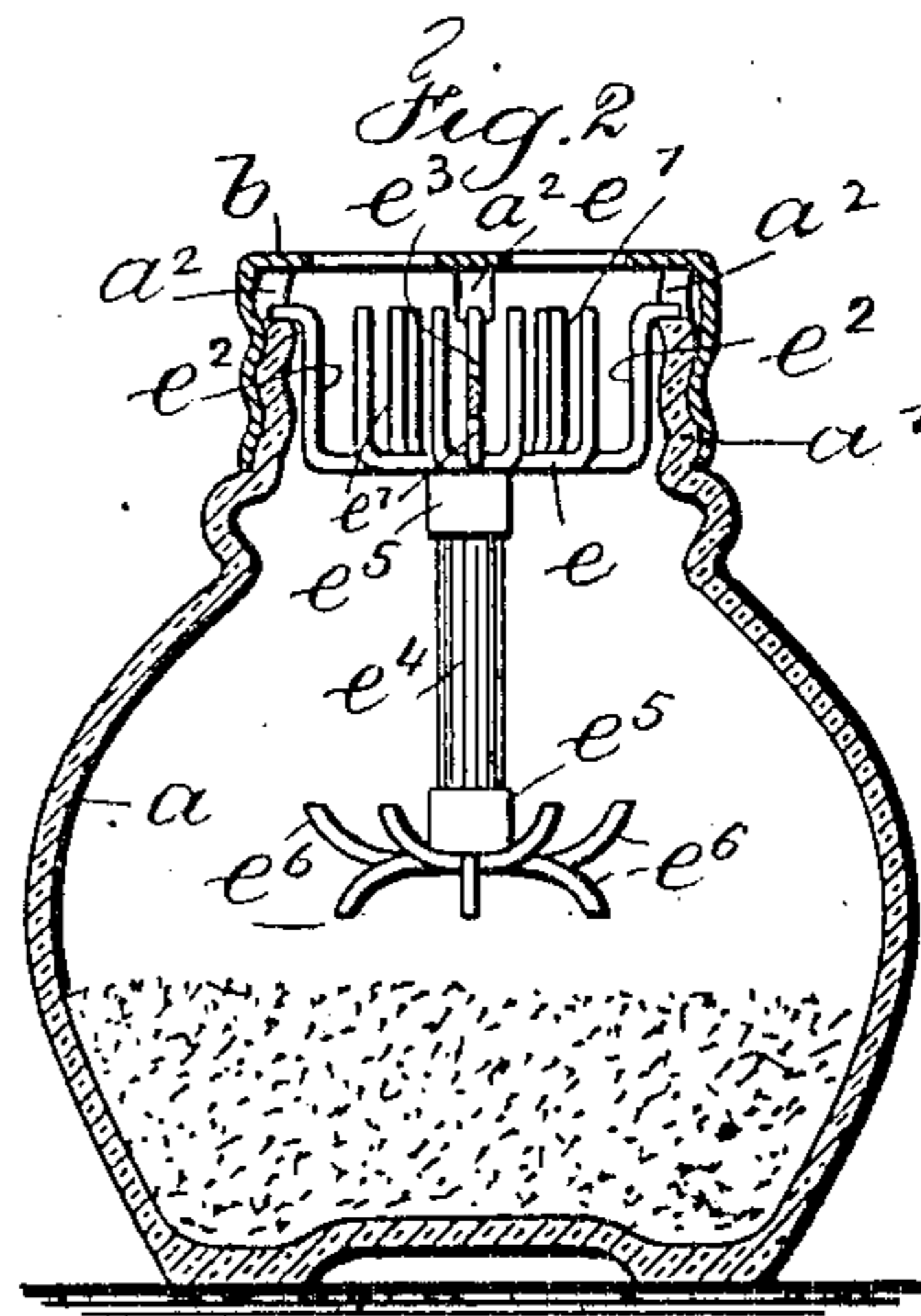
