

(No Model.)

F. B. THATCHER.
SALT SHAKER.

No. 572,138.

Patented Dec. 1, 1896.

Fig. 1.

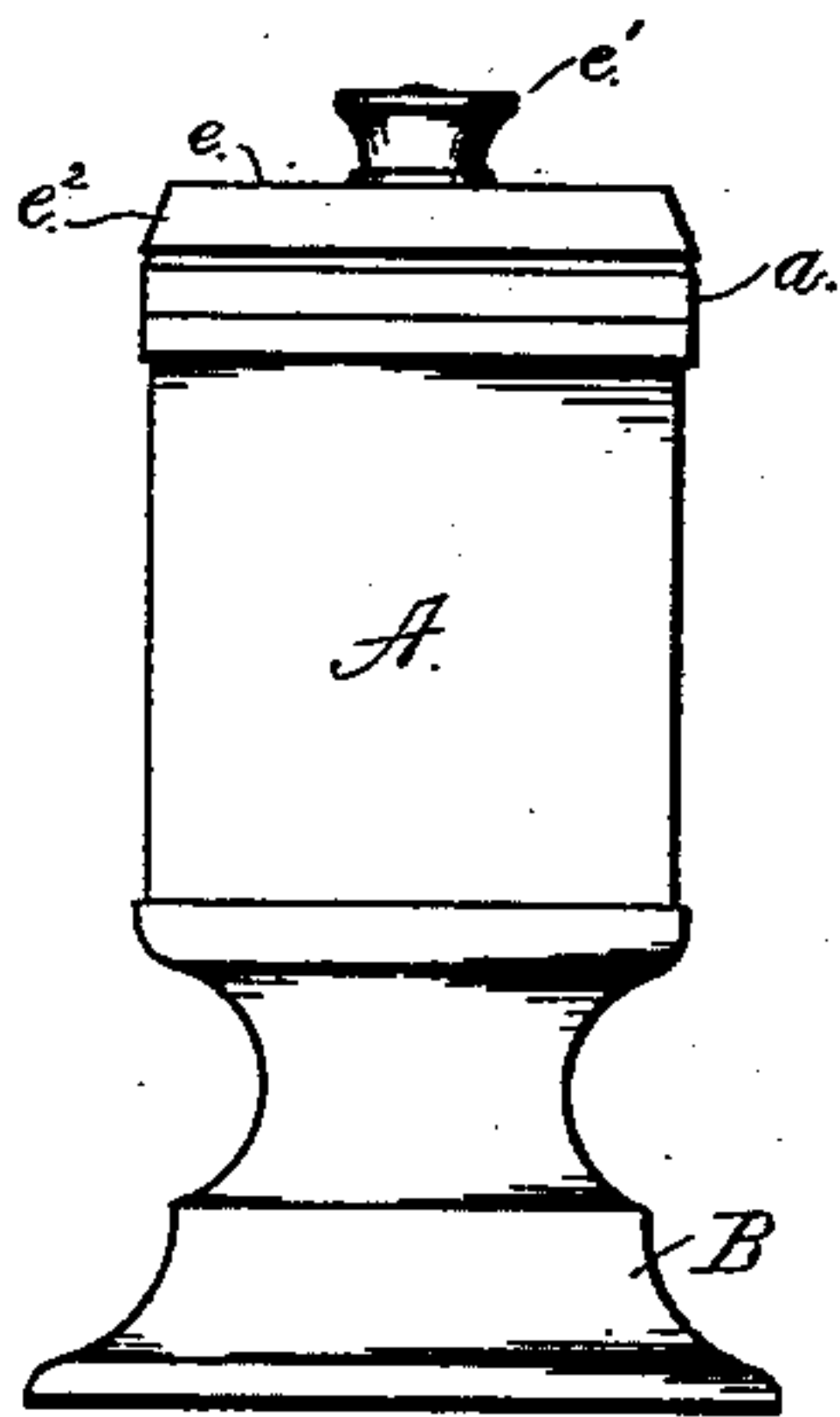


Fig. 2.

