March 16, 1937. P. W. FLEISCHER 2,074,314

CIGAR BOX

Original Filed Sept. 18, 1931 3 Sheets-Sheet 1

Fig. 1.

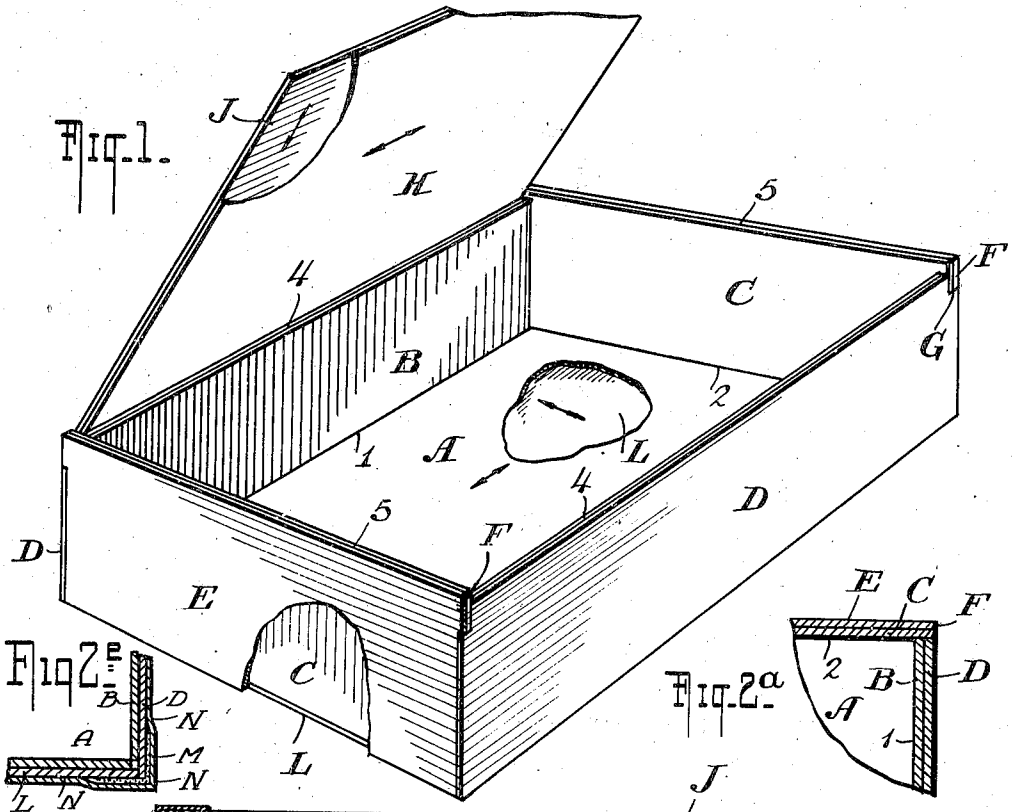


Fig. 2a.

Fig. 2b.

Fig. 2.

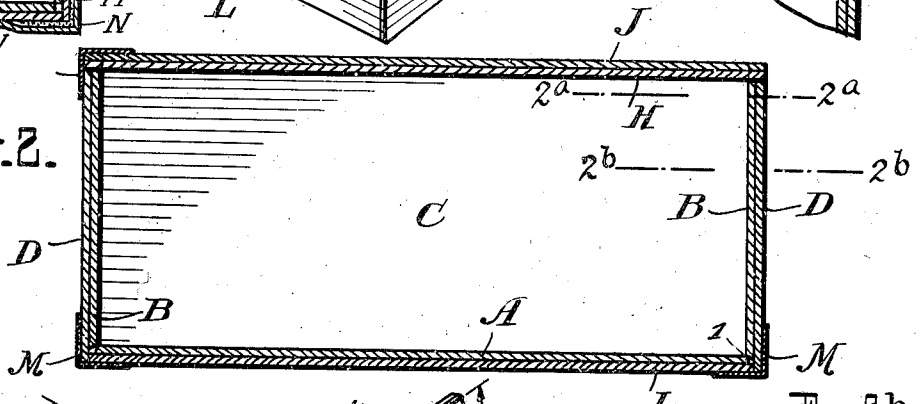


Fig. 3.

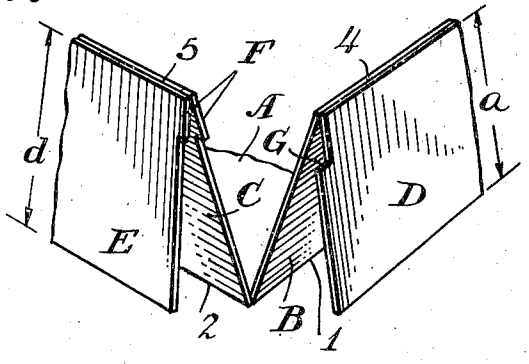
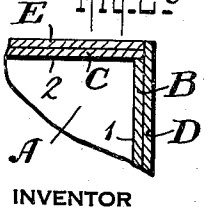


Fig. 2b



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CIGAR BOX

Original Filed Sept. 18, 1931 3 Sheets-Sheet 2

Fig. 4.