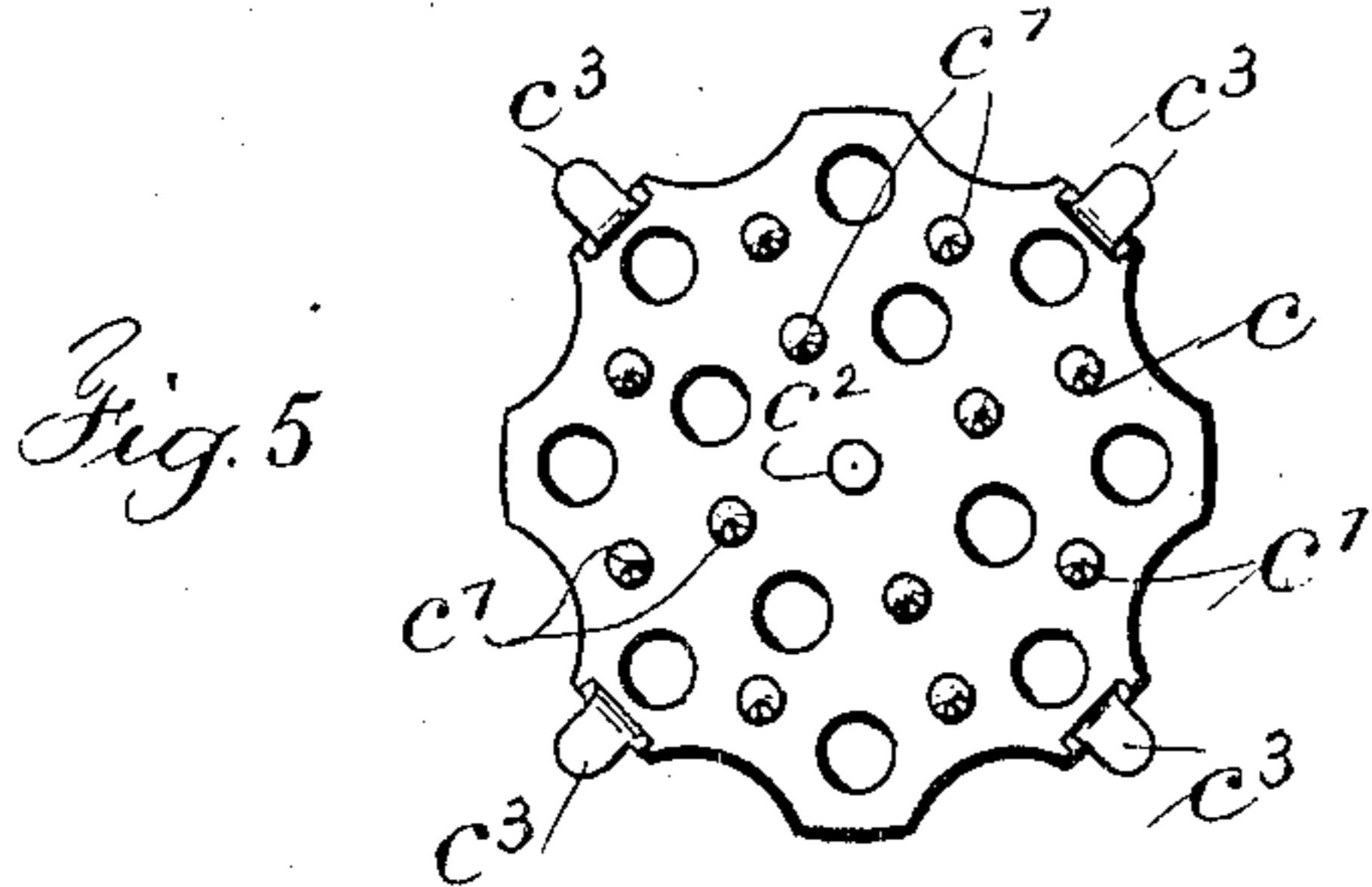
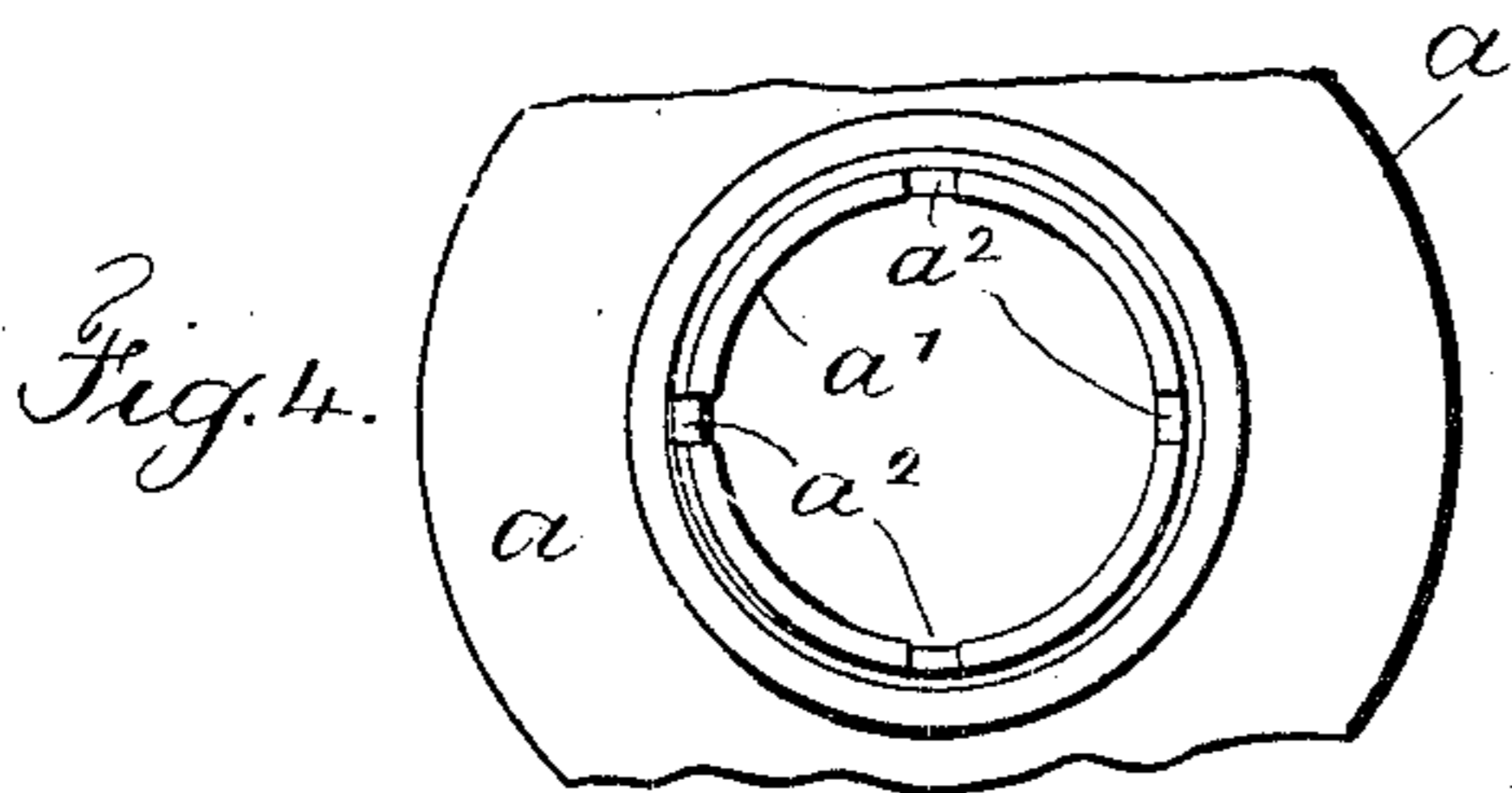
