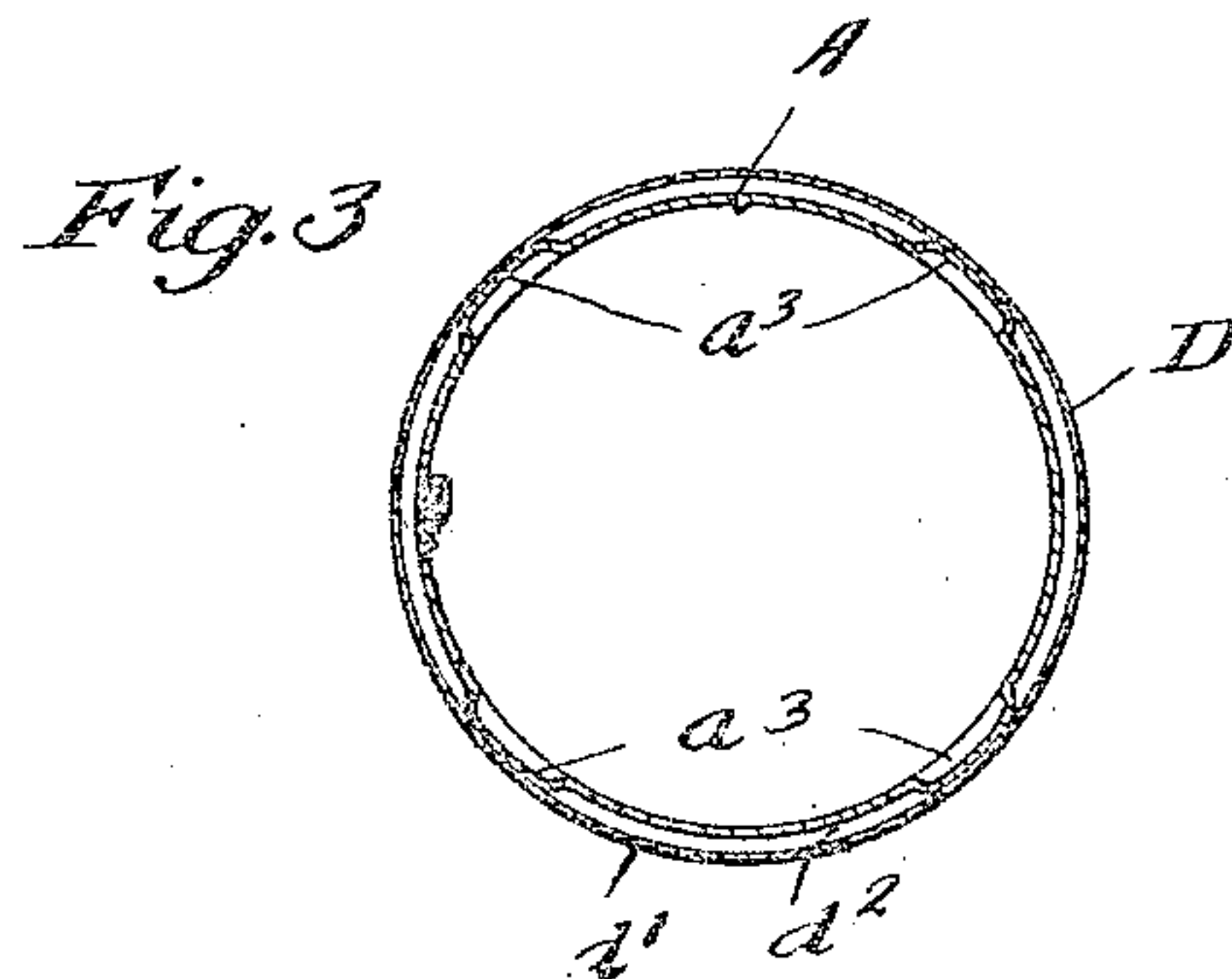
