

No. 621,785.

Patented Mar. 28, 1899.

R. P. BEATTY.

DISPENSING TOP OR COVER FOR PACKAGES, &c.

(Application filed July 12, 1898.)

(No Model.)

Fig. 1.

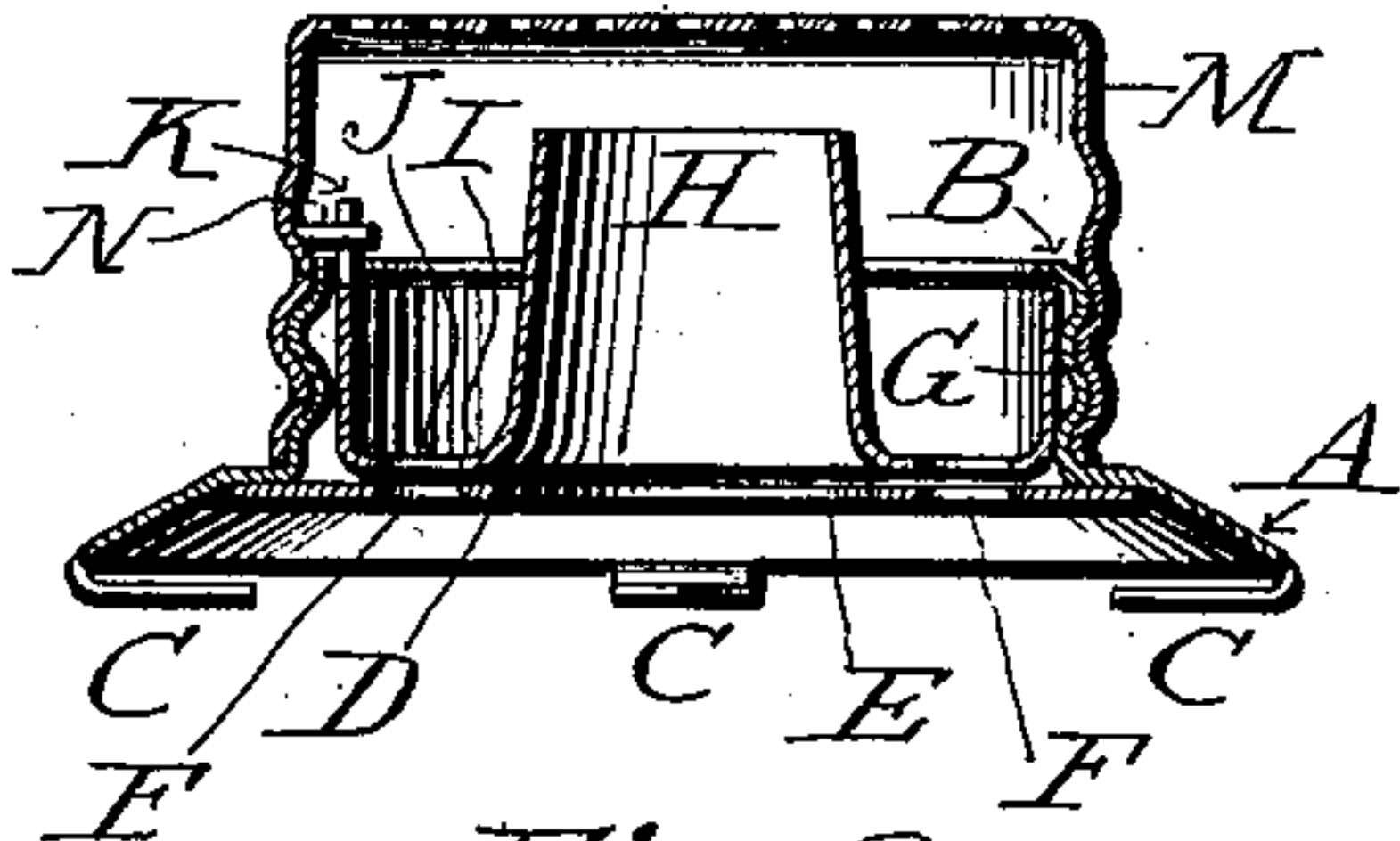


Fig. 6.

