

(No Model.)

H. P. HUSTON.  
KNOCKDOWN BOX.

No. 363,143.

Patented May 17, 1887.

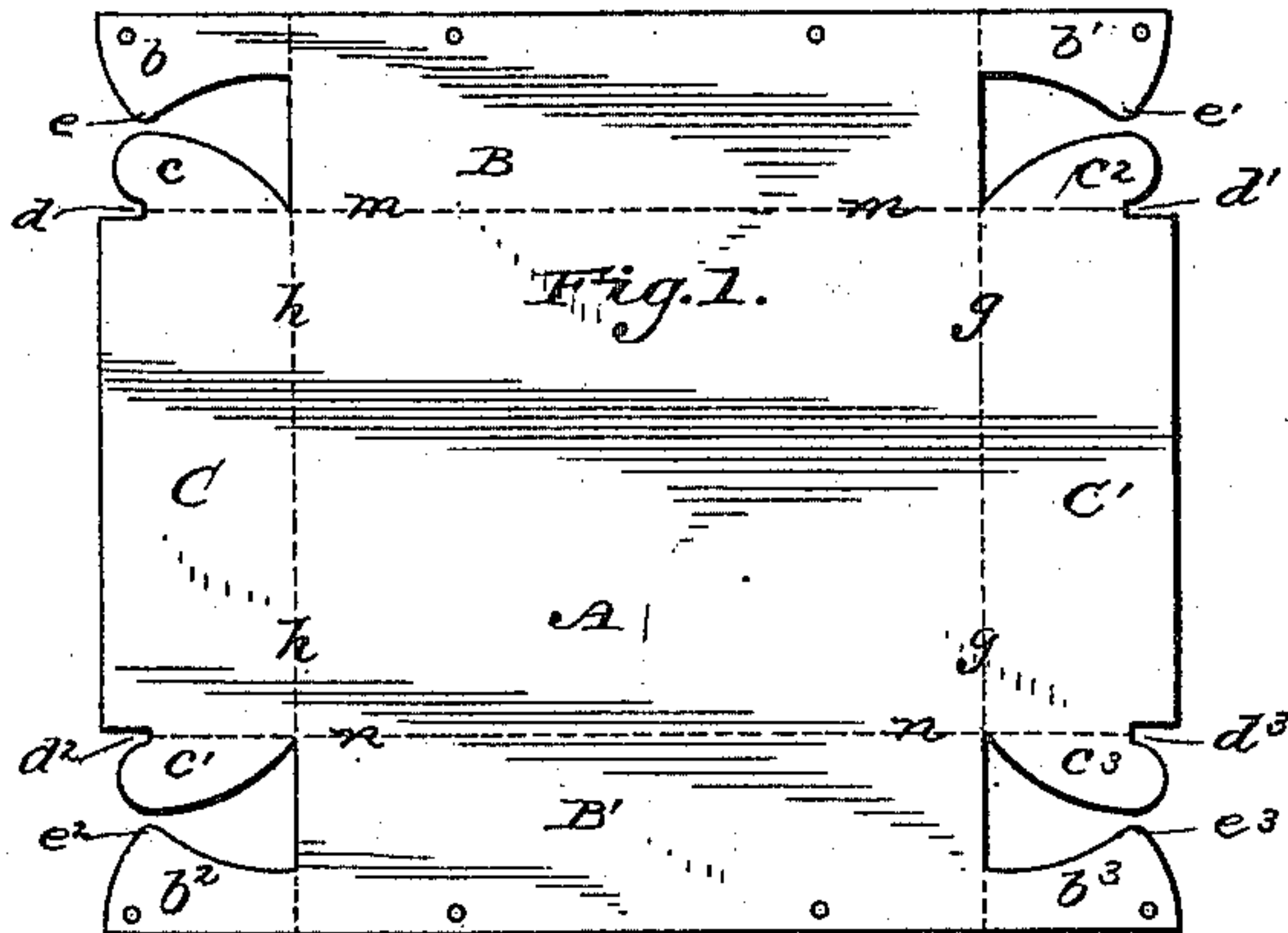


Fig. 2.

