Nov. 29, 1966 D. J. KETCHEM 3,288,329

DISPOSABLE DISPENSER FOR CUP-LIKE PRODUCTS

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Fig. 1.

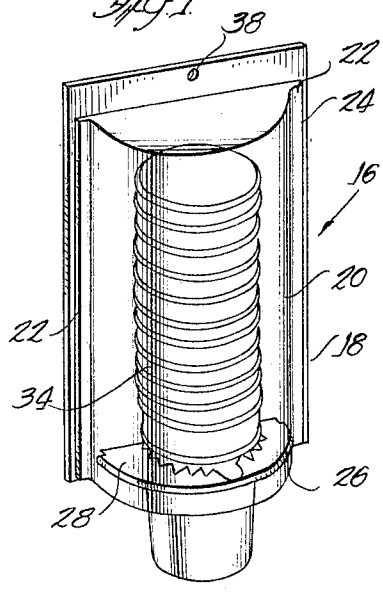



Fig. 2.

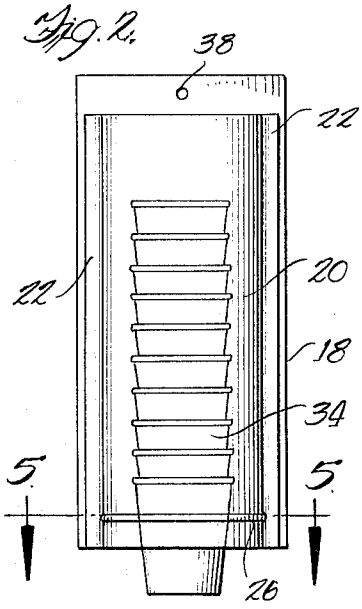



Fig. 3.

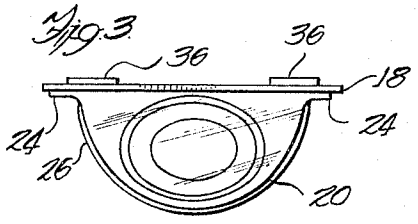



Fig. 5.

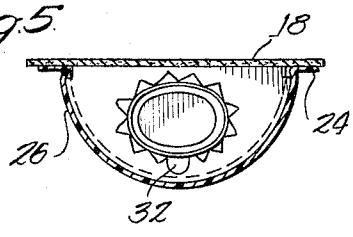



Fig. 4.

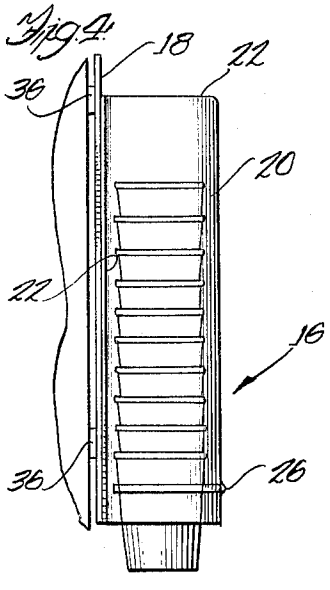
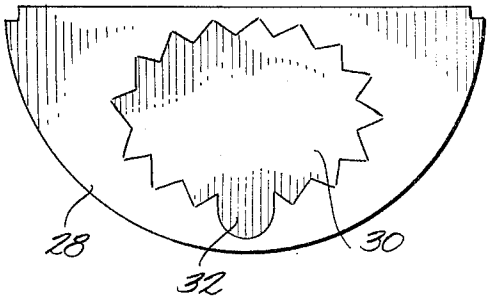



Fig. 6.




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DISPOSABLE DISPENSER FOR CUP-LIKE PRODUCTS

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Fig. 7.

