

Sept. 11, 1951

L. J. ROSENBERG

2,567,786

TELESCOPIC SHIPPING CARTON

Filed Oct. 17, 1947

2 Sheets-Sheet 1

FIG. 1.

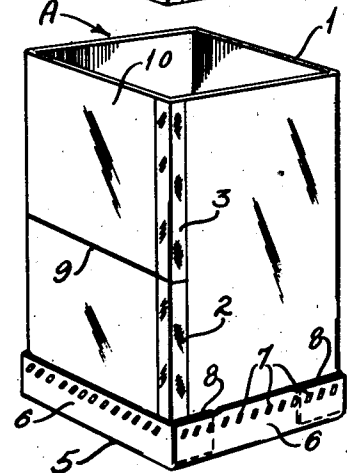
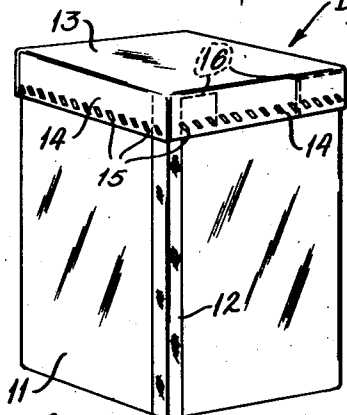
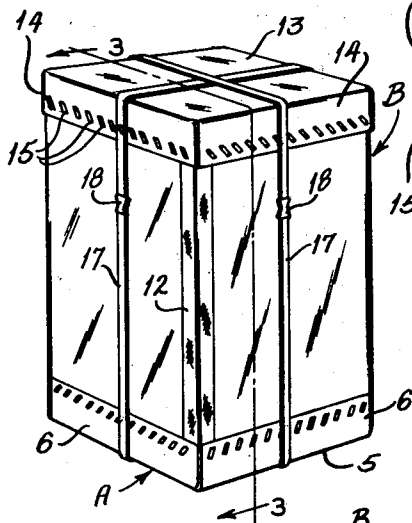
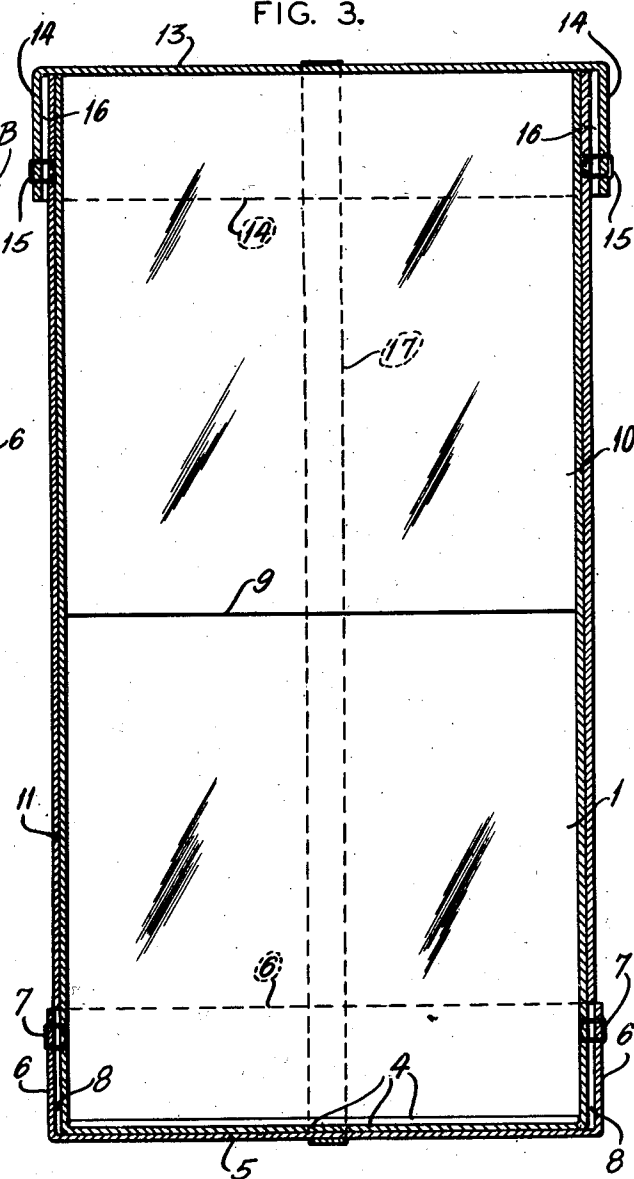


FIG. 2.

FIG. 3.