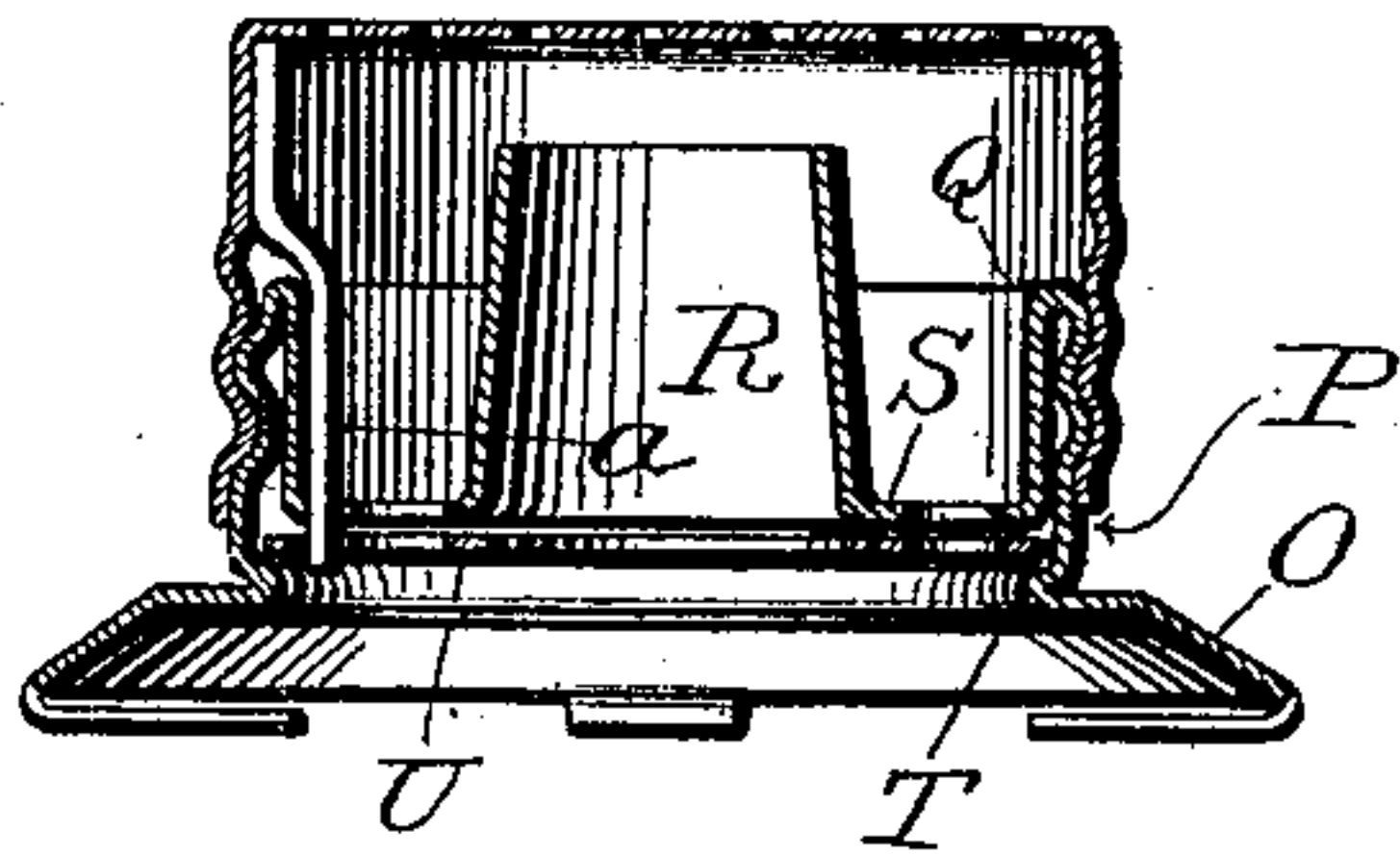


Fig. 2.

