Jan. 6, 1942. I. DORFMAN 2,269,013

COLLAPSIBLE CARRYING CONTAINER

Filed Dec. 16, 1940 2 Sheets-Sheet 1

FIG. 1.

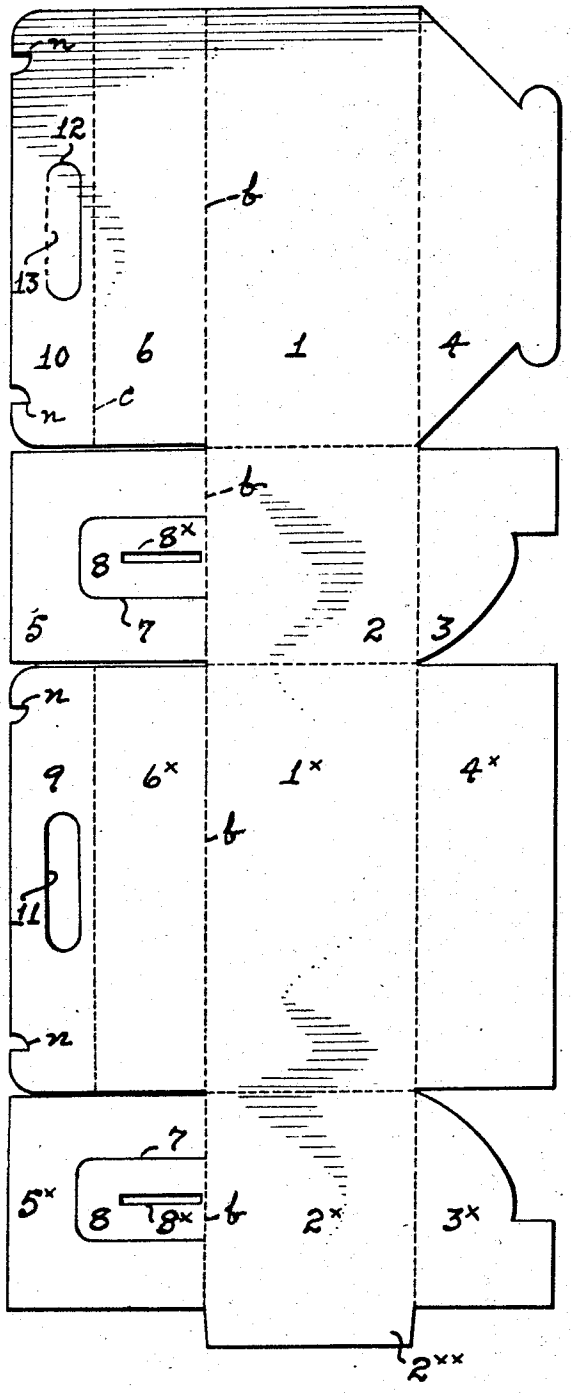


FIG. 2.

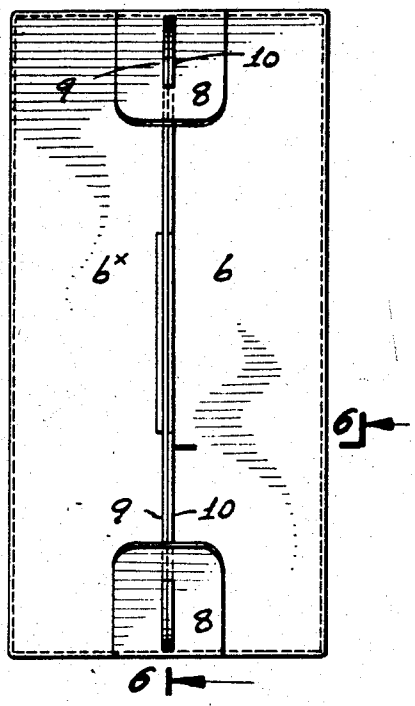
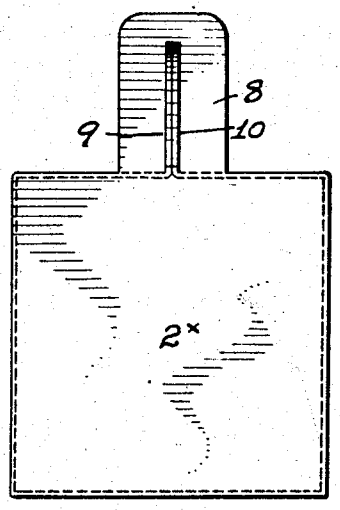


FIG. 3.



INVENTOR.
Irving Dorfman

BY H. Lee Helms
ATTORNEY.

Jan. 6, 1942. I. DORFMAN 2,269,013

COLLAPSIBLE CARRYING CONTAINER

Filed Dec. 16, 1940 2 Sheets-Sheet 2

FIG.4.

