July 1, 1952 R. P. PHILLIPS, JR 2,601,941

CORNER CAP DISPENSING DEVICE

Filed Nov. 14, 1950

Fig. 1

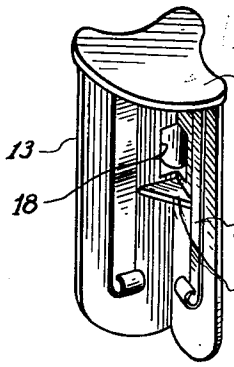


Fig. 4

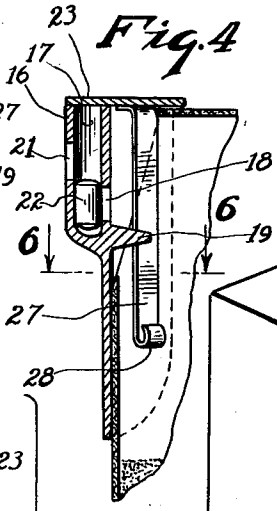


Fig. 3

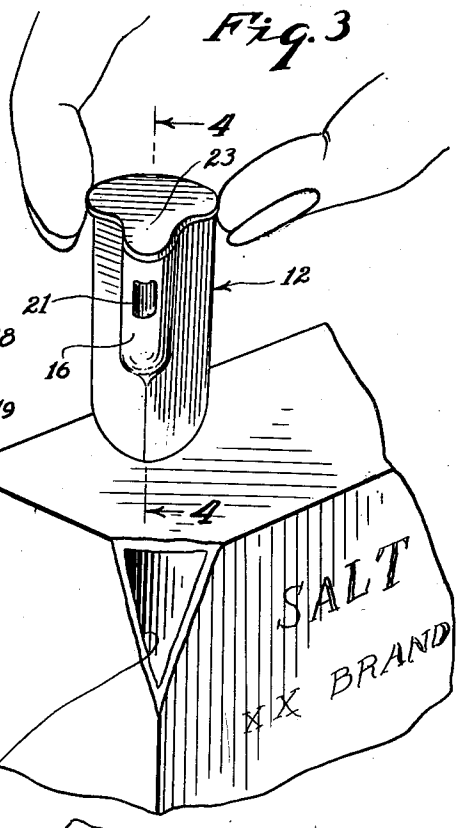


Fig. 2

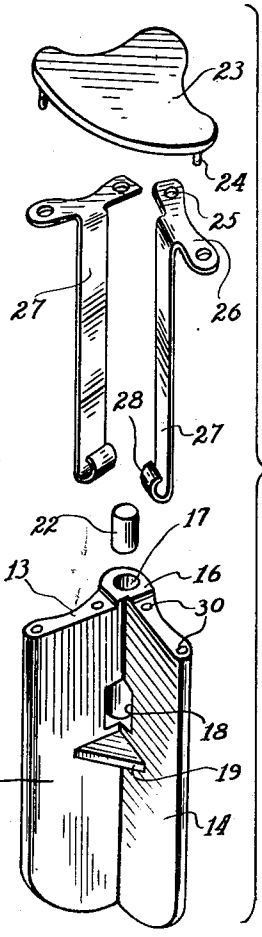


Fig. 5

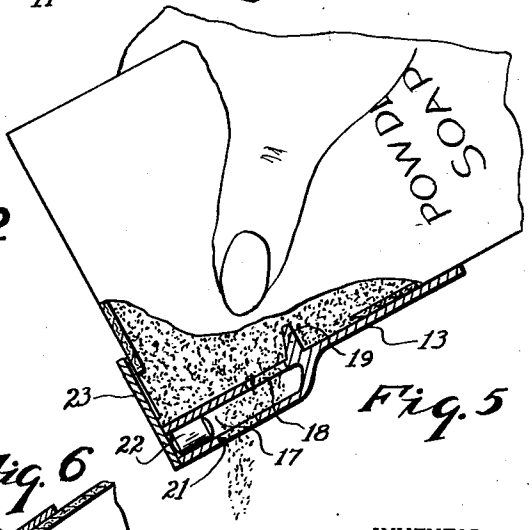
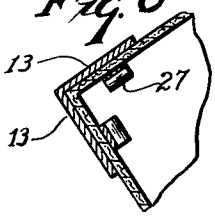


Fig. 6



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CORNER CAP DISPENSING DEVICE

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Application November 14, 1950, Serial No. 195,665

1 Claim. (Cl. 222—500)

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This invention relates to a corner cap dispensing device for salt boxes and the like.

It is an object of the invention to provide a corner cap device for boxes containing dry ingredients such as salt, cereal, soap powder, starch and the like once the boxes have been opened and whereby the contents can be readily removed through the cap, but wherein automatically as the box is set back on the shelf the dispensing opening is closed and there is little chance of the ingredients being contaminated with foreign matter, insects or will the contents be easily spilled.

