Feb. 11, 1930. M. L. WOLFF 1,746,507

FOLDING BOX AND THE LIKE

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Fig. 1

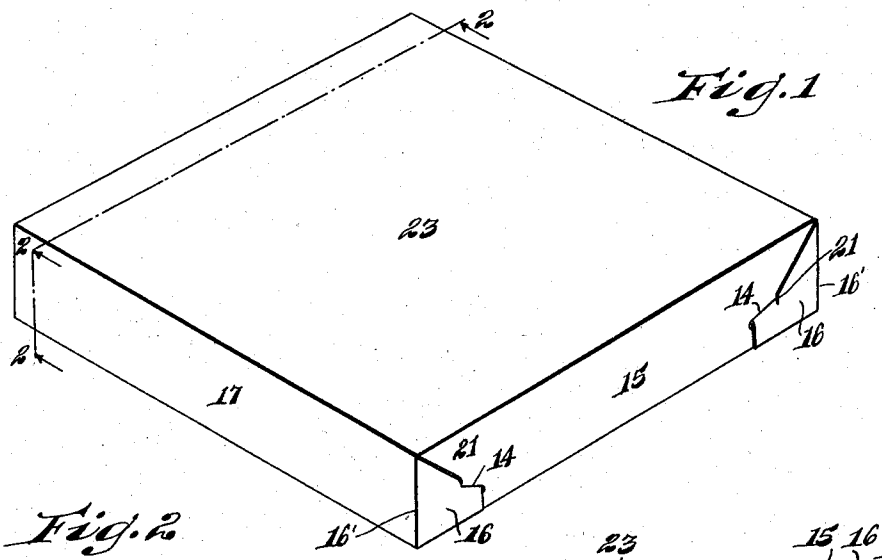
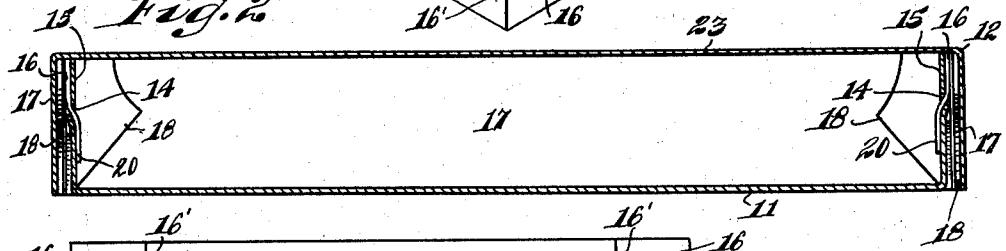