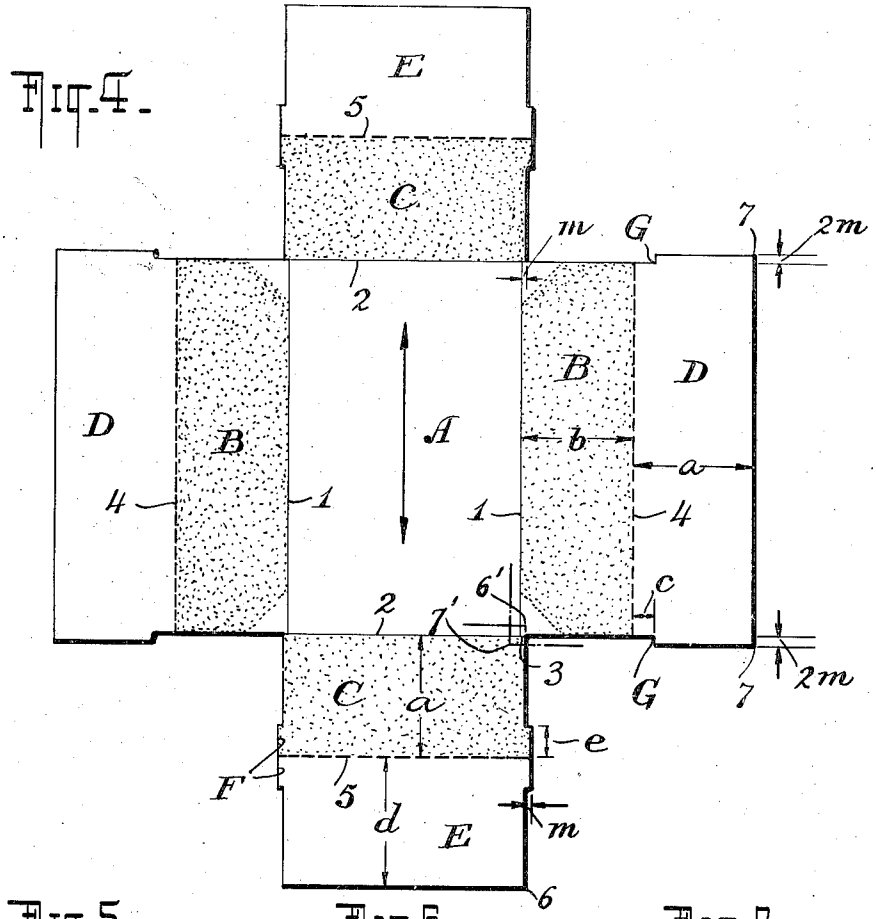


Fig. 5.

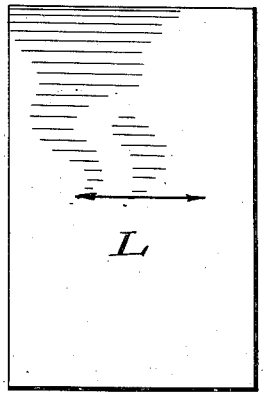


Fig. 6.

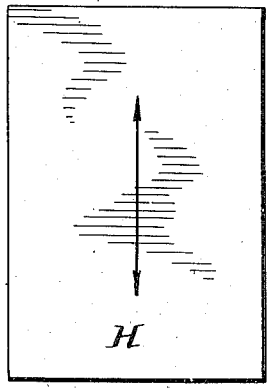
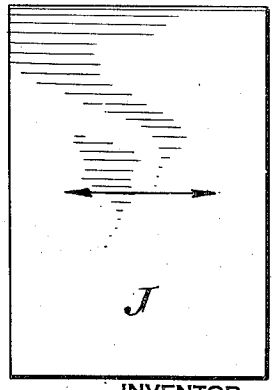


Fig. 7.



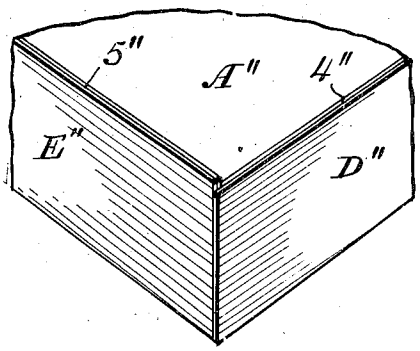
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CIGAR BOX

Original Filed Sept. 18, 1931 3 Sheets-Sheet 3

Fig. 10.



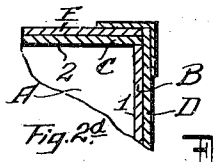


Fig. 2d.

Fig. 11.