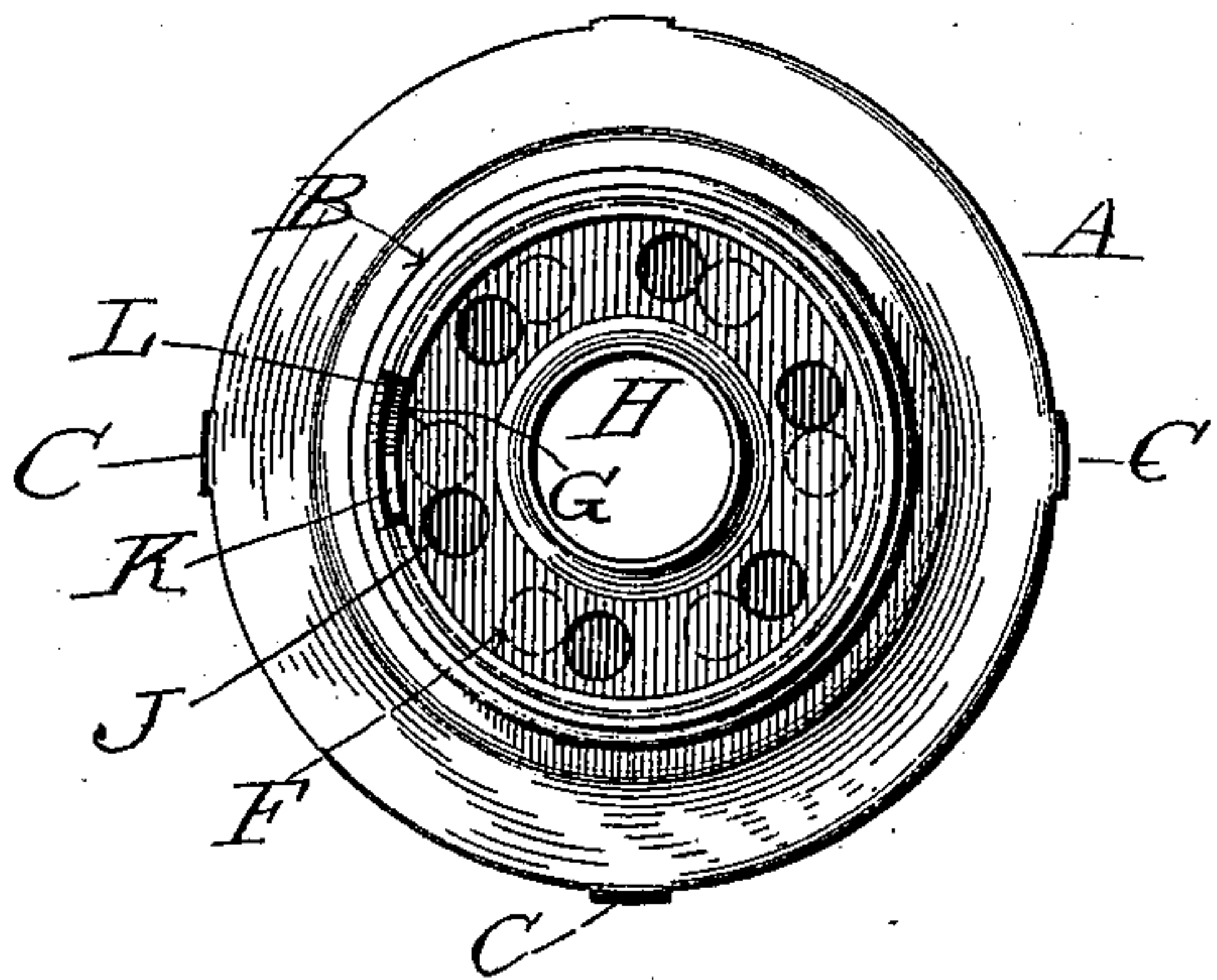


Fig. 7.