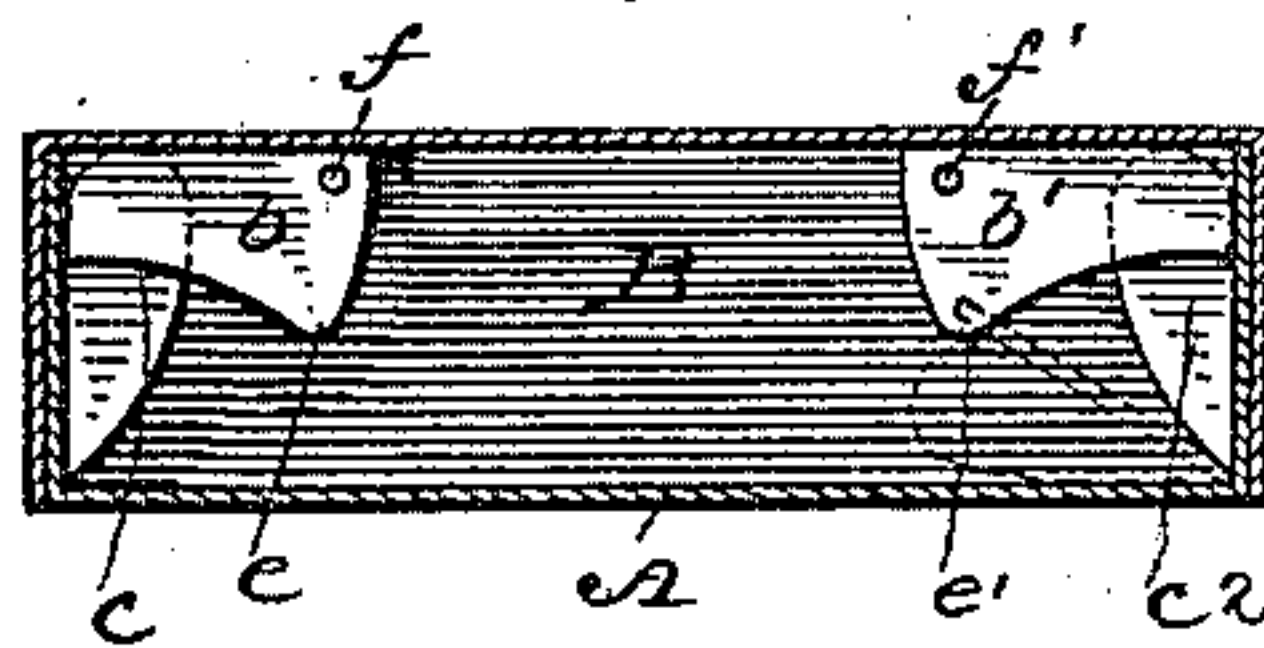


Fig. 3.