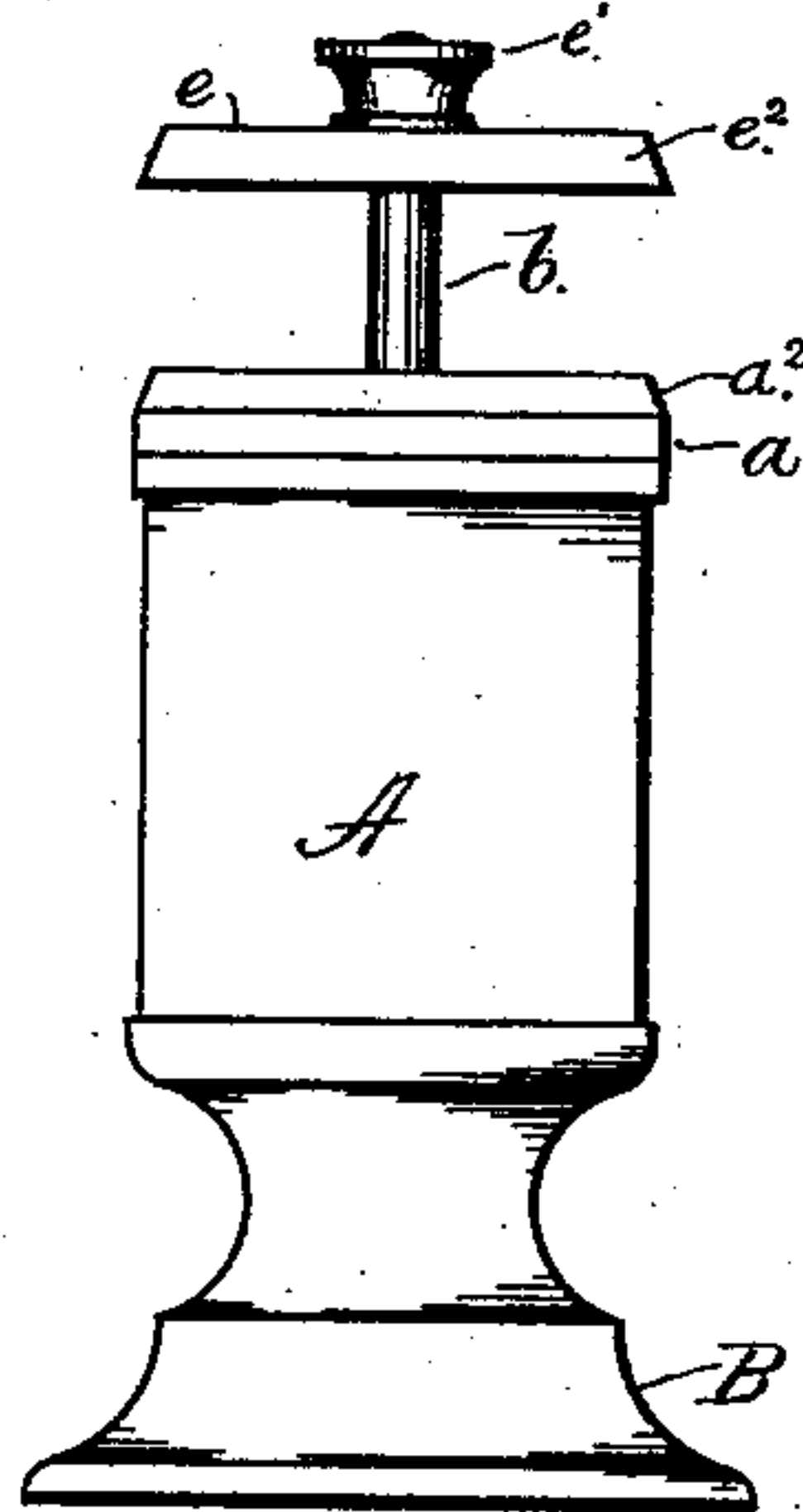


Fig. 4.

