

No. 742,159.

PATENTED OCT. 27, 1903.

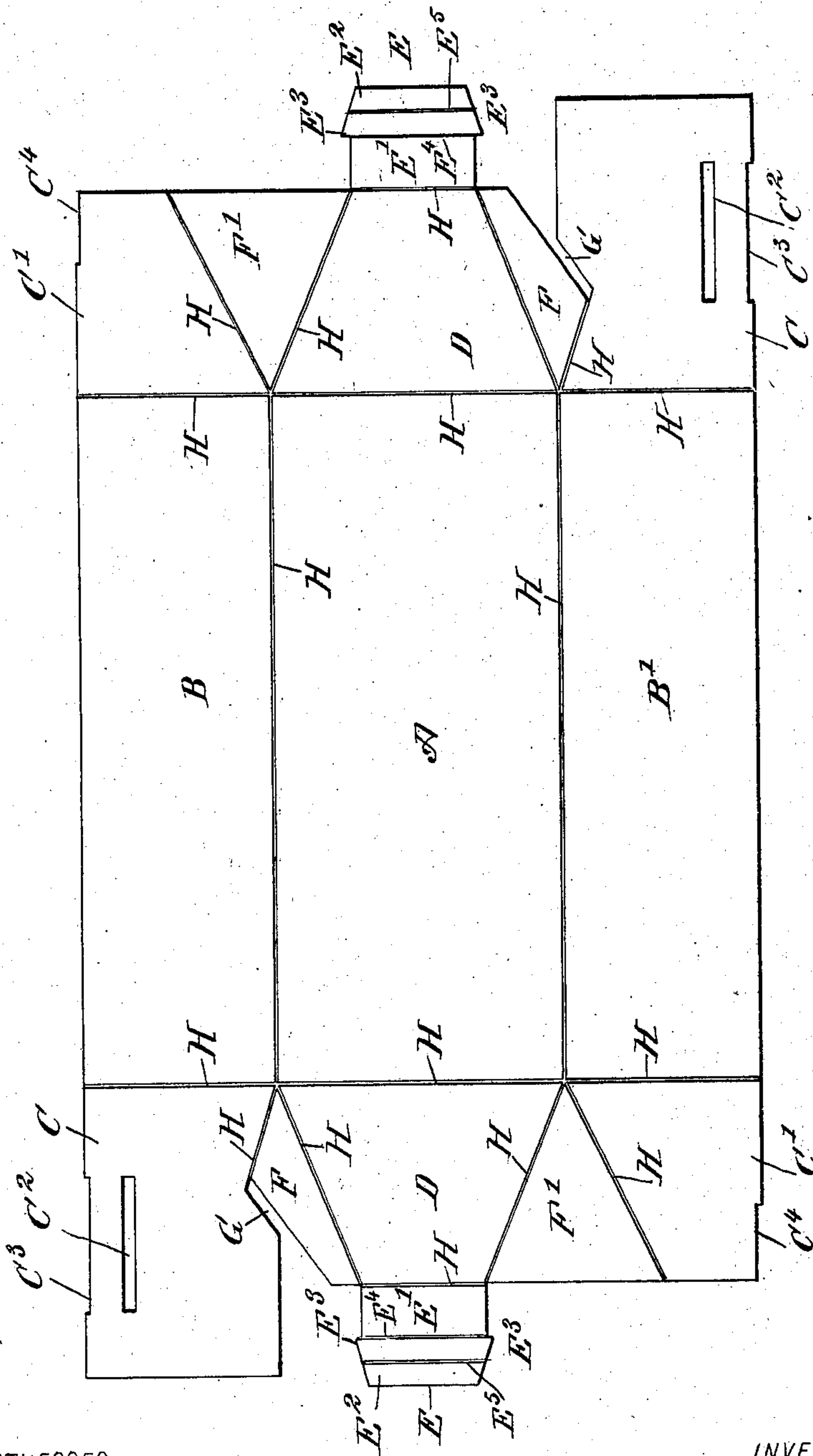
W. E. BURTON.  
FOLDING BOX.

