

July 10, 1934.

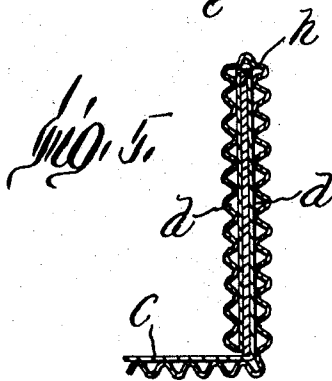
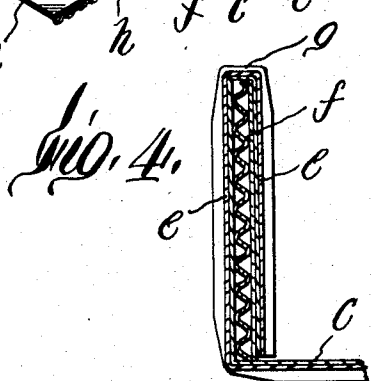
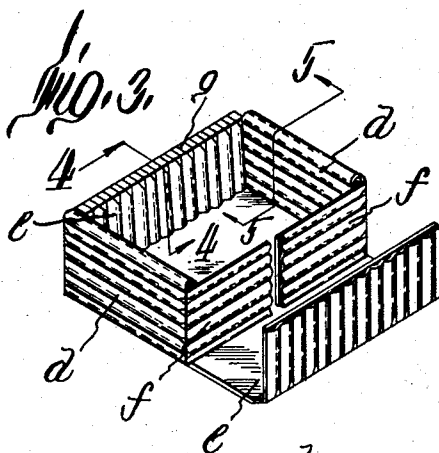
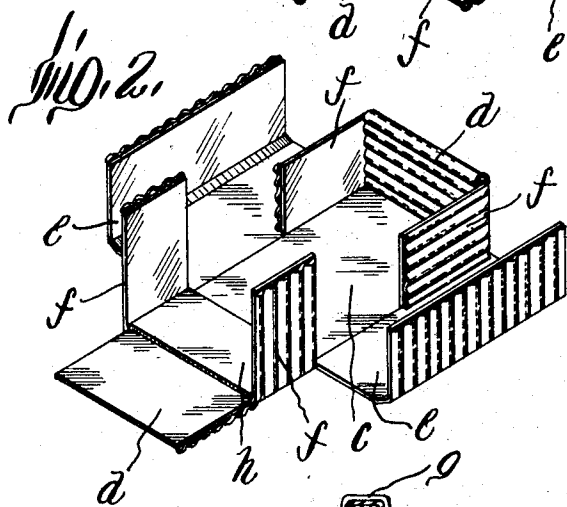
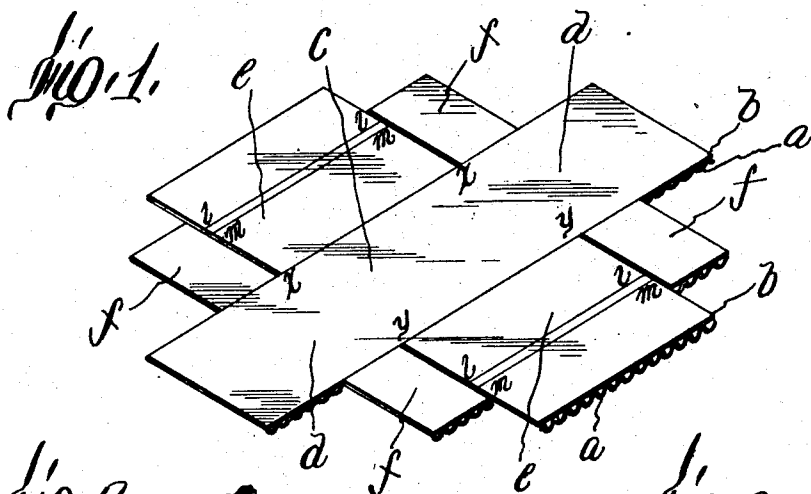
C. F. WILLIAMS

