

(No Model.)

C. A. SPITTELL.
FOLDING PAPER BOX.

No. 489,993.

Patented Jan. 17, 1893.

Fig. 1.

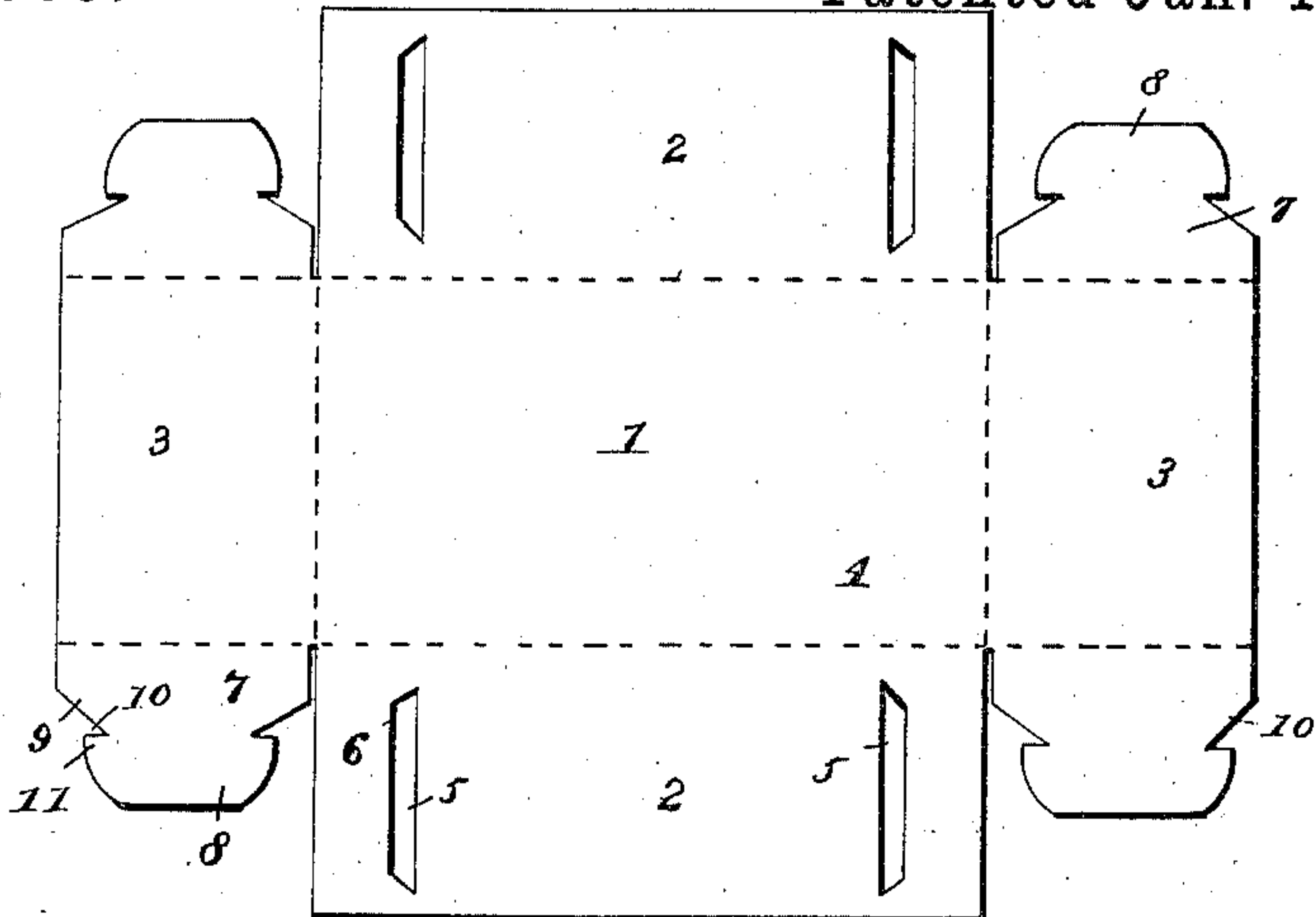


Fig. 2.

