

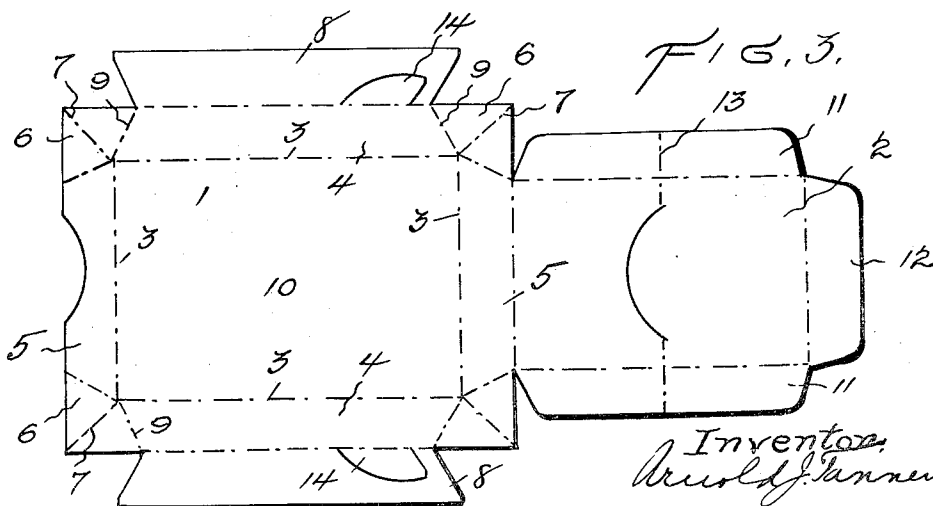
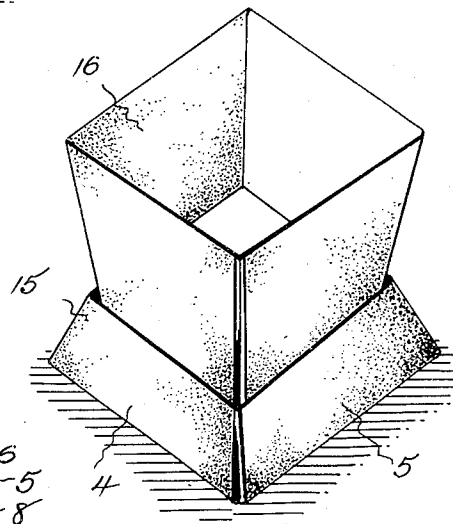
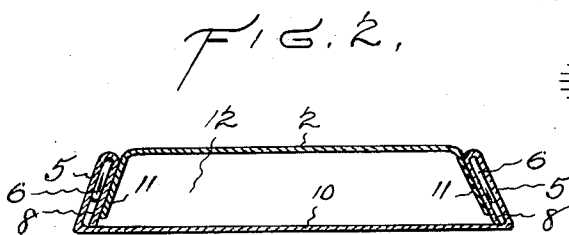
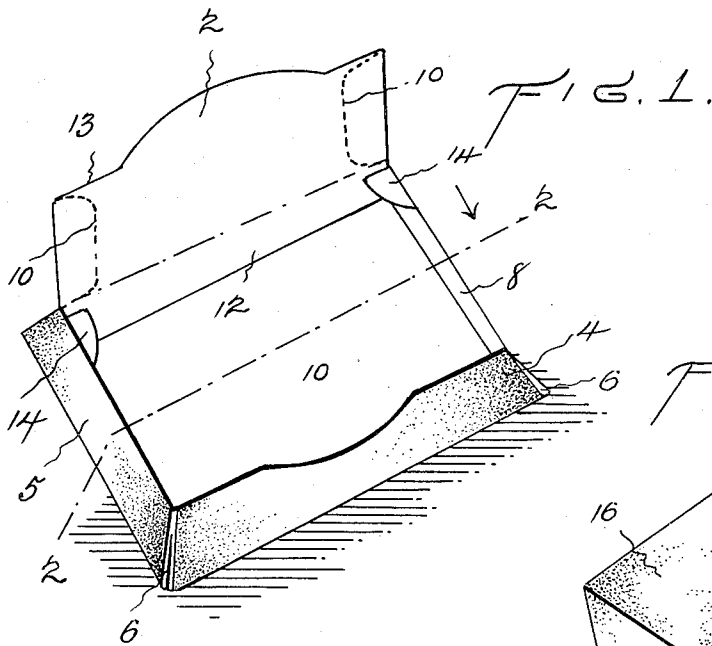
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FOLDING BOX OR RECEPTACLE

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UNITED STATES PATENT OFFICE

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FOLDING BOX OR RECEPTACLE

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The present invention relates to folding boxes or cartons which are composed of a sheet of paper or suitable material which is arranged to be folded from a flat condition into a box or receptacle. The object of the invention is to provide an economical box which consumes the minimum amount of material and which may be readily assembled from the flat blank and retentively held in the folded position by means which are self-acting, meaning that no gluing is required nor are there any inter-locking tongues or similar devices which are required to be engaged, in fact the box, when assembled, is held in that position by friction means entirely.

The improved box or carton may be employed with or without a cover and when a cover is employed the same may be assembled to fold on itself to provide a display card.

In another embodiment of the invention the improved carton or receptacle may be employed as a saucer or tray for a flower pot, for example such as described in a copending application Serial No. 394,479. It will be noted in the latter use of the invention, the tray or receptacle made accordingly thereto, is practically water-tight for the corners of the receptacle are water-tight and when the receptacle is made of water-proof material, this tightness against the leakage of water is of particular advantage in the use mentioned and also for other uses such for example as a tray or receptacle employed for containing ice-cream or the like.

