S. KISLOVITZ.

PAPER BOX.

APPLICATION FILED MAR. 18, 1916.

1,213,135.

Patented Jan. 16, 1917.

2 SHEETS—SHEET 1.

Fig. 2.

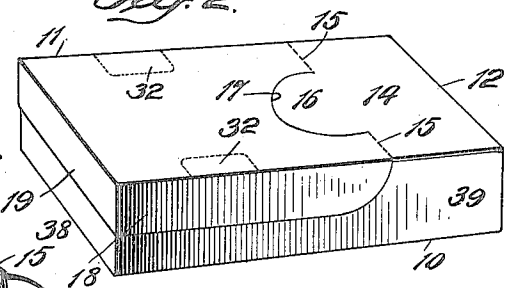


Fig. 1.

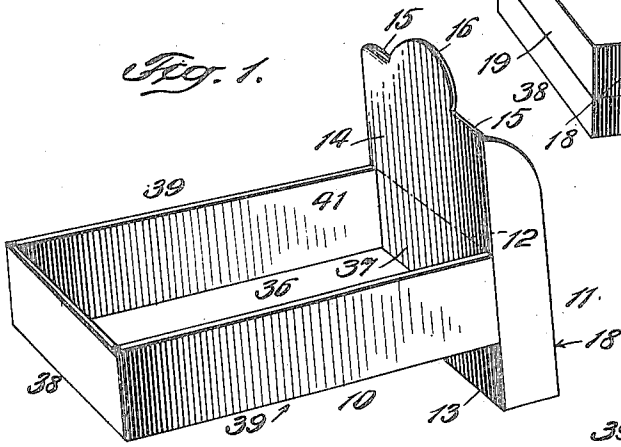


Fig. 3.

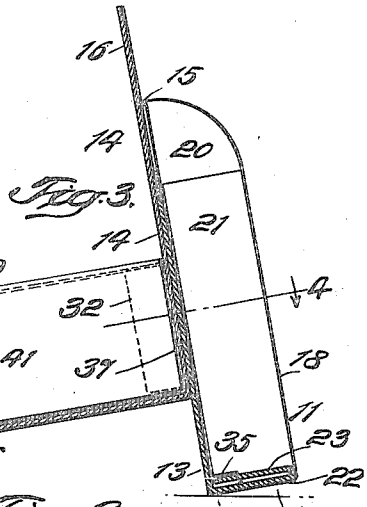


Fig. 5.

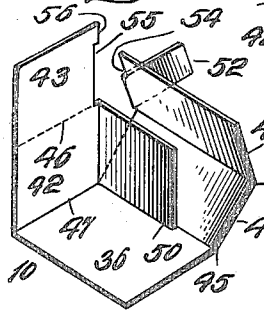


Fig. 4.

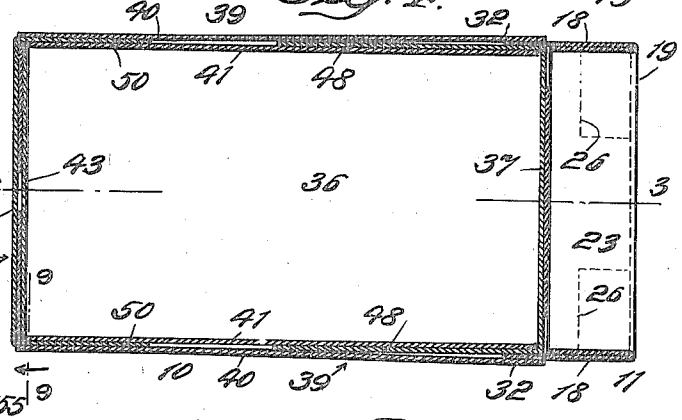


Fig. 6.

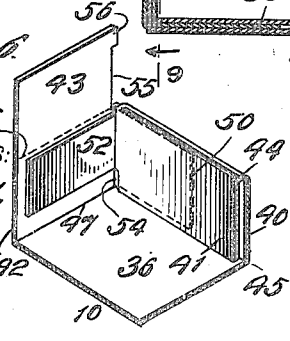
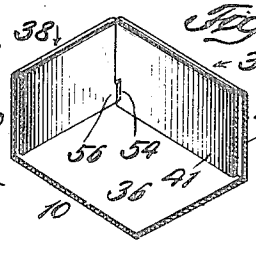


Fig. 7.



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2 SHEETS—SHEET 2.

