Aug. 8, 1933. I. M. RUDOWITZ 1,921,946

FOLDING BOX

Filed April 12, 1932

Fig. 1.

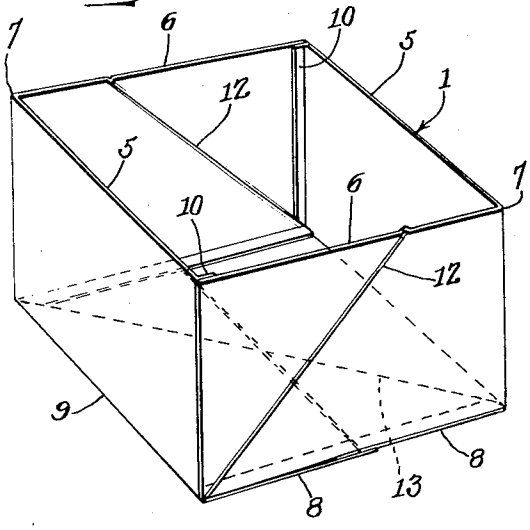


Fig. 2.

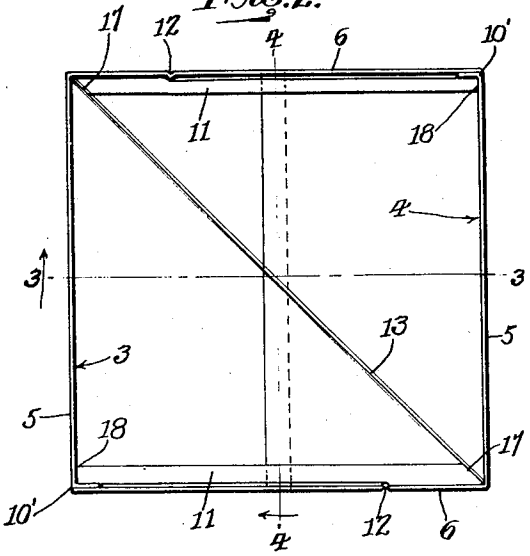


Fig. 3.

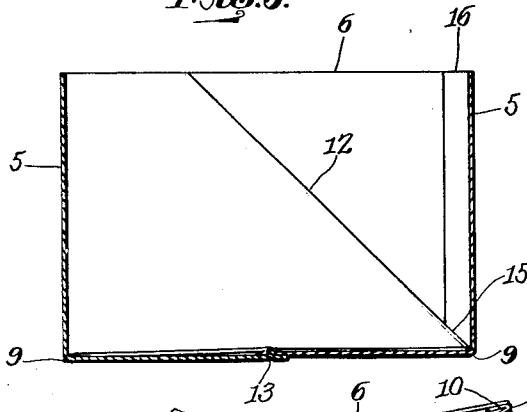


Fig. 4.

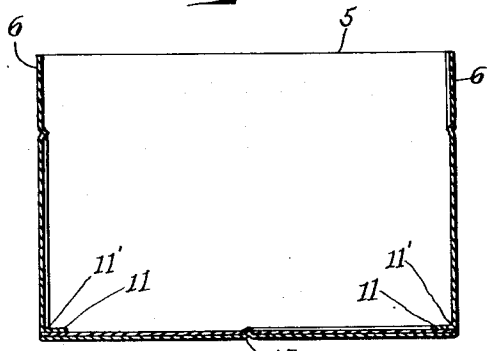


Fig. 5.

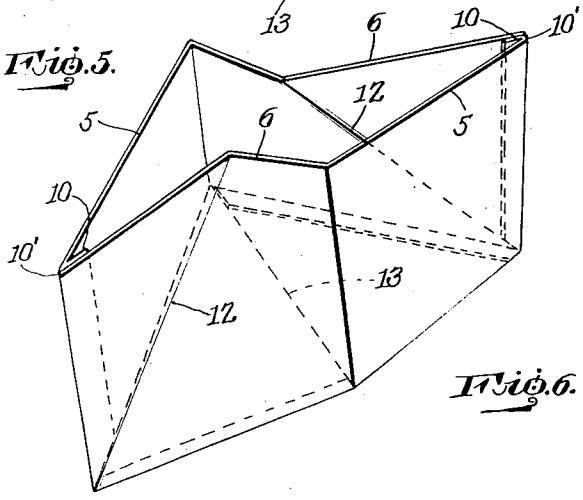
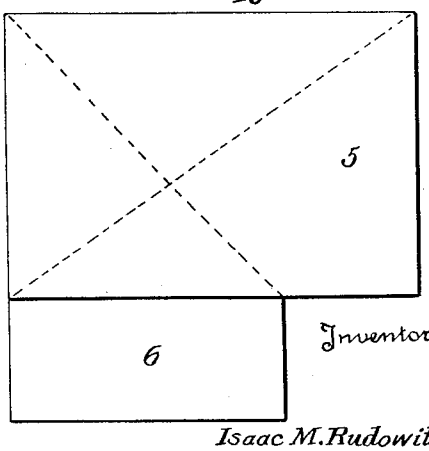


Fig. 6.