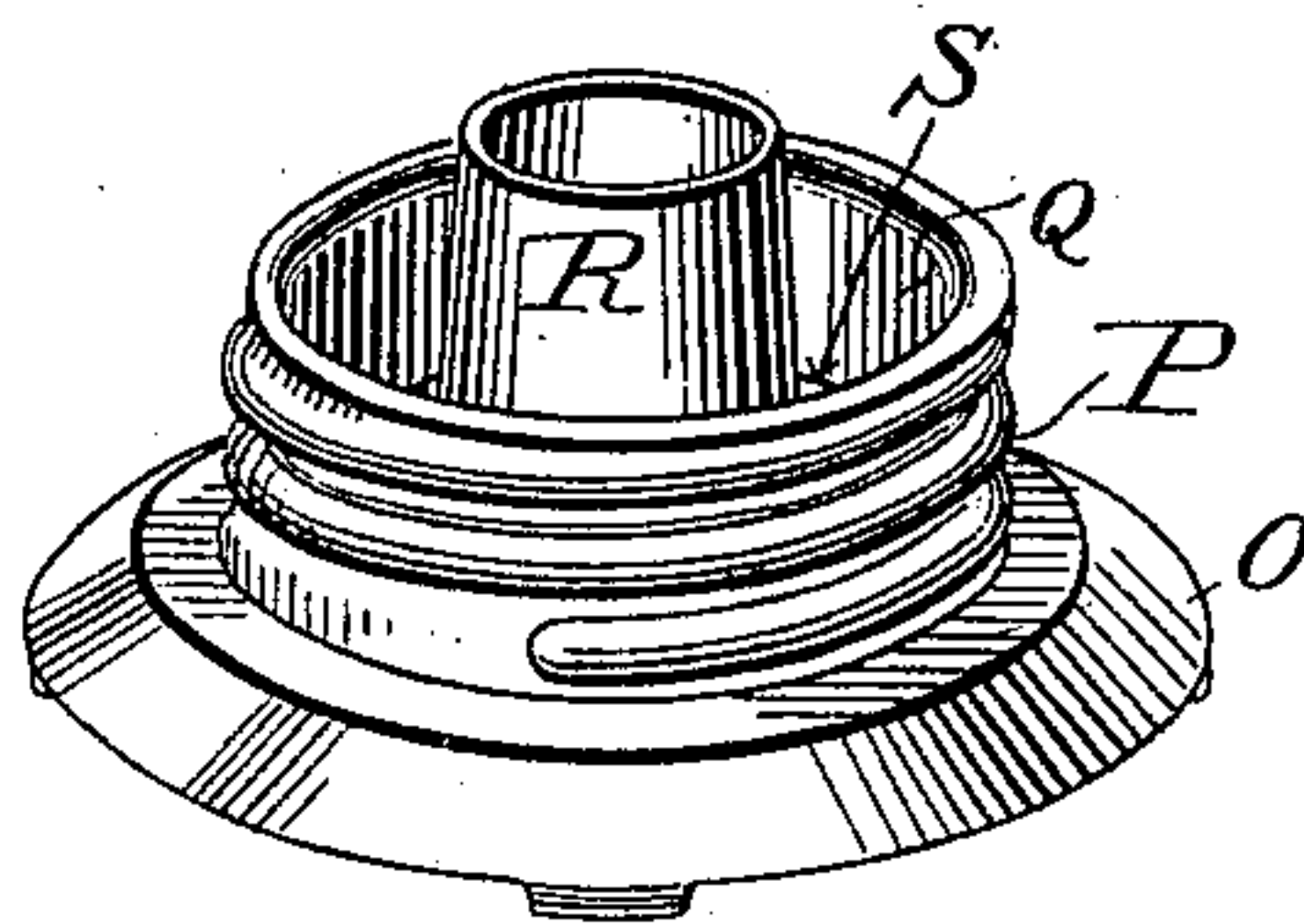


Fig. 3.

