No. 628,465. Patented July 11, 1899.

M. L. HORNING.

PYRAMIDAL HAT BOX.

(Application filed Apr. 10, 1899.)

(No Model.)

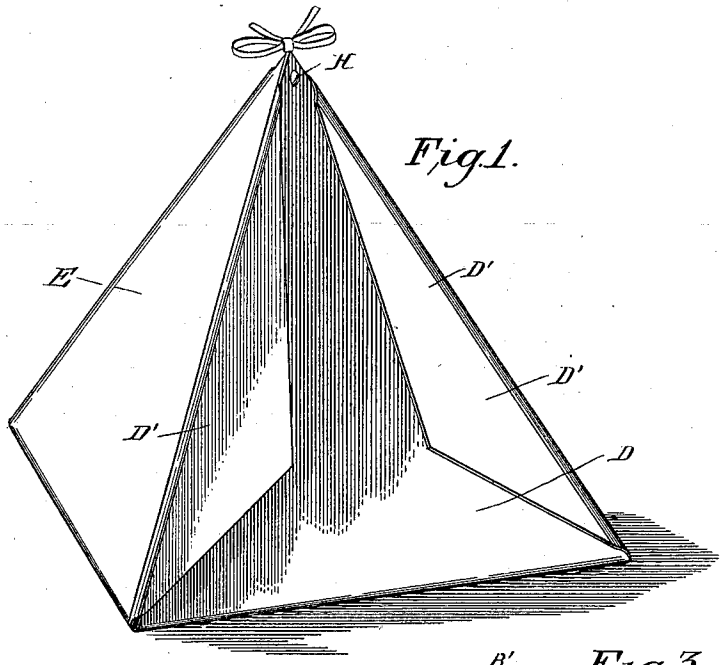


Fig. 1.

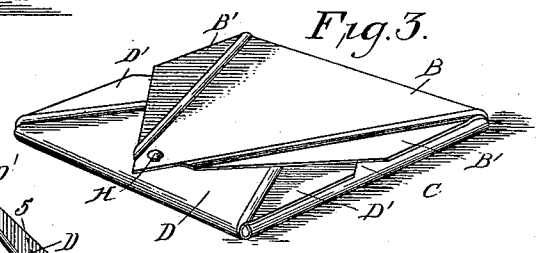


Fig. 3.

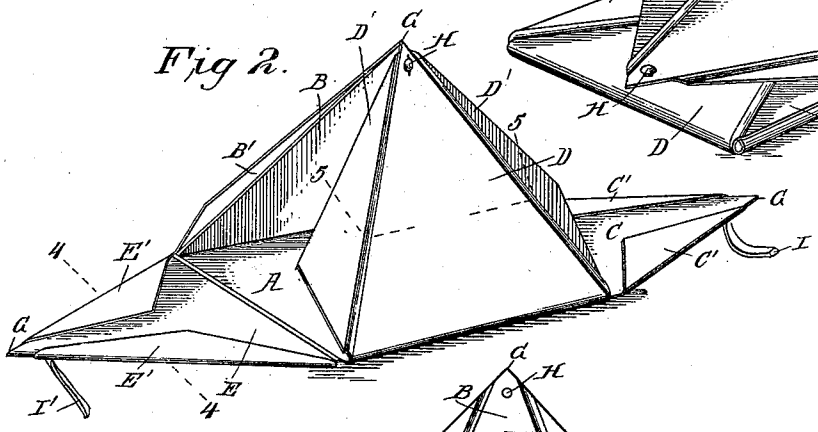


Fig 2.

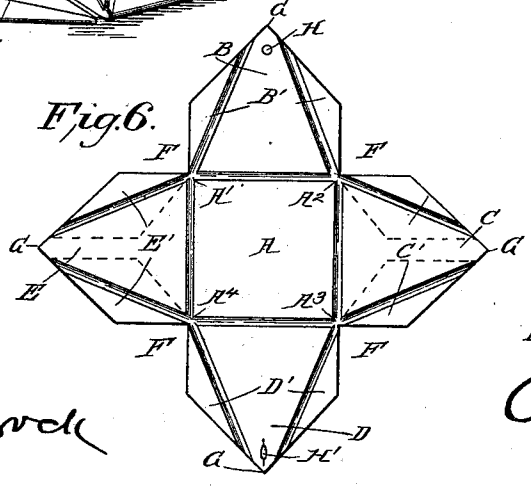


Fig. 6.

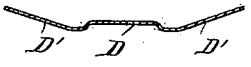


Fig. 5.

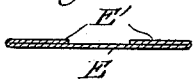


Fig. 4.

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UNITED STATES PATENT OFFICE.

MARTIN L. HORNING, OF ALBION, MICHIGAN.

PYRAMIDAL HAT-BOX.

SPECIFICATION forming part of Letters Patent No. 628,465, dated July 11, 1899.

Application filed April 10, 1899. Serial No. 712,468. (No model.)

