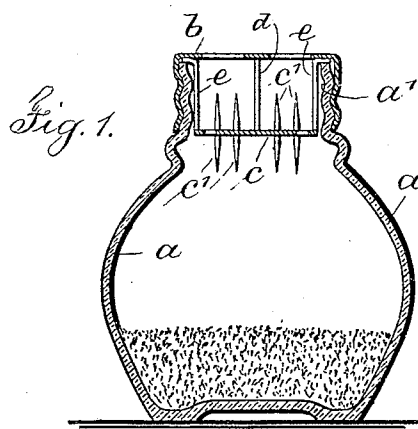
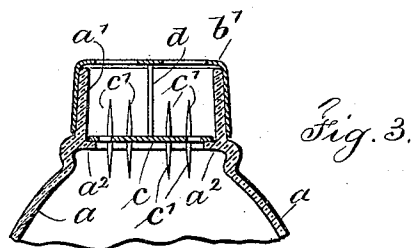
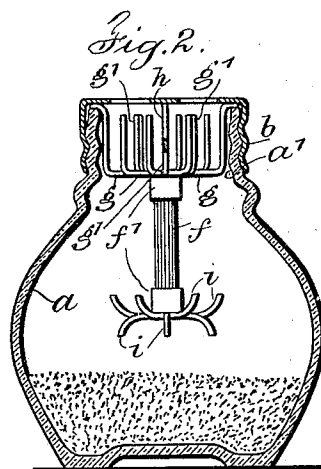
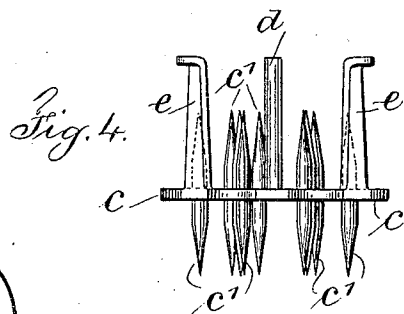
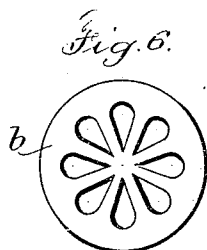
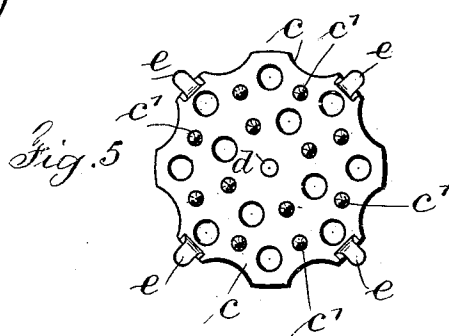
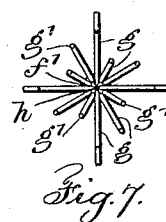


No. 875,531.

PATENTED DEC. 31, 1907.

O. KAMPFE.  
SALT SHAKER.

APPLICATION FILED OCT. 7, 1905.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## SALT-SHAKER.

No. 875,531.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed October 7, 1905. Serial No. 281,730.

*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.

Salt shakers, as usually constructed, consist of a body of glass or metal and a removable perforated cap or top. So long as the salt remains dry it is easily shaken out of the holder, but the influences of moisture taken up by the salt in humid weather or by the sea shore, make it almost impossible to shake the salt from the holder. Several structures have been devised, such as pronged bars to break up the damp salt in an effort to obviate this trouble, but without appreciable success, and the object of my invention is to be able to shake the salt out of the holder with substantially equal facility, regardless of its condition.

In carrying out my invention I provide a foraminous plate or partition in the neck of the salt receptacle or shaker, distant from the perforated cap so as to leave an air chamber between the two parts into which the salt enters as comminuted by and shaken through the said plate before, and in such a quantity as will readily pass through the perforated cap. This foraminous plate or equivalent device, may be supported by projections or by a ledge of the receptacle neck, or by arms therefrom over the top edge of the neck of the receptacle held under the cap. I prefer to employ pointed projections from one or both sides of the foraminous plate or device between the openings or holes therein and at right angles thereto, and to provide a central pin from said plate to the under surface of the cap to space the plate and cover apart.

