

(No Model.)

2 Sheets—Sheet 1.

J. C. HARKER.
BOX.

No. 598,087.

Patented Feb. 1, 1898.

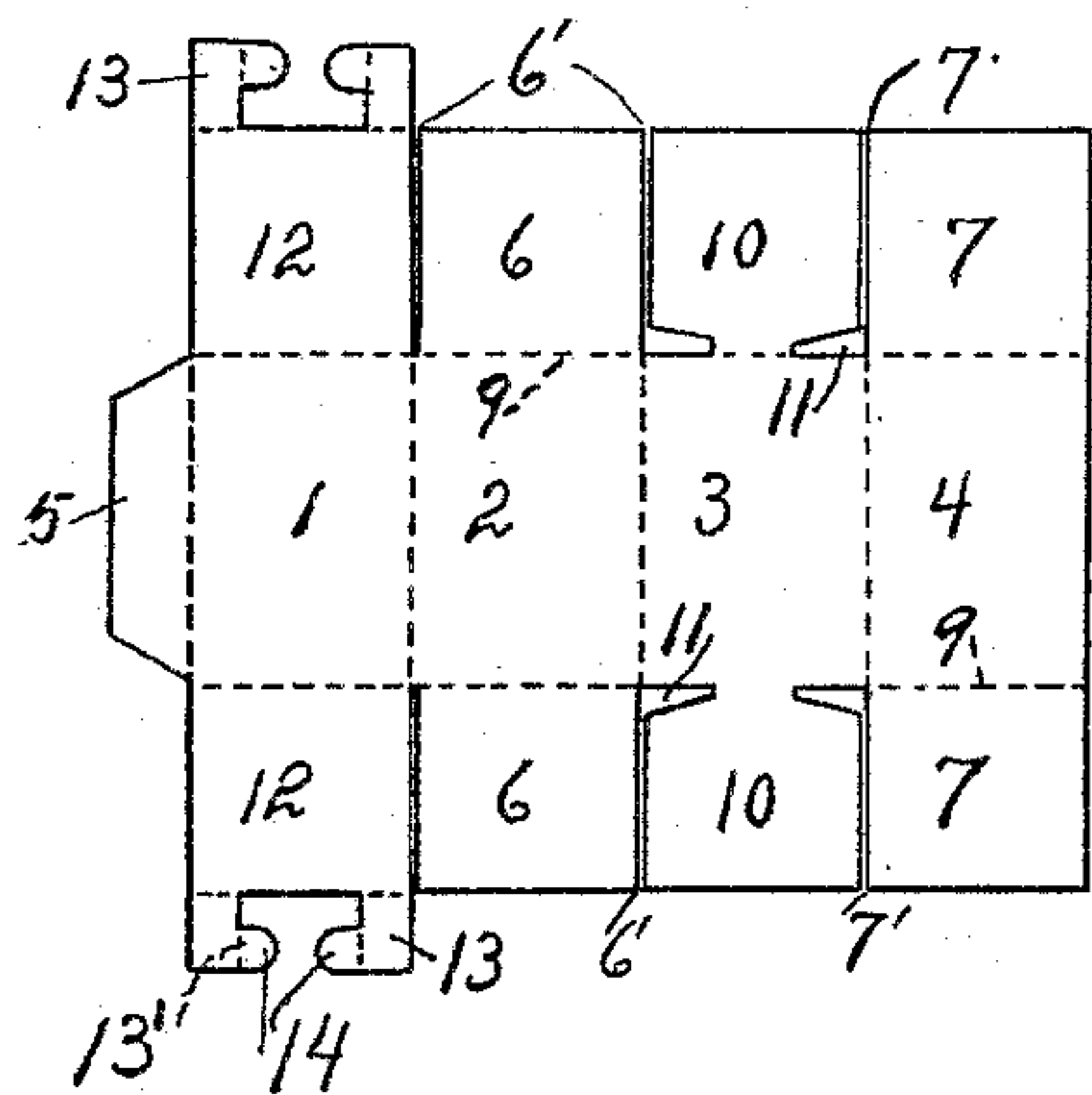


Fig. 1.

Fig. 3.

