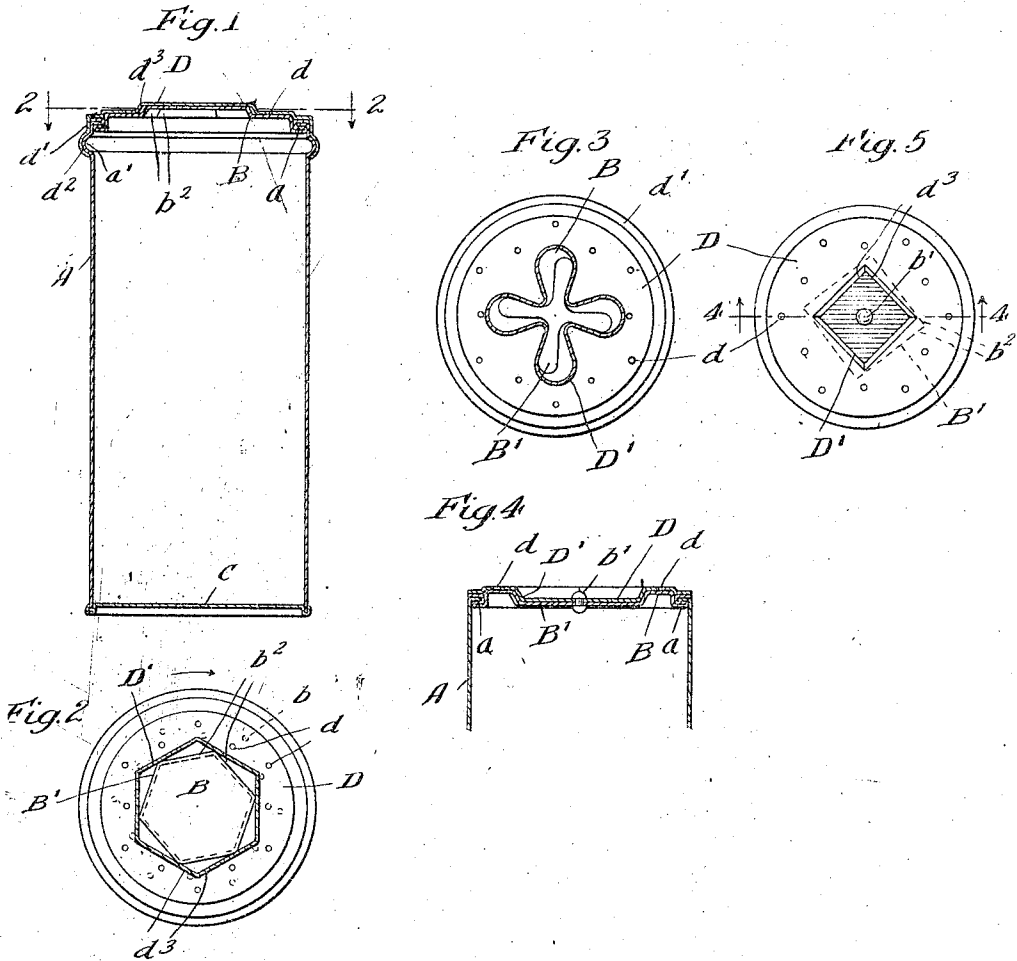


J. M. HOTHERSALL.
SIFTER TOP CAN OR BOX.
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966,550.

Patented Aug. 9, 1910.



Witnesses:

Wm. Geiger
N. Munday,

Inventor:
John M. Hothersall

By Munday, Evans, Adcock & Clarke,

Attorneys

UNITED STATES PATENT OFFICE.

JOHN M. HOTHERSALL, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN CAN COMPANY,
OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

SIFTER-TOP CAN OR BOX.

966,550.

Specification of Letters Patent.

Patented Aug. 9, 1910.

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To all whom it may concern:

Be it known that I, JOHN M. HOTHERSALL, a citizen of the United States, residing in New York, in the county of Kings, and State of New York, have invented a new and useful Improvement in Sifter-Top Cans or Boxes, of which the following is a specification.

My invention relates to improvements in sifter top cans or boxes for toilet powder or other articles.

Heretofore sifter top cans have usually been made with a small integral stop teat or projection stamped up on one perforated member which fits in a slot or depression in the other perforated member to cause the movable perforated member to stop in proper position for registering it in open position or holding it in closed position. And in practical use and operation, great difficulty has heretofore been experienced owing to the fact that the tin or sheet metal being thin and light, the stop teat or projection on the one member will slide under the other member past the stop slot or depression therein and thus become worse than useless as a stop or registering device, as it not only does not assist in registering the movable perforated member with the other, but tends to separate the two perforated members and thus permit the powder to unduly sift out and prevents a tight and proper closure.