APPLICATION FILED JAN. 23, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES:

William P. Goebel  
Neville Hostetler

INVENTOR

William E. Burton

BY

Munn

ATTORNEYS.

No. 742,159.

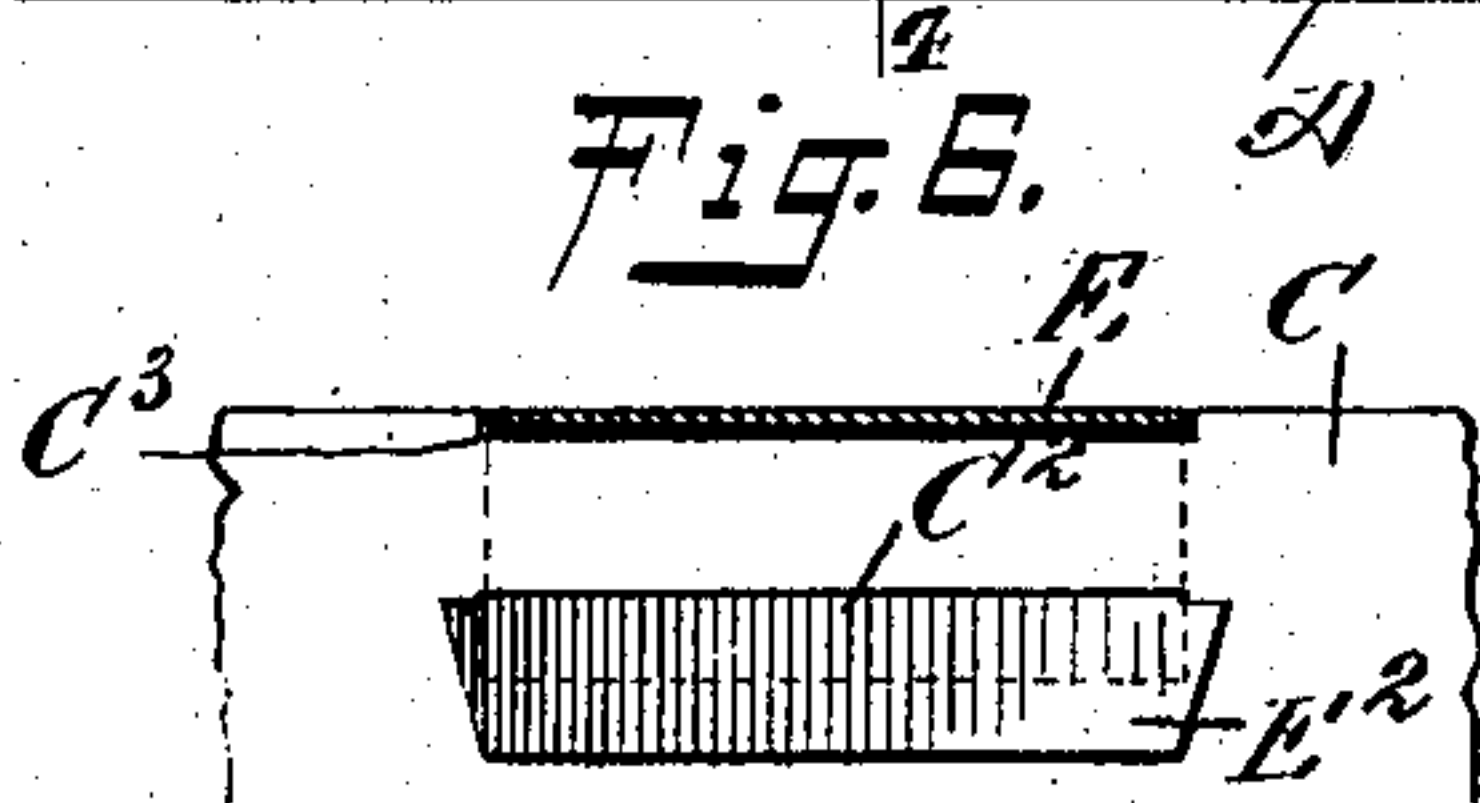
