Aug. 28, 1928. 1,682,350

W. A. RINGLER

DISPENSING CARTON AND PAPER CUP THEREFOR

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Fig. 1.

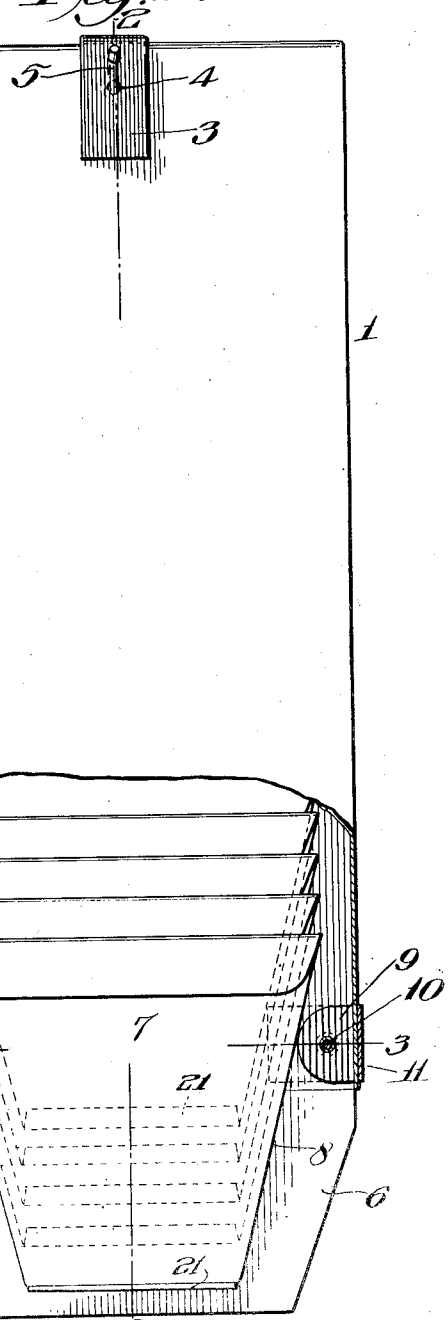
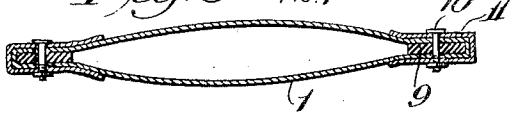


Fig. 3 ON LINE 3-3 FIG. 1



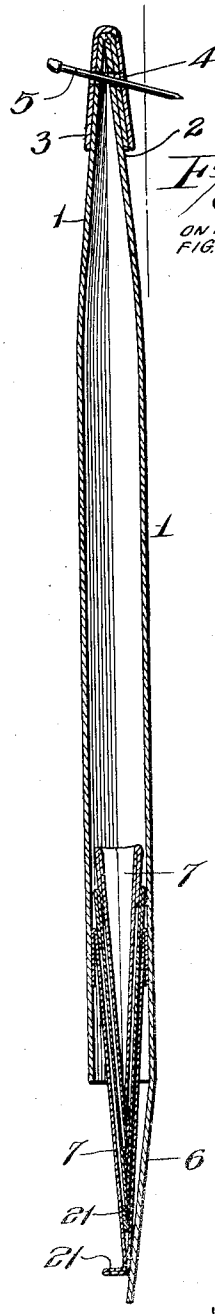


Fig. 2 ON LINE 2-2 FIG. 1.

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Fig. 4.

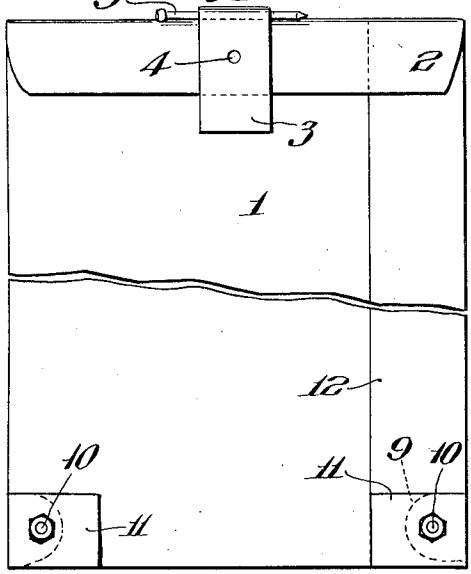


Fig. 5.

