

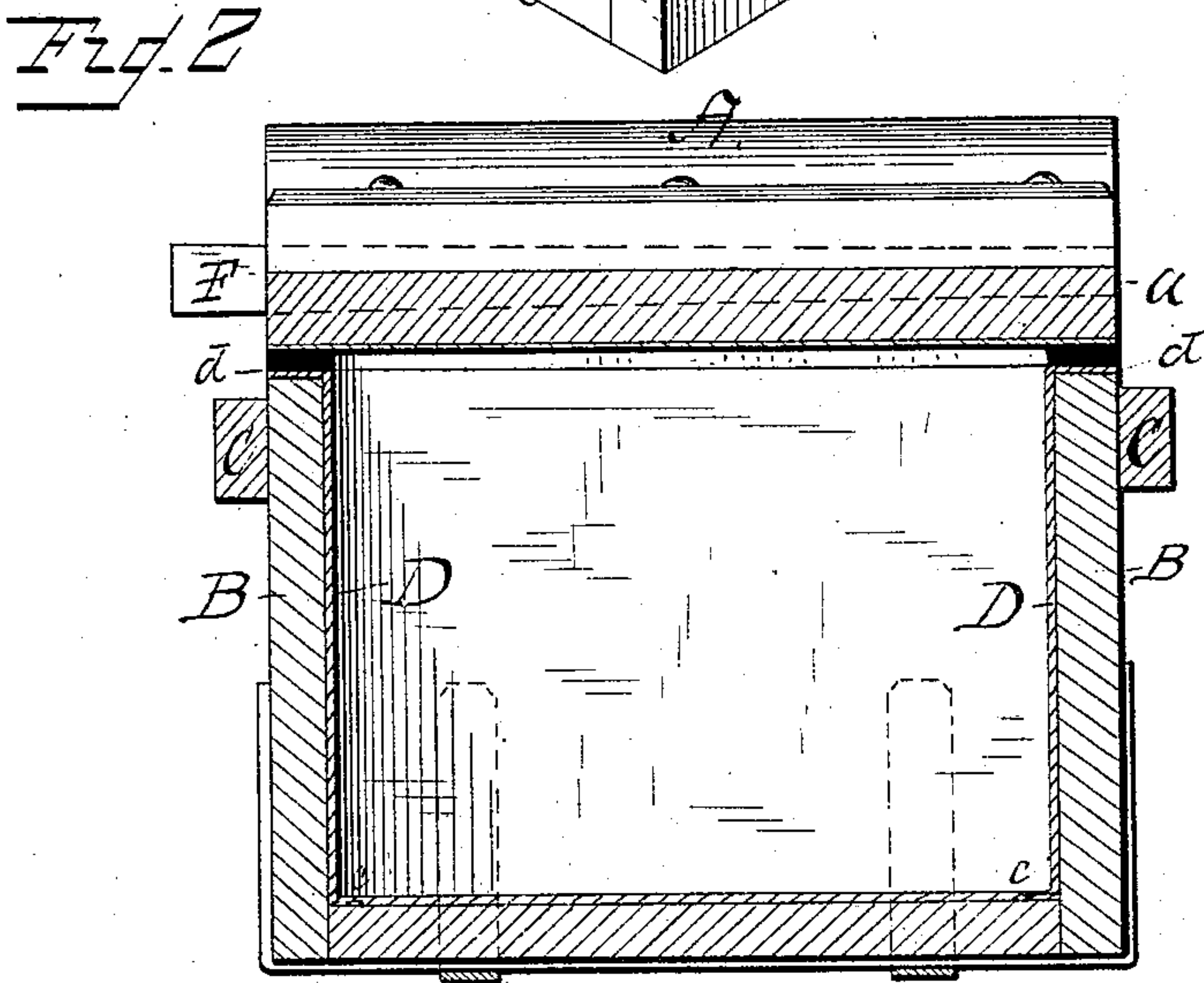