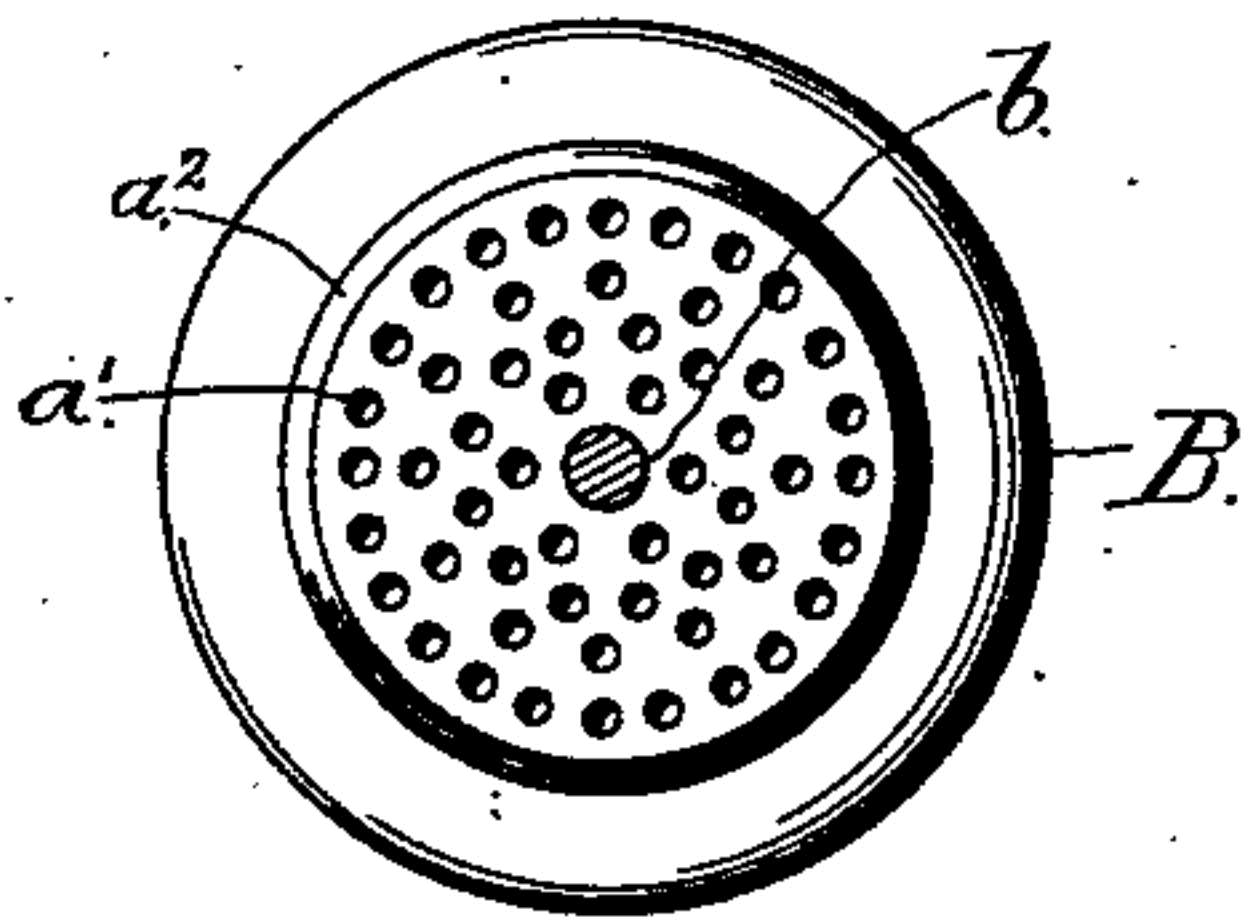


Fig. 3.

