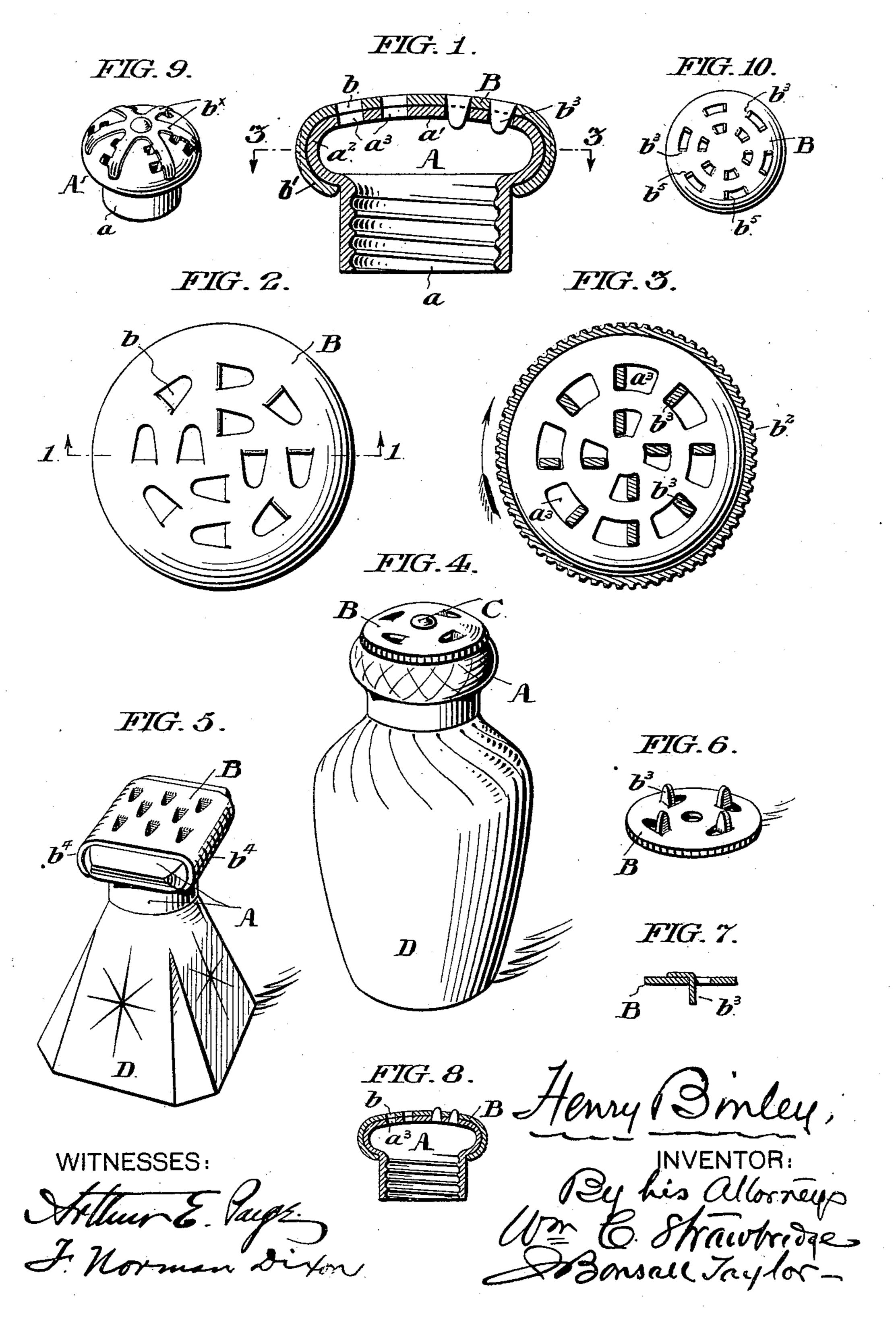
## H. BINLEY. SALT CELLAR.

(Application filed Oct. 12, 1898.)

(No Model.)



## United States Patent Office.

HENRY BINLEY, OF PHILADELPHIA, PENNSYLVANIA.

## SALT-CELLAR.

SPECIFICATION forming part of Letters Patent No. 618,833, dated February 7, 1899.

Application filed October 12, 1898. Serial No. 693,272. (No model.)

To all whom it may concern:

Be it known that I, HENRY BINLEY, a citizen of the United States, residing in the city and county of Philadelphia, in the State of 5 Pennsylvania, have invented certain new and useful Improvements in Salt-Cellars, of which

the following is a specification.

My invention relates to salt retaining and distributing devices, and generally to a parto ticular type of such devices which as heretofore constructed consist of a receptacle provided with two perforated caps, one, the main cap, applied to the mouth of the receptacle, and the other, the supplementary cap, ap-15 plied upon and adapted for lateral or rotary movement with respect to said main cap, the arrangement being such that when the supplementary cap is in one position its perforations register with those of the main cap, 20 and when in another position its imperforate portions cover the perforations of the main cap,—with the result that in the first described position free egress for the contents of the receptacle is afforded, and in the sec-25 ond position the receptacle is closed and its contents protected from dampness and contamination by dust.