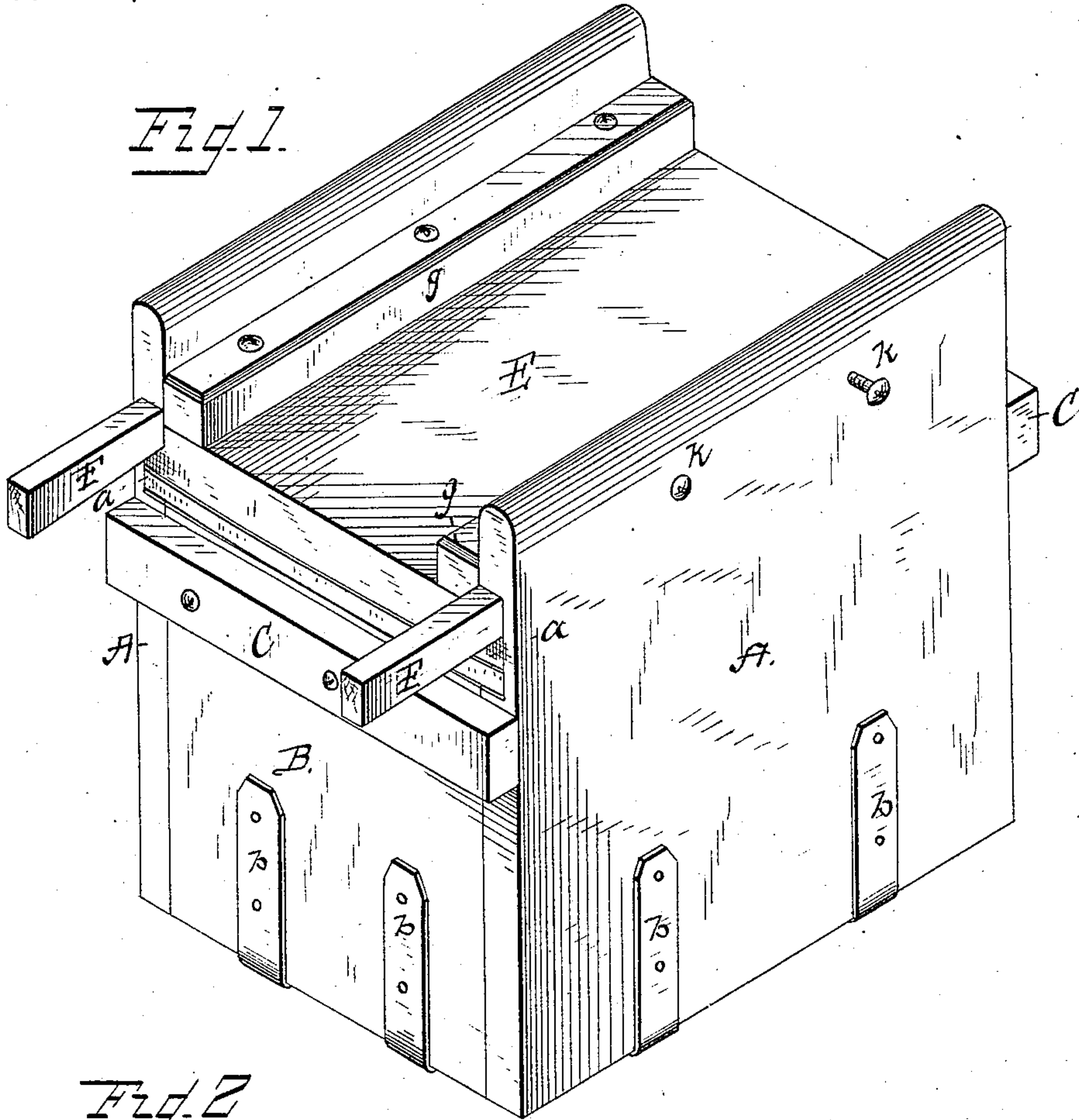
(No Model.)