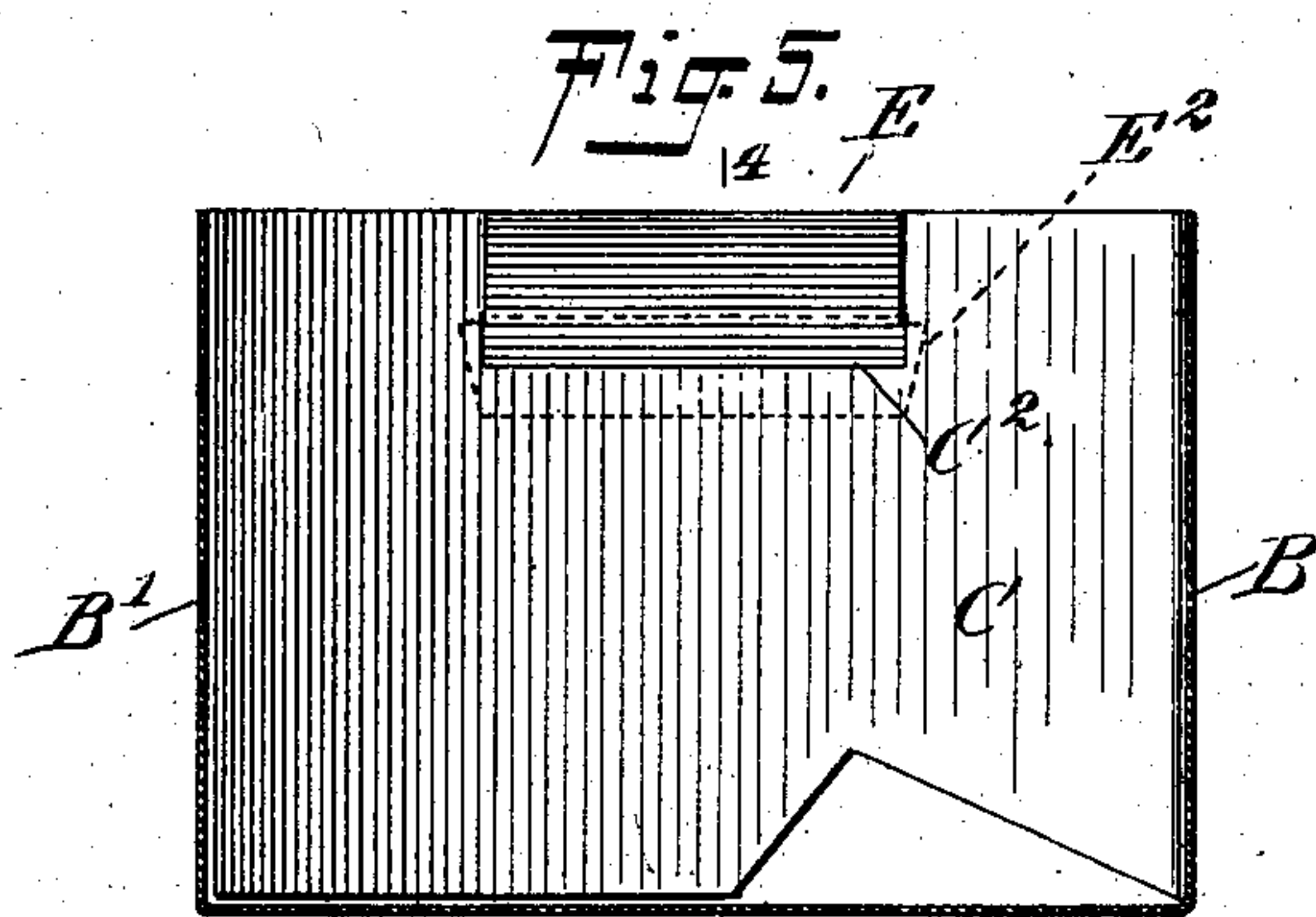
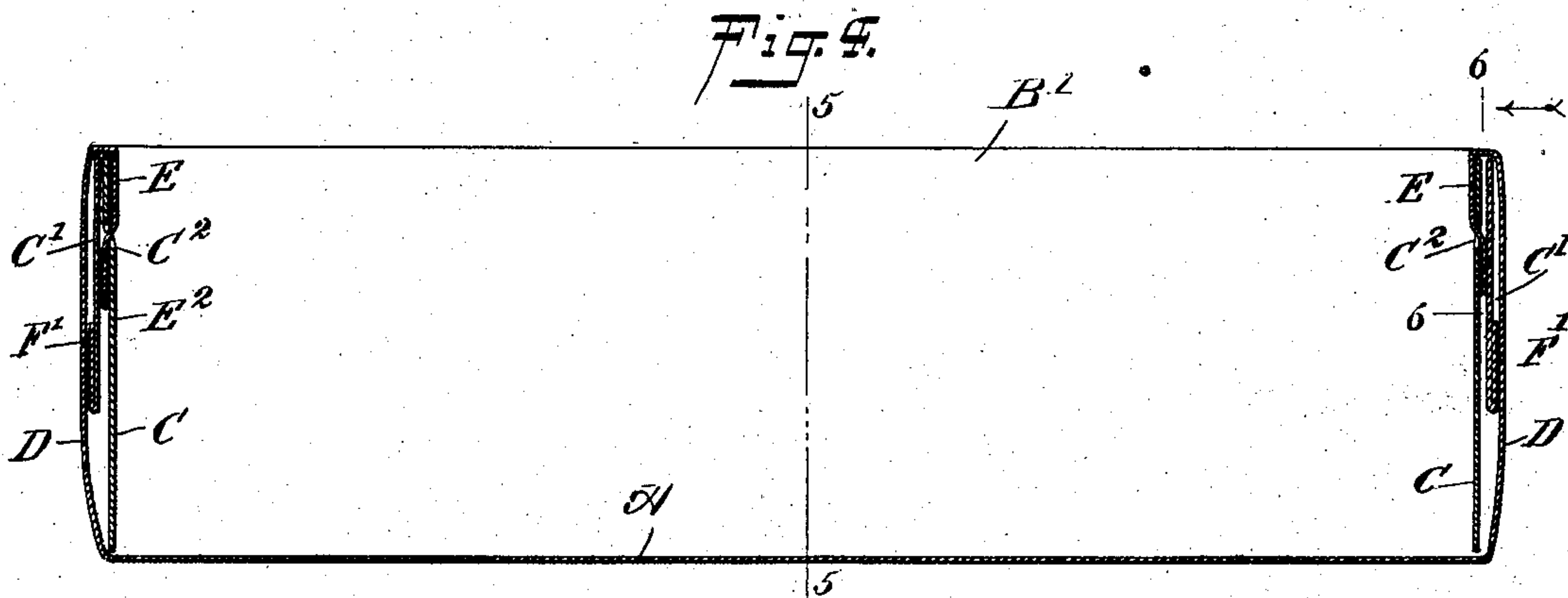