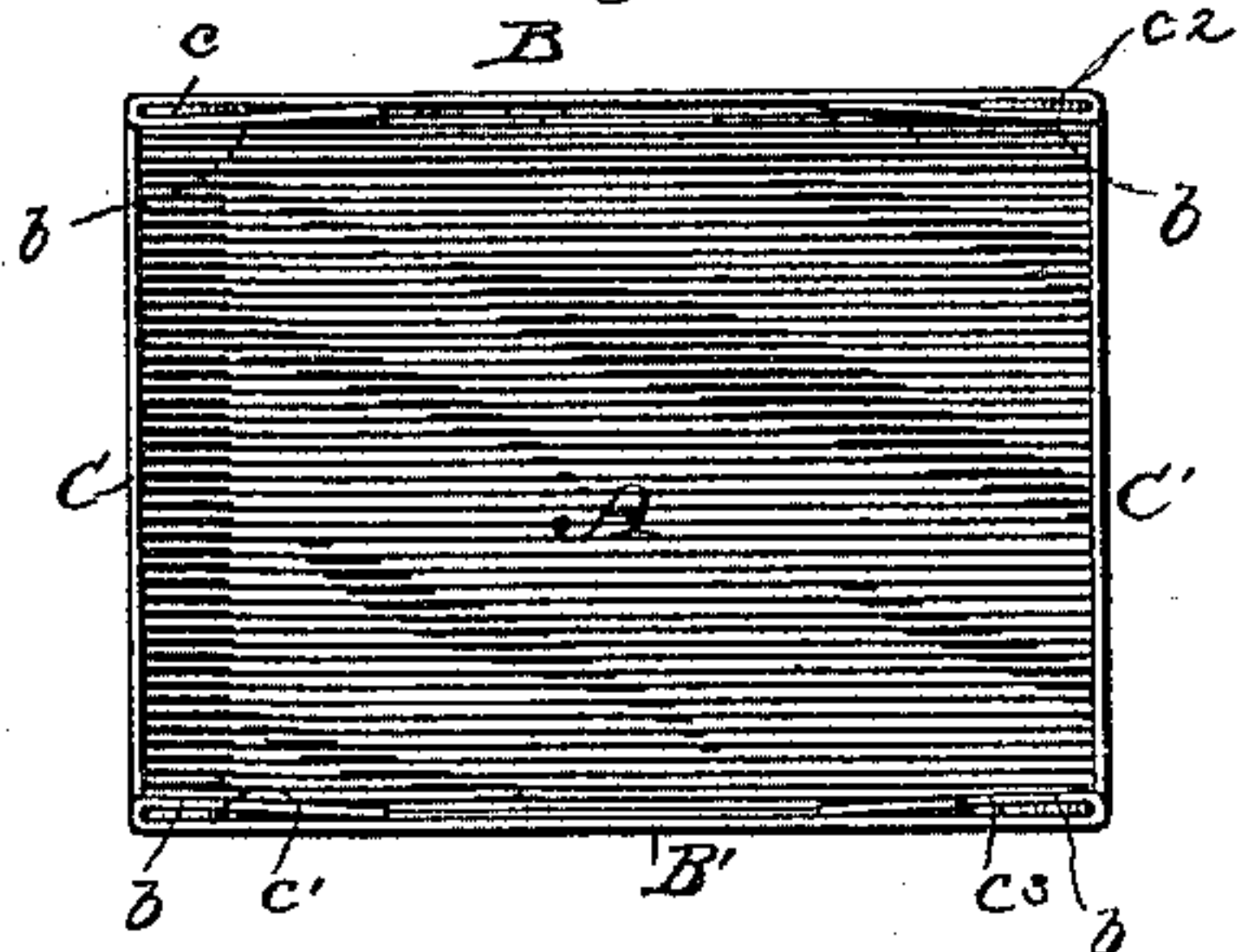