2 Sheets—Sheet 1.

A. J. HERRING.  
PACKING AND STORING BOX.

No. 287,435.

Patented Oct. 30, 1883.



WITNESSES

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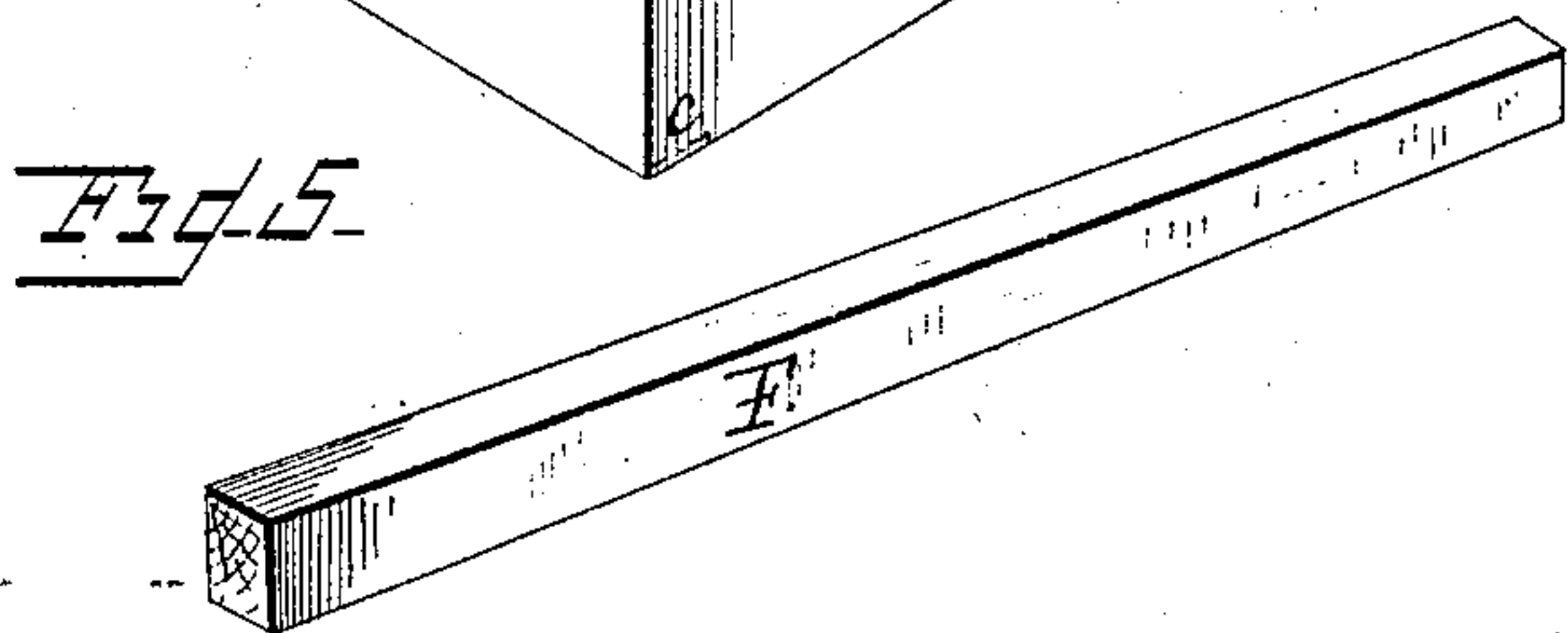
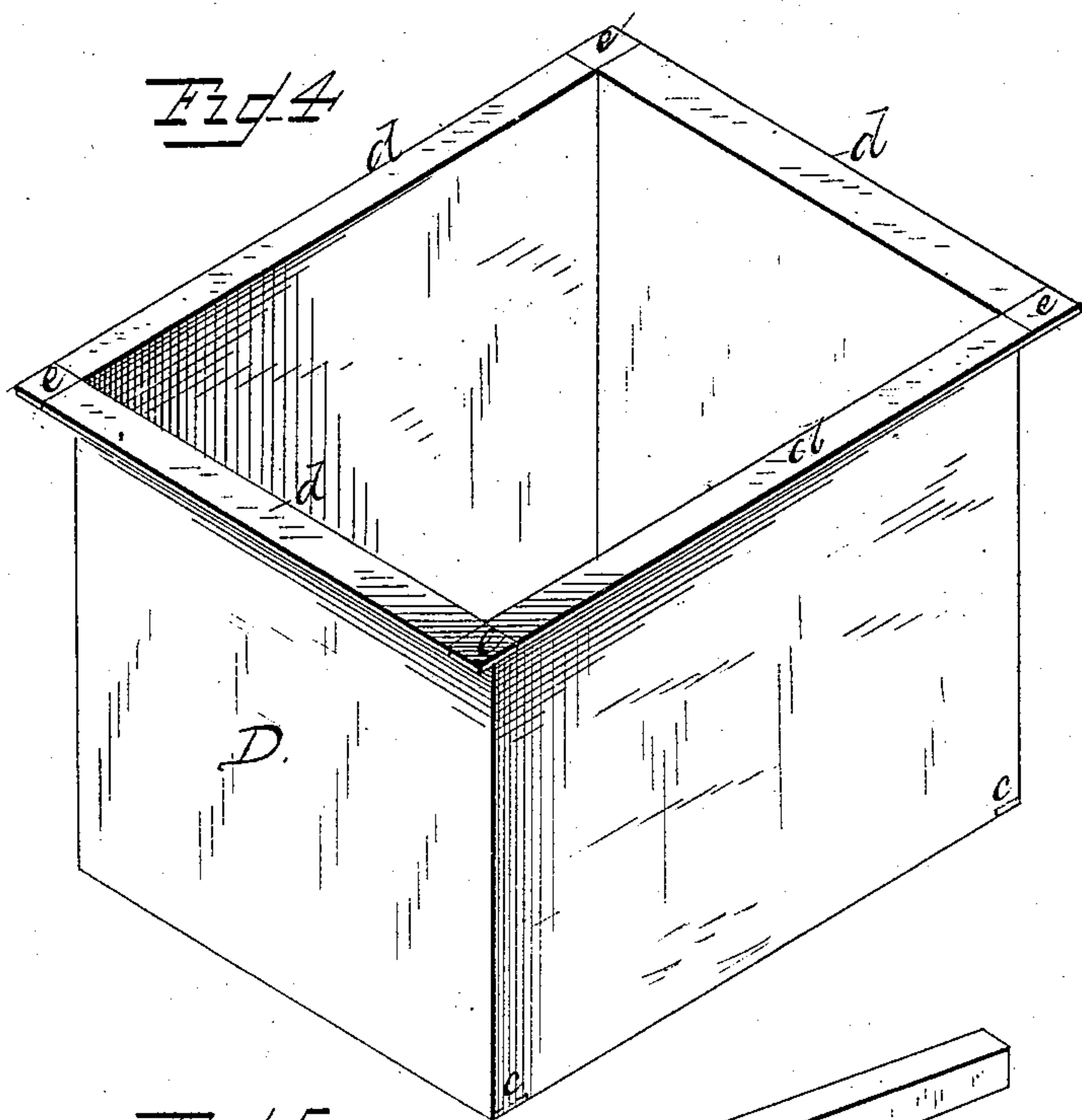
