

No. 698,266.

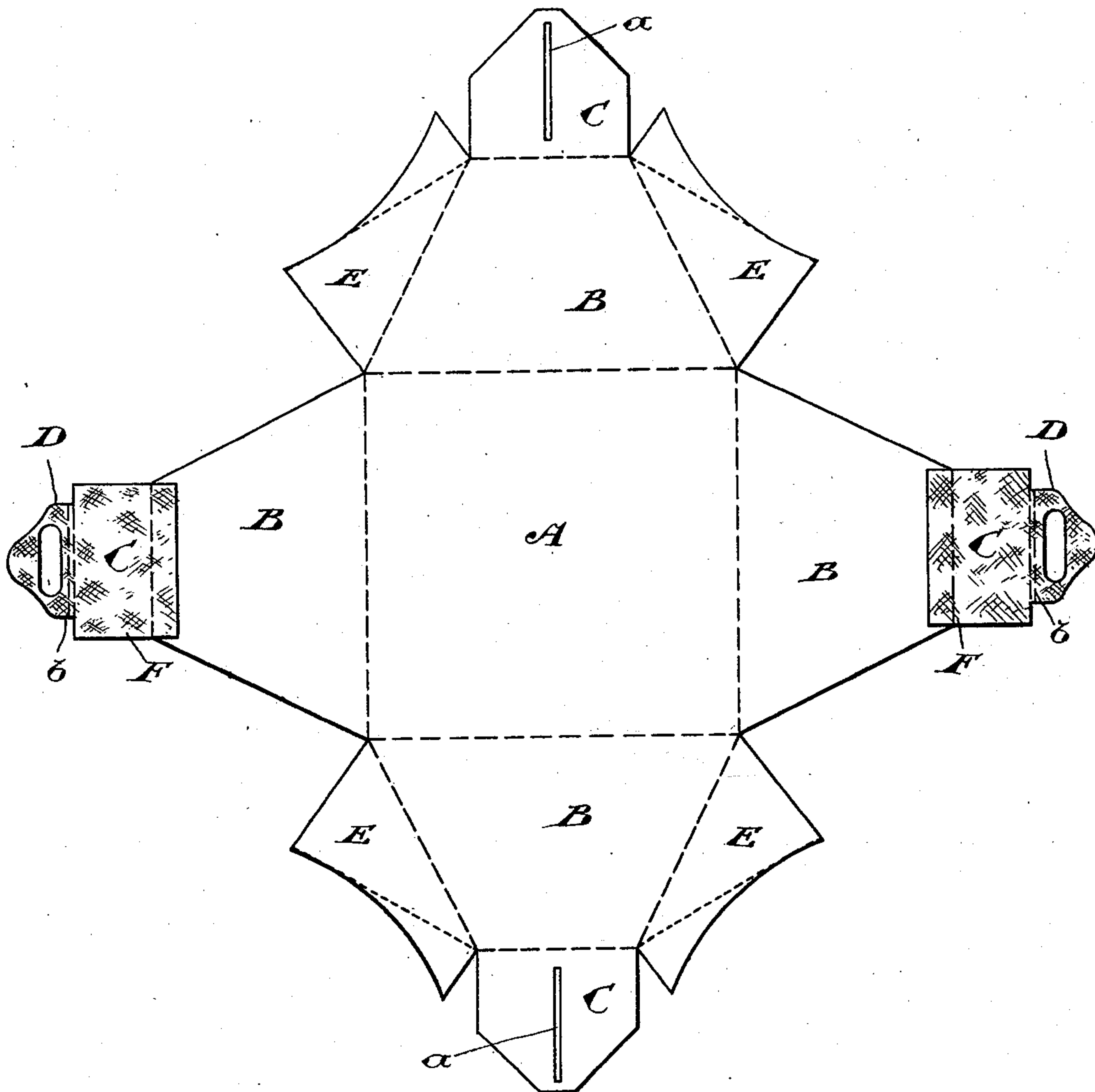
Patented Apr. 22, 1902.

D. ELLIOTT.  
FOLDING BOX.

(Application filed May 15, 1901.)

(No Model.)