1,965,951

ORNAMENTAL BOX

Filed March 8, 1934

2 Sheets-Sheet 1



Inventor
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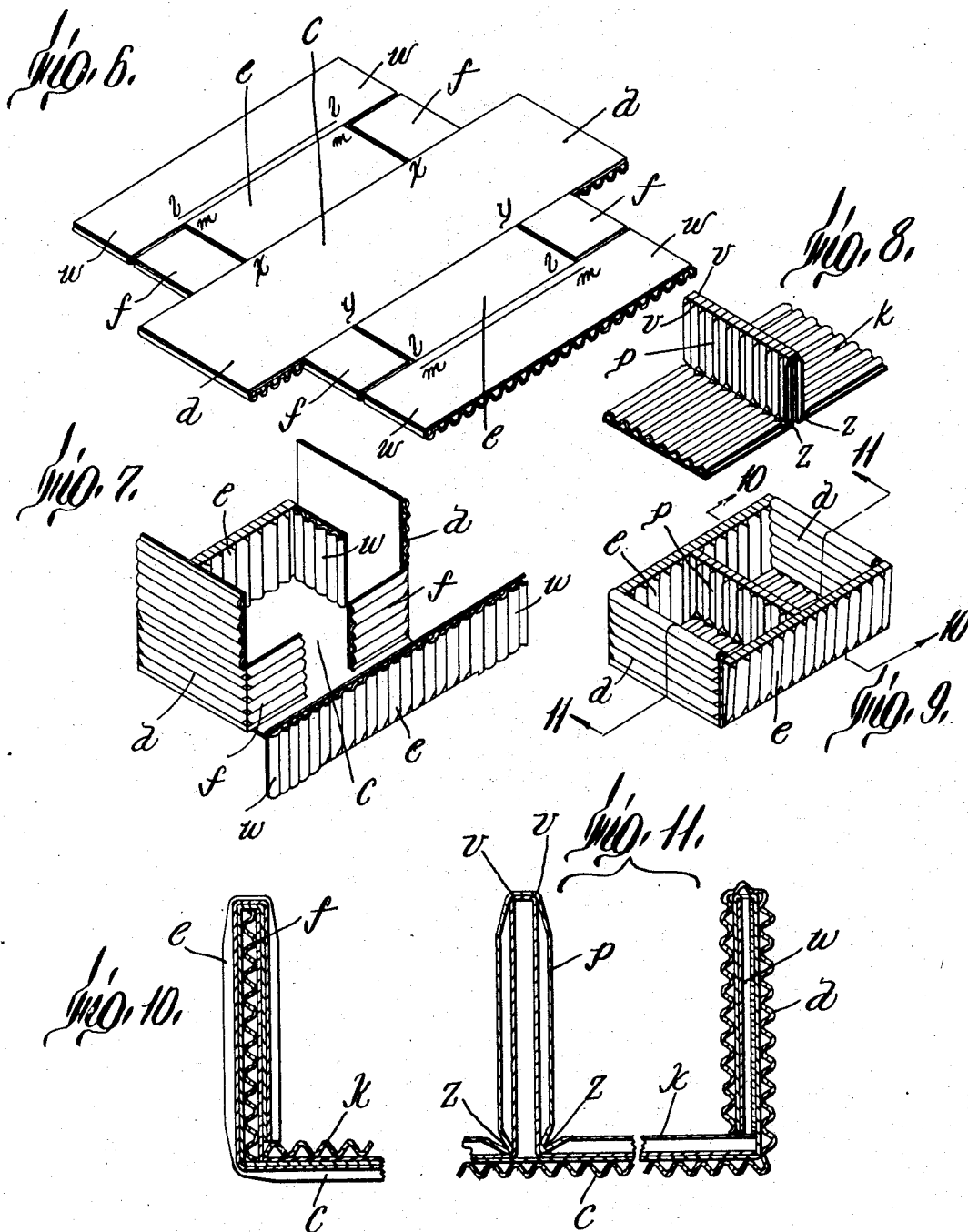
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ORNAMENTAL BOX

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

1,965,951

ORNAMENTAL BOX

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Application March 8, 1934, Serial No. 714,608

8 Claims. (Cl. 229—34)

This invention relates to an ornamental box such as can be used for a container in which such edibles as cookies, candy, nuts, fruits, or other articles may be displayed and sold. An object is to provide a box of this character that can be shipped to the user in the form of a pre-fabricated flat blank capable of being quickly folded into usable form without the need of adhesives or fastening elements.