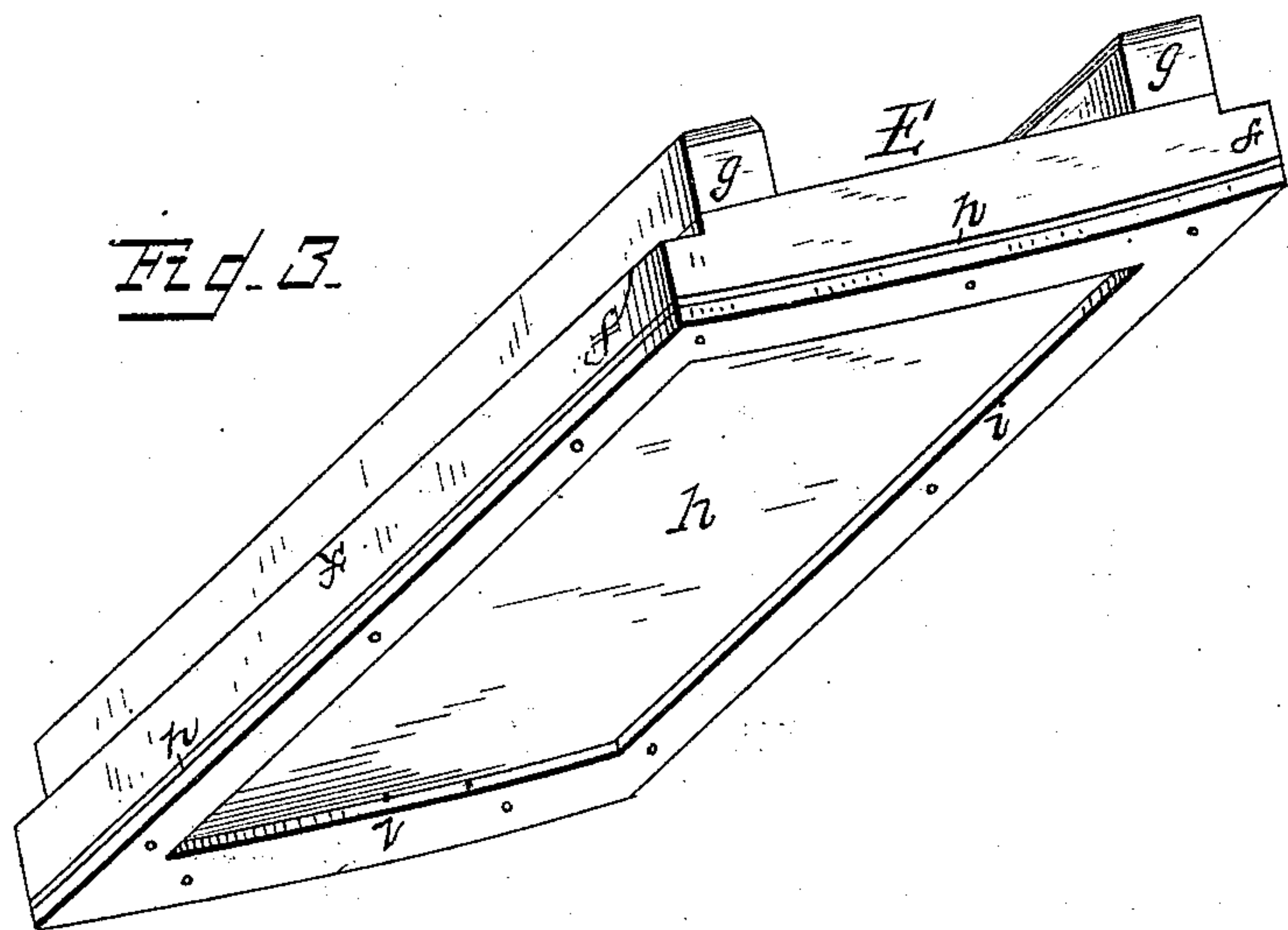
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# UNITED STATES PATENT OFFICE.