2 Sheets—Sheet 1.



*Fig. 1.*

*Witnesses*

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*Inventor*

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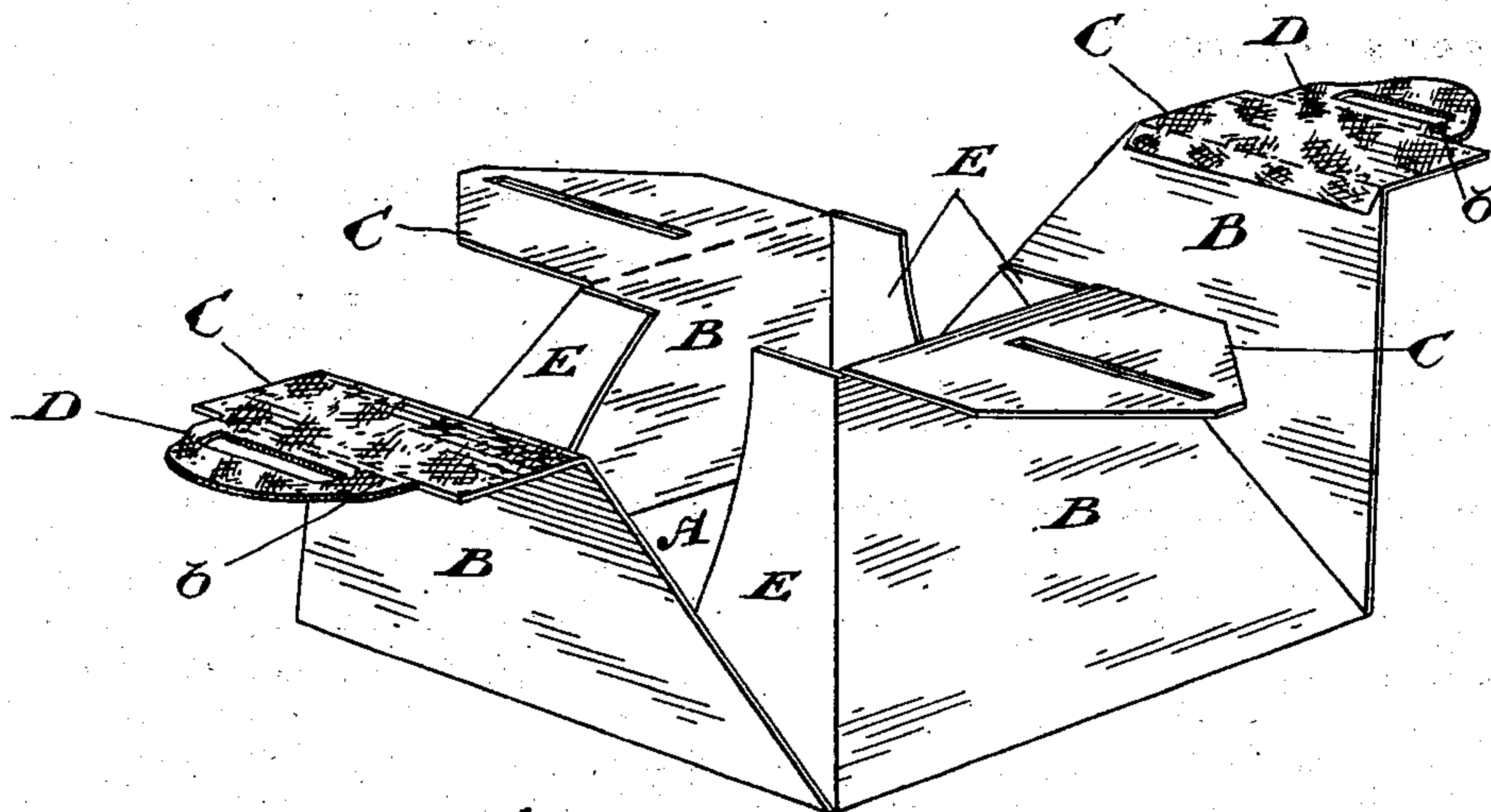
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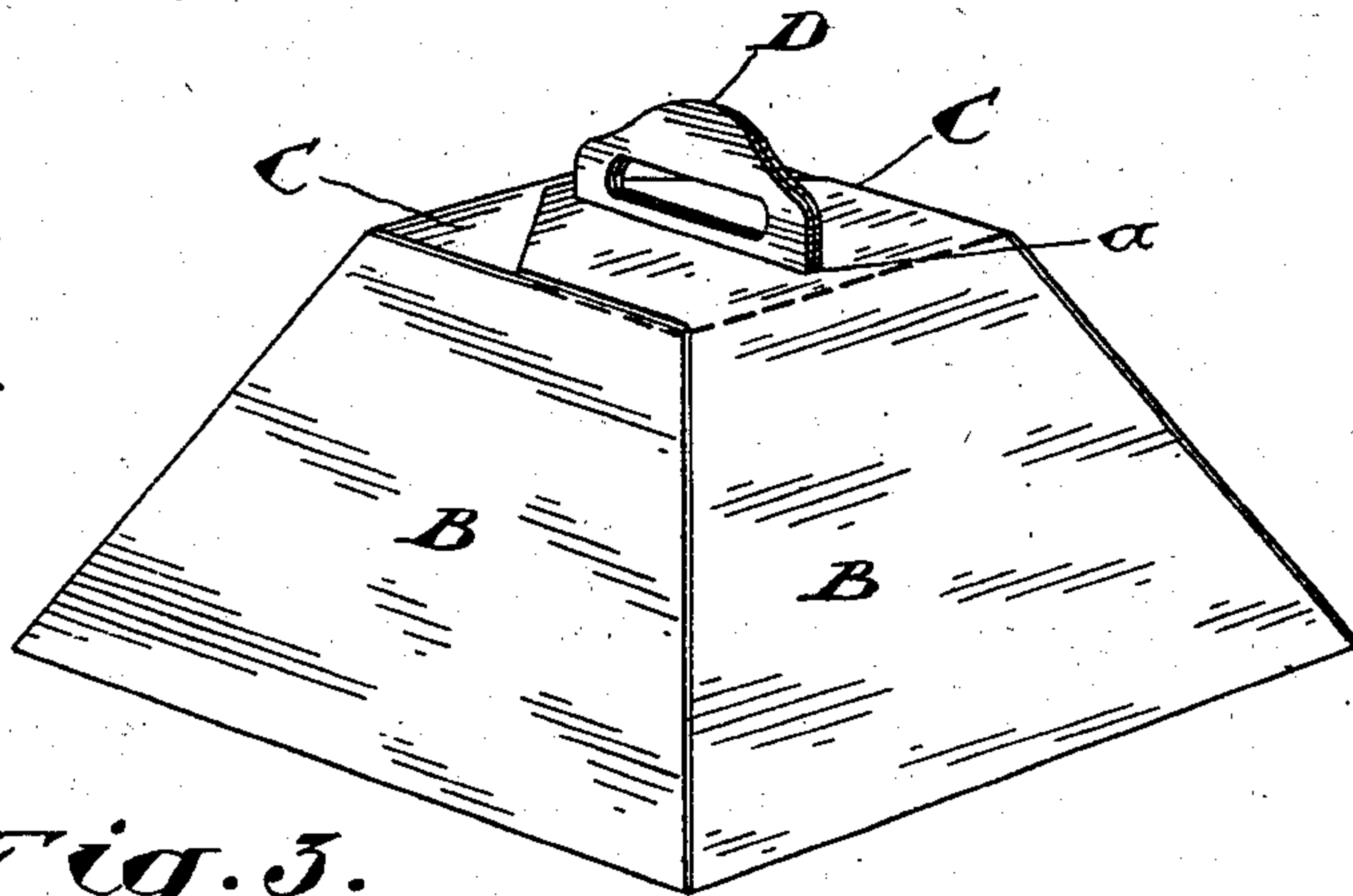
(Application filed May 15, 1901.)