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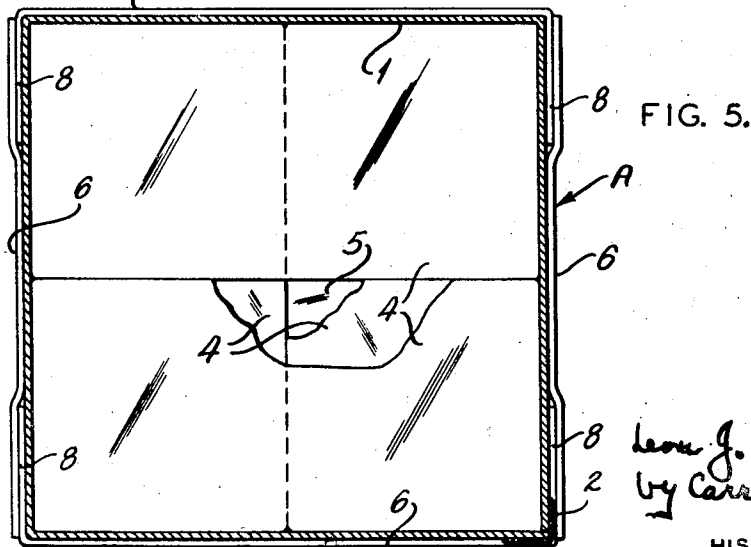
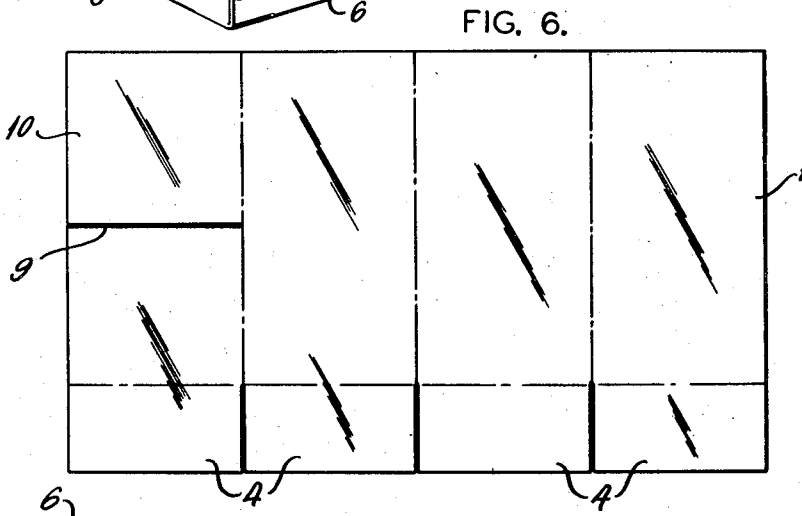
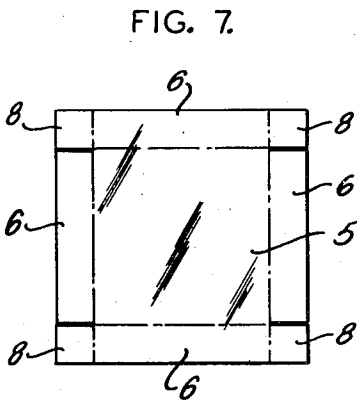
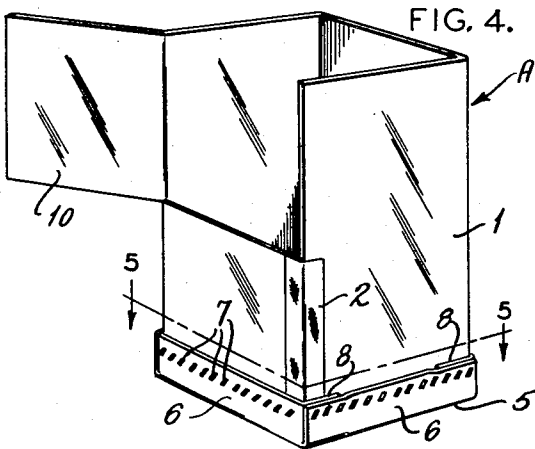
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Filed Oct. 17, 1947

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UNITED STATES PATENT OFFICE

2,567,786

TELESCOPIC SHIPPING CARTON

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Application October 17, 1947, Serial No. 780,527

2 Claims. (Cl. 229—23)

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This invention relates to telescopic containers, the containers being relatively tall and being inherently rigid and adapted for ready packing and unpacking of various articles contained therein, and being further characterized in that a minimum number of component elements or parts are utilized, the structural characteristics of which differ from the prior art containers of the present type.