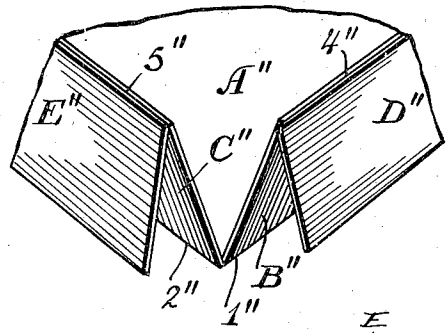
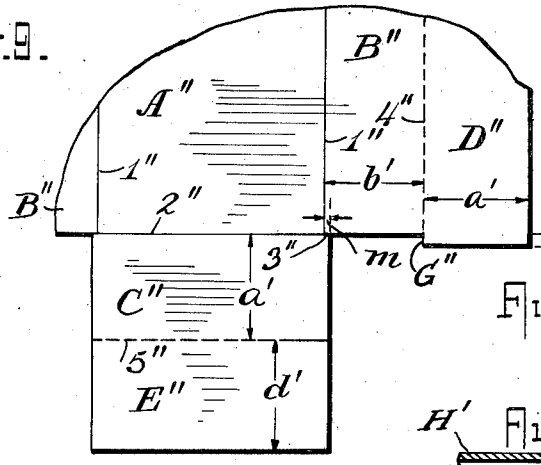


Fig. 9.



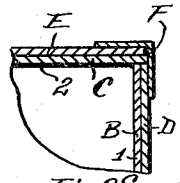


Fig. 2c

Fig. 13.

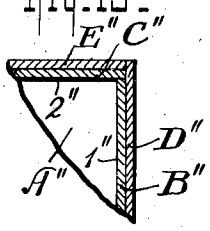


Fig. 12a.

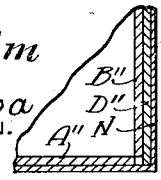


Fig. 12.

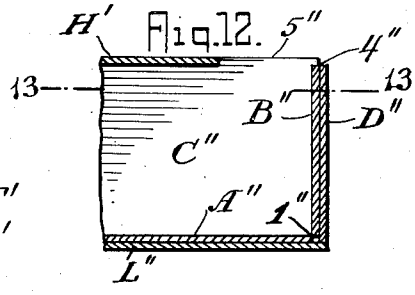
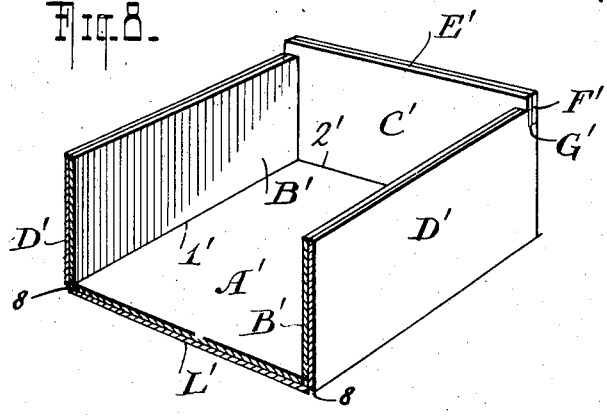


Fig. 8.



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UNITED STATES PATENT OFFICE

2,074,314

CIGAR BOX

Paul W. Fleischer, Weehawken, N. J., assignor to A. H. Balliet Corporation, Allentown, Pa., a corporation of Pennsylvania

Application September 18, 1931, Serial No. 563,495
Renewed June 14, 1935

28 Claims. (Cl. 229—30)

My invention relates to boxes made of cardboard, paper, fibre, or similar material and intended to be used as containers for cigars or other articles.

The object of my present invention is to provide an acceptable substitute for the wooden frame boxes customarily employed for cigars and the like, such substitute to be made of cardboard or similar material, and to possess a strength and appearance equal to those of wooden boxes, while at the same time having the advantage of reduced cost and weight, and greater ease of manufacture. As regards the appearance of the box, it is of importance that its edges be strong, sharply defined, and "square", that is, having the proper angle. Special difficulties were encountered in meeting these several requirements, and particularly the one relating to the character of the edges. I have succeeded in overcoming these difficulties by my invention, and in producing a box of the type mentioned, satisfactory in every respect.

As examples, three embodiments of my improved box have been illustrated in the accompanying drawings, with reference to which the invention will now be explained in detail.

Fig. 1 is a perspective view showing one form of my improved box, with the cover open and parts broken away; Fig. 2 is a vertical section of such box; Figs. 2*a* and 2*b* are sections on the corresponding lines of Fig. 2; Figs. 2*c* and 2*d* are sections corresponding to Figs. 2*a* and 2*b* but showing a modification; Fig. 2*e* is a section corresponding to the lower right hand portion of Fig. 2, but with the addition of covering N; Fig. 3 is a detail perspective view showing a corner of the box before folding it to final shape; Fig. 4 is a plan view of the blank from which the body of the box is formed; Fig. 5 is a plan view of an extra bottom which may be used in conjunction with said body; Figs. 6 and 7 are plan views of two pieces of cardboard or the like from which the cover of the box is formed; Fig. 8 is a partial perspective view illustrating a second embodiment of my improved box; Fig. 9 is a partial plan view of a blank from which the box body of a third embodiment is formed; Fig. 10 is a perspective view of one corner of such box body, in the finished condition; Fig. 11 shows the same corner in partly open position, as it is before being folded fully to final shape; Fig. 12 is a partial vertical section of said third embodiment; Fig. 12*a* is a fragmentary section corresponding to Fig. 12, but with the omission of bottom portion L'' and with the addition of a decorative covering N, and Fig. 13 is a horizontal section on line 13—13 of Fig. 12.