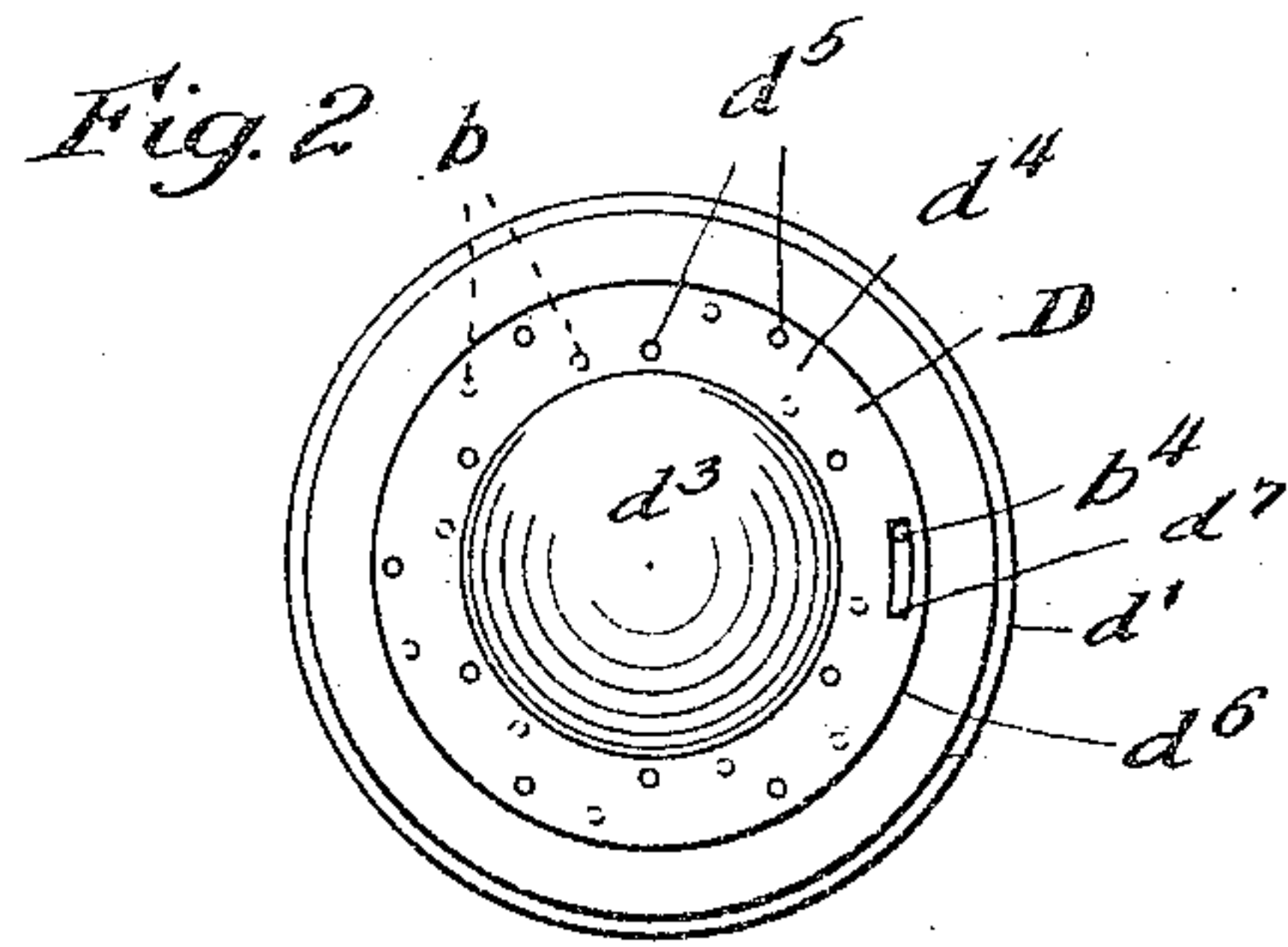