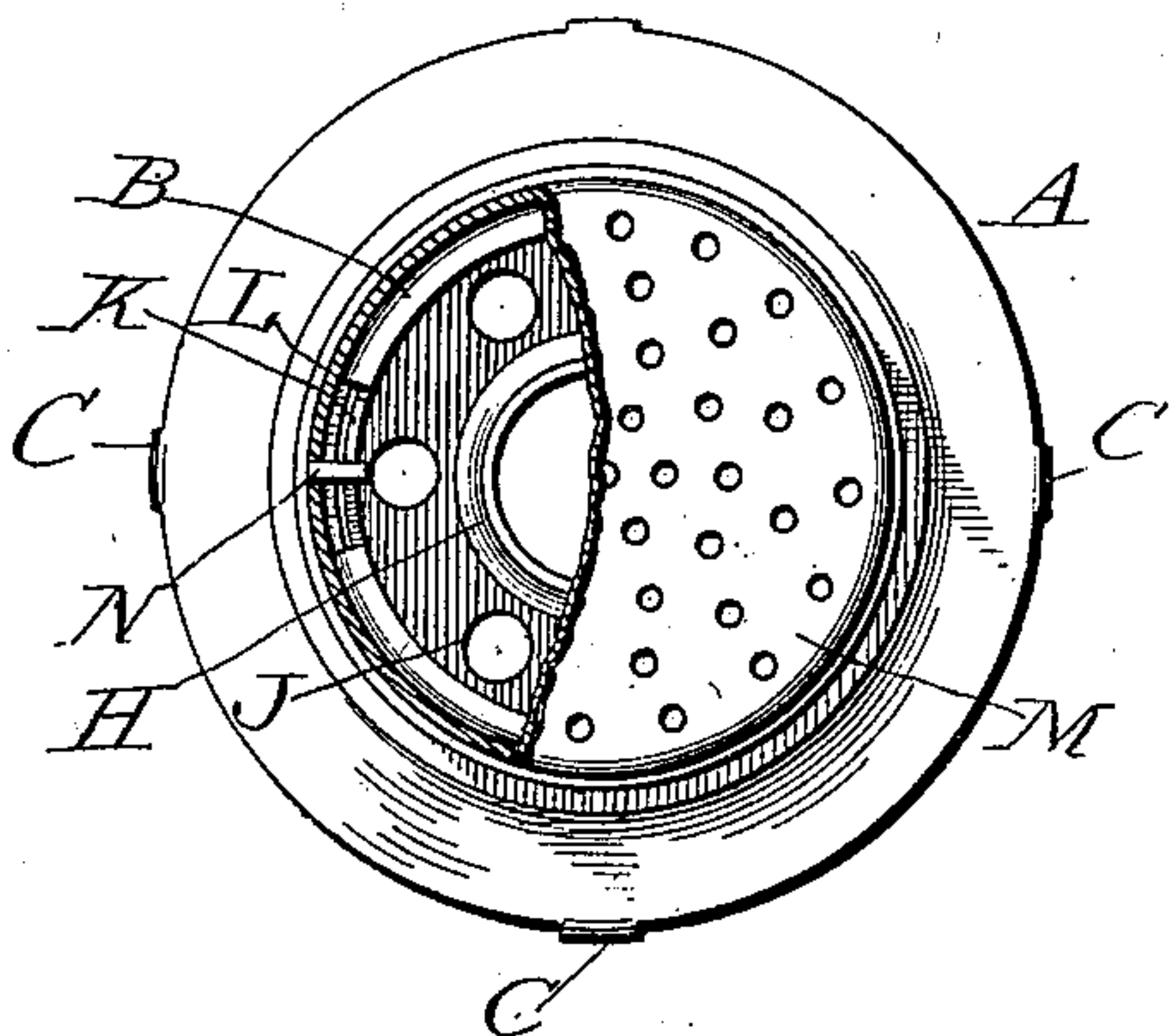


Fig. 4.