In the construction illustrated by Figs. 1 to 7, the box body may be formed in a single piece from a blank of the form shown in Fig. 4, in a view looking from the outer side of the box bottom. The blank comprises a rectangular bottom portion A the outline of which is marked by four score lines 1 and 2 extending lengthwise and crosswise respectively. These score lines are cut from that face of the blank which is up in Fig. 4, that is, from what is regarded as the outside of the box, and leave adjacent the inside of the box (at the under face in Fig. 4) hinges by which the said bottom portion is connected with side portions B and end portions C.

The side portions B are of the same length as the hinge or score lines 1, but the end portions C are of slightly greater length than the corresponding hinge or score lines 2, the excess *m* at each end being equal to the thickness of the material of which the blank is made. The score lines 2 extend only partly through the material up to the points where they meet the score lines 1, but at the extensions 3, in the continuation of the score lines 2, the material is cut through entirely, so that there will be no direct connection between the side portions B and those parts of the end portions C which extend beyond the score lines 2.

At the edges farthest from the bottom portion A, the side portions B are connected, by score lines 4 from that face of the blank which is down in Fig. 4 and which is to be the inside of the box, and leave adjacent the outer face of the box (the upper face in Fig. 4) uncut material forming hinges, with flaps D adapted to form side walls in conjunction with the side portions B. As indicated by the dotted lines in Fig. 4, the score lines 4 are on the face of the blank opposite to that on which the score lines 1 and 2 are provided.

The height *a* of the flaps D is shown as exceeding the height *b* of the side portions B by an amount equal to twice the thickness of the material of which the blank is made, so that the lower edge of flap D will reach one thickness of material below the lower face of the blank when it forms the bottom of the box. The edges at the ends of the portions B are in line with the score lines 2, and the edges at the ends of the flaps D, for a distance *c*, are in continuation of said edges of the portions B, but toward their free ends the flaps D are widened, at each side, by an amount 2*m* equal to twice the thick-

ness of the material of which the blank is made.

At the edges farthest away from the bottom portion A, the end portions C are connected, by score lines 5 forming hinges, with flaps E adapted to form end walls in conjunction with the end portions C. As indicated by the dotted lines in Fig. 4, the score lines 5 are cut from that face of the blank opposite to that on which the score lines 1 and 2 are provided.

The end portions C are shown as having a height a equal to that of the side flaps D, and therefore exceeding the height b of the side portions B, by twice the thickness of the material, or in other words, by $2m$, so that $a=b+2m$. The height d of the end flaps E is shown as exceeding the height a of the end portions C by an amount equal to twice the thickness of the material of which the blank is made. In other words, $d=a+2m$.

As previously stated, the width of each end portion C is greater than the length of the score line or hinge 2, by an amount equal to m, at each side of such end portion. The parallel side edges of the end flaps E are in line with the corresponding side edges of the end portions C. Adjacent to the score line or hinge 5, however, both the end of C and the end flap E are widened to form end portions extending to an amount m (thickness of the material) at each side, and for a distance or height e which exceeds the distance or height c by twice the thickness of the material. In other words, $e=c+2m$.

A blank of the formation described above is laid on a table or other suitable support in such a position that those faces of the portions A, B, C which will later form the inner surfaces of the box body, i. e., the upper bottom face and the inner face of the side and end walls, will engage such support, while the opposite faces will be exposed and on top, Fig. 4 illustrating such position. This shows the blank with its "outer" face up. Glue or other suitable adhesive is then applied to the exposed surfaces of the side portions B and end portions C, except to those corners of the side portions which are adjacent to the bottom portion A; the stippling in Fig. 4 indicates this adhesive coating. The end flaps E are then folded upwardly as considered in Fig. 4, swinging them on the hinges 5, so as to lay them on top of the respective end portions C.

Since the height d of the end flaps E is greater than the height a of the end portions C, the outer corners 6 of said flaps will, when folded down as described, partly overlap the side portions B, as indicated at 6', and the corresponding corners of the side portions are left free of adhesive, so that the flap corners 6 may not stick to said side portions, while the flaps E stick to the end portions C. Thereupon the side flaps D are folded upwardly about the hinges 4, against the glued surfaces of the side portions B, the outer corners 7 of the flaps D coming to lie, as at 7', on top of the inwardly folded corners 6 of the flaps E, where there is no glue, so that the flaps D will not stick to the flaps E.

The blank thus prepared is then taken up from its support, and is turned upside down, i. e., what is to become the inside of the bottom and next adjacent flaps up. The side portions B with the flaps D adhering thereto are swung upwardly, i. e., inwardly, on the hinges at 1 to a position at right-angles to the bottom portion A, as shown in Figs. 1 and 2; the end portions C with the flaps E adhering thereto are similarly swung upwardly (inwardly) on the hinges 2 to a position at right-angles to the bottom portion A.

The two flaps C and E have each adjacent their hinge lines 5 projections F which result in the remainder of the edges of flap C between F and the score line 2 and the remainder of the edges of flap E beyond the projections F forming recesses as compared with the projections F. These recesses correspond in length along the sides of the flaps with the lengths of projections beginning at G in flaps D and extending outwardly in Fig. 4 along the sides of the flaps D. The projecting portions F are doubled when the flap E is folded upon the flap C, giving a dimension to the recess equal to two thicknesses of the blank, which is the reason for the shoulder at G having a projection equal to $2m$. The sides and the ends of the box will thus fit together neatly at their upper corners, in interlocking fashion.