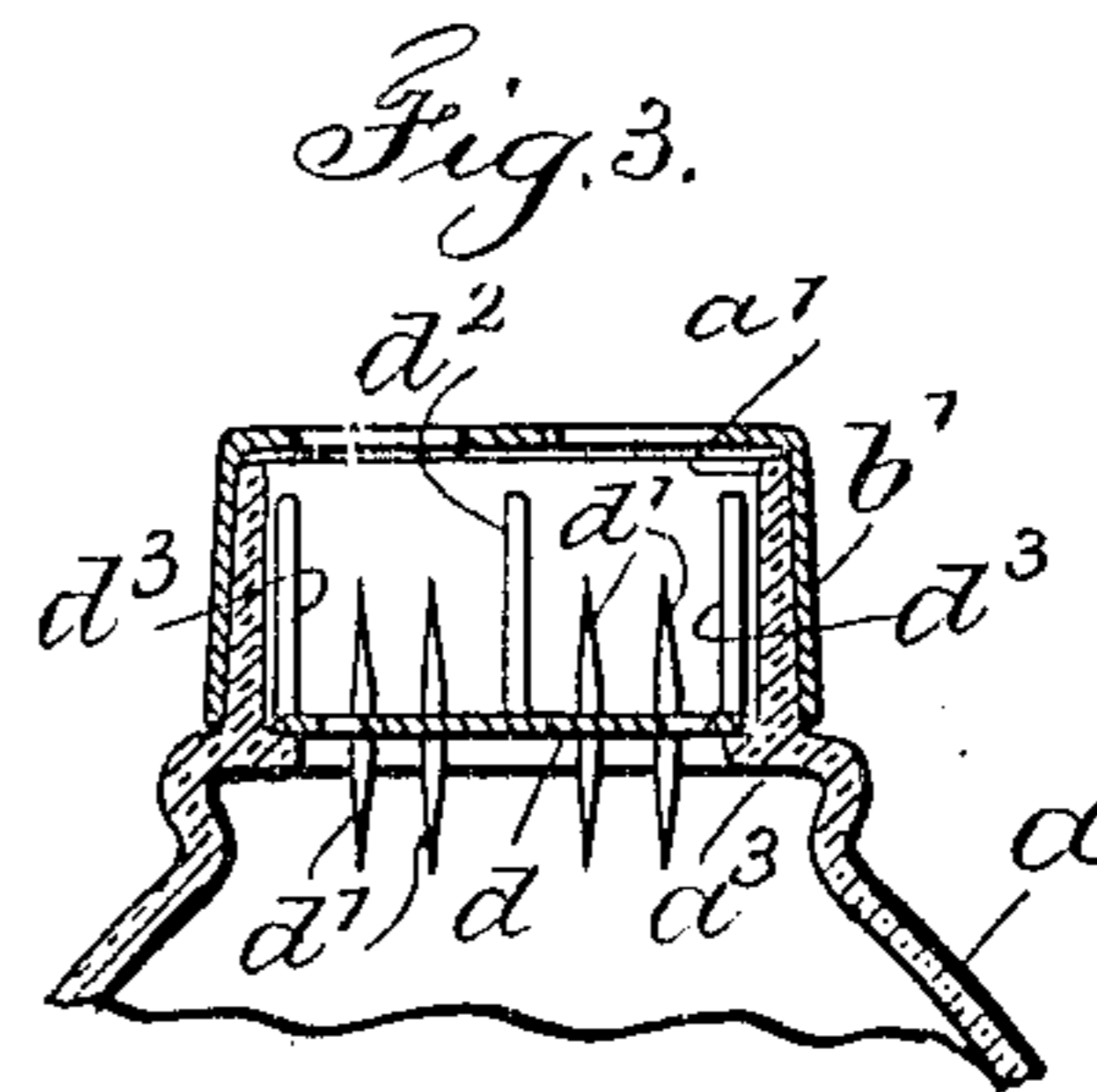