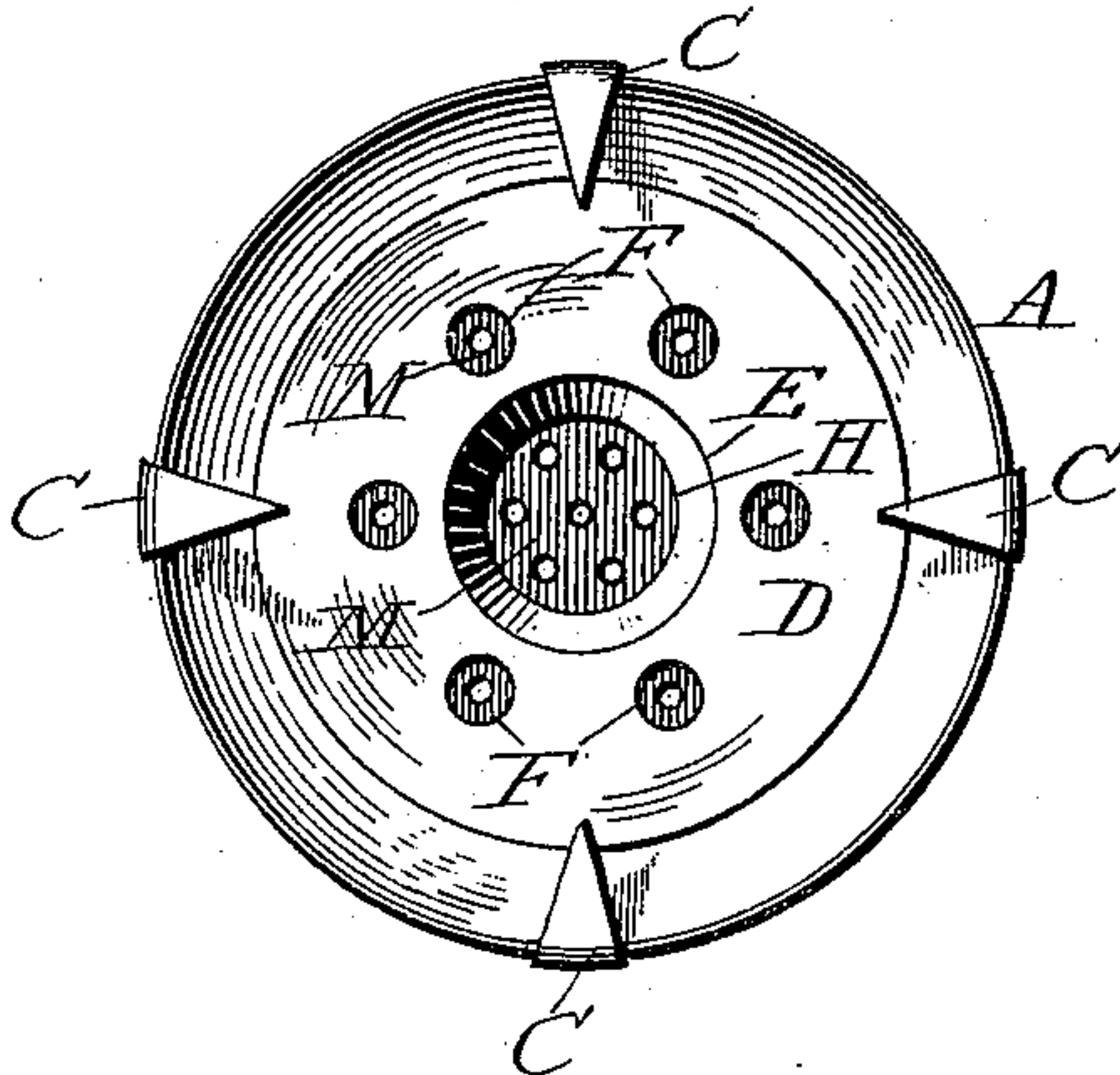
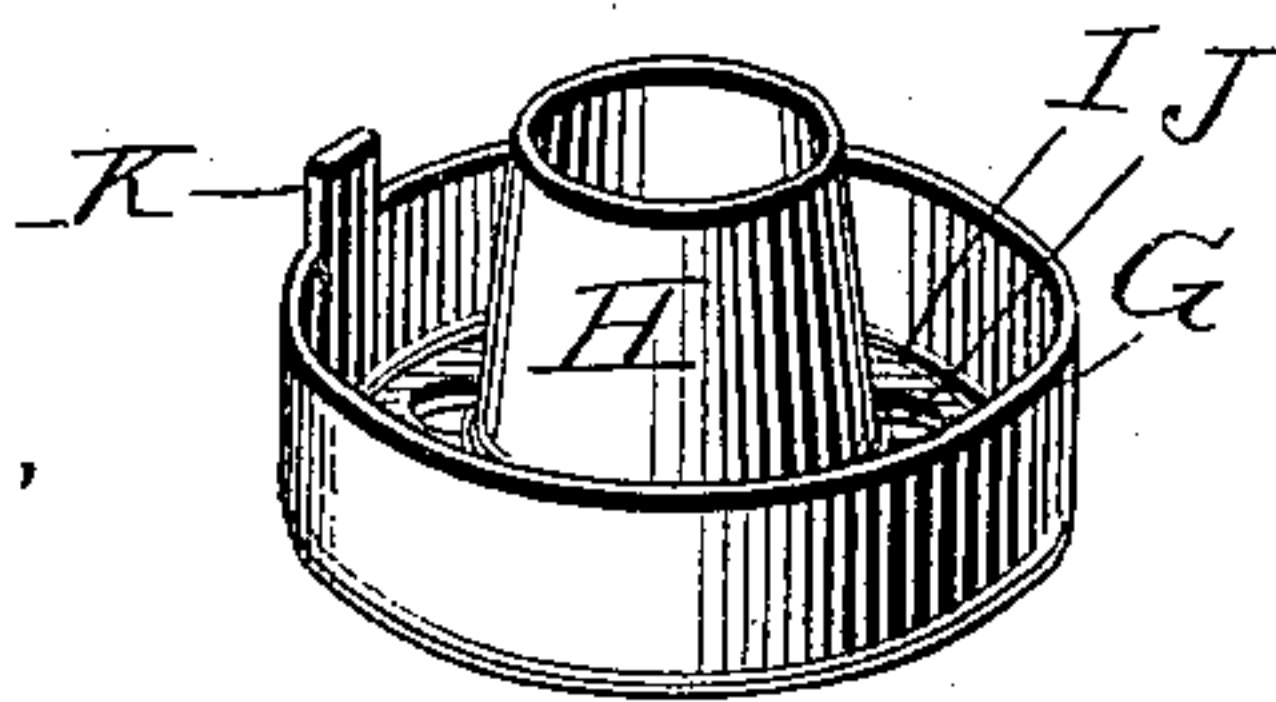


