

Nov. 16, 1948.

A. E. BENTHAM

2,454,029

CARTON

Filed July 21, 1945

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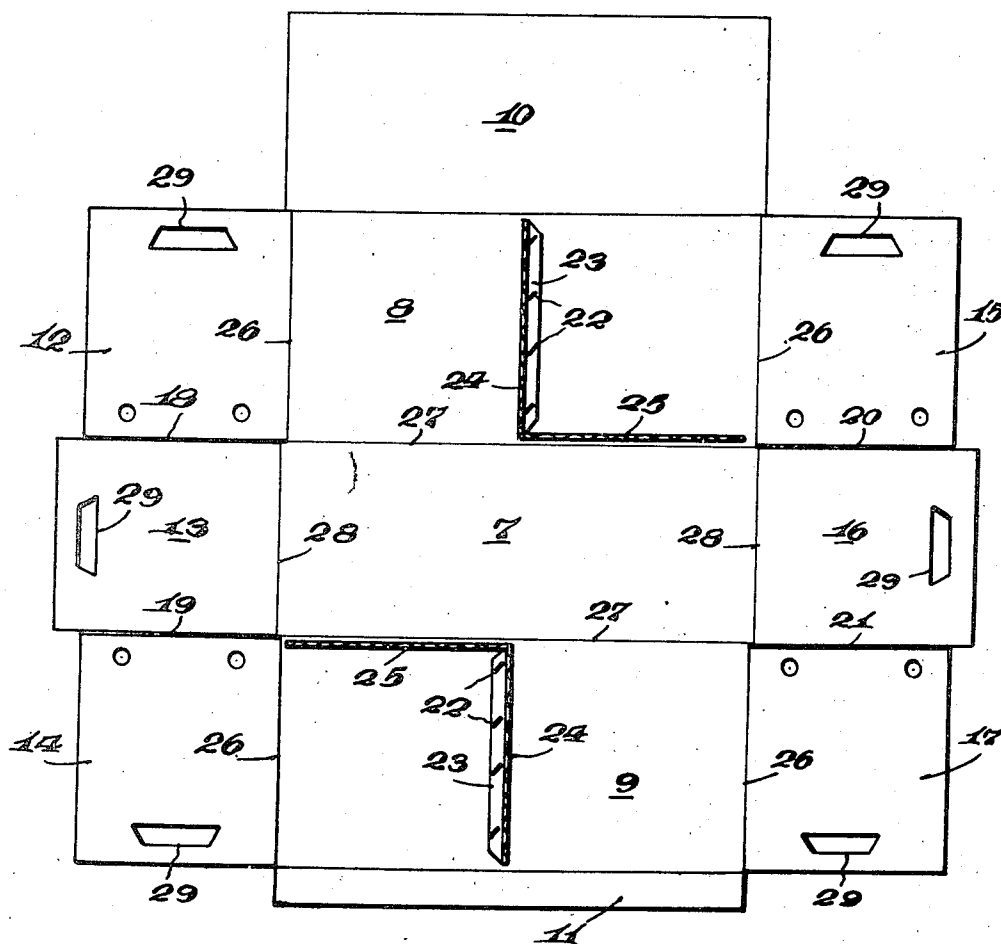


