This invention relates to dispensers and more particularly to portable dispensers for dispensing singly relatively small articles such as confections, including chewing gum, candies, and the like.

There is a demand for dispensers which serve as containers for small confections, and the like, and which will function to disperse the same singly on demand. Such dispensers enable children, for example, to carry confections, including chewing gum, candies, and the like, with relative sanitary conditions and to dispense such confections as desired without danger of spilling and contaminating the entire quantity of confections.

It is therefore an object of the present invention to provide a dispenser which functions as a substantially closed container for small articles and which will dispense such articles one at a time upon each actuation thereof.

Another object is to provide a dispenser in which the container is formed of two relatively rotatable parts, one of which is formed with a dispensing opening and which can be separated and reassembled for filling.

A further object is to provide a dispenser in which the discharge opening is partially encircled by an internal shield and a rotor coaxial with the opening carries a series of spaced feeder blocks which turn around the shield and carry the articles in the container singly to the open side of the shield for dispensing.

According to a feature of the invention, an arcuate guard wall is provided in the container registering with the open side of the shield to prevent direct entry of an article from the container through a space between adjacent feeder blocks and through the outlet opening.

The above and other objects and features of the invention will be more readily apparent from the accompanying drawing in which:

FIGURE 1 is an external view of a dispenser embodying the invention;

FIGURE 2 is a sectional view through the dispenser;

FIGURE 3 is a section on the line 3—3 of FIGURE 2;

FIGURE 4 is a disassembled view of the dispenser; and

FIGURE 5 is a view of the rotor and stem looking from the top thereof.

FIGURE 2 is a view of the container in which the open side of the shield is provided with a series of spaced feeder blocks which turn around the shield and carry the articles in the container singly to the open side of the shield for dispensing.

In order to prevent free flow of articles in the container through the discharge opening, an internal shield 16 is formed in the container part 10 and partially encircles the discharge opening, as seen in FIGURES 2, 3 and 4. As shown, the shield 16 extends closely around the opening on one side with straight side portions extending over adjacent opposite sides of the opening leaving the remaining side of the opening unprotected so that articles can flow into and through the opening.

Articles are carried to the open side of the shield by a rotor having a stem 17 permanently secured in a sleeve or socket 18 in the container part 11 and which is coaxial with the opening 12. The rotor includes a head having a top plate 19 projecting radially outward therefrom and carrying a series of circumferentially spaced feeder blocks 21 which may be hollow, as shown, to facilitate molding. The top plate 19 may be partially cut between the feeder blocks 21, as shown at 22 in FIGURES 3 and 5, so that the articles may feed more easily into the spaces between the feeder blocks for dispensing. When the container parts are assembled, the feeder blocks will lie around the shield 16, as seen in FIGURES 2 and 3. The stem 17 is preferably hollow, as shown, to facilitate molding but the internal diameter thereof is smaller than the articles to be dispensed. Thus the articles cannot flow up into the stem 17 under any conditions.

In order to prevent flow of articles in the container directly through the open side of the shield 16 and the discharge opening, an arcuate guard wall 23 is provided in the container integral with the lower part 10 thereof and of a radius to encircle the feeder blocks 21, as shown. The guard wall is so positioned as to register with the open side of the shield 16 so that it will in conjunction with the top plate 19 prevent flow of articles in the container into a space between adjacent feeder blocks which registers with the open side of the shield.

In use, the container may be filled with confections or similar articles to be dispensed. Typical of such articles are coated chewing gum balls and candies of various types of a size indicated approximately by the dotted lines 24 in FIGURE 3. While spherical articles may be dispensed very easily, it is not essential that the articles be spherical and articles of other shapes can be handled by the dispenser.

With the container filled and held in a position such that the discharge opening 12 is at the bottom, articles will flow in between the feeder blocks 21 which are exposed beyond the arcuate wall portion 23. When the two halves of the container are then turned relative to each other in either direction, one of the articles so confined between the feeder blocks will be carried around into registration with the open side of the shield 16. As soon as the article is in a position in which it can pass through the open side of the shield, it will do so due to gravity and will fall by gravity through the discharge opening 12. It will be seen that only one article can be so dispensed until the rotor is again turned by turning the container parts relative to each other. This operation can be continued until the dispenser is empty at which time the container parts can be separated and refilled and further use made thereof. It will of course be apparent that the container could, if desired, be formed of a more rigid material such that it could not be separated without destroying it so that it would be incapable of reuse.

While one embodiment of the invention has been shown as described herein, it will be understood that it is illustrative only and not to be taken as a definition of the scope of the invention, reference being had for this purpose to the appended claims.
What is claimed is:

1. A dispenser comprising a hollow container formed with a dispensing opening of a size to pass an article to be dispensed, a shield projecting into the container partially encircling the opening and open at one side for passage of an article to and through the opening, a rotor in the casing rotatable on an axis aligned with the opening and including a plurality of spaced feeder blocks registering with the shield and movable around the shield, the spaces between adjacent feeder blocks each accommodating an article to be dispensed and being open from the outer periphery to the center of the rotor, and means in the container to prevent entry of an article into a space registering with the open side of the shield whereby articles in the container will be dispensed singly as the rotor is turned.

2. A dispenser comprising a hollow container formed with a dispensing opening of a size to pass an article to be dispensed, a shield projecting into the container partially encircling the opening and open at one side for passage of an article to and through the opening, a rotor in the casing rotatable on an axis aligned with the opening and including a plurality of spaced feeder blocks registering with the shield and movable around the shield, the spaces between adjacent feeder blocks each accommodating an article to be dispensed and being open from the outer periphery to the center of the rotor, and an arcuate wall in the container partially encircling the rotor and registering with the open side of the shield to prevent entry of an article into a space registering with the open side of the shield.

3. A dispenser comprising a hollow container formed of two parts rotatably connected to each other, one of said parts having a dispensing opening therein of a size to pass an article to be dispensed and lying on the axis of relative rotation of the parts, a shield projecting axially into the casing secured to said one of the parts partially encircling the opening and open at one side for passage of an article to the opening, a rotor in the casing secured to the other of said parts and including a plurality of spaced feeder blocks registering axially with the shield and movable around the shield, the spaces between the feeder blocks each accommodating an article to be dispensed and being open from the outer periphery to the center of the rotor, and an arcuate wall in said one part partially encircling the rotor and registering with the open side of the shield to prevent entry of an article into a space registering with the open side of the shield.

4. The dispenser of claim 3 in which the container parts are semi-spherical and the last named arcuate wall comprises a strip projecting inwardly of said one of the parts.

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