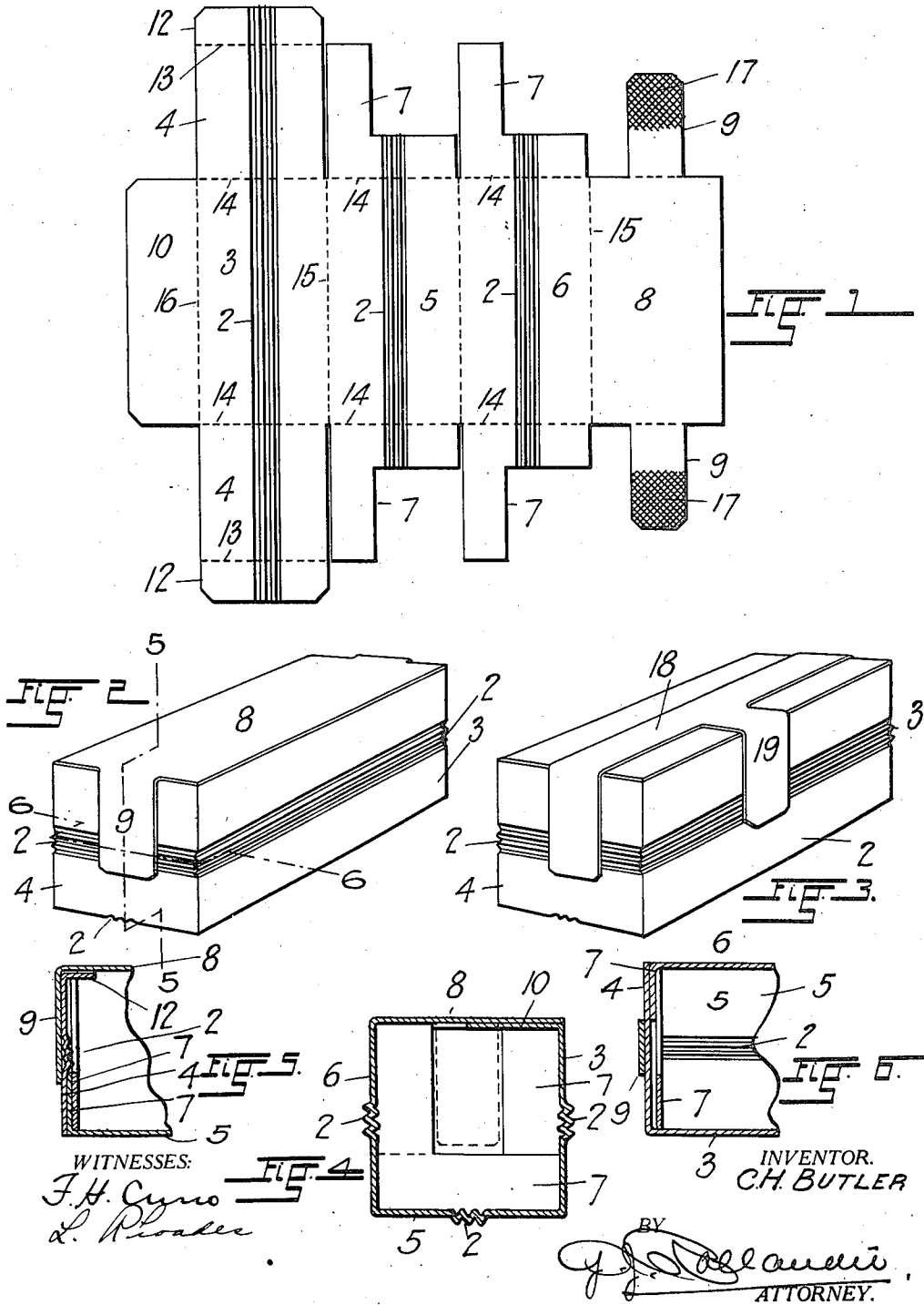


C. H. BUTLER.
 CARTON.
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CHARLES H. BUTLER, OF DENVER, COLORADO.

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To all whom it may concern:

Be it known that I, CHARLES H. BUTLER, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Cartons, of which the following is a specification.

