Oct. 23, 1923. 1,471,478

H. A. FEIGELMAN

FOLDING PAPER BOX

Filed Nov. 14, 1922 3 Sheets-Sheet 1

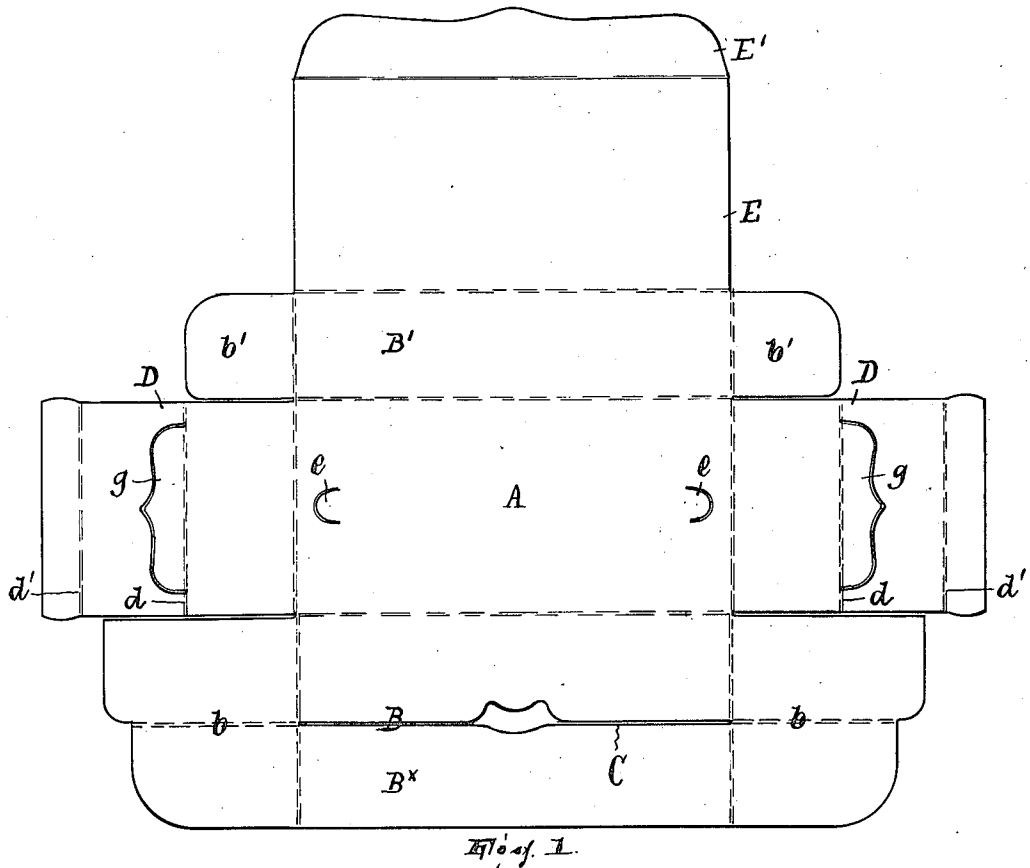


Fig. 1.

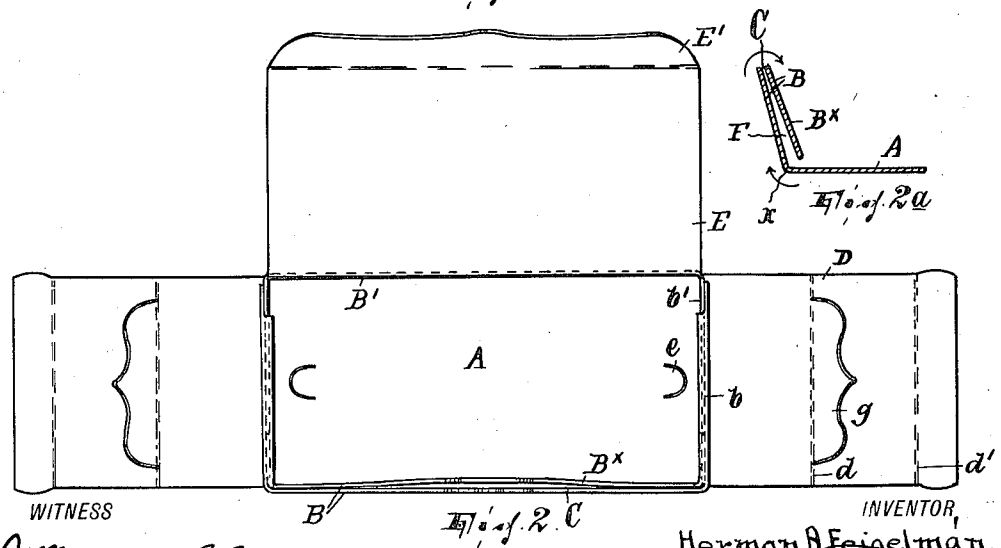


Fig. 2a

Fig. 2.

