

J. KELLEY.

PACKING BOX.

APPLICATION FILED OCT. 21, 1908.

917,453.

Patented Apr. 6, 1909.

2 SHEETS—SHEET 1.

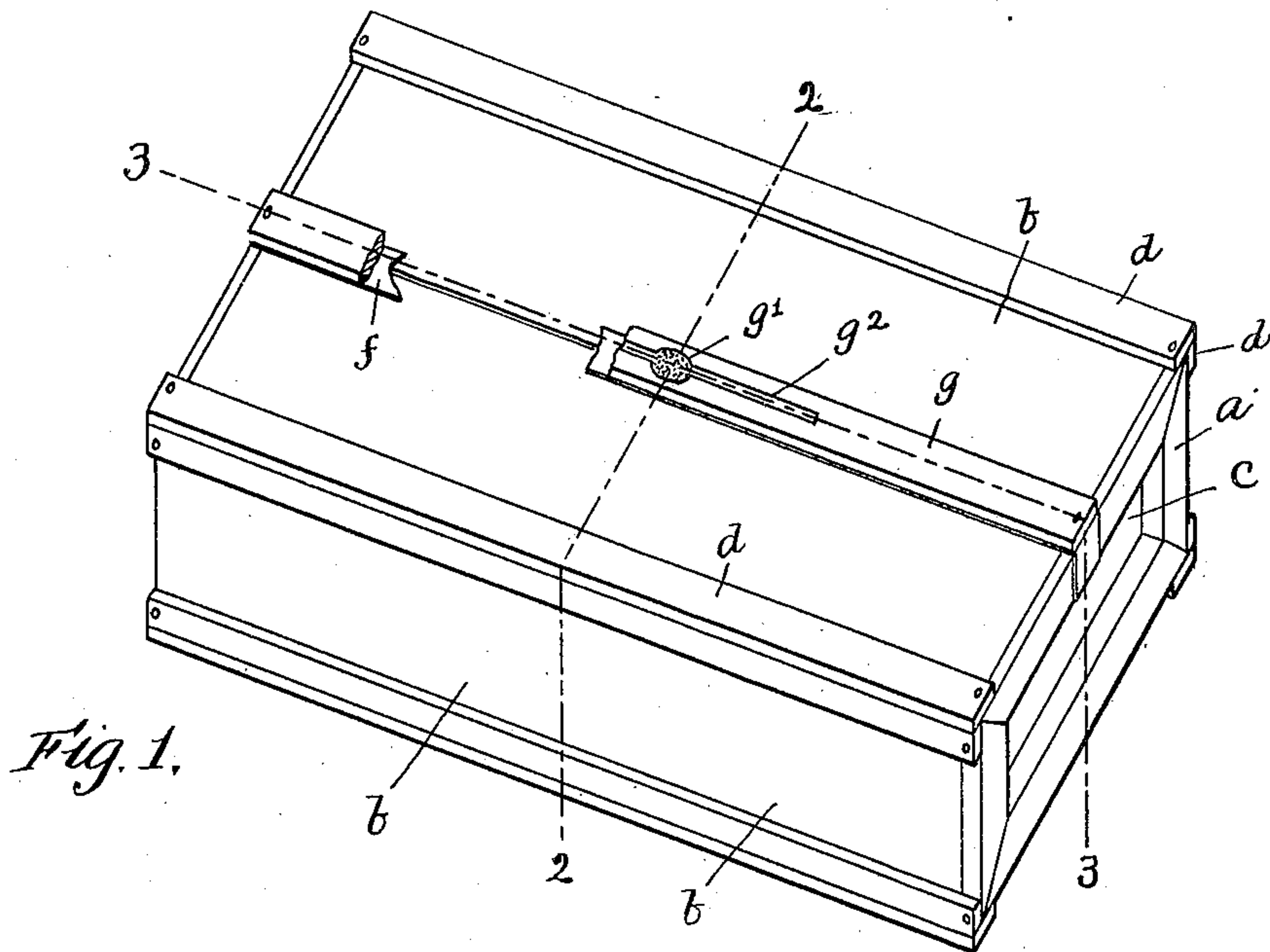


Fig. 1.

