

No. 777,695.

PATENTED DEC. 20, 1904.

C. F. RAMSAY.  
COLLAPSIBLE BOX.

APPLICATION FILED JULY 6, 1904.

NO MODEL.

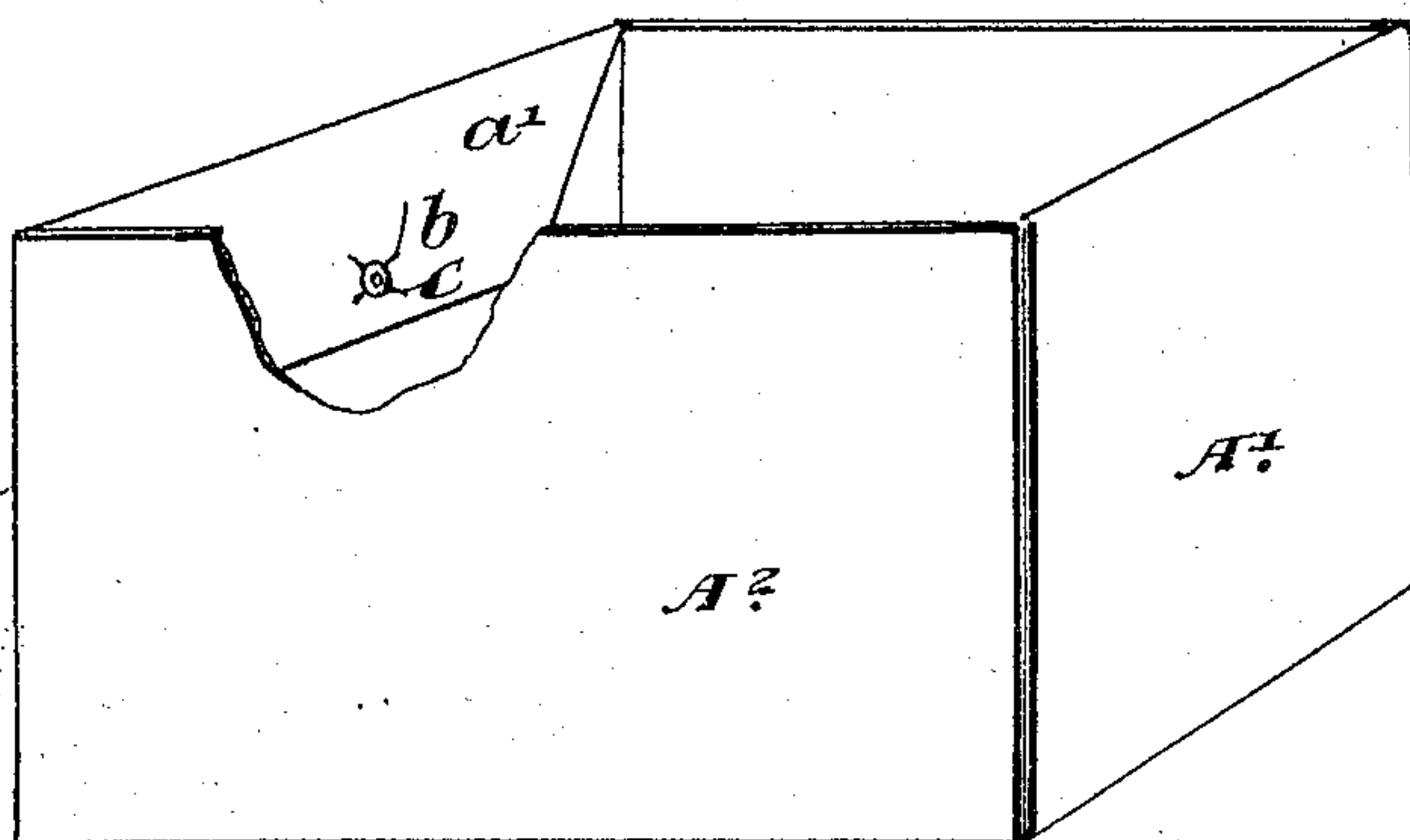


Fig. 1.