Fig. 5.



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# UNITED STATES PATENT OFFICE.

ROBERT P. BEATTY, OF CLEVELAND, OHIO.

## DISPENSING TOP OR COVER FOR PACKAGES, &c.

SPECIFICATION forming part of Letters Patent No. 621,785, dated March 28, 1899.

Application filed July 12, 1898. Serial No. 685,761. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT P. BEATTY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Dispensing Tops or Covers for Packages, &c., of which the following is a specification.

My present invention pertains to improvements in dispensing tops or covers for packages, the advantages and construction of which will be hereinafter set forth, reference being had to the annexed drawings, wherein—

Figure 1 is a vertical sectional view of the top; Fig. 2, a top plan view with the cap-piece removed, the parts being in such relative position that the series of small openings are closed; Fig. 3, a top plan view, the cap-piece being broken away and the parts in that relation which they assume when the cap is screwed down to place; Fig. 4, a bottom plan view; Fig. 5, a detail perspective view, and Figs. 6 and 7 views illustrating a modified form of construction.

The object of my invention is to produce a top or cover which may be used to dispense granular or powdered substances either in small quantities at a time from various points or to permit of a comparatively large concentrated flow from one point.

It is a well-known fact that no little difficulty is experienced, as well as waste involved, in the present common way of filling small table salt and pepper casters or shakers, due principally to the fact that the packages in which they are put up are not provided with any proper means for facilitating such work. The use of a separate filling device is objectionable for many reasons; and the present invention combines in one structure the elements necessary to produce a shaker for distributing the substance—salt, pepper, or the like—equally from a number of small openings and at the same time to have present a funnel or channel which may be used, when desired, to direct a comparatively large stream of material into any desired receptacle or place.

The cover is designed especially to be attached to and used with salt-packages which now come principally in box form and in small bags.

Referring first to Figs. 1 to 5 of the draw-

ings, A denotes a ring or annular rim provided with an upstanding threaded collar B and at points around its lower edge with projections or fastening devices C. Within said rim at a point below the threaded collar there is secured, by solder or otherwise, a disk D, provided with a large central aperture E, and with a series of smaller apertures F around said opening E.

Seated within the collar B and resting upon the disk D is a cup-shaped member forming a valve and funnel comprising an outer wall G, a central funnel or discharge-nozzle H, connected at its base to the outer wall G by a web or member I, said member being provided with a series of openings J, designed to register with the openings F when the parts are in the position indicated in Figs. 1 and 3. It will be noted that the funnel is slightly higher than the outer wall G, which facilitates its being placed in an open-mouthed vessel for the purpose of filling the same. To secure the cup-shaped member in place, the upper edge of the collar B is turned over slightly, as indicated in Fig. 1, the cup-shaped member, however, being free to be moved or rotated.

Extending up from the wall G and preferably formed integral therewith is an arm K, the arm extending into a recess L, formed in the overturned edge of the collar B.