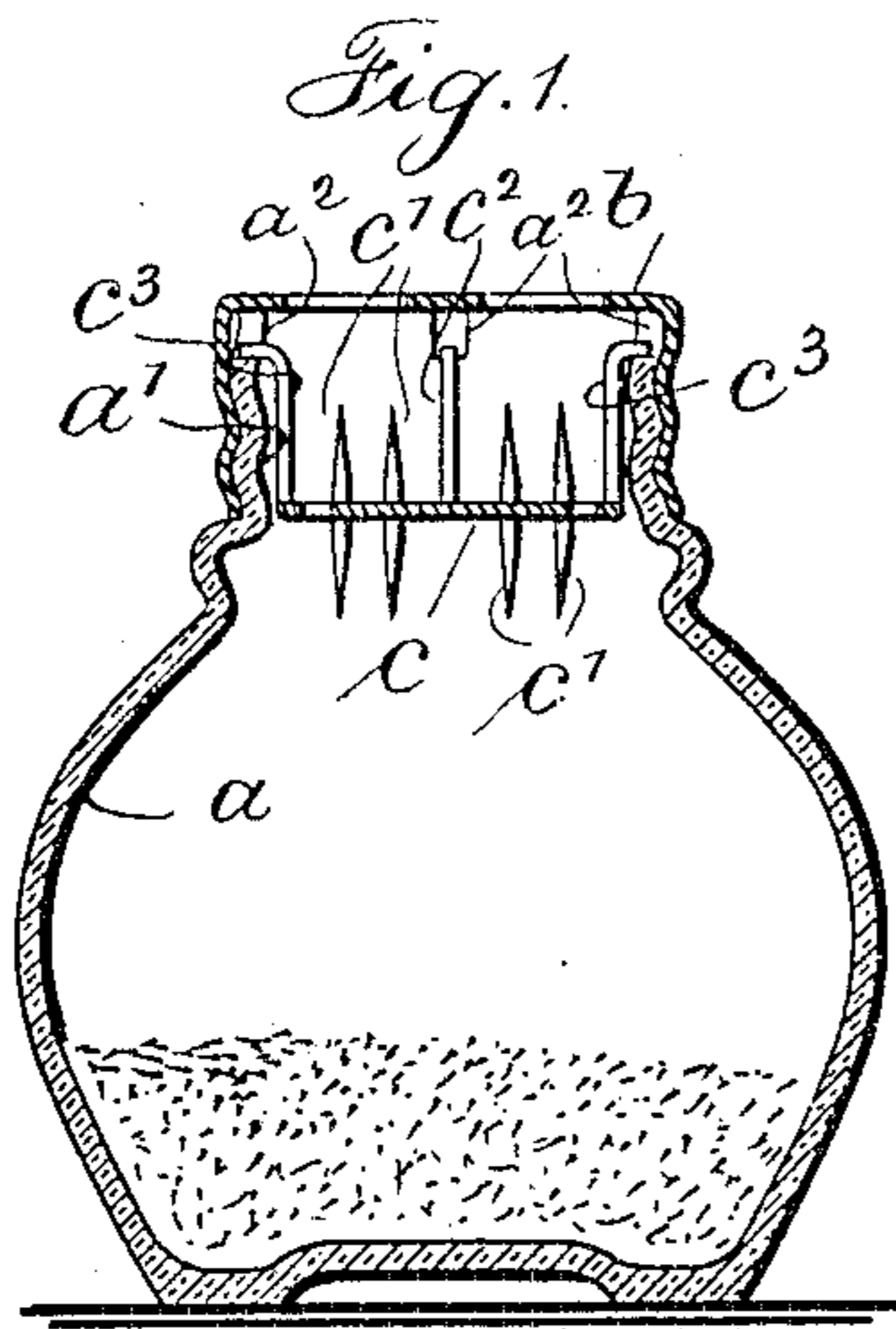