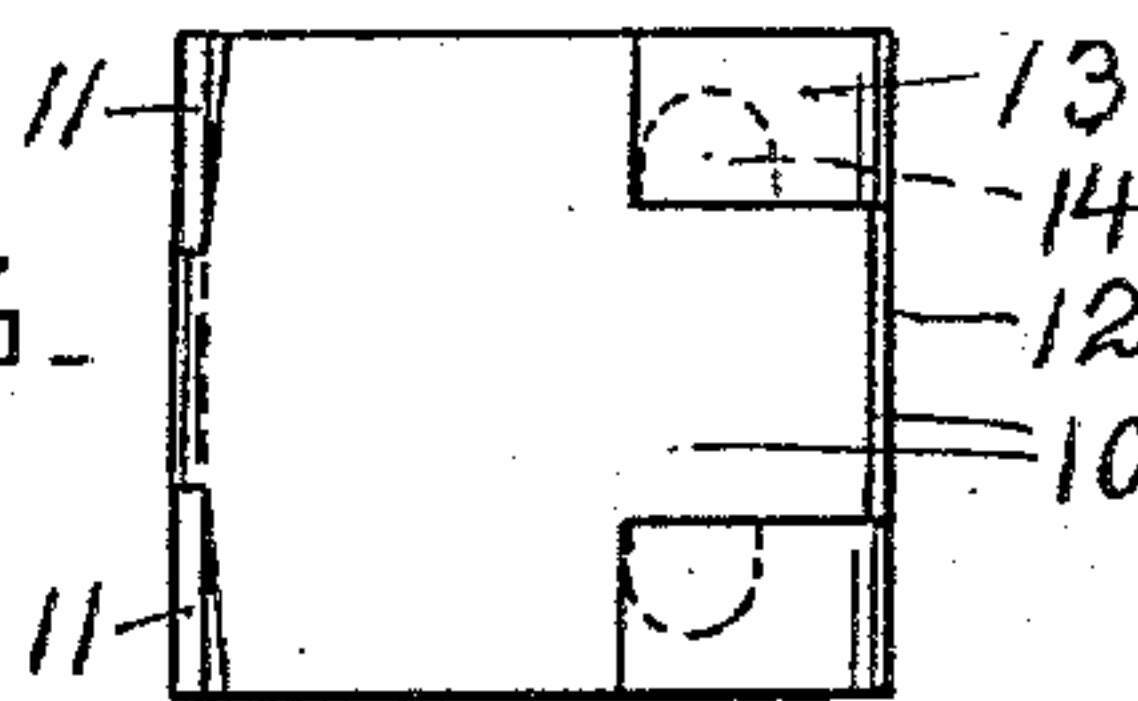


Fig. 4.

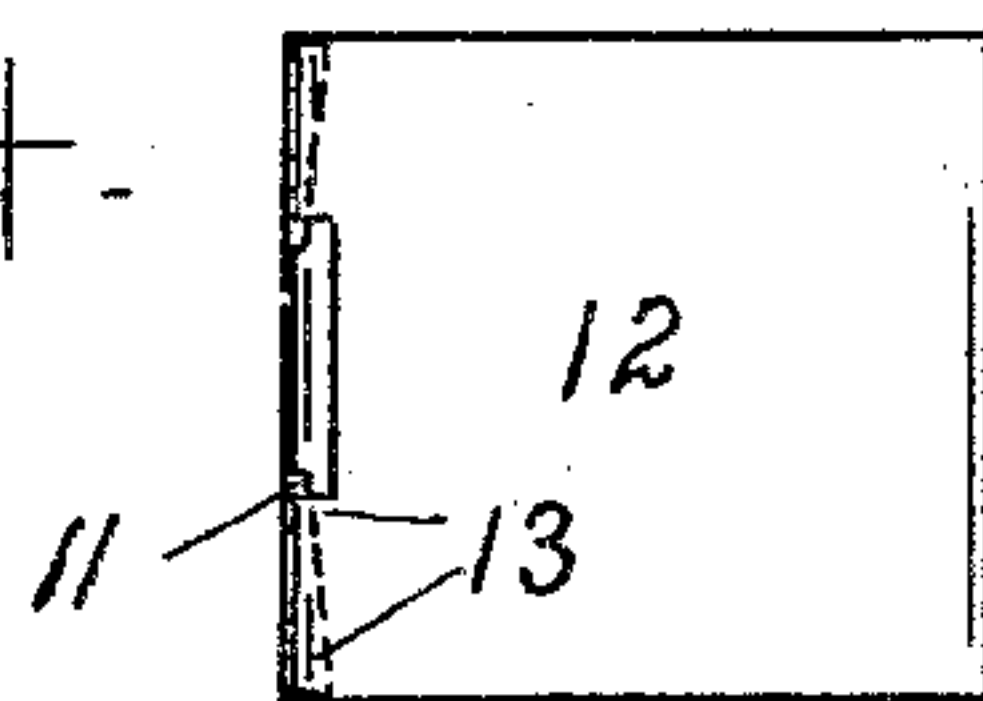


Fig. 2.

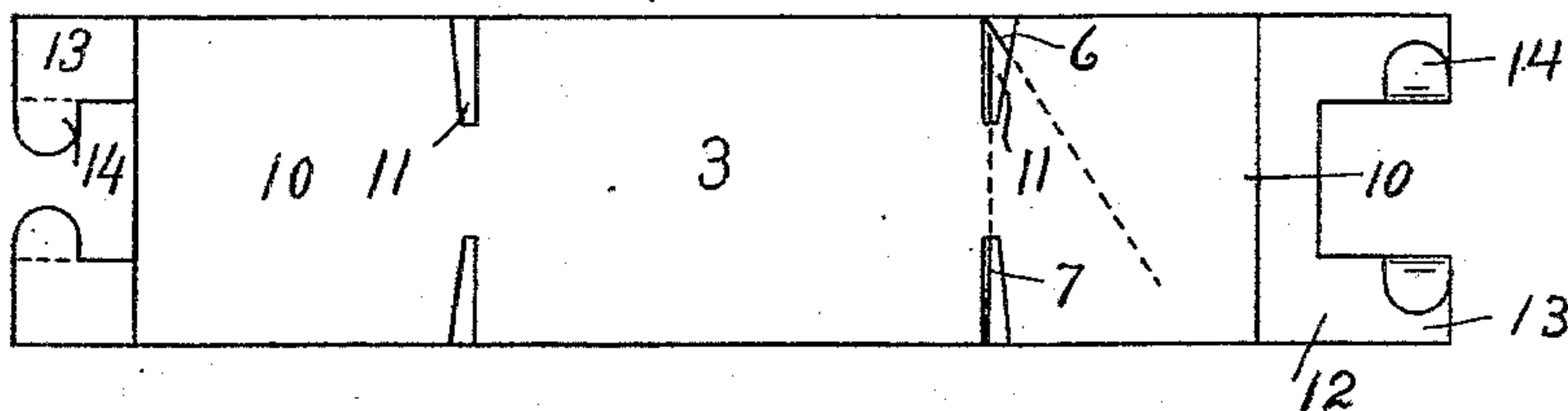


Fig. 5.

