

(No Model.)

H. A. RUHLMANN.

PACKING BOX.

No. 277,788.

Patented May 15, 1883.

Fig. 1.

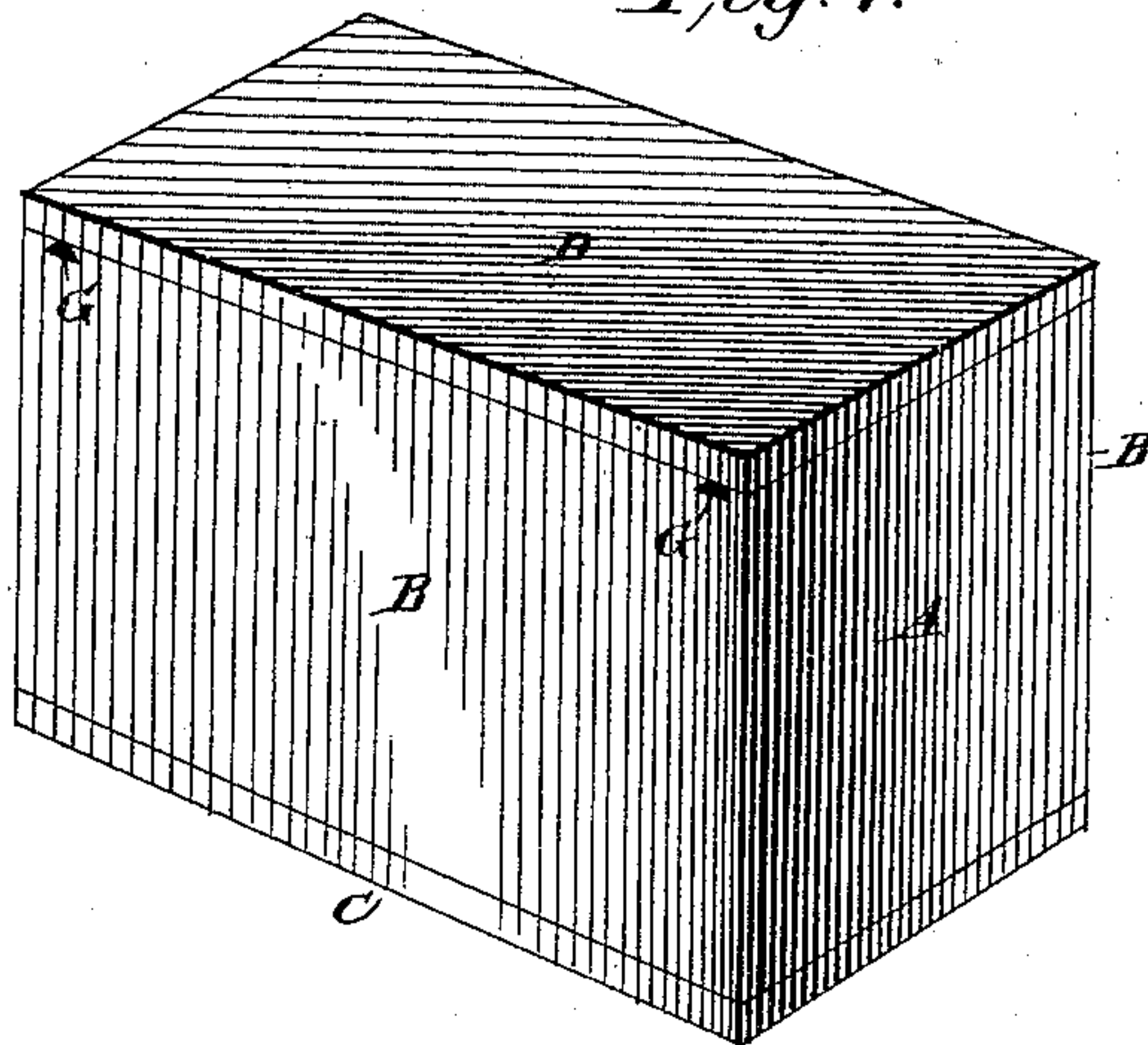


Fig. 2.