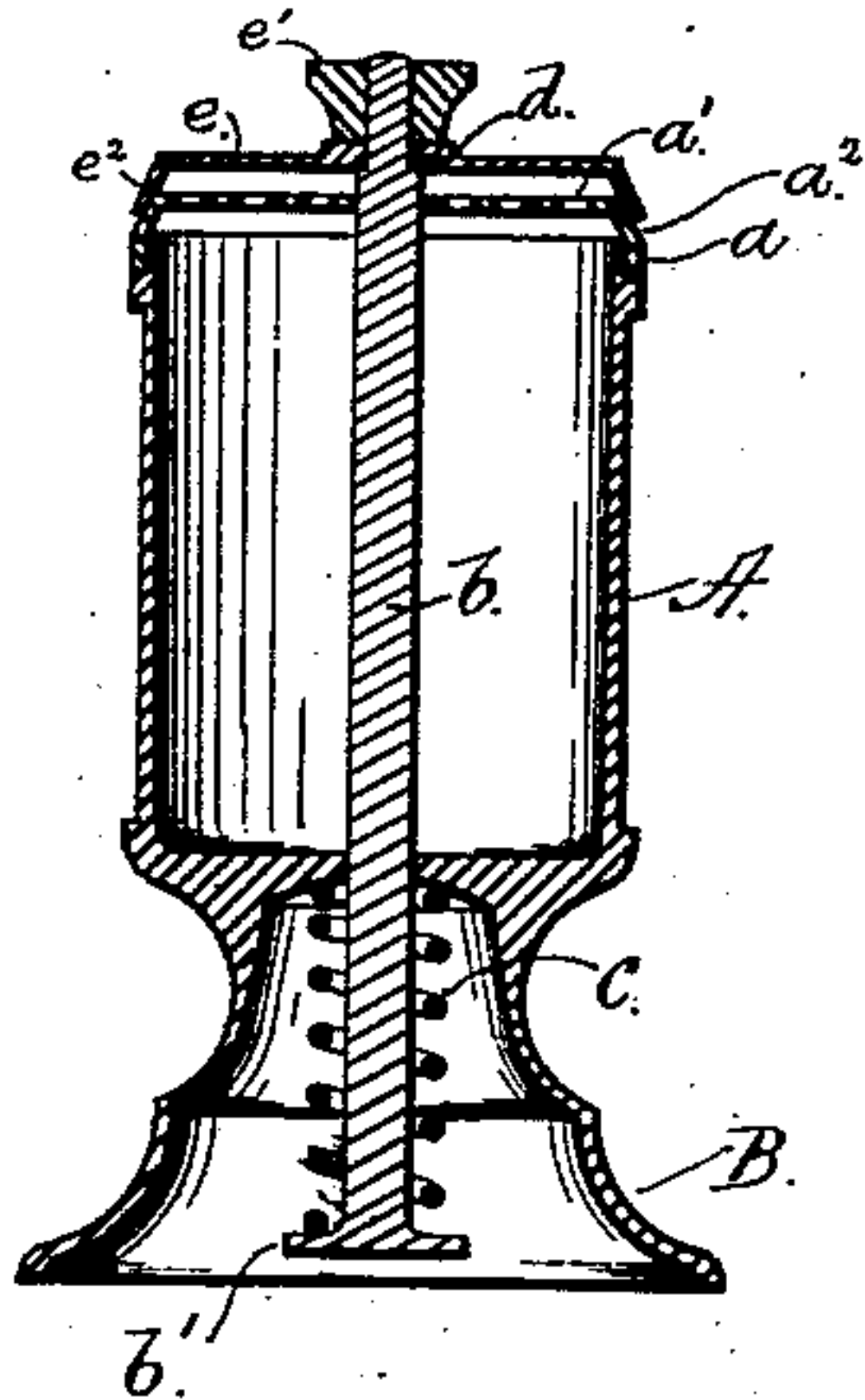