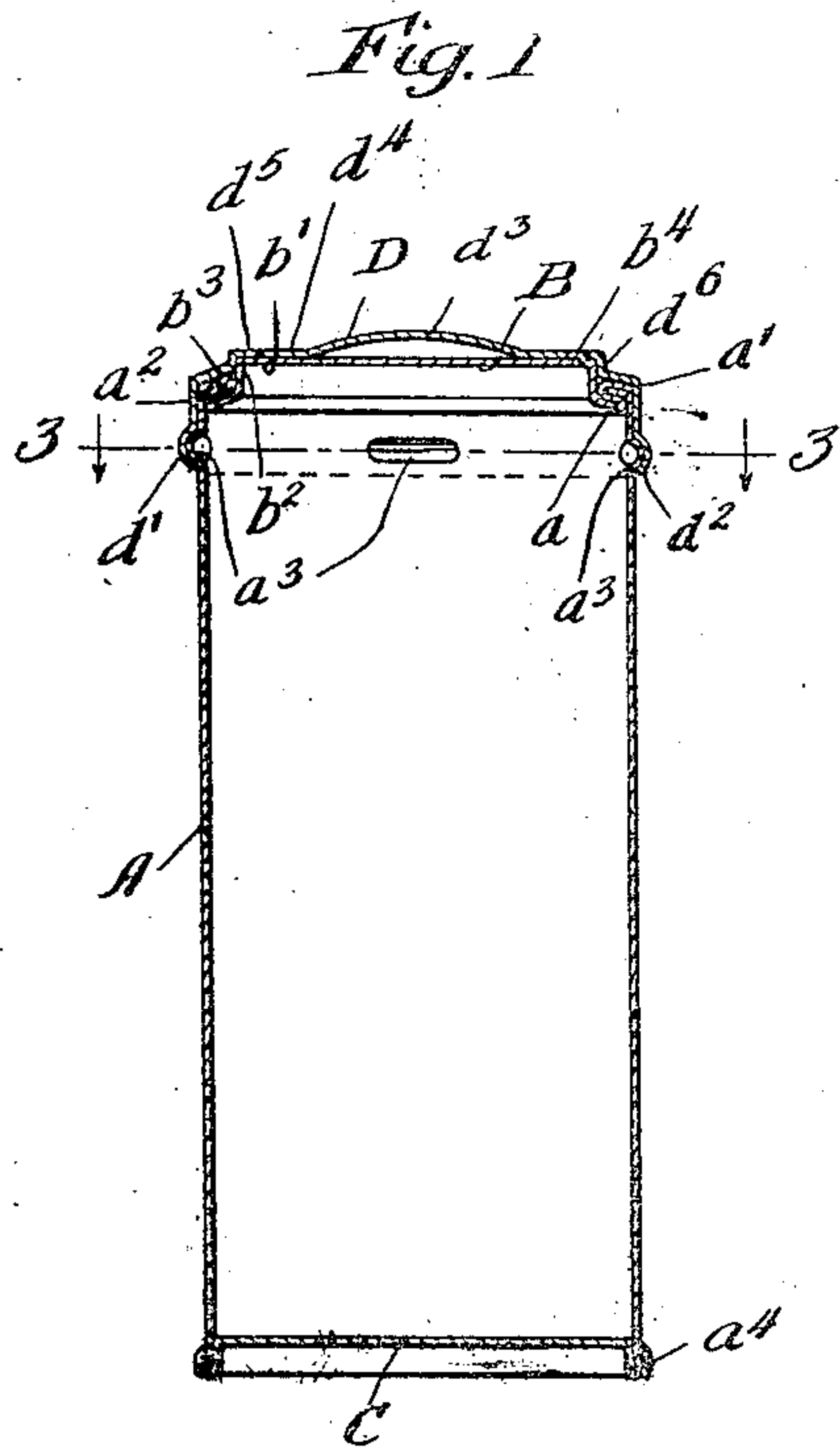