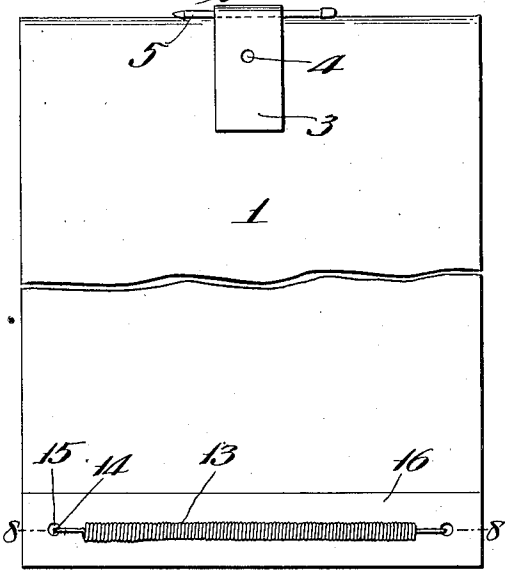


Fig. 6.

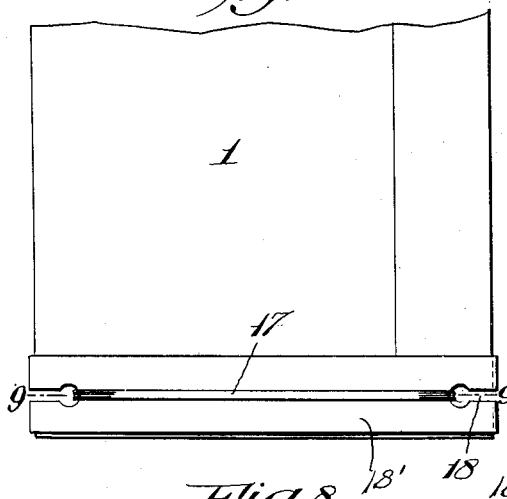


Fig. 7.

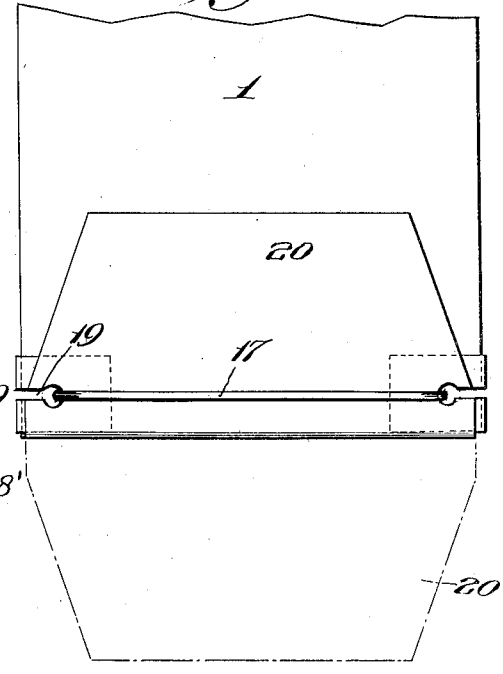


Fig. 8

ON LINE 8-8 FIG. 5.

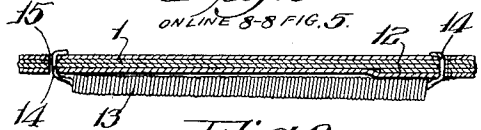
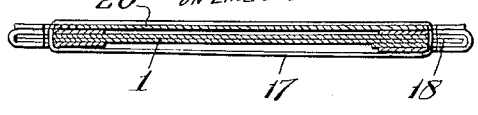


Fig. 9

ON LINE 9-9 FIG. 6.



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Fig. 10.