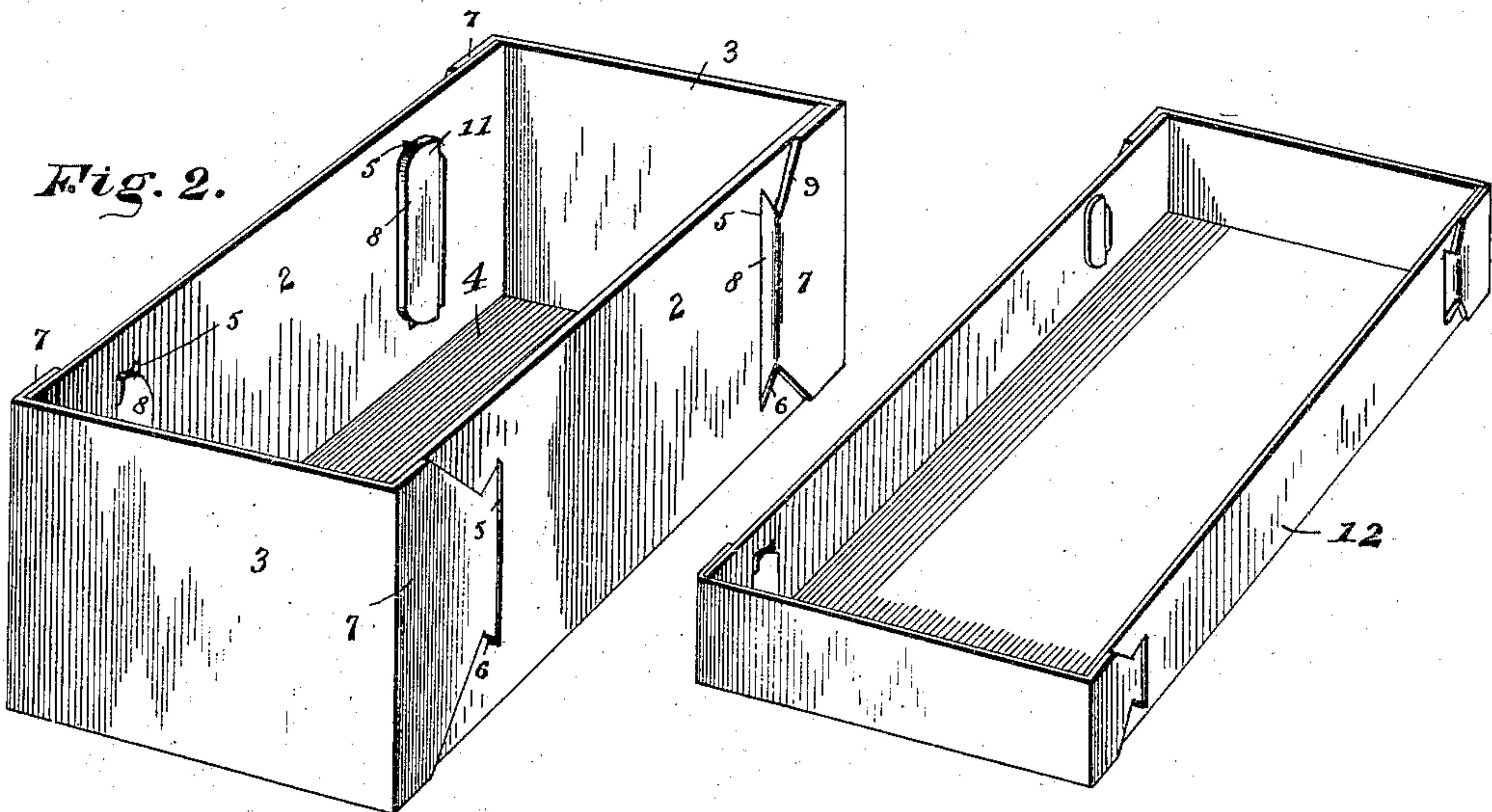