It will be noted that the bottom edges of the flaps D, E are flush with each other, while the upper edges (hinges at 5) of the end flaps E are at a higher level than the upper edges (hinges at 4) of the side flaps D; this results from the particular relative dimensions described above.

The extent to which the ends of the box project upwardly beyond its sides, corresponds to twice the thickness of the box material. The space thus provided receives the box cover made of two pieces H, J of the same size, glued together, and preferably differing from each other in that the grain of the material runs lengthwise in one of them, and crosswise in the other, as indicated by the arrows in Figs. 1, 6, and 7. Warping is thus prevented or minimized.

The length of each of these pieces H, J, is equal to that of the bottom portion A, or in other words, to the distance between the two hinges or score lines 2; the width of the pieces H, J exceeds that of the bottom portion A (or in other words, the distance between the two hinges or score lines at 1) by an amount equal to four thicknesses of the material. With this length and width the cover made of the pieces H, J will fit properly, when closed as in Fig. 2, to bring its upper surface flush with the upper edges of the end walls C, E (hinges at 5) and its lower surface flush with the upper edges of the side walls B, D (hinges at 4). The longitudinal edges of the cover will then be flush with the outer surfaces of the side walls B, D, while the transverse edges of the cover will fit between the upper edges of the end walls C, E, where such end walls project above the side walls. At one of its longitudinal edges, the cover is hinged to the box body, for instance, by means of a cloth strip K.

It will be noted from Fig. 2 that since the side wall flaps D are of greater height than the inner side wall portions B, such flaps will project downwardly beyond the inner wall portions, and similarly, the end wall flaps E will project downwardly beyond the inner end wall portions C, since (as described above) the height d of the flaps E is greater than the height a of the inner end wall portions C. There will thus be formed, below the bottom portion A, a space (of a height equal to one thickness of the material, with the relative dimensions chosen as described above) adapted to receive an additional bottom piece or layer L. This piece will be of about the same shape as the bottom portion A, but its width and its length will exceed the corresponding dimensions of said portion A, by an amount equal to two thicknesses of the material, so that such

piece will fit properly between the projecting lower edges of the flaps D, E, as indicated in Fig. 2. This extra bottom piece L will be glued to the lower surface of the bottom portion A, and preferably the grain of the material will run in different directions in the two layers A, L as indicated by the arrows in Fig. 1, for the purpose of preventing or minimizing any warping of the bottom.

Fig. 2 also shows strips M of cloth or other suitable material applied at the lower edges of the box body to hold its upright walls in position relatively to the bottom. It will be noted that where the flaps turn upwardly and inwardly hinging upon material adjacent the inner face of the box, the walls at the scoring are separated to an extent approximately 90°, leaving grooves along the edge of the bottom below but in line with the upwardly extended inner flaps. The strips M not only act as stays, assisting in holding the bottom to the flaps (and effective for this purpose even if there were no hinges of integral material between) but they also may be considered as forming covers for the edges, bridging the grooves and protecting them from intrusion of foreign matter or injury to their edges. Strips similar to strips M might be applied to the four upright edges of the box body, but these may be omitted, since generally the entire box will receive a covering of ornamental paper N or other suitable material to give the box a finished or pleasing appearance. This covering of paper or other suitable material is shown in Figs. 2*e* and 12*a*.

In Figs. 2*c* and 2*d* the structures of Figs. 2*a* and 2*b* respectively are shown with the additions in each figure of a strip M up along the edge of the corner shown, this construction, outlined above, contemplating a strip of M of this character at each of the four corners and glued respectively, each strip to front or back as the case may be and an end.

Instead of making the box body of a single piece of material, as explained above with reference to Figs. 1–7, I may obtain substantially the same results by employing two pieces of material to form the box body, as shown in Fig. 8. One of these pieces would consist of a bottom A', side portions B' connected therewith by hinges 1', and end portions C' connected with the bottom portion A' by hinges 2', these parts, as to shape and dimensions, being exactly like the correspondingly designated parts of Figs. 1–7. The side flaps D' and end flaps E' of Fig. 8 are of the same size (except for width) and shape as the flaps D and E of Figs. 1–7, but instead of being hinged at the top, to the respective inner side wall and end wall portions, the flaps D' and E' would be hinged at their bottom edges, along lines of scoring such as indicated at 8, to the corresponding edges of the bottom piece L', the latter being of the same shape and size as the bottom piece L. Because the side and end flaps hinge at the upper edges of the bottom L' they do not come down quite level with the lower surface of this bottom and the sides D' and ends E' are not quite as wide as the ends D and E respectively by approximately the thickness of the bottom L'. This is seen in the lower front of Fig. 8. In this form of my invention, therefore, the box body would be formed of one piece of material comprising the connected sections A', B', C', and a second piece of material comprising the connected sections L', D', E'. These parts would be glued together in substantially the same manner as described above. The formations F', G' would be the same as F, G in Figs. 1, 3, and 4, and the cover J, H, hinge K and binding strips M of Fig. 2 might be applied unaltered to the construction shown in Fig. 8. The grain of the bottom piece L' would preferably run crosswise of the grain of the bottom portion A', in the same manner as explained with reference to the parts A, L.