The object of my invention is to provide an improved construction of sifter top can which will obviate or overcome the difficulties heretofore experienced.

My invention consists in a sifter top can or box in which the two perforated members—top head and closing plate or cover—are provided with large, central non-circular interfitting or nesting stop portions, the stop portion on the one member being sufficiently smaller than that on the other to permit of the necessary turning movement to open and close the perforations. The central stop portions on the two members may be either depressed or raised, as may be preferred or desired, and the same may be of any suitable non-circular outline, bounded either by curved or straight lines.

In the accompanying drawing forming a part of this specification, Figure 1 is a central vertical section of a sifter top can or box embodying my invention. Fig. 2 is a

section on line 2—2 of Fig. 1. Fig. 3 is a plan view showing the stop portions of a non-circular curved outline. Fig. 4 is a vertical section on line 4—4 of Fig. 5, showing the stop portions depressed instead of raised as in Fig. 1 and Fig. 5 is a plan view of the form shown in Fig. 4.

In the drawing, A represents the body of the vessel, B the perforated top head or member, preferably secured to the body A by an inwardly projecting folded seam *a*, C is the bottom head, and D the movable perforated plate or cover.

The perforations *d* in the movable member D are brought into registry with the perforations *b* in the other perforated member B by turning the movable perforated member D. The outer or movable perforated member D may be mounted to turn or rotate in any suitable manner, as for example, by providing it with a rim or flange *d*¹ having an annular channel *d*² embracing a bead or holding projection *a*¹ on the body A, as shown in Fig. 1, or by connecting the members B, D together by a pivot *b*¹, as shown in Fig. 4.

The two perforated members B, D of the sifter top can or box are provided with offset non-circular central stop portions B¹ D¹, each surrounded by an integral stop flange *b*² *d*³, and the one fitting within the other and being smaller than the other so that the one may turn sufficiently in respect to the other to open and close the perforations. In Figs. 1 and 2, I have represented the stop portions as being of hexagonal form, in Fig. 3 of a four leaved clover form and in Figs. 4 and 5 of a square form, but I wish it to be understood that any other suitable non-circular shapes may be employed, whether bounded by curved or straight lines or in part by curved or in part by straight lines. The two interfitting stop portions on the two perforated members thus afford a plurality of interengaging stop faces distributed about the center of the two perforated disks or members B, D so that the engagement of the stop faces on the one member with those on the other has no tendency to cause the two thin sheet metal members to separate or spring apart and thus permit the stop faces to pass each other. And as in my invention the stop portions on each of the two thin perforated sheet metal disks B, D are central and of comparatively large area,

these stop portions may be offset, counter-sunk, raised or depressed to any extent desired or required to absolutely insure impossibility of the stop faces on the one passing those on the other.

In practicing my invention, I prefer to make the offset stop portions on the two perforated members B, D of the sifter top can of a hexagonal or other polygonal form, and I prefer that the polygon should be one having a greater number of sides than a triangle, although a triangular form may be used. The triangular form, however, only gives three engaging stop faces, whereas a square or polygon of four sides gives four, a pentagon five and hexagon six and so on. If the offset stop portion on the two members is made of a curved outline, the same may be of any desired curved configuration. If preferred, also, the offset stop portions on the two members may be made of an outline which is partly curved and partly straight. In the drawing, I have illustrated two suitable ways for pivotally or rotatably connecting the two perforated members together, but other suitable means may be employed to connect the two perforated members.

I claim:—

1. In a sifter top can, the combination with a perforated top head, of a perforated rotary closure member, said top head and closure member being provided with integral, interlocking and concentric large, central, non-circular stop portions, said stop portion on the one member being a counterpart of that of the other and of larger size

to permit the necessary turning movement to open and close the perforations, substantially as specified.

2. In a sifter top can, the combination with a perforated top head having a single, large, integral, polygonal offset central stop portion, of a perforated cover having a single, integral, polygonal offset central stop portion concentric and interlocking with said central stop portion on the top head, said central stop portions on said head and cover being the one smaller than the other to permit of the necessary turning of the cover in respect to the top head to open and close the perforations, substantially as specified.

3. In a sifter top can, the combination with a perforated top head having a single, large, integral, raised hexagonal center, of a rotary perforated cover having a single, large, integral, raised, hexagonal center concentric with said hexagonal center of the top head and interlocking therewith, and of larger size to permit of the necessary turning movement to open and close the perforations, said hexagonal centers on the top head and cover forming a plurality of interlocking stops on opposite sides of the center so that any tendency of one pair of said stops to pass each other or the cover to tilt in respect to the top head will be counteracted by the stops on the opposite side of the center, substantially as specified.

JOHN M. HOTHERSALL.

Witnesses:

J. WILSON,
LOUIS C. TISSOT.