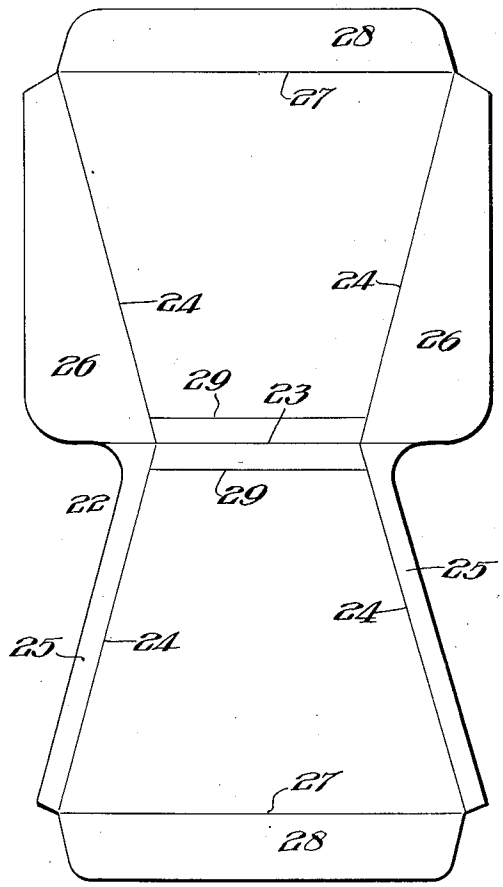


Fig. 11

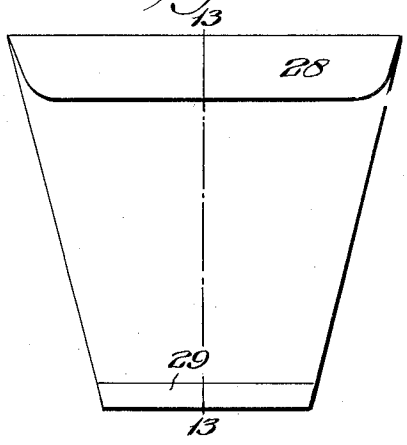


Fig. 12.

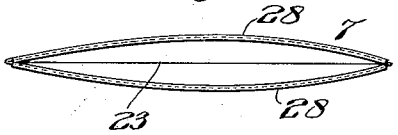


Fig. 13.

ON LINE 13-13 - FIG. 11.

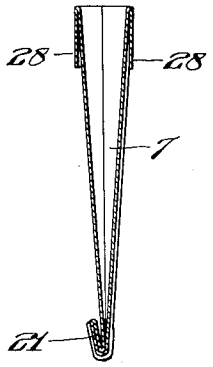
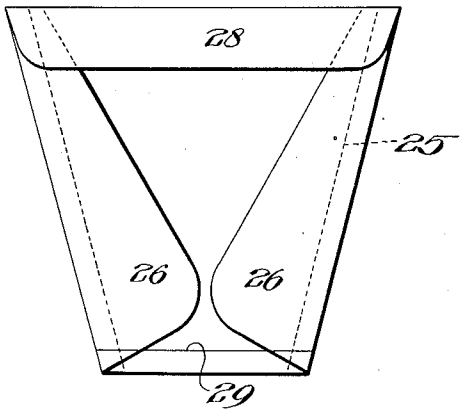


Fig. 14.



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Patented Aug. 28, 1928. 1,682,350

UNITED STATES PATENT OFFICE.

WILLIAM A. RINGLER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO INDIVIDUAL DRINKING CUP COMPANY, INC., OF EASTON, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

DISPENSING CARTON AND PAPER CUP THEREFOR.

Application filed April 18, 1924. Serial No. 707,355.

My present invention comprehends a novel dispensing carton and cup therefor.

It further comprehends a novel construction of a dispensing carton which can be used if desired for shipping a desired number of nested cups and also for dispensing them, and wherein one end of the carton is provided at opposite sides with novel resilient means serving to support the stack of cups and to prevent the withdrawal of more than one cup at a time.

It further comprehends a novel construction of a cup.

Other novel features of construction and advantage will hereinafter more clearly appear in the detailed description and the appended claims.

For the purpose of illustrating the invention, I have shown in the accompanying drawing a typical embodiment of it, which, in practice, will give reliable and satisfactory results. It is however to be understood that this embodiment is typical only and that the various instrumentalities of which my invention consists can be variously arranged and organized, and that the invention is not limited to the precise arrangement and organization of these instrumentalities as herein set forth.

Figure 1 is a front elevation of a dispensing carton, embodying my invention and partly broken away in order to illustrate more clearly the cups and the manner in which they are dispensed.

Figure 2 is a section on line 2—2 of Figure 1.

Figure 3 is a section on line 3—3 of Figure 1.

Figure 4 is a rear elevation of the carton seen in Figure 1.

Figures 5 and 6 are rear elevations of other embodiments of my invention.

Figure 7 is a front elevation of the embodiment seen in Figure 6.

Figure 8 is a section on line 8—8 of Figure 5.

Figure 9 is a section on line 9—9 of Figure 6.

Figure 10 is a plan view of a paper cup blank.

Figure 11 is a front elevation of a cup formed from the blank seen in Figure 10.

Figure 12 is a top plan view of the cup seen in Figure 11.

Figure 13 is a section on line 13—13 of Figure 11, the bottom portion of the cup, in this view, being shown folded back to form a grasping portion or handle.

Figure 14 is a rear elevation of the paper cup.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:

1 designates a flattened dispensing carton embodying my invention. One end of the carton is sealed by a flap 2 having adhesive thereon and a strip of reinforcing material 3 is employed having an aperture 4 through which a nail can be forced, such nail being also employed to support the dispensing carton on a wall or other support. The opposite end of the carton is provided with a sealing flap 6 which can be opened into the position seen in Figure 2. The cups 7 are flat and nest one within another and opposite edges converge downwardly as at 8.