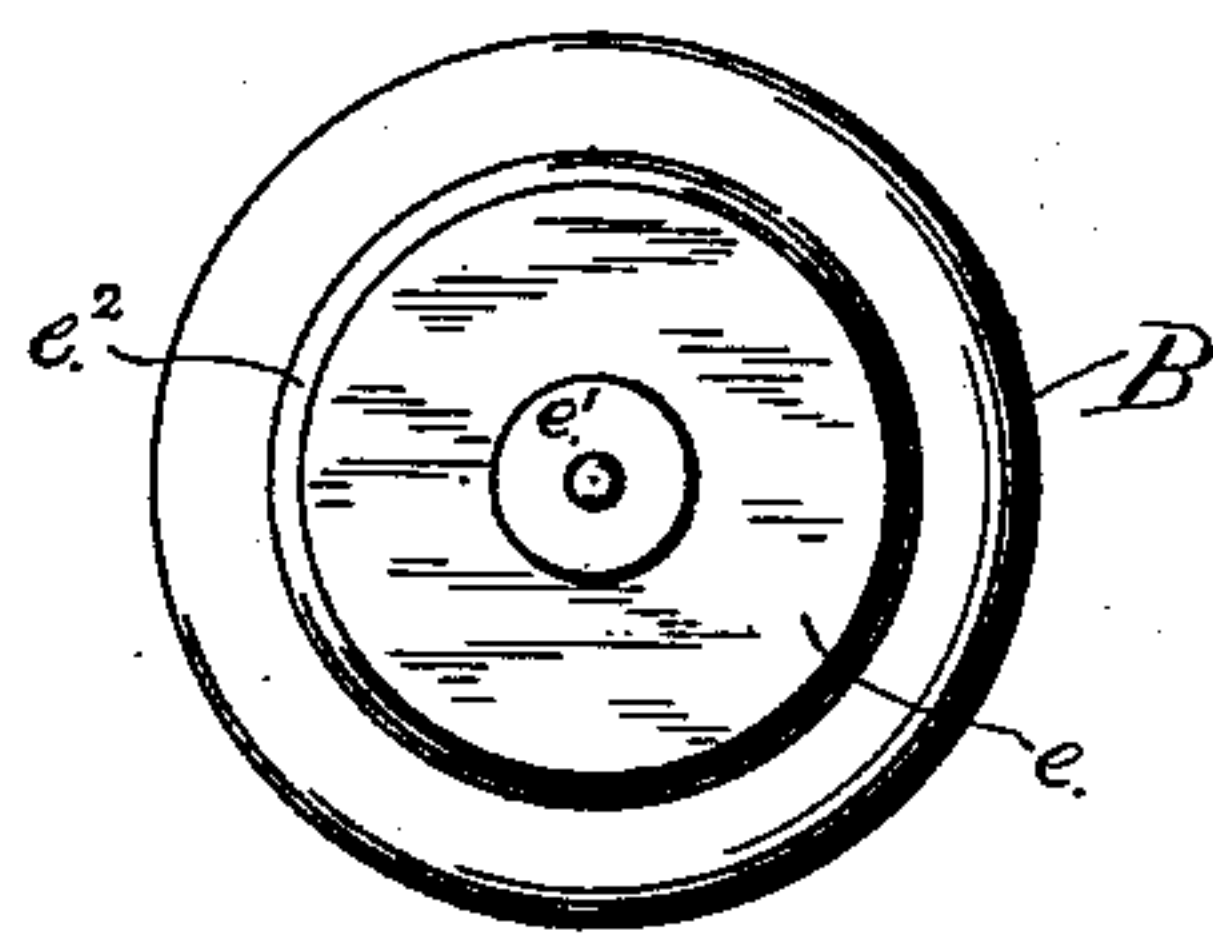


