

H. R. HEYL.

Improvement in Boxes.

No. 132,075.

Patented Oct. 8, 1872.

Fig.1.

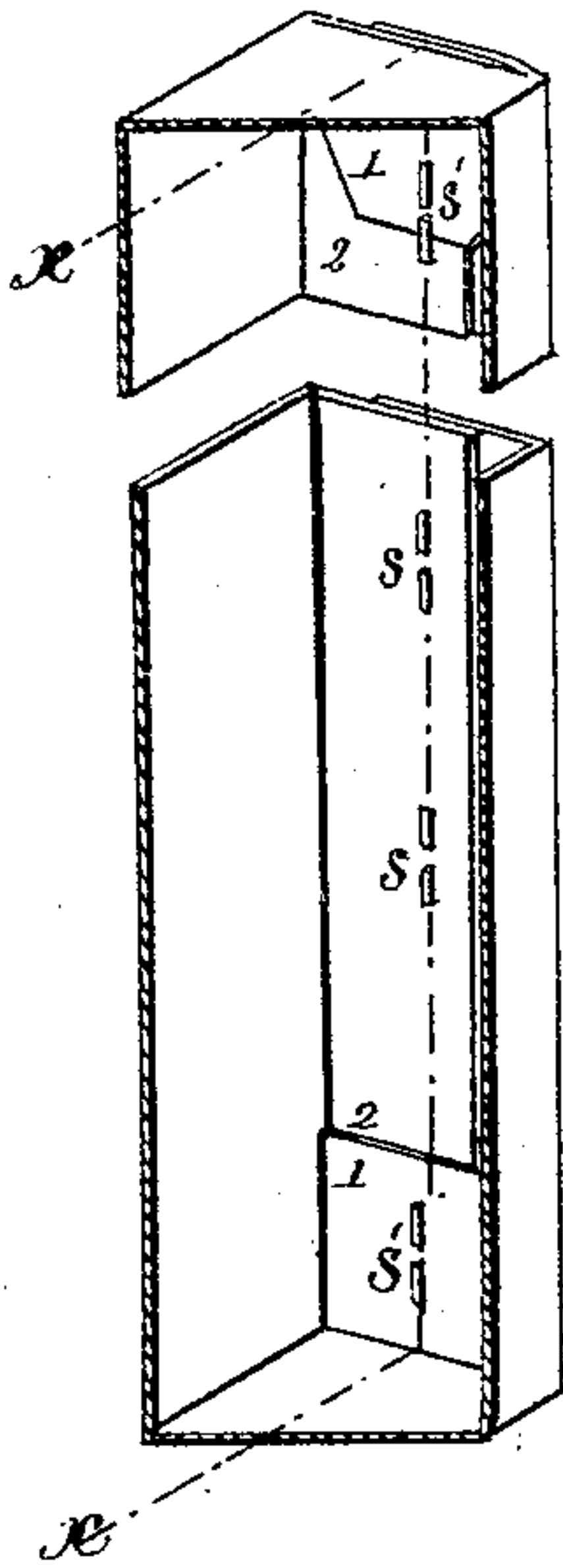


Fig.2.

