

April 25, 1944.

G. LOTH

2,347,422

OCTAGONAL BOX

Filed May 18, 1943

2 Sheets-Sheet 1

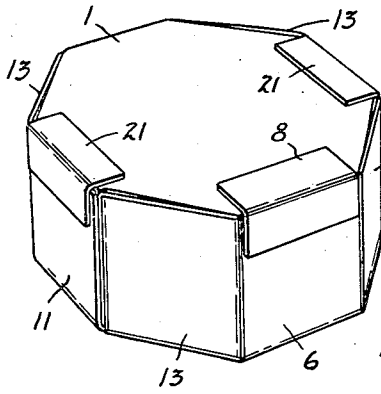


Fig. 1

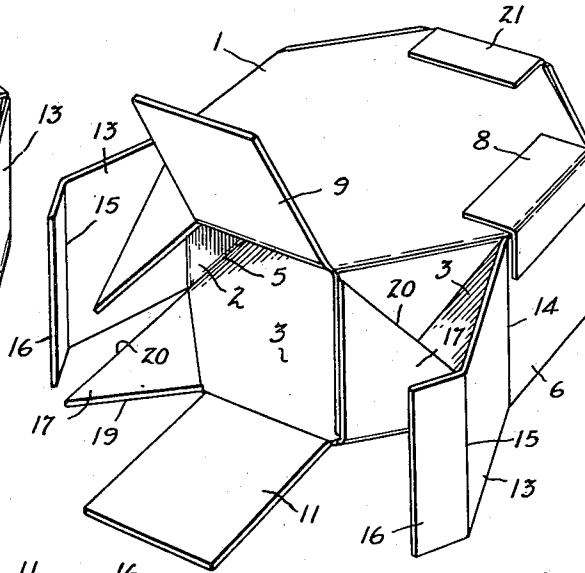


Fig. 2

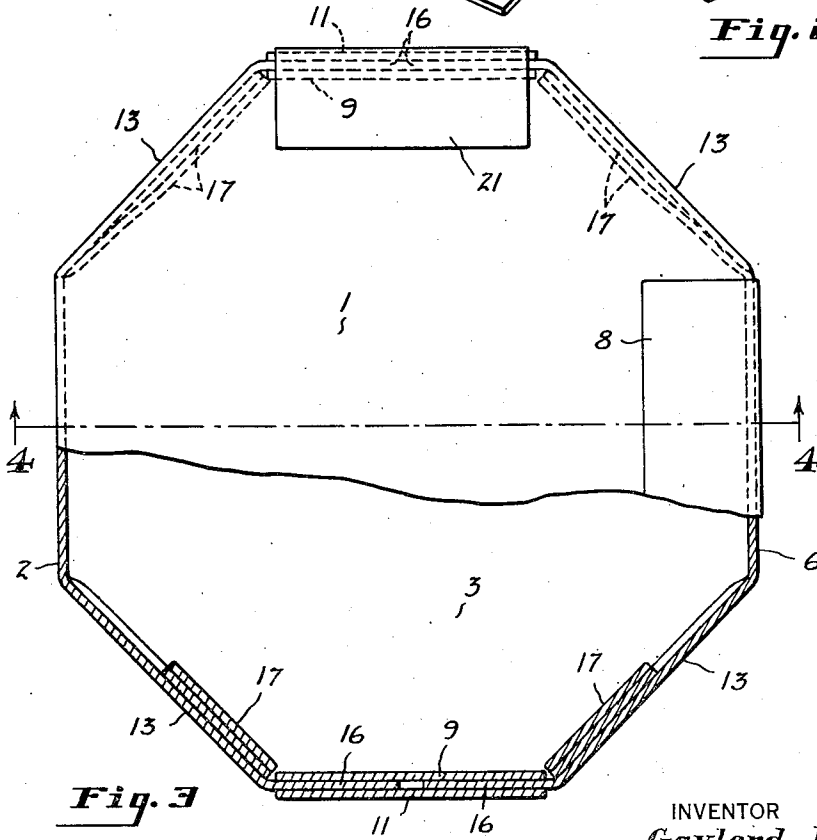


Fig. 3

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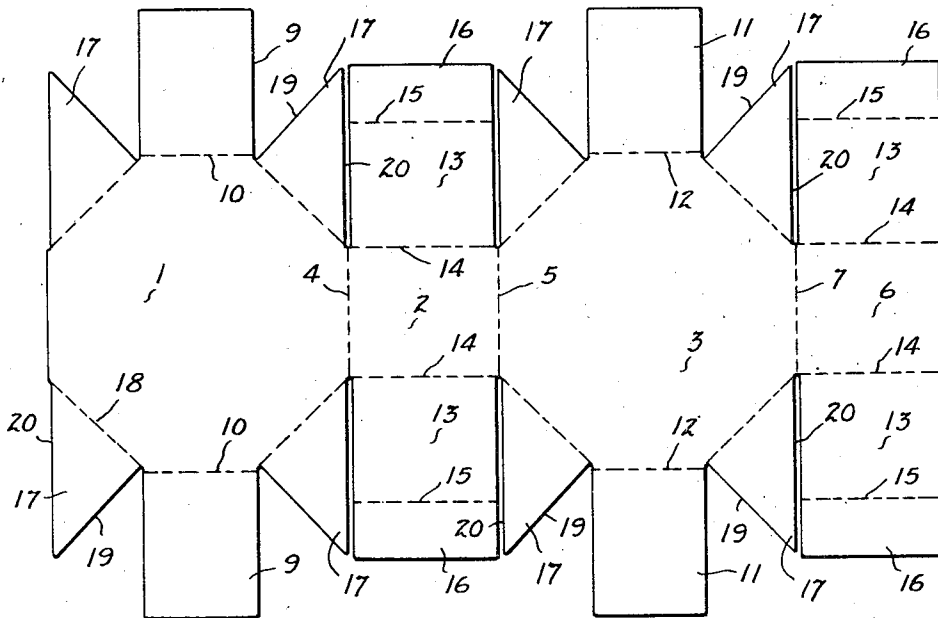
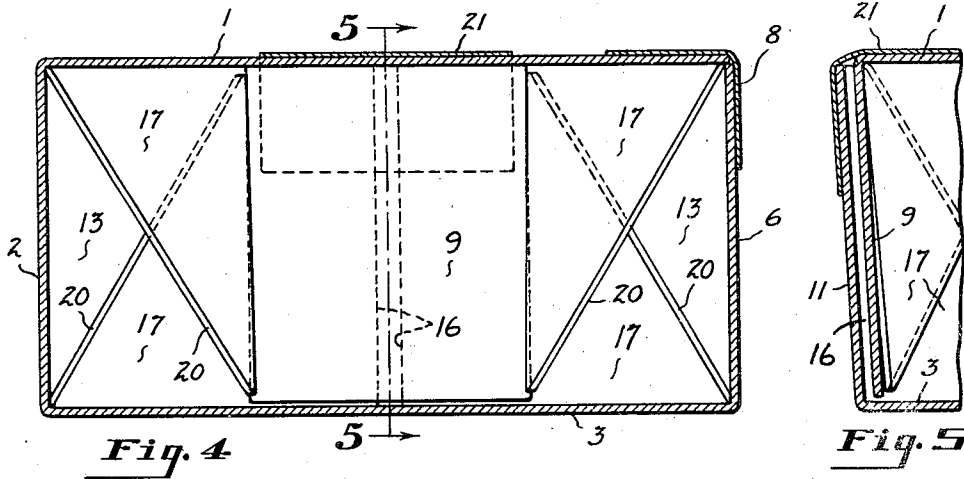
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OCTAGONAL BOX

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Application May 18, 1943, Serial No. 487,474

3 Claims. (Cl. 229—41)

This invention relates to a box of octagonal form, preferably of knockdown construction and made from sheet material, such as fiberboard.

It is an object of the present invention to provide an octagonal box that can be easily set up for use and which may be collapsed flat for shipping or storing.

A further object of the invention is to provide an octagonal box adapted to be formed from a one-piece paperboard blank so cut and scored that it can be folded to form a closed container.