The several embodiments of the invention will be described hereinafter with reference to the accompanying drawings, wherein—

Figure 1 is a perspective view showing the improved box or carton with a cover and which latter is in its open position so folded as to provide a display or advertising means at the back of the box;

Figure 2 is a sectional view taken on the line 2—2 of Figure 1;

Figure 3 is a plan view of a blank of which a box and cover therefor is constructed; and

Figure 4 is a perspective view showing the improved receptacle in use as a saucer for a flower pot.

Referring to the drawings, more particularly to Figure 3, herein the blank of which the complete box and cover is composed, comprises the body portion 1 and extension 2 therefrom. The body blank is creased on the lines 3 to define sections 4—4 and 5—5. The sections 4—4 form the outer side walls of the receptacle. One section 5 forms the front wall and the opposite section 5 forms the back wall of the receptacle. Corner sections 6 connect the sections 4—4 and 5—5 together and these sections 6 are diagonally scored on the lines 7 so as to allow a bellows-like fold of the said sections. Flaps 8—8 are connected to the sections 4—4 and these flaps are arranged to fold inwardly to form double side walls lying over the folded-in corner sections 7 and which sections fold against the side walls. The flaps 8—8 are tapered with expanding free ends so as to conform with the inwardly sloping angular corners of the receptacle.

The corner sections 6, referred to hereinbefore, also fold on lines 9—9 where they are connected to the sections 4—4 and 5—5 in such a way that the side walls are tapered and inwardly inclined from the bottom upwardly. With this arrangement the side walls and also the front and back walls stand out of perpendicular position relatively to the bottom of the receptacle, as shown in the set-up position of the box in Figure 1. The flaps 8—8 are slightly greater in width than the side walls, therefore, when said flaps are folded inwardly over the folded corner sections 6, as shown in Figure 2, the lower edges of said flaps will frictionally engage the upper surface of the bottom 10 and thereby, due also to the inward slant of the side walls, said flaps are retentively held in the folded position. With this retention means the box or receptacle is firmly held in its set up position.

The extension 2 is connected to the body by means of the section 5 forming the back wall of the receptacle. This extension forms the cover for the receptacle and is retentively held in its closed position by the tuck-in side flaps 11 and tuck-in flap 12. Said extension is cut and scored on the line 13 so as to fold

on itself to form a display device which is folded in the position shown in Figure 1 wherein said side flaps 11 are preferably folded in to improve the appearance of the display. Means comprising ears or pieces 14 cut out of the flaps 8—8 lie in a horizontal position to engage the bottom of the folded cover to retain the same in the raised display position.

10 In Figure 4 a modified use of the improved receptacle is shown and herein the receptacle is in the form of a saucer 15 which is used with a flower pot 16, for example. In this application of invention the receptacle is substantially the same as the other example 15 with the exception that the cover extension member 2 is omitted.

The improved structure hereinbefore described produces a receptacle or carton having the maximum rigidity that can be obtained with the material of which the article is composed, and as previously stated, there are no inter-locking tongues or slits which leave openings at the corners or elsewhere, 25 therefore, the carton or receptacle is practically water-tight and to get full advantage of this feature, it is obvious that the article may be composed of water-proof material.

Various modifications may be made in carrying out the constructional details of the invention hereinbefore described or in the application of the invention, wholly or partly, and it is to be understood that any modification coming fairly within the terms of 30 the appended claims shall be covered thereby.

I claim:

1. A receptacle of the class described having inwardly sloping single walls and flaps connected to oppositely disposed walls arranged to be folded inwardly and to be self-retained in the folded position whereby through friction alone said receptacle is maintained in its folded or set up position. 40

2. A receptacle of the class described having inwardly sloping single or inner walls, flaps extending from oppositely disposed walls arranged to be folded inwardly to provide double walls and engaging means comprising expanded ends of said flaps whereby 45 the receptacle is maintained in its folded position.

3. A receptacle of the class described having a bottom, side, end and back walls, said walls sloping inwardly, said end walls having flaps connected thereto arranged to be folded inwardly and retained in the folded position by forming frictional self-retentive means; and an extension from said back wall providing a cover for the reduced open top of said 50 receptacle.

4. A receptacle of the class described having a bottom, side, end and back walls, said walls sloping inwardly, said end walls having flaps connected thereto arranged to be folded 55 inwardly and retained in the folded position

by frictional restraint produced due to the inward inclination of said walls.

5. A receptacle of the class described composed of a single blank having defined sections forming the side, back and end walls of the receptacle; corner pieces connecting said sections, said corner pieces being arranged to fold in an inwardly inclined angle, said sections being arranged to fold to provide inwardly inclined walls; flaps connected to said side walls arranged to fold over the respective wall so as to over-lie said folded end corner pieces and said folded flaps, due to the inwardly inclination of the side walls being frictionally engaged whereby the receptacle is maintained in its folded or set up position. 70 75 80

6. A receptacle of the class described composed of a single blank having defined sections forming the side, back and end walls of the receptacle, corner pieces connecting said sections, said corner pieces being arranged to fold in an inwardly inclined angle, said sections being arranged to fold to provide inwardly inclined walls; flaps connected to said side walls arranged to fold over the respective wall so as to over-lie said folded corner pieces, said folded flaps due to the inwardly inclination of the side walls being frictionally engaged whereby the receptacle is maintained in its folded or set up position; an extension from said back wall providing a cover for the receptacle, means for retaining said cover in its closed position and means whereby said cover is folded on itself and retained in a position to provide a display 90 95 100 device.

Signed at New Haven, county of New Haven, State of Connecticut, this 19th day of December, 1929.

ARNOLD J. TANNER. 105

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