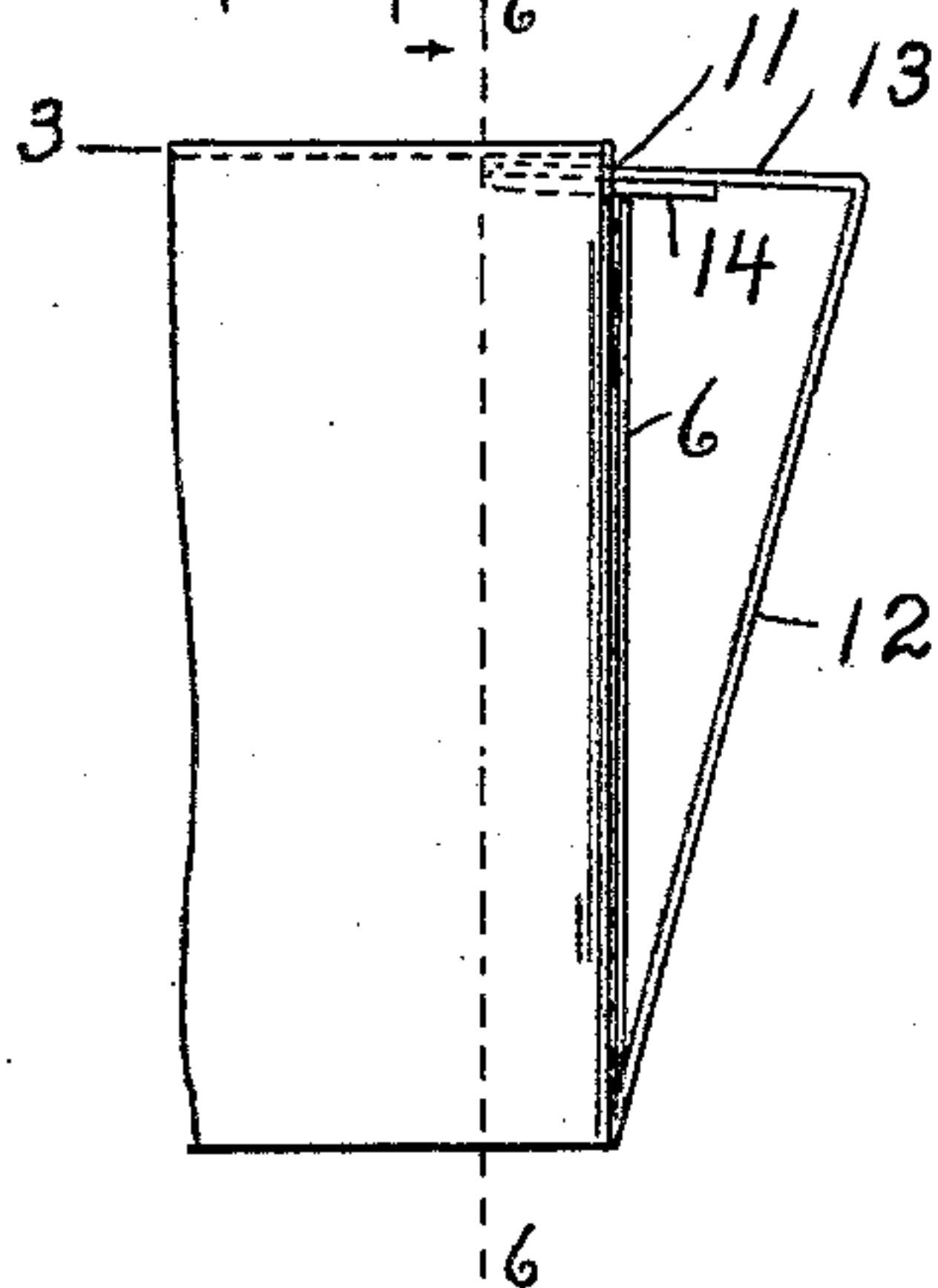
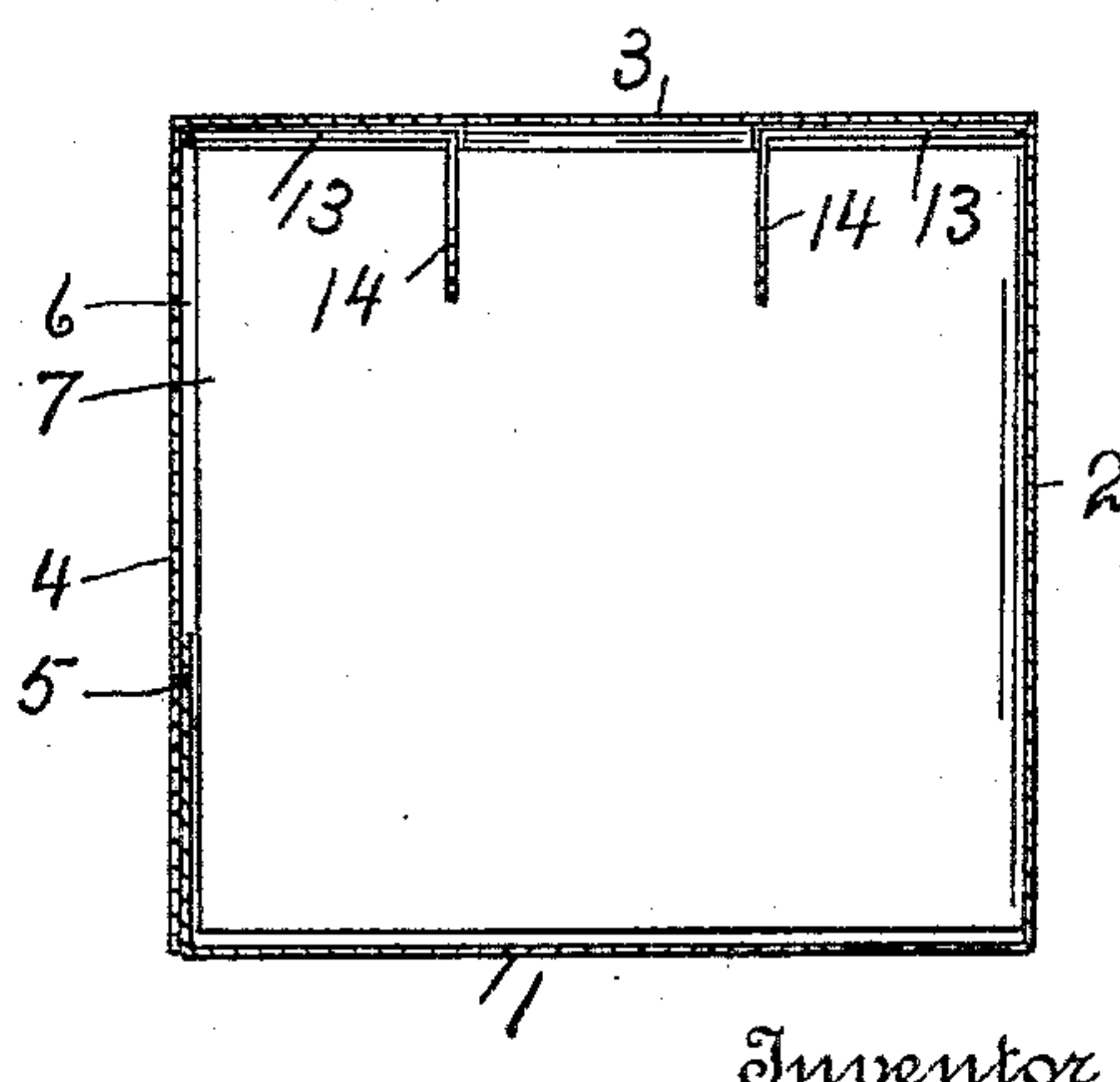