A further object of the invention is to provide a knockdown octagonal box of one-piece construction in which the peripheral walls are strongly reinforced and in which the peripheral walls are held in place by means of locking flaps provided in diametrically opposite sides of the box.

With the above and other objects in view, the invention may be said to comprise the box illustrated in the accompanying drawings, hereinafter described and particularly set forth in the appended claims, together with such variations and modifications thereof as will be apparent to one skilled in the art to which the invention pertains.

Reference should be had to the accompanying drawings forming a part of this specification, in which:

Figure 1 is a perspective view of the box closed and sealed;

Fig. 2 is a perspective view showing one side of the box open;

Fig. 3 is a top plan view of the box with a portion of the top broken away to show the peripheral walls, the one side in section;

Fig. 4 is a vertical section taken on the line indicated at 4—4 in Fig. 3;

Fig. 5 is a fragmentary vertical section taken on the line indicated at 5—5 in Fig. 4; and

Fig. 6 is a plan view of the blank from which the box is made.

The box of the present invention is made from a one-piece blank, such as shown in Fig. 6 of the drawings, the box having an octagonal wall 1, a side wall 2 which is integral with the octagonal wall 1 and also with a second octagonal wall 3 identical with the first. At the juncture of the side wall 2 with the octagonal walls 1 and 3, scored or creased hinge lines 4 and 5 are provided that form hinge connections between the side wall 2 and the octagonal walls 1 and 3. A second side wall 6 is integral with the octagonal

wall 3 and is hinged about a scored or creased line 7 along one of the side edges of the octagonal wall 3, the hinge line 7 being diametrically opposite and parallel to the hinge line 5.

The blank is adapted to be folded about the hinge lines 4, 5 and 7 to position the octagonal walls 1 and 3 in parallel relation with the free edge of the side wall 6 contiguous to the side edge of the octagonal wall 1 that is diametrically opposite the edge to which the wall 2 is hinged. The free end of the wall 6 is hingedly connected to the octagonal wall 1 by suitable means such as a strip 8 of adhesive tape, which provides a hinge connection so that the box can be collapsed flat for shipment or storage. The octagonal wall 1 is provided with two full-width flaps 9 on diametrically opposite sides thereof which are connected to the wall 1 by means of scored or creased hinge lines 10, the hinge lines 10 being parallel with each other and disposed at right angles to the hinge line 4. The octagonal wall 3 is provided with two full-width locking flaps 11 which are connected to the wall 3 by means of scored or creased hinge lines 12, which are parallel with each other and perpendicular to the hinge lines 5 and 7.

After the blank has been folded to bring the octagonal walls 1 and 3 into parallel relation, the flaps 9 and 11 may be folded to positions perpendicular to the walls 1 and 3, with the locking flaps 11 overlying the flaps 9. The length of the flaps 9 and 11 correspond to the length of the walls 2 and 6 and are adapted to form two diametrically opposite double-thickness walls. The flaps 9 and 11 together with the side walls 2 and 6 form four of the eight peripheral walls of the box and the other four walls 13 are in the form of flaps integral with the side walls 2 and 6, each flap 13 being connected to the side wall 2 or 6 by means of a score or creased hinge line 14. Each side wall 13 has a scored or creased hinge line 15 which provides a retaining flange 16 at its free edge, the hinge lines 15 being parallel to the hinge lines 14 and spaced therefrom a distance equal to the length of a side of the octagonal end walls. The walls 13 are adapted to be folded against edges of the walls 1 and 3, and the retaining flanges 16 are adapted to lie upon the outer faces of the flaps 9 and beneath the outer locking flaps 11.

The four edges of each of the octagonal walls 1 and 3 intermediate the flaps 9 and 11 and the side walls 2 and 6 are preferably provided with triangular flaps 17, each of which is connected

to the octagonal walls by means of a score or creased hinge line 18. Each flap 17 has one edge 19 on the side adjacent the flaps 9 or 11 which is perpendicular to the hinge line 18 and another edge 20 which is disposed parallel to the side edges of the side wall forming flaps 13.