No. 886,702

PATENTED MAY 5, 1908.

J. M. HOTHERSALL.  
SIFTER TOP POWDER CAN OR BOX.  
APPLICATION FILED OCT. 5, 1907.



Witnesses:

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# 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 POWDER CAN OR BOX.

No. 886,702.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed October 5, 1907. Serial No. 396,015.

*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 Powder Cans or Boxes, of which the following is a specification.

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

My invention consists in a sifter top can or box having a sheet metal body and a perforated upper or top head permanently seamed or secured thereto, the body being provided with a friction seat wall at its upper end and with a plurality of externally projecting shoulders, preferably four in number, the same constituting what may be termed a sectional bead, and a rotatable friction cover furnished with a series of perforations therein, adapted to register with the perforations in the upper or top head of the can, and having a deep flange or rim surrounding and embracing the upper end of the can body and provided at its lower portion with an annular internal channel or groove and an inturned flange at its extreme lower edge cooperating with the sectional bead or series of shoulders on the can body to lock or secure the rotatable perforated friction cover on the can body while permitting it to rotate to the extent necessary to open and close the perforations in the inner or permanent top head of the can. The perforated permanent top head of the can is provided with a stop projection and the rotary perforated cover with a cooperating slot or stop to limit the turning movement of the perforated cover.

My invention further consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described.

In the accompanying drawing forming a part of this specification, Figure 1 is a central vertical section of a sifter top powder can or box embodying my invention. Fig. 2 is a top or plan view and Fig. 3 is a horizontal section on line 3—3 of Fig. 1.

In the drawing, A represents the body of my sheet metal sifter top can or box, B its permanent perforated inner upper head, C its permanent bottom head and D the rotatable perforated friction cover.

The inner perforated top head B is perma-

nently secured to the body A by an inwardly turned or folded seam  $a$  so as to leave a smooth cylindric friction seat wall  $a^1$  at the upper end of the body A for the deep flange  $d$  of the perforated rotary cover D. The permanent top head B is provided with a series of perforations  $b$  in the flat or disk portion  $b^1$  thereof. The perforated top head B is also provided with an annular cylindric flange  $b^2$ , the upper part of which projects above the folded seam  $a$  formed by the interfolding of the seaming flanges  $b^3$  of the top head B and  $a^2$  of the can body A.

The can body A is provided just below the cylindric friction seat wall  $a^1$  with a plurality or series of externally projecting short shoulders  $a^3$ , preferably four in number, each being a short segment of a circle and the same together forming what might be termed a sectional or segmental bead.

The rotary cover D has a cylindric flange  $d$  which fits the cylindric friction seat wall  $a^1$  of the can body A and the lower portion of this cover flange  $d$  is provided with an internal annular groove  $d^1$  and an inwardly projecting terminal flange or annular lip  $d^2$  adapted to receive and embrace the short segmental shoulders  $a^3$  on the can body and thus lock and secure the rotary cover on the can while permitting it to rotate freely. The rotary cover D is also provided at its upper part with a raised or dome-shaped center  $d^3$  and with an annular flat portion  $d^4$  which is furnished with a series of perforations  $d^5$  adapted to be turned into registry with the cooperating perforations  $b$  in the top head B. The rotary cover D is also provided with an annular cylindric flange or shoulder  $d^6$  adapted to fit, surround and embrace the cooperating cylindric flange  $b^2$  of the top head B. The top head B is further provided with a stop  $b^4$  which fits in and cooperates with a corresponding stop  $d^7$  on the rotary cover D to limit the turning thereof in respect to the perforated top head B. The stop on the top head B is preferably a raised teat or projection and that on the rotary cover D is preferably a short segmental slot.