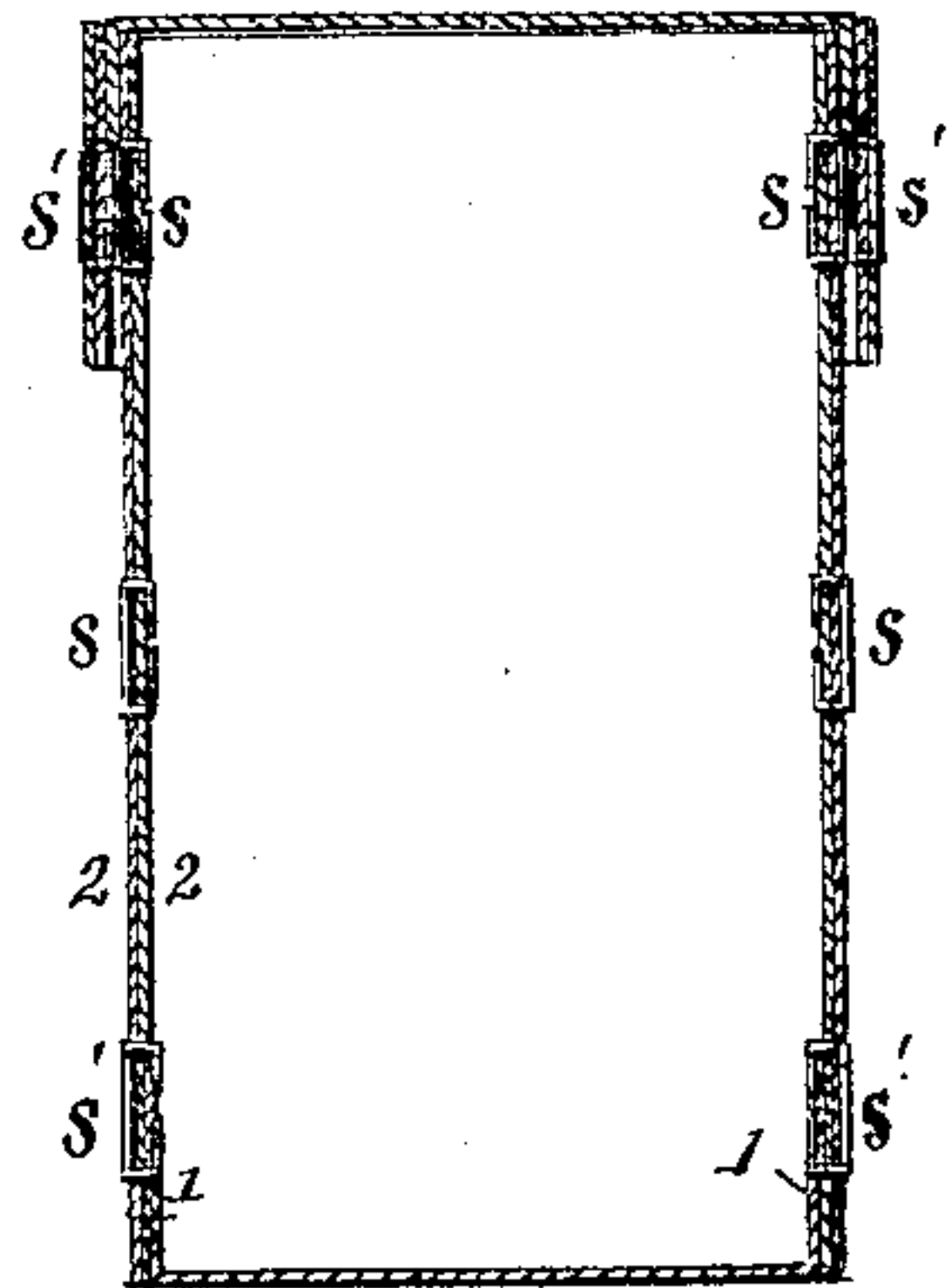


Fig.3.