Fig. 1

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Fig. 2

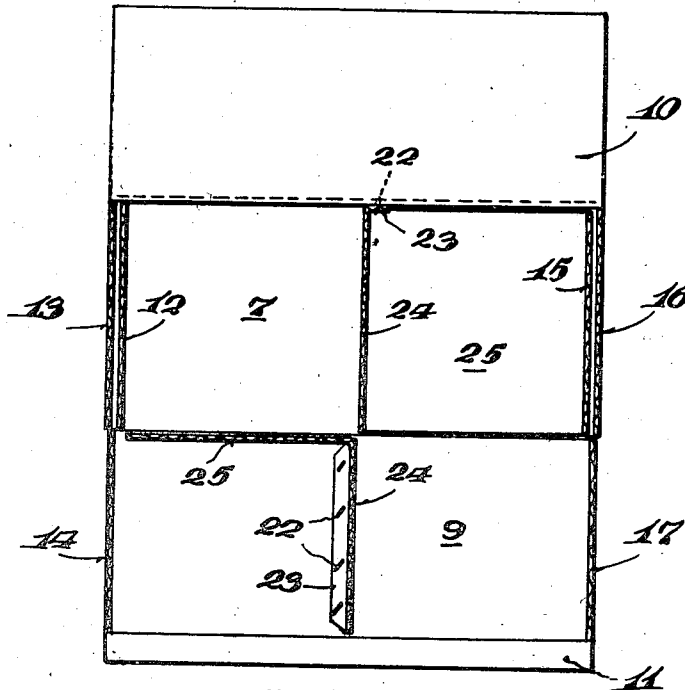
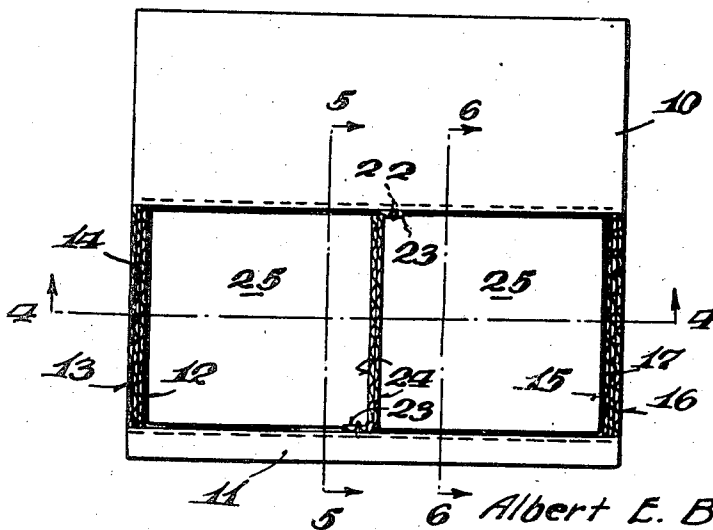


Fig. 3



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Fig. 4

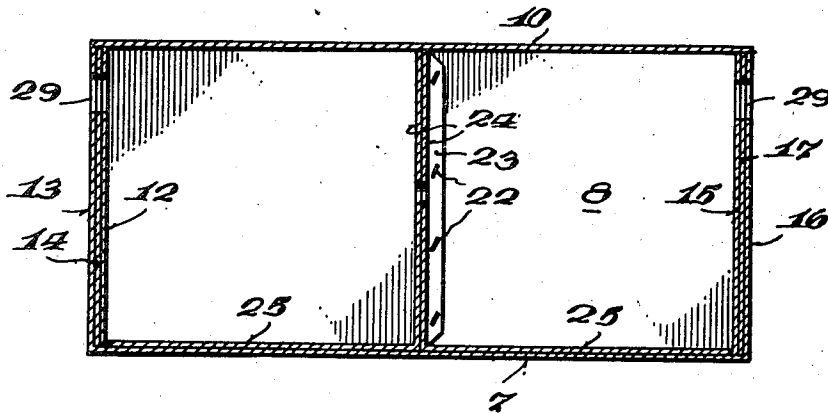


Fig. 5

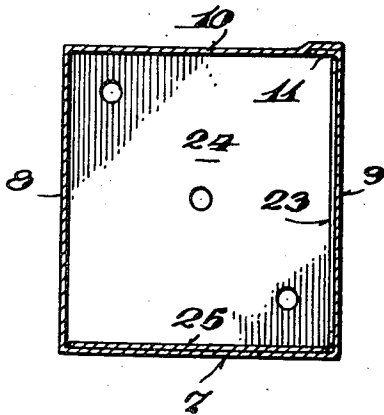
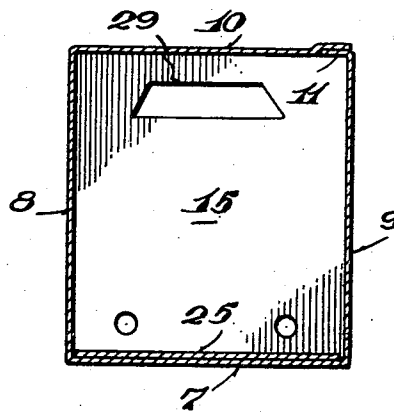