WITNESS

Wm. L. Bell.

INVENTOR,

Herman A. Feigelman,

BY

John Leonard.

ATTORNEY

Oct. 23, 1923. 1,471,478

H. A. FEIGELMAN

FOLDING PAPER BOX

Filed Nov. 14, 1922 3 Sheets-Sheet 2

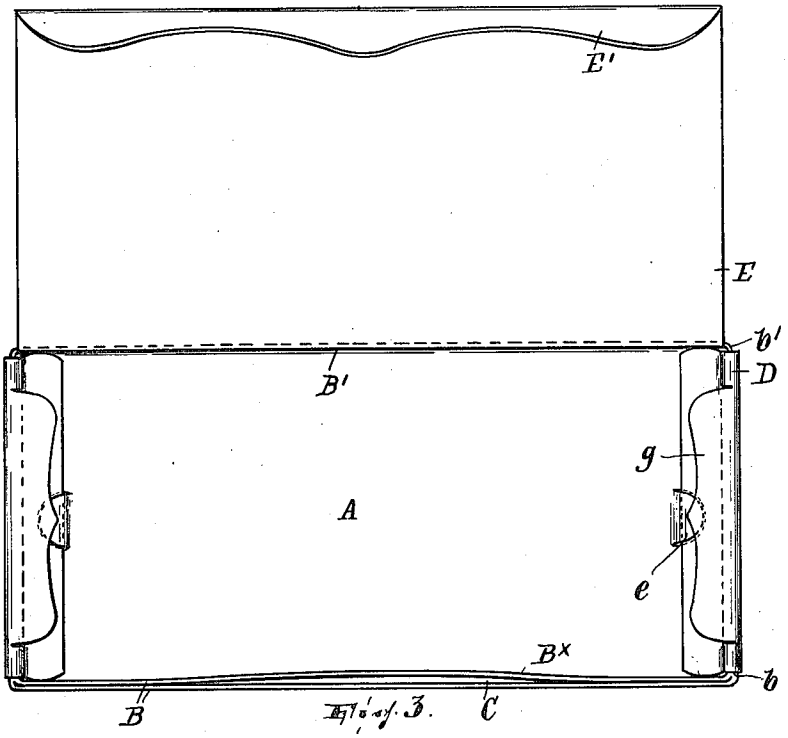


Fig. 3.

