A dispensing carton for a stack of folded sheets and a base with a spring biased follower for urging the folded sheets toward a dispensing panel of the carton. The carton features a pair of laterally extending flanges on the bottom panel for frictionally locking the dispensing carton to the base.

5 Claims, 14 Drawing Figures
Figure 3.765,565

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DISPENSER CARTON AND HOLDER

BACKGROUND OF THE INVENTION

This invention relates to a folded sheet dispensing carton and a holder therefor. More particularly, it relates to a napkin dispensing carton with tear-out sections for napkin dispensing and insertion of a spring-biased follower.

There are available today a good number of cardboard cartons cooperating with a base having spring urged follower means for urging napkins toward a carton dispensing opening. However, they all have one or more of the following problems: difficult loading of the dispenser onto the base, dropping of napkins in the loading operation, or lack of sanitation due to handling of the napkins prior to dispensing. The present invention overcomes all these problems by employing a unique dispensing carton which is locked into a supporting base.

Other advantages of the present invention are the extreme ease of loading the dispenser carton onto the base, no half filled sleeves of napkins being left for storage, fewer cleanup problems for dispensers, and the carton's ability to carry advertising messages or seasonal decoration.

SUMMARY OF THE INVENTION

The instant invention provides a dispensing carton for a stack of folded sheets. The carton comprises a one piece blank suitably cut and scored to be foldable into a container of rectangular form in cross section, having a front dispensing panel, closed top and side panels, a rear panel, and a bottom panel having a longitudinal tear-out section which, on removal, permits insertion into the carton of a spring biased follower connected to a base. The follower's function is to urge the folded sheets toward the front dispensing panel. The bottom panel also has a pair of laterally extending flanges for frictionally locking the dispensing carton to the base.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the supporting base and dispensing carton intact.

FIG. 2 is a perspective view of the supporting base, and fully loaded dispensing carton with the front panel tear-out section removed revealing the napkins within.

FIG. 3 is a perspective view of the intact dispensing carton from the front.

FIG. 4 is a perspective view of the intact dispensing carton from the rear.

FIG. 5 is a perspective view of the supporting base and spring biased follower in its fully contracted position.

FIG. 6 is a plan view of the cardboard blank used to form the carton of FIGS. 3 and 4.

FIG. 7 is a perspective view of the partially erected blank of FIG. 6.

FIG. 8 is a perspective view of the bottom panel with the tear-out section intact.

FIG. 9 is a perspective view of the erected blank of FIG. 6 with the napkins inside.

FIG. 10 is the same as FIG. 8 except that the tear-out section is removed, revealing napkins inside.

FIG. 11 is a sectional view taken on the vertical plane indicated by the line A—A of FIG. 2.

FIG. 12 is a partial sectional view taken on the vertical plane indicated by the line B—B of FIG. 11.

DESCRIPTION OF THE PREFERRED EMBODIMENT

We refer now to the drawings in describing the preferred embodiment of the instant invention. In FIG. 1, a dispenser carton generally designated 20 locked onto a supporting base generally designated 22, which preferably is built with substantial weight to provide dispensing without movement of the dispenser.

FIG. 1 displays the carton 20 with the front panel tear-out section 24 of the front dispensing panel 26 intact, while FIG. 2 illustrates the manner in which carton 20 dispenses napkin 28 through the opened front panel 26.

FIGS. 3 and 4 are illustrative of the pair of flanges 30 which extend laterally from the bottom panel 32. In FIG. 5, the supporting base 22 with a spring biased follower 34, which urges the napkins 28 toward the front dispensing panel 26. The follower 34 can be of any design, but the arcuate shaped upper extremity 38 has been found to simplify insertion of the follower 34 into the longitudinal tear-out section 36 of the bottom panel 32.

FIG. 6 is a sectional view taken on the vertical plane indicated by the line C—C of FIG. 5.

FIG. 14 is a bottom view of the supporting base and spring biased follower in its fully contracted position with portions broken away for clarity of illustration of the spring biased follower.