This invention relates to cartons for use in packing and transporting articles of merchandise, and its primary object resides in providing a carton which is expansible to accommodate to a limited extent, articles of different proportions.

Another object of my invention is to provide a carton which after it has been filled, is sealed to prevent its being opened without detection for one reason, and to prevent its being used more than once for the same purpose, for another reason.

To render the carton of commercial value, its construction has been designed to combine simplicity with practicability in use, and with this purpose in view it is made of a single piece of paste-board or other similar material which is cut and scored so that it may be readily folded into box-shape, and which has integral means for sealing the box in its closed condition.

An embodiment of my invention has been shown in the accompanying drawings in the various views of which like parts are similarly designated, and in which—

Figure 1 is a plan view of the single blank from which my improved carton is formed. Fig. 2, a perspective view of the carton in its folded, sealed condition. Fig. 3, a similar view showing a modified construction of the sealing means. Fig. 4, a transverse section through the carton shown in Fig. 2. Fig. 5, a fragmentary section taken along the line 5—5, Fig. 2, and Fig. 6, a similar section along the line 6—6, Fig. 2.

Referring more specifically to the drawings, the blank is as shown in Fig. 1, made of a rectangular piece of pasteboard or the like which is cut and scored to provide the bottom, sides, ends, flaps and lid of the carton, the scored or weakened lines along which the different parts are folded to form a rectangular box having been indicated by broken lines. The blank is provided with three series of plaits 2 for the purpose of rendering it expansible to accommodate articles of merchandise of different proportions as hereinbefore explained. One of these series of plaits extends longitudinally

along the part 3 of the blank which forms one of the sides of the receptacle, and continuately along the parts 4 which are formed integral with the said side part to form the ends of the box. The other two series of plaits extend longitudinally through the parts 5 and 6 which respectively form the opposite side and the bottom of the receptacle, and they are continued along the therewith integral parts 7 which coöperate with the parts 4 to close the ends of the box.

The cover or lid of the box is designated by the numeral 8, and has at its ends preferably integrally formed sealing tabs 9 which are provided to seal the receptacle after it has been filled, as will hereinafter be more fully described.

A flap 10 formed along the outer edge of the side piece 3 of the blank, folds in practice inwardly over the open top of the box along its edge opposite to that at which the lid is connected. This flap when thus folded serves as a support for the lid and at the same time closes the box along the edge at which it is formed when the adjacent edge of the lid is separated therefrom by lateral expansion of the bottom piece 5.

The end pieces 4 which are formed integral with the side part 3, are extended to provide flaps 12 which when folded along the scored lines 13, close the open top of the box along its end edges and coast with the flap 10 to support the lid in its closed position.

The end pieces 7 which are formed integrally with the side part 6 and the bottom 5 of the blank are cut in L-shape principally for the purpose of compelling a person folding the carton, to place the solid end pieces 4 outermost, which, it will be observed, is necessary to secure all the parts of the box in their relative positions when the sealing flaps 9 are attached to the said end parts 4 as is shown in Figs. 2 and 3.

The blank hereinabove described is folded and secured in box form in the following manner: The end pieces 4 and 7 are first bent along the scored lines 14 at the ends of the side and bottom parts with which they are formed integral, and the last-mentioned parts are then folded along their scored dividing lines 15 at right angles to each other. The lapping end parts are arranged so that the solid pieces 4 are outermost, and the flaps 10 and 12 at the edges of the side piece 3 and the end pieces 4 are turned in-

wardly along the scored lines 16 and 13 over the open top of the box for the purpose mentioned hereinbefore. After the box thus formed has been filled, the lid is folded over its open top and secured in place by attaching the sealing tabs 9 to the outer surface of the outermost end parts 4. It will be seen that the tabs when thus secured, firmly hold the different parts of which the box is composed in their relative positions, and must be severed from the parts with which they are connected before the contents of the box can be removed. They therefore prevent the box from being opened without detection and at the same time render the article unfit for further use as a means for transporting merchandise.

To facilitate the attachment of the tabs to the ends of the box, they may be coated with an adhesive substance, as indicated at 17 in Fig. 1, and instead of forming the tabs integral with the lid of the receptacle, they may if so desired be provided by pasting a separate paper strip 18 upon the outer surface thereof as shown in Fig. 3.

