# **United States Patent**

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[21]	Appl. No.	771.556
[22]	Filed	Oct. 29, 1968
[45]	Patented	Feb. 23, 1971
[54]	GARMEN	T-SHIPPING CARTON

- 5 Claims, 5 Drawing Figs.

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**ABSTRACT:** A garment-shipping carton having a rear wall, sides, a top and bottom. A flap which depends from inside of the top has an aperture therein for supporting hangers. A front wall is pivotably secured along its bottom edge to the carton and has a pair of securing flaps at its side. The securing flaps interlock to hold the lower sections of suspended garments which are longer than the carton between themselves and the inside of the front wall. A hook under the top interlocks with an aperture on a snap lock flap pivotably mounted along the top edge of the front wall.



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### GARMENT-SHIPPING CARTON

### BACKGROUND OF THE INVENTION

A shipping carton for garments should be strong enough to maintain its shape during transportation in order to avoid any serious damage to its contents. The size of the carton should be large enough to permit most garments to hang freely, but small enough to permit efficient utilization of space. If the carton did not permit the garments to be hung, there would be a serious wrinkling problem while the goods are in transit. On the other hand, if the cartons are large enough to accommodate such items as dresses or full-length coats, there would normally be significant amounts of unused space. The luxury of normally unused space is not feasible due to shipping and storage expenses.

Ready accessibility to the contents of the carton is important. The garments in the carton may be removed and/or replaced many times. For this reason there should be some type of door or movable panel on the carton which provides ready access to the contents. By the same token, the movable panel must be securely held in place during transportation of the carton and its contents. A latching device which is reliable and easily opened and closed is highly advantageous.

The construction of the carton must be sufficiently strong to support the garments and sufficiently rigid to withstand the abuse of shipment. Needless to say, a relatively weak carton which would bend, break or collapse during any type of hard usage would cause extensive damage to the garments it contains.

It is particularly desirable if the entire carton including the support for the garment hangers and the locking device can be constructed of a unitary blank. This construction permits maximum ease of assembly, minimum cost of manufacture and the most efficient shipment of the carton blanks. The cartons are normally constructed of a paperboard which is not inherently strong. Moreover, it is not economically feasible to build substantial metal or wood braces into a carton which may be used only once. The construction in general and the connection of the panels in particular, therefore, becomes more important. It is necessary to assemble the different panels in a manner which permits them to reinforce each other.

Previous garment-shipping cartons usually had metal rods on which the clothes were hung. It was also common to have metal or wooden supports to add rigidity to the paperboard carton. As mentioned earlier, these additional pieces add significantly to the cost of the shipping blanks, construction and the complexity of assembly. It is also preferable if the carton can be formed of a simple blank.

This invention provides a garment shipping carton which has the desirable characteristics discussed above. It has a size which makes it useful for transporting suits, dresses, coats and so forth of nearly any length. During transportation, the garments either hang completely free or hang with their lower 55 sections neatly and securely folded.

All garments in the carton are readily accessible through a large pivoted front panel. When the front panel is closed, however, it has a strong but simple and reliable locking device to secure it to the other panels of the carton. The carton is  $_{60}$  further constructed of a unitary blank which includes a support for the garment hangers, a locking device and appropriate panels which reinforce the entire structure.

#### SUMMARY OF THE INVENTION

A garment-shipping carton for transporting clothing having various lengths comprising a rear wall, sides, a top and bottom appropriately fastened together. Depending from inside of the top of the carton is a means for holding hangers. A front wall is pivotably secured to the bottom edge of the carton. A flap crosses and overlaps the front wall to secure the lower sections of garments. A latching device, formed of the same material and integral with the means for holding hangers, interlocks with a locking aperture in a snap lock flap attached along the top edge of the front wall. FIG. 1 is a perspective view of the opened garment shipping carton of this invention.

FIG. 2 is a side plan sectional view of the garment-shipping carton.

- FIG. 3 is a side detailed view of the locking device for closing the carton.
- FIG. 4 is a perspective view partially cut away to illustrate the locking device in the closed position of the carton.

FIG. 5 is a top view of the carton blank.

FIGS. 1 through 4 show the assembled and FIG. 5 shows the blank of the carton 10 of this invention. The carton 10 has a back wall 12 formed of a left rear flap 14 and a right rear flap 16. The flaps 14 and 16 are pivotably attached along one edge to left side 18 and right side 20 respectively. The left side 18 has the left top panel 22 attached at its upper end. The left top panel 22 forms a right angle with the left side 18 and is generally parallel with the support of the bottom of the carton. Extending downwardly from the left top panel 22 is a left top flap 24 which is pivotably secured to the left top panel 22. The 20 panel 24 abuts and lies against the left rear panel 14 to reinforce it and brace it with respect to the left side 18. Similarly, the right side 20 has a right top panel 26 pivotably attached along its upper end and a depending right top flap 28 extending downwardly from the rear edge of the right top side 26.

Depending from the top 30 formed by the left top panel 22 and right top panel 26 are depending support panels 32 and 34. The support panels 32 and 34 have apertures 36 and 38 to form a means for holding garment hangers. Indentations or cutouts 40 and 41 in the support panels form hooks 42 and 43

which act as part of the latching device. The top panels 22 and 26 are designed to be held together in some manner, if desired, by an adhesive or tape such as 44. As formed, the support panels 32 and 34 readily support very heavy loads. Moreover, the apertures in the support panels 32 and 34
should be sufficient to hold several garment hangers 45 such as that shown in FIG. 2. The hook 42 is merely illustrative of one type of latching device. It is also possible that the latching device could be formed separately from the support panel but still part of the blank. While other embodiments may be used, 40 they should all be formed of the material of the carton blank

and yet be reliable and capable of being used many times.

