provide a construction whereby when the discharge-opening is closed the closing mediums will be drawn into such intimate contact as to render the top practically proof against the leakage of the powder.

The invention consists of a powder-can top having a perforated fixed member and a perforated movable member or cover whose perforation is adapted to be brought into register with the perforation in the fixed member, so as to discharge the contents of the can and to be moved out of register with the perforation in the fixed member, so as to close the top against the escape of the contents, and in such closing movement the cover is drawn down tight over the fixed member to thereby insure against the escape by leakage of the contents, all as I will proceed now more particularly to set forth and finally claim.

In the accompanying drawings, illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a perspective view of the top with the parts in discharging position. Fig. 2 is a perspective view of the top with the parts in closed position. Fig. 3 is a side elevation with the parts closed. Fig. 4 is a cross-section on the line A B of Fig. 1. Fig. 5 is a cross-section on the line C D, Fig. 2. Fig. 6 is a top plan view of a top having more than one discharge-hole and lug and slot. Fig. 7 is a cross-section, and Fig. 8 a side elevation, of the modification of Fig. 6.

While the invention is entitled and is hereinin described as relating to a can, it is to be understood that the receptacle may be technically a can and of metal, or it may be any other kind of receptacle and of any other material; but of course the top, in which the present invention resides, is preferably and most conveniently made of metal.

The breast 1 may be of any approved construction, and it has applied to it by seaming or otherwise the fixed member 2, and this fixed member preferably includes a convex end portion 3 with substantially vertical side walls 4. In the end portion 3 is an opening or perforation 5, and in line with this opening and in the side wall of the fixed member is a lug 6, projecting outwardly.

Surrounding the end portion and side walls of the fixed member 2 is a shell, comprising an end portion 7 and side walls 8, and these side walls may be knurled or otherwise prepared to afford a rough surface to be easily grasped by the fingers in rotating or turning the shell about the fixed member. The shell is provided with a journal 9, which may be a rivet, and this journal also serves the purpose of uniting the shell and the fixed member more or less intimately or in such manner that the shell may be rotated or turned upon the fixed member.

In the side wall 8 is a slot 10, preferably arranged obliquely, as shown more particularly in Fig. 3, and of any shape, but in any case having its lower edge 11 inclined. The lug 6 projects through this slot, and its lower edge is in contact with the lower edge 11 of the slot. The inclination of the slot is such that when the shell is turned, as in Figs. 2 and 5, to cover up the opening 4 in the fixed member the lower edge 11 will serve as a cam or wedge in conjunction with the lug 6, and thereby draw down the shell tightly over the fixed member, and inasmuch as the lug is always in alinement with the perforation or opening in the fixed member and the highest point of the cam-slot is brought opposite this opening when the top is closed it follows that the pressure is brought most strongly upon the closed portion of the shell over the said opening in the fixed member, and thereby this opening is most effectively closed. Figs. 4 and 7 exaggerate the loose fit of the shell when open, and Fig. 5 shows the tightening effect of the cam-slot and lug.

For discharge purposes the shell is provided with an opening 12, which may be brought into register with the opening 5, as shown in Figs. 1 and 4, by simply turning the shell in the opposite direction.

As shown in Figs. 6–8, there may be more than one discharge-opening and more than one lug and slot. The use of more than one lug and slot, and especially the use of oppositely-arranged lugs and slots, results in an equalization of the tightening pressure and its more perfect distribution over the whole top.

I am aware that it is not broadly new to provide a can-top with a side opening and a rotatable shell connected therewith by a lug and a cam-slot; but in the construction referred to the cam-slot simply serves as a detent to prevent the accidental movement of the shell, and it has no function in drawing the shell tight over the discharge-opening to close it. I am also aware that movable covers have been applied to jars, bottles, and other open-end receptacles by means of lugs on one and cam-slots on the other; but in these constructions the whole cover must be detached in order to open the receptacle for the discharge of its contents. My invention differs from these in providing a receptacle with a fixed top having a discharge-opening in its end and a laterally-projecting side lug and a covering-shell inclosing the fixed member and applied to it in such way as to be capable of being turned about it and having the cam-slot coöperating with the lug so as to draw the shell when in the closed position tightly over the discharge-opening in the fixed member, and this is true whether one discharge-opening be employed or a number of such discharge-openings are provided, and while the location of the lug in alinement with the opening of the fixed member is important it is not essential in every instance, and this is particularly true in the case of tops having a considerable number of discharge-openings, as illustrated in Figs. 6, 7, and 8.

Although a journaling-rivet 9 is shown as the means by which the top members are connected, it is not intended to restrict the invention to the use of such rivet, and it may be omitted.

What I claim is—

1. A powder-can top, provided with a fixed member having a suitable number of discharge-openings in its end and a suitable number of laterally-projecting lugs on its side, and a covering-shell inclosing the fixed member and turning upon the end thereof and having a number of discharge-openings equal to that in the end of the fixed member and adapted to be brought into and out of register with the openings in the fixed member, and also having cam-slots in its side wall corresponding in number with the lugs on the fixed member and coöperating therewith in the closing movement of the covering-shell to draw down the said shell tightly over the discharge-openings in the fixed member.

2. A powder-can top, provided with a fixed member, having a discharge-opening in its end and a lug on its side in alinement with said opening, and a rotary cover applied over and turning upon the end of the fixed member and having an opening adapted to be moved into and out of register with the opening in the fixed member and a slot in its side through which the lug projects, said slot having an inclined edge engaged by the lug, so that when the cover is turned to close the opening in the fixed member the cover will be drawn down tight over the said opening.

3. A powder-can top, provided with a fixed member, having a discharge-opening in its end and a lug on its side in alinement with said opening, and a rotary cover applied over and turning upon the end of the fixed member and inclosing it and having an opening adapted to be moved into and out of alinement with the opening in the fixed member and also having in its side an obliquely-arranged slot engaged by the lug and serving to draw down the cover tightly upon the fixed member when the opening therein is closed.

In testimony whereof I have hereunto set my hand this 7th day of May, A. D. 1906.

JOHN H. GOSS.

Witnesses:

HENRY FEHL,

J. H. PILLING.