Jan. 22, 1935. W. F. NEWHOUSE 1,988,698

BERRY BOX

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Fig. 1

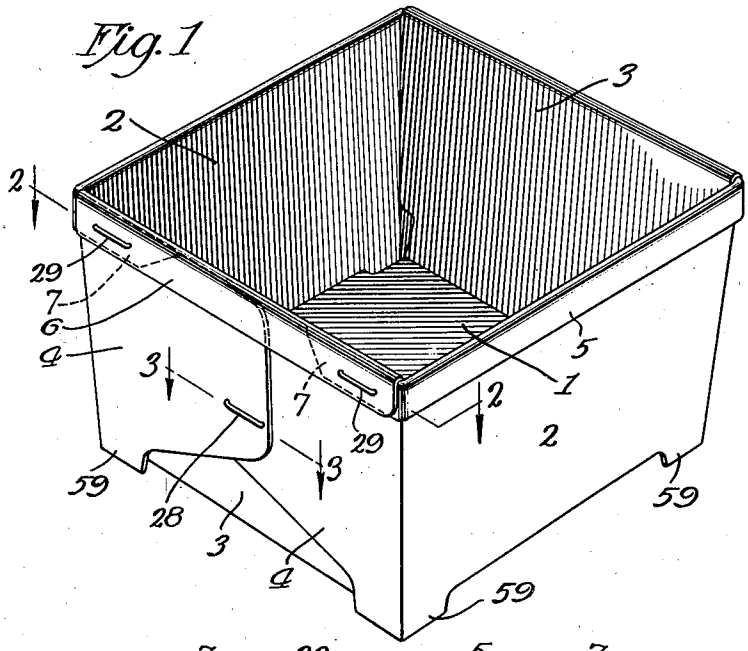


Fig. 2

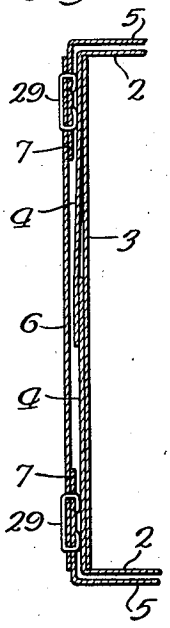


Fig. 4

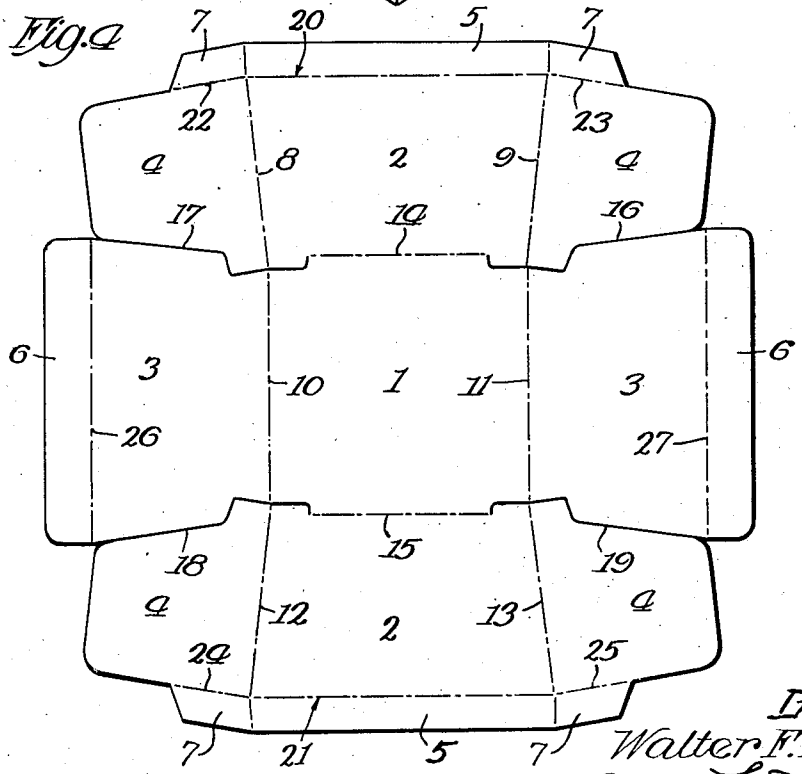
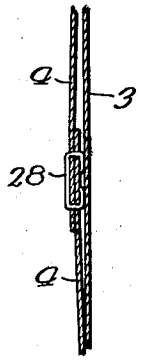