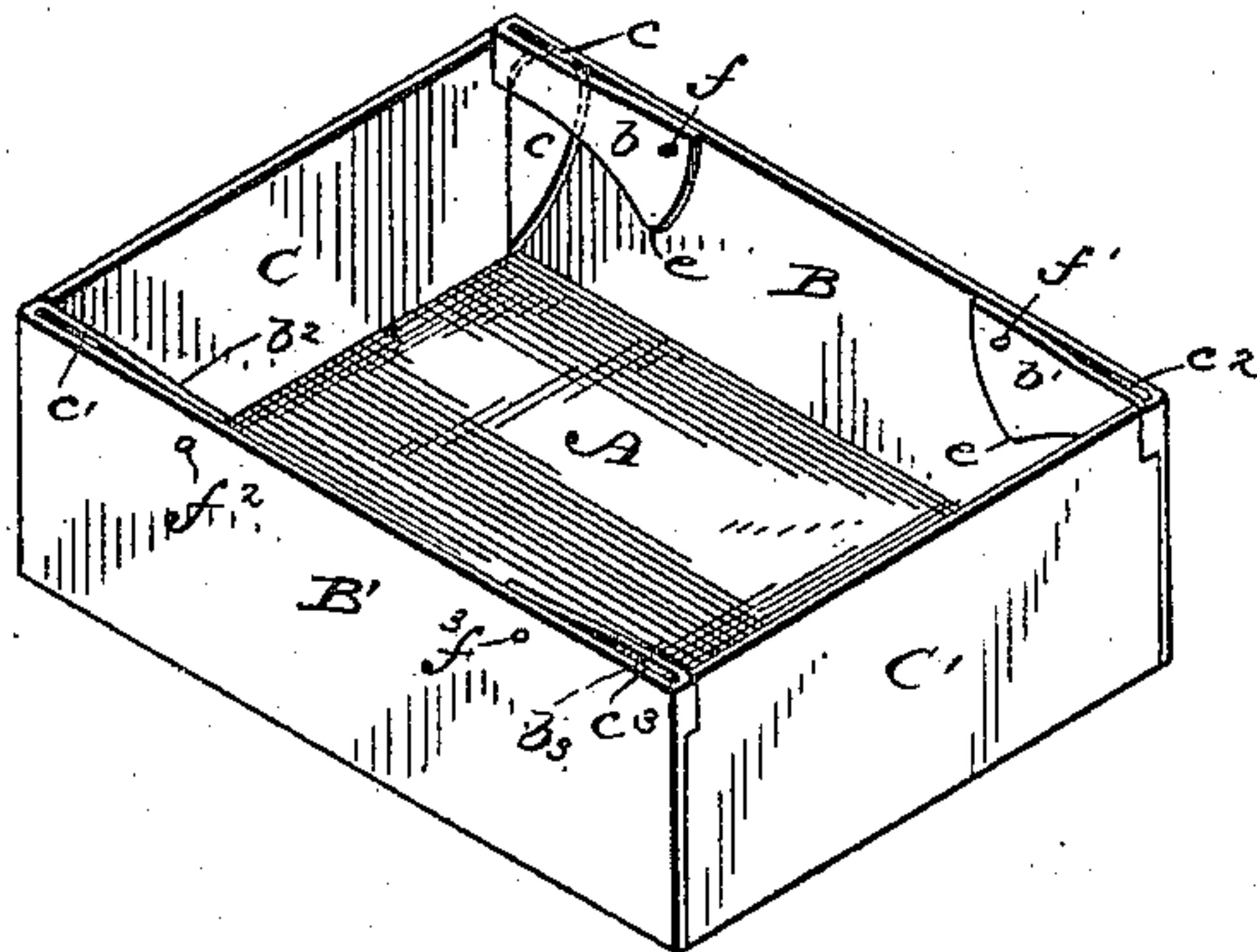