10 In accordance with the present invention, I provide a box made from a one-piece blank of single-faced corrugated paper whose corrugated paper ply preferably, though not necessarily, consists of translucent paper more particularly of the nature of so-called glassine paper or parchment paper. The blank is pre-cut and pre-scored in such a way that when its parts are put together into operative relationship, all of the exterior surface and at least substantially all of the internal wall surface of the resulting box is presented by the corrugated translucent paper ply which lends a sheer, glistening and otherwise pleasing aspect to the box that tends to attract the attention of prospective purchasers to the edibles or other articles displayed therein.

With the foregoing and other features and objects in view, I shall now describe my invention in greater detail in conjunction with the accompanying drawings, wherein,—

30 Figure 1 represents in perspective a pre-cut and pre-scored flat blank of paper from which the box of the present invention is made.

Figure 2 illustrates in perspective the box in a partially folded condition.

35 Figure 3 similarly depicts the box about completed.

Figures 4 and 5 are sections on the lines 4—4 and 5—5 respectively of Figure 3.

40 Figure 6 is a view similar to Figure 1 of a modified form of blank.

Figure 7 shows in perspective such form of blank in partially folded condition.

Figure 8 depicts an adjunct for the box made from paper similar to that used for the box.

45 Figure 9 shows in perspective the finished box, including the adjunct.

Figures 10 and 11 are sections partly broken away on the lines 10—10 and 11—11 respectively of Figure 9.

50 As already indicated, the paper used in making the box of the present invention is single-faced corrugated paper whose corrugated paper ply preferably consists of thin translucent paper of the nature of glassine or parchment designated as *a* in Figure 1. The plane ply of facing pa-

per designated as *b* in Figure 1 may be of any suitable character, being preferably also quite thin and flexible but opaque so as to afford the desired background or contrast for the corrugated translucent ply. In some instances, the corrugated paper ply and/or the plane paper ply may be colored and/or ornamentally imprinted. When the plane paper ply is imprinted, the imprints preferably occur on the face lying next to the corrugated translucent ply so as to show through such latter ply which serves both to enhance the beauty of such imprints and to protect them. The blank includes a bottom portion *c* defined by lines of score *x—x* and *y—y* constituting its side edges, end wall portions *d* capable of being folded to double thickness projecting from the end edges of the bottom portion, side wall portions *e* also capable of being folded to double thickness projecting from the side edges of the bottom portion, and a pair of wings *f* projecting from the side edges of each end wall portion and whose junctures with the end portion are defined by lines of score constituting continuations of the lines of score *x—x* and *y—y*. The wing portions *f* are in close proximity to the side wall portions *e* extending outwardly a distance preferably slightly less than half the length of the side wall portions *e* and being of a width preferably slightly less than half the width of the side wall portions so that they can be tucked in between the folds or layers of the side wall portions, as best shown in Figure 4, and thus serve to interengage the end and side walls of the box and to enhance the rigidity of the side walls.