Fig. 3



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BERRY BOX

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Fig. 5

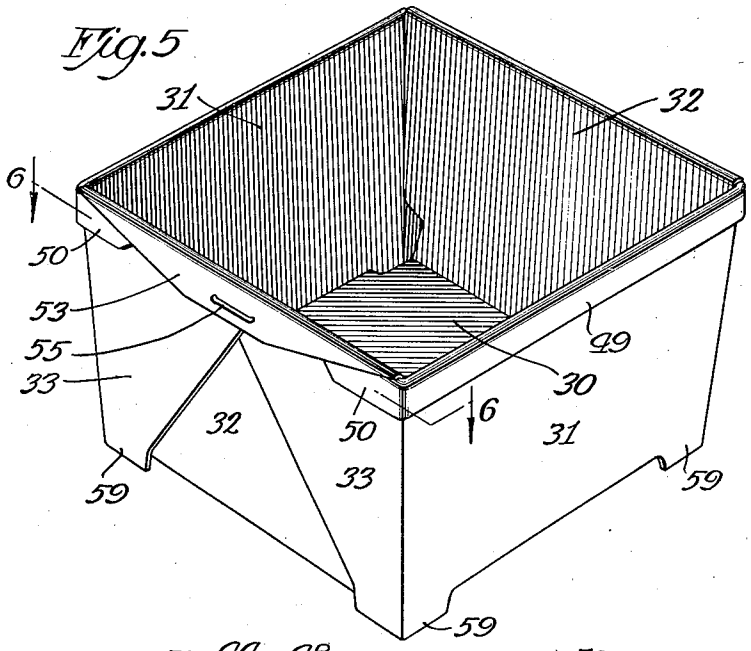


Fig. 6

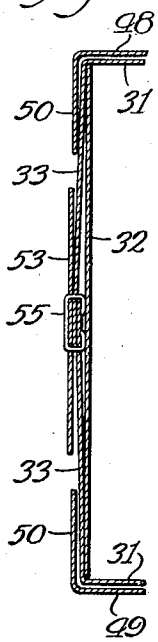
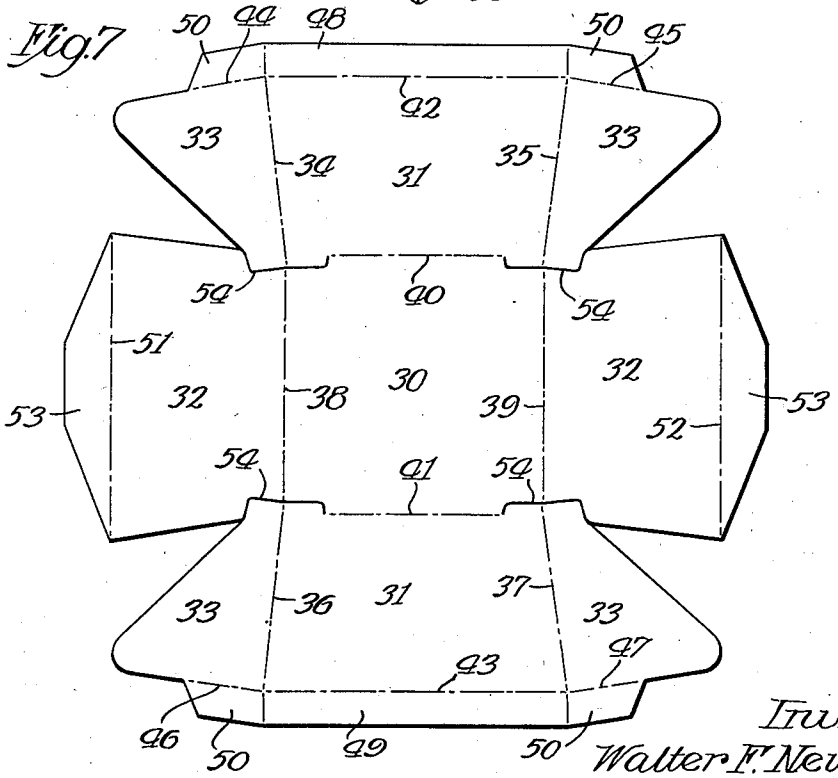