In the third form of my invention, illustrated by Figs. 9 to 13, the box body is formed from a single piece of material comprising the connected sections A'', B'', C'', D'', E''. The bottom portion A'' and side portions B'' are of the same size and arrangement as in Fig. 1; at 1'' I have indicated the score lines at which hinges connect the side portions B'' with the bottom portion A'', and at 4'' the hinge or score line (on the opposite face of the blank) which connects the side flap D'' with the side portion B''. The height *a'* of the side flap D'' exceeds the height *b'* of the side portion B'' by a single thickness of the material, in the particular case illustrated, and the side flap D'' is of rectangular shape and projects at each end beyond the ends of the side portions B'', a distance equal to $2m$, that is to say, two thicknesses of the material. The shoulders G'' will therefore be in line with the hinges 4.'' As in Fig. 4, the end portions (C'' in Fig. 9) project laterally beyond the bottom portion, by a distance m equal to the thickness of the material. Fig. 9 shows at 3'' the short stretch along which the material is cut through entirely, in line with the hinge 2'' which connects the bottom portion A'' with the end portion C''. The latter has the same height *a'* as the side flap D'', and is rectangular, without any projection such as F in Fig. 4. The end flaps E'' are connected with the end portions C'' by hinges or score lines 5'', and are rectangular; each end flap is of the same width as the end portion C'' but the height *d'* of the end flap E'' exceeds the height *a'* of the end portion C'' by a single thickness of material.

Glue would be applied to the blank shown in Fig. 9 in substantially the same manner as in Fig. 4, that is to say, to the portions B'' and C'', having those corners of B'' which are adjacent to the bottom portion A'', free of glue, so that the end flaps E'' will not stick to the side portions B'' when such flaps are folded in the manner described above in connection with Figs. 1–7.

The box body would then be formed or "set up" in substantially the same manner as explained in connection with Figs. 1–7. Since the height of the flaps D'', E'' exceeds by one thickness the height of the respective wall portions B'', C'', the lower edges of said flaps will project, a distance equivalent to one thickness of material, below the lower edges of said wall portions B'', C'' as shown in Fig. 12 with respect to the parts B'', D''. The lower edges of the flaps D'', E'' will thus be flush with the lower surface of the bottom portion A'' and against said surface and lower edges I prefer to place and secure (by glue, adding corner strips which may act as cover strips such as M, if desired) a bottom piece L'', both the length and the width of which exceed the corresponding dimensions of the bottom portion A'' by four thicknesses of the material. The bottom piece L'', however, is not essential.

In Fig. 12*a* the bottom piece L'' is omitted and the strip M is omitted, but the covering N is applied and is glued to the lower edge of the doubled-back board D'' and to the bottom A'',

closing the space left by the fold. This also acts as a cover and is supported at the corner by the extended cardboard.

With the dimensions set forth, the upper edges of the end wall portions C'' and of the end flaps E'' (in other words, the hinge at 5'') will be above the upper edges of the side wall portions B'' and of the side flaps D'' (hinge at 4''), by a distance equivalent to one thickness of the material, as shown clearly at the right in Fig. 12. A space is thus provided for the reception of a cover H', which in this case is made of single thickness, but otherwise may be hinged and arranged in the same manner as shown in Figs. 1 and 2.

While the three embodiments illustrated differ from each other in certain details as explained above, they are alike in general features, and especially in the following particulars: From the relation of dimensions shown in Figs. 4 and 9, it will be seen that the length of the outer layer (D, D', D'') of the side wall exceeds the length of the bottom portion (A, A', A'') by four thicknesses of material, so that each end of said outer layer projects two thicknesses beyond the end of the bottom portion. The inner layer (B, B', B'') of the side wall is of the same length as the bottom portion, and therefore the ends of such inner layer do not project beyond the ends of the bottom portion. Both of these relations will appear clearly in Figs. 1, 2*a*, 2*b*, 8, and 13. Furthermore, adjacent to the bottom portion (A, A', A''), the inner layer (C, C', C'') of the end wall exceeds the width of the bottom portion by two thicknesses of material, each end of such inner layer, adjacent to the bottom portion, projecting one thickness beyond the end of the bottom portion. Adjacent to the bottom portion (A, A', A''), the inner layer (B, B', B'') of the side wall fits between the projecting ends of the inner layers (C, C', C'') of the end walls, as shown in Figs. 1, 2*b*, 8, and 13. These figures also show that, adjacent to the bottom portion, both the outer layers (E, E', E'') and the inner layers (C, C', C'') of the end walls fit between the projecting ends of the outer layers (flaps D, D', D'') of the side walls. The said outer layers or flaps (D, D', D'') as well as the outer layers or flaps (E, E', E'') of the end walls, extend downwardly beyond the respective inner layers. Both the side walls and the end walls are double, having two layers, and the inner layer (B, B', B'') of a side wall is embraced by the ends of the inner layers (C' C', C'') of the end walls, while said inner layers (C, C', C'') of the end walls are embraced by the ends of the outer layers or flaps (D, D', D'') of the side walls.

Various modifications may be made without departing from the nature of my invention as defined in the appended claims.