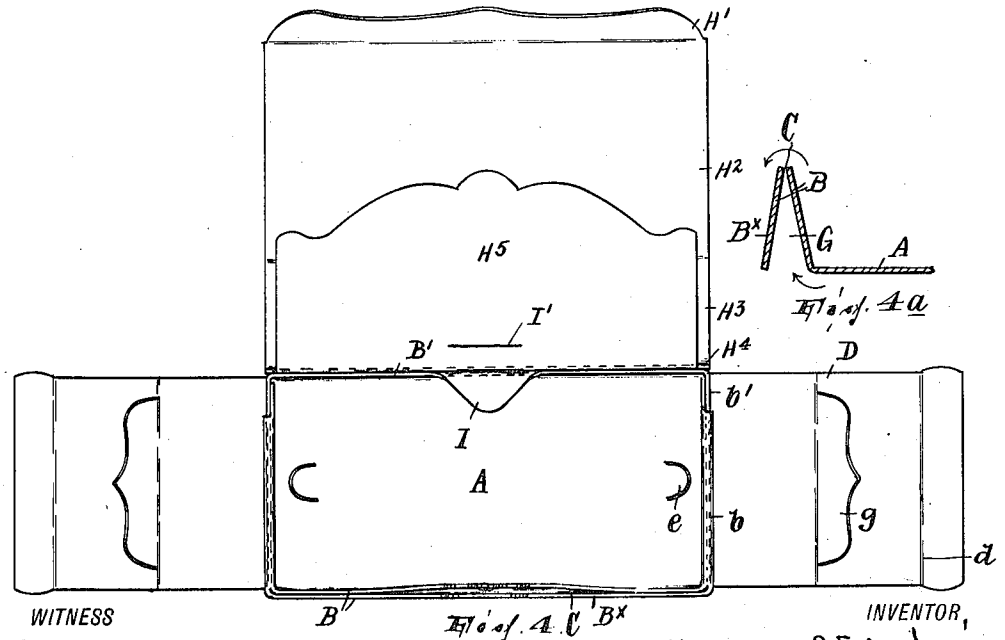


Fig. 4. Fig. 4a.

WITNESS

Wm. L. Bell.

INVENTOR,

Herman A. Feigelman.

BY

John Sinnard.

ATTORNEY.

Oct. 23, 1923. 1,471,478

H. A. FEIGELMAN

FOLDING PAPER BOX

Filed Nov. 14, 1922 3 Sheets-Sheet 3

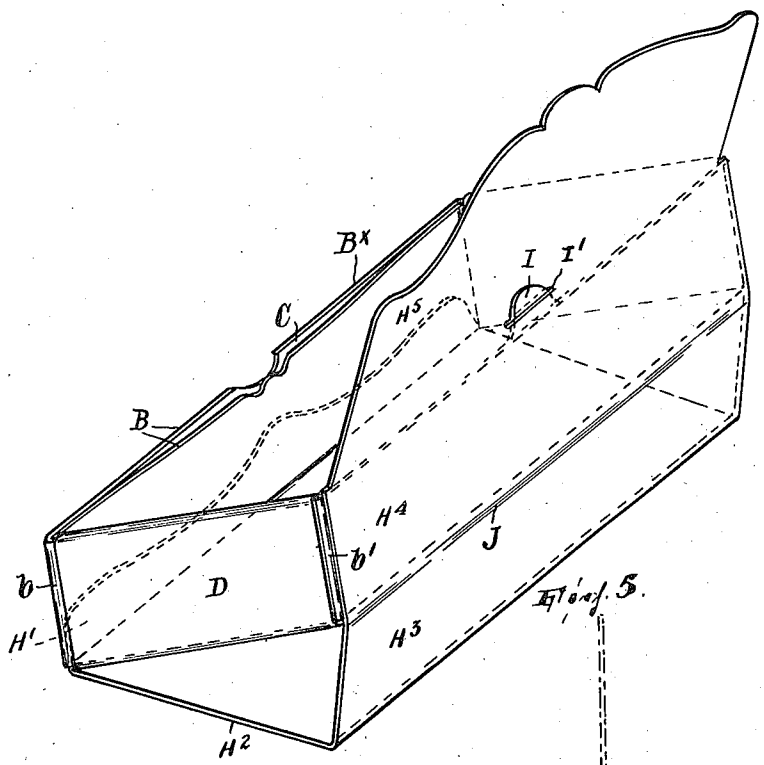


Fig. 5.

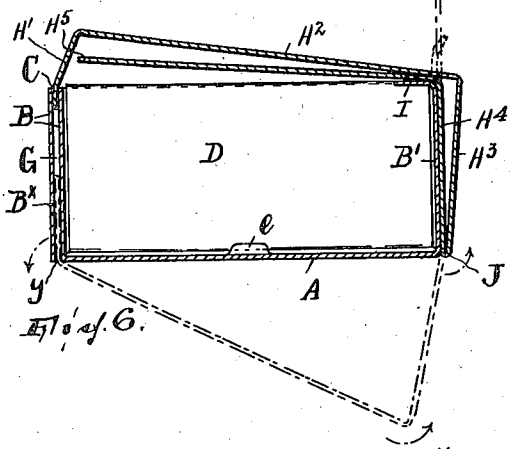


Fig. 6.

WITNESS

Wm. A. Bell.

INVENTOR,

Herman A. Feigelman,

BY

Johnson & Stewart,

ATTORNEY.

Patented Oct. 23, 1923. 1,471,478

UNITED STATES PATENT OFFICE.

HERMAN A. FEIGELMAN, OF PATERSON, NEW JERSEY, ASSIGNOR TO DAVID L. FLEISHER, OF BROOKLYN, NEW YORK.