The inner perforated top head B and the outer deep flanged perforated cover D are both permanently seamed to the body A at the factory where the cans are manufactured, and then after the can or box has been filled through its open bottom end, the bot-



tom head C itself is permanently seamed or secured to the body A by a seam  $d^4$  so that the bottom head cannot be removed without mutilation. My improved sifter top can is

5 thus not refillable without mutilation and this affords material protection against spurious goods being palmed off therein as the original goods of the manufacturer whose labels or trade-marks are upon the can.

10 The segmental bead or series of short segmental externally projecting shoulders on the body serve, in connection with the annular groove on the deep flange of the cover to permanently lock or secure the cover to the

15 can, while at the same time permitting the cover to be readily and conveniently turned by grasping the cover with one hand and the body with the other. And this removes the objections or difficulties heretofore experi-

20 enced in sifter top cans having no separate piece rotary closing plates and wherein the outer cover is perforated and made to serve both as an outer or slip cover and as a rotary turning plate.

25 The dome shape center  $d^3$  of the rotary cover  $d$  serves to limit the contacting surfaces of the head and cover disks to the perforated zones thereof and thus produce a more perfect closure of the openings or perforations

30 while at the same time enabling the rotary cover to turn with greater ease.

In cans of this construction where the body is provided with a complete circular or annular external bead in place of the series of

35 short shoulders, as in my invention, great difficulty is experienced in practically turning the cover.

In operation the rotary cover D with its deep external friction flange or rim surround-

40 ing and embracing the upper end of the can body affords ample and convenient hold for the hand or fingers to grasp in turning the rotary cover to open or close the perforations in the top head B, while at the same time the

45 friction fit between the rotary cover D and the body A and the inner head B effectually prevents the escape of powder. In my improved powder box the external cover D is permanently applied to the body and does

50 not require to be removed, thus producing a much more convenient package than those having separate rotary closing plates and separate removable slip covers. In my can also the external cover D being permanently,

55 though rotatably, secured to the can or box, adds to its strength and durability and gives the structure as a whole a neat finish. As in my improved powder box the external cover is permanently and irremovably applied, it is

60 not liable to become lost or misplaced as is

the case in powder boxes where the outer cover is removable.

I claim:—

1. In a sifter top powder box or can, the combination with a sheet metal body having 65 an inner perforated top head permanently seamed thereto and provided with a plurality of short segmental externally projecting shoulders near its upper end, of a rotary perforated outer cover having an external 70 deep flange or rim surrounding and embracing the upper end of the body and furnished with an internal annular groove or channel embracing the said short segmental shoulders on the body of the vessel, said inner top head 75 having a central flat disk portion and said rotary cover having a raised or dome shaped center to limit the contacting surfaces of said head and cover disks to the perforated zones thereof, substantially as specified. 80

2. In a sifter top powder box or can, the combination with a sheet metal body having an inner perforated top head permanently seamed thereto and provided with a plu- 85 rality of short segmental externally projecting shoulders near its upper end, of a rotary perforated outer cover having an external deep flange or rim surrounding and embrac- ing the upper end of the body and furnished with an internal annular groove or channel 90 embracing the said short segmental shoulders on the body of the vessel, said inner top head having an annular cylindrical flange and said outer rotary cover having an annular flange or shoulder surrounding said cylindrical 95 flange on said top head, substantially as specified.

3. In a sifter top powder box or can, the combination with a sheet metal body having an inner perforated top head permanently 100 seamed thereto and provided with a plurality of short segmental externally projecting shoulders near its upper end, of a rotary perforated outer cover having an external deep flange or rim surrounding and embrac- 105 ing the upper end of the body and furnished with an internal annular groove or channel embracing the said short segmental shoulders on the body of the vessel said inner top head having an annular cylindrical flange 110 and said outer rotary cover having an annular flange or shoulder surrounding said cylindrical flange on said top head, said top head being united to said body by a folded seam lying within the circumference of the 115 body, substantially as specified.

JOHN M. HOTHERSALL.

Witnesses:

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