In the prior art telescopic type containers at least three main component elements or parts have been utilized, namely, such a carton wherein the outer walls are in two parts, usually an upper part and a lower part, and these two parts have free edges that abut, in most instances approximately midway of the length of the same. The other main component element or part is a liner which in some instances is substantially coextensive in length with the height of the container and others wherein this liner is also divided intermediate its ends and has abutting free edges. Where an access opening or access door is provided in one wall of the liner, the same is approximately one-half the length of the liner or intermediate the ends thereof and when the free edges of the outer wall sections or parts are in abutting relationship, this abutting relationship occurs closely adjacent the upper edge which defines in part the access opening in one wall of the liner or the point of pivotation or hinging of the door. Thus when the two outer parts have their free edges in abutting relationship with the liner inside thereof, the upper part of the outer casing either extends over the door or the access opening as the case may be.

In the present invention the overall shape of the container is rectangular and it consists of only two main component elements, namely, an inner one-piece rectangularly shaped section and an outer rectangularly shaped one-piece section. These sections have interconnected walls and right angle corners. Like the prior art containers each section has a flanged cap thereon and permanently secured thereto adjacent one end, thus providing a free end for each section. The inner section of the present invention is of greater length than the outer section. The outer section is adapted to snugly telescopically and slidably engage the inner section. The flange on the inner section surrounds the same adjacent one end thereof. This inner section is provided with a vertically hinged door that comprises substantially one-half of one of the walls thereof and the same is hinged at one right angular corner and thus exposes an opening for packing and unpacking the container when the outer

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section has been removed from the inner section.

When the inner and outer sections are in their telescoped arrangement the free end edge of the outer section rests on the marginal seat formed by the cap flange adjacent the end of the inner section. This provides for a continuous and uninterrupted length of the walls constituting the outer section from the top to the bottom thereof where the free edge engages the marginal seat formed by the upturned flange on the inner section and when the two said sections are thus interengaged the outer section extends over the hinged door and maintains the same in closed position. The aforesaid structure inherently results in an effective reinforced container throughout in that the outer walls of the outer section are continuous from top to bottom and thereby reinforce the inner walls which constitute the inner section. The dimension of the height of the walls of the inner section which are of greater length than the walls of the outer section is such that when the free end edge of the outer section rests on the said seat provided by the flange adjacent the end of the inner section, the free end of the inner section will be disposed interiorly of the outer section and engage adjacent opposite portions of the inner side of the cap or any closure member that may be positioned thereat. The difference of the greater length of the inner section relative to the outer section is determined by the width of the flange of the cap adjacent the end of the inner section and this difference is usually equal to the width of the flange adjacent the end of the inner section.

In the present container any end thrust from either of the caps that are adjacent the ends of the inner and outer telescoping sections or any weight that may be applied when the sections are telescoped and with the free end edge of the outer section in engagement with the marginal seat formed by the upturned flange of the cap adjacent the end of the inner section will be imparted directly to this flange and as the flange is securely engaged with the walls of the inner section there is thus provided a very rigid seat and a means of transmitting the thrust or weight directly to the bottom of the container as distinguished from the prior art containers wherein, as aforesaid, the outer wall or section is divided intermediate its ends and any end thrust or weight, therefore, is applied directly to the said outer wall where the edges of the two parts comprising the same abut or contact each other.

In view of the foregoing it is an object of the present invention to provide a telescopic type of container that is relatively tall and subject to

heavy duty and wherein the same consists of only two main component elements, namely, an inner and an outer section, and with each section provided with flanged caps the flanges of which are secured to each section adjacent their ends and each section having free end edges and the free end edge of the outer section engaging the edge of the flange on the inner section and there being a hinged door in one of the walls of the inner section.

Another object of the invention is to provide a container comprising inner and outer snugly slidable engageable telescopic sections wherein each section at one end thereof is provided with a flanged cap, the flanges being secured to the walls of each section and the free edges of the flanges of the cap on the inner section defining an upwardly facing marginal seat surrounding the same adjacent one end thereof so that when the free edges of the outer section are telescoped over the inner section the said free edges engage the said seat and the free edges of the inner section are disposed interiorly of the cap thereon and engage the same at opposite portions.

Another object of the invention is to provide a telescopic type container that is relatively tall and consists of two main component elements, namely, inner and outer similarly formed rectangularly shaped sections, the inner section being of greater length than the outer section and provided at one end thereof with a flanged cap with the flanges secured to the side walls comprising this section and exteriorly thereof and defining an upwardly facing marginal seat that surrounds the same adjacent one end thereof and each of the sections having free end edges and when the said sections are in telescoped arrangement the free end edge of the outer section is supported on the said seat and the free end edge of the inner section is disposed interiorly of the upper capped end of the outer section and engages the same or other closure means therein at opposite points.