Fig. 6



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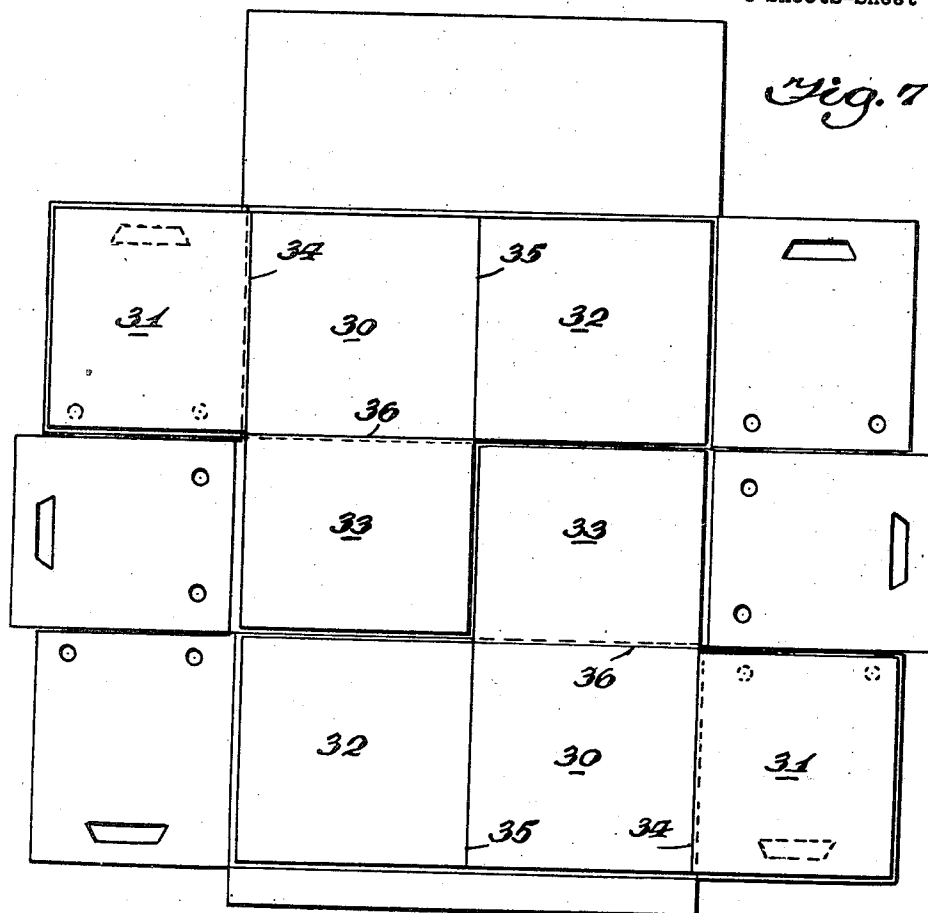
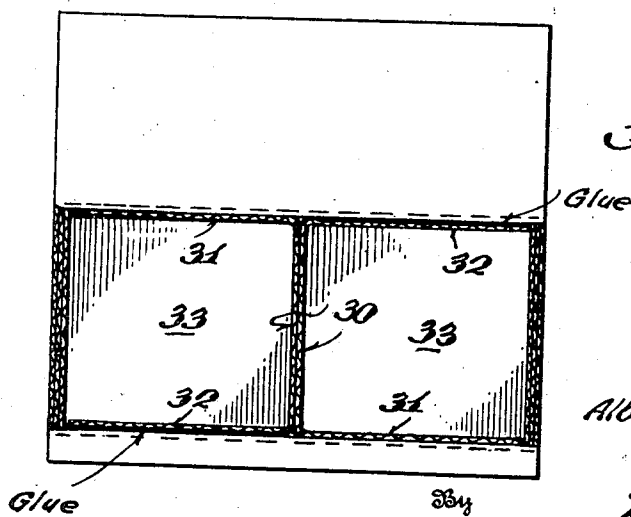
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UNITED STATES PATENT OFFICE

2,454,029

CARTON

Albert E. Bentham, Baltimore, Md., assignor to
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Application July 21, 1945, Serial No. 606,443

1 Claim. (Cl. 229—23)

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This invention relates to improvements in cartons and more particularly to cartons of the type disclosed in my application Serial No. 446,753, filed June 12, 1942, now Patent No. 2,398,402.

One of the objects of the invention is to provide a fiberboard carton to be used as a substitute for conventional wooden egg cases and which will be sufficiently strong to prevent breakage of eggs carried thereby.

Another object is to supply an egg case of simple construction and one which will cost considerably less than a conventional wooden egg case.

A still further object is to furnish an egg case which may be shipped flat and subsequently speedily set up by unskilled labor with the use of materials which are not considered critical at the present.

With the foregoing objects outlined and with other objects in view which will appear as the description proceeds, the invention consists in the novel features hereinafter described in detail, illustrated in the accompanying drawings and more particularly pointed out in the appended claim.