While for most purposes the tabs at the ends of the lid are sufficient to secure the carton in box form, an auxiliary tab may be formed or otherwise provided at the longitudinal edge of the lid, for attachment to the adjacent side of the box as shown at 19 in Fig. 3.

It will be seen that the series of plaits arranged as shown and described, permit the box to expand transversely in both directions to vary the proportions of its cross-sectional area for the purpose of corresponding within determinate limits, to the dimensions of the article or articles disposed within the box.

I wish it understood that while I have shown and described my improved carton in the best form at present known to me, modifications of its construction, other than those already mentioned, may be resorted to within the spirit of my invention as defined in the following claims.

I claim—

1. A carton formed of a single blank cut and scored to form the sides, bottom, ends and lid of a rectangular box when folded, the said end-pieces being formed integrally at the ends of one of the side pieces, the bottom, side and end-pieces having longitudinally extending series of plaits to permit of the expansion of said box in two directions when the parts of the box are in the folded position, and the blank having tabs adapted to secure the lid to said end pieces.

2. A carton formed of a single blank cut and scored to form the sides, bottom, ends and lid of a rectangular box, when folded, one of the side pieces having along one of its edges a flap to fold inwardly beneath the

portion of the lid opposite to its edge at which it connects with the opposite side piece, the end-pieces being formed integral at the ends of the last-mentioned side piece, and the side, end, and bottom pieces having longitudinally extending series of plaits to permit of the expansion of the box in two directions when the parts of the box are in the folded position.

3. A carton comprising a box formed by folding a single blank along determinate score lines to provide a rectangular body having an open top covered by a lid which at one of its edges connects with a side of the said body, the box having in its ends and its sides, a series of plaits for the expansion of the body in one direction and in its bottom, a series of plaits for the expansion of the body in another direction, and means capable of fastening the lid in its closing position to part of the said body whereby to maintain the different parts of which the body is composed in their relative positions.

4. A carton comprising a box formed by folding a single blank along determinate score lines to provide a rectangular body having an open top covered by a lid which at one of its edges connects with a side of the said body, the box having in its ends and its sides, a series of plaits for the expansion of the body in one direction, and in its bottom, a series of plaits for the expansion of the body in another direction, and means capable of fastening the lid in its closing position to the ends of the body whereby to maintain the different parts of which the body is composed in their relative positions.

5. A carton comprising a box formed by folding a single blank along determinate score lines to provide a rectangular body having an open top covered by a lid which at one of its edges connects with a side of the said body, the box having in its ends and its sides, a series of plaits for the expansion of the body in one direction and in its bottom, a series of plaits for the expansion of the body in another direction, and means capable of sealing the lid in its closing position by adherence to a part of the body whereby to secure the different parts of which the body is composed in their relative positions.

6. A carton comprising a rectangular box having in its ends and its sides series of plaits for the expansion of the box in one direction and in its bottom a series of plaits for the expansion of the box in another direction.

7. A carton formed of a single blank cut and scored to form the sides, bottom, ends and lid of a box, the said end-pieces being formed integrally at the ends of one of the side-pieces, and the bottom, side and end

pieces having series of folds the edges of which are turned alternately inwardly and outwardly.

8. A carton formed of a single blank cut and scored to form the sides, bottom, ends and lid of a box, there being three sets of end pieces formed respectively at the ends of the two side-pieces and at the ends of the bottom piece, the lid piece having tabs to partially cover the end-pieces on one of the side pieces when the carton is in the folded condition, and the end-pieces on the other side piece and those on the bottom piece having openings which in position correspond with the portions of the end-pieces on the first-mentioned side-piece, which are covered by the tabs.

9. A carton comprising a rectangular box formed of a single piece and having means

for its automatic extension in the directions of its height and width, by outwardly directed pressure while it retains its rectangular form.

10. A carton comprising a rectangular box formed of a single piece and having means for its automatic extension in the directions of its height and width, by outwardly directed pressure while it retains its rectangular form, a lid for closing an open side of the box, and means for securing the lid in its closing condition.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES H. BUTLER.

Witnesses:

L. RHOADES,

G. J. ROLLANDET.