Inasmuch as the corrugations extend in parallelism across the blank so as to necessitate folding of the side wall portions *e* on lines of fold perpendicularly to the corrugations, it is desirable to form double lines of score *l—l* and *m—m* at the regions where flexing or folding is to be effected and thereby to avoid marring the corrugations by such folding or flexing. These lines of fold, which are preferably spaced apart a distance equal approximately to the double thickness of the single-faced corrugated paper, conduce to upper side edges *g* in the box presenting a pleasing crinkly appearance, as best shown in Figure 3. No scoring is necessary at the junctures between the end wall portions *d* and the bottom portions *c* of the blank or the regions where folding or flexing of the end wall portions to double thickness is to be effected, as such folding or flexing takes place quite readily and naturally on lines paralleling the corrugations and can hence be effected without marring or

distorting the corrugations. However, the end walls of the resulting box are comparatively flexible and limp. Accordingly, as best shown in Figures 2 and 5, I prefer to insert in between the folds or layers constituting each end wall of the box a flat stiff member h made of such material as cardboard or its equivalent that serves to keep the end wall rigid.

Once the blank has been folded as illustrated in Figures 2 and 3 to box form, it tends to remain in such form without the need of adhesives or fastening elements. This is especially true when the box is filled with the edibles or other articles to be displayed or sold therein, as these tend to hold the side and end walls intact. The box and its contents may, if desired, be closed off with a wrapper of regenerated cellulosic film, or sheet material, such as "Cellophane" adhesively or otherwise secured to the walls of the box, thereby permitting full view of the contents while at the same time preventing access of dust or other contaminations thereto and tending to keep them fresh.

In some instances, the end wall portions d of the blank may be made of sufficient length not only to fold up into double thickness but to overlie substantially the entire bottom portion c of the box, in which case all the external and internal surfaces of the box would be presented by the corrugated translucent paper ply. Such a box bottom may be desirable for edibles of the nature of chocolates, as it would mean that such edibles would make only localized contact with the box bottom, that is, only at the crests of the corrugations, wherefore, there would be less tendency for such edibles to stick to the bottom. Hence, when I say that at least substantially all of the internal wall surface of the box is presented by the corrugated translucent paper ply, I mean to include thereby a box structure whose internal bottom surface is also presented by such ply.

In Figure 6, I have shown an advantageous modification which does away with the need for equipping the box with members for stiffening its end walls. In this form of blank, not only do I provide wings f projecting from the side edges of each end wall portion d , but also wings w projecting from the end edges of the outer half of each side wall portion e . When this form of blank, which is otherwise similar to that shown in Figure 1, is being folded up into the box structure, as shown in Figure 7, the wings f are tucked in between the folds of the side wall portions and the wings w are inserted in between the folds of the end wall portions. This means that although the corrugations of the end walls run horizontally thereacross, nevertheless, they are stiffened by the wings w whose corrugations run vertically, like those of the opposite side walls.

In some instances, it may be desirable to provide the box with an adjunct k , shown in Figure 8, for lining its internal bottom surface and dividing it into compartments. The adjunct may be made of single-faced corrugated paper similar to that used for the box and consist of a single rectangular sheet of such paper scored on lines running perpendicularly across the corrugations so as to permit the formation of an erect or stand-up pleat p whose corrugations run vertically, such pleat being defined by upper double lines of score v spaced apart a distance equal approximately to the double thickness of the single-faced corrugated paper and two lower lines of score z equispaced from the adjacent upper lines of score. The length and

width of the adjunct may correspond substantially to the internal length and width of the box bottom and the height of its pleat p may correspond substantially to the internal height of the box so that when it is placed in the box, as shown in Figure 9, it lines the internal surface of the box bottom and presents to view corrugations running across the bottom perpendicularly to the external bottom corrugations; and its pleat p affords a rigid partition which divides the box into compartments or sections. By virtue of the fact that the internal bottom corrugations presented by the box adjunct run perpendicularly to the external corrugations presented by the box bottom proper, the stiffness of the box bottom as a whole is greatly enhanced. Again, the adjunct serves to maintain the box parts in a permanently folded condition, as the side edges of its pleat p engages firmly the internal side walls of the box and its bottom edges engage the internal bottom edges of both the side and end walls of the box so as to prevent them from becoming dislodged. The stiffness of the partition or pleat p and the firm engagement of its side edges with the internal side walls of the box permit such partition to be grasped as the box handle without dislodging either it or any other part of the box. Aside from the function of the box adjunct in dividing the box into compartments which may be used for holding different kinds of cookies, candy, nuts, or other articles, it serves to complete the ornamental external appearance of the box, lending corrugations to the internal bottom surface of the box and affording a partition for the box all of whose external surfaces are corrugated. It should be understood that while I have shown a box adjunct having only one pleat, two or more similar pleats may be formed therein for the purpose of dividing the box into three or more compartments.

