

W. H. YOUNG.
SALT SHAKER.

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1,057,697.

Patented Apr. 1, 1913.

Fig. 1

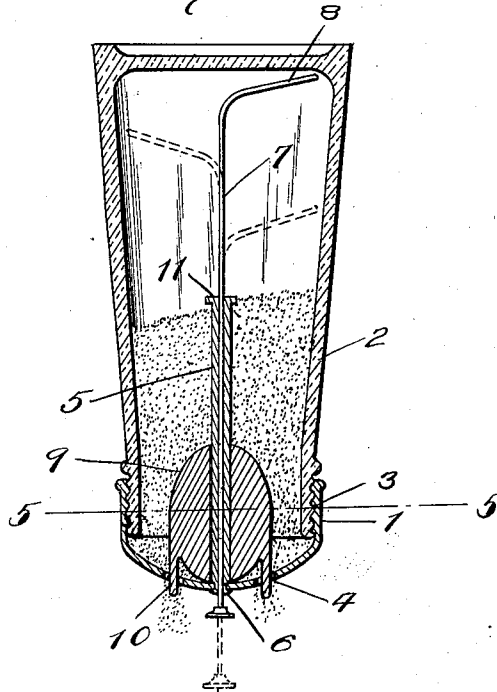


Fig. 2

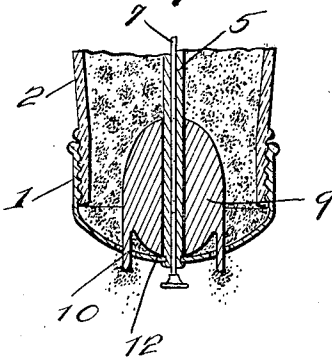


Fig. 3. Fig. 4.

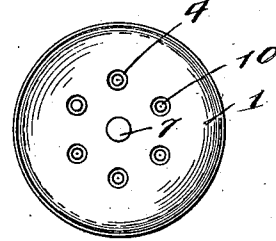
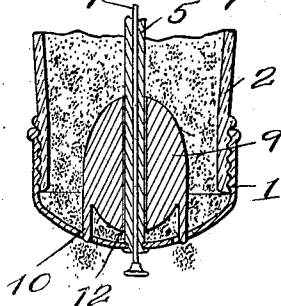
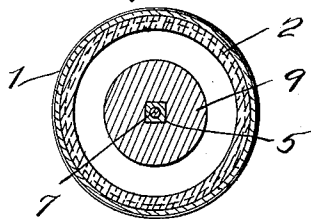


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM HENRY YOUNG, OF DECATUR, GEORGIA.

SALT-SHAKER.

1,057,697.

Specification of Letters Patent.

Patented Apr. 1, 1913.

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To all whom it may concern:

Be it known that I, WILLIAM H. YOUNG, a citizen of the United States, residing at Decatur, in the county of Dekalb and State of Georgia, have invented certain new and useful Improvements in Salt-Shakers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to shakers for salt and other finely divided material, and has as its object to provide a shaker from which the salt may be ejected in desired quantities whether the salt be damp or dry, and to accomplish this object by automatic means which shall be simply and cheaply constructed.

Figure 1 of the drawings is a longitudinal vertical section of the shaker constructed in accordance with my invention, the shaker being inverted. Fig. 2 is a similar section of the lower end of the shaker filled with damp salt, the ejecting weight being in its lowermost position. Fig. 3 is a view similar to Fig. 2, the ejecting weight being moved a short distance upward. Fig. 4 is a top plan view of the shaker. Fig. 5 is a cross section of the shaker along the line 5—5 of Fig. 1.

The top 1 is secured to the body 2 of the shaker by means of the screw threads 3 or in any other suitable manner. This top is provided with openings 4—4 through which the salt is ejected when the shaker is inverted and moved rapidly up and down by the hand.