FOLDING PAPER BOX.

Application filed November 14, 1922. Serial No. 600,900.

To all whom it may concern:

Be it known that I, HERMAN A. FEIGELMAN, a citizen of Russia, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Folding Paper Boxes, of which the following is a specification.

This invention relates to boxes formed of stiff paper or the like sheet material and so manufactured in blank form that the blank may be converted to the box form at the time it is to be put into use. The principal object is to shape the blank so as to facilitate the operation of forming a box therefrom and so as to impart increased stability and strength to the box when formed and reduce the possibility of injuring or weakening the material in manipulating it to form the box; a further object is to shape the blank so that it may be adapted to be folded in such a way in forming the box that the latter can be used with a certain support or stand so as to display the contents of the box.

In the drawings,

Fig. 1 shows the blank;

Fig. 2 shows in plan the blank partly folded to form the box;

Fig. 2ª is a section of a detail of Fig. 2;

Fig. 3 shows in plan the blank fully folded to form the box, except that the cover is in the open position;

Fig. 4 shows in plan the blank in a modified form and partly folded to form the box in a way to be used with the mentioned support or stand so as to display its contents;

Fig. 4ª is a section of a detail of Fig. 4;

Fig. 5 is a perspective view of the box and support or stand appearing in Fig. 4; and

Fig. 6 is a transverse section of what is shown in Fig. 4.

Referring first to the blank shown in Fig. 1, the essential elements thereof are a rectangular bottom-forming portion A and side-wall-forming sections B B′ projecting from opposite sides of said portion and each having extensions *b b′* reaching beyond lines coincident with the other two sides of said portion to such an extent that when said sections are bent up into upstanding relation to said portion and the extensions of each section are bent toward the other section, said extensions will overreach each other, one of said sections, as B, including the extensions *b* thereof, being wider than the other, whereby when the wider section is folded on a line substantially parallel with the adjoining side of said portion and distanced from the latter not less than the width of the other section and said sections are bent into upstanding relation to said portion and the extensions of each section are bent toward the other the extensions of the wider section may receive in their folds the extensions of the other section and a box with a bottom and four sides will be formed. In the preferred form a slit C will be provided in the wider section along the line of the mentioned folding and when so located such slit will be adapted to perform certain functions (to be explained) for which it is intended whether the folding mentioned is accomplished by an inward bending or an outward bending of the material.

The principal element of novelty of my invention is the forming of one of said sections, including the extensions thereof, wider than the other, whereby the folding mentioned and subsequent interlocking of the extensions with each other by causing the folded extensions to receive in their folds the other extensions are possible. This interlocking serves materially to strengthen and increase the stability of the completed box, though I may remark that usually there will be used in connection with it means of some kind for positively maintaining the interlock, as will hereinafter appear.

The folding may be accomplished by the bending of the outlying portion of the section to be folded, as B, either inwardly or outwardly. If the bending is inward, as in Figs. 1 to 3, inclusive, there will exist no crevice along the front lower angle of the finished box, which will be an advantage when the box is used as a container in which to deliver goods (as candy) to the consumer; if the bending is outward, as in Figs. 4 to 6, inclusive, there will exist a crevice along the front lower angle of the finished box, which crevice will be the mouth or entrance to a pocket which will exist between the folded portions of the section in question, and in this crevice may be received the tongue or flap of a support or stand which may be employed so as to adapt the box to be used as a display container.

Before describing in detail these two adap-

tations of the blank I will first describe that form of means to maintain the mentioned interlock which I prefer to use: Included in the blank shown in Fig. 1 are two retaining members D, forming extensions from those sides of the portion A beyond lines coincident with which the extensions *b b'* reach. After the interlocks are formed, as explained, these two members D are bent into upstanding relation to the portion A and then folded on lines *d*, parallel with the adjoining sides of said portion A, down and inwardly of and against the interlocked extensions *b b'*, to be there retained by having their free edge portions (bent again on the lines *d'* so as to lie flat against the portion A) caught under locking tabs *e* formed by providing crescent-shaped slits in said portion A. (The parts marked *g* are simply ornamental tabs formed by suitably slitting the members D contiguous to the lines of folding at *d* and adapted when the members have been folded at *d* to project inward in a plane parallel with the portion A.)