Another object of the invention is to provide a telescopic container that is relatively tall and comprising substantially similarly shaped inner and outer sections, the outer section being composed of interconnected walls with right angularly bent corners and being continuous or uninterrupted throughout its length and having a free edge that is adapted to engage a seat formed by a closure adjacent the end of the inner section.

Another object of the invention is to provide a telescopic type container that is relatively tall and consists of inner and outer telescopic sections each of which has flanged cap secured adjacent one end thereof and the free edges of the flange of the cap on the inner section defining an upwardly facing marginal seat that surrounds the same adjacent one end thereof and the walls constituting the outer section being continuous and uninterrupted and the outer section having a free edge that contacts the said marginal seat, and the inner section being of greater length than the outer section so that when the said free end of the outer section is in engagement with the marginal seat the free end of the inner section will be disposed interiorly of the cap of the outer section and in engagement therewith and the difference of the greater length of the inner section relative to the outer section being determined by the width of the flange adjacent the end of the inner section and the width of this flange usually being equal to the greater length of the inner section relative to the length of the outer section.

With the above and other objects in view, the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claim hereto appended, it being understood that various changes in the form, proportions, and minor details of construction, within the scope of the claim, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, which form part of this specification and wherein like symbols refer to like parts wherever they occur,

Fig. 1 is a perspective view of a telescopic shipping carton embodying my invention,

Fig. 2 is a similar view, showing the cover section of the container separated from the goods receiving section thereof,

Fig. 3 is an enlarged vertical sectional view on the line 3—3 in Fig. 1,

Fig. 4 is a perspective view of the goods receiving section with the access door swung open,

Fig. 5 is a horizontal sectional view on the line 5—5 in Fig. 4,

Fig. 6 is a face view of the blank from which the tubular body of the goods receiving section is formed; and

Fig. 7 is a face view of one of the closure cap blanks.

In the accompanying drawings, my invention is shown embodied in a relatively tall, heavy duty shipping container comprising an inner, upwardly opening goods receiving section A and an outer, downwardly opening slip cover section B adapted to telescope snugly over the open end of said inner section. The two sections are preferably made entirely of corrugated board, fiberboard or other bendable material.

The goods receiving section comprises a four-sided tubular body 1 made by bending a rectangular blank along three score lines disposed between and parallel with two opposite ends thereof and securing said ends together through the length of the corner formed thereby preferably by means of lower and upper adhesive strips 2 and 3, respectively. The tubular body 1 is closed at its bottom or lower end by four closure flaps 4 and a cap 5. One of the closure flaps 4 is formed on the lower end of each of the four side walls of the tubular body 1, the closure flaps of two opposite side walls being bent inwardly into edgewise abutting relation and the closure flaps of the two other opposite side walls being bent inwardly into edgewise abutting relation over and into contact flatwise with the two first mentioned inwardly bent closure flaps. The cap 5 for the bottom of the upright tubular body 1 of the goods receiving section A seats against the two folded over lowermost closure flaps 4 and has side marginal flaps or flanges 6 that are bent upwardly against the outer faces of the corresponding side walls of said body and are permanently secured flatwise thereto by staples or other suitable fasteners 7. The flanges on two opposite sides of the cap 5 have end tabs 8 that are bent around the adjacent corners of the tubular body and are covered by the depending end flanges on the two other opposite sides of said cap and are secured in place by the fastening staples 7 therefor. The thus secured flange provides a rigid and upwardly facing marginal seat that surrounds the inner section A adjacent one end thereof.

One of the two adjacent side walls that are secured together at one corner of the tubular

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body 1 of the goods receiving section A by the adhesive strips 2 and 3 is slit horizontally from side to side, as at 9, at the upper end of the lowermost strip 2 to form a hinged door or closure flap 10 which is preferably secured in closed wall forming position by the uppermost strip 3.

The downwardly opening slip cover section B of the carton comprises a four-sided open-ended tubular body 11 of a width adapted to snugly telescope over the upper end of the tubular body 1 of the goods receiving section A. The tubular body of the outer slip cover section is made from a rectangular blank which is bent along three lines between two opposite ends thereof and said ends connected at one corner of said body by an adhesive strip 12 that extends from top to bottom thereof. The upper end of the tubular body 11 of the outer slip cover section B is closed by a cap 13 which seats thereon and has depending side marginal flanges 14 that are permanently secured by staples or other suitable fasteners 15 flatwise to the outside faces of the corresponding side walls of said body. The flanges on two opposite sides of the cap 13 have end tabs 16 that are bent around the adjacent corners of the tubular body and are covered by the depending end flanges on the two other opposite sides of said cap and are secured in place by the fastening staples 15 therefor.

