Nov. 25, 1969 H. S. COLLIN 3,480,153

HANGER BAR FOR GARMENT CARTONS

Filed Dec. 5, 1967

Fig. 1.

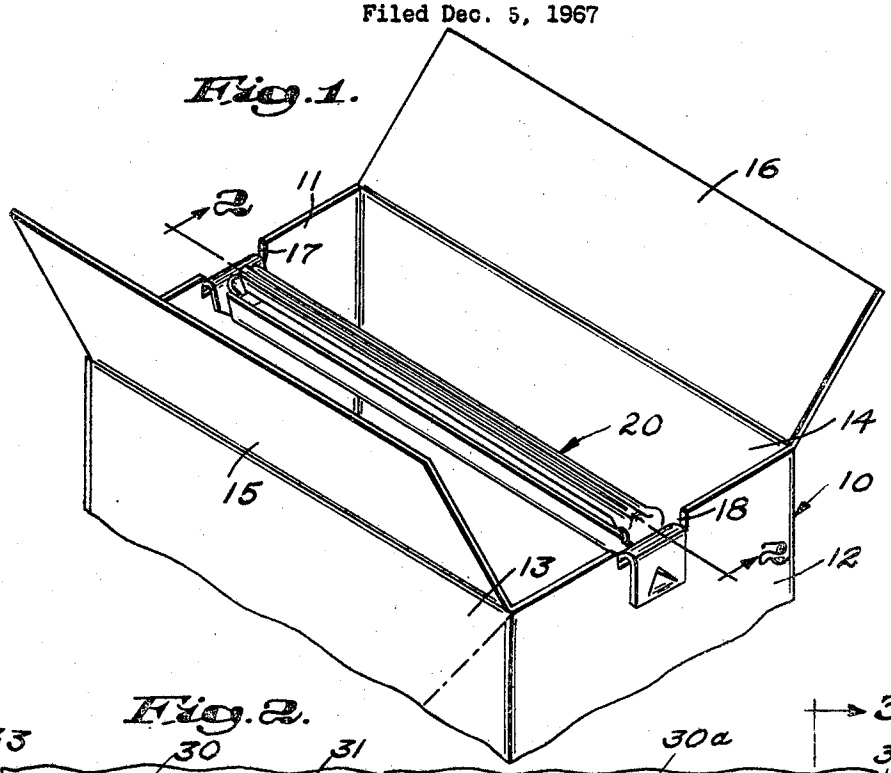
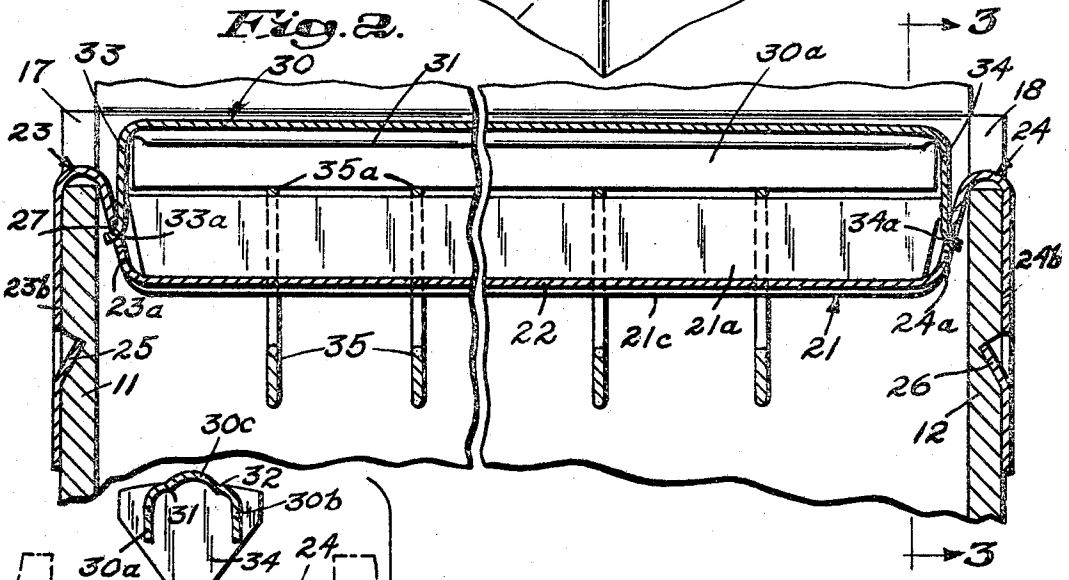


Fig. 2.