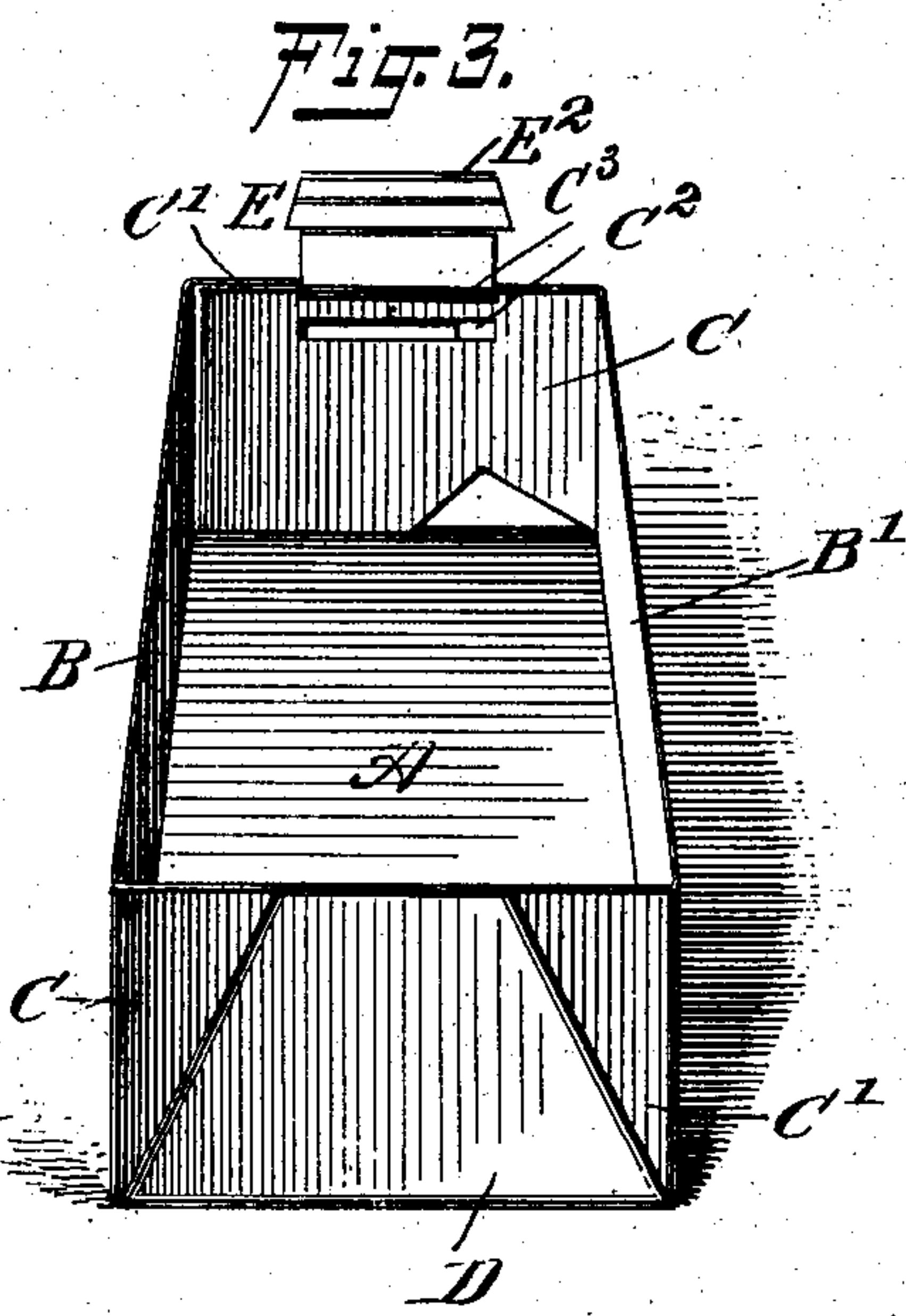
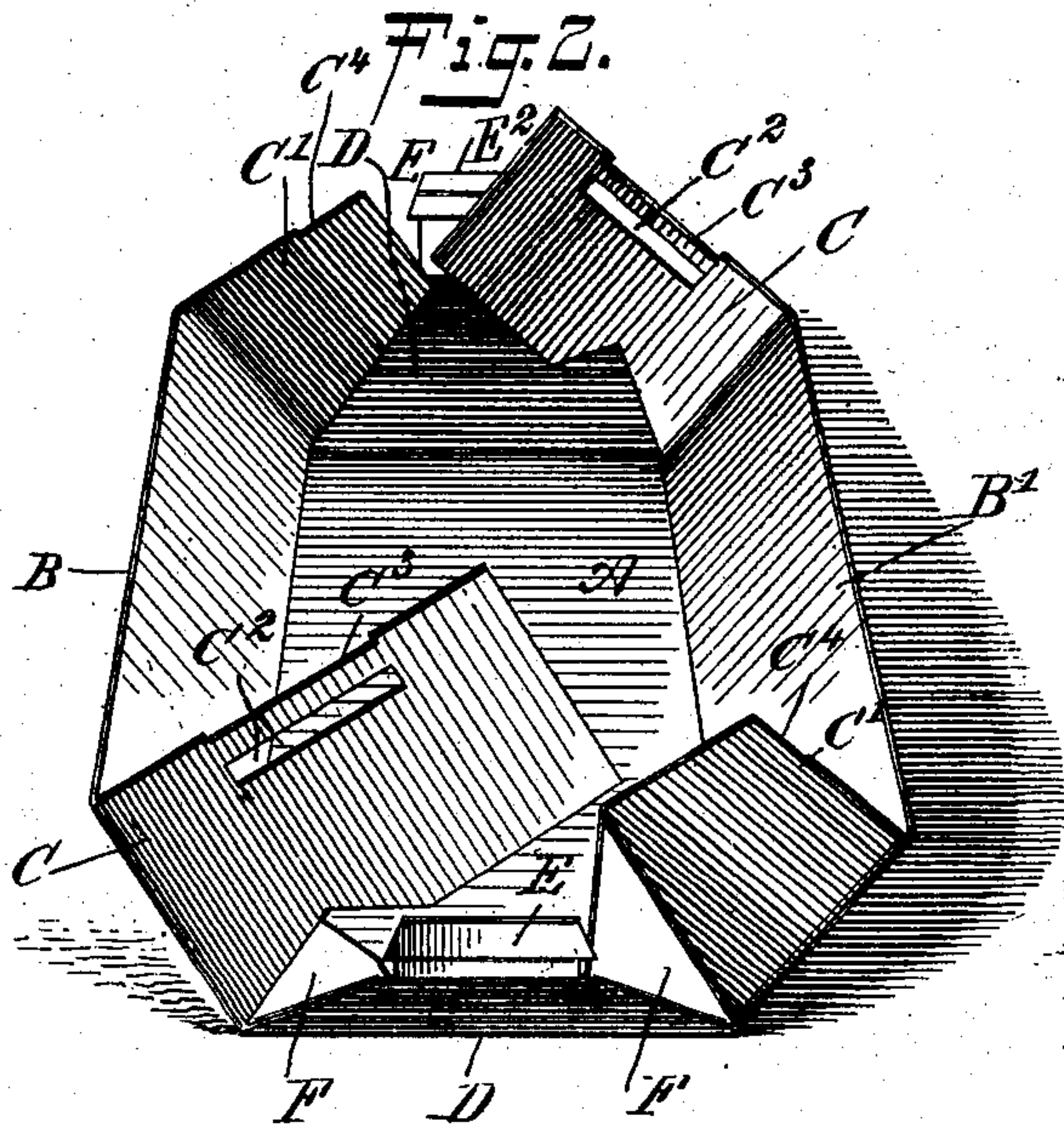
PATENTED OCT. 27, 1903.

