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COLLAPSIBLE BOX. APPLIOATION FILED FEB, 16, 1903.


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## COLLAPSIBLE BOX.

SPECIFICATION forming part of Letters Patent No. 728,749, dated May 19, 1903.
Application filed February 16, 1903. Serial No. 143,551. (No model.)

To all whom it may concern:
Be it known that I, Luther A. McCord, a citizen of the United States, and a resident of Laurens, in the county of Laurens and State useful Improvements in Collapsible Boxes, of which the following is a specification.

My invention is an improvement in pasteboard boxes such as are commonly used by - milliners for holding ladies' hats and bonnets, and especially in collapsible or knockdown hoxes intended for such purposes; and the invention consists in certain novel construclions and combinations of parts, as will be 5 hereinafter described and claimed.

In the drawings, Figure 1 is a sectional perspective view of a box embodying my invention adjusted to position for use with the lid applied and the cords fastened. Fig. 2 is a - perspective view of the box proper. Fig. 3 is a top plan view of the box proper. Fig. 4 is a sectional view of the box collapsed and inserted within the lid, and Fig. 5 is a perspective view of the body of the box collapsed

The box A is formed with the bottom $A^{\prime}$, the sides $A^{2}$, and the ends $A^{3}$. The bottom $\mathrm{A}^{\prime}$ and the sides $\mathrm{A}^{2}$ are uncreased throughout

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 lines $a^{2}$ whers, the sith $A^{\prime}$ into and out of open position.The ends $\mathrm{A}^{3}$ are foldable on the lines $a^{3}$ where they unite with the bottom $\mathrm{A}^{\prime}$ into and 5 out of open position, and on the lines $a^{4}$ where they unite with the sides $\mathrm{A}^{2}$, and these ends $A^{3}$ are scored or creased diagonally at $A^{4}$ from the opposite lower corners of the ends $A^{3}$ to the upper edges of said ends, where the midway between the opposite ends of the end boards $A^{3}$, the lines $A^{4}$ extending thus obliquely across the opposite ends of the box from a point at the middle of the upper edge
45 of said ends to the opposite lower corners of the ends $A^{3}$, as will be understood from Fig. 2 of the drawings, so that the ends $\mathrm{A}^{3}$ may fold from the position shown in Figs. 1 and 2 to that shown in Figs. 4 and 5 when it is de-
50 sired to collapse the box. When folded, as shown in Fig. 5, the box proper may be inserted within the lid $B$, the latter having the
edge flanges $\mathrm{B}^{\prime}$, forming a receptacle for the box $A$, as will be understood from Fig. 4. When cords C, which lead outwardly from the middle portions 1 of the ends $A^{3}$, are brought over the lid $B$ and secured, as shown in Fig. 1, it will be understood that the box will be held firmly in open position. I find it desirable, however, to make the ends of the box double and to construct them with the outer creased and folding sections $\mathrm{A}^{3}$ and the separate inner uncreased sections or boards $D$ and to connect the cords $C$ with the boards D and lead them thence through the middle portion 1 of the outer end sections $\mathrm{A}^{3}$, as will be understood from Figs. 1, 2, and 3 of the drawings. This is preferred, because I am able to provide a strong connection with the cords C to relieve the ends $\mathrm{A}^{3}$ of such connection and to reinforce the ends $A^{3}$ when the box is open by uncreased boards $D$, which are of the same size as the ends $A^{3}$ and which form unfolding inner end sections to coöperate with the uncreased and unfolded sides $\mathrm{A}^{2}$ in furnishing a strong practically rigid box and at the same time one which can be readily folded whenever desired.
In securing the cords $C$ to the box I prefer to provide the boards with which they connect with three openings $\mathrm{C}^{\prime}, \mathrm{C}^{2}$, and $\mathrm{C}^{3}$ and to pass the cords from the inside out through one of the end openings $\mathrm{C}^{\prime}$ or $\mathrm{C}^{3}$ and then in through the other end opening, after which the end is tied to the cords within the board 85 and brought out through the intermediate opening $C^{3}$, as will be best understood from Fig. 6 of the drawings. By this construction I secure a strong connection for the cords $C$, so the latter will not likely pull out in use.

By my invention it will be noticed I provide a box having unfolding sides and folding ends and reinforce the folding ends with unfolding boards which operate close to their inner sides and support the folding ends firmly when the box is opened for use and yet do not in any way interfere with the folding of the ends in closing the box or collapsing it to its folded position, as shown in Fig. 4.

Having thus described my invention, what 100 I claim as new, and desire to secure by Letters Patent, is-

1. The improvement in boxes herein described, consisting of the box proper having
an uncreased bottom, uncreased sides jointed at their lower edges to the opposite edges of the bottom, the folding ends jointed at their lower edges to the bottom, and creased on
lines the ners to the middle of their upper edges, and the uncreased inner end boards fitting loosely within the box against the folding ends thereof, and conforming approximately in shape c and size to said folding ends, the cords secured at their inner ends to the uncreased inner end boards and extending thence out through the creased and folding end boards, and the lid fitted to said box, substantially 15 as set forth.
2. The combination with the box having creased and folding end boards, of the uncreased inner end boards fitting within the box against the inner sides of the folding ends and conforming approximately in shape and size to said folding ends, and the cords extending from said uncreased inner end boards out through the creased and folding end boards, substantially as set forth.
ing end boing or collapsible having foid inner end boards and cords secured to the inner end boards and cords secured to the latter and extending outwardly through the outer folding end boards; substantially as described.
3. The herein-described improvement in boxes, consisting of the uncreased bottom, the uncreased sides having a flexible joint at their lower edges with the opposite edges of
the bottom, theobliquely-creased foldingends
having a flexible joint at their lower edges with the bottom, and having their oblique creases extending from their opposite lower corners to their upper edges at the middle of
the latter, the uncreased inner end boards conforming in shape and size to the shape and size of the folding ends when the latiter are unfolded for use, and fitting loosely within the box against the inner faces of the folding ends, said uncreased inner end boards being provided with a plurality of openings, and the cords secured at their inner ends by passing the same through the openings in the inner end boards and extending thence out throngh the creased and folding end boards, and the lid fitted to said box, substantially as set forth.
4. The combination with the box, having the folding ends and provided with openings for the tying-cords, the non-folding and uncreased inner end boards conforming approximately in shape and size to the folding ends, and provided with three openings in comparatively close proximity, and the fasten-ing-cords passed through the outer ones of 60 said openings and tied within the box and then having their free ends passed outwardly through the intermediate openings in the inner end boards and thence outwardly through the openings in the folding end boards to po- 65 sition for use, substantially as set forth.

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Witnesses:
Solon C. Kemon, Perry B. Turpin.