In the drawing, Figures 1 and 2 are vertical sections of 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 an elevation and Fig. 5 a plan in larger size of the foraminated plate device shown in Fig. 1. Fig. 6 is a plan of the cap and Fig. 7 is a plan of the removable portion of the form of my invention shown in Fig. 2.

Referring to Figs. 1, 2 and 3, *a* represents the body of the salt shaker, and *a'* the neck thereof. These parts may be made of any material or in any manner well known in this art; they are very frequently made of glass.

The neck *a'* is shown as molded with an exterior screw thread and the perforated cap *b* fitting over the neck with a screw-threaded flanged edge united to the screw thread of the neck, as shown in Figs. 1 and 2, or as shown in Fig. 3, the neck may have a smooth slightly tapering exterior 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 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 in instances where the salt is damp this prevents the body of salt packing within the salt shaker against the inner surface of the cap and clogging up the openings, as has heretofore been usual in these devices. I have shown equivalent means for producing this division in the salt shaker, Figs. 1, 4 and 5 representing one form—Fig. 2 another form, and Fig. 3 still another form. Referring to Figs. 1, 4 and 5, *c* represents a perforated or foraminous plate or partition provided with pointed perforations *c'* which project at right angles to the plane of the plate and from opposite sides of the same, one series of said pointed projections extending down from the plate into the body of the salt shaker or receptacle and the other series above the plate into the chamber formed between the plate and the removable perforated cap. This foraminous plate or partition is also provided at spaced apart intervals with suspending arms *e*, four of which are shown in Fig. 5, and also said plate is provided with a center pin *d*. The upper ends of the arms *e* are bent at right angles to the main portion and the diameter across the plate to the outer surfaces of the arms is such as to agree substantially with the internal diameter of the neck consequently the free ends of the arms projecting beyond this diameter will extend over the upper edge of the neck, while the arms will fit snugly and freely down into the neck, the arms supporting the plate from the upper edge of the neck with the plate about in line with the lower portion of the neck and

the center pin *d* is of substantially the same length as the arms, so that when the perforated cap is screwed down to position the inner surface thereof bears upon the upper surfaces of the arms *e* and also upon the center pin *d* to hold the foraminous plate or partition firmly in place.

From Fig. 1 it will be apparent that above the foraminous plate or partition *c* and between the same and the perforated cap *b* there is a chamber in the neck of the salt shaker, and when the same is turned over or inverted to shake out the salt, the projecting points *c'* help to break up the salt and a limited amount of salt is free to pass through the openings in the plate *c*, and no more than what passes through the plate *c* can pass through the perforated cap *b*, but so much as passes through the plate *c* must pass through the chamber between the same and the cap *b*; therefore, there is no possibility of a clogging action of the salt against the perforated cap; and I prefer to notch the periphery of the plate *c* so as to provide for the passage of salt in the notches thereof as well as in the perforations thereof, and the pointed projections above the foraminous plate between the same and the perforated cap perform the office of preventing the particles of salt within the chamber adhering together.

Referring to Fig. 3, it will be noticed that the neck *a'* of the body of the shaker is provided with an internal flange or ledge *a''*, and that in this form of my invention the arms *e* are dispensed with but the center pin *d* is retained and comes against the under surface of the cap, performing the function of holding the foraminous plate down upon its supporting ledge *a''*, the device of this form of my invention having the same action in use as that described with reference to the form shown in Figs. 1, 4 and 5.