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UNITED STATES PATENT OFFICE

1,921,946

FOLDING BOX

Isaac M. Rudowitz, Brooklyn, N. Y.

Application April 12, 1932. Serial No. 604,828

1 Claim. (Cl. 229—41)

This invention relates to folding boxes, more particularly to an open top box body formed from cardboard or other suitable material.

The essential objects of the invention are to provide, in a manner as hereinafter set forth, a folding open top box body which is simple in its construction and arrangement; capable of being folded in a compact manner when not in use, strong, durable, having the bottom thereof reinforced, thoroughly efficient when used, conveniently extended, and inexpensive to manufacture.

With the foregoing and other objects which may hereinafter appear, the invention consists of the novel form of folding open top box body as hereinafter more specifically described and illustrated in the accompanying drawing wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the invention as claimed.

In the drawing:—

Figure 1 is a perspective view of the open top foldable box when extended.

Figure 2 is a top plan view thereof.

Figure 3 is a section on line 3—3 Figure 2.

Figure 4 is a section on line 4—4 Figure 2.

Figure 5 is a perspective view illustrating the box body partly folded.

Figure 6 is a top plan view of the box body when folded.

An open top box body, in accordance with this invention is generally indicated at 1 and is formed of two sections or elements 3, 4 formed from paper stock or other suitable material. The sections 3, 4 are oppositely disposed, but of like form. The description of one section will apply to the other and each section consists of a pair of side wall forming parts 5, 6 disposed at right angles to each other and having a bend 7 therebetween which provides a hinge, a bottom forming portion 8 extending inwardly from the lower end of part 5, a bend 9 between part 5 and portion 8 which provides a hinge, an inwardly extending flap 10 at one side of part 5, a bend 10′ between part 5 and flap 10 which provides a hinge, an inwardly extending flap 11 at the bottom of part 6, a bend 11′ between part 6 and flap 11 which provides a hinge, a diagonally disposed score 12 on the outer face of part 6 which provides a hinge and extends from the lower corner of the free side edge of part 6 to a point between the vertical median of the latter and the bend 7 and a diagonally disposed score 13 in the lower face of portion 8 which provides a hinge and extends from the bottom of bend 7 to a point centrally of the free lengthwise edge 14 of portion 8. One end of flap 10 is inclined and its other end squared as at 15, 16 respectively. One end of flap 11 is inclined and its other end squared as at 17, 18 respectively.

The sections 3, 4 are connected together to provide the box body, and when connected the flap 10 of section 3 is secured to the inner face of the wall forming part 6 of section 4 and has its side edge flush with bend 7 of section 3, the flap 10 of section 4 is secured to the inner face of the wall forming part 6 of section 3 and has its side edge flush with bend 7 of section 4, the bottom forming portion 8 of section 3 extends upon and is secured to the bottom forming portion 8 of section 4 to complete and reinforce the bottom of the box body, the flap 10 of section 3 extends upon the upper face of and is secured to the bottom portions 8 of both sections and acts as a reinforcing means for the bottom of the box body, and the flap 11 of section 4 extends upon the upper faces of and is secured to the bottom forming portions 8 of both sections and acts as a reinforcing means for the bottom of the box body. The inclined end 15 of flap 10 of section 3 registers with one side of the score 12 in part 6 of section 4. The inclined end of flap 10 of section 4 registers with one side of the score 12 in part 6 of section 3. The inclined end 17 of flap 11 of section 3 registers with one side of the score 13 on the bottom forming portion 8 of section 4. The inclined end 17 of flap 11 of section 4 registers with one side of the score 13 in the bottom forming portion 8 of the section 3. The score 13 in one bottom forming portion 8 forms a continuation of the score 13 in the other bottom forming portion 8.

When the box body is folded, the bottom thereof folds inwardly upon itself and each wall forming part 6 also folds inwardly upon itself and has a portion thereof seat against a part of the bottom and its remaining portion arranged against the inner face of a wall forming part 5 and in this connection attention is directed to Figure 5 which shows the box body partly folded and to Figure 6 which illustrates the box body completely folded.

The flaps are termed combined coupling and hinge elements.

What I claim is:—

A folding open top box body consisting of a pair of oppositely disposed one-piece elements, each including a pair of side wall forming portions integrally hinged together, one of said wall forming portions of each element being provided with an inwardly extending upstanding flap at one end

and the other wall forming portion of each element being provided with an inwardly extending flap at its bottom, each element including a section of the box bottom, said section extending inwardly from and integrally hinged with the bottom of a side wall forming portion of said element, each bottom section being of the same width as and of greater length than the height of that wall forming portion to which it is hinged, said bottom sections being secured together in overlapping relation to provide the bottom of the box body and to reinforce said bottom throughout the center of the latter, said bottom flanges being secured to the upper face of said bottom, the end flange of one element being secured to the inner face of the other element at one end of the latter, said bottom being formed with an integral hinge disposed diagonally thereof to provide for said bottom folding inwardly and said wall forming portions provided with the bottom flanges being formed with oppositely disposed diagonally extending integral hinges to provide for such portions being folded inwardly in opposite directions.

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