Fig. 2



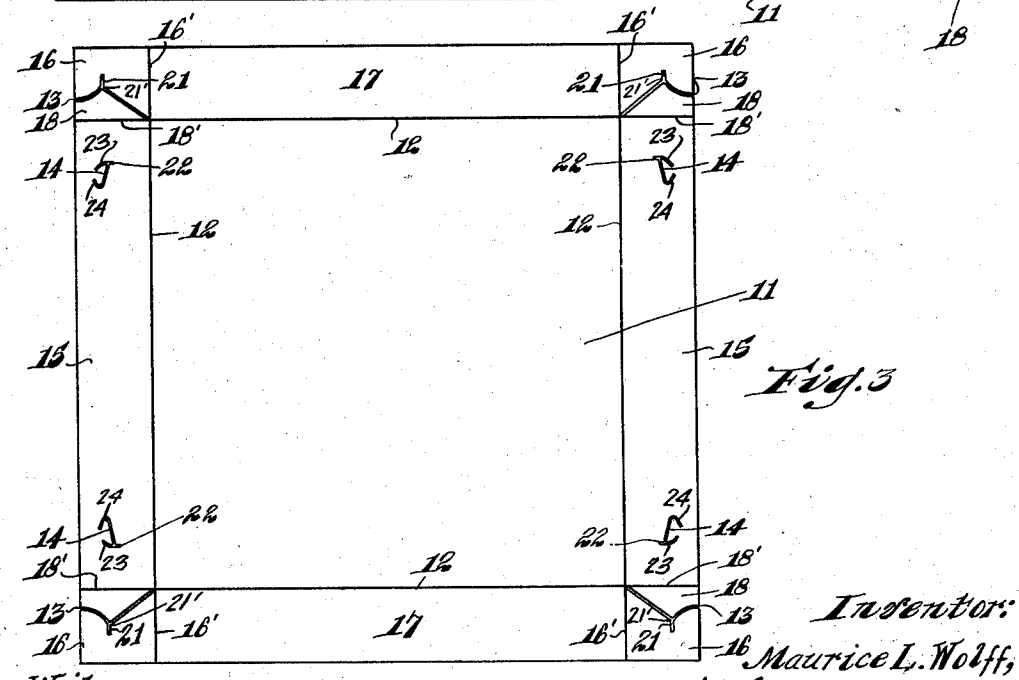


Fig. 3

Witnesses:
E. E. Wessels
F. C. Appleton

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FOLDING BOX AND THE LIKE

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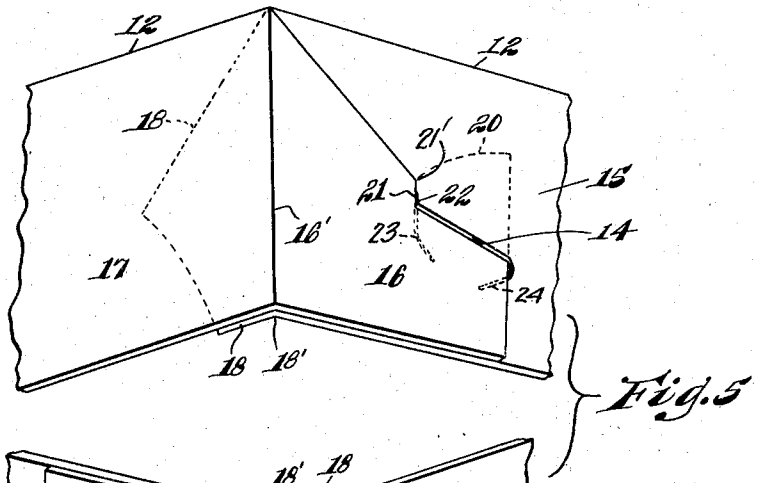
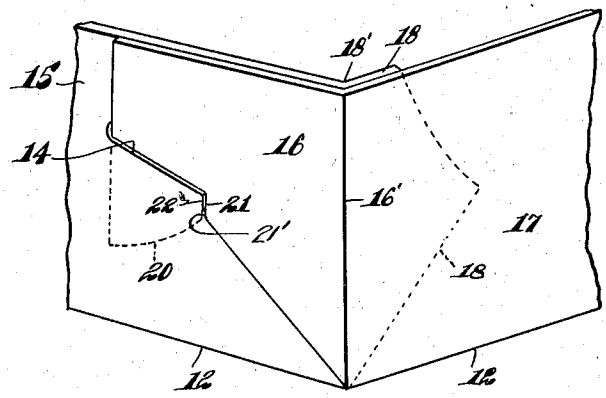


Fig. 5



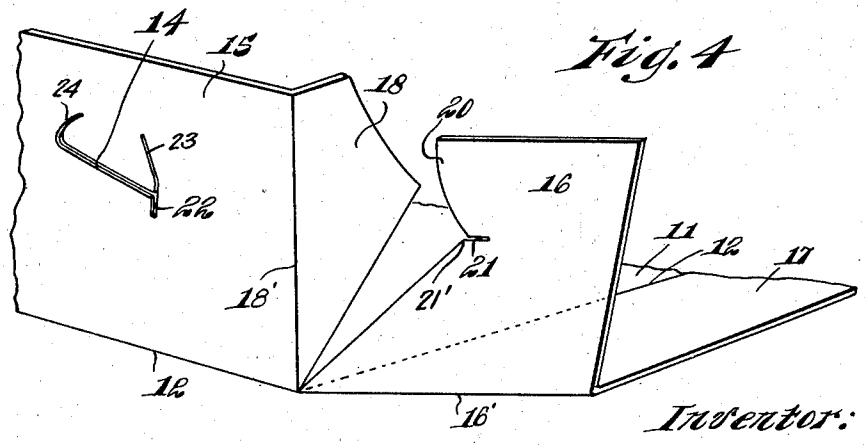


Fig. 4

Witnesses:
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Patented Feb. 11, 1930 1,746,507

UNITED STATES PATENT OFFICE

MAURICE L. WOLFF, OF CHICAGO, ILLINOIS

FOLDING BOX AND THE LIKE

Application filed January 18, 1928. Serial No. 247,556.

My invention relates to folding boxes, and has for its object the provision of a box of the kind described affording a stronger and more rugged construction with a given amount of material.

A more particular object of my invention is to provide an improved corner construction in a foldable card-board box.

Other objects and advantages of the method and construction herein employed will appear more fully in the hereinafter specification taken in connection with the accompanying drawings in which,

Figure 1 is a perspective view of a box embodying my invention.