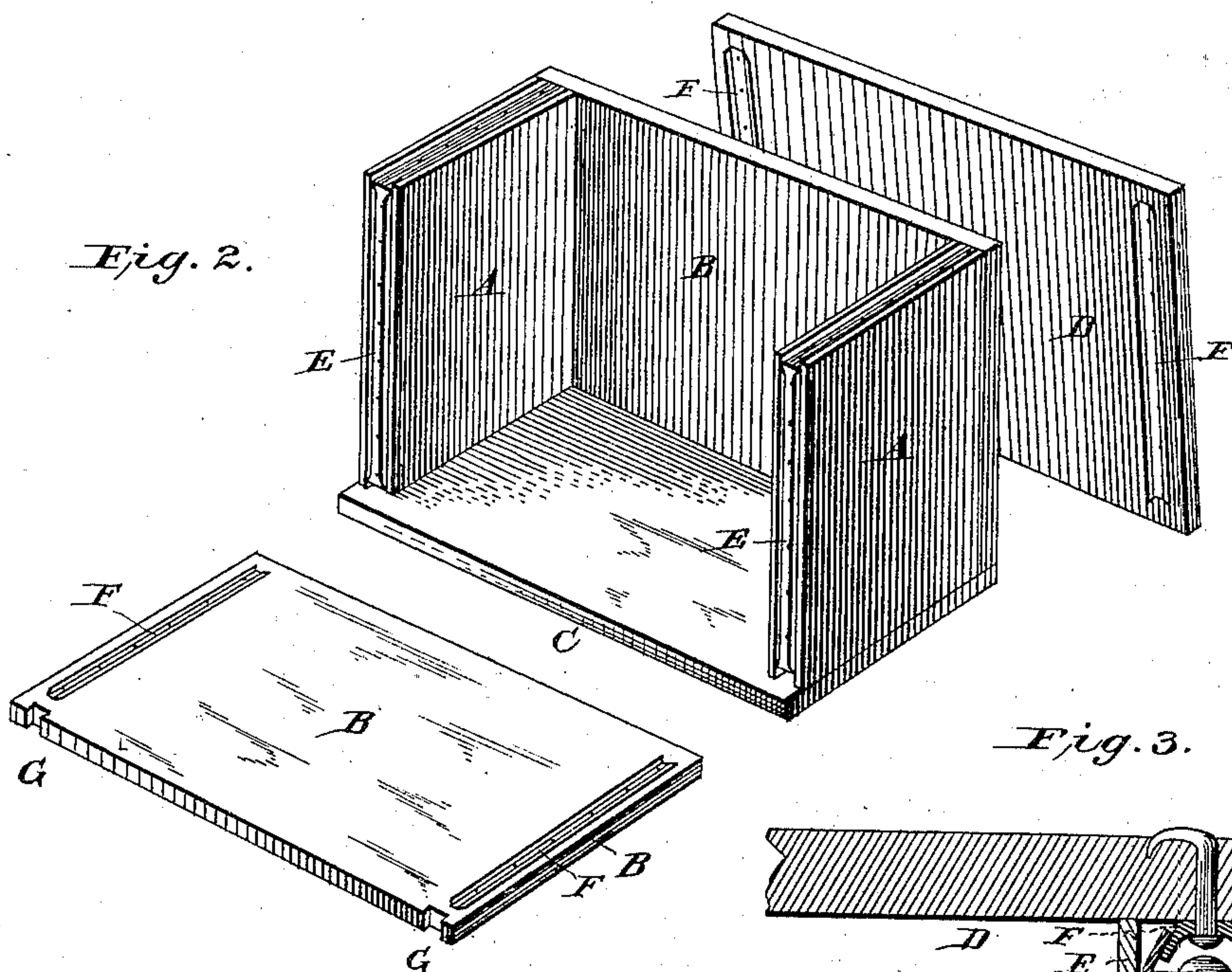