W. E. BURTON.  
FOLDING BOX.

APPLICATION FILED JAN. 23, 1903.

NO MODEL.

2 SHEETS—SHEET 2.



WITNESSES:

William P. Goebel.  
Chas. H. Foster.

INVENTOR

William E. Burton

BY

Mumma  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

WILLIAM E. BURTON, OF NEW YORK, N. Y.

## FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 742,159, dated October 27, 1903.

Application filed January 23, 1903. Serial No. 140,220. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM E. BURTON, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Folding Box, of which the following is a full, clear, and exact description.

The invention relates to folding-boxes, such as shown and described in the Letters Patent of the United States No. 716,665, granted to me December 23, 1902.

The object of the present invention is to provide a new and improved folding box formed of a single blank and arranged to economize in the use of the material, to allow convenient and quick setting up of the box from the flat blank, and to securely lock the integral parts in the set-up position.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a face view of the blank for forming the box-body or the box-cover. Fig. 2 is a perspective view of the improvement partly set up. Fig. 3 is a similar view of the same, showing one end complete and the other end unlocked. Fig. 4 is a longitudinal sectional elevation of the improvement on the line 4 4 of Fig. 5. Fig. 5 is a transverse section of the same on the line 5 5 of Fig. 4; and Fig. 6 is a like view of the locking device of the improvement, the section being on the line 6 6 of Fig. 4.