M denotes the screw-cap, provided with a series of perforations in its top and also with an inwardly-projecting stud N, which extends from the inner face of its side or skirt out into the path of the arm K. The relation of the stud N to the cap and the arm K is such that the cap will screw down nearly tight before the stud comes into contact with the arm, whereupon by a further rotation of the cap the stud will engage the arm and carry it and the cup-shaped member with it and in so doing bring the openings F and I into alinement. Thus it will be seen that when the cap is screwed down to place the openings F and I will always be in communication with the interior of the vessel to which the cover is attached, while the funnel H is always open thereto. When in this position, the vessel and the attached top may be used as an ordinary shaker or caster, the substance passing through the funnel H and



openings F and I and finally out through the perforations in the cap. It is usual to place a disk of paper or the like beneath the perforations in the cap to prevent leakage in shipping, and this disk must of course be removed before the device can be used.

When it is desired to use the device for filling, the cap is removed and the cup-shaped member or valve is rotated, so as to close the openings F and I, leaving only a discharge-passage through the funnel. Before said valve is closed, however, the salt or other material which may have been held within the cup-shaped member and around the funnel will have fallen back into the body of the package or box, thus preventing any loss or waste of material which would otherwise occur. After being used for the purposes of filling and it is again desired to use the device as a shaker, all that is necessary is to screw the cap down to place, the stud N coming into contact with the arm K, turning the cup-shaped piece or valve and bringing the openings therein and the openings F into alinement.

In Figs. 6 and 7 I have shown a modified form of the device, the underlying principles being identical with the other, but the construction differing slightly. In this form, O designates the rim formed with an upstanding threaded collar P, as in the previous structure; but instead of stopping off here the metal is turned down upon itself, forming an upright wall Q, which is connected at its lower end to the central funnel R by the horizontal perforate member S, or, in other words, the rim and cup-shaped member are formed of one piece. At the junction of the rim O and the collar P the metal is turned in slightly, forming a shoulder T, and a disk U, provided with a central opening and a series of smaller openings therearound, is seated thereon beneath the perforate piece S. An arm *a*, secured to the cap-piece, extends down through a slot formed in the member S into an opening provided in the disk U for the purpose of rotating said disk just as the cap-piece reaches its lowermost position, and thus bringing the discharge-openings of the disk and the member S into alinement.

Having thus described my invention, what I claim is—

1. A dispensing top or cover comprising in combination a funnel, a plate around the same provided with a series of openings; and means substantially as described for closing said openings.

2. In a dispensing top or cover, the combination of a funnel; a plate surrounding the same and provided with a series of openings; a valve for closing said openings; a perforate cap designed to fit over the funnel and openings; and means carried by the cap for actuating the valve.

3. In a dispensing top or cover, the combination of a funnel; a series of independent discharge-openings; and means substantially as described for closing said discharge-openings.

4. In a dispensing top or cover, the combination of a funnel; a series of independent discharge-openings; a valve for controlling said discharge-openings; a perforate cap designed to fit over the funnel and openings; and means for actuating the valve and opening the same as the cap is brought to place.

5. In a dispensing cover or top, the combination of a base provided with a threaded collar; a funnel located within said collar and a series of openings formed therearound; means substantially as described for opening and closing said openings; and a perforate cap designed to fit on said threaded collar.

6. In a dispensing cover or top the combination of a base provided with an upstanding threaded collar, and with attaching means at its lower edge; a funnel located centrally within the collar; a series of discharge-openings intermediate said funnel and collar; a valve for closing said openings; a perforate cap; and means carried by the cap for actuating the valve.

7. In a dispensing top or cover, the combination of a rim provided with an upstanding threaded collar and attaching devices at its lower edge; a funnel; members Q and S connecting said funnel and the collar substantially as described; openings formed in member S around the funnel; a disk U rotatably mounted beneath the funnel and provided with a large central opening and a series of smaller openings around the same; a perforate cap designed to fit upon the threaded collar; and an arm attached to the cap to act upon the disk and rotate the same when the cap is screwed down, substantially as and for the purpose described.

In witness whereof I hereunto set my hand in the presence of two witnesses.

ROBERT P. BEATTY.

Witnesses:

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C. H. RICHARDS.