S. H. FOLSOM.

Salt-Cellar.

No. 219,854. Patented Sept. 23, 1879.

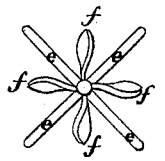

Fig. 3.

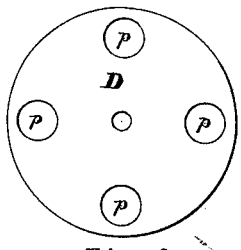

Fig. 4.

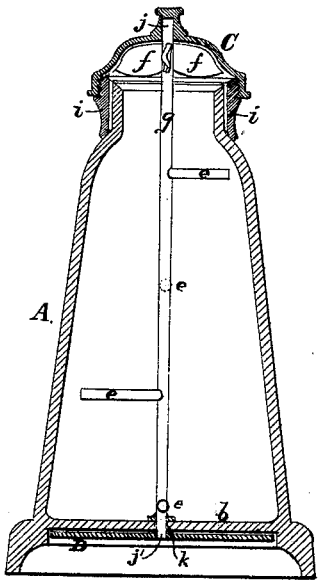

Fig. 2.

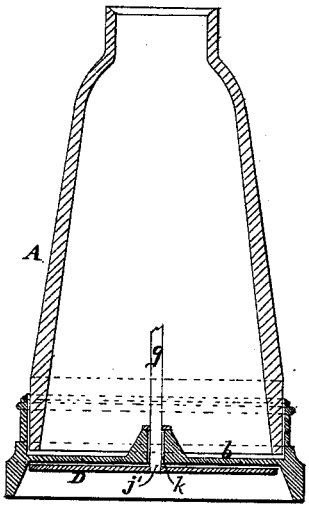

Fig. 5.

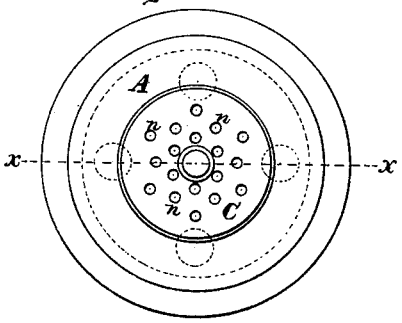

Fig. 1.

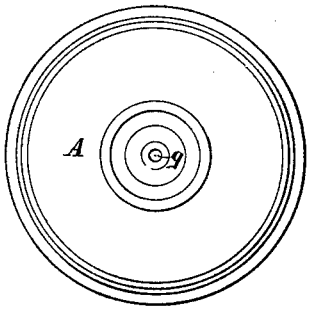

Fig. 6.

Witnesses. { E. A. Hemmenway. / Benj. Andrews Jr.

Inventor. Samuel H. Folsom by N. C. Lombard Atty.

UNITED STATES PATENT OFFICE.

SAMUEL H. FOLSOM, OF WINCHESTER, MASSACHUSETTS.

IMPROVEMENT IN SALT-CELLARS.

Specification forming part of Letters Patent No. **219,854**, dated September 23, 1879; application filed February 3, 1879.

To all whom it may concern:

Be it known that I, SAMUEL H. FOLSOM, of Winchester, in the county of Middlesex and State of Massachusetts, have invented a certain new and useful Improvement in Salt-Cellars, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to a salt-holder for table use, having an adjustable cap or top, with apertures, through which the salt is ejected when required for use. Such salt-holders are in common use; and I am aware that various devices have been inserted in the chamber of this kind of salt-holder for the purpose of preventing the salt from adhering to the sides of the holder, clogging the apertures of the cap, consolidating in a mass or lumps, and to keep the salt in a finely-pulverized condition, in order to secure a delivery of salt through the apertures of the cap sufficiently free for practical use; but these devices have been only partially successful in securing a proper delivery of salt, owing to its natural tendency to rapidly absorb moisture from the atmosphere, and to become sticky and adhesive after a short exposure to the atmosphere in the holder.