In practical use the perforations of salt cellars of this type frequently become clogged 30 by the salt to such an extent as to render them temporarily unserviceable, and it is the object of my invention to equip a salt cellar of the character referred to with simple and convenient means by which the perforations may 35 be kept clear and the usefulness of the struc-

ture be correspondingly enhanced.

Generally stated, my invention comprehends the provision of a salt cellar, or receptacle for holding salt, pepper, spice, or other 40 granular or pulverized substances, of the foregoing general type in which one of the caps is provided with spurs arranged to exist permanently within the perforations of the other, which latter are of sufficient size to permit 45 the slight movement of one cap with respect to the other, with the result that when the upper cap is reciprocated laterally or rotated the spurs are caused to move from end to end of the perforations in which they are entered, 50 and to cut away any salt which may have accumulated in such perforations.

In the accompanying drawings I show and

herein I describe, a good form of a convenient embodiment of my invention, as well as modified forms thereof, the particular sub- 55 ject-matter claimed as novel being hereinafter definitely specified.

In the drawings,

Figure 1 is a vertical, sectional, elevational, view of the caps of a salt cellar embodying 60 my invention, removed from the salt-retaining receptacle, section being supposed on the dotted line 1—1 of Figure 2.

Figure 2 is a plan of the caps shown in Figure 1.

Figure 3 is a plan view of the main cap shown in Figure 1,—the edge wall and the spurs of the supplementary cap being shown in section,—and the section of said edge wall which is shown as serrated being assumed to 70 be taken on the dotted line 3—3 of Figure 1.

Figure 4 is a view in perspective of a complete salt cellar embodying a modified form

of my invention.

Figure 5 is a view in perspective of a com- 75 plete salt cellar embodying another modified form of my invention.

Figure 6 is a view in perspective of the supplementary cap represented in Figure 4, removed and shown as inverted.

Figure 7 is a sectional detail of a portion of a cap, illustrating a modified application of the spur.

Figure 8 is a view similar to Figure 1, illustrating, however, the spurs as applied to the 85 lower cap.

Figure 9 is view in perspective of a modified form of my invention; and,

Figure 10 is a top plan view of still another modified embodiment of my invention. 90 Similar letters of reference indicate corre-

sponding parts.

Referring to Figures 1, 2, and 3, of the drawings,—A is the main cap, the same being shown as having a neck a, adapted to be ap- 95 plied to the mouth of any suitable salt-containing receptacle, and a perforated head a'shown as preferably formed as an integral continuation of the neck, represented as approximately flat as to its upper surface, and 100 which as represented is of greater diameter than the neck  $\alpha$ , with the result that a bead, flange, or rib  $a^2$  projects beyond said neck.

 $a^{3}$  are the series of perforations or open-

ings in the upper surface of the main cap A, preferably of rather larger size than is usual in salt cellars of this class, preferably shaped as segmentally curved elongated openings of 5 uniform width from end to end, and arranged in concentric relationship with respect to the axis of the head, and in such manner that vertical planes coinciding with the ends of the openings are approximately radial with ro respect to said axis, the openings furthermost from said axis being, as shown, longer than those nearest said axis.

B is the supplementary cap, mounted upon said main cap in such manner as to adapt it 15 for slight rotary oscillation with respect to the same, conveniently, as shown in Figures 1, 2, and 3, by providing said supplementary cap with a depending flange b' which extends around and beneath the bead or rib  $a^2$  of the 20 main cap.

The supplementary cap illustrated in section in Figure 3 differs slightly from that shown in Figures 1 and 2 in that, as stated, it is equipped with a serrated or milled edge  $b^2$ .

The openings b in the supplementary cap correspond in number, size, and distribution, with the openings in the main cap.

The supplementary cap illustrated in the figures referred to, is provided with a series 30 of spurs  $b^3$  located one in the vicinity of each of the perforations b and extending each through one of the openings  $a^3$ .

The spurs  $b^3$  are conveniently formed contemporaneously with the openings b, by cut-35 ting U-shaped incisions in the body of the cap, and bending down the tongues or flaps thus produced.

When the parts are in the position shown in Figures 1, 2, and 3, the openings in the re-40 spective caps are in registry with each other, and, upon inverting and shaking the containing receptacle, its contents will emerge through them.

Upon the cessation of use of the device, the 45 supplementary cap B may be turned in the direction indicated by the arrow in Figure 3, with the result that the imperforate portions of the supplementary cap will be carried over the openings in the main cap, the movement 50 of the supplementary cap continuing until its spurs encounter the distant ends of said openings, in which position said openings will be completely closed.

When salt accumulates in the openings  $a^3$ 55 to such an extent as to clog them, they may be cleared by turning the supplementary cap backward and forward.