In packing the carton, the tall goods receiving section A is placed in an upright position without the uppermost tape 3 applied thereto, thus permitting the door 10 to be swung open about the closed corner formed in part thereby to provide a side opening through which easy access may be had to the lower portion of said section for packing. After the section A has been filled through the side opening thereof, the hinged door 10 is then swung back into wall forming position and may be secured in said position by the uppermost adhesive corner strip 3. The slip cover section B is then telescoped downwardly over the filled goods receiving section A, the height of the tubular body 11 of said cover section being such that the cap 13 thereof seats on the upper end of the section A and the lower end of said body seats on the upper edges of the upturned side flanges 6 of the bottom cap 5 of the section A. The closed carton may then be bound with crossed metal securing bands or strips 17 that extend around the top, bottom and sides thereof and are locked in contracted position by means of suitable coupling members 18.

The above carton is of a simple and inexpensive construction; and it permits easy access to be had to the lower portion of the tall goods receiving section for packing. The wide access door 10 is formed merely by slitting one of the two abutting side wall panels of the goods receiving section A horizontally from side to side, the adjacent closed corner formed in part by said wall providing a vertical hinge for said door. The door may be secured in closed, wall forming position by the uppermost corner strip 3; and this strip together with the lowermost corner strip 2, secure the two abutting side wall panels of the tubular body 1 of the section A together in corner forming relation from top to bottom of said tubular body 1. The turned under closure flaps 4 and cap 5 of the goods receiving section A greatly increase the strength, durability and load-supporting capacity of the lower, wear receiving portion of said section; and the upstanding side flanges 6 of said cap hold the bottom edges of the side walls of the slip cover section off the floor, thereby preventing floor moisture from reaching

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said bottom edges of said side walls of said cover section and rising therein by capillary attraction.

In view of the foregoing it is clear that there is provided a container that is relatively tall and which possesses novel structural characteristics comprising the inner and outer telescoping sections, the novel marginal seat that is provided adjacent one end of the inner section to cooperate with the free end of the outer section and the vertically hinged door provided in one of the panels or walls of the inner section which permits ready access to the lower and upper portions thereof during packing and unpacking of the same.

What I claim is:

1. A substantially rectangularly shaped tall heavy duty shipping carton consisting only of inner and outer similarly formed snugly telescoping rectangularly shaped one-piece sections, each section having interconnected oppositely disposed walls and right angular corners, the inner section being of greater length than the outer section, one corner of the inner section being vertically slit to substantially intermediate the ends thereof and there being a horizontal slit connecting with the vertical slit and extending entirely across one of the walls to an adjacent corner, thus with the last mentioned corner providing a vertically hinged door which when open exposes an unobstructed opening the width of the last mentioned wall, each section having a similar integral flanged cap on one end thereof with the flange paralleling, contacting, and permanently secured to exterior end portions of the opposed walls, the flanges of the inner section defining an upwardly facing marginal seat surrounding the same adjacent one end thereof, each section having a free and open end edge, the outer section when telescoped on the inner section having its end edge in engagement with the marginal seat on the inner section and with the free end of the inner section disposed in engagement with interior portions of the cap on the outer section, and the difference of the greater length of the inner section relative to the outer section being equal to the width of the flange adjacent the end of the inner section.

2. A substantially rectangularly shaped tall heavy duty shipping carton consisting only of inner and outer similarly formed snugly telescoping rectangularly shaped one-piece sections, each section having interconnected oppositely disposed walls and right angular corners, the inner section being of greater length than the outer section, one wall of the inner section at one corner being free downwardly substantially intermediate the ends thereof and there being a horizontal slit extending from the free edge thereof entirely across said one wall to an adjacent corner, thus with the last mentioned corner providing a vertically hinged door which when open exposes an unobstructed opening the width of the last mentioned wall, each section having a similar integral flanged cap on one end thereof with the flange paralleling, contacting, and permanently secured to exterior end portions of the opposed walls, the flanges of the inner section defining an upwardly facing marginal seat surrounding the same adjacent one end thereof, each section having a free and open end edge, the outer section when telescoped on the inner section having its end edge in engagement with the marginal seat on the inner section and with the free end of the inner section disposed in engagement with interior portions of the cap on the outer section,

and the difference of the greater length of the inner section relative to the outer section being equal to the width of the flange adjacent the end of the inner section.

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