Fig. 8.

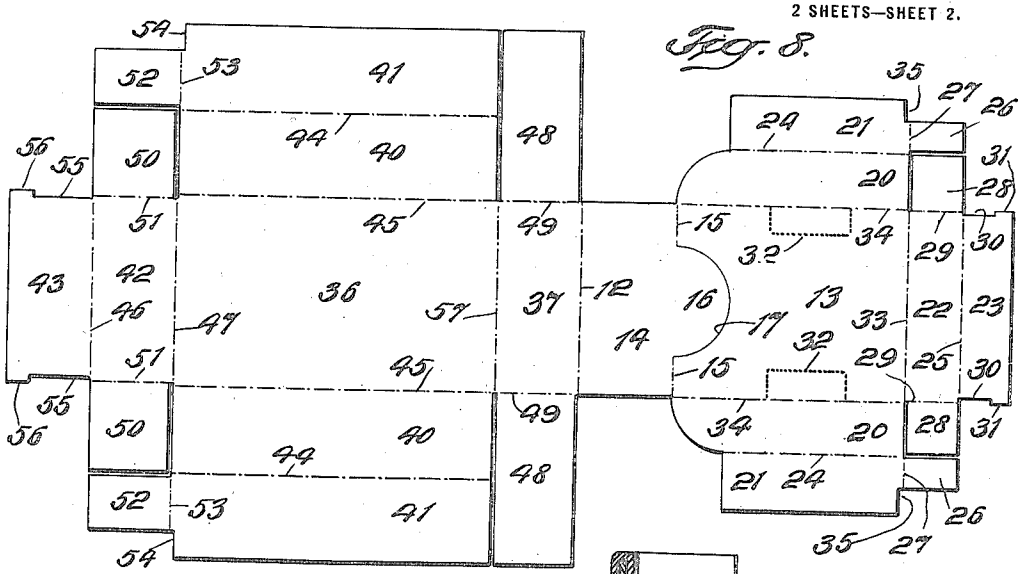


Fig. 9.

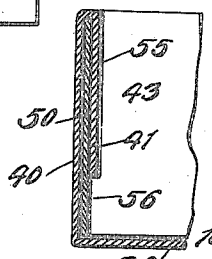


Fig. 10.

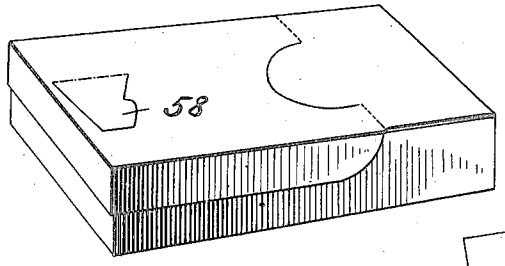


Fig. 11.

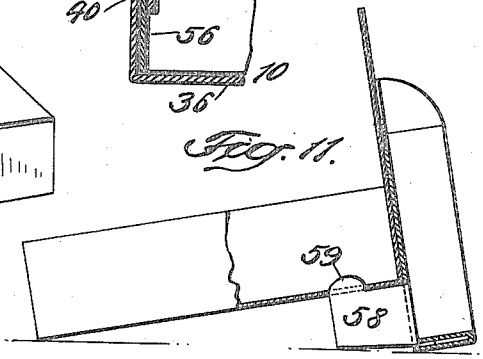


Fig. 12.

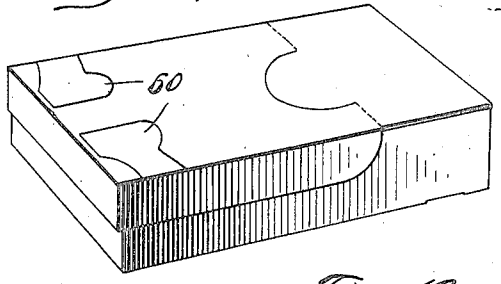


Fig. 13.

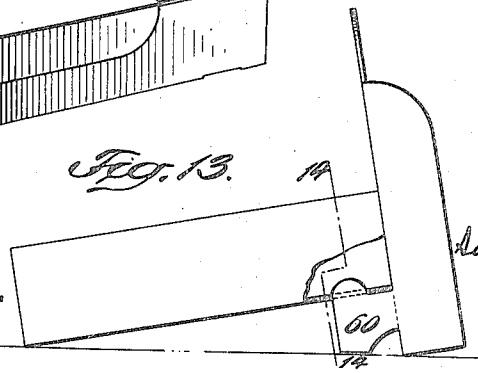
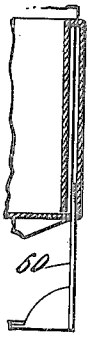


Fig. 14.