Fig. 6.



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(No Model.)

2 Sheets—Sheet 2.

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BOX.

No. 598,087.

Patented Feb. 1, 1898.

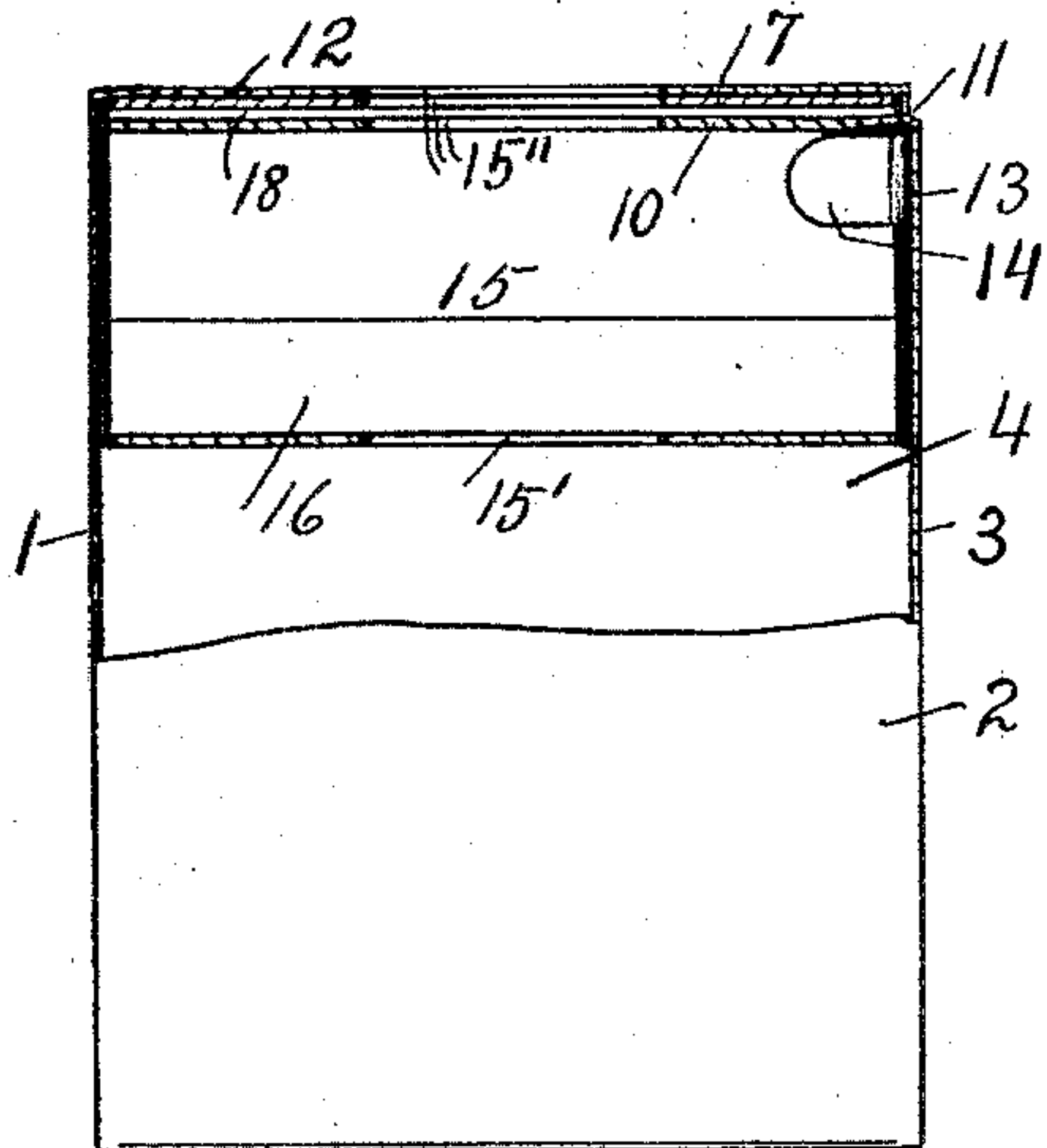


Fig. 7.