The embodiment of my invention shown in Figures 4 and 6 differs from that shown in 60 Figures 1, 2, and 3, merely in that the upper or supplementary cap B is formed as a flat disk of small diameter, preferably provided with a milled edge, and secured upon and with respect to the main cap by an axial 65 pivot C.

In the embodiment shown in Figure 5 the main cap A is of quadrangular as opposed to

circular plan, and its elongated openings, concealed beneath the supplementary cap, are disposed with their axes in parallelism.

The supplementary cap B is formed as a quadrangular plate, the two end portions  $b^4$ of which are turned down beneath the opposing side edges of the main cap. The principle of construction illustrated in Figure 5 is 75 essentially the same as that shown in the figures of the drawings already described, the only difference being that the supplementary cap of Figure 5 is adapted to be reciprocated in a right line instead of in a curved line.

In Figure 7 I illustrate a spur  $b^3$  which instead of being struck from the body of the cap B is formed as an independent structure and soldered or otherwise secured to it.

In each of the figures of the drawings thus 85 far described, I illustrate the spurs  $b^3$  as depending from the supplementary cap and working within the openings formed in the main cap. Obviously, however, my invention is not limited to this particular arrangement, 90 but covers equally its reversal which comprehends a main cap having tongues entered in openings formed in a supplementary cap.

Figure 8, otherwise a duplicate of Figure 1, represents such an arrangement as that above 95 mentioned.

D, Figures 4 and 5, represent container. bodies of ordinary construction.

In the embodiment of my invention shown in Figure 9, portions of the upper cap which 100 are so to speak, idle, are removed,—leaving the cap in the form of a six pointed star. In the embodiment referred to the perforations in the main cap are disposed in rows radial with respect to the axis of the cap, with the 105 result that the radially disposed arms  $b^{\times}$ , in one position of the supplementary cap, cover said openings. The spurs  $b^3$  depend of course from the radial arms  $b^{\times}$  and the operation of the device is of course the same as that of the 110 structures already described.

My invention would to a degree be present in the structure of Figure 9 even if the perforations of the main cap were so large that the radial arms  $b^{\times}$  failed to cover them, in- 115 asmuch as even in such a construction the spurs of the said supplemental skeleton cap would be present in the perforations, and, in the rotative oscillation of said supplemental skeleton cap, operative to clean such perfo- 120 rations.

In the construction illustrated in Figure 10 the upper cap B has spurs  $b^3$  which respectively present through each of the perforations or openings of the lower main cap, and 125 the lower or main cap likewise has spurs  $b^5$ which respectively present through each of the openings of the upper or supplementary cap with the result that the perforations of both the upper and lower caps may be simul- 130 taneously cleared.

Having thus described my invention, I claim—

1. In combination, a main cap embodying

openings, a supplementary cap structure supported over said main cap, means for holding said supplementary cap structure in constant contact with said main cap but free for lat-5 eral movement with respect thereto, and tongues mounted on one of said structures and projecting into the openings formed in

the other,—substantially as set forth.

2. The combination to form a top for a salt 10 cellar, of a main cap embodying elongated openings, a supplementary cap also embodying elongated openings, means for securing said supplementary cap upon the main cap free for lateral movement with respect there-15 to, and spurs mounted upon one of said caps and permanently existing within the openings in the other cap, substantially as set forth.

3. The combination to form a top for a salt 20 cellar, of a main cap embodying elongated concentric openings, a supplementary cap also embodying elongated concentric openings, means for securing said supplementary cap upon the main cap free for rotary oscil-25 lation with respect thereto, and spurs mounted upon said supplementary cap and extending into the openings in the main cap, substantially as set forth.

4. The combination to form the top of a salt 30 cellar, of a main cap embodying elongated openings, a supplementary cap in which Ushaped tongues have been formed and bent

down to project through openings of the main cap, and means for securing said supplementary cap upon the main cap free for ro- 35 tary oscillation with respect thereto, substan-

tially as set forth.

5. The combination to form the top of a salt cellar, of a main cap formed with a neck and a head having a projecting rib or bead, a sup- 40 plementary cap mounted upon said main cap and having a depending flange bent beneath the rib or bead of the said main cap, openings in the top of said main cap and in said supplementary cap, and spurs integral with said 45 supplementary cap and extending through the openings in the main cap, substantially as set forth.

6. In combination, a main cap embodying perforations, a supplemental structure sup- 50 ported over said main cap, means for holding said supplemental structure in fixed vertical relationship with respect to said main cap but free for lateral movement with respect thereto, tongues mounted on said supplemental 55 structure and projecting into the perforations of the main cap, substantially as set forth.

In testimony that I claim the foregoing as my invention I have hereunto signed my name

this 6th day of October, A. D. 1898.

HENRY BINLEY.

In presence of—

J. Bonsall Taylor, F. NORMAN DIXON.