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UNITED STATES PATENT OFFICE.

SAMUEL KISLOVITZ, OF NEW YORK, N. Y., ASSIGNOR TO CHARLES A. BLADES, OF ARLINGTON, NEW JERSEY.

PAPER BOX.

1,213,135. Specification of Letters Patent. Patented Jan. 16, 1917.

Application filed March 18, 1916. Serial No. 85,000.

To all whom it may concern:

Be it known that I, SAMUEL KISLOVITZ, a citizen of the United States, and a resident of Bronx, in the county of Bronx and State of New York, have invented certain new and useful Improvements in Paper Boxes, of which the following is a specification.

The invention pertains more particularly to paper boxes in which merchandise may be shipped and which are adapted to be converted into proper display boxes to be placed on a counter, shelf or the like for exhibiting the goods that may be contained in the boxes. Preferably the box will comprise two main parts, to-wit: a body portion and a lid or cover, and the lid or cover will be of such construction that it may be converted into a prop at the rear end of the box for supporting the body of the box in an inclined position. The box is also equipped with means whereby the cover may be interlocked when in its rear position serving as a prop, with the body of the box so that the entire structure will be firm. The body of the box will preferably be formed of two thicknesses of material along its sides and front end, and these two thicknesses of material will be in one integral piece with the sections folded inwardly, one upon the other, so as to make two ply sides and front end for the body of the box. The box is also equipped with what I term a friction lock at the corners of the front end of the body of the box, whereby the inner thicknesses or plies of the sides and front end of the box become securely and nicely locked in position. The front end and front side portions of the cover of the box are in two plies folded and locked together in the same manner that the sides and front end of the body of the box are in two plies folded and locked in folded position.

The box of my invention embraces a number of advantages and many novel features in the details of construction, and the invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which:

Figure 1 is a perspective view of a box embodying my invention, the same being shown in its open position for displaying the contents of the box, the cover of the box having been doubled upon itself and turned rearwardly to serve as a prop for the body of the box; Fig. 2 is a perspective view of the box shown in closed position; Fig. 3 is a longitudinal section through the box, taken on the dotted line 3—3 of Fig. 4, Fig. 3 showing the box in its open or display position; Fig. 4 is a horizontal section through the box, taken on the dotted line 4—4 of Fig. 3; Fig. 5 is a detached perspective view of one sectional front corner portion of the body of the box and illustrates one step in the formation of the same from the blank; Fig. 5 illustrates in partial formation the lock at each corner of the front end of the box for securing the inner plies of the sides and the end of the box in position; Fig. 6 is a corresponding perspective view of the same showing a further step in the formation of the front corners of the box from the blank; Fig. 7 is a corresponding view, showing one front corner portion of the box in its completely formed condition; Fig. 8 is a detached top view of the blank from which the box shown in Figs. 1 to 7 inclusive is formed, this being an integral sheet properly slit and scored preparatory to being folded into the box formation shown in Fig. 1; Fig. 9 is a sectional view through one front corner portion of the box, taken on the dotted line 9—9, of Fig. 4; Fig. 10 is a perspective view of a modified form of my invention, the modification residing only in the construction of the means for holding the box lid to serve as a prop at the rear end of the body of the box; Fig. 11 is a sectional view, partly broken away, of the same and illustrates the means for securing the lid of the box when in its open position supporting the body of the box in display position; Fig. 12 is a perspective view of a further slightly modified construction of box embodying my invention, the modification residing merely in the character of means provided for supporting the lid of the box in its prop-position; Fig. 13 is a side elevation, partly broken away and partly in section, of the same, the lid or cover being shown in its open position, and Fig. 14 is a sectional view through a portion of the box taken on the dotted line 14—14 of Fig. 13.