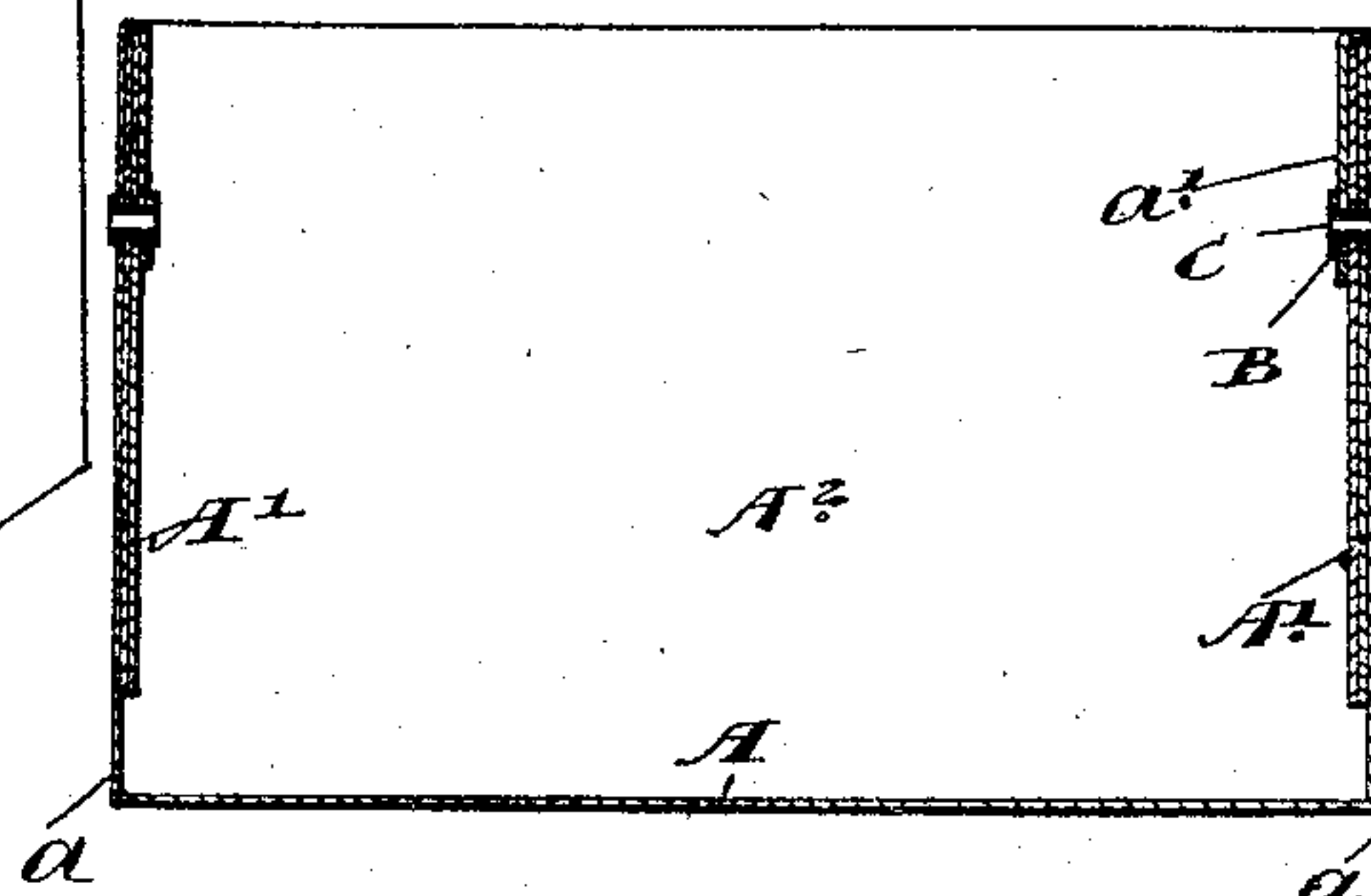


Fig. 2.

