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CORNER CONSTRUCTION FOR A CHICK BOX

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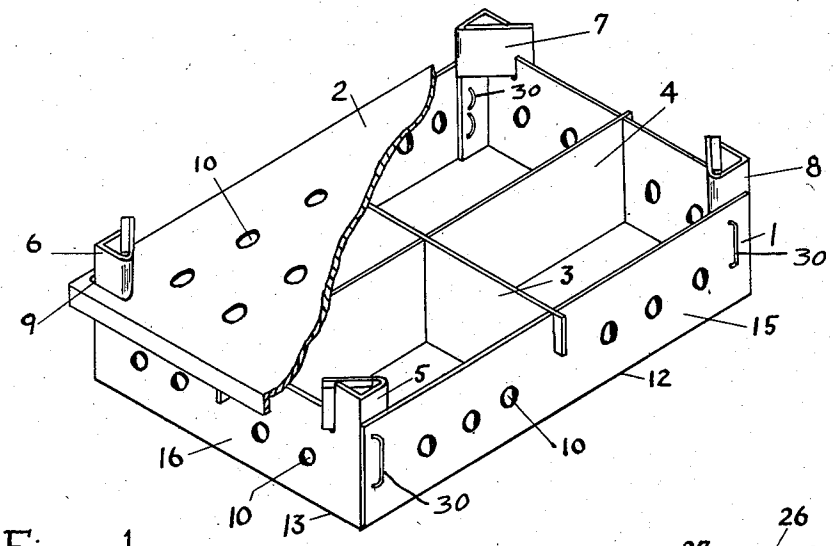


Fig. 1

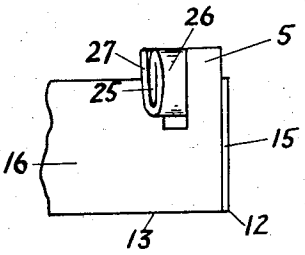


Fig. 4

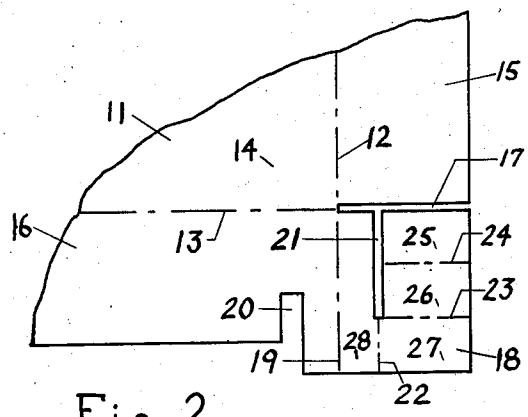


Fig. 2

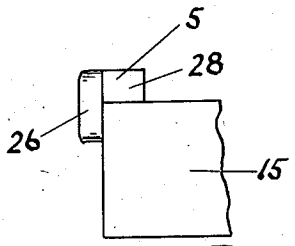


Fig. 5

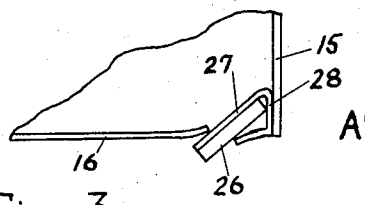


Fig. 3

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CORNER CONSTRUCTION FOR A CHICK BOX

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2 Claims. (Cl. 229—6)

This invention relates to a container of the type commonly referred to as a chick box and, more particularly, to a reinforced integral corner post construction for such a box, so elevated as to space from its cover the bottom of another superposed box.

Boxes of the type referred to herein which are used for shipping live chicks must be constructed to meet two basic requirements: first of all, they must be fashioned so as to provide proper ventilation for the chicks during shipment; and secondly, the boxes must be sufficiently strong so as to prevent their collapsing when they are piled one upon the other, otherwise, the chicks would be crushed in transit.

To meet the first requirement, present-day chick boxes are provided with ventilating holes along the vertical sides of the box and over the top of the cover. To meet the second requirement, the conventional chick box is suitably reinforced, preferably at the corners, so as to provide a more rigid construction. Also, it is conventional to extend the corners of these boxes upwardly above the level of the cover so that, when the next box is placed thereupon, a space will be provided between the cover of each box and the bottom of the next higher box. This latter provision will give an added ventilation feature to each stack of boxes.

The present invention, as hereinafter described, provides a chick box of one-piece construction which meets the above-mentioned requirements by means of integral corner posts that are two-dimensional in cross-section both above and below the box top, so as to give adequate support to any superposed boxes, and to resist collapse under the weight thereof.

Other and further objects and advantageous features of my invention will hereinafter more fully appear in connection with a detailed description of the drawings, in which

Fig. 1 is a perspective view of my box with part of the cover broken away.

Fig. 2 is a plan view of a portion of the blank from which my box is made. The portion of the blank shown here is adapted to be folded to form the foreground corner of Fig. 1.

Fig. 3 is a plan view of the blank portion shown in Fig. 2 after it has been folded into a corner.

Fig. 4 is a front view taken from Fig. 3.

Fig. 5 is a right-hand end view of Fig. 3.