(No Model.)

2 Sheets—Sheet 2.



*Fig. 2.*



*Fig. 3.*

*Witnesses*

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# UNITED STATES PATENT OFFICE.

DAVID ELLIOTT, OF TORONTO, CANADA.

## FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 698,266, dated April 22, 1902.

Application filed May 15, 1901. Serial No. 60,352. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID ELLIOTT, of the city of Toronto, in the county of York, Province of Ontario, Canada, have invented certain new and useful Improvements in Folding Boxes, of which the following is a specification.

The object of my invention is to devise a folding cardboard box to hold hats or other goods; and it consists, essentially, of a box shaped when set up as the frustum of a pyramid, the blank from which the box is formed being so cut and creased as to give the desired shape, substantially as hereinafter more specifically described and then definitely claimed.

Figure 1 is a plan view of the blank from which the box is formed. Fig. 2 is a perspective view of the box partly set up. Fig. 3 is a perspective view of the box completely set up.

In the drawings like letters of reference indicate corresponding parts in the different figures.

Referring to Fig. 1, which shows the integral blank from which the box is formed, A represents the center rectangle, which forms the bottom of the box, and B four similar regular trapezoids hinged to the sides of the rectangle by forming suitable hinge-creases in the cardboard or other suitable material of which the blank is preferably formed. The outer edges of these trapezoids are of course parallel to the edges hinged to the center rectangle and have flaps C, hinged thereto by creasing the cardboard. These flaps are preferably as wide as the outer edges of the trapezoids and ought not to be longer than the width of these edges. To two opposite flaps C are hinged the handles D by creasing the cardboard, as indicated. In the other two flaps C are formed slits *a*, parallel with the hinge-creases of the handle D. Two of the trapezoids B have side flaps E, hinged thereto by creasing the cardboard. These flaps are so shaped that the inner end of each flap forms the same angle with the side of the trapezoid to which it is connected as the said side does with the base of the trapezoid, which is a side of the center rectangle. The outer end of each of the flaps E is preferably parallel to the inner end, but may be cut at any angle provided it does not when the box is set up interfere

with the proper folding of the lid-flaps C. The ends of these side flaps must, of course, be not greater in length than the width, respectively, of the rectangle A, which forms the bottom of the box, and of the lid-flaps C, which form the lid of the box. The portions of the blank forming the handles D are preferably strengthened by having pieces F, of canvas, manila, or other tough flexible fabric, pasted thereto. These tough flexible pieces extend partly onto the lid-flaps C, so as to strengthen the hinge between the handle and the lid.