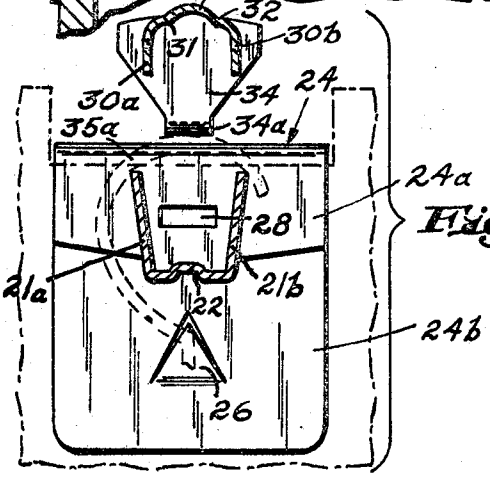


Fig. 3.

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HANGER BAR FOR GARMENT CARTONS

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ABSTRACT OF THE DISCLOSURE

A bar for supporting clothes hangers in an upright garment shipping carton. A channel shaped metal bar for supporting the hangers has U-shaped end portions which engage over the side walls of a carton. A lock bar, of inverted channel shape, overlies the hooks of the hangers and has down turned ends terminating in prongs which snap into slots in the end portions of the supporting bar.

This invention relates to hanger bars for supporting clothes hangers, and more particularly to a bar for use with commercial garment shipping cartons of the upright type.

BACKGROUND OF THE INVENTION

An upright carton of the type to which this invention pertains is made of a size and height to hold a number of garments, such as suits, coats, or dresses, on clothes hangers, and has a bar at the top to receive the hangers. The purpose of using such cartons is to prevent the garments from becoming wrinkled, in transit between the factory or warehouse and the store, and to eliminate the need for pressing when the garments are received at the store. In cartons previously used, the hangers are likely to slide along the bar, or fall off, if the carton is tilted, so that some or all of the contents may become wrinkled. The principal object of this invention is to provide a bar which securely locks the hangers, so that they cannot slide or fall off.

SUMMARY

The bar here disclosed is made of sheet metal and consists of a body and a cover. The body is channel shaped and has end portions with upwardly sloping inner walls connected to downwardly extending outer walls. The end portions engage in notches in the end walls of the carton. The cover is an inverted channel with downwardly extending side walls, and has down turned tabs at the ends, terminating in prongs which engage in slots in the inner amount of spring so that the prongs can be disengaged walls of the body end portion. The tabs have a certain by pressing against the tabs with a screw driver. When the cover is in place, its side walls engage and lock the hooks of hangers disposed on the bar body, and the prongs lock the cover to the body.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings illustrating the invention:

FIGURE 1 is a perspective view of the top portion of a garment carton on which is installed a hanger bar constructed according to the invention;

FIGURE 2 is an enlarged cross-section, partly broken away, taken along line 2—2 of FIGURE 1; and

FIGURE 3 is a cross-section taken along line 3—3 of FIGURE 2, showing the locking bar in raised, free position.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The carton, generally indicated by the numeral **10**, on which the bar is used, is rectangular and has end walls **11** and **12**, side walls **13** and **14**, and top closure flaps **15** and **16**. The carton is ordinarily made of corrugated cardboard and may be of any suitable construction. End walls **11** and **12** have notches **17** and **18** for receiving the hanger bar, generally indicated by the numeral **20**.

The body section **21** of the bar assembly is generally channel-shaped, and has upstanding side walls **21***a* and **21***b*. A stiffening rib **22** is formed along the bottom wall **21***c* of the bar. The bar has end portions, generally indicated by the numeral **23** and **24**, consisting of inner walls **23***a*, **24***a*, sloping upward from the bottom wall of the bar, connecting with down-turned outer walls **23***b*, **24***b*. Prongs **25** and **26** are struck out of outer walls **23***b* and **24***b* and face inward and upward. Inner walls **23***a*, **24***a* have slots **27** and **28**.