The blank from which the box-body or the box-cover is formed is made from a single piece of paper or other material and consists, essentially, of a middle portion A, from the sides of which extend integrally the sides B and B', each terminating at its ends in flaps C C', and the said middle portion A terminates at each end in an integral outer covering-flap D, provided at its free end with a locking-tongue E and connected at its sides by flanges F F' with the end flaps C C' on the corresponding end of the box.

The end flap C at each end of the box is provided with a slot C<sup>2</sup>, extending in the direction of the length of the flap a short distance from the outer side thereof, as plainly illustrated in the drawings, and this slot C<sup>2</sup> is adapted to receive the corresponding locking-tongue E, which latter has its shank E' approximately of a width corresponding to the length of the slot C<sup>2</sup>, and the head E<sup>2</sup> of the locking-tongue has sidewise-projecting teeth E<sup>3</sup> for abutting against the outer face of the end flap C at the time the box is set up, and the head E<sup>2</sup> is passed through the slot C<sup>2</sup>. (See Figs. 4, 5, and 6.)

The head E<sup>2</sup> of each locking-tongue has tapering sides and is preferably provided with a transverse crease E<sup>4</sup> at the junction of the shank with the head and with a transverse crease E<sup>5</sup> midway of the head E<sup>2</sup>, so as to facilitate forcing the head E<sup>2</sup> through the slot C<sup>2</sup> when setting up the box to bring the head E<sup>2</sup> to the outer face of the end flap C.

Each end flap C is preferably of a length corresponding to the width of the box and is of a width corresponding to the height of the box, so that when the box is set up each end flap C not only forms a locking-flap, but also an inner covering-flap in contradistinction to the outer covering-flap D, previously mentioned.

The flanges F and F' at each end of the box are partly formed by the outer covering-flap D and the end flaps C C', as plainly shown in Fig. 1, and the flange F has a portion of its outer side separated from the corresponding portion of the inner side of the end flap C by forming a slot G between the said sides, so that the end locking-flap C can be folded transversely to form the inner end flap, and at the same time the flange F doubles up on the inner face of the outer flap D, the same as the flange F', to give the box a fine appearance, as indicated in Fig. 3—that is to say, the tapering sides of the outer flap D continue in the flanges F and F' doubled up on the inside of the said outer covering-flap.

The several parts above mentioned are separated from each other by suitable creases or scores H, (mainly shown in Fig. 1,) so that the blank can be readily converted into a box body or cover by first turning the sides B and B' up at right angles to the middle portion A,



then turning the end locking-flap C inward to stand at right angles to the turned-up sides B and B', after which the other end flap C' is swung transversely onto the outer face of the flap C, so that the flanges F and F' are doubled up on the outer flap D, swung up against portions of the flaps C and C', and then the locking-tongue E is swung inward and downward, and its head E<sup>2</sup> is forced through the slot C<sup>2</sup> of the inner end locking-flap C, so that the several parts are securely fastened together.

In order to bring the top of the end locking-tongue E flush with the top of the box-body when set up, I provide each of the locking-flaps C with a recess C<sup>3</sup> and the end flap C' with a recess C<sup>4</sup> arranged in such a manner that when the box is set up the recesses C<sup>3</sup> and C<sup>4</sup> at each end of the box are in register for the reception of the corresponding shank E' of a locking-tongue E. The recess C<sup>3</sup> is of a length corresponding to the width of the shank E', so that the latter holds the flap C against transverse movement, and hence the end parts of the box are not liable to open accidentally.

By having the teeth E<sup>3</sup> projecting beyond the ends of the slot C<sup>2</sup> on the outside of the flap C it is evident that the head cannot accidentally disengage the end flap C, and consequently the several parts are securely held in a locked position.

