

PATENT SPECIFICATION

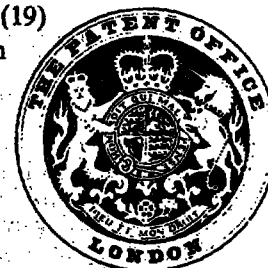
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(54) IMPROVEMENTS IN OR RELATING TO A DISPENSER

(71) We, DART INDUSTRIES INC., a corporation organized and existing under the laws of the State of Delaware, United States of America, of 8480 Beverly Boulevard, Los Angeles, California 90048, United States of America, do hereby declare the invention for which we pray that a patent may be granted to us and the method by which it is to be performed to be particularly described in and by the following statement:-

The present invention relates to a dispenser and more particularly to a dispenser for storing and dispensing herbs, spices and the like.

According to this invention there is provided a dispenser for granular or powdered material such as spice comprising a container having a bottom wall having an upwardly extending recess therein and an upstanding peripheral wall having an upper edge which defines a top opening of the container, and a cap removably affixed to said container and closing said top opening, and having at least one hole therein to permit dispensing of a commodity from the dispenser, said cap having a configuration and size substantially corresponding to the configuration and size of said recess in said bottom wall, the arrangement being such that two or more such dispensers can be stacked vertically on top of each other, with the perforated cap of a lower dispenser fitting into the bottom wall recess of a container immediately above it thereby to seal the contents of the lower container from the atmosphere and to retain the dispensers together in releasable stacking engagement.

In order that the invention may be more readily understood and so that further features thereof may be appreciated the invention will now be described by way of example and with reference to the accompanying drawings in which:-

Figure 1 is a perspective view of a dis-

penser in accordance with the present invention, the dispenser comprising a container and a perforated cap and being provided with an unperforated top cap;

Figure 2 is a side elevation of the dispenser of Figure 1;

Figure 3 is an exploded perspective view of the dispenser of Figure 1;

Figure 4 is a side elevation view of the unperforated top cap of the dispenser shown in Figure 1;

Figure 5 is a side elevation view of the perforated cap of the dispenser shown in Figure 1;

Figure 6 is a side elevation view of the container of the dispenser shown in Figure 1;

Figure 7 is a top plan view of the unperforated cap shown in Figure 4;

Figure 8 is a bottom plan view of the unperforated cap shown in Figure 4;

Figure 9 is a top plan view of the perforated cap shown in Figure 5;

Figure 10 is a bottom plan view of the perforated cap shown in Figure 5;

Figure 11 is a bottom plan view of the container shown in Figure 6;

Figure 12 is a top plan view of the container shown in figure 6;

Figure 13 is a cross-section taken on line 13-13 of Figure 1;

Figure 14 is a perspective view of three dispensers in stacked position;

Figure 15 is an enlarged cross-section taken on circled portion 15 of Figure 14;

Figure 16 is a perspective view of a modified form of perforated cap, with the cap in closed position;

Figure 17 is a perspective view of the modified form of perforated cap, shown in Figure 16 with the cap in open position;

Figure 18 is a cross-section taken on line 18-18 of Figure 16;

Figure 19 is a cross-section taken on line 19-19 of Figure 16;

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Figure 20 is a top plan view of the cap of Figure 16; and,

Figure 21 is a side view of the cap of Figure 16.

Referring to the drawings a dispenser in accordance with the invention comprises a cylindrical container having a bottom wall 6 and upstanding cylindrical walls 7 and a perforated cap having a top wall 8 with a plurality of holes 9 which perforated cap may be snap fitted into engagement with the container. The top wall 8 of the perforated cap has a downwardly extending peripheral wall 10 which terminates in a bottom radially outwardly protruding peripheral bead 11. (See Figure 3). An annular connecting wall 12 which is integral with the perforated cap extends radially outwardly from the wall 10 and has an integral downwardly depending wall 13 which is continuous around the entire cap with the exception of a cut-out portion 14 (see Figure 5). When the perforated cap is snap fitted into engagement as will be described further below, the lower edge of the wall 13 engages the upper edge of the wall 7 of the container, thereby to locate the perforated cap in the desired position relative to the container. The cut out portion 14 enables a user to remove the cap from the container by inserting a finger, for example, into the cut out portion 14 to prise the cap off the container for filling the container with a commodity to be dispensed therefrom.

The upper edge of the wall 17 of the container terminates in radially inwardly extending bead 15 (see Figure 13) which interlocks with the outwardly extending bead 11 on the cap when the cap is snapped on to the container 7 with the lower edge of the wall 13 and the upper edge of the wall 7 engaging as described above. The beads 11 and 15 are so dimensioned to permit the cap easily to be snapped into sealing engagement with the container and also to permit removal of the cap by inserting a finger into the cut-out portion 14 and prising the cap off the container. The components of the dispenser are injection moulded from polyethylene, polypropylene or derivatives thereof; the container and perforated cap having some flexibility but being sufficiently rigid to maintain their configuration and to allow a firm engagement and a sealing relationship between the cap and the container.