To all whom it may concern:

Be it known that I, MARTIN L. HORNING, a citizen of the United States, residing at Albion, in the county of Calhoun and State of Michigan, have invented a new and useful Pyramidal Hat-Bag, of which the following is a specification.

My invention is in the nature of a pyramidal bag or paper box, especially designed to receive a lady's trimmed hat, the object being to provide an unfolded or partially-folded bag or box which may be folded about a lady's trimmed hat or other delicate structure in the form of a pyramid to prevent injury to the contents.

The invention consists also in certain details of construction and novelties of combination and arrangement, all of which will be fully described hereinafter and pointed out in the appended claims.

In the drawings forming part of this specification, Figure 1 is a perspective view illustrating a hat-bag constructed in accordance with my invention formed into pyramidal shape and secured. Fig. 2 is a perspective view illustrating the invention after the first step in closing the bag, two sides being shown erect and secured. Fig. 3 is a perspective view of the hat-bag folded flat for storage or transportation. Fig. 4 is a sectional view taken on the dotted line 4 4 of Fig. 2. Fig. 5 is a similar view on the dotted line 5 5 of Fig. 2. Fig. 6 is a view in plan of the paper blank properly shaped and grooved to form a hat-bag.

Like letters of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the drawings, A indicates the bottom, and B, C, D, and E the sides, of my improved bag. The bottom is square, and the sides are triangular in outline, and in the formation of the stiff-paper or cardboard blank, (shown in Fig. 6,) which when folded into form, as shown in Fig. 1, forms my improved hat-bag, small triangular pieces are cut out of the center of the four sides of a square blank, leaving spaces F, triangular in form, with apex inward, the pieces of such spaces being at the corners of the bottom A. Along each side of the square bottom A and from each of its corners A' A^2 A^3 A^4 to points in the sides and very near to the corners G of the original large blank the paper or cardboard is stamped outward, forming grooves inside and ribs outside, as clearly illustrated.

The parts of the blank included between the grooves form the bottom and sides of the bag, as before stated, and the parts outside are triangular in shape, as at B' B', C' C', D' D', and E' E', and form flaps to the sides B C D E.

The side B is provided with a button H and the side D with a buttonhole H' to receive the button when the sides B and D are folded to their closed position, as in Figs. 1 and 2, and the sides C and E are provided with tapes or springs I I', respectively, by means of which they are secured in their closed positions, as shown in Fig. 1.

When the hat-bag is to be closed over a hat or other delicate structure or article, the sides B and D are brought up to position to form two opposite sides of a pyramid, as in Fig. 2, and buttoned together. The flaps B' and B' and D' D' when the blank is flat, as in Fig. 6, or folded for storage or transportation, as in Fig. 3, are kept either in the same plane as the sides B and D or at a very slight angle thereto, so that when these sides are carried up to their closed position, as in Fig. 2, these flaps will extend substantially in the same planes as the sides. The flaps C' C' E' E' when the bag is folded and packed, as in Fig. 3, are folded in, bending on the lines of the grooves or ribs between the flaps and sides close against the sides themselves, so that when these sides C and E are laid out, as in Fig. 2, these flaps will open to angles of about forty-five degrees from the sides. In closing up sides C and E the flaps B' B' D' D' are inclosed by the flaps C' C' E' E', and the tendency of B' B' D' D' being to the planes of the sides B and D or outward they will press outward snug against the inside of sides C and E, and the tendency of the flaps C' C' and E' E' being to fold inward they will be passed to the outside of sides B and D, and will closely hug these sides, forming a closure for the openings between the adjacent sides and snugly closing up the hat-bag and protecting its contents.

By stamping the ribs and grooves on the

lines of the bends between the sides and their flaps while the paper is wet and soft and afterward drying, the material of the ribs forms hinges and acts as springs to a certain extent to keep flaps B′ B′ D′ D′ pressed close against the inside of sides C and E and the flaps C′ C′ and E′ E′ pressed close against the outside of sides B and D when the hat-bag is formed, so that as long as the points at the top of the bag are kept together the corners will be tightly closed and the contents of the bag fully protected from dust, dirt, or other injurious effects.

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

1. A blank for a pyramidal bag or box consisting of a square sheet of stiff material cut and stamped to form, having triangular parts removed from the middle of each side, the spaces left having their inner apices at the four corners of an inner square, and ribs and grooves extending from each of said inner corners to the next one, and similar ribs and grooves extending from said inner corners to points in the sides of the original square blank near its corners, substantially as described.

2. The herein-described pyramidal hat bag or box, comprising the square bottom, the triangular sides, and the triangular side flaps, the material at the line of junction of the bottom and sides, and sides and flaps being stamped up to form outward-projecting rib-hinges, the opposite sides to be first folded normally carrying their flaps at obtuse angles thereto, and those to be last folded to inclose the first, normally carrying their flaps at an acute angle, whereby the flaps of the first-folded sides will press outward against the inside of the last-folded sides, and the flaps of the last-folded sides will press inward against the outside of the first-folded sides, the ribs being formed to act as hinges and springs to effect these results, substantially as described.

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Witnesses:
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