To overcome this difficulty, and to secure a free delivery of salt from the holder in quantities desired, however adhesive the salt may have become by exposure, is the object of my invention; and it consists in the combination, with a salt-holder, of a shaft mounted in bearings in the cap and bottom of the holder, and extending through the bottom and far enough below it to attach to the shaft a winch or disk, by means of which the shaft may be revolved, and provided with one or more radiating arms, which, when the shaft is revolved, pass through the salt in the holder, thoroughly stirring it, detaching portions which may adhere to the sides and bottom of the holder, breaking the lumps, and reducing the entire body of salt in the holder to a condition in which it is free to fall upon the cap when the holder is inverted for use.

It further consists in the combination, with the salt-holder provided with a removable cap or cover, and the centrally-located shaft mounted in bearings and adapted to be revolved therein, of one or more radiating blades having screw-shaped or spiral surfaces, adapted to revolve in close proximity to and sweep over the entire perforated surface of the cap, driving before them the salt which has fallen upon the cap, and forcing it through the apertures thereof.

By the use of this rotating shaft and its appendages the particles of salt are not only disengaged and separated from the mass by attrition produced by being swept around upon the surface of the cap and fall through the apertures by force of gravity, but the screw of the propelling-blades projects the salt forward upon the cap and forcibly ejects it through the apertures; and as the quantity of salt ejected from the holder depends upon the number and rapidity of the revolutions of the shaft, it is obvious that the amount of salt ejected is under the control of the operator.

Figure 1 of the drawings is a plan of my new and improved salt-holder. Fig. 2 is a vertical section on line *x x* on Fig. 1. Fig. 3 is a plan of the shaft and its appendages. Fig. 4 is a plan of the winch-disk. Fig. 5 is a vertical section, illustrating a modification of the bottom of the holder, and Fig. 6 is a plan of the same.

In the drawings, A is the body of the holder, and may be made of glass or any other suitable material, and of any desired form which will admit of the application thereto of a rotating shaft, as hereinbefore described. *i* is the collar, which is permanently attached to the upper portion of the holder, and to which the cap C is attached by means of a screw-thread formed upon said collar engaging with a corresponding thread upon the cap C.

The collar *i* may be dispensed with by making the screw-threads directly upon the surface of the holder, to which the cap may be attached.

b is the bottom of the holder, and is provided with an aperture, *k*, through which the shaft *g* extends, and in which it has its lower bearing. The bottom *b* is located above the extreme lower end of the sides of the holder, to form beneath said bottom a recess, within which is located the winch or disk D, firmly

secured upon the shaft *g*, and by which said shaft may be revolved.

The bottom *b* may be made in a separate part and attached to the holder A, as represented in Fig. 5.

e e e e are arms attached to and projecting radially from the shaft *g*, and *f f f f* are the propelling-blades, having curved screw-shaped surfaces, as shown. *j* and *j'* are the journals of the shaft *b*, fitted to bearings in the cover and bottom of the holder, as shown.

The shaft blades and arms may be cast entire, or made in parts and joined together.

The cap C is provided with apertures *n n*, through which the salt is delivered.

The winch D, made in the form of a circular disk, is provided with apertures *p p*, to afford a firm hold upon the winch with the finger when rotating the shaft.

The arms *e e* and propelling-blades *f f* are not limited to any fixed number, as one of each will perform the service very satisfactorily; but I prefer to use a larger number, as shown.

The operation of my improved salt-holder is as follows: The holder is supplied with salt through the opening at the top, the cap being removed for that purpose. To use said holder, invert it and revolve the shaft by the finger placed upon the winch. The salt falls upon the perforated cap, and is ejected through the apertures of the cap by the propelling-blades.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The combination, with a salt-holder provided with a perforated cover, of a shaft mounted in bearings in the top and bottom thereof, and one or more radially-projecting blades having spiral or screw-shaped surfaces secured upon said shaft in close proximity to the inner surface of said perforated cap, and adapted to be rotated from the outside of the salt-holder, substantially as and for the purposes described.

2. The combination, with a salt-holder provided with a perforated cover, of the shaft *g*, one or more radial arms, *e e e*, one or more spiral or screw-shaped blades, *f f*, and a winch or disk, D, all constructed, arranged, and adapted to operate substantially as and for the purposes described.

Executed at Boston, Massachusetts, this 29th day of January, A. D. 1879.

SAMUEL H. FOLSOM.

Witnesses:

N. C. LOMBARD,

E. A. HEMMENWAY.