

No. 825,972.

PATENTED JULY 17, 1906.

F. L. IMPEY.
CONTAINER.

APPLICATION FILED OCT. 16, 1906.

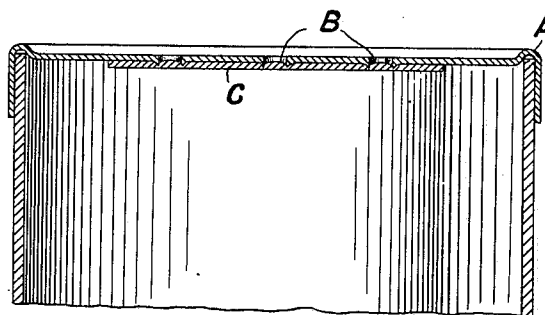


FIG. 1.

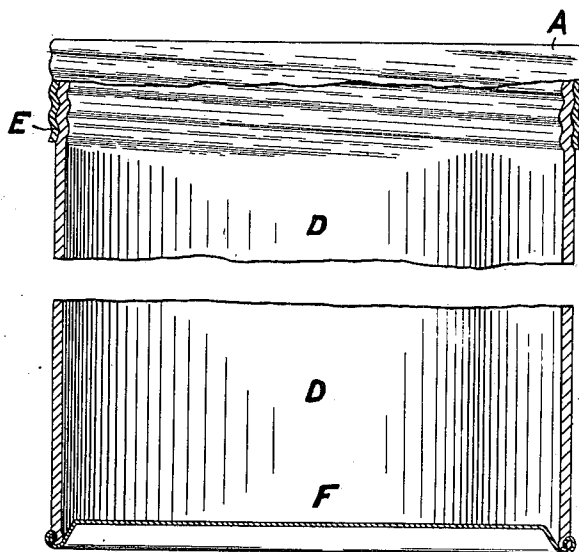


FIG. 2.

Witnesses
J. Stewart Rice.
J. B. Malnato.

Inventor:
Francis Levitt Impey,
by Dodge and Sons
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UNITED STATES PATENT OFFICE.

FRANCIS LEVITT IMPEY, OF MANCHESTER, ENGLAND.

CONTAINER.

No. 825,972.

Specification of Letters Patent.

Patented July 17, 1906.

Application filed October 16, 1905. Serial No. 282,989.

To all whom it may concern:

Be it known that I, FRANCIS LEVITT IMPEY, engineer, a subject of the King of Great Britain, residing at Rusholme, Manchester, in the county of Lancaster, England, have invented certain new and useful Improvements in Containers, of which the following is a specification.

For a long time past the pepper-box principle of having a lid or end with perforations on boxes made of paper, cardboard, or pulp, hereinafter called for short "cardboard," containing powder has long been known, and in selling in boxes powders to be finely showered or sprinkled in use it has been found necessary either to have a revolving hit-and-miss grating above or below the perforations or else to fix paper over the perforations, either inside or outside, or both. Now the hit-and-miss grating is expensive to adopt. It is very apt to stick fast and does not work cleanly. If, on the other hand, paper be pasted over the holes, this operation forms a considerable item in the cost of the box, and the perforating of the paper always leaves a jagged contour, unsightly and obstructive. Further, with the ordinary sprinkling-boxes sold for pepper, disinfecting-powders, and the like and having tin slip-on lids the lids are liable to be shaken off unless the lid is fastened on by means of a label or band of paper. The objection to this label is, first, the box cannot conveniently be used a second time; second, the cost of applying the paper or label after the canister is filled, which is greater than that of screwing; third, the fact that if it is desired to ornament the body of the canister by means of an ornamental label this can be applied when the canister is being made and before it is filled by means of automatic machinery; which puts on the label with little, if any, extra cost for labor. This label, however, being put on before the filling of the canister would not hold the lid on. To obviate this difficulty, I make the tin lid to screw onto the cardboard body, so that it cannot be shaken off. This saves the customer, who is a seller of spices, peppers, &c., the trouble of labeling, a job that he is not accustomed to. Now my invention produces a cheap box that will not merely carry its contents securely and can be made useful for sprinkling or peppering purposes without a moment's delay, but can also be replenished and used for other purposes.

The way in which I make perforations se-

curely closed, yet readily openable, is by pressing paper or other like material into the lid or end with such force that the perforations are filled up level or thereabout by the paper, the edges of the perforations acting as punches which partially cut the paper round the holes and wedge it therein, so that the strong bristles of a brush when thin paper is used or a stiff blunt-pointed object with thick paper is required to force the latter away from the holes in the one case or in a single piece from the lid in the other. In this latter case it is very desirable to make the disk only just large enough to cover the perforated part, so that when it falls off the powder can easily get round it. The holes are thus completely open for the material to be showered out, while when ordinary pasted paper is used and pierced from without inward the jagged edges are apt to more or less close and hinder the passage of the contents. The paper disk should preferably be only sufficiently large to cover the perforations and should be of considerably less size than the internal diameter of the lid. The lid is screwed on for the reasons hereinbefore stated; but hitherto while easy to screw the metallic lid it has been found impracticable to satisfactorily screw the cardboard or pulp box, and an expensive screwed metal rim has been attached to the box to screw the lid onto, and the expense of this has prevented such a device from being used largely in commerce, as it is cheaper to make a fresh box for pepper or disinfectant for each filling and composed entirely of cardboard, except the ends. Now I have got over this difficulty by discovering how to screw (and screwing) the end of the cardboard box itself. This I do by heated tools, either with mandrel and reciprocating heated dies forming the outside screw-thread and pressing all round or spinning a thread on the outside by heated dies. These heated dies produce a beautifully smooth and permanent thread, hard and compact. The temperature should be a black heat, just below the point at which the dies would char the box, and differs with different materials, but can be found out at once with practice.

Referring to the drawings, Figure 1 is a longitudinal section of a box; and Fig. 2 is a similar view, in partial section, showing the lid screwed on.

In the drawings, A is the lid of metal; B, perforations in same; C, disk of soft paper

pressed hard against the perforated part from the inside, so as to nearly fill the perforations; D, box having screwed thread E on same. F is a metallic end spun onto the box-body.

I declare that what I claim is—

1. As a new article of manufacture, a sprinkling-box having a perforated metal lid and inwardly-projecting edges around said perforations, together with a disk of soft material of smaller diameter than the interior of the lid but covering the perforations and projecting somewhat into the perforations, the inwardly-extending edges projecting somewhat and cutting into the disk.

2. As a new article of manufacture, a sprinkling-box having a perforated metal lid; a disk of fibrous material and of smaller diameter than said lid, placed against the inner face of the lid and covering the perforations; and projections on the interior of said lid retaining said disk.

3. As a new article of manufacture, a sprinkling-box; a lid with perforations on said box; flanges on the lid about the perfo-

rations; and a disk of paper partially filling said perforations and gripping said flanges.

4. In combination with a box-top provided with a series of perforations or openings, a sealing-disk of paper placed against the under face of the top with those portions of the disk which stand in line with the openings obtruded into the same, whereby the disk will be firmly held to the top.

5. In combination with a box-top provided with a series of perforations or openings, a sealing-disk of paper placed against one face thereof with those portions of the disk which stand in line with the openings obtruded into the same by pressure applied to the disk, whereby the disk will be firmly held to the top.

In witness whereof I have hereunto signed my name, this 5th day of October, 1905, in the presence of two subscribing witnesses.

FRANCIS LEVITT IMPEY.

Witnesses:

JOHN W. THOMAS,
MALCOLM SMETHURST.