A bottom panel 46 is pivotably attached to the bottommost side 18. The bottom 46 can also be pivotably attached to the right side 20 instead of separated, as shown in FIG. 5. As shown in FIG. 5, it would be necessary to attach the right side 20 to the edge 47 of the bottom 46. A bottom back flap 48 is pivotably attached along its side 49 to the bottom 46.

A front flap 50 is pivotably attached along its bottommost edge 52 to the bottom 46 of the carton 10. Lower side flaps 53 and 54 are held along the side edges of the flap 50 and themselves support securing flaps 55 and 56, respectively. The securing flaps are designed to engage and lock with each other. In particular, a locking tab 58 having rounded edges is attached to the outer edge of the securing flap 55 and engages a locking aperture 59 on the securing flap 56. While other locking devices can be used, the tab and recess has been found to work very satisfactorily.

Garment-engaging flaps 62 and 64 along the lower edges of flaps 55 and 56, respectively, physically engage the garments when the securing flaps are locked. The garment-engaging flaps particularly secure longer garments which have to be folded up along the front panel 50, as shown in FIG. 2. It is anticipated that the flaps 62 and 64 could be along the top edges of the securing flaps 55 and 56 for garments which have the proper length to require such an adaptation.

Upper side flaps 67 and 68 are secured along the side of the front panel 50 and above the securing flaps 55 and 56. The upper side flaps are used to further protect the garments during shipping by preventing an opening between the front panel 50 and the sides 18 and 20 when the carton is closed.

A closing snap lock flap 70 is pivotably attached along the top edge of the front panel and has a general trapezoidal shape. A locking aperture 72 is formed in the flap 70 to engage the hooking means 42 and 43 on the support panel to 75 lock the carton.

Any type of adhesive 74 may be used to secure the right side 20 to the bottom 46. Similarly, adhesive 75 can be used to strengthen the back edge and hold the panels in place.

To assemble the blank of FIG. 5, the bottom back flap 48 is bent to a vertical position while the bottom 46 lies flat on the floor. The left side 18 with the left back flap 14 is then also bent to a vertical position. The left top panel 22 and left top flap 24 now standing in a vertical position are bent toward the center of the bottom 46, but generally parallel to it. While in this position, the left top flap 24, which is now horizontal, is 10 bent downwardly to a vertical position. The left back flap 14, which is in a vertical position, is bent to a location behind the bottom back flap 48 and left top flap 28

If the right side 20 is not attached to the bottom 46 as shown, it is secured thereto by means of an adhesive 74, as 15 ing a length greater than the height of the carton comprising: seen in FIG. 1. Once the right side 20 is raised to a vertical position, the right top panel 26 is then bent downwardly toward the center of the carton to a position at a right angle with the right side 20. The right top flap 28 is then folded down and the right back flap 16 is bent to a position at a right 20angle from the right side behind the bottom back flap 48 and the right top flap 28. The support panels 32 and 34 on panels 26 and 22, respectively, are bent to a vertical position and the left top panel 22 and the right top panel 26 are then taped together with adhesive or tape 44 or held together by any 25 other securing means. An adhesive 75 is placed along the back top edge to also aid in securing the carton together.

Garment hangers can then be hung in the apertures 36 and 38, as seen in FIG. 2. If a particular garment is longer than the height of the box, it will be folded onto the inside of the front panel 50. The securing flaps 32 and 34 are then bent to a position over the garment and locked by means of the locking tab and aperture. The front flap 50 is then pivoted upwardly where the locking aperture 72 will fit over the locking hook 42 and 43, particularly as seen in FIGS. 2 and 4. If the front panel 35 is pulled rearwardly, the panel locks into place within the indentations 40 and 41 behind the hook. In order to open the front panel, it is simple matter to grasp the top edge of the front panel 50 as seen in FIG. 3, push it slightly forward and press down to release the front panel from the hook. Thus, the 40construction of this carton insures that the front panel 50 may be readily opened and closed in order to provide full access to the garments stored therein. Moreover, it is constructed completely out of paperboard, yet it is very sturdy due to the overlapping flap structure. It also provides a means for holding garment hangers which is extremely sturdy and combines

therewith an integral latching means to hold the front panel in place.

It is anticipated, however, that the securing flaps 55 and 56 may be replaced by a single flap and that a different type of latching device may be utilized.

For ease of description, the principles of the invention have been set forth in connection with but a single illustrated embodiment. It is not my intention that the illustrated embodiment nor the terminology employed in describing it be limiting inasmuch as variations in these may be made without depart-

ing from the spirit of the invention. Rather I desire to be restricted only by the scope of the appended claims.

I claim:

1. A garment-shipping carton for transporting clothing hav-

- a rear wall, sides, a top and bottom appropriately fastened together;
  - a means for holding hangers comprising a support panel depending from the top of the carton and having an aperture therein:
- a front wall pivotably secured to the bottom edge of the carton;
- means for holding the garments against the inside of the front wall; said means for holding being a part of and integral with the carton; and
- means for securing the front wall in an upright position in order to close the carton including a hook formed in said panel and a flap pivotally attached to the top edge of the front wall and having an aperture for receiving the hook. 2. The garment-shipping carton of claim 1 wherein the

means for holding garments includes a flap means adapted to overlap garments which are positioned against the inside of the front wall and secured thereto in a substantially fixed relation.

3. The garment-shipping carton of claim 1 wherein the means for holding garments includes securing flaps pivotably supported along either side edge of the front wall and a means for locking the flaps together.

4. The garment-shipping carton of claim 3 wherein an inwardly turned flap is supported along at least one edge of the securing flaps to engage the garments and hold them against the front wall.

5. The garment-shipping shipping carton of claim 1 wherein panels which are attached to the top and bottom overlap and 45 reinforce the rear wall.

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