The box is set up by raising the trapezoidal sides B, to which the side flaps E are secured. The side flaps E are bent inward and allowed to rest on the center rectangle A, forming the bottom of the box. The other trapezoidal sides are then bent up and are temporarily held in position by resting against the side flaps E. The lid-flaps C, to which the handles D are attached, are then bent inward and the handles D brought to a vertical position. The lid-flaps, with the slits *a* in them, are then turned down and the handles D brought up through the slits.

It will be noticed that besides the hinge-creases between the handles D and the lid-flaps C, I provide the creases *b*. These enable the handles D to be turned back flat on the lid of the box when it is desired to stack a number of them in their set-up condition.

Although side flaps E are preferably provided with outer ends parallel to their inner ends, yet these flaps might be made triangular, as indicated in dotted lines in Fig. 1. Although this form is not as good to form a support for the sides last brought up in setting up the box, yet it is a construction that might be used by a person desirous of avoiding infringement of the patent. It is also preferable to have the inner ends of these side flaps constructed at the angle indicated, so that they will rest on the bottom of the box, and so hold the sides to which they are connected in proper position; yet a box of some value might be constructed in which these inner ends were set at a different angle, and in some cases the flaps might be omitted altogether, though this is not a very desirable construction, as it would make the box more difficult to set up and less secure when in use.

Although the center rectangle is shown as



a square, it is obvious that it may also be an oblong. In the latter case the box produced from the blank will be of the shape of the frustum of an oblong pyramid.

5 What I claim as my invention is—

1. A folding box shaped as the frustum of a pyramid and comprising a rectangular bottom; trapezoidal sides hinged to the base; lid-flaps hinged to the upper edges of the  
10 sides so that they may be overlapped to form the top of the box; and handle-flaps secured to two opposite lid-flaps, the other two lid-flaps having slits formed therein through which the said handle-flaps may be passed,  
15 substantially as described.

2. A blank to form a box shaped as the frustum of a pyramid which consists of a sheet of stiff material cut and creased to form a central rectangle A; trapezoids B at each  
20 side of the central rectangle; slitted flaps C at each side of two opposite trapezoids B; and flaps D at the outer ends of the remaining two trapezoids arranged to be projected through the slits in the first-mentioned flaps,  
25 substantially as described.

3. A blank to form a box shaped as the frustum of a pyramid which consists of a sheet of stiff material cut and creased to form a central rectangle A, similar regular trape-  
30 zoids B at each side of the central rectangle; slitted flaps C at each side of two opposite trapezoids, the inner end of each flap forming the same angle with the side of the trapezoid as the said side does with the side of the cen-  
35 tral rectangle and the outer end being substantially parallel to the inner end; flaps D

at the outer ends of the trapezoids not greater in size than squares formed with the ends of the trapezoids as bases and arranged to be projected through the slits in said flaps C, 40 substantially as described.

4. A folding box shaped as the frustum of a pyramid and comprising a rectangular bottom; trapezoidal sides hinged to the base; side flaps hinged to the sides of two opposite  
45 trapezoidal sides the lower of the side flaps being adapted to rest on the bottom of the box; lid-flaps hinged to the upper edges of the sides so that they may be overlapped to form the top of the box; and handle-flaps se- 50 cured to two opposite lid-flaps, the other two lid-flaps having slits formed therein through which the said handle-flaps may be passed, substantially as described.

5. A folding box shaped as the frustum of 55 a pyramid and comprising a rectangular bottom; trapezoidal sides hinged to the base; lid-flaps hinged to the upper edges of the sides so that they may be overlapped to form the top of the box; handle-flaps secured to 60 one or more of the said lid-flaps, the remaining lid - flaps having slits formed therein through which the said handle-flaps may be passed; and pieces of tough flexible material pasted to the handle-flaps and a portion of 65 the lid-flaps, substantially as described.

Toronto, May 7, 1901.

DAVID ELLIOTT.

In presence of—

J. EDW. MAYBEE,  
A. J. COLBOURNE.