The stack of nested cups is resiliently supported within the carton by means of the resilient or elastic members 9 which may be of rubber, secured within the carton near one end by means of fastening devices 10 which may be bolts and nuts, the bolts passing through reinforcing strips 11 pasted or connected in any desired manner to the carton. The carton is preferably formed from a blank having the side flap 12 which is pasted to the part which it overlaps.

In the embodiment shown in Figures 5 and 8, the stack supporting means which prevents the withdrawal of more than one cup at a time consists of a spring 13 having hook shaped ends 14 which pass through apertures 15 in a reinforcing strip 16 and the walls of the carton.

I may also employ as shown in Figures 6, 7 and 9 an elastic band 17 which enters the side slots 18 in the reinforcing strips 18′ and the side walls of the carton and also the slots 19 in the sealing flap 20, the inner ends of the slots 17 and 19 being preferably rounded. In this case the elastic band retains the flap 20 in its closed condition during shipment of the carton and it is unnecessary to provide the flap with adhesive or other securing means.

The cups 7 have their bottom portion deflected to form a grasping portion 21. This also reinforces the bottom of the cup.

The cups 7 are formed from a blank 22 see Figure 10, which is adapted to be folded on the line 23, on the converging side lines 24 to form side flaps 25 and 26 and to be folded on the lines 27 to form the top flaps 28. As shown in Figure 14, the side flaps 25 and 26 are bent over and pasted to the back of the cup, the side flaps 26 overlapping the flaps 25 and being pasted to the back of the cup as well as to the flaps 25. The top flaps 28 may be simply bent downwardly or preferably they are pasted to the side flaps 26 and to the front and back of the cup. The bottom portion of the cup is then bent on the lines 29 to form the grasping portion 21.

The manner in which the cups nest one within another is clearly shown in Figures 1 and 2, from which it will be understood that both the cups and the dispensing carton are substantially flat.

When it is desired to dispense the cups the lower flap is opened which permits the stack of nested cups to drop downwardly, and their tapered side walls to engage the yieldable supporting means.

The nail or the point of a pencil is then inserted through the aperture 4 so that the carton can be supported on a nail, hook or other supporting device.

The person who desires a cup takes hold of the grasping portion or handle 21 on the lowermost cup and draws it downwardly thereby removing such cup from the carton. The resilient means is compressed or withdrawn and moves inwardly when a cup is drawn out of engagement therewith so that only one cup is withdrawn at a time.

If the resilient stack supporting means is a rubber band or a spring as illustrated, substantially the same action takes place as that hereinbefore described when a cup is being withdrawn.

As only the lower part of the lower cups are exposed to view, the cups are kept in a sanitary condition until they are all dispensed.

It will be apparent that the carton may serve as both a shipping and dispensing carton for the cups.

It will be apparent that the carton serves as a container for the cups and can be be made of paper, metal or any other desired material.

It will now be apparent that I have devised a new and useful dispensing carton and paper cup therefor, which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment thereof which will give in practice satisfactory and reliable results, it is to be understood that this embodiment is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. The combination with a dispenser for paper cups having cup retaining means providing for the withdrawal of cups singly from a stack of cups within the dispenser, of cups adapted to be nested together in a stack within the dispenser, and each cup having a lower marginal portion folded laterally to extend to one side of the body of the cup and constituting a grasping handle portion for withdrawing the cup from the dispenser, and to lie flat against the adjoining side wall of the cup when the cup is nested within another cup.

2. A cup dispensing carton, having an open end and a flap to close such end, said carton and flap having registering slots at opposite edge portions of the carton, and an elastic band surrounding the carton and entering said slots to retain said flap closed, said band when said flap is open serving to support a stack of nested cups and to prevent the withdrawal of more than one cup at a time.

3. The combination with a cup dispenser comprising a container of substantially flat formation for a stack of nested cups and having cup retaining means providing for the withdrawal of cups singly therefrom, of cups of substantially flat formation adapted to be nested together in a stack within the dispenser, each cup being closed at its lower end and having its lower marginal portion folded laterally to extend to one side of the body of the cup and constituting a grasping handle portion for withdrawing the cup from the dispenser, and to lie flat against the adjoining side wall of the cup when the cup is nested within another cup.

4. A dispenser for paper cups of substantially flat form, said dispenser comprising a container of substantially flat formation adapted to receive within the same a stack of cups and provided with yielding cup holding and separating means disposed within the same at opposite side edge portions thereon to engage opposite side edge portions of cups of substantially flat form in the container.

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