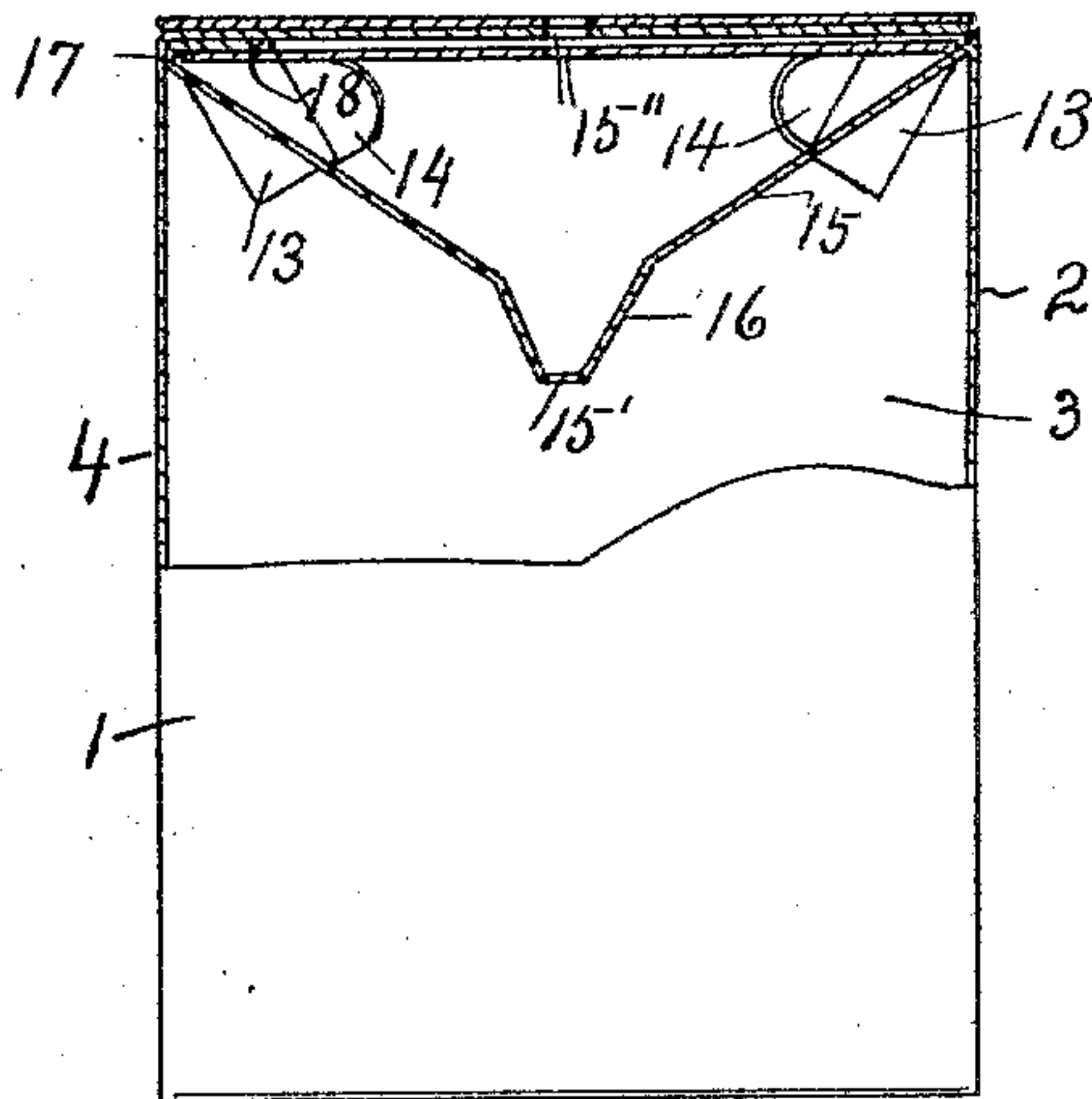


Fig. 8.

Fig. 9.