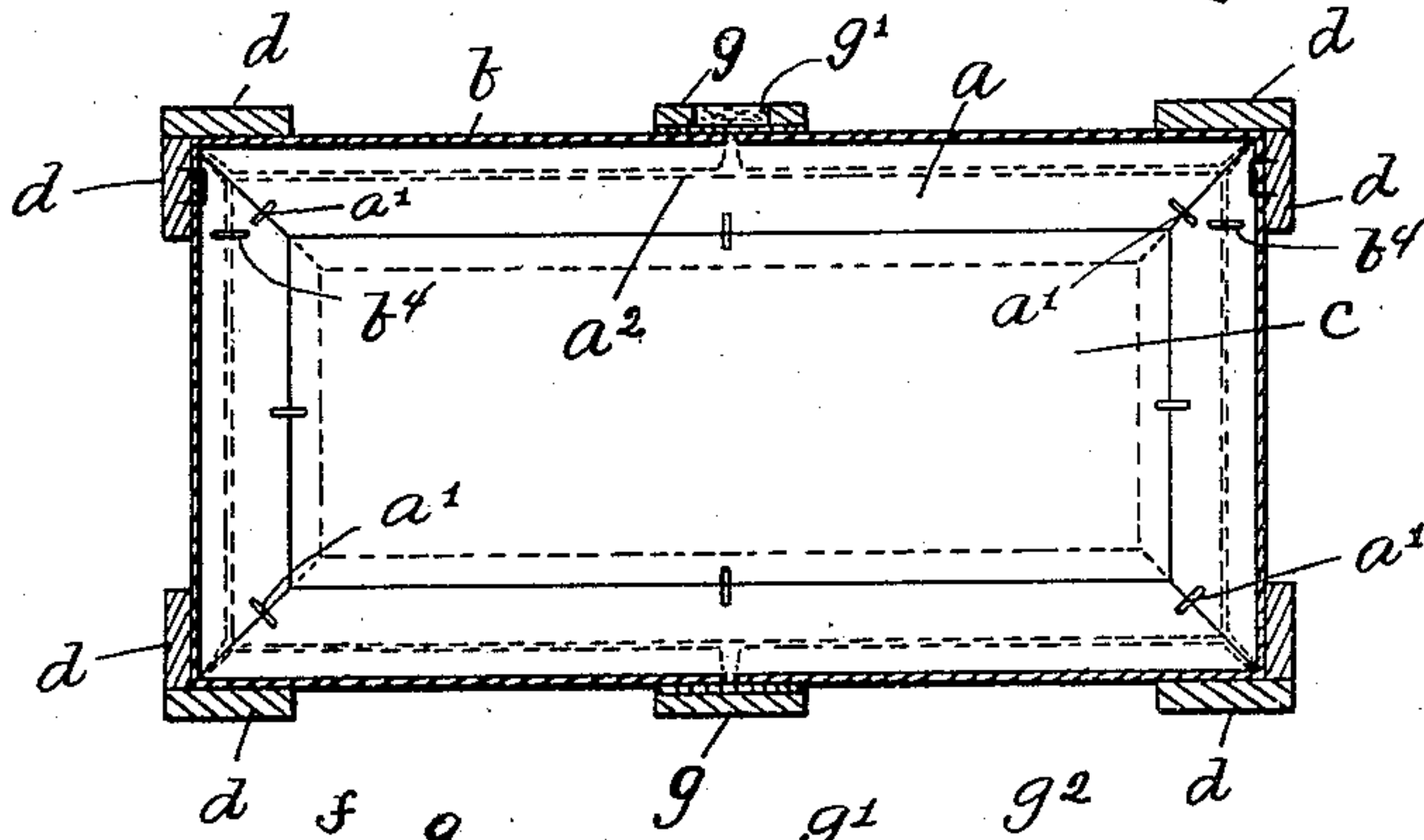


Fig. 2.

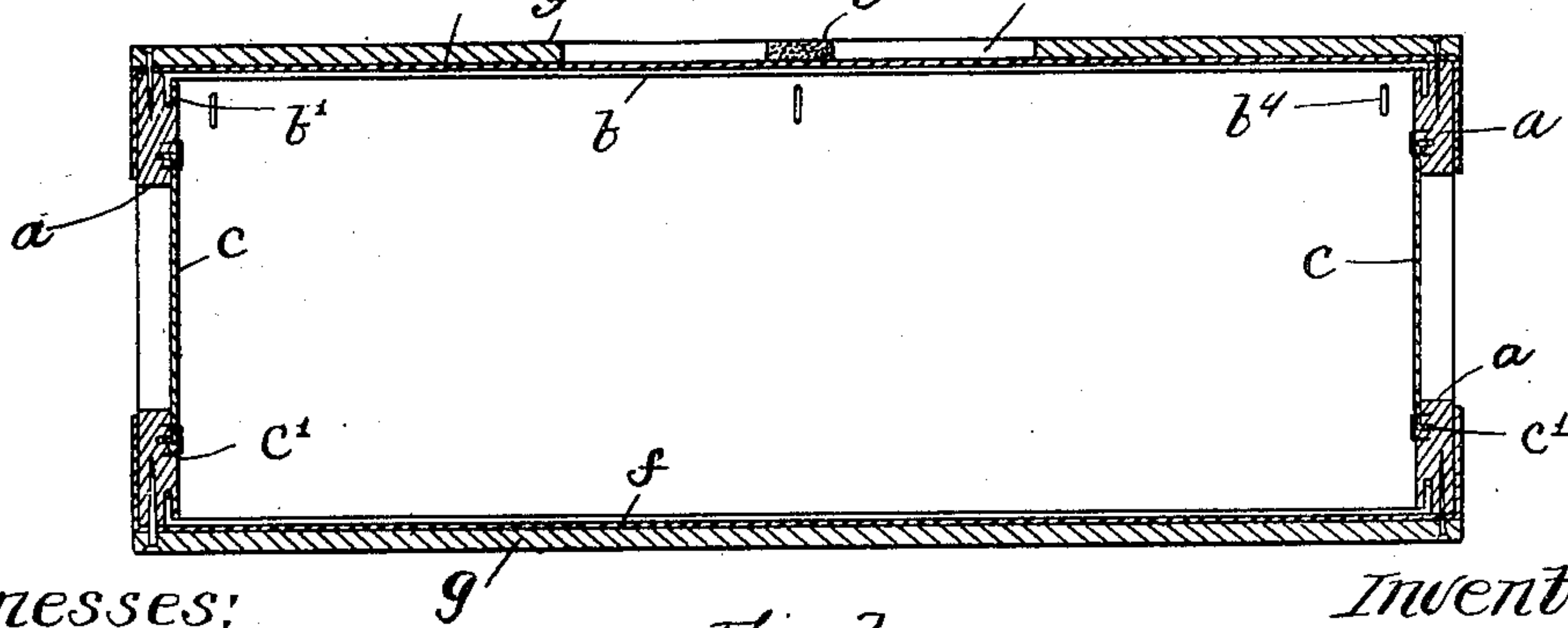


Fig. 3.

Witnesses:

H. B. Davis.  
Cynthia Doyle.