In assembling the box, the blank is first folded about the parallel hinge lines 4, 5 and 7 and the end of the side wall 6 is secured to a side of the octagonal wall 1 by means of the adhesive strip 8 which serves as a permanent hinge connection and which may be a cloth tape. The flaps 9 and the flaps 17 at one end of the box are then folded down to positions perpendicular to the walls 1 and 3, after which the side walls 13 at said end of the box are folded over the overlapping flaps 17 until the retaining flanges 16 overlie the outer faces of the inner flap 9, whereupon the outer locking flap 11 is folded down against the outer faces of the flanges 16 and secured in place by means of a suitable strip of tape 21, which secures the free end of the locking flap 11 to the wall 1. After the peripheral walls of the box have been closed at one side, merchandise may be placed therein and the opposite walls may then be folded to closed positions and secured in closed positions by a second strip 21 of adhesive tape. If desired, the tape 21 may be in the form of paper tape which can be broken to permit the box to be opened without damage to the flaps, so that the box may be opened at one or both ends, may be collapsed flat for shipping or storage, and may be again used.

It is to be understood that variations and modifications of the specific product herein shown and described for purposes of illustration may be made without departing from the spirit of the invention.

What I claim is:

1. An octagonal box formed of a one-piece blank of sheet material and comprising top and bottom walls of octagonal shape, a pair of diametrically opposite side walls, one integrally and hingedly joined at its opposite ends to corresponding side edges of the two octagonal walls and the other integrally and hingedly joined at one end to a side edge of one octagonal wall and attached at its opposite end to the corresponding side edge of the other octagonal wall, a second pair of diametrically opposite side walls, each formed by overlapping flaps integrally and hingedly joined to side edges of the octagonal walls that are spaced from the edges to which the first pair of side walls are joined, and four intermediate side walls, each integrally and hingedly joined to one of the four side edges of the side walls of the first pair and each having a flange at its free edge that is interposed between the overlapping flaps forming the second pair of side walls.

2. An octagonal box formed of a one-piece blank of sheet material and comprising top and bottom walls of octagonal shape, a pair of diametrically opposite side walls, one integrally and hingedly joined at its opposite ends to corresponding side edges of the two octagonal walls and the other integrally and hingedly joined at one end to a side edge of one octagonal wall and attached at its opposite end to the corresponding side edge of the other octagonal wall, a second pair of diametrically opposite side walls, each formed by overlapping flaps integrally and hingedly joined to side edges of the octagonal walls that are spaced from the edges to which the first pair of side walls are joined, a triangular flap integrally and hingedly joined to each of the other four side edges of each of the octagonal walls, and four intermediate side walls, each integrally and hingedly joined to one of the four side edges of the side walls of the first pair, each of said intermediate side walls overlying a pair of triangular flaps and having a flange at its free edge that is interposed between the overlapping flaps forming the second pair of side walls.

3. A knockdown octagonal box formed of a one-piece fiberboard blank and comprising octagonal top and bottom walls, the diametrically opposite side edges of which are substantially parallel and alternate side edges of which are substantially perpendicular to one another, a side wall integrally and hingedly joined at its opposite ends to corresponding side edges of the octagonal walls, two full width flaps of the same length as said side wall integrally and hingedly connected, one to each of the diametrically opposite side edges of one of said octagonal walls that are perpendicular to the edge to which said side wall is joined, a side wall diametrically opposite the first, integrally and hingedly joined to a side edge of one octagonal wall and having its free edge contiguous to the corresponding edge of the other octagonal wall, a strip of adhesive tape hingedly securing the free edge of the latter side wall to the octagonal wall to which its free edge is contiguous, four intermediate side walls, each integrally and hingedly joined to a side edge of one of the two first-mentioned side walls, said intermediate side walls having flanges at their free edges that overlie said flaps, two full width locking flaps overlying the first-mentioned flaps and said flanges and integrally and hingedly joined to the octagonal wall opposite that to which the first flaps are joined, and means for securing said locking flaps in place against the outer faces of said flanges.

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