In the drawings, 10 designates the body of the box as a whole and 11 the cover therefor, and said body and said cover are in one integral piece of paper and formed from the blank, shown in Fig. 8. The cover is hinged to the rear end of the body of the box along

the fold-line 12 and is in two connected sections 13, 14 joined together along hinge or weakened lines 15. Intermediate the inner ends of the weakened lines 15, the section 14 of the cover has a projecting portion 16, which normally, when the cover is closed, lies within a recess 17 cut in the section 13 of the cover, as shown in Fig. 2. When the cover is to be placed in its open or prop position, the weakened lines 15 permit the front section 13 of the cover to be folded over upon the section 14, and then the folded cover is turned rearwardly and downwardly on the hinge-line 12 into its prop position, shown in Figs. 1 and 3, and at this time the projection 16 on the cover section 14 extends upwardly to afford a larger advertising space than would be possible if said section were not provided. The portions of the blank which form the cover sections 13, 14 are numbered 13, 14 in Fig. 8. The section 14 of the cover has no side flanges to pass downwardly upon the sides of the body of the box, and hence when the cover is in its open or prop position, shown in Fig. 1, the then front face of the cover section 14 is fully exposed and appropriate to bear any advertisement that it may be desired to place thereon. The cover section 13 is formed with side and front end flanges to pass downwardly upon the sides and front end of the body 10. The side flanges of the cover section 13 are numbered 18 and the front end flange 19, and these flanges are each of two ply, which, in Fig. 8, I will number 20, 21 for the side flanges 18 and 22, 23 for the front flange 19. The plies 20, 21 are connected by weakened lines 24 so that the plies 21 may be folded over on the plies 20 and become the inner layers of the side flanges 18. The plies or sections 22, 23 are connected by a weakened line 25 so that the section 23 may be folded over upon the section 22 and become the inner thickness of the front end flange 19. The side flange sections 21 are formed at their outer ends with projecting lips 26 (Fig. 8) connected by weakened lines 27 with said sections 21, and at the lateral ends of the section or ply 22 are lips 28 connected with the body of the section 22 by weakened lines 29. The ends of the ply or front end section 23 are recessed, as at 30, the recess being substantially the width of the lips 26 and leaving at the outer edge of the ply or section 23 small end projections 31. The cover section 13 is also formed with locking lips 32 extending inwardly from the fold or weakened lines 34 and joined to the body of the cover by a weakened line, so that when desired the user of the box may, with his fingers or thumbs, press the lips 32 outwardly in a direction from the top of the box so that said lips may finally serve as means for locking the cover in its prop position, as indicated in Figs. 1 and 3. The formation of the front corners of the box cover is substantially the same as the formation of the front corners of the body of the box, and the method of folding the side and end flanges of the cover are substantially illustrated in Figs. 5, 6 and 7, which illustrate the method of folding the parts to form the front corners of the body of the box. In folding the plies 20, 21, 22, 23 for the front end portion of the cover of the box, the plies 22, 23 will be turned upwardly on the weakened or fold line 33 and the lips 28 thereof will be turned at right angles to the body of the ply 22 so as to extend edge-wise of the box-lid. The plies 20, 21 will then be turned upwardly on the weakened lines 34 and then the plies 21 will be folded inwardly against the plies 20 and lips 28, and this will result in the lips 26 being first bent outwardly by contact with the edge of the end ply 23 and then folding downwardly along the face of the ply 22 and at right angles to the body of the ply 21, this being an operation illustrated in Figs. 5 and 6, the lip corresponding with the lip 26 being shown in Fig. 6 as having been folded inwardly against the lower ply of the end of the body of the box. After the plies 21 have both been folded inwardly against the lips 28 and the lips 26 have thereby been carried inwardly and positioned to lie along the face of the then vertical lower end ply 22, the outer end ply 23 is folded on the weakened line 25 over upon the ply 22 and when this is being done, the lugs or projections 31 on the ends of the ply 23 pass downwardly below the lips 26 and enter the recesses formed at the angles 35 at the junction of the lips 26 with the plies 21, with the result that said projections pass below the then lower edges of the lips 26 at the corners of the structure and serve as means for locking the side and end flanges of the cover firmly in their folded position.

In accordance with my structure of cover I may form the box of thin inexpensive card-board or paper of a kind commonly used for light boxes, but secure such strength in the box that the box may be very properly used for holding reasonably heavy material and for displaying the same on a counter, show case or the like. So far as the cover of the box is concerned, my invention resides in the manner of forming the two ply side and front end flanges and locking them in folded position and in the fact that the cover is hinged at its rear end to the body of the box and is in two unequal hinged sections, in this instance 13, 14, capable of being folded one upon the other and then turned into substantially vertical position at the end of the box.