It is another object of the invention to eliminate the need for transferring dry materials to canisters, jars or other protective receptacles once the boxes containing the ingredients have been opened.

Other objects of the invention are to provide a corner cap device for boxes containing dry ingredients which is of simple construction, inexpensive to manufacture, easy to apply to the box, sanitary and easy to keep clean, has a minimum number of parts, durable, of pleasing appearance and efficient in operation.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which

Fig. 1 is a perspective view of the corner cap dispensing device embodying the features of the present invention.

Fig. 2 is a collective and perspective view of the respective parts forming the device.

Fig. 3 is a perspective view looking upon the front of the device and illustrating the manner in which it is attached to the corner of a box.

Fig. 4 is a vertical sectional view of the device taken on line 4—4 of Fig. 3.

Fig. 5 is a sectional view of the device tilted upwardly with the box and in a position to dispense a portion of the contents thereof.

Fig. 6 is a transverse sectional view of the device and of the box taken on line 6—6 of Fig. 4.

Referring now to the figures, 10 represents a box adapted to contain salt or other dry ingredients which is, when purchased, provided with a square closed corner. The purchaser, upon receiving the box and in order to adapt it for the present device, will cut or slice the corner therefrom to provide an opening 11 in the box. The device, as indicated generally at 12 and as illustrated in Fig. 3, is held over this opening and is pushed downwardly thereover with certain parts engaging with the side walls of the opening to retain the device in place.

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The dispensing device comprises a body 13 having wings 14 and 15 angled from one another and adapted to slide over the sides of the box. This body 13 has, at the upper center part thereof, an elongated enlargement 16 having a hole 17 extending downwardly thereinto. On the inner side of the body 13 is an inlet opening 18 communicating with the hole 17 and through which the dry material leaving the box passes. In order to keep the dry material from being fed to the inlet 18 in such amounts as to clog the opening, there is provided a barrier 19 just below the opening 18 and extending between the wing portions 14 and 15. On the exterior of the enlargement 16 is an outlet opening 21 through which the dry material is dispensed from the device. The dry material will move through the hole 17 from the inlet 18 and thence outwardly through the opening 21.

A valve element 22 is automatically adjustable in the hole 17. When the box and the device are upright, the valve element 22 will be dropped in the hole 17 and close the inlet opening 18, Fig. 4. When the box is tilted up, the valve element 22 will move through the hole 17 to a position above the outlet opening 21 to permit the free flow of the material through the hole 17 from the inlet 18 to the outlet 21.

The top of the hole 17, after the valve element 22 has been inserted therein, is enclosed by a top plate 23 having depending pins 24 aligned to pass through holes 25 of a horizontal portion 26 of stainless steel depending retaining spring elements 27 having rolled up engaging portions 28. These pins pass into holes 30 on the upper end of each wing portion of the body 13. The horizontal portion 26 is rested on the top of the wing portion and the top plate is fitted thereover. There are two of these finger springs, one for each wing portion and they depend downwardly along the inner faces respectively of the wing portions 14 and 15 in order to engage, as shown in Fig. 4, with the inner faces of the respective sides of the box to retain the device in place thereon. With the springs 27 and the top plate 23 attached to the body 13 the assembly is completed and a unitary device 12 is provided.

The body 13, the top plate 23 and valve element 22 are preferably made of plastic thereby making possible the easy cleaning of the device. With the springs 27 being of stainless steel, there is little chance for corrosion or contamination resulting from the passage of the material over and through the device.

It will be apparent that there has been pro-

vided an automatic valve opening and closing dispensing device which can be easily connected to the box containing dry material and such that as the box is tilted over, the material can be readily and automatically dispensed and upon the box being set in the upright position, the passage through which the material is dispensed in the device is closed whereby to prevent the inward passage of foreign matter, insects or the spilling of the material from the box should the box become accidentally turned over.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claim.

What is claimed is:

A dry material corner cap dispenser for boxes comprising a body having wing portions disposed at an angle with respect to each other and an enlargement having a hole therein, said body having inlet and outlet openings communicating with the hole in the enlargement through which the dry material can pass, a valve element operable in the hole in the enlargement to normally close the inlet opening, a top plate portion connected to the body and extending over the wing

portions thereof and spring retaining elements depending downwardly over the respective wings of the body and along the inner faces thereof to cooperate with the inner faces of the wing portions to retain the device on the corner of the box, a barrier connected between the wing portions of the body member at a location below the inlet opening thereof to keep the inlet from being clogged and to prevent so far as possible the extra material from passing downwardly along the outer faces of the box and between these faces and the engaging faces of the wing portions with the box.

RANDALL P. PHILLIPS, JR.

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