It will also be noted that the end walls project upwardly beyond the side walls, to receive the cover (H, J or H') between such upwardly-projecting portions.

I claim as my invention:

1. In a box of the character described, a box body having a bottom portion and double side and end walls connected with such bottom portion, the outer layers of the side walls exceeding the length of the bottom portion by four thicknesses of material, each end of such outer layers projecting two thicknesses of material beyond the adjacent end of the bottom portion, the inner layers of the side walls being of the same length as the bottom portion, the inner layers of the end walls exceeding the width of the bottom portion by two thicknesses of material, each end of such inner layers of the end walls projecting one thickness of material beyond the adjacent corner of the bottom portion, the outer layers of the end walls corresponding in width to the inner layers thereof, the ends of the inner layers of the side walls fitting between the projecting ends of the inner layers of the end walls, and both the inner and the outer layers of the end walls fitting between the projecting ends of the outer layers of the side walls, adjacent to the bottom portion.

2. A box body according to claim 1, in which both layers of the same wall have their upper edges flush with each other, while the lower edge of the outer layer extends downwardly below the lower edge of the inner layer, the lower edges of the several outer layers being at the same level.

3. A box blank comprising a single blank of paper board having a bottom and inside wall-forming members attached thereto, said wall-forming members having attached outside extensions thereon, the said inside wall-forming members being cut-scored from the bottom on one face of the blank, and the outside wall-forming extensions being cut-scored on the opposite side of the blank, said outside wall-forming members being longer than the inside wall-forming members by a length equal to at least one thickness of the paper board forming the blank.

4. A box blank comprising a single blank of paper board having a bottom and inside wall-forming members attached thereto, said inside wall-forming members having attached outside wall-forming extensions thereon, the said inside wall-forming members being cut-scored from the bottom on the outer face of the blank, and the outside wall-forming extensions being cut-scored from the first mentioned members on the opposite face of the blank whereby to form a box having substantially two-ply walls.

5. A box of the class described having a bottom, a plurality of integral inner foldable wall-forming members cut-scored from the outer face thereof, each of said wall-forming members having an outer extension thereon, said extensions being cut-scored from the said wall-forming members on the opposite face of the blank whereby to form a box having two-ply lateral end walls.

6. A box blank comprising a single blank of paper board having a bottom and inside wall-forming members attached thereto, said wall-forming members having attached outer lateral and end wall extensions thereon, the said inside wall-forming members being cut-scored from the bottom on one face of the blank, and the outside wall-forming extensions being cut-scored on the opposite side of the blank, and wall extensions upon the ends of the lateral walls of said outside wall-forming members for covering the ends of said inside wall-forming members.

7. A box of the class described having a bottom, a plurality of foldable inside wall-forming members cut-scored from one face thereof, each of said wall-forming members having an outside wall-forming extension thereon, said extensions being cut-scored from the said inside wall-forming members from the opposite face of the blank, said extensions being longer than the inside wall-forming members, to form square corners all round the bottom edges of the box.

8. A box comprising a single blank of folded paper board having a bottom and inside wall-forming members attached thereto at the sides and ends, said wall-forming members having attached outside extensions thereon, the said inside

wall-forming members being cut-scored from the bottom on one face of the blank, and the outside wall-forming extensions being cut-scored on the opposite side of the blank, coacting interlocking corner-forming means carried by certain of said wall-forming members, and extensions carried by said outside wall-forming members in excess of the heights of the inside wall-forming members to form square corners all around the bottom edges of the box.

9. A box formed from one sheet of paper board including outer end walls having plain bottom edges, inner end walls continuous with the top edges of the first-mentioned walls, all longer where they are joined than elsewhere in said walls and a flat bottom continuous with the lower edges of said inner walls and having its lower surface disposed in substantially flush relation with the first-mentioned edges.

10. A paper board box comprising a bottom and having an integral right-angularly folded inner wall, said board being cut scored so that the edge of said wall is stepped from the lower surface of said bottom, an outer wall engaging the first-mentioned wall and integral therewith, there being interposed cut scores at which said walls are folded, said outer walls each having an edge substantially flush with said surface.

11. A paper board box including a bottom and having integral therewith and disposed at right-angles thereto an upwardly foldable inner wall, said board having therein a cut score whereon said wall is foldable so that the lower edge of said wall may substantially register with the top surface of said bottom, and an outer foldable wall integral with the first-mentioned wall and engaging the latter, said respective walls having another cut score therebetween to provide aligned top edges, said inner wall being of less area than said outer wall whereby the bottom edge of said outer wall may register in flush relation with the lower surface of said bottom.

12. In a paper board box, in combination, a bottom, an inner wall foldable at right-angles to said bottom, said wall and said bottom having a cut-score therebetween, so that the lower edge of said wall is stepped above the plane of the lower surface of said bottom, an outer wall engaging the first-mentioned wall and having its lower edge surface coincident with said plane, and a thin sheet of material disposed on said surface to substantially conceal said stepped edge.

13. In a cigar box, a bottom wall of cardboard, paper, fiber or the like, an inner lateral wall integral with and joined by a bottom fold to the bottom wall, an outer lateral wall extending over the bottom fold at least as far as the plane of the bottom of the bottom wall, three other lateral walls to complete the box, means for securing said outer and inner lateral walls to the two adjoininging other lateral walls, means for securing the other lateral walls together and to the bottom wall and a cover glued to the outside of the box.