The body 10 has a bottom 36, a rear end 37, a front end 38 and sides 39, and said sides and front end are each formed of two

plies numbered, or the sides, 40, 41, respectively, (Fig. 8) and for the front end 42, 43, respectively. The plies 40, 41 are connected by weakened lines 44 and the plies or sections 40 are connected with the bottom 36 along weakened lines 45. The end plies or sections 42, 43 are connected along a weakened or fold line 46 and with the bottom 36 along a weakened line 47. The end section 37 is formed with laterally extending lips 48 joined to the section 37 along weakened or fold lines 49. The front ply or section 42 is formed with laterally extending lips 50 joined to the section 42 along weakened lines 51. The plies or sections 41 of the sides of the body of the box have, in the blank, forwardly extending lips 52 joined to the body of the plies or sections 41 along weakened lines 53, and at the forward ends of said plies or sections 41 recesses 54 are formed. The lateral end edges of the front ply or section 43 are recessed, as at 55, leaving at the outer lateral edges of said ply or section 43 projections 56 corresponding with the projections 31 on the front end of the cover of the box.

In folding up the sections of the blank to form the body 10 of the box, I may fold the lips 48 inwardly at right angles to the rear end section 37 and then turn said section 37 upwardly on the weakened line 57, thus causing the lips 48 to extend lengthwise along the weakened lines 45 at the side edges of the bottom 36. I then turn the lips 50 inwardly on the weakened lines 51 to stand at right angles to the ply or section 42 of the front end portion of the blank and then turn said front end portion or sections 42, 43 upwardly on the weakened line 47 and thereby cause the lips 50 to extend lengthwise along the weakened lines 45 at the lateral edges of the bottom 36, this position of the sections 42, 43 and lips 50 being illustrated in Fig. 5. Thereupon I fold the side plies or sections 40, 41 upwardly on the weakened lines 45 and then fold the sections 41 inwardly and downwardly upon the sections 40 and also upon the lips 48, 50, then extending along the weakened lines 45, and this results in the lips 52 of the plies or sections 41 being first turned outwardly, as shown in Fig. 5, and then as the sections 41 are folded downwardly, in said lips being carried against the inner face of the end sections or plies 42, 43 and then downwardly along the inner face of the section 42, as I illustrate in Fig. 6. Thereafter the end section or ply 43 is turned over inwardly and downwardly upon the section or ply 42 and said lips 52 and the projections 56 at the lateral ends of said section or ply 43 are entered within the recesses 54 at the ends of the side sections or plies 41, as shown in Fig. 7, thereby locking the side and end sections or plies in their folded position and giving permanent form and stability to the body of the box. The special way provided by me for forming the sides and front end of the body of the box and locking the several plies thereof in folded position without the use of paste or the like, permits me to use paper or board of rather thin character in the manufacture of the box and yet produce a box of considerable rigidity and capable of receiving articles for shipment and of serving as a display box on a counter, shelf or the like.

After the body of the box has been folded in the manner described to its complete form shown in Figs. 1 and 2, the cover 11 may be closed over the said body on the hinge or weakened line 12, thus leaving the box in the condition shown in Fig. 2. When it is desired to display the contents of the box, the cover 11 will be converted into the prop position illustrated in Fig. 1, and in carrying out this operation the front section 13 of the cover will be turned over upon the rear section 14 thereof on the hinge or weakened lines 15, and then the folded cover will be turned rearwardly and downwardly on the hinge or weakened line 12 into the prop-position, shown in Fig. 1. The hinge-line 12 permits the inner cover section 14 to be turned upwardly in line with the rear end of the body of the box but prevents said section 14 from being turned over against the outer face of said end, the purpose being that said section 14 shall extend upwardly above the body of the box and display an advertisement or other data. In order to lock the cover 11 in its prop position, I preliminarily while turning the section 13 over upon the section 14 force the lips 32 outwardly at right angles to the face of the top section 13, and then upon moving the folded cover to its prop position, I cause said lips 32 to enter between the outer plies or sections 40 of the sides of the box and the lips 48 extending along said sections, or to the position shown by dotted lines in Fig. 3, thereby securing the folded cover in its prop position. The lips 32 become frictionally held between the sections or plies 40 of the sides of the box and the adjacent faces of the lips 48 and thereby a reasonably secure lock is formed for maintaining the box in its display position, shown in Fig. 1.

