No. 636,047. Patented Oct. 31, 1899.

F. KNOBELOCH.

PAPER BOX.

(Application filed Apr. 29, 1899.)

(No Model.)

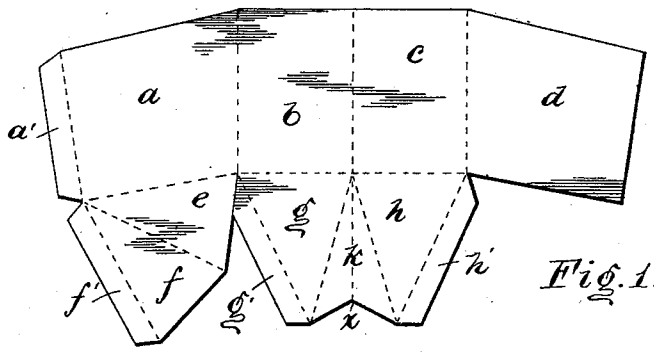
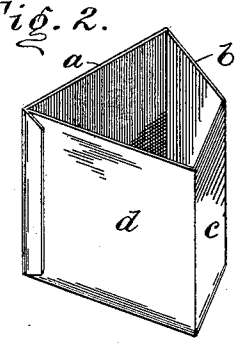


Fig. 1.

Fig. 2.



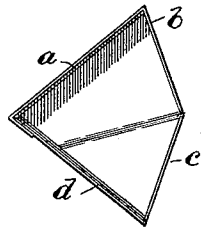


Fig. 3.

Fig. 4.

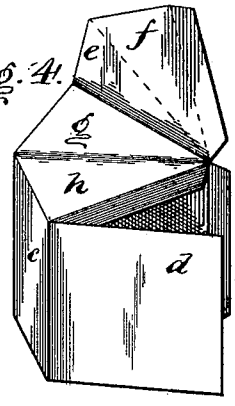
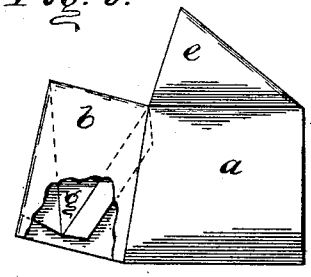


Fig. 5.



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UNITED STATES PATENT OFFICE.

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PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 636,047, dated October 31, 1899.

Application filed April 29, 1899. Serial No. 715,070. (No model.)

To all whom it may concern:

Be it known that I, FRANK KNOBELOCH, a citizen of the United States, and a resident of Dayton, in the county of Montgomery and State of Ohio, have invented a certain new and useful Improvement in Paper Boxes, of which the following is a full, clear, and exact description.

My invention relates to an improvement in what is termed a "collapsible" paper box which can be readily and quickly made to assume box form and is more especially intended for what is known as a "pail-filler" for use in packing candies and the like, as will be more fully hereinafter described; and it consists in certain modifications and improvements on the box shown and described in my Patent No. 606,671, of July 5, 1898.

In the drawings, Figure 1 is a plan view of a blank or sheet of cardboard cut and scored to form my box. Fig. 2 is a perspective view of my improved box folded into shape. Fig. 3 is a top view of the same. Fig. 4 is a perspective view of a blank cut and scored to form my improved box, partially folded into shape, with the bottom side up. Fig. 5 is a side view of my improved box in its collapsed condition, bottom side up, with a portion of one side cut away to show the position of the false or inner bottom.

Like letters of reference indicate identical parts in all the figures.

A blank of cardboard or other suitable material is cut and scored the desired shape where the same is to be folded, the dotted lines indicating scores and the heavy lines the cuts. The portions *a*, *b*, *c*, and *d* form the four sides of the box and *e f* one of the bottoms, preferably the outside bottom, and the extensions *g h* for the other or inside or false bottom.

The box is formed in the following manner: The portions or sides *a* and *d* are brought together, which is possible by reason of the scores shown in dotted lines, and the flap *a* is glued to the side or portion *d*, either on the inside or outside, as is desired, as seen in Fig. 1. One of the bottoms, we will say the outer bottom, is formed by an extension either of the side wall *a* or *d* of the drawings. I have shown it as an extension of *a*. This is scored diagonally, thus forming the portions *e f*, and is provided with a flap *f'*, which is glued to the side or wall *d*, and thereby securing the bottom in place. The inside or false bottom is formed by an extension of the sides *b c*. This portion is scored in the diagonal manner shown, thus forming the sections *g h* and leaving the intermediate triangular portion *k*, which is also scored to permit it to be folded and the extensions *g h* brought together. In order to permit this bottom to be brought into place to be perfectly flat, it of course necessitates the folding of the intermediate portion *k* upward on the inside of the box, and in order to enable this to be done the portion forming the extensions *g h* is cut away toward the center score, as seen at *x*. By thus having it cut out to the extent shown this intermediate portion may be folded to either side and lie flat on the bottom, as seen in Fig. 3.

I have shown the extensions *g h* provided with side flaps *g' h'*, which, however, may be omitted, if desired, as they are not essential. When these flaps are used and the blank is in box shape and the inside bottom in position, these flaps are bent into a perpendicular position and lie against the side walls *a b* and tend to brace the bottom and hold the side walls outward and prevent their collapsing. After bringing the sides together and the flaps *f' a'* are glued in place the blank will then be in complete box form, as shown in Fig. 2.

In order to collapse the box into the position shown in Fig. 5 for shipping or packing, the overlapped portion or ridge formed by the portion *k* intermediate the extensions *g h* is grasped and the inner or false bottom drawn upward, bringing sides *b c* together, and the outer bottom is preferably folded outward, thereby bringing the walls *a d* together.

Of course it will be understood that the details of construction may be varied for reasons which may exist in particular cases for the purpose of economy of material. For example, one of these bottoms may be of smaller extent and not cover the entire space of the

bottom and therefore not make two complete bottoms, which for certain uses are not necessary.

I claim—

1. A paper vessel made of a single blank of suitable material, cut and scored to fold into trapeziform, with a double bottom, one of said bottoms formed of an extension of the narrower middle sides of the blank and provided with a middle web portion scored to fold upon itself, and the other bottom consisting of an extension of one of the end sides of the blank, substantially as and for the purpose described.

2. A paper vessel made of a single blank of suitable material cut and scored to fold into trapeziform with a double bottom, the one bottom formed of an extension of the narrower middle sides of the blank and provided with a middle web portion, said extension cut and scored to cause the middle portion to fold upon itself, and the other consisting of an extension of one of the end sides of the blank, said extension scored diagonally to permit collapsing of the box, substantially as and for the purpose described.

3. A paper vessel made of a single blank of cardboard or other suitable material, cut and scored to fold into trapeziform with a double bottom, one consisting of an extension of the inner sides provided with a middle web portion, cut and scored to fold upon itself, the other bottom consisting of an extension of one of the ends, and marginal flaps to overlap the adjacent side and bottom where they are glued, substantially as shown and in the manner described.

4. A collapsible box made of a single blank of suitable material, cut and scored to fold into trapeziform with a double bottom, the inner bottom formed of an extension of two of the sides provided with a middle web portion, cut and scored to fold upon itself, marginal flaps or extensions integral with said bottom and arranged to fold perpendicularly and form a brace to hold the box firmly in shape when the bottom is pushed to its normal position, substantially as and for the purpose described.

FRANK KNOBELOCH.

Witnesses:
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