14. In a cigar box, a bottom wall of cardboard, paper, fiber, or the like, an inner lateral wall integral with and joined by a bottom fold to the bottom wall, a cardboard outer lateral wall integral with and joined by a top fold to the inner lateral wall, and extending over the bottom fold at least as far as the plane of the bottom of the bottom wall, three other lateral walls to complete the box, means for securing said outer and inner lateral walls to the two adjoining other lateral walls, means for securing the other lateral walls together and to the bottom wall and a cover glued to the outside of the box.

15. In a cigar box, a bottom wall of cardboard, paper, fiber or the like, an inner lateral wall integral with and joined by a bottom fold to the bottom wall, an outer lateral wall glued to the outside of the inner lateral wall and extending over the bottom fold at least as far as the plane of the bottom of the bottom wall, three other lateral walls to complete the box, means for securing said outer and inner lateral walls to the two adjoining other lateral walls, means for securing the other lateral walls together and to the bottom wall and a cover glued to the outside of the box.

16. A cigar box having a bottom, double end walls projecting further at the top at the ends of the end walls than at the lower parts thereof and the outer end wall reaching down to the plane of the lower face of the bottom of the box and side walls extending within the space beneath the end projections of the end walls and also extending down to the plane of the lower face of the bottom of the box, whereby the side walls interlock with the outer end walls and both side and end walls extend into the same plane as the bottom face of the box.

17. In a box of cigar type, integral bottom and double side and double drop lid end walls, the dividing line between the bottom and the inner side and end walls scored for upward turning from the bottom walls and the dividing line between the inner and outer side and inner and outer end walls being scored for downward turning of the outer side and outer end walls with respect to the inner walls, the outer and inner end walls having end projections at the tops and having the ends of the outer side walls extending into the spaces beneath said projections.

18. A cigar box having bottom and double end walls integral therewith outwardly scored between the inner end walls and the bottom and inwardly scored at the top of the inner end walls and having end projections at the tops of both the outer and inner end walls, in combination with front and rear side walls fitting beneath said projections.

19. In a box of cigar type, integral bottom and double side and double end walls, the side and end walls each scored for upward (inward) turning adjacent the bottom walls and downward turning of the outer side and outer end walls with respect to the inner walls, the outer and inner end walls having end projections at the tops and having the ends of the outer side walls extending into the spaces beneath said projections, the outer side and outer end walls each extending down to the plane of the lower face of the bottom of the box.

20. A cigar box having bottom and double end walls integral therewith outwardly scored between the inner end walls and the bottom and inwardly scored at the top of the inner end walls and having projections at the tops at the ends of both the outer and inner end walls, in combination with front and rear outer and inner side walls fitting beneath said projections, the outer side and outer end walls extending down to the plane of the lower face of the bottom of the box.

21. In cigar box manufacture, the art of producing a square lower corner at the fold between a bottom wall and a lateral wall made from a single piece of cardboard, paper, fiber or the like

as a blank, which consists in extending the blank over the outside face of said lateral wall and beyond the fold at least as far as the outside edge of the bottom wall and in gluing a cover to the extended blank and to the bottom wall, closing the space left by the fold, supporting the cover at the corner by said extended cardboard.

22. In cigar box manufacture, the art of producing a square lower corner at the fold between a bottom wall and a lateral wall made from a single piece of cardboard, paper, fiber or the like as a blank which consists in bending the blank inwardly to form a lateral wall in doubling back the same piece of the blank at the top of the lateral wall, in carrying it down on the outside of said lateral wall beyond the edge of the fold and at least as far as the outer edge of the bottom wall and in gluing a cover to the lower edge of the doubled-back card-board and to the bottom wall, closing the space left by the fold, supporting the cover at the corner by the cardboard closing the fold.

23. A box comprising a bottom, a side member having an end portion, an inner end member articulated to said bottom and having a recess therein having an area equal to the cross-section of the end portion of said side member, and an outer end member articulated to said inner end member.

24. A box comprising a bottom, side members having end portions, inner end members articulated to said bottom and having notches therein to receive the end portions of said side members, outer end members articulated to said inner end members, and means for securing said side members in position with respect to said bottom.

25. A box comprising a bottom, side members having end portions, inner end members articulated to said bottom and having recesses therein for receiving the end portions of said side members, outer end members articulated to said inner end members, and stays of flexible material for securing together said bottom and side members.

26. A box comprising a bottom, an end connected to said bottom and comprising two articulated members, one of said members being directly connected to the bottom and having recesses therein, side members having end portions received in said recesses, and adhesive stays of flexible material for attaching said end members and side members together.

27. As a new article of manufacture, an integrally formed box blank having a bottom-forming portion, inner end portions directly connected to said bottom-forming portion and having side receiving recesses in the sides thereof, and outer end portions.

28. A box comprising a bottom, wall-forming members disposed substantially at right-angles to said bottom and connected thereto along score lines, and other wall-forming members disposed outside of and in face-to-face abutment with said first-named wall-forming members, the lower edges of said second-named wall-forming members extending below said score lines and terminating approximately in the plane of the lower face of said bottom.

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