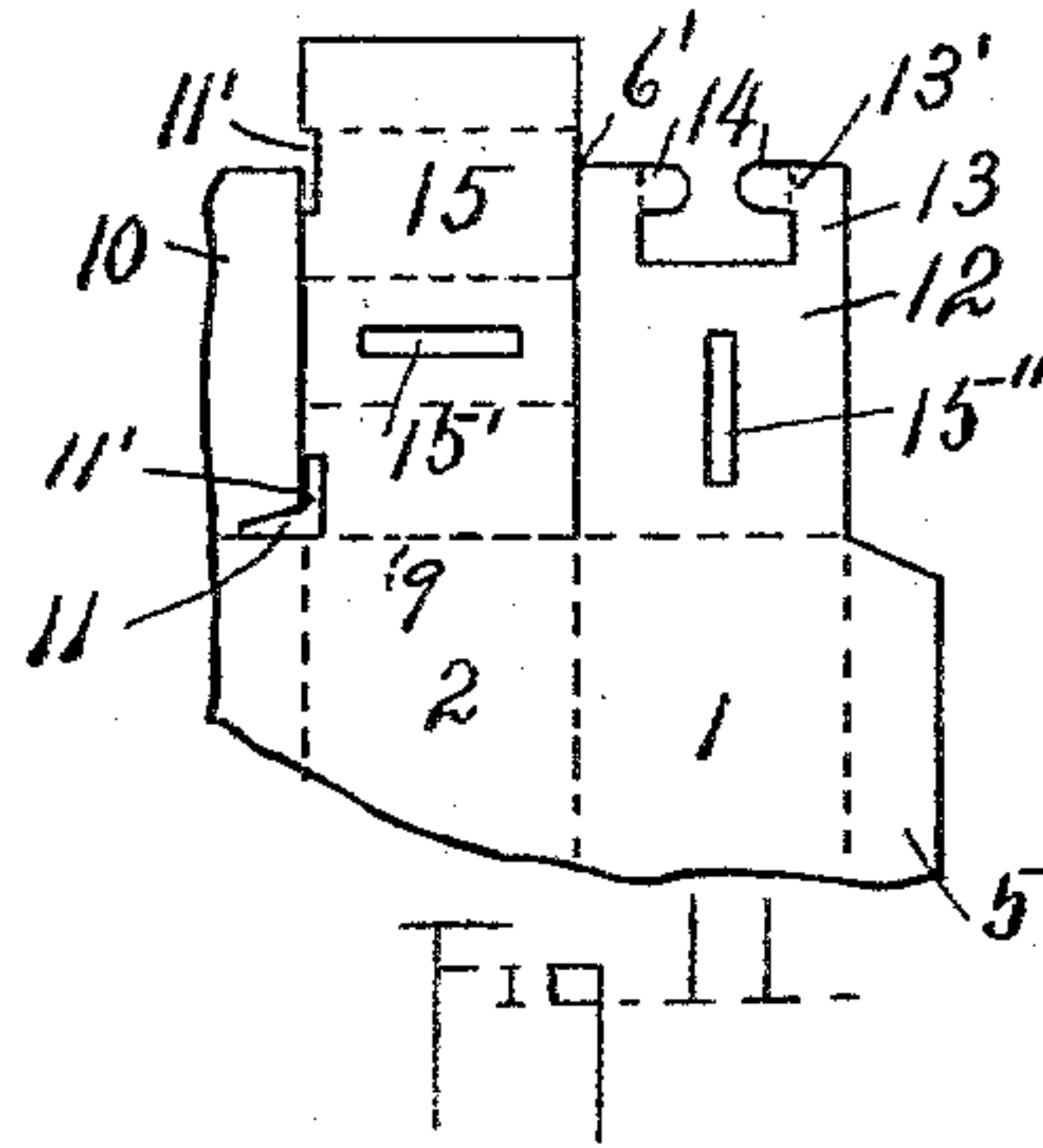
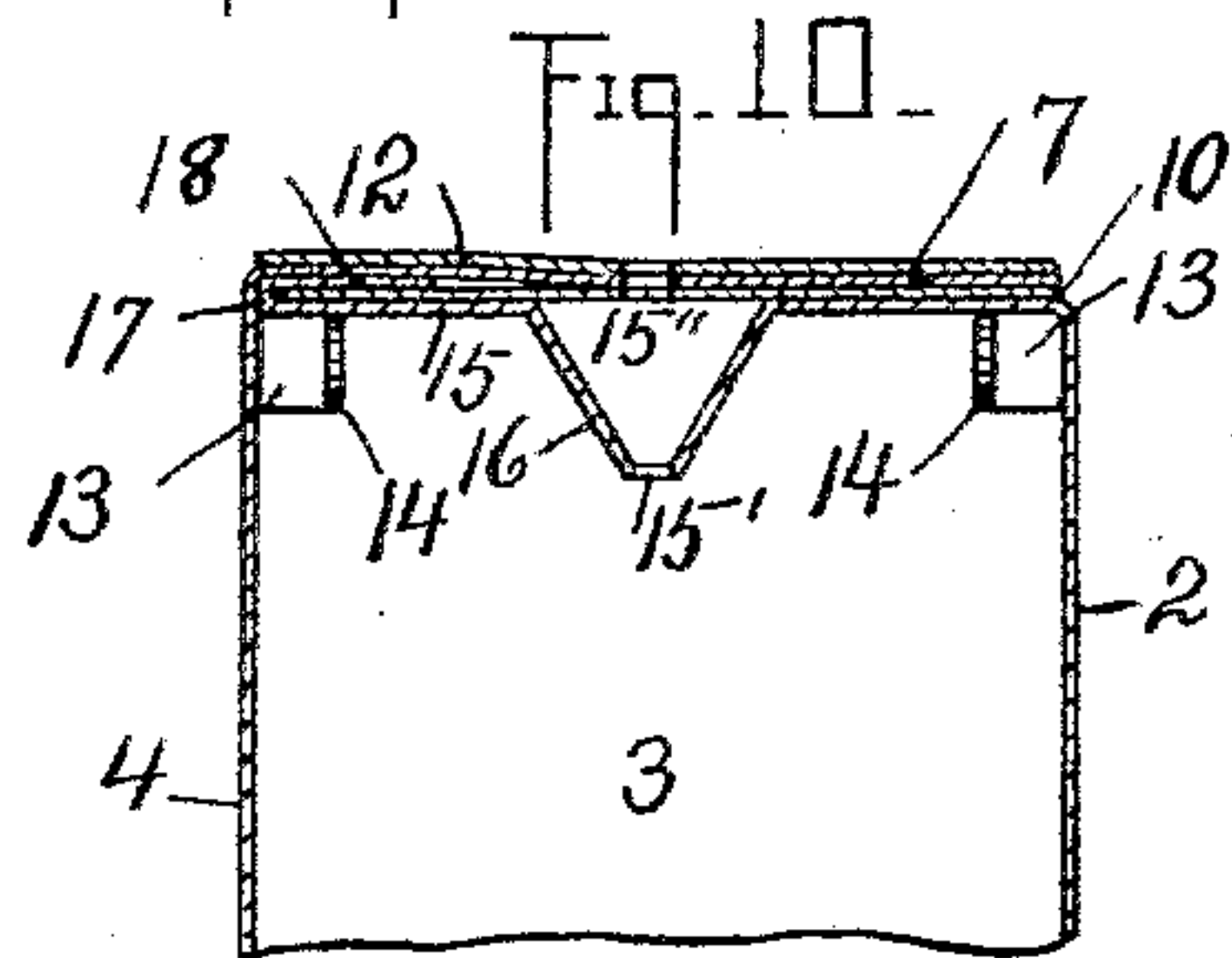