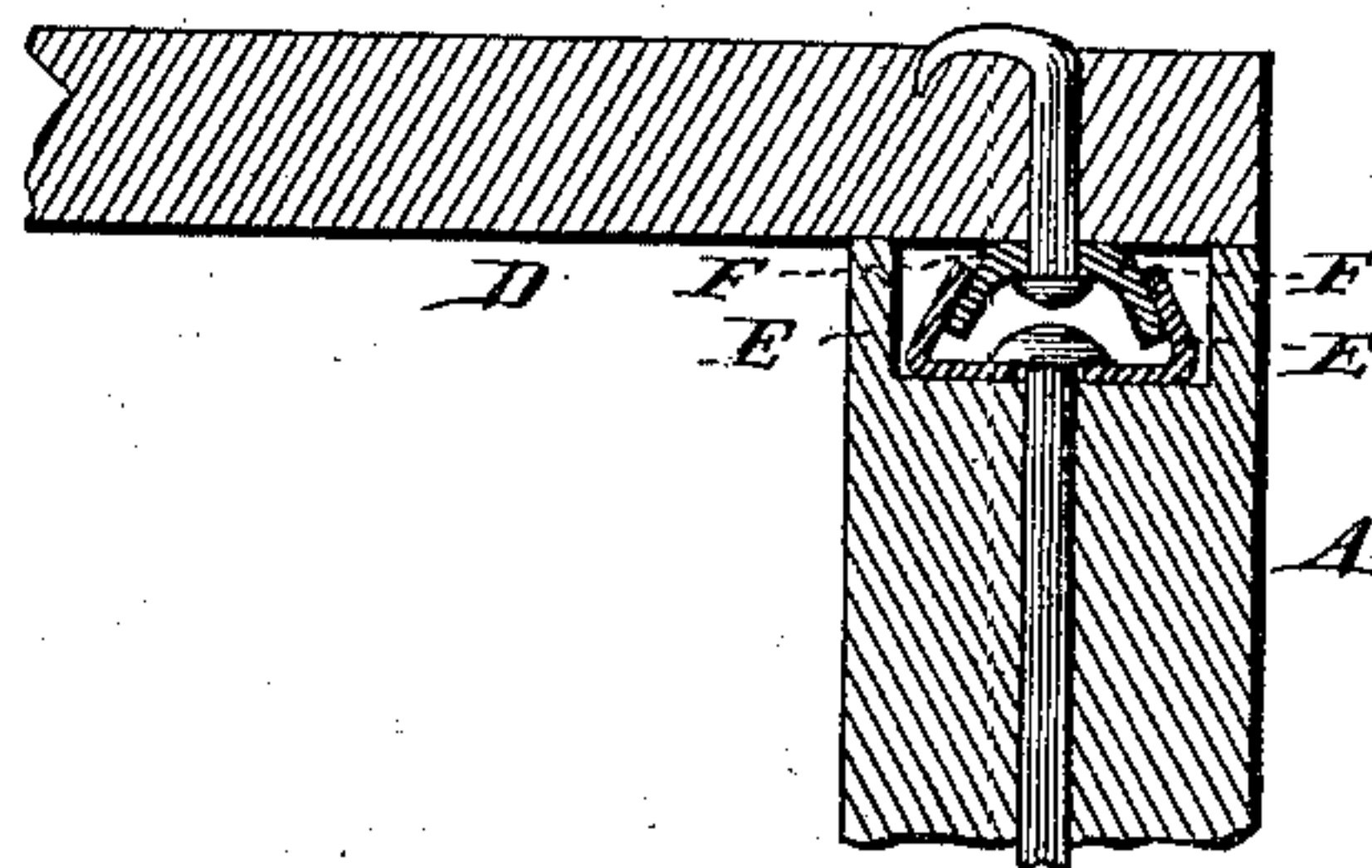