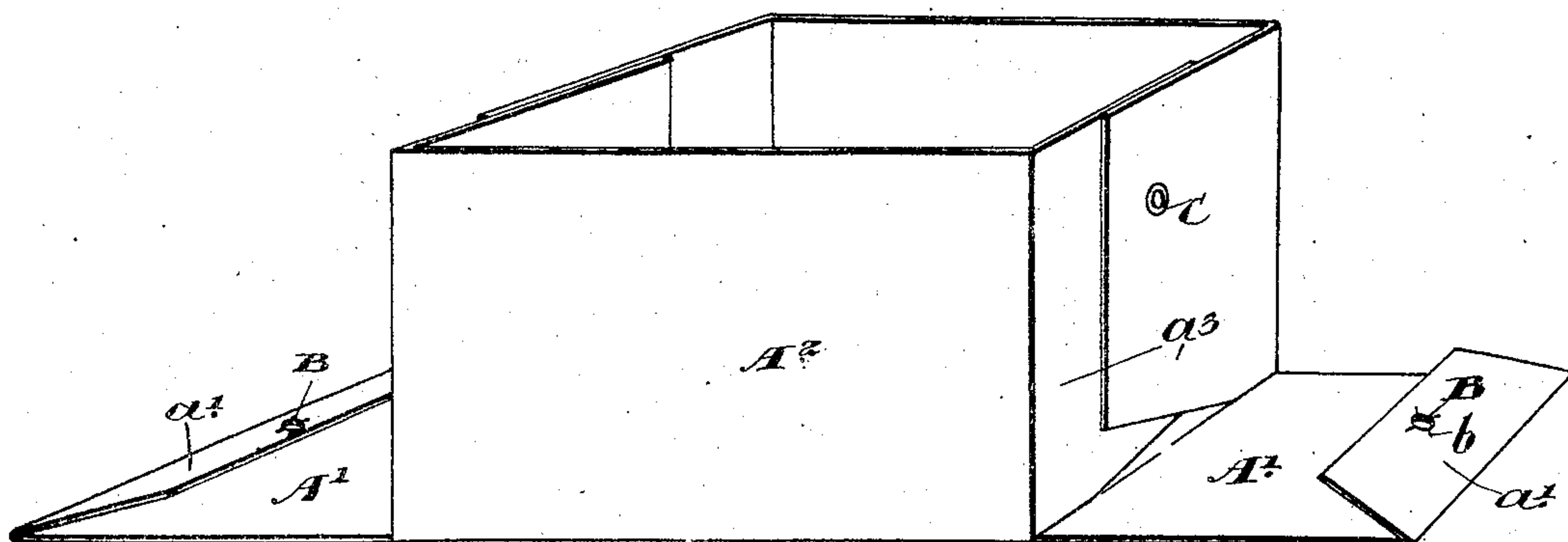


Fig. 3.