Referring, now, to Figs. 1 to 3, inclusive, it will be seen that if the blank described is manipulated to form the box substantially as already explained and in so forming such box the folding of the section B is so accomplished that its outer portion (designated B^x in Fig. 2^a) is folded inward, the box will be seamless or without a crevice at *x* in said figure, that is, along its front lower corner. The box in this case may be provided with a cover, as the rectangular piece E projecting from the extension B' of the blank in Fig. 1 and itself having an outward flap E'; when this cover is swung over into covering relation to the box its flap E' may be entered into the pocket F (Fig. 2^a) through the mouth or entrance formed therefor by the slit C.

Referring, now, to Figs. 4 to 6, inclusive, it will be seen that if the blank is manipulated as already explained, but so as to bend the outlying portion of section B outwardly (Fig. 4^a) a pocket G will be formed which will have as one mouth or entrance thereto, the crevice *y* (Fig. 6) along the lower front corner of the box, as well as the mouth or entrance to said pocket afforded by the slit C. This mouth or entrance *y* will serve to admit to the pocket a suitable part of means to form a stand or support for the box when used as a display container. The particular form of such stand or support is not material, the one shown (not in itself new) consisting of another blank of sheet material comprising the rectangular foldable leaves H', H^2, H^3, H^4, H^5 arranged in the order named, the leaf H^2 being substantially equal in area to the bottom (A) of the blank, the leaves H^3 H^4 being substantially equal in area to the front or back sides of the walls of the box and the leaves H', H^5 being flaps; the leaf H^4 is suitably secured, as by gluing, to the back wall of the box. Thus, if leaf H' be entered into the mentioned pocket through its mouth *y* a stand or support for the box when used as a display container will be provided, the box then standing at an incline; flap H^5 may have advertising matter displayed thereon and it may be kept in an upright position by a tab I on the top of the section B' (the parts E E' being of course omitted from the blank as used in Figs. 4 to 6) adapted to enter a slit I' in said flap. Or, as shown in Fig. 6, the material may be folded back on itself, as at J and extended over the box, the extreme portion of leaf H' being then introduced through slit C into the mentioned pocket G, leaf H^2 then serving as the cover of the box.

The slit C serves this useful purpose apart from its function as a receiving means for a flap or the like, to wit: that it indicates to the user in forming the box from the blank where the line of folding the section B and its extensions *b* should come, although usually this as well as all other lines of folding will be indicated on the blank shown in Fig. 1 in some way, as by scoring or creasing the same on the dotted lines shown in that figure.

In addition to strengthening the finished box the interlock between the parts *b b'* facilitates the operation of forming the box and avoids creasing the blank too sharply (and so weakening it when the material is not adapted to stand sharp creasing) on the lines of bending between the bottom wall A and sections B B', inasmuch as the interlock keeps the four side walls in upstanding position until the members D can be folded over and secured by the tabs *e*.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A blank of sheet material including a rectangular-bottom-forming portion and side-wall-forming sections projecting from opposite sides of said portion and each having extensions reaching beyond lines coincident with the other two sides of said portion to such an extent that when said sections are bent up into upstanding relation to said portion and the extensions of each section are bent toward the other section said extensions will overreach each other, one of said sections, including the extensions thereof, being wider than the other from said portion outwardly, whereby when the wider section is folded on a line substantially parallel with the adjoining side of said portion and distanced from the latter not less than the width of the other section and said sections are bent up into upstanding relation to said portion and the extensions of each section are bent toward the other section the exten-

sions of the wider section may receive in their folds the extensions of the other section and a box with a bottom and four side walls will be formed.

2. A blank of sheet material including a rectangular-bottom-forming portion and side-wall-forming sections projecting from opposite sides of said portion and each having extensions reaching beyond lines coincident with the other two sides of said portion to such an extent that when said sections are bent up into upstanding relation to said portion and the extensions of each section are bent toward the other section said extensions will overreach each other, one of said sections, including the extensions thereof, being wider than the other from said portion outwardly and having a slit parallel with said portion and spaced therefrom a distance not less than the width of the other section, whereby when the wider section is folded on a line coincident with said slit and said sections are bent up into upstanding relation to said portion and the extensions of each section are bent toward the other section the extensions of the wider section may receive in their folds the extensions of the other section and a box with a bottom and four side walls will be formed.

In testimony whereof I affix my signature.

HERMAN A. FEIGELMAN.