ANDREW J. HERRING, OF BOZEMAN, MONTANA TERRITORY.

## PACKING AND STORING BOX.

SPECIFICATION forming part of Letters Patent No. 287,425, dated October 30, 1883.

Application filed April 7, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW J. HERRING, a citizen of the United States of America, residing at Bozeman, in the county of Gallatin and Territory of Montana, have invented certain new and useful Improvements in Packing and Storing 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 appertains to make and use the same.

This invention has relation to improvements in packing and storing boxes, especially to that class of boxes adapted to have packed and stored within them butter and similar perishable products; and the object is to provide a substantial air-tight packing-vessel, which will preserve pure and marketable substances liable to be deteriorated in quality and value by exposure to atmospheric influences.

My invention therefore consists in the novel construction and combination of parts, as will be hereinafter more fully described and specifically claimed.

In the annexed drawings, forming a part of this specification, Figure 1 is a perspective view of my improved packing-box. Fig. 2 is a sectional view of the box, taken through the line *xx*, Fig. 1, showing the interior construction. Fig. 3 is a view of the lid, showing the packing and lining. Fig. 4 is a view of the metallic lining and bottom, and Fig. 5 is a view of one of the wedges used to force the lid in place.

To effect the end of my invention I cut from a suitable board duplicate side boards, A. These side pieces are cut so that the grain of the wood shall run in the direction of the height of the box. In each side piece I cut or otherwise form the broad grooves *a*, the bottoms of which form the upper rims or edges of the sides of the packing-vessel, and the tops thereof form the upper bearings for the long wedges which force the lid down and retain it in place. In a similar manner I cut from the board the end pieces, B, in length reaching from the bottom of the side pieces to the bottoms of the broad grooves. The wooden bottom is next cut to fit the space between the sides and ends, and the whole is planed to fit tight and snug at the joints, which are secured together by nails or

screws. Across each end of the box, at the upper part, I fix the cross-pieces C, secured in their places by any suitable means. These cross-pieces extend clear across the box, and the ends are nailed to the side pieces. Their office is to keep the end pieces from bulging and the side pieces from springing from their connections. The wooden portion of the box is further secured and strengthened by the metallic cross-bands *b*, which principally secure the parts from springing apart, and also act as preservers of the material from accident and rough usage. I then form from suitable sheet metal the lining D, having the turned edges *c* at the bottom and turned flanges *d* at the top. This side lining is preferably made of one piece of sheet metal, so formed that the seam *m* shall come in a side or end, and is securely sealed by soldering. The bottom *n*, cut to fit the measurement of the box-lining, is then put in place on the flanges *c*, and is also soldered airtight. This metallic-sheet box is then set in the wooden box, and the top flanges struck down snug and square on the ends of the box, and along the lower walls of the broad grooves in the side pieces of the box, and these flanges are then nailed or secured down fast, and the nail or screw heads filed smooth with the surface of the metal. The corners are then, or at any time, fitted with the pieces *e*, secured to the lining by solder, and these, it will be seen, fill out square the whole of the flange, and thus provide a full bearing surface for the lid. I then make the lid E by cutting from a substantial board a piece or pieces the length of the width of the box between the side walls of the broad grooves, and form on the lid the side shoulders, *f*, which taper in depth from one end through. These shoulders, in connection with the cross-pieces *g*, fixed to the lid on a line with the line of the shoulders and inner surface of the side pieces, form the tunnels in which the wedges enter and operate. Transversely the under surface of the lid is formed slightly concave, in order that the bearing shall be flush in the center and the ends and sides be drawn down tight on the ends and sides of the box. The metallic lining *h* is tacked or nailed to the lid, and about the edge is secured rubber packing *i*, which, it will be seen, is forcibly impressed on the edges of the



packing-vessel by the action of the wedges, and thus an air-tight vessel is obtained.

5 The letter F represents wedges fitting the tapering tunnels formed by the spaces between the shoulders of the lid and the side and top walls of the broad grooves in the side pieces.

10 When the box is packed and closed, screws *k* are inserted through the side pieces into the cross-pieces of the lid, and thus give additional security to the box against displacement of parts of any character during transportation and handling consequent thereto.

15 This box is particularly applicable to the shipment of butter during the summer season, when it is liable to become rancid, since the peculiar character of the lid, in connection with its packing and the air-tight box with metallic lining, the air is entirely and continuously excluded from contact with the contents of the packed material.

20 What I claim as my invention, and desire to secure by Letters Patent, is—

1. The wooden box, formed of the sides having the broad lateral grooves and ends, with the cross-pieces and the bottom, in combination with the cover, formed on the under side convex, and the wedges, substantially as described.

2. A lid formed with tapering shoulders and side pieces and a convex under surface, and furnished with packing, in combination with

the packing-vessel having grooves, and with wedges, substantially as described.

3. The lid formed with tapering shoulders, and provided with side pieces and convex under surface, with metallic lining and packing about the edges, and the side wedges, in combination with a wooden packing-box lined with metal and formed with broad side grooves, substantially as described.

4. The packing-box with metallic lining, and formed with side grooves, the lid with side shoulders and convex under surface, provided with metallic lining and suitable packing, and the wedges, in combination with fastening-screws, substantially as described.

5. The packing-box herein described, consisting of the sides A, with the broad grooves, ends B, provided with the cross-pieces C, metallic cross-bands *b*, metal lining D, with filled corners *e*, lid E, formed with the side shoulders and convex under surface, and having the metallic lining and packed edges, and the wedges F, arranged and combined substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW J. HERRING.

Witnesses:

JOSEPH V. HINCHMAN,  
WILLIAM M. ALEVARD.