The body section **21** is preferably formed in one piece from sheet metal, and so proportioned that it can be formed from a strip of uniform width. End portions **23** and **24** are thus wider than the channel-shaped main portion in the finished bar. The wide end portions distribute the weight of the garments hung on the bar over a corresponding wide area of the carton walls. When the body section is placed on the carton, end portions **23** and **24** pass through notches **17** and **18** and engage over the end wall **11** and **12** of the carton. The prongs **25** and **26** bite into the end walls and prevent displacement of the bar.

The cover section, generally indicated by the numeral **30**, is also formed in one piece from sheet metal and is generally channel-shaped with downwardly extending side walls **30***a* and **30***b* and a top wall **30***c*. Stiffening flutes **31** and **32** are formed in the top wall. Generally triangular end flaps **33** and **34** are bent down from top wall **30***c* and terminate in tab portions **33***a* and **34***a* which are of appropriate width to fit into slots **27** and **28**.

To use the bar assembly, body section **21** is set in place on a carton, and end portions **23** and **24** are pushed down into notches **17** and **18**. The garment hangers **35**, which may be of any of the usual wood, wire, or plastic types having hook portions **35***a*, are hung on body section **21**. The garments may be placed on the hangers before or after the hangers are hung on the bar.

The hangers are spaced as desired. Plain garments of sturdy materials, for example, may be packed tightly. In the case of fragile garments or garments with bows or ornaments, it may be desirable to space the hangers so that the garments do not touch each other.

When all the hangers and garments have been placed in the carton and arranged as desired, the cover section **30** is put on. This may be done readily by inserting the tab portion of one of the cover end flaps into one of the slots **27** or **28**. The opposite end of the cover section is then pressed down against the adjacent inner wall **23***a* or **24***a*. Walls **30***a* and **30***b* of the cover section stop short of end flaps **33** and **34** so that the latter may yield inwardly to allow the last tab portion to engage in its slot. The slope of inner walls **23***a* and **24***a* facilitates insertion of the last tab.

When cover section **30** is in place, as shown in FIGURE 2, the clearance between walls **30***a*, **30***b* and walls **21***a*, **21***b* of the body section is such that the hook portions **35***a* of the hangers are gripped tightly. The hangers then cannot slide along the bar or rock sidewise.

To remove the cover section, one of the end flaps **33** or **34** is pressed back, with a screw driver or similar tool, to free its tab portion from the slot, and that end of the cover section is lifted. The other end can then be readily freed.

The bar here disclosed can be used with either a top opening or a side opening carton. When used on the latter, the notches **17** and **18** are made deeper, so that the bar is spaced from the top of the carton, to allow the cover section to be put on and taken off. The bar securely locks the hangers so that they cannot fall off, rock, or slide if

the carton is tilted. The garments are thus kept spaced and in the proper position.

What is claimed is:

1. A hanger bar, for a garment carton having end walls, comprising a body section having a central hanger supporting portion and end portions adapted to engage said end walls to support the bar thereon, said end portions having inner walls provided with openings, and a cover section overlying said body section and adapted to grip the hooks of clothes hangers disposed on said central portion, said cover section having resilient bendable end flaps engaging said openings.

2. A hanger bar as described in claim 1, said central portion being channel-shaped with side walls and a bottom wall, and said inner walls sloping upward from said bottom wall.

3. A hanger bar as described in claim 1, said central portion being channel-shaped with side walls and a bottom wall, the combined width of said side walls and bottom wall being equal to the width of said end portions.

4. A hanger bar as described in claim 1, said central portion being channel-shaped with a bottom wall, and having a rib disposed along said bottom wall.

5. A hanger bar as described in claim 1, said cover section being channel-shaped with downwardly extending side walls and a top wall and having flutes along said top wall.

6. A hanger bar as described in claim 1, said end flaps being generally triangular end terminating in tab portions extending into said openings.

References Cited

UNITED STATES PATENTS

2,484,453	10/1949	Halverson	211—124 X
3,057,461	10/1962	Richer	211—124 X
3,162,314	12/1964	Belsinger	211—124
3,298,503	1/1967	Field	211—124 X
3,403,787	10/1968	Browning	211—124

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