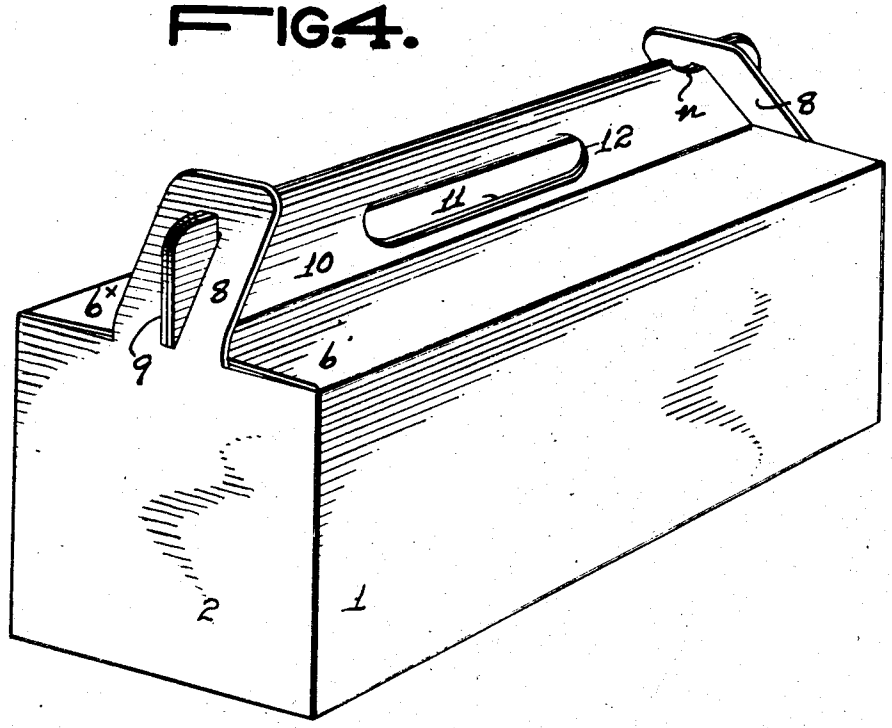


FIG.6.

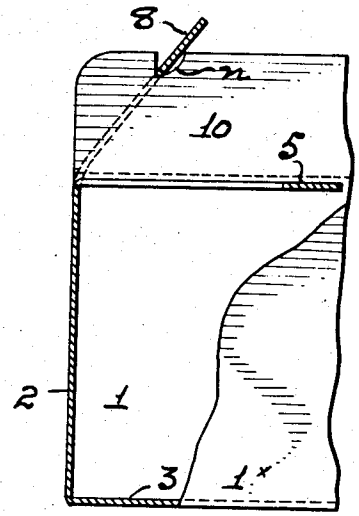


FIG.5.

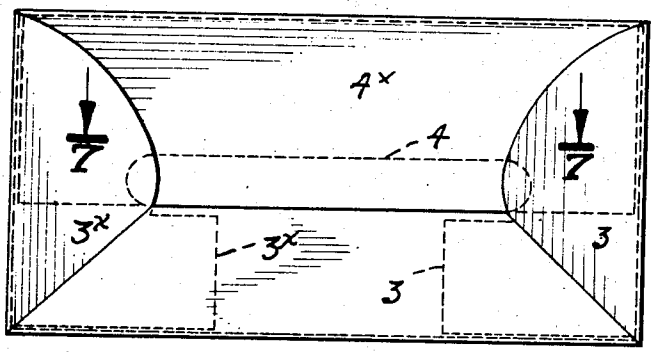
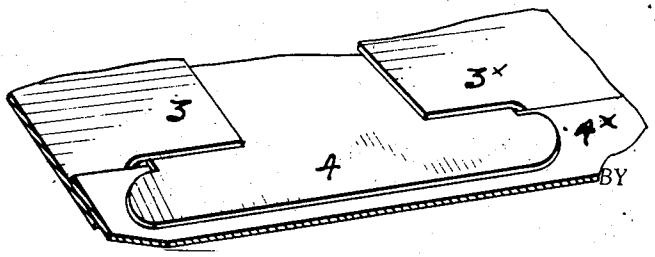


FIG.7.



INVENTOR

Irving Dorfman

BY H. Lee Helms

ATTORNEY.

Patented Jan. 6, 1942 2,269,013

UNITED STATES PATENT OFFICE

2,269,013

COLLAPSIBLE CARRYING CONTAINER

Irving Dorfman, New York, N. Y.

Application December 16, 1940, Serial No. 370,374

2 Claims. (Cl. 229—52)

The object of the present invention is to provide a collapsible carrying carton adapted for universal use but particularly adapted for poultry and other perishable goods, the characteristic of the carton being the construction of the top closure flaps which customarily comprise two end flaps which are relatively short and two side flaps which are the length of the carton and which overlie the short top flaps, the construction being such that upstanding carrying walls, having lock hooks, form extensions of the top side flaps and the end flaps are provided with lock straps so that portions of the end flaps lie both under and above the side flaps, those portions above the side flaps being formed as the lock straps for engagement with hooks of the carrying walls extended from the top side flaps.