An unperforated cap having a top wall 16 and downwardly extending peripheral side wall 17 is dimensioned to be snugly fitted over the perforated cap in the manner shown in Figure 13 to seal the holes 9 in the top wall 8 and thus to protect the contents of the dispenser from deterioration as a result of prolonged exposure to the atmosphere. The side wall 17 has a cut away portion 20 to facilitate removal of the unperforated cap

by a user of the dispenser.

The bottom wall 6 of the container is elevated above the lower edge of the wall 7 to provide a recess 18 in the bottom of the container. The dimensions of the walls 8 and 10 of the perforated cap correspond to the dimensions of the recess 18 so that a plurality of dispensers may be stacked together, the perforated cap of one container being snugly received within the recess 18 of the next container in the stack in the manner shown in Figure 15, thereby maintaining the stack of dispensers in a releasably wedged together condition as shown in figure 14. In this way the contents of the lower dispensers are sealed from the atmosphere and the amount of space necessary to store the dispensers is minimized. The top most dispenser of the stack may be sealed with an unperforated cap, of the type described above, as shown in Figure 14. Figures 16 to 19 show a modified form of perforated cap which comprises a hinged cap member and a snap engagement member. The hinged cap member has a diametrical hinge 23 in the form of a moulded channel extending from one edge of the cap member to the other across the underside of the upper wall 21 of the cap member (see Figure 19). The upper wall 21 comprises two semi-circular portions separated by the hinge 23, one such portion being provided with a series of perforations and the other semi-circular portion being unperforated. An integral peripheral skirt 22 depends from the upper wall 21, the skirt 22 being discontinuous adjacent the hinge 23, and terminating at its lower edge with an inwardly protruding rib 25 (see Figure 18). The rib 25 is adapted to snappingly engage with a corresponding circumferential channel formed in an upstanding wall 26 forming part of the snap engagement member, thereby to secure the cap member and snap engagement member together. The upstanding wall 26 terminates at its lower end with an outwardly protruding bead and has an annular connecting wall extending outwardly therefrom, there being a downwardly depending peripheral wall integral with the connecting wall (see Figure 18).

The hinge 23, when the cap member and snap engagement member are secured together, permits the unperforated semicircular portion of the perforated cap to be swung upwardly to an open position as shown in Figure 17 thereby providing a large opening 24 into which a spoon or the like may be inserted into a container to whereby the perforated cap is attached to enable large or measured quantities of a commodity to be dispensed from the container. A cut-away portion 27 is provided in the wall 22 for the user to insert a finger into the opening and pivot the wall 21 upwardly from the position shown in Figure

16 (closed position) to the position shown in Figure 17.

The modified closure shown in Figure 16 to 19 is preferably injection moulded from a material such as polypropylene due to the flexibility of polypropylene and its failure to fatigue at the hinge 23 after repeated use.

WHAT WE CLAIM IS:-

1. A dispenser for granular or powdered material such as spice comprising a container having a bottom wall having an upwardly extending recess therein and an upstanding peripheral wall having an upper edge which defines a top opening of the container, and a cap removably affixed to said container and closing said top opening, and having at least one hole therein to permit dispensing of a commodity from the dispenser, said cap having a configuration and size substantially corresponding to the configuration and size of said recess in said bottom wall, the arrangement being such that two or more such dispensers can be stacked vertically on top of each other, the perforated cap of a lower dispenser fitting into the bottom wall recess of a container immediately above it thereby to seal the contents of the lower container from the atmosphere and to retain the dispensers together in releasable stacking engagement.

2. A dispenser according to claim 1 wherein said cap includes spaced inner and outer vertically extending walls which are adapted to locate and retain said cap in position on the container, and an opening in said outer wall so that a person's finger may be inserted in the opening to facilitate removal

of said cap from said container.

3. A dispenser according to claim 2 wherein said inner wall of said perforated cap is provided with a peripheral outwardly protruding bead and said peripheral wall of the container is provided with a peripheral inwardly protruding bead, said beads being adapted to co-operate to permit the cap releasably to be snapped into sealing engagement with the container.

4. A dispenser according to any one of the preceding claims wherein said cap has a swingably mounted cover part which is movable to and from closed and open positions, said open position providing a large opening in the cap portion to permit ingress into the dispenser of a spoon or the like, and said closed position positioning said cover part over said large opening.

5. A dispenser according to any one of the preceding claims provided with an unperforated cap adapted to be fitted over the perforated cap to seal the hole or holes in said cap.

6. A dispenser substantially as herein described with reference to and as illustrated in Figures 1 to 15 of the accompanying drawings.

7. A dispenser substantially as herein described with reference to Figures 1 to 15 as modified by Figures 16 to 21 of the drawings.

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