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O. KAMPFE.
SALT SHAKER.

APPLICATION FILED OCT. 7, 1905.



Witnesses

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SALT-SHAKER.

No. 843,280.

Specification of Letters Patent.

Patented Feb. 5, 1907.

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To all whom it may concern:

Be it known that I, OTTO KAMPFE, a citizen of the United States, residing at the borough of Brooklyn, in the county of Kings, city and State of New York, have invented an Improvement in Salt-Shakers, of which the following is a specification.

As usually constructed heretofore salt-shakers consist of a body of glass or metal and a removable perforated cap or cover, and a device has heretofore been employed within these shakers in the form of a pronged bar to break up the damp salt in an effort to obviate the trouble that arises from the influences of moisture taken up by the salt in humid weather and at the seashore, which moisture makes it almost impossible to shake the salt from the holder.

The object of my invention is to make it possible to shake the salt out of the holder at all times with substantially equal facility regardless of its condition.

In carrying out my invention I provide a device within the salt shaker or receptacle having a predetermined extent of movement axially of the body of the shaker normally distant from the perforated cap, so as to leave an air-chamber between the same and the under side of the cap, into which the salt enters as comminuted by and shaken through the movable device previous to the salt passing through the perforated cap, said movable device acting to comminute the salt. This movable device is preferably in the form of a foraminous plate provided with a suitable support and a means for limiting its extent of movement, the same being properly guided in the neck of the salt-receptacle and movable along the same. This movable device is provided with series of projections rising from the general plane of the structure either from one or both sides of the same, and where the foraminous plate is employed these projections are preferably from both sides of the plate, and I prefer to employ in connection therewith a center pin adapted to contact with the under surface of the perforated cap at the center thereof, so as to assist in limiting the extent of movement.