In the foregoing description, I have for convenience referred to the blank and the box made therefrom as including side wall portions and end wall portions. It is obvious, however, that the principles of my invention apply to boxes of a square configuration as well as to those of a rectangular configuration, and, accordingly, that the expressions "side walls" and "end walls" as used in one or more of the appended claims are meant to include the opposite side walls of square as well as of rectangular boxes.

I claim:—

1. An ornamental box of the character described made from a one-piece blank of single-faced corrugated paper whose corrugated ply consists of translucent paper, all of the exterior surface and at least substantially all of the internal wall surface of said box being presented by said corrugated translucent paper ply.

2. An ornamental box of the character described made from single-faced corrugated paper whose corrugated ply consists of translucent paper and whose plane paper ply carries imprints lying next to and visible through said corrugated translucent paper ply, all of the exterior surface of said box being presented by said corrugated translucent paper ply.

3. An ornamental box of the character described made from single-faced corrugated paper whose corrugated ply consists of translucent paper and whose plane paper ply carries imprints lying next to and visible through said corrugated translucent paper ply, all of the exterior surface and at least substantially all of the internal wall surfaces of said box being presented by said corrugated translucent paper ply.

4. An ornamental box of the character described made from a one-piece blank of single-faced corrugated paper which flexes easily on lines running parallel to said corrugations, all of the exterior surface and at least substantially all of the internal wall surface of said box being presented by said corrugated paper ply, all of the walls of said box consisting of a double layer of said single-faced corrugated paper with the corrugations running vertically down opposite side walls but horizontally across the bottom and the end walls, and a flat stiff member inserted in between the layers of each end wall and serving to keep it rigid. 80
5. An ornamental box of the character described made from a one-piece blank of single-faced corrugated paper which flexes easily on lines running parallel to said corrugations, all of the exterior surface and at least substantially all of the internal wall surface of said box being presented by the corrugated paper ply, all of the walls of said box consisting of a double layer of said single-faced corrugated paper with the corrugations running vertically down opposite side wall but horizontally across the bottom and the end walls, each of said side walls including a wing projecting from each end edge and inserted in between the layers of the adjacent end wall, the corrugations of said wing running vertically and thereby stiffening said end wall. 85
6. The combination with an ornamental box of rectangular configuration made from single-faced corrugated paper all of whose exterior surface and all of whose internal wall surface is presented by the corrugated paper ply, of a rectangular sheet of similar paper lining the internal bottom surface of said box and provided with an upstanding pleated portion, all of the external surface of said sheet being presented by the corrugated paper ply and the pleated portion of said sheet serving to divide said box into compartments. 90
7. The combination with an ornamental box of rectangular configuration made from a one-piece blank of single-faced corrugated paper whose corrugated ply consists of translucent paper and all of whose exterior surface and all of whose internal wall surface is presented by said corrugated translucent paper ply, of a rectangular sheet of similar paper lining the internal bottom surface of said box and provided with an upstanding pleated portion, all of the external surface of said sheet being presented by said corrugated translucent paper ply and the pleated portion of said sheet serving to divide said box into compartments. 95
8. The combination with a rectangular box of rectangular configuration made from single-faced corrugated paper whose corrugated ply is presented externally at the bottom of said box, of a rectangular sheet of similar paper lining the internal bottom surface of said box and provided with an upstanding pleated portion, the corrugations of said sheet running perpendicularly to the corrugations of the box bottom and vertically in said upstanding pleated portion, all of the external surface of said sheet being presented by the corrugated paper ply and the pleated portion of said sheet serving to divide said box into compartments. 100
- CHARLES F. WILLIAMS. 110
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