In Figs. 10 and 11 I illustrate the same box shown in Figs. 1 to 9 inclusive, except that as a substitute for the two locking lips 32 of Figs. 2 and 8 I provide the cover section 13 with a brace lip 58, which when the cover is to be converted into its folded prop position, may be pressed outwardly and then when the cover has been given its prop position, have a projection 59 on said lip 58 forced upwardly through a slot in the bottom of the body of the box, as shown in Fig. 11, said lip then serving as the means for

locking the folded box cover to the body of the box. The lip 58 is merely a substitute for the two lips 32, shown in Fig. 8.

The construction shown in Figs. 12, 13 and 14 involves as a modification the employment of two lips 60 in lieu of the one lip 58, shown in Fig. 10, said lips 60 extending out to the weakened lines at the edges of the cover and being adapted to be turned outwardly from the cover and finally, at their upper edges, inserted upwardly through the bottom of the box between the two plies or sections of the sides thereof for the purpose of locking the cover in its folded prop position, shown in Fig. 13. Since the body of the box and the cover therefor, shown in Figs. 1, 2, 3 and 8 correspond exactly with the constructions shown in Figs. 10 to 14 inclusive with the exception of the incidental props 58, 60, I deem it unnecessary to enter into a detailed description of such constructions.

In each of the several forms of the invention hereinbefore described, the cover of the box is in two unequal sections, the section 13 being longer than the section 14, and this construction is desirable, since it permits the cover to be given its prop position in which it holds the body of the box in an inclined or display position without, at the same time, projecting unduly upwardly at the rear end of said body portion. It is quite desirable that a portion of the cover project upwardly at the rear end of the body of the box, as shown in Figs. 1 and 2, to bear a suitable advertisement or the like having reference to the goods on display in the box, but it would be objectionable if the cover extended upwardly to an undue extent, because in such case the cover would operate as an obstruction to conceal other articles which might be on display on a shelf, counter or the like.

What I claim as my invention and desire to secure by Letters Patent, is:

1. A box comprising a body portion, and a cover therefor hinged to the rear end of said body portion, said cover being formed of transverse sections connected by a hinge-line, and the forward section being longer than the rear section and capable of being folded thereon and therewith turned into a substantially vertical position supporting the body of the box in an inclined display position, and the hinge connecting the said rear cover-section with the rear end of said body permitting said section to be turned upwardly to a vertical position and being adapted to arrest said section in such position.

2. A box comprising a body portion, and a cover therefor hinged at the rear end of said body portion, said cover being formed of transverse sections connected by an intercepted hinge-line, and the forward section being longer than the body of the rear section and capable of being folded thereon and therewith turned into a substantially vertical position supporting the body of the box in an inclined display position, the rear section of the cover between the sections of said intercepted hinge-line having a forwardly projecting portion cut from the forward section of the cover and affording a prominent advertising surface when the cover sections are in folded position supporting the body of the box.

3. A box comprising a body portion, and a cover therefor hinged to the rear end of said body portion, said cover being formed of transverse sections connected by a hinge-line, and the forward section being longer than the body of the rear section and capable of being folded thereon and therewith turned into a substantially vertical position supporting the body of the box in an inclined display position, and said cover being also formed with means for locking it when the box is to be given its display position, to the body portion of the box.

4. A box comprising a body portion, and a cover therefor hinged to the rear end of said body portion, said cover being formed of transverse unequal sections connected by a hinge-line, and the forward section being longer than the rear section and capable of being folded thereon and therewith turned into a substantially vertical position supporting the body of the box in an inclined display position, and said forward section of the cover having side and front end flanges to pass upon the adjacent portions of the body of the box, while the rear section of said cover has no edge flanges and thus is permitted, when the box is in display position, to present a plain surface in line with the rear end of the body of the box.

5. A box comprising a body portion, and a cover therefor hinged to the rear end of said body portion, said cover being formed of transverse unequal sections connected by a hinge-line, and the forward section being longer than the body of the rear section and capable of being folded thereon and therewith turned into a substantially vertical position supporting the body of the box in an inclined display position, and said forward section being formed integrally with a hinged lip adapted to engage said body portion and lock said cover thereto when said cover is in its folded prop-position.

6. A box comprising a body portion, and a cover therefor hinged to the rear end of said body portion, said body portion having sides formed of two layers of material with the inner layer folded inwardly and downwardly upon the outer layer, and said cover being formed of transverse sections connected by a hinge-line, and the forward section

being longer than the body of the rear section and capable of being folded thereon and therewith turned into a substantially vertical position supporting the body of the box in an inclined display position, and the forward section of said cover being formed adjacent to its side edges with hinged lips adapted, when the box in converted into its display position, to be inserted between the thicknesses at the rear ends of the sides of the body of the box, thereby serving to lock the cover and body together.