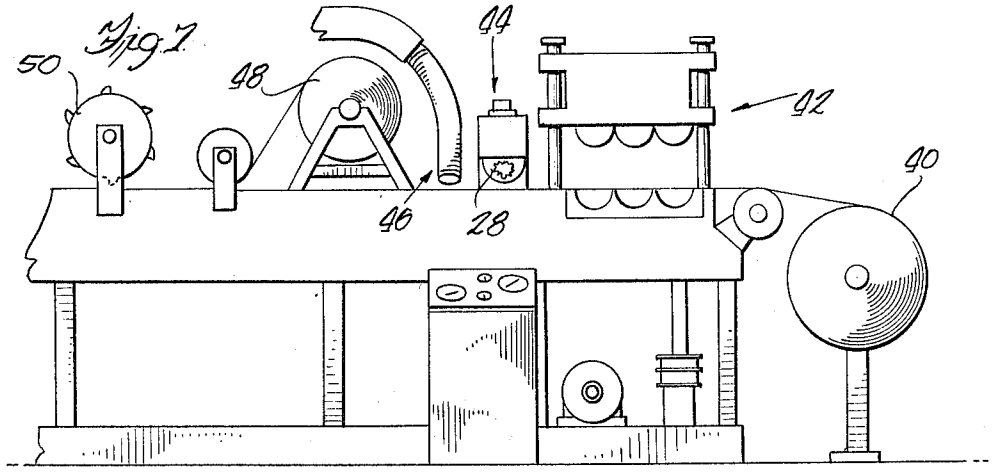



Fig. 8.

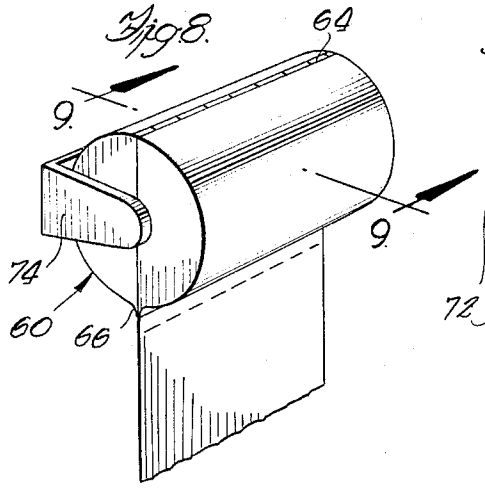



Fig. 10.

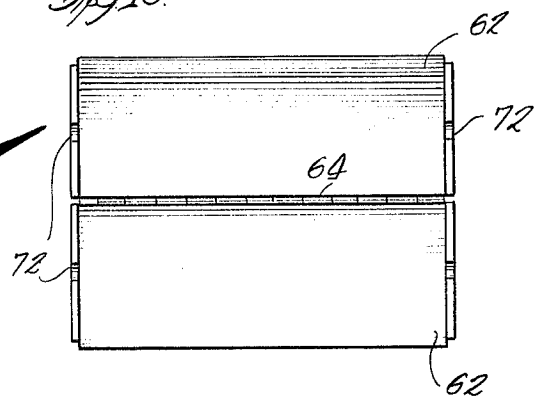



Fig. 9.

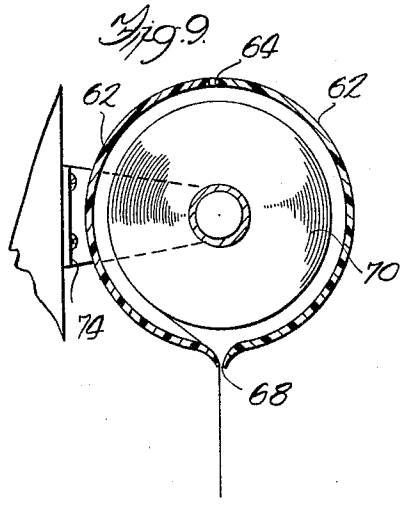
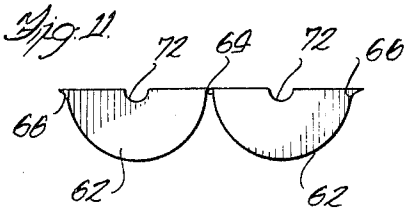



Fig. 11.




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# DISPOSABLE DISPENSER FOR CUP-LIKE PRODUCTS

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5 Claims. (Cl. 221—155)

This invention relates to an improvement in disposable dispensing packages for holding and dispensing various paper, plastic, or metal products.

The present invention eliminates the need for costly permanent dispensers since the dispensers made in accordance with the principles of the invention, are of simple and low cost design. They also afford sanitary packaging and storage of articles, such as cups, and provide a convenient and attractive package which enhances the sale ability of products.