Fig. 7



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BERRY BOX

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Fig. 8

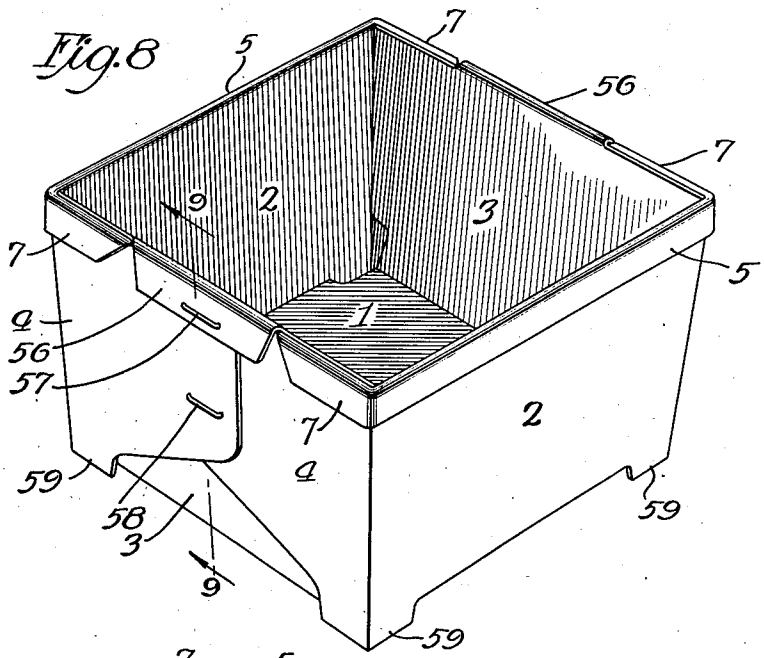


Fig. 9

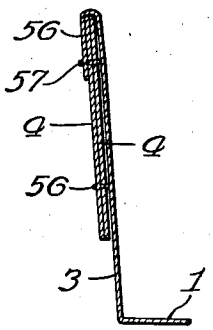
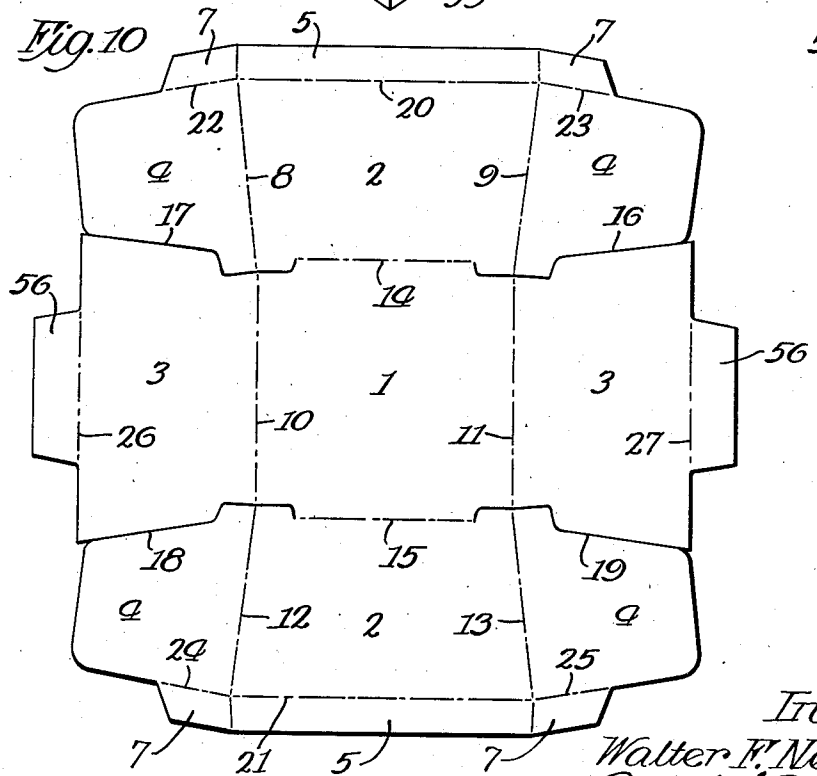