Referring to the drawings in detail, in Fig. 1 there is shown a rectangular box body **1** and a cover **2**, the latter being broken away to reveal the usual interfitting partitions **3** and **4**, which cross at right angles to form four compartments within the box. Upstanding corner posts **5**, **6**, **7** and **8** of triangular cross section, and formed integrally from the box material, as described hereinafter, project upwardly through appropriate holes **9** in the cover. The cover and sides of the box are suitably perforated, as shown at **10**, **10** in Fig. 1.

Fig. 2 shows one of the four corners of the one piece flat substantially rectangular blank **11**, for the box body **1** of Fig. 1. This blank corner has been suitably cut and

provided with the necessary score lines or creases for forming one of the integral corner posts of the box body **1**. In Fig. 2, are shown score lines **12** and **13**, which bound the rectangular box bottom **14**, and on which are folded upwardly the respective integral long sides **15**, **15** and the respective integral ends **16**, **16** of the completed box. A slit **17** separates the long side **15** from a specially-constructed right-hand flap portion **18** of the end **16**. Since the crease **12** extends across end **16** as at **19**, the flap **18** can be bent with respect to end **16**.

As is also apparent from Fig. 2, flap **18** is wider in vertical extent than the left-hand vertical width of end **16**. The right-hand portion of the end **16** immediately to the left of the crease **19** is of the same width as flap **18**. Between the wide and narrow portions of the end **16** is a vertical notch **20**.

Another slit **21** extends along a vertical line located between one-quarter and one-third of the distance from crease **19** to the right-hand edge of the flap. This slit **21** extends downwardly from the slit **17** for about two-thirds of the width of flap **18**. From the bottom end of the slit **21**, a crease **22** extends co-linear with this slit to the bottom edge of the flap. At the bottom end of slit **21**, another crease **23** extends horizontally to the right-hand edge of the flap. Half-way between crease **23** and slit **17**, another crease **24** extends horizontally from slit **21** to the right-hand edge of the flap **18**. These creases **22**, **23** and **24**, together with slits **17** and **21** and crease **19**, mark off flap **18** into the areas labelled as **25**, **26**, **27** and **28**; these latter areas are so labelled to aid in the description of the folding operation.

Now in order to fold the blank of Fig. 2 to form the corner **5** of Fig. 1, section **25** is folded along crease **24** so that it is superimposed on section **26**. The combined sections **25** and **26** are folded along crease **23** so that they cover section **27**. The back face of section **26** will be facing upward.

Now the triple thickness of sections **25**, **26** and **27** is tucked into notch **20** by bending the flap **18** along creases **22** and **19**. At crease **19** there will be a right angle bend and at crease **22** there will be a 45° angle bend.

End **16** is folded along crease **13** towards bottom **14** so that the end is at right angles to the bottom. Side **15** is similarly folded along crease **12** to form another right angle. The foremost end of side **15** should now be flat against portion **28** of the flap **18**. The corner may now be secured by putting one or more staples as shown at **30**, Fig. 1 through side **15** and section **28**.

Now, if above outlined procedure is followed for each of the four corners, the body of the box will be complete. The box itself will be made of cardboard, preferably the corrugated type, and, in the illustrations shown here, the corrugations in the side **16**, as well as the corner posts, will be vertical, so as to afford the greatest strength at the corners.

In Figs. 2 to 5 inclusive the ventilation holes **10** have been omitted for the sake of simplicity, but it should be understood that the blank form **11** is suitably perforated so as to provide a completed box similar to that shown in Fig. 1.

When the shell of the box has been assembled, the partitions **3** and **4** are inserted in the conventional manner, appropriate complementary slots having been provided in the partitions and in the box to permit the customary interfitting relationship between the partitions and the box.

My improved corner construction permits the use of a minimum number of separate parts, such that each box may be easily and quickly assembled from its preformed blank. Since the corners are integral with the body proper of the box, no separate corner parts are required. These features are particularly important where the boxes

are shipped from the manufacturer in a "knocked down" condition for subsequent assembly by the purchased. In the case of my box, only four separate parts are required for each box; that is, the body proper, the cover and the two partitions.

Although the container illustrated and described herein has been referred to primarily as a chick box, it should be realized that the novel features disclosed herein are applicable to other suitable containers used for different purposes. My invention has been described with particular reference to the embodiment illustrated in the drawings. However, it should be apparent that this invention admits of other and obvious forms apart from those shown.

I claim:

1. A one-piece chick box providing integral corner posts higher than the box sides for the spacing above its top of another superimposed box, said box comprising a rectangular bottom, four integral side walls rising from the respective edges of said bottom at right angles thereto, and connected to each other at their adjoining terminal portions to provide the four corners of said box, the construction at each box corner comprising a first side wall whose proximate vertical edge is approximately alined with said box corner, a second side wall having its proximate terminal portion substantially higher than said first

side wall, and having an integral lengthwise extension of substantially the same increased height which is folded inwardly at right angles on the line of said box corner and attached to the inside proximate surface of said first side wall, the upper edge of said second side wall, substantially at the beginning of its higher terminal portion, being formed with a narrow vertical notch, and the upper portion of said integral extension having a free flap extension bent backwardly, crosswise of said box corner, and entered in said notch, thereby to form with the other right angled upper edges of said higher terminal portion an integral corner post of substantially triangular cross section.

2. A one-piece chick box as claimed in claim 1, wherein said free flap extension of the attached flap of the second side wall consists of a plurality of prefolded thicknesses of the box material, whose tendency to spring to unfolded condition creates a holding friction with the sides of said vertical notch.

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