Not only does the construction tightly close the top of the carton by bringing the end and side flaps into tight abutment, with the carrying walls also held in close abutment, but it enables the carrying of relatively heavy articles by distributing the bottom weight equally to both the sides and ends of the carton so that all parts of the carton are equally active in resisting strain.

The invention will be described with reference to the accompanying drawings, in which:

Figure 1 is a plan view of the blank from which the carton is formed, the dotted lines representing lines of fold.

Figure 2 is a plan view of the assembled carton taken from the top thereof.

Figure 3 is an end elevation of the assembled carton.

Figure 4 is a perspective view of the assembled and closed carton.

Figure 5 is a bottom plan view.

Figure 6 is a fragmentary sectional elevation taken on the line 6—6, Figure 2.

Figure 7 is an enlarged fragmentary view showing the center area of the bottom construction from the upper face thereof.

By reference to Figure 1 it will be seen that the carton may be constructed from a unitary sheet of cardboard or the like and in such manner that there is negligible waste. The blank is cut and scored to form side walls 1, 1*x* and end walls 2, 2*x*, the latter having a projecting lip at 2*xx* which may be glued or stapled to side wall 1. The bottom construction comprises bottom end flaps 3, 3*x* and bottom side flaps 4, 4*x*.

When connecting lip 2*xx* is secured to side wall 1 the blank may be folded from the form in which it is in flat collapsed position as with members 1 and 2 underlying members 1*x* and 2*x* with the point of transverse fold at *a*, Figure 1, into full rectangular shape. Thereupon bottom side flap 4*x* may be folded horizontally and superposed by the folding in of the bottom end flaps 3 and 3*x*, followed by the insertion of the bottom lock side flap 4, the latter being pushed down until its rounded ends lie under bottom side flap 4*x* and the bottom elements assume the position shown in Figures 5 and 7.

The bottom being closed it is only necessary to fold and latch the top members. The top members comprise top end flaps 5, 5*x* and top side flaps 6, 6*x*, the latter being of the same length as the side walls. Each end flap is formed with a U-cut at 7 meeting a fold line at *b* and in such manner each top end flap is provided with a lock strap 8 having a slot at 8*x* which is formed by cutting out a narrow rectangle in the cardboard.

In closing the top of the carton the end flaps are folded inwardly on the line *b* and to horizontal position. Carrying wall extensions 9 and 10 of the side flaps 6 and 6*x* are folded on the line *c* and the side flaps are folded down on the lines *b* to lie over upon the end flaps, which will bring the carrying walls into mutual abutment. These walls will be provided with hand holes as by forming a hand hole at 11 in carrying wall 9 and by cutting carrying wall 10 with an elongated C-cut 12 so that the cardboard partially bounded by the C-cut may be folded inwardly on the line 13 and projected through hand hole 11 as indicated in Figures 2 and 4.

At the above described position of the elements, the lock straps 8 which have not been folded inwardly with the end flaps, but which remain upright, are swung in so that the ends of the carrying walls 9 and 10 are received in the slots of the lock straps. As shown in Figures 1, 4 and 6, the carrying walls at each end are notched at *n* to provide lock hooks for receiving lock straps.

It will be seen that the lock straps serve to hold into abutment all cardboard areas adjacent the joints or meeting faces of the closure elements, so that, for example, the top side flaps 6 and 6*x* at their ends are held in firm abutment with the end flaps and the two carrying walls are firmly held into face to face abutment, sealing the top of the carton at such area. Relatively heavy articles may be carried by the carton while still constructing it of light weight material, because its strains are carried to the carrying walls 10 from the base of the carton through

the instrumentalities of both the side walls and the end walls.

It will be understood that various modifications may be made in the form and arrangement of the elements illustrated in the drawings and constituting an embodiment of the invention without departing from the spirit of the latter.

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

1. A carrying carton of sheet material having side and end walls and a bottom closure, top closure flaps carried at the upper end of the end walls and adapted to be swung at right angles to said end walls about fold lines, top closure flaps carried at the top of the side walls and adapted to overlie the end closure flaps, vertically movable carrying extensions at the ends of said top closure flaps carried by the side walls, and apertured latching straps for said carrying extensions formed by sections cut out from the top closure flaps carried by the end walls, said straps being swingable about said fold lines to angular position over upon the carrying extensions so that the walls of the strap apertures engage the ends of the carrying extensions.

2. A collapsible carrying carton of sheet material comprising a unitary sheet cut and scored to provide successively disposed side and end walls, a side wall being located at one end of the sheet and an end wall at the opposite end of the sheet, one of said last named walls carrying a lip for permanent attachment to the other wall, interlocking bottom closure walls carried by the sheet, and end and side top closures carried by the sheet, the side top closure walls being formed with extensions foldable to vertical position when the box is closed and resting on its bottom, whereupon said extensions will lie in mutual abutment, straps cut from the end top closure walls, and each strap having the same fold line as the end top closure wall in which it is cut and being disposed within the area of its said end top closure wall, each strap being swingable into latching engagement with the extensions of the side closure wall at the end area thereof.

IRVING DORFMAN.