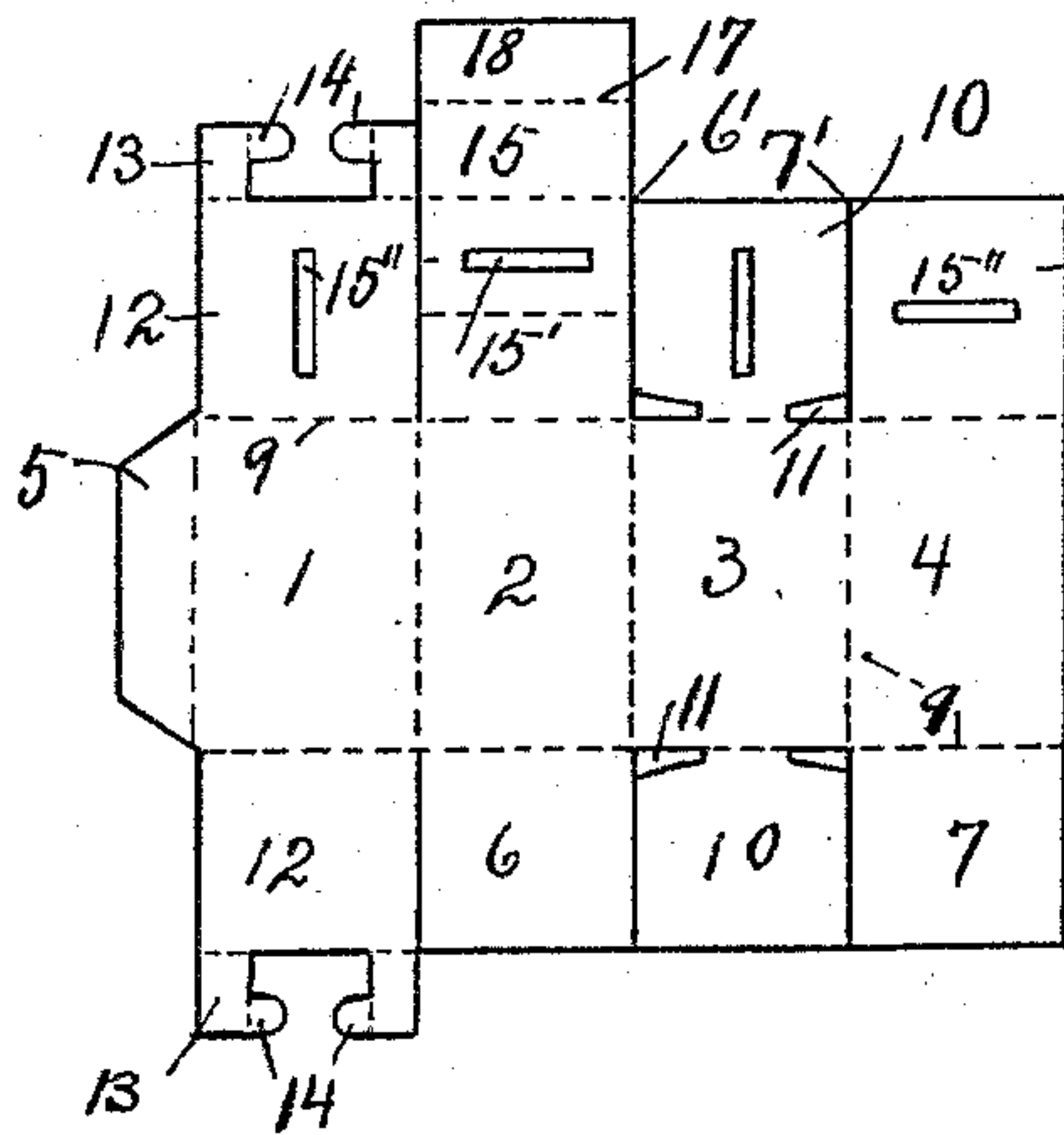