Fig. 10



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UNITED STATES PATENT OFFICE

1,988,698

BERRY BOX

Walter F. Newhouse, Benton Harbor, Mich.

Application August 30, 1933, Serial No. 687,440

4 Claims. (Cl. 229—32)

This invention relates to berry boxes or trays, such as those made from paper or similar sheet material, and more particularly to those having a cuff-like reinforcement extending along the upper edges of the rectangular box or tray.

Generally stated, the object of the invention is to provide a novel and improved construction and arrangement whereby the said reinforcement is practically continuous for the full length of each of the four upper edges of the box or tray, involving stapled and unstapled cuffs, whereby the reinforcement is more effective and satisfactory than heretofore.

It is also an object to provide certain details and features of construction and combinations tending to increase the general efficiency and the desirability of a berry box or tray of this particular character.

Another object is to provide a specific construction of box or tray, of this general character, that can be manufactured on comparatively simple and inexpensive machinery, at a relatively low cost of production.

To the foregoing and other useful ends, the invention consists in the matters hereinafter set forth and claimed, and shown in the accompanying drawings, in which,—

Fig. 1 is a perspective of a berry box or crate embodying the principles of the invention.

Fig. 2 is a fragmentary horizontal section on the line 2—2 in Fig. 1.

Fig. 3 is a similar section on line 3—3 in Fig. 1.

Fig. 4 is a plan view of the blank from which the box or crate shown in Fig. 1 is made.

Fig. 5 is a perspective showing a different form of the invention.

Fig. 6 is a detail horizontal section on line 6—6 in Fig. 5.

Fig. 7 is a plan view of the blank from which the box or tray shown in Fig. 5 is made.

Fig. 8 is a perspective showing another form of the invention.

Fig. 9 is a detail vertical section on line 9—9 in Fig. 8.

Fig. 10 is a plan view of the blank from which the box or crate shown in Fig. 8 is made.

Referring to Figs. 1 to 4 of the drawings, the blank from which the box or crate shown in Fig. 1 is made, shown in Fig. 4, comprises the substantially rectangular bottom section 1, the tapered side sections 2 and 2, and the substantially tapered side sections 3 and 3, together with the side-wall flaps 4, one at each corner of the blank, and the cuff flaps or reinforcement strips 5 and 5, 6 and 6, and 7, one of the latter being provided substantially at each corner of the blank. Said blank has the scored or creased lines 8, 9, 10, 11, 12 and 13, which define edges of the sections 1 and 2 and 2, and the blank also has the scored or creased lines 14 and 15 defining the other edges of the bottom section. The lines 16 and 17, 18 and 19 are cut clear through, as shown, to permit folding of the blank, as will hereinafter more fully appear. There are also the scored or creased lines 20 and 21, at opposite edges of the blank, forming strips 5, and the similar scored or creased lines 22 and 23, 24 and 25, as shown, defining the short strips 7 previously mentioned. Between the sections 3 and the sections 6 there are straight scored or creased lines 26 and 27, as shown, and the flat blank thus formed, of paper or other sheet material, is foldable into the shape shown in Fig. 1 of the drawings.

When the blank is folded, to produce the box or crate shown in Fig. 1 of the drawings, staples 28 are inserted, one at each side of the box, through the overlapping sections 4, the staple points being clinched on the inner surfaces of these overlapping portions. Other staples 29, two at each side of the box, are inserted through the cuff strips 6 and through the underlying portions 7, and clinched on the inner surfaces of the latter. In this way, there are no staple points that pass clear through the inner walls of the box or tray, and hence there are no clinched staple points on the interior surface of the box.