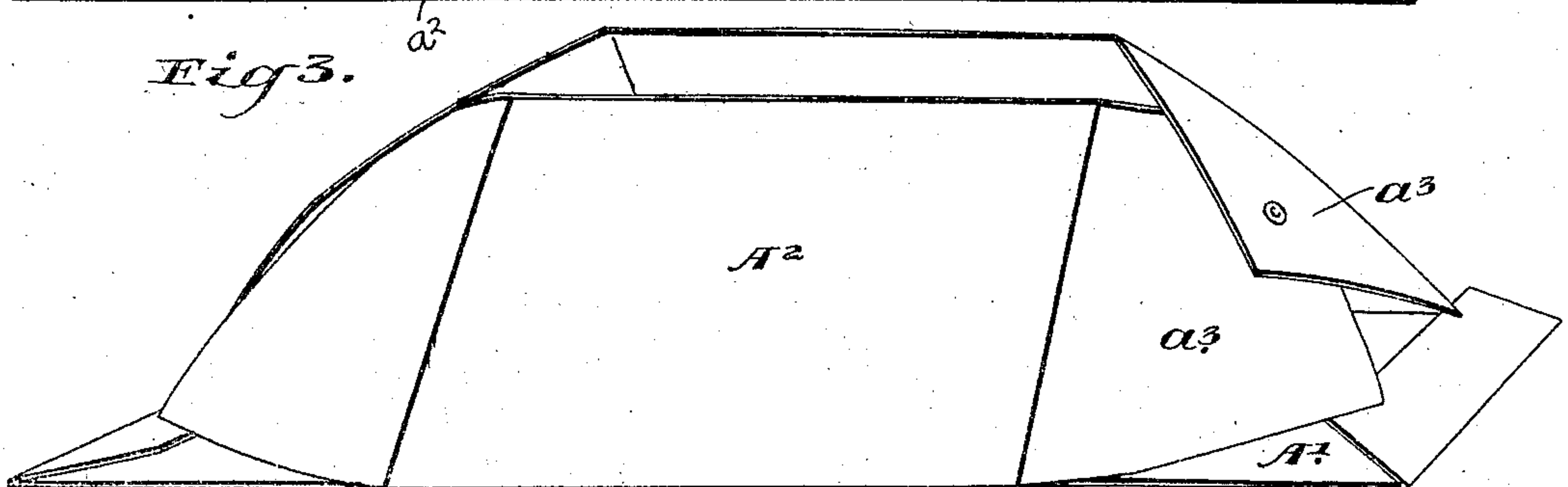


Fig. 4.

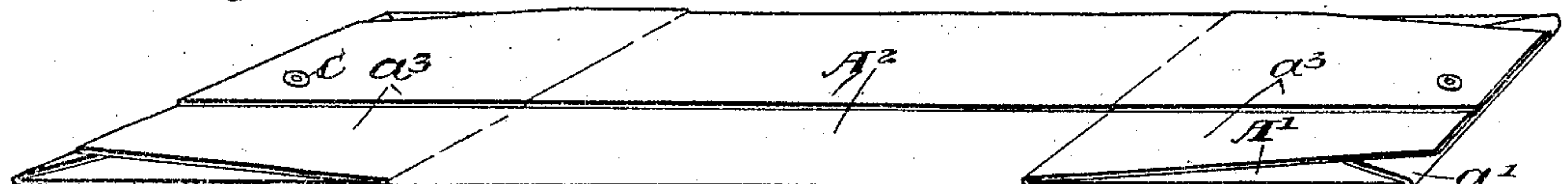


Fig. 5.

Witnesses.  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

CHARLES FREDERICK RAMSAY, OF BRANTFORD, CANADA.

## COLLAPSIBLE BOX.

SPECIFICATION forming part of Letters Patent No. 777,695, dated December 20, 1904.

Application filed July 6, 1904. Serial No. 215,494.

*To all whom it may concern:*

Be it known that I, CHARLES FREDERICK RAMSAY, of the city of Brantford, in the county of Brant, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Collapsible Boxes, of which the following is a specification.

My invention relates to improvements in collapsible boxes; and the object of the invention is to devise a simple form of paper, cardboard, or pasteboard box which will be extremely strong and durable for a light weight of material and which may be readily collapsed into a flat form for convenience in packing; and it consists, essentially, of the combination, construction, and arrangement of parts hereinafter described, and particularly pointed out in the claims.