Referring to Fig. 2 the device represented in this form of my invention comprises a stem *f* of wires with retaining sleeves *f'*. Above the upper sleeve *f'* the wires are all bent out at right angles forming arms *g* in a common plane, and the ends of said arms are upturned at *g'*. Some or all of these arms may be upturned, but the arms *g* are each on a common plane and perform the function of dividing up the space within the salt shaker at about the upper end of the receptacle or body *a*, producing a chamber in the neck between the said arms and the removable perforated cap *b*. Equidistant arms *g* of the series are upturned of a diameter equal to the inner diameter of the neck with their free ends overturned, said arms fitting within the neck and centering the stem *f*, the free ends of these arms resting upon the upper edge of the neck in a manner similar to the arms *e* of Figs. 1, 4 and 5, and in this device I employ a center pin *h* agreeing in all respects

with the center pin *d* and the wires of the stem at the lower end thereof are bent at substantially right angles to the stem into radial series *i*, which may, as shown in Figs. 2 and 7, be partly upturned and partly downturned.

In the operation of the device in Figs. 2 and 7, the arms *i* assist centrally in breaking up the salt and the arms *g* in a common plane divide the same and permit a regulatable quantity to pass into the chamber between their plane and the cover, and the upturned portions of said arms help further in dividing up the salt, so that the quantity that passes by the plane of the arms *g* is kept from again adhering and permitted to freely pass through the perforations of the cap.

The devices herein shown and constituting the forms of my invention described are removable from the glass or other body of the shaker, as freely as is the cap or cover, so that said parts may be cleansed and the salt supply replenished.

I claim as my invention:

1. The combination with the body and neck of a salt receptacle or shaker and a removable perforated cap therefor, of an open mesh structure adapted to fit snugly down into the neck of the shaker to a predetermined extent so as to produce therein a chamber substantially separate from the body of the receptacle holding the salt, pointed projections formed therewith, a center pin also formed therewith and rising to contact against the under side of said cap, a series of peripheral arms rising from said open-work structure and having overturned upper ends extending over the upper end of the neck and held in place by the cap.
2. The combination with the body and neck of a salt receptacle or shaker and a removable perforated cap therefor, of a foraminous plate adapted to fit snugly within and down into the neck of the shaker to a predetermined extent so as to produce therein a chamber substantially separate from the body of the receptacle holding the salt, a series of peripheral arms rising from said foraminous plate and having overturned upper ends extending over the upper end of the neck and held in place by the cap when in position, and a central pin projecting from said foraminous plate and agreeing in length with the series of peripheral arms and contacting against the under side of the cap.
3. The combination with the body and neck of a salt receptacle or shaker and a removable perforated cap therefor, of a foraminous plate adapted to fit snugly within and down into the neck of the shaker to a predetermined extent so as to produce therein a chamber substantially separate from the body of the receptacle holding the salt, a series of peripheral arms rising from said foraminous plate and having overturned

upper ends extending over the upper end of the neck and held in place by the cap when in position, and series of pointed projections formed with said foraminous plate and projecting upward into the chamber between the foraminous plate and the perforated cap.

4. The combination with the body and neck of a salt receptacle or shaker and a removable perforated cap therefor, of a foraminous plate adapted to fit snugly within and down into the neck of the shaker to a predetermined extent so as to produce therein a chamber substantially separate from the body of the receptacle holding the salt, a series of peripheral arms rising from said foraminous plate and having overturned upper ends extending over the upper end of the neck and held in place by the cap when in position, and a series of pointed projections formed with said foraminous plate and extending in opposite directions from opposite sides thereof, part of the said projections extending upward into the chamber formed between the foraminous plate and the perforated cap and others extending down into the receptacle holding the salt.

5. The combination with the body and neck of a salt receptacle or shaker and a removable perforated cap therefor, of a foraminous plate adapted to fit snugly within and down into the neck of the shaker to a predetermined extent so as to produce therein a chamber substantially separate from the body of the receptacle holding the salt, a series of peripheral arms rising from said foraminous plate and having overturned upper ends extending over the upper end of the neck and held in place by the cap when in position, a central pin projecting from said foraminous plate and agreeing in length with the series of peripheral arms and contacting against the under side of the cap, and a series of pointed projections formed with said foraminous plate and projecting upward into the chamber between the foraminous plate and the perforated cap.

Signed by me this fourth day of October 1905.

OTTO KAMPFE.

Witnesses:

GEO. T. PINCKNEY,  
BERTHA M. ALLEN.