In the drawings—

Fig. 1 is a top plan view of the carton blank with the partition portions in standing position.

Fig. 2 is a similar view with the back wall portion and certain end portions of the main blank set up.

Fig. 3 is a top view of the carton with the cover in open position.

Fig. 4 is a vertical sectional view taken on the line 4—4 of Fig. 3.

Figs. 5 and 6 are vertical transverse sectional views taken on the lines 5—5 and 6—6 of Fig. 3.

In Figs. 4, 5 and 6 the cover is shown in closed position.

Fig. 7 is a plan view of a modified form of the blanks.

Fig. 8 is a top view of a carton made from the blanks shown in Fig. 7.

Referring first to Figure 1, the main blank is divided by hinge score lines into a bottom portion 7, a rear wall portion 8, a front wall portion 9, and end wall portions 12, 13, 14, 15, 16 and 17. The blank is provided with parallel slits 18, 19 and 20, 21, between the end portions, so that in folding the blank each end of the carton will be of three thicknesses.

Each of the side wall portions has secured thereto, by any suitable means such as staples 22, the flap 23 of a partition blank which will normally lay flat against the main blank but which when set up will provide a transverse partition

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or divider 24 and a bottom reinforcement 25, as best shown in Fig. 4.

After the partition blanks are placed in vertical position, as shown in Fig. 1, with the parts 24 and 25 at right angles to one another, the end portions 12 and 15, and end portions 14 and 17 are bent upwardly along the lines 26, as indicated in Fig. 2, and then the front and rear wall portions 8 and 9 are folded toward one another along the lines 27. This brings the partition blanks into the position shown in Fig. 3, at which time the end portions 13 and 16 are bent upwardly on the lines 28 to place them at the outside of the ends of the carton.

It will be noted that each end portion is of the same dimensions as the end of the carton (Fig. 6) thus providing broad surfaces to receive glue which may be employed in securing the end portions together at each end of the box.

The end portions of the blank are provided with hand holes 29 which register at each end of the carton when the box is set up, and as these hand holes are in three thicknesses of the material it will be understood that the margins of the hand holes will not tear when the carton and its contents are lifted.

The top portion 10 when closed is folded down on the top flap 11 and it will be noted in Figs. 4 to 6 that the parts 10 and 11 not alone rest on the upper edges of the portions 24 of the partitions but also on the upper edges of the three thickness ends of the carton. This enables the cartons with their contents to be piled one on the other without bulging or buckling.

It may also be seen from Fig. 4 that the bottom of the box is reinforced by the parts 25 which together form a false bottom for the carton and back-up the end walls thereof.

The partition portions 24 are firmly secured together by any preferred means, such as glue.

In the modification illustrated in Figs. 7 and 8, the main blank is like that shown in Fig. 1 but the partition blanks are of a different form for auxiliary reinforcing purposes. Each partition is preferably of T-shape and consists of a central portion 30 from which oppositely disposed wings 31 and 32 extend. A third wing 33 is secured to one end of the central portion 30 and the parts are adapted to fold about the lines 34, 35 and 36. The wing 32 of each partition is secured by glue or the like to the interior of one of the side walls. Therefore, when the carton is set up, the parts 30 will be arranged side by side and extend across the interior of the carton while the wings 31 and 32 will form additional front and rear walls

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for the carton. The wings 33 which overlie the bottom of the carton, form a second bottom and back-up or reinforce the end walls thereof.

From the foregoing it is believed that the construction and advantages of the improved cartons may be readily understood and I am aware that changes may be made in the details disclosed without departing from the spirit of the invention as expressed in the following claim. It will also be obvious that the cartons may be made of various sizes for various uses and may be formed of any suitable stiff material which can be folded along score or hinge lines.

What I claim and desire to secure by Letters Patent is:

A knock-down fiberboard carton ensemble, comprising a main blank provided with spaced transverse score lines dividing it into a top portion, opposite side portions and a bottom portion, the main blank having other score lines to provide an end portion at each end of each side portion and the bottom portion, overlapping substantially T-shaped partition members super-

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posed on the main blank in non-registering relation, each partition member including a body portion overlying a side portion and from which three wings extend, one of the extending wings of each partition overlying the bottom portion and another wing of each partition being secured to one of the side portions in the main blank, each partition being provided with score lines to allow the wings to be folded into positions at right angles to the body portion.

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