In the drawings, Figures 1 and 2 are vertical sections showing a complete salt-shaker, and Fig. 3 a vertical section at the upper end of a salt-shaker, the three figures representing forms of my invention. Fig. 4 is a plan of the receptacle as shown in Fig. 1 without the cover and movable device, and Fig. 5 is a

plan, in larger size, of the foraminous plate structure shown in Fig. 1.

Referring to Figs. 1-4, inclusive, *a* represents the body of the salt-shaker, and *a'* the neck thereof. These parts may be made of any suitable material and in any manner well known in the art, preference being given to glass, as the same is very easily cleansed. The neck *a'*, as shown in Figs. 1, 2, and 4, is molded with an exterior screw-thread, and the perforated cap *b*, fitting over the neck, is provided with a screw-threaded flange which unites with the screw-thread of the neck when the cap is connected to the body of the shaker, as shown in Figs. 1 and 2, while, as shown in Fig. 3, the neck of the receptacle is made smooth and slightly tapering and the cap *b'* provided with a smooth surface to hold to the same frictionally when pressed tightly to place.

By means of the device employed by me the internal space is separated divisionally at about the base of the neck, so that between the under side of the cap and said point of separation or division there is a chamber formed in the neck, the function of which is to break up the salt in the body portion *a* as the same is shaken for delivery, which action causes a substantially regulatable quantity to pass into the neck-chamber to be delivered through the openings in the cap, and where the same is damp and refractory in its movement this prevents the body of salt packing within the salt-shaker against the inner surface of the cap and clogging up the opening, as has heretofore been usual in these devices, it being a fact in the present case that at this line of division the salt is comminuted, and a limited quantity passes this line of division through the chamber and through the perforated cap. I have shown equivalent means for producing this division in a salt-shaker, Figs. 1 and 5 representing one form, Fig. 2 another form, and Fig. 3 still another form, of my invention.

Referring to Figs. 1, 4, and 5, *a²* are notches made in the rim of the neck *a'* at spaced-apart intervals, four of these being shown in Fig. 4. In these figures, *c* represents a foraminous plate having pointed projections *c'* spaced apart between the holes of the plate and advantageously extending out from opposite surfaces or sides of the plate at right angles to the plane of the plate. *c²* is a central pin of predetermined length, and *c³* suspending arms, four in number, as shown

in Fig. 5, and of a length agreeing with the length of the center pin, with their extreme ends turned over at right angles to the line of the arms and the diameter of the arms across the plate being slightly less than the internal diameter of the neck. The turned-over ends of the arms c^3 are received in notches a^2 . Consequently when the salt-shaker is in an upright position, such as shown in Fig. 2, these arms rest at the bases of the notches a^2 , and in shaking the salt from the receptacle a movement is given to the foraminous plate substantially equal to the depth of the notches, the plate moving along in the neck a' until the center pin and the ends of the arms strike the under surface of the perforated cap, this device moving back and forth with the up-and-down movement of the shaker in the hand, such movement further assisting in breaking up the salt and in causing the same in regulatable quantities to pass through the perforations of the plate, through the chamber between the plate and the cap, and through the perforations of the cap.

In the form of my invention shown in Fig. 3 the foraminous plate d , the projections d' , and the center pin d^2 are the same as shown in Figs. 1 and 5. This plate, however, is provided with guiding-arms d^3 and the base of the neck a' of the receptacle with projections or a ledge a^3 , formed integral with the receptacle. These projections or ledge support the plate and the parts connected therewith at a predetermined point, and the center pin d^2 and arms d^3 are of the same length, the length providing for a movement of the plate with the movement of the receptacle, which movement substantially agrees with the movement herein described of similar parts with reference to Fig. 1, the function and the operation being exactly the same.