A box body or cover made from a single blank, as described, permits of shipping the blank in a flat state, so as to take up comparatively little room, and the blank can be easily converted into a box body or cover for securely holding the material with which the box is to be filled.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A paper box made from a single piece and comprising a middle portion, sides integral with the sides of the middle portion, end flaps integral with the ends of the said sides, outer covering-flaps integral with the ends of the middle portion and provided at their free ends with locking means, reversely-located flanges at the ends of the box, integrally connecting the outer covering-flaps with the adjacent end flaps, for practically the full extent of each, and other reversely-located flanges at the ends of the box, also connecting the outer covering-flaps with the adjacent end flaps for a part only of the extent of each.

2. A paper box made from a single piece and comprising a middle portion, sides integral with the sides of the middle portion, end flaps integral with the ends of the said sides, outer covering-flaps integral with the ends of the middle portion and provided at their free ends with locking-tongues, reversely-located flanges at the ends of the box, integrally connecting the outer covering-flaps with the adjacent end flaps, for substantially the full extent of each, and other reversely-located

flanges at the ends of the box, also connecting the outer covering-flaps with the adjacent end flaps, for a part only of the extent of each, each of the said flanges being formed partly from each of said flaps.

3. A paper box made from a single piece and comprising a middle portion, sides integral with the sides of the middle portion, end flaps integral with the ends of the said sides, outer covering-flaps integral with the ends of the middle portion and provided at their free ends with locking-tongues, one of the end flaps at each end of the box having means for receiving the corresponding locking-tongue, reversely-located flanges at the ends of the box, integrally connecting the outer covering-flaps with the adjacent end flaps, for the full extent of each, and other reversely-located flanges at the ends of the box, also connecting the outer covering-flaps with the adjacent end flaps for a part only of the extent of each.

4. A paper box made from a single piece of material and comprising a middle portion, outer covering-flaps integral with the ends of the middle portion and provided with locking-tongues, sides integral with the sides of the middle portion, end flaps integral with the ends of the said sides, one of the end flaps at each end of the box having means for receiving the corresponding locking-tongue, reversely-located flanges at the ends of the box integral with the adjacent end and outer covering-flaps, for the full extent of each, and other reversely-located flanges at the ends of the box, also connecting the outer flaps with the adjacent end flaps, for a part only of the extent of each, the remaining extent thereof being separated by a slot.

5. A paper box made from a single piece of material and comprising a middle portion, outer covering-flaps at the ends of the middle portion and provided with locking-tongues, side portions at the sides of the middle portion, end flaps at the ends of said side portions, one of the end flaps at each end of the box having means for receiving the corresponding locking-tongue, thus forming a locking end flap, the length of which corresponds to the width of the box, reversely-located flanges at the ends of the box, connecting the outer covering-flaps with the adjacent end flaps, for the full extent of each, and other reversely-located flanges at the ends of the box, also connecting the outer covering-flaps with the adjacent end flaps for a part only of the extent of each.

6. A paper box made from a single piece of material and comprising a middle portion, outer covering-flaps integral with the ends of the middle portion and having tapering sides and locking-tongues extending from the free ends of the said outer covering-flaps, the head of each locking-tongue having sidewise-extending teeth, sides integral with the sides of the middle portion, end flaps integral with the ends of the said sides, one of the end flaps



at each end of the box having a slot for the reception of the corresponding locking-tongue, the length of the slot corresponding approximately to the width of the shank of the locking-tongue, and flanges integral with the end and outer covering-flaps and formed partly from each of the said flaps, as set forth.

7. A paper box made from a single piece and having double inner flaps at each end of the box, one lapping the other, and the two formed with registering recesses in the edges thereof, and outer covering-flaps also at the ends of the box and adapted to fit said recesses, flush with the general surface of the box.

8. A paper box having double inner flaps at

an end thereof, the same being formed in their upper edges with registering recesses, and one of said flaps having a slot parallel to the longer side of the recess therein, and an outer covering-flap having a locking-tongue, the shank of the latter fitting the recesses flush with the surface of the box, and the head of said tongue being adapted to the slot.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM E. BURTON.

Witnesses:

THEO. G. HOSTER,

EVERARD BOLTON MARSHALL.