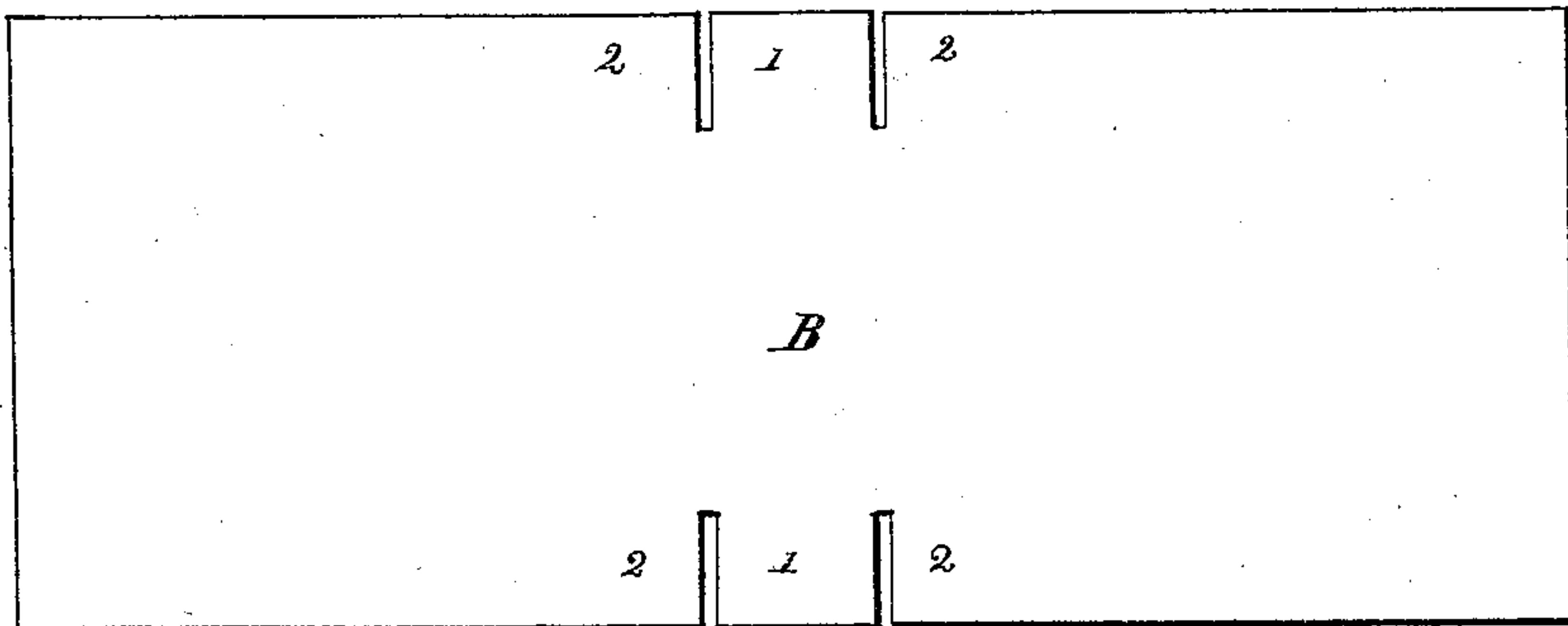
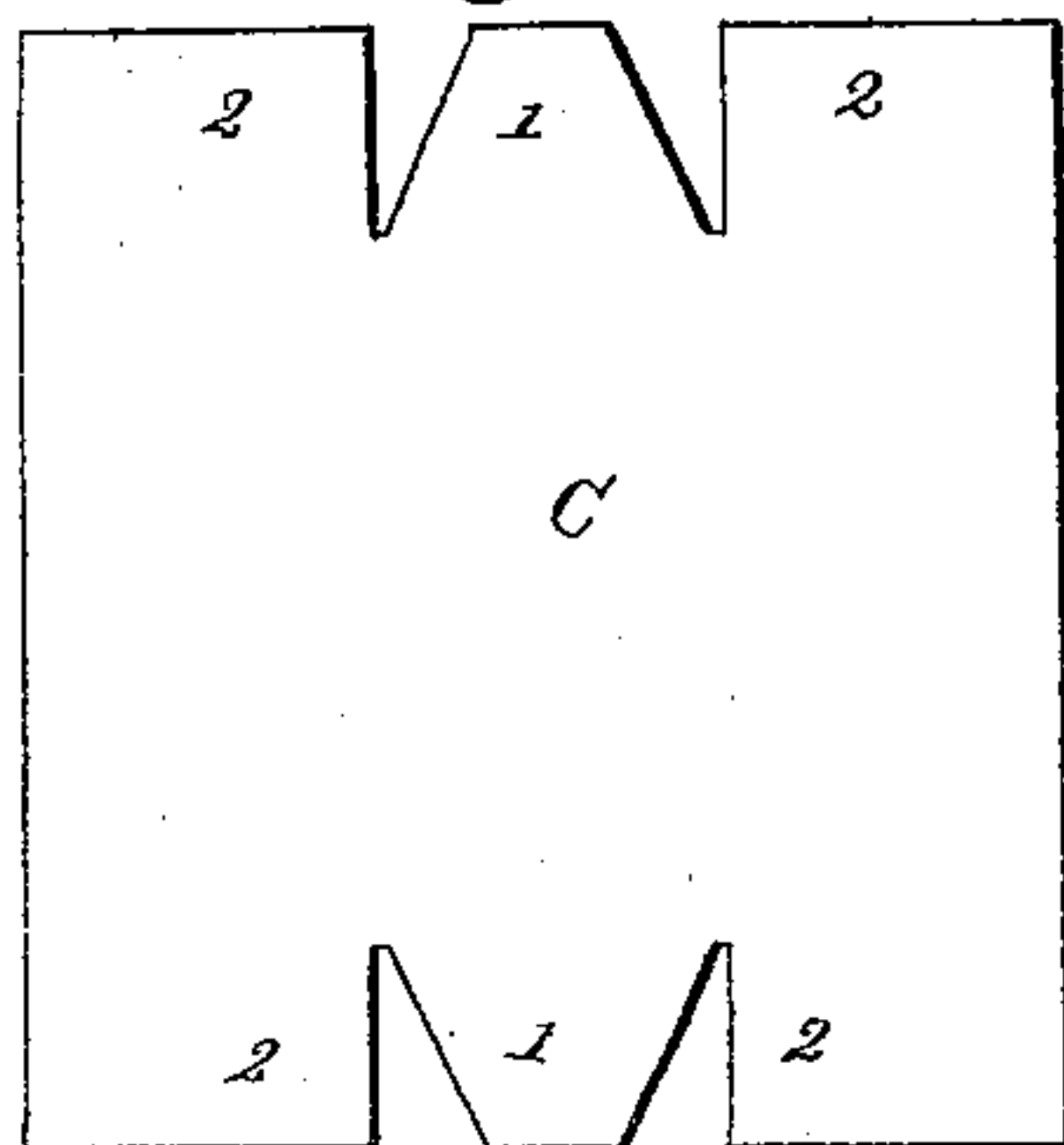