Figure 2 is a cross section taken on line 2—2 of Figure 1.

Figure 3 is a plan view of the bottom part of a box before folding.

Figure 4 is a fragmentary view of the means provided for securing the corners of my box together, preparatory to the completion thereof.

Figure 5 is a fragmentary view of the corners of the lid and of the bottom part of a box embodying my invention.

With more particular reference to the drawings, wherein similar characters of reference indicate corresponding parts in the several views of the preferred form of my invention, 11 designates a sheet of cardboard having the marginal creases 12, the irregular curved corner slits 13 and the irregular marginal slits 14. The creases 12 together with the corner creases 16′ 18′ provide means whereby the ends 12 and the sides 17 of the bottom part of my device may be folded into shape, it being understood that the ends 15 will be folded about the crease 12 while the sides 17 will be folded about their corresponding crease 12, the flap 16 being foldable about the crease 16′ while the flap 18 will fold about the crease 18′. It will now be seen that the flaps 18 when the box is folded into container shape fall in back of and reinforce the sides 15.

The improved corner construction of my folding box which constitutes an important feature of this invention, I desire to stress strongly. It will be noted that a double fold is obtained on both sides and ends of my device at the corners thereof, a locking engagement being secured by the dovetailing of the tongue 20 and slit 21 into the communicating auxiliary branching incisions 22, 23, 24 of the slit 14. The incision 22 which is downwardly projected and registers directly with the slit 21 is formed as a prolongation of the upwardly directed incision 23, the latter being adapted to receive a portion 21′ of the flap 16 immediately below the slit 21 should the flap 16 shift upwardly when subjected to strain. The incision 24 is of arcuate configuration and serves to clampingly receive an edge of the tongue 20. The general purpose of the slits 21 and 14 and the auxiliary branching incisions 22, 23, 24, it will thus be seen, is to provide a locking arrangement which will prevent the inadvertent detachment of the tongue 20 from the slits 14 and the auxiliary branching incisions 22, 23 and 24, since the upwardly projecting incision 23 will receive that part of the material immediately below the slit 21 and thus prevent the disengagement of the marginal portion 15 from the flap 16.

I am aware of conventional methods of corner reinforcing means as employed in folding boxes, but the expedients used either provide a double fold at only one side of the corner of the box, or the construction is such as to leave an aperture or passageway at that point whereby soiling of the contents of the box readily takes place, and with certain varieties of commodities, such as food products, actually permits the contents to leak out or to scatter crumbs and fragments around when the box is handled. My novel corner construction in folding boxes not only completely eliminates the soiling and leakage of contents referred to, but provides a corner reinforcement demonstrably superior to methods in vogue.

My folding box is manufactured by feeding card and paste board stock to a die stamping machine, a single operation of which suffices to cut and crease the stock placed therein into the flat unfolded shape shown in Figure 3. The folding may then be accomplished by machinery or by hand, as desired.

The lid 23 of my container is practically a counter part of the bottom portion 11, it being observed however, that I place the slits 14 in the sides and the flaps 16 in the ends, this being a reversal of the position of the slits and flaps of the bottom part. The result of this method is that when the lid 23 is placed over the bottom part 11, a quadruple fold is obtained at the corners of my container when the lid is placed thereon,—a comparatively strong, strain and stress resisting corner construction resulting from this method.

While I have described and illustrated a preferred form of my invention with some degree of particularity, it will be understood that some minor changes may be made therein; hence I do not wish to confine myself literally to the precise details as set forth, but wish to avail myself of such variations and modifications as fairly fall within the scope of the appended claim.

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

A folding box formed of a single sheet of material with foldable margins at the sides and ends thereof, corner members at the ends of said margins, one of said foldable margins having a slit formed with a comparatively straight diagonally stretching portion terminating at one end in an arcuate portion, the other end of said diagonally stretching portion having a downwardly projecting portion communicating with an upwardly and inwardly directed part, the diagonally stretching portion of said slit receiving a tongue integrally formed with one of said corner members, said tongue having an incision at the side thereof, said incision registering with said downwardly projecting portion of said diagonally stretching slit, whereby the tongue will be lockingly engaged with said slit while said incision will register with said downwardly projecting portion of the said diagonally stretching slit to provide means for a comparatively secure evenly aligned corner bracing formation, said upwardly and inwardly directed part partially receiving a portion of material when shifting, said portion of material being adjacent the tongue and serving to prevent the tongue from being disengaged therefrom.

In testimony whereof I have signed my name to this specification.

MAURICE L. WOLFF.