Figure 1 is a perspective view of my box as set up and constructed in accordance with my invention, portion being broken away to exhibit the connection of the eyelet to the fold of the end flap. Fig. 2 is a longitudinal section through the box and end flaps, showing the manner of adjustably connecting them together by the eyelets. Fig. 3 is a perspective view of the box, showing the end flaps of the bottom thrown back; and Fig. 4 is a perspective view showing the sides and end flaps of the sides in the act of being collapsed. Fig. 5 is a perspective view of the sides with the end flaps collapsed flat down upon the bottom and end flaps of the bottom—that is to say, the box collapsed and ready for packing for shipment.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the bottom, having the end folds  $a$ , from which extend the end flaps  $A'$ , having the inwardly-turned folds  $a'$ , provided with circular holes B, having the radial cuts  $b$  extending inwardly from the edges of the holes and designed to make the edges flexible for the purpose which will hereinafter appear.

$A^2$   $A^2$  are the sides of the box, which are suitably connected at the fold  $a^2$  to the bottom A of the box and are provided with end flaps  $a^3$ , which overlap each other, as indicated, and are connected together by eyelets C. These eyelets C form a pivot for the end

flaps  $a^3$  and enable the box to be folded down in the manner as indicated in Figs. 4 and 5 and into the position shown in Fig. 5, which is the flat or collapsed position.

In order to raise the box into the position shown in Fig. 3, the outer edges of the sides  $A^2$  are pulled apart and swung back, as indicated in Fig. 4, until the sides  $A^2$  and end flaps  $a^3$  are brought into the position shown in Fig. 3, the eyelets C serving to allow of this movement without disturbing the relative connection between the end flaps  $a^3$ . The end flaps  $A'$  of the bottom A are then brought up into position, as shown in Figs. 1 and 2, and the hole B is sprung over the inner head of the eyelet C and the flexible edges  $b$  of the hole B folded down behind the eyelet. The eyelet C is of course of sufficient length to allow of this and suitably formed. It will be understood that the folds  $a'$  of the end flaps  $A'$  are preferably folded into the position shown in Figs. 1 and 2 to complete the box, and such box when completed is rigid and strong and yet readily knocked down flat, as indicated in Fig. 5. In this latter figure it will be noticed that the folds  $a'$  fold in under the flaps  $a^3$ .

Although I describe the flaps  $A'$  as being brought to the outside of the flaps  $a^3$ , it will be understood that the flaps  $A'$  might be with equal facility brought to the inside of the aforesaid flaps  $a^3$ , in which case, of course, the folds  $a'$  of the flaps  $A'$  would be reversely folded onto the outside of the box; but as this would not form a box equally as neat in appearance as hereinbefore described I fold the flap  $A'$  as shown.

What I claim as my invention is—

1. A collapsible box comprising a bottom having end flaps overlapping and permanently connected together by a pivot at each end at a point equidistant from the side and bottom of the box, whereby the sides may be collapsed flat upon the bottom by pulling outwardly at the bottom of the end folds and the box set up by pulling upwardly upon the top edges of the sides as specified.

2. A collapsible box comprising a bottom having end flaps connected by a fold to the ends of the bottom, and supplemental end



5 folds at the outer end of the end flaps provided with a hole located midway between the ends of the supplemental fold, and sides having end flaps permanently connected together by  
10 a pivot at each end equidistant from the side and bottom of the box, said pivot being adapted to hold the supplemental folds down over the end flaps by reason of it projecting through the hole of the end flaps as specified.  
15 3. A collapsible box comprising a bottom having end flaps connected by a fold to the ends of the bottom and supplemental end folds at the outer end of the end flaps provided with a hole having radial slits extending outwardly from the edge of the hole and located midway

between the ends of the supplemental fold, and sides having end flaps permanently connected together by an eyelet having the head of the eyelet on the inside and the eyelet at a point equidistant from the side and bottom of the box, the flange of the head of the said eyelet being adapted to hold the supplemental folds down over the end flaps by the radially-separated edges of the hole being sprung behind the flange of the eyelet as specified. 20

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Witnesses:

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