Briefly, the inventive concept involves the use of a transparent plastic material which may be shaped to accommodate the type of product being packaged. A first embodiment, which may be used for holding and dispensing cup-like receptacles, includes a plastic blister affixed to a chipboard back. The blister has an integral top portion, and a dispensing insert at the opposite end which functions to allow removal of the receptacles from the dispenser in sequential order. Means are provided to maintain the dispensing insert in closed condition until it is desired to condition the dispenser for use. A second embodiment is adapted for holding a roll of paper towels and comprises a cylindrical plastic housing which encloses the roll and has a dispensing slot for removal of paper from the roll. Both embodiments lend themselves to high production with use of automatic machinery.

Each of the two disclosed embodiments feature a low cost disposable dispenser of simple and attractive design, and which allow visual inspection of the contents to thus enhance the sale ability thereof.

The main object of this invention is to provide an improvement in a disposable dispensing package for holding and dispensing various paper, plastic or metal products.

A more specific object is to provide a disposable dispenser which is of comparative low cost.

Still another object is to provide a disposable dispenser in which a product may be maintained and dispensed in a sanitary manner.

A further object is to provide a disposable dispenser which is convenient to use and which has an attractive appearance.

Another object is to provide a disposable dispenser which allows visual inspection of the contents.

Still another object is to provide a disposable dispenser which lends itself to high production with use of automatic machinery.

Other objects and features of the invention will become more apparent from the following description and accompanying drawings wherein:

FIG. 1 is a perspective-like view of a cup dispenser embodying the principles of the invention;

FIG. 2 is a front view of the same;

FIG. 3 is a top view of the same;

FIG. 4 is a side view of the same;

FIG. 5 is a section view generally as seen from line 5—5 in FIG. 2;

FIG. 6 is an enlarged plan view of an insert used in the dispenser of FIG. 1;

FIG. 7 is a schematic illustration of apparatus useable for the fabrication of the dispenser of FIG. 1;

FIG. 8 is a modified form of dispenser embodying the principles of the invention;



FIG. 9 is an enlarged section view generally as seen along line 9—9 in FIG. 8;

FIG. 10 is a plan view showing the dispenser of FIG. 8 in open condition; and

FIG. 11 is an end view of the dispenser as shown in FIG. 10.

Referring now to the drawings numeral 16 identifies a cup dispenser illustrative of an embodiment of the invention which dispenser includes a flat rectangular back 18 formed of a semi-rigid material such as chipboard, or equivalent. A blister 20 made from a clear plastic film, such as polystyrene, is formed in the shape of a semi-circular elongated member having an integral upper end 22 forming a top enclosure therefor. The blister has integral flange portions 24 extending along the body thereof whereby the blister may be fixed, as with adhesive, to the back 18. A U-shaped female channel slot 26 is formed in the blister 20 near the lower end for fixedly holding a chipboard insert 28. The latter has a starburst snap-out 30 stamped in the insert, which is provided with a thumb-hole portion 32 for easy removal of the snap-out when the dispenser is being serviced for usage. The diametrical dimensions of the snap-out 30 are such as to accommodate the shape of stacked cups 34 contained in the dispenser. While the cups shown are of generally elliptical form, it is understood that the dispenser can be formed to handle other shaped cups, i.e., round, rectangular, etc. In any event, the points of the star-pattern opening resulting from the removal of the snap-out 30, serve as grips to hold the stacked cups in the dispenser and to provide for cup-at-a-time dispensing.

Means to affix the dispenser 16 to a supporting surface, such as the side of a water cooler, are provided in the form of two pressure sensitive adhesive areas 36 arranged on the rear of the back 18. In addition, a hole 38 may be provided in the back 18 near the top thereof, for hanging the dispenser upon a hook when more convenient or desirable.