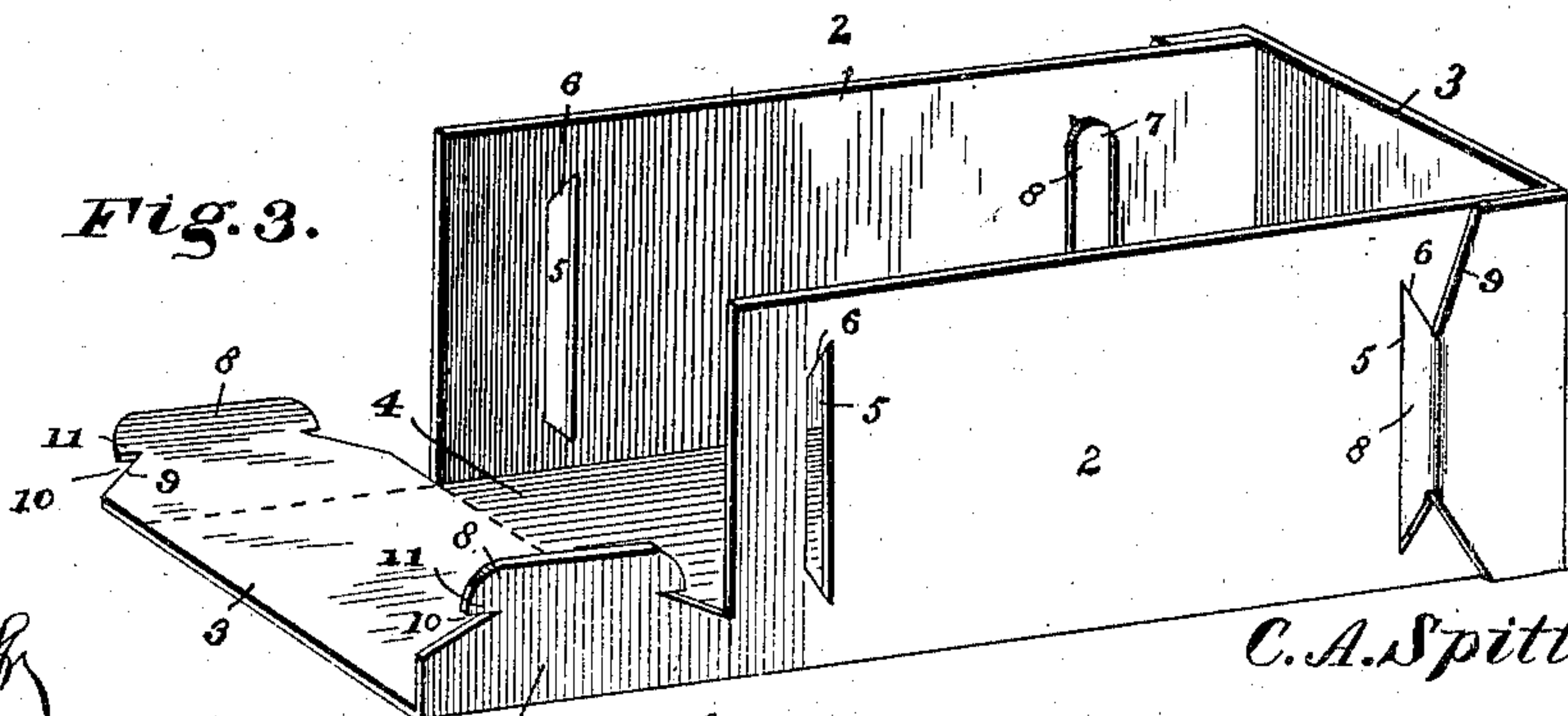