Fig. 3.



Witnesses:

A. M. Long.

H. H. Colestock.

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UNITED STATES PATENT OFFICE.

HENRY A. RUHLMANN, OF GRAND RAPIDS, MICHIGAN.

PACKING-BOX.

SPECIFICATION forming part of Letters Patent No. 277,788, dated May 15, 1883.

Application filed July 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. RUHLMANN, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented a new and useful Packing-Box, of which the following is a specification.

My invention relates to improvements in packing-boxes which are designed to be taken apart and put together again at pleasure, thereby enabling them to be more easily stored or returned to the shipper and used again.

My invention consists of parts and combination of parts, all as will hereinafter be described and claimed.

Figure 1 is a perspective of the box when set up or put together; Fig. 2, the same with the top and one side removed; Fig. 3, a partial section on the line *x x*, enlarged.

Similar letters refer to similar parts throughout.

The box is of the usual form, and consists of six rectangular sides—viz., the ends A A, sides B B, bottom C, and top D. Instead of securing these together by nails in the usual way the ends are provided with a strip of metal, E, let into grooves in its edges and well secured to the said ends. Said metal is folded at an acute angle at its edges, so as to constitute the outer part of a dovetail joint or a metallic dovetail groove. The said folded edges are cut away at the corners of the ends A A, thus enabling me to extend a single strip of metal entirely around each of the said ends. The sides B B, bottom C, and top D are each provided with two strips of metal, F, placed on one side parallel to and at suitable distances from their ends. Said strips of metal are folded at their edges at an obtuse angle in such a manner as to constitute the inside part of a dovetail joint or a dovetail tongue corresponding with the form of the strip E, before described. Said strips F are firmly secured to the said sides, bottom, and top, the result being that when slipped inside of the strips E they jointly serve to secure the said sides, bottom, and top to the ends A A, and still admit of indefinite removal and replacement without injury to the box. The ends A A and

sides B B are made of equal width. The bottom C and top D are each of a width equal to the combined length of one end A and thickness of the sides B B. The strips F on the bottom C and top D are of a length equal to the length of the sides B B, and are placed equidistant from the edges of said bottom and top. One of the sides B B has suitable notches, G G, to allow the strips F F on the top D to enter the strips E when the said sides B B are in position.

The operation of my device is as follows: I first place the bottom with the sides having the strips F uppermost, and next place the ends A A in position by sliding the strip E on one edge over the said strip F. The sides are next attached to the ends in like manner, when it will be found that the ends of the strips F on the bottom will abut against the sides and lock the bottom in position. The top D is next slid into place, when it will be found that the bottom C and top D, by extending over the edges of the sides B B, effectually secure said sides in place. The strips F on the top D will also abut against the side B having no notches G, and thus secure the top D from moving farther in that direction. It only remains to secure the top D from moving back in the direction from which it was inserted in any convenient manner, and the box will be firmly secured in all its parts, while by reversing the operation described it can be easily separated into its component sides, thus being less bulky and more convenient for transportation and storage.

I am aware that packing-boxes have been made with dovetail joints in such a manner that they could be readily taken apart. I do not claim such, broadly; but—

What I claim, and wish to secure by Letters Patent, is—

1. A packing-box having the edges of its end pieces united to its top, bottom, and sides by a dovetail joint, substantially as described.

2. In a packing-box, the combination of end pieces having their edges grooved, and a dovetailed strip located in said groove, and the top, bottom, and sides, having a correspondingly-

dovetailed strip upon their inner sides which abut against the edges of said groove, for the purpose set forth.

3. The combination of ends A, having their
5 edges grooved, a dovetailed strip in said grooves, and sides, top, and bottom, having a correspondingly-dovetailed strip upon their

insides which abut against the edges of the groove, and one of the sides provided with slots G, for the purpose set forth.

HENRY A. RUHLMANN.

Witnesses:

ELLA ARRANCE,
SCOTT E. CURDY.