In Figs. 5, 6 and 7, the blank shown in Fig. 7, from which the box or tray shown in Fig. 5 is made, comprises the middle bottom section 30, and tapered side-wall sections 31 and 31, 32 and 32, together with flaps 33 at the corners of the blank. Scored or creased lines 34 and 35, 36 and 37, are provided, together with the scored or creased lines 38, 39, 40 and 41, defining the edges of the bottom section and side-wall sections. The outer portions of the side-wall sections have the scored or creased lines 42, 43, 44, 45, 46, 47, defining the cuff strips 48, 49, and the short strips 50, there being one of the latter upon each corner of the blank. The sections 32 have scored or creased lines 51 and 52, and these sections are cut to form the cuff strips 53, shaped as shown, while cut lines 54 are also provided in the blank, as shown, thereby providing a blank of the shape and character shown in Fig. 7 of the drawings.

When the blank shown in Fig. 7 is folded into

shape to provide a box or tray of the kind shown in Fig. 5, staples 55 are then inserted, one at each side of the box, through the strips 53 and the flaps 33, the points of the staples being clinched on the inner sides of said flaps. In this way, the staples 55 do not extend through the wall sections 32, and, in fact, there are no staple points whatever on the interior surface of the box or tray.

As shown in Fig. 10 of the drawings, the blank from which the box shown in Fig. 8 is made comprises foldable sections and strips of the same kind as shown in Fig. 4 of the drawings, except that in Figs. 8, 9 and 10 the strips 6 are not used, but, instead, shorter strips 56 are used. Otherwise, the formation of the blank shown in Fig. 10, as indicated, is exactly the same as the blank formation shown in Fig. 4 of the drawings, and the corresponding sections and strips have the same reference numerals.

When the blank shown in Fig. 10 is folded into shape, to produce the box or tray shown in Fig. 8 of the drawings, staples 57 are inserted, one at each side of the box, through the strips 56 and the flaps 4, the points of the staples being clinched on the inner surfaces of these flaps. In this way, the ends of the strips 56 do not overlap the ends of the strips 7, but, in effect, the four upper edges of the box have continuous cuff strips or reinforcing strips, to stiffen and strengthen the upper edges of the box or tray. In addition, staples 58 are inserted through the flaps 4, one at each side of the box, and again these staple points are clinched on the inner sides of the flaps. In this way, no staple points whatever appear on the interior surface of the box or tray.

From the foregoing, it will be seen that each form of the invention involves a downwardly-tapered berry box or tray having its four upper edges reinforced practically for the full length of each edge, so that each upper edge is formed by a crease or fold, providing a smooth rounded edge practically from one corner of the box to the other, clear around the box. In addition, in each form of the invention, the staples are so inserted, and the blanks are so formed, that none of the staple points are clinched on the interior surface of the box or tray, whereby the contents of the box or tray do not engage any metallic parts, but only the smooth surface of the paper or other sheet material from which the receptacle is made.

If desired, the blanks can be so formed that the boxes or trays will have short legs or feet 59 at each lower corner of the receptacle. However, these may be omitted, if so desired, and the receptacles can be made either with or without said legs or feet, depending upon circumstances and requirements.

What I claim as my invention is:

1. A berry box formed from a single flat blank, comprising two stapled cuffs for two opposite sides thereof, two unstapled cuffs for the other two sides, and overlapping flaps for the stapled sides of the box, extending under the stapled cuffs, said unstapled cuffs having end portions foldably connected to the upper edges of said flaps, the outer edges of said end portions extending obliquely to the outer edges of the two unstapled cuffs in the said blank, with the upper edge of each of said end portions horizontal, so that each flap has a cuff portion at its upper edge, as well as each side wall, and the staples all being clinched externally of the side walls of the box.

2. A structure as specified in claim 1, said stapled cuffs extending substantially to the corners of the box.

3. A structure as specified in claim 1, said stapled cuffs being tapered at their ends, with only a single staple at the middle of each tapered cuff.

4. A structure as specified in claim 1, said stapled cuffs terminating at the ends of said end portions, and each having only a single staple at the middle thereof.

WALTER F. NEWHOUSE.