Fig. 3.



Witnesses

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By his Attorneys,

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Inventor

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UNITED STATES PATENT OFFICE.

CHRISTIAN A. SPITTELL, OF NEW BRUNSWICK, NEW JERSEY.

FOLDING PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 489,993, dated January 17, 1893.

Application filed May 21, 1892. Serial No. 433,886. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN A. SPITTELL, a citizen of the United States, residing at New Brunswick, in the county of Middlesex and State of New Jersey, have invented a new and useful Folding Paper Box, of which the following is a specification.

This invention relates to certain new and useful improvements in paper boxes, and has special reference to that class of boxes made from paper of a suitable nature, paste-board, veneer or other similar materials known as "knock-down" boxes, which are capable of being packed flat for shipment and storage, and when required for use may be folded up into box form by a simple manipulation thereof as is now well understood in the art.

The present invention consists of the peculiar and improved construction of the blank to provide corner or side flaps with terminating tongues adapted to be fitted in the adjacently situated slots and which are employed in holding the box in form when folded into box shape.

The object of this invention is to provide means for preventing the corners of the box from separating and resisting a tendency toward disconnection thereof by any strain brought to bear against the same in any direction, but which may be readily separated when so desired and properly manipulated.

In the drawings:—Figure 1 is a plan view of the blank employed in forming the box. Fig. 2 is a perspective view of the box showing the parts thereof in connection with each other, and the lid to one side thereof. Fig. 3 is a perspective view showing a portion of the box in a folded position, and a part thereof unfolded.

Similar numerals of reference are used to indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 designates the blank which is of substantial rectangular form having sides 2 and ends 3 adapted to fold upward at right angles to the bottom 4. The sides 2 have slits 5 formed therein near the opposite ends therein, the said slits being formed converging near their opposite ends as at 6. The ends 3 are provided with integral end flaps 7 whose extreme ends are constructed with shouldered tongues 8,

the portions of said flaps extending toward the said tongues being beveled as at 9 and terminating in recesses 10 which form with the adjacent edges of the tongues 8, shoulders 11.

In forming the parts into a box the sides 2 are arranged in vertical position relative to the bottom 4, and the ends 3 are closed up against the oppositely situated end edges of the said sides 2. The flaps 7 are then bent around a portion of the sides 2 and the tongues 8 are inserted in the slits 5 so that the shoulders thereof will bear against the converged portions of the said slits 5, and thereby lock the parts in close connection with each other. The shoulders of the tongues 8 take under the converged portion 6 of the slits 5 as set forth, and as the said converged portions reduce the ends of the said slits, the tongues are locked in connection therewith against accidental disengagement or strain that may be brought to bear thereon through the medium of the ends as well as the side portion of the box, and thereby provide a convenient form of device. The converged or reduced end portions of the slits make the front wall or that nearest the ends of the box of each of said slits shorter than the innermost walls, and said shorter walls being less in length than the length across the said tongues, the latter are firmly secured in said slits.

In bending the parts of the box up into position they turn on scores or creases at the several points which will be positioned proportionately to the size and nature of the box put up. The device as a whole, including both the cover and the box body, is arranged in locked position and in proper form for use without the use of glue, cement or other analogous material, and if desired the parts may be readily unlocked without injuring the box. By folding the flaps 7 around the corners of the box, the latter is greatly strengthened.

It will be understood that the box may be made in varying sizes and any kind of stock may be employed in making the same.

The cover or lid 12 is of the same construction and arrangement as the box body itself, and is thereby made equally strong, and by means of the similarity of the construction of the two parts the use of a multiplicity of dies in formation of the blanks is avoided. The

flaps on the ends run out square toward the sides before the triangular portion of said flaps is formed to construct the shouldered tongues which will give an extended bearing surface over the sides of the box at the corners thereof and thereby greatly strengthen the same, and giving the loose ends of the sides an extended and secure bearing surface. It will be further seen that the construction and employment of folded over edges to bind on adjacently situated parts is wholly avoided in the construction and arrangement of the box and lid or cover therefor, as has been set forth.

15 In locking parts of the box and the cover together, the shouldered tongues are quickly inserted in the slips aforesaid and will automatically lock themselves by engaging the reduced end portions of the said slips. This latter feature of advantage is very convenient and makes it possible to set up the parts of the box and lid in a ready and quick manner.

Having thus described the invention what is claimed as new is:—

The herein described box having sides and ends adapted to be folded as set forth, the sides being formed with slots which have upper and lower converging end-walls to reduce the front parts of said slots to a less length than the rear portions of the same, and the ends having flaps provided with tongues that have overhanging shoulders that are adapted to engage said slots and the shoulders brought to bear against the front reduced portions of said slots to lock the ends closed, the said flaps fitting over and strengthening the corners of the box, the said shoulders being of greater length from one to the other across the tongues than the outermost walls of the said slots, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHRISTIAN A. SPITTELL.

Witnesses:

JOSEPH C. RAPPLEYEA, Jr.,
A. W. WINCKLER.