In the form of my invention shown in Fig. 2 the movable device is made of wire and comprises arms e in a common plane occupying about the position of the foraminous plates c d heretofore described. This movable device also has projecting ends e' of the arms e , guiding-arms e^2 , whose diameter across the plane of the arms e is slightly less than the inner diameter of the neck a' . There is also in this movable device a center pin e^3 . The ends of the arms e^2 are overturned, as are the arms c^3 in Figs. 1 and 5, and these wires are gathered together as a stem e^4 , held together by sleeves e^5 . The lower ends of these wires are turned outward radially, as central arms e^6 , which may alternately bend in opposite directions, as shown in Fig. 2. The turned-over ends of the arms e^2 are received in the notches a^2 of the neck, and the device is so supported, and the entire wire structure shown is movable axially of the salt-receptacle and its neck when the same is shaken

for the removal of the salt, the central arms initially acting to break up the salt, and the wires or arms e , in a plane parallel to the perforated cap b , permit regulatable quantities of the salt to pass by the same into the chamber formed between the same and the cap, so that the main body of the salt in this form of the invention, the same as in the form shown in Figs. 1 and 2, never reaches the cap, and such quantities as pass by the plane of the arms pass freely through the neck-chamber and through the perforated cap.

I claim as my invention—

1. A salt-receptacle having one end thereof perforated, a pulverizing device loosely mounted in said receptacle near said perforated end and adapted to produce a chamber near said end substantially separate from the body of the receptacle holding the salt and means on said receptacle for supporting said pulverizing device and for guiding the same to give said device a slight axial movement with respect to said receptacle when the same is shaken.

2. A salt-receptacle having one end thereof perforated, a pulverizing device loosely mounted in said receptacle near said perforated end and adapted to produce a chamber near said end substantially separate from the body of the receptacle holding the salt, means on said receptacle for supporting the pulverizing device and devices forming part of the pulverizing device and extending out from the periphery thereof within said chamber for guiding said pulverizing device during a slight axial movement imparted thereto with respect to the receptacle when the same is shaken.

3. The combination with the body and neck of a salt receptacle or shaker and a removable cap therefor, of a device adapted to fit and temporarily remain within the neck of the shaker and produce therein a chamber substantially separate from the body of the receptacle holding the salt, and said device being loosely held at portions thereof between the cap and portions of the neck of the receptacle whereby a slight reciprocatory movement is given to said device when the receptacle is shaken.

4. The combination with the body and neck of a salt receptacle or shaker and a removable cover therefor, the neck being provided with notches of appreciable depth at intervals in the upper edge, of a device adapted to fit and temporarily remain within the neck of the shaker and produce therein a chamber substantially separate from the body of the receptacle holding the salt, and guide-arms forming part of said movable device whose diameter is slightly less than that of the neck of the receptacle, with overturned ends to the arms received in but of relatively less diameter than the depth of the notches said notches serving as a means of support

normally for said movable device whereby an axial movement may be given to said device by the shaking of the structure as held in the hand.

5 5. The combination with the body and neck of a salt receptacle or shaker, the neck having notches in the rim, and a removable perforated cap for the receptacle, of a forami-
10 nous plate adapted to be received and temporarily remain in the neck of the salt-shaker, devices engaging said notches for supporting
15 said foraminous plate loosely in position so that there is formed a chamber in the neck separate from the chamber holding the salt, whereby the salt shaken is obliged to pass
20 through the foraminous plate and through the chamber in the neck before reaching the perforated cap and simultaneous therewith a movement is given to the said movable de-
vice axially of the salt-shaker.

6. The combination with the body and neck of a salt receptacle or shaker, the neck

having notches in the rim and a removable perforated cap for the receptacle, of a forami-
25 nous plate adapted to be received in the neck of the salt-shaker and having pointed projec-
tions extending out therefrom and at right angles to the plane thereof and guide-arms whose extreme diameter across the plate is
30 slightly less than the inner diameter of the neck with the upper ends of said arms overturned and received in the notches of the
neck and thereby supported, said notches providing for a predetermined and limited
35 movement of the said foraminous plate and its projections axially of the salt-shaker and simultaneous with the removal of the salt.

Signed by me this 4th day of October, 1905.

OTTO KAMPFE.

Witnesses:

GEO. T. PINCKNEY,
BERTHA M. ALLEN.