The dispenser 16 is preferably fabricated on apparatus which takes raw materials and forms, cuts, loads and seals the various elements as required to make a cup loaded dispenser. Apparatus illustrative of machinery useable toward this end, is schematically shown in FIG. 7. A roll of film 40 e.g., polystyrene, is positioned so that sheet material is fed into a forming station 42 wherein a plurality of blisters 20 are made under heat and pressure, as required. In such operation, the end 22 and channel slot 26 are formed simultaneously with the shaping of the material into blisters. The formed blisters 20 are next moved to an insert feeding station 44 wherein an insert 28 is placed in each blister and held therein by engagement with the channel slot 26. Next the blister and insert assembly is moved to a cup feeding station 46 for loading with a given number of stacked cups 34. Finally, the loaded assemblage is moved to a position when the back 18 is affixed thereto by an adhesive, or other satisfactory means. The material for the back 18 is taken from a roll 48 and is cut to desired width (or length as the case may be) by a rotatable cutter 50.

It is understood, of course, that the apparatus above described is merely illustrative of what is basically required in an integrated operation for loaded dispenser fabrication. Naturally, the degree of automatic operation may be varied to be consistent with cost considerations. That is, the greater the production rate of loaded dispensers 16, the more justification for fully automatic, and high priced apparatus. The main point being made here, is that the dispenser 16 of the invention lends itself to fully automatic fabrication, if so desired.

As should be obvious, to condition the dispenser for use,

the snap-out **30** is removed, thus allowing the cups **34** to drop down so that the lowermost one is projecting from the bottom of the dispenser and is held in position by the points of the opening formed by removal of the snap-out, as clearly shown in FIGS. 1 and 2.

A second embodiment of a dispenser **60**, which incorporates the principles of the invention, is illustrated in FIGS. 8 to 11 inclusive. The dispenser **60**, which is useable for holding a roll of paper towels, is in the form of a hollow closed-end cylinder, and is made from two symmetrical semi-circular elongated members **62**, each of which is provided with an integral hinge portion **64** extending along one edge whereby the members may be operatively secured together. The edge of each member **62** opposite the hinge portion, is curved to form a dispensing lip **66**, the arrangement being such that a slot **68** is provided when the members **62** are in closed condition, as best seen in FIG. 9. In such manner, a roll of paper towels **70** held in the dispenser **60** may be fed through the slot **68** and torn off the roll in whatever length desired. At both ends of each member **62**, a semi-circular hole **72** is provided which is adapted to match an adjacent hole of the juxtaposed member when the members are in closed condition to thus form a round hole whereby the dispenser may be supported upon the arms of a wall bracket **74**.

The material of the dispenser **60** is preferably a clear plastic, such as polystyrene. Low fabrication cost is thus made possible so that the dispenser may be discarded after the contents are used; however, it will be appreciated that the dispenser may be reloaded by the user, if so desired.

Certain modifications could be made in structural details of either embodiment above disclosed. For example, in the cup dispenser **16**, the chipboard insert **28** could be made integral with the back **18**, so that only a bending operation along a fold line would be required to establish the 90° assembled relation of the insert to the back.

The foregoing description has been given in detail without thought of limitation since the inventive principles involved are capable of assuming other forms without departing from the spirit of the invention or the scope of the following claims.

What is claimed is:

**1.** A disposable dispenser comprising in combination a transparent plastic semi-circular elongated member having an integral end wall at one end and a channel slot toward the other end, a semi-rigid back member to which the elongated member is affixed, and a dispenser insert maintained in position within the elongated member by engagement with the channel slot, said insert having a star-burst snap-out which will maintain a cup-like product in the dispenser and will allow for sequential dispensing thereof.

**2.** A disposable dispenser according to claim **1**, where in said dispenser insert is formed integral with the back member and is folded along a line to define a right angle relative to the back member.

**3.** A disposable dispenser romprising in combination a transparent plastic semi-circular elongated member having an integral end wall at one end and a channel slot toward the other end, a semi-rigid rectangular back member to which the elongated member is affixed, a dispenser insert maintained in position within the elongated member by engagement with the channel slot, said insert having a star-burst snap-out providing pointed fingers for removably maintaining a cup-like product in the dispenser, and holding means to maintain the dispenser in operative position.

**4.** A disposable dispenser according to claim **3**, wherein said holding means comprises pressure sensitive adhesive areas on the rear of the back member.

**5.** A disposable dispenser according to claim **3**, wherein a plurality of cup-like receptacles are sealed in the dispenser between the integral end wall and the star-burst snap-out before the latter is removed from the insert.

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