Fig.4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

HENRY R. HEYL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
AMERICAN PAPER-BOX-MACHINE COMPANY, OF SAME PLACE.

## IMPROVEMENT IN BOXES.

Specification forming part of Letters Patent No. 132,075, dated October 8, 1872.

*To all whom it may concern:*

Be it known that I, HENRY R. HEYL, of the city and county of Philadelphia, in the State of Pennsylvania, have invented an Improvement in Boxes, to be made of paper, pasteboard, thin wood, or other flexible material, of which the following is a specification:

The subject of this invention is a box produced of any suitable flexible material, slit and folded in such a manner that the edges will slightly overlap, adapting them to be held by staples which are driven through both thicknesses by percussion, and are secured by clinching or bending the two ends of each staple in opposite directions, either toward or away from each other. The lowest staple at each side also engages and holds the tab or lap that is folded up from the bottom, as hereinafter described. With shallow boxes or box-lids one staple at each side or end may suffice to secure the parts together; but for deeper boxes two, three, or more staples are employed at each side.

Machinery for forming and fastening my improved boxes will form the subject of a separate application for letters patent.

The essential peculiarities in the box, which is the subject of this present application, consists in connecting the lapped edges and the upturned bottom-flaps by means of double-pointed staples of wire, or its equivalent, secured by bending the two ends of each in opposite directions.

In the accompanying drawing, Figure 1 is a sectional perspective view of a box and cover made according to my invention; Fig. 2 is a longitudinal section at *x*, Fig. 1; Fig. 3 is a plan of a paper blank adapted for the formation of a box; and Fig. 4 is a plan of a blank adapted to form a cover.

The blank B to form a box, and the blank C to form a cover, are each made of a single piece of paper, or other material, cut to the requisite size in quadrangular shape, and suitably notched or slitted to separate the parts which are to form the bottom laps or tabs 1 from the sides 2 2. In constructing the box, folds are made in the places indicated by the dotted lines, the tabs 1 being preferably folded on the inside, and the side flaps 2 2 on the outside. The edges of the flaps 2 2 being lapped slightly one over the other, they are fastened by staples *s s'*, which are preferably applied in longitudinal positions, and are secured by bending their ends in opposite directions, either toward or away from each other. The upper staples *s s* fasten the side flaps together. The lower ones *s'* pass in addition through the tabs 1, and thus secure these also. The staples are readily inserted by percussion without any preliminary piercing of the material.

My invention is well adapted for the manufacture of the class of shallow boxes which are used with sliding covers as well as boxes with covers or lids, such as I have shown in the drawing. My improvements afford an economical and efficient mode of fastening boxes of any size, shape, or depth.

### *Claim.*

The following is claimed as new:

A box, formed substantially as set forth, and held together by wire staples, applied in the manner specified.

HENRY R. HEYL.

Witnesses:

OCTAVIUS KNIGHT,  
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