The carton 20 is loaded onto the base 22 by first removing the longitudinal tear-out section 36 and the arcuate shaped tear-out section 40 located on the rear panel 42 adjacent the longitudinal tear-out section 36. The arcuate shaped tear-out section 40 is not necessary, and when present can be of almost any design. However, it should correspond in design to the upper extremity 38 of the spring biased follower 34 to further simplify insertion of the follower 34 into the longitudinal tear-out section 36. The locking feature is provided by the flanges 30 extending laterally of the bottom panel 32, thereby providing a wider dimension than that of the carton width. The carton 20 is next inserted into the base 22, and by pushing the carton 20 securely to the bottom of the base 22, the locking feature is effected. The dispensing tear-out section 24 should be removed only after the carton 20 has been securely locked onto the base 22.

The cardboard blank 44, suitably cut and scored for use in forming the carton 20, is shown in FIG. 6. FIGS. 7-10 illustrate the erected blank 44, and portions thereof.

In FIG. 11 is illustrated the functioning of the spring biased follower 34, which is shown in its fully extended position for a fully loaded carton 20. As the carton 20 is inserted into the base 22, the follower 34 is inserted between the rear panel 42 and the last of the napkins 28 to be dispensed A constant force spring 46 supplies the pressure necessary for forward movement of the napkins 28 toward the front dispensing panel 26.

FIG. 12 illustrates the locking mechanism of the present invention. The base 22 is provided with a pair of longitudinal outer sidewalls 48 and a pair of longitudinal inner sidewalls 50. The base is also provided with a pair of lateral outer sidewalls 52 and a pair of lateral inner sidewalls 54, as best seen in FIGS. 11 and 13. The pair of carton bottom panel flanges 30 are frictionally locked into the base by virtue of being held by the carton locking edges 56 of the pair of longitudinal inner
The carton 20 generally rests on carton support plates 58, 60 and 62 (FIG. 14) which extend between the pair of lateral inner sidewalls 54. The carton locking edges 56 are spaced above the carton support plates 58, 60 and 62.

Reference is now made to FIGS. 13 and 14 for further apparatus description of the base 22 and the spring biased follower 34. The follower 34 is pivotally mounted onto a follower support plate 64 by a pair of anchor lugs 66. The elbows 68 in the spring biased follower 34 maintains the follower 34 in an upright position to urge the napkins 28 forward toward the dispensing panel 26. The constant force spring 46 is pivotally mounted at one end by a rivet 70 onto the follower support plate 64, while the remainder of the spring 46 is coiled into a retaining well 72 located between the forward lateral inner sidewall 54 and the middle support plate 60.

As the napkins 28 are removed from the carton 20, the follower 34 and follower support plate 64 move forward on four rollers 74 which are rotatably mounted on the support plate 64. The rollers 74 roll between the outside support plates 58 and 62 and a bottom panel 76. Four assembly screws 78 (only two are shown in FIG. 14) secure the bottom panel 76 to the base 22.

Foam rubber support feet 80 are fixed to the bottom panel 76 to prevent the base 22 from scratching or slipping on the surface upon which it rests.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description and it will be apparent that various changes may be made in the form, construction and arrangement of the parts of the article and that changes may be made in the steps of the method described and their order of accomplishment without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

What is claimed is:

1. In combination, means for supporting and dispensing a stock of folded sheets, comprising:
a carton of rectangular cross section having a front dispensing panel, closed top and side panels, a rear panel, a bottom panel having a longitudinal tear-out section and a pair of laterally extending flanges; a supporting base for said carton having a pair of longitudinal inner sidewalls, each inner sidewall having a carton locking edge for frictionally locking the laterally extending flanges, and a pair of carton support plates between the lateral inner sidewalls of the base;
a spring biased follower capable of insertion into the carton upon removal of the longitudinal tear-out section; and means for rolling said follower along the base and urging the folded sheets toward the front dispensing panel comprising a follower support plate having a pair of anchor lugs for pivotal mounting of the spring biased follower, and rollers rotatably mounted on the follower support plate.

2. The combination of claim 1 further comprising a constant force spring having one end fixed to the follower support plate and wherein the base further comprises a retaining well adjacent the forward lateral inner sidewall to receive the other end of the spring.

3. The combination of claim 2 wherein the rear panel is provided with a tear-out section adjacent the bottom panel tear-out section to facilitate insertion of the spring-biased follower.

4. The combination of claim 3 wherein the spring biased follower is arcuately shaped at its upper extremity, and the rear panel tear-out section is similarly arcuately shaped.

5. The combination of claim 4 wherein the folded sheets are napkins.