7. A paper box comprising a body-portion, and a cover therefor hinged to the rear end of said body portion, said cover being formed of transverse sections connected by a hinge line, and the forward section being longer than the rear section and capable of being folded thereon and therewith turned into a substantially vertical position supporting the body of the box in an inclined display position, and said forward section of the cover having side and front end flanges to pass upon the adjacent portions of the body of the box and said flanges being of double thickness with the sections of the paper blank therefor folded one upon the other and then into vertical position, the said flanges being interlocked by lips at the ends of the inner member of the blank for the front flange being turned at right angles to said member and inclosed between the layers of the side flanges, and by lips on the outer members of the blank for the side flanges being turned at right angles thereto and inclosed between the two thicknesses of the front flange, the outer member of the blank for the front flange being formed with projecting shoulders (31) to interlock with said outer members for the side flanges when the parts are folded together.

8. A paper box comprising a body-portion and a cover therefor, said body portion having two-ply sides and front end, the sections of the blank therefor being folded one over upon the other and then into vertical position, and said sides and end being interlocked at the front corners of the box by lips at the lateral ends of the inner section of the blank for the front end being turned at right angles to said section and folded between the sections of the sides, and by lips on the outer sections of the blank for the sides being turned at right angles to said outer sections and folded between the two thicknesses of the front end.

9. A paper box comprising a body portion and a cover therefor having side and front end flanges to pass upon the adjacent portions of the body of the box, said flanges being of double thickness, the members of the paper blank therefor being folded one upon the other and then into vertical position, and the said flanges being interlocked at the front corners of the cover by right-angle lips at the ends of the inner member of the blank for the front flange which lips are folded between the layers of the side flanges, and by right-angle lips on the outer members of the blank for the side flanges which lips are folded between the layers of the front flange.

10. A paper box comprising side and end portions of double thickness, the members of the paper blank therefor being folded one upon the other and then into vertical position, said side and end portions being interlocked at adjoining ends which form the corner by a lip at the lateral end of the inner member of the blank for one of said portions, said lip being turned at right angles to said inner member and inclosed between the layers of the other portion, and by a lip on the lateral end of the outer member of the blank for said other portion, said lip being turned at right angles thereto and inclosed between the two layers of the first-mentioned portion, and the outer member of the blank for said first-mentioned portion being formed at its end with a projecting shoulder to interlock with the outer member of the blank for said other portion.

11. A paper box, and a cover therefor hinged to the rear end of said body portion, and the whole being in one integral piece or blank, the sides and front end of the said body portion being of double thickness, the members of the paper blank therefor being folded one upon the other and then into vertical position, and lateral ends of said members having integral hinged lips to be folded between the layers of adjacent sides and ends respectively, and said cover having side and front end flanges of double thickness, the members of the blank therefor being folded one upon the other and then into vertical position, and said flanges having at their adjoining ends means for locking them together.

12. A paper box comprising side and end portions, the side and front end portions being of double thickness, the members of the paper blank therefor being folded one upon the other and then into vertical position, and the rear end of the box being of single thickness and having at its ends hinged extensions or lips folded between the thicknesses of the sides of the box, and said side and front end portions being interlocked with each other at adjoining ends to form the corners by lips at the lateral ends of the inner member of the blank for the front portion, said lips being turned at right angles to said inner member and inclosed between the layers of the sides, and by lips on the front lateral ends of the outer members for the sides and which said lips are turned at right angles to said outer members and inclosed between the two layers of the front

of the box, and the outer member of the blank for said front being formed on its ends with projecting shoulders to interlock with the outer members of said sides when the parts are folded together.

13. A box comprising a body portion, and a cover therefor hinged to the rear end of said body portion, said cover being formed of transverse sections connected by a hinge-line, and the forward section being longer than the rear section and capable of being folded thereon and therewith turned into a substantially vertical position supporting the body of the box in an inclined display position, and said box being provided with interlocking parts for securing said cover in its vertical prop-position.

Signed at New York city, in the county of New York and State of New York, this 16th day of March A. D. 1916.

SAMUEL KISLOVITZ.

Witnesses:

ARTHUR MARION,

CHAS. C. GILL.