Fig. 11.

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UNITED STATES PATENT OFFICE.

JOHN C. HARKER, OF BALTIMORE, MARYLAND.

BOX.

SPECIFICATION forming part of Letters Patent No. 598,087, dated February 1, 1898.

Application filed March 5, 1897. Serial No. 625,982. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. HARKER, a resident of Baltimore, in the State of Maryland, have invented certain new and useful
5 Improvements in 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 pertains to make and use the same.

10 The invention relates to paper boxes, and has for its object to provide a box that cannot be opened without mutilation; and the invention consists in the construction hereinafter described and particularly pointed out.

15 In the accompanying drawings, Figure 1 is a blank suitable for forming the improved box. Fig. 2 is a side elevation of a rectangular tube or partially-formed box made by suitably bending the blank, the end laps at one
20 end being so disposed that they may be distinguished as far as possible. Fig. 3 is an end elevation of the same, three end laps being folded as in the complete box and the locking wings or pieces bent at right angles to the
25 end lap to which they are attached. Fig. 4 is a like view of the completed box. Fig. 5 is a partial side elevation, on an enlarged scale, showing a folded and doubled wing entering a slot formed at the junction of the
30 opposite end lap with the box-body. Fig. 6 is a section on line 6 6 of Fig. 5, the view being from the box interior and taken after the locking-wings have been fully entered and partially expanded. Figs. 7 and 8 are partial
35 central vertical sections at right angles to each other, showing a modified construction; and Fig. 9 shows the blank from which it is made. Fig. 10 is a partial central vertical section of a modification, and Fig. 11 shows
40 a part of the blank from which it is made.

Referring to Fig. 1, numerals 1, 2, 3, and 4 indicate portions of a blank adapted when said blank is suitably bent to form the four
45 sides of a box, and 5 denotes an extension of the side part 1 adapted to overlap and to be secured by pasting or otherwise to the part 4, as shown.

6 and 7 denote end laps or overlapping pieces separated by the cuts or slits 6' and 7'
50 at each end of the blank which, when suitably bent at right angles along the lines 9, overlies each other and close or partially close

an end of the box or a side if the improvement be applied to a side. 10 denotes similar overlapping portions having recessed or cut-
55 away portions or slots at 11, adapted to receive locking devices.

12 indicates overlapping end pieces which in the completed box overlie the other end laps on their exterior, and 13 indicates locking-
60 wings which can be bent at right angles to the parts 12 and folded on the line 13' and thereby doubled, and when so doubled can be inserted in the slots 11. The said wings having been pushed through the slots to their
65 full extent unfold, so that the parts 14 thereof preclude their withdrawal, and the box is thereby effectually closed and the closures locked in manner to prevent opening without
70 mutilation. To effect this operation, it is only necessary that the parts 14 after they have been inserted in the slots spring away from the main part of the wings a small distance,
75 so as to engage the inside of the box adjacent the slots. If suitable paper or paper-board or other elastic material be used, the parts 14 will spring back sufficiently for the purpose.

It is not essential that the described devices be used to close both ends of the box, and one end may be closed, if desired, in any other
80 suitable manner.

It is important that the wings and the slots be situated near the corners and that the folding parts of the wings be on their proximate
85 sides, so that the wings will directly oppose the withdrawal each of the other from its slot and so that the pull of the wings upon the laps, as in an attempt to open the box, will be exerted upon them near their junction with
90 the box sides and whereby the connection of the slotted lap with a box side will be weakened as little as practicable.

It would be possible to dispense with one or more of the end laps, though the closure would be less perfect. It would also be possible to
95 fold the inner laps so that they would lie in a different order; but the preferred construction is illustrated, though the improvement is not limited to the precise construction, which may be varied by skilled mechanics.

100 Although the improvement is described as applied to the end of a box, its application to a side would not be a departure.

The above-described box may be modified

when it is desired to use it as a toy bank or money-safe, as indicated in Figs. 7, 8, 9, 10, and 11. One of the end laps 15 is in each case made longer than the width of the box and slotted at 15', so that when suitably bent within the box to close its end the slot will be situated in the angle of a depressed portion 16. This lap is made sufficiently long that it may be bent reversely at 17 to provide a part or strip 18 to lie between laps 10 and 7 when folded down in the order shown. Each of the end laps is provided with a central slot, so that when they are folded down to finally close the end of the box the several slots will register with slot 15' and so that coin or the like can be dropped through them into the interior. The escape of coins thus deposited is prevented by the angular or reëntrant form of that part of the lap 15 in which its slot 15' is situated.

The parts of lap 15 on each side of the depressed portion 16 may occupy the inclined position shown in Fig. 8, in which case the locking-wings occupy approximately the position there shown, or said parts of lap 15 may be bent horizontally from the part 16, as shown in Fig. 10. In this case the lap 15 on the edge opposite lap 12 may be notched, as at 11', so that the notches will register with notches 11 when the laps are folded and the locking-wings may be inserted without pressing lap 15 out of place. Parts 14 of the locking-wings in this form, which is the preferred form, are below lap 15 and hold it up. The blank is like that shown in Fig. 9, except for the notches 11'.

Having described my invention, what I claim is—

1. In a box, an end lap having adjacent each of its lateral edges a slot 11 contiguous its junction with a side at the corner of the

box, in combination with an end lap having a locking-wing at each corner of its outer end wider than a slot, a part of said wing being adapted to be folded and entered through said slot and unfolded within the box, said wing being held edgewise by the box-wall on one side and by the inner end of the slot on the other, substantially as described.

2. In a box an end lap having an intermediate part bent inwardly and provided with a slot combined with exterior overlying slotted laps locked to the box whereby coin can be deposited in the closed box, one of said latter laps having a locking-wing passed within the box and overlapping one of its walls to prevent removal without mutilating the parts, substantially as described.

3. In a box an end lap 15 having a part bent inwardly and provided with a coin-slot and having notches 11' overlying slotted laps the outer of which has locking-wings adapted to be inserted through notches 11' and to expand below lap 15, said wings and notches being contiguous the corner of the box, substantially as described.

4. The blank for forming a box comprising the parts 1, 2, 3, 4 and 5 to form its body, the parts 6 and 7 to close the ends and the parts 10 and 12 provided with the slots and locking-wings respectively to lock the ends, said slots and wings being contiguous the outer edges of the respective parts 10 and 12, substantially as described.

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

JOHN C. HARKER.

Witnesses:

GEO. E. TAYLOR,
BENJ. R. CATLIN.