Fig. 5.



WITNESSES:

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SALT-SHAKER.

SPECIFICATION forming part of Letters Patent No. 572,138, dated December 1, 1896.

Application filed August 29, 1891. Serial No. 404,071. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK B. THATCHER, of the city and county of Providence, in the State of Rhode Island, have invented certain new and useful Improvements in Salt-Shakers; and I do hereby declare the following specification, taken in connection with the accompanying drawings, forming a part of the same, to be a full, clear, and exact description thereof.

The object of the present invention is to produce a salt-shaker or other analogous device which shall be self-closing and which when closed shall be practically moisture-tight, so as to prevent the contents from absorbing moisture from the external atmosphere, whereby said contents will be preserved in a dry state in any and all conditions of the atmosphere.

To that end the invention consists in the combination, with a suitable receptacle provided with discharge-orifices, of a spring-actuated cover which may be raised so as to permit the discharge of the contents of the receptacle and which when released will be returned by the spring so as to close the receptacle and effectually exclude moisture from the interior thereof.

The invention further consists in certain combinations and arrangements of parts hereinafter described.

Referring to the drawings, Figure 1 is a perspective view of a salt-shaker embodying my invention and showing the parts in closed position. Fig. 2 is a like perspective view showing the parts in position for discharging the contents of the receptacle. Fig. 3 is a central vertical section of Fig. 1. Fig. 4 is a top view of the receptacle with the cover removed, and Fig. 5 is a top view with the cover in place.

A represents a suitable receptacle, which may be of any desired shape or size, that shown in the drawings being of cylindrical form and of a size suitable for an individual salt-shaker for table use. This receptacle A is preferably provided with a standard B, said standard being preferably hollow to receive and inclose certain of the other parts. Fitted onto the top of the receptacle is a cap or top *a*, which is provided with a series of discharge-orifices *a'*, as shown in Figs. 3 and

4. Arranged centrally within the receptacle A and fitted to slide through holes formed in the standard B and cap *a*, respectively, is a rod *b*, which is supported in place by the standard B and the cap *a*. The lower end of the rod *b* is enlarged or provided with a thumb-piece *b'*, and surrounding the lower end of said rod *b* is arranged a spiral spring *c*, one end of said spring bearing against the thumb-piece *b'* and the other end of said spring bearing against the standard or the bottom of the receptacle. The upper end of the rod *b* which projects through and above the cap *a*, as shown, is reduced in diameter so as to form an annular shoulder *d*. To the upper end of said rod is secured a cover *e*, corresponding in shape to the shape of the receptacle, said cover being held in place upon the rod by being clamped between the shoulder *d* and a thumb-nut *e'*, screwed upon the end of the rod, all as clearly shown in Fig. 3.

To render more certain the formation of a moisture-tight joint between the cover *e* and the cap or top of the receptacle, said cap *a* is preferably provided with a conical portion *a²* and the cover *e* provided with a conical flange *e²*, the interior diameter of the edge of said flange *e²* being preferably somewhat less than the greatest exterior diameter of the conical portion of the cap, and so that said flange *e²* will be certain to find a seat upon the conical portion *a²* of the cap and form a tight joint therewith.

The operation of the parts is as follows: The spring *c* in its normal position serves to hold the cover *e* down upon the top of the receptacle and thus close the interior of said receptacle against the entrance of moisture. When it is desired to discharge any of the contents of the receptacle, all that is necessary is to simply push upon the thumb-piece *b'*, and thus lift the cover *e* against the action of the spring into the position shown in Fig. 2, for instance. The contents of the receptacle or any portion thereof may then be readily shaken out through the discharge-orifices *a'*. Upon releasing the pressure upon the thumb-piece *b'* the spring *c* will immediately serve to return the cover *e* to its seat and again close the interior of the receptacle against the entrance of moisture, the device being thus entirely self-closing.

The advantages of the device above described will be readily understood and appreciated, and it will be seen that while the device is simple in construction and easily manipulated the entrance of moisture to the interior of the receptacle will be effectually prevented, with the result that the contents will be kept in a dry state in all conditions of the atmosphere, thereby avoiding, in the case of salt, for instance, the absorption of moisture and the consequent packing and clogging so troublesome and annoying in the case of salt-shakers as heretofore constructed.

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

The combination of a suitable receptacle having a perforated top provided with a conical portion to form a seat, a rod passing through said receptacle and through said perforated top, a cover secured to the outer end of said rod, said cover being provided with a conical flange arranged to seat upon the conical portion of said perforated top, and a spring acting upon said rod to normally hold said cover in its closed position, substantially as described.

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