Fig. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## KNOCKDOWN BOX.

SPECIFICATION forming part of Letters Patent No. 363,143, dated May 17, 1887.

Application filed November 19, 1886. Serial No. 219,369. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY P. HUSTON, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Knockdown Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in receptacles formed from material that may be readily bent or folded, and adapted to be disjointed, so as to occupy a relatively smaller space during transport or in storage to that which they inclose when put together in readiness for use.

Receptacles of this general character are known to the trade as "knockdown boxes." My invention contemplates particularly an improved conformation for such boxes and the blanks from which they are formed, embodying simplicity and durability of construction, economy of time, labor, and material in the process of manufacture, and ready manipulation in setting up and disjointing the parts.

I have illustrated my improvements in the drawings accompanying this specification, wherein—

Figure 1 represents in plan the configuration of the blank from which the body of the box or its cover is formed. Fig. 2 represents a central section through the box-body and cover. Fig. 3 represents in plan the box-body or its cover, and Fig. 4 represents the same in perspective.

Similar letters of reference denote similar parts throughout the several views.

The box is made up of two parts—the body portion and the cover inverted over and inclosing the same, as shown in Fig. 2. Each of these parts is designed to be formed from a blank of the shape shown in Fig. 1, the blank for the cover being necessarily somewhat larger than that for the body portion, for obvious reasons.

The blank A is cut from a rectangular sheet of the material (preferably pasteboard) employed in such manner as to leave a central rectangular portion, side flaps, B B', pro-

vided with auxiliary flaps  $b b' b^2 b^3$ , and end flaps, C C', having tongues  $c c' c^2 c^3$ . The slits  $d d' d^2 d^3$ , separating the outer portions of these tongues from the end flaps, C C', render the tongues flexible, so that they may be readily manipulated in making and uncoupling the joint, as hereinafter explained. The auxiliary flaps  $b b' b^2 b^3$  have projections  $e e' e^2 e^3$ , also flexible.

In forming the body of the box—or its cover, as the case may be—from one of these blanks, I proceed as follows: The auxiliary flaps  $b b' b^2 b^3$  are bent inwardly, (upon the lines  $g g$  and  $h h$ ,) respectively, and secured at their upper edges to the interior surfaces of the side flaps, B B', by means of eyelets, as  $f f' f^2 f^3$ , or otherwise. The side flaps are then bent upwardly (along the lines  $m m$  and  $n n$ ) at right angles to the main portion of the blank. The tongues  $c c' c^2 c^3$  are thereupon bent upwardly (along the lines  $m m$  and  $n n$ ) at right angles to the end flaps, C C'. The end flaps are bent inwardly (along the lines  $g g$  and  $h h$ ) and between the side flaps, B B', until the tongues  $c c'$ , &c., pass the projections  $e e'$ , &c., as indicated in dotted lines in Fig. 2. The end flaps are then bent in a reverse direction until they are at right angles to the main portion of the blank, and in this reverse movement the tongues  $c c'$ , &c., enter the space between the side flaps, B B', and the auxiliary flaps  $b b'$ , &c., passing behind the projections  $e e'$ , &c., thereby forming the complete receptacle or its cover, as indicated in Figs. 3 and 4.

In knocking down or disjointing the box it is merely necessary to push or bend the end flaps inwardly until the tongues  $c c'$  are disengaged, and then bend the side and end flaps outwardly until they lie in the same general plane with each other. In this flattened-out condition the smallest possible space for transportation or storage is occupied.

It will be noted especially that the joints connecting the side and end flaps are wholly within the interior space when the parts are united. The receptacle therefore presents an even and neat exterior, and the joint-pieces are protected from injury.

It is obvious that the form of the tongues  $c c'$ , &c., and the auxiliary flaps  $b b'$ , &c., may be varied within considerable limits without



departing from the spirit of my invention, according to the degree of flexibility of the material employed and the dimensions or shape of the receptacle to be produced.

5 Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

10 1. A knockdown box having a corner-joint consisting of a flap connected to the interior surface of one of the sides, and a tongue connected with the adjacent side and passing between the flap and first side, substantially as described.

15 2. A knockdown or folding receptacle having side and end flaps, the side flaps being provided with receiving-pockets, each consisting of a strip connected at its upper side and inward end to the inner surface of the side flap, and the end flaps being provided with tongues  
20 engaging within said pockets, substantially as shown and described.

3. A knockdown or folding receptacle having side and end flaps, the side flaps being provided with receiving-pockets, each consisting of a strip connected at its upper side and inward end to the inner surface of the side flap, and having a tongue projection, and the end flaps being provided with tongues engaging within said pockets, substantially as shown and described. 25 30

4. A blank of flexible material, for the purpose described, consisting of a rectangular central portion and rectangular wings  $B B' C C'$ , having the extensions  $b b'$ , &c., and the tongues  $c c'$ , &c., substantially as shown and described. 35

In testimony whereof I affix my signature in presence of two witnesses.

HENRY P. HUSTON.

Witnesses:

JOHN C. PENNIE,  
M. A. BALLINGER.