The square rod 5 is secured to the under side of the cover 1 in any suitable manner. As shown in the drawings, the end of the rod is reduced in size and inserted in a small aperture formed in the center of the cover. The rod is held in position by means of the head 6, which is made by flattening against the cover the end of the reduced portion of the rod. This rod 5 is hollow, and the stem 7 of the stirrer 8 is seated within its central bore. The outer end of the stirrer rod is provided with a knurled cap to be grasped by the thumb and finger, and the lower end is bent to project laterally. The square rod 5 extends half way from the cover to the opposite end of the shaker and it is evident that the stirrer 8 can be freely moved from the bottom of the shaker both upwardly and angularly about the axis of the shaker to the horizontal plane of the lower end of the

rod 5. This stirrer is provided to break up the salt that hardens in the bottom of the shaker, and permits it to be ejected from the openings 4.

The weight 9 has a central longitudinal hole square in cross section, by which it is adapted to fit somewhat loosely upon the square rod 5 and to slide thereupon, but at the same time to be prevented from rotative movement with respect to the rod. The weight 9 is circular in all of its horizontal sections and generally elliptical in outline in vertical sections taken through its axis. It is formed integral with the pins 10 which project from its end adjacent the cover 1 parallel to each other and to the axis of the shaker. These pins register with the openings 4. They are considerably smaller in cross-sectional area than the openings.

When the shaker is taken from the table and inverted in the usual manner over the food, the sliding weight moves toward the cover and the pins partially fill the openings 4. If the salt in the shaker is dry and granular, it will be prevented from issuing too rapidly from the shaker by means of these pins. Fig. 1 shows the shaker filled with dry salt, which is thus controlled in its flow through the openings. On the other hand, if the salt within the shaker be damp when the shaker is inverted over the food and moved up and down, the weight will reciprocate upon the rod 5 between the cover and the flanged end 11 of the rod, the pins forcing the damp salt through the openings at the end of each downward movement. The damp salt is quite apt to stick to the end of the pins and, since the openings are somewhat larger than the pins and since there is necessarily some lateral movement of the pins within the openings due to the loose character of the fit of the different parts, the salt which sticks to the pins will be freed therefrom during their upward movement when this salt comes into contact with the outer edges of the openings. This action is shown in Figs. 2 and 3. The damp salt which is shown sticking to the ends of the pins in Fig. 2 is freed therefrom, as shown in Fig. 3, just as the outer ends of the pins reënter the shaker. I have found that unless the openings be made considerably larger than the pins or prongs 10, the salt when damp will not be expelled there-through except in very small quantities. On the other hand, when large openings are

used the dry salt issues too freely. By combining the large openings with the ejector pins, I have devised a shaker construction which operates satisfactorily under all conditions. It will be observed that these pins are made to project some distance through the openings, a feature of construction which I have found to be very effective. The end of the weight, which is adjacent the cover, serves to squeeze the salt radially outward from the center of the shaker in position over the openings 4 where it is pushed downward by the prongs 10. This result is accomplished by giving the end of the weight a spheroidal shape and by constructing the parts so that the weight may come into actual contact with the under side of the cover. The action of the ejector is automatic and it is so constructed that it is unlikely to get out of order.

What I claim is:

1. A shaker having a top provided with openings and a longitudinally moving weight slidable centrally within the shaker up to and in contact with the top, the end of the weight adjacent the top being spheroidal in shape and adapted to squeeze the material from the center of the under side of the top, outward to positions over the openings.

2. A shaker having a top provided with openings and a longitudinally moving weight slidable centrally within the shaker up to and in contact with the top, the end of the weight adjacent the top being spheroidal in shape and adapted to squeeze the material from the center of the under side of the top, outward to positions over the openings, and ejector pins carried by the weight and held in register with the openings and movable from a position wholly within the shaker through the said openings.

3. The combination of a receptacle, a perforated top, a hollow rod angular in its peripheral outline, and rigidly secured to the top in central longitudinal position within the receptacle, a sliding weight having an axial hole angular in cross section and fitted over the rod, ejector pins on the weight, a central rod slidable within the hollow rod and projecting through the top, and a laterally projecting stirrer on the inner end of the second rod.

In testimony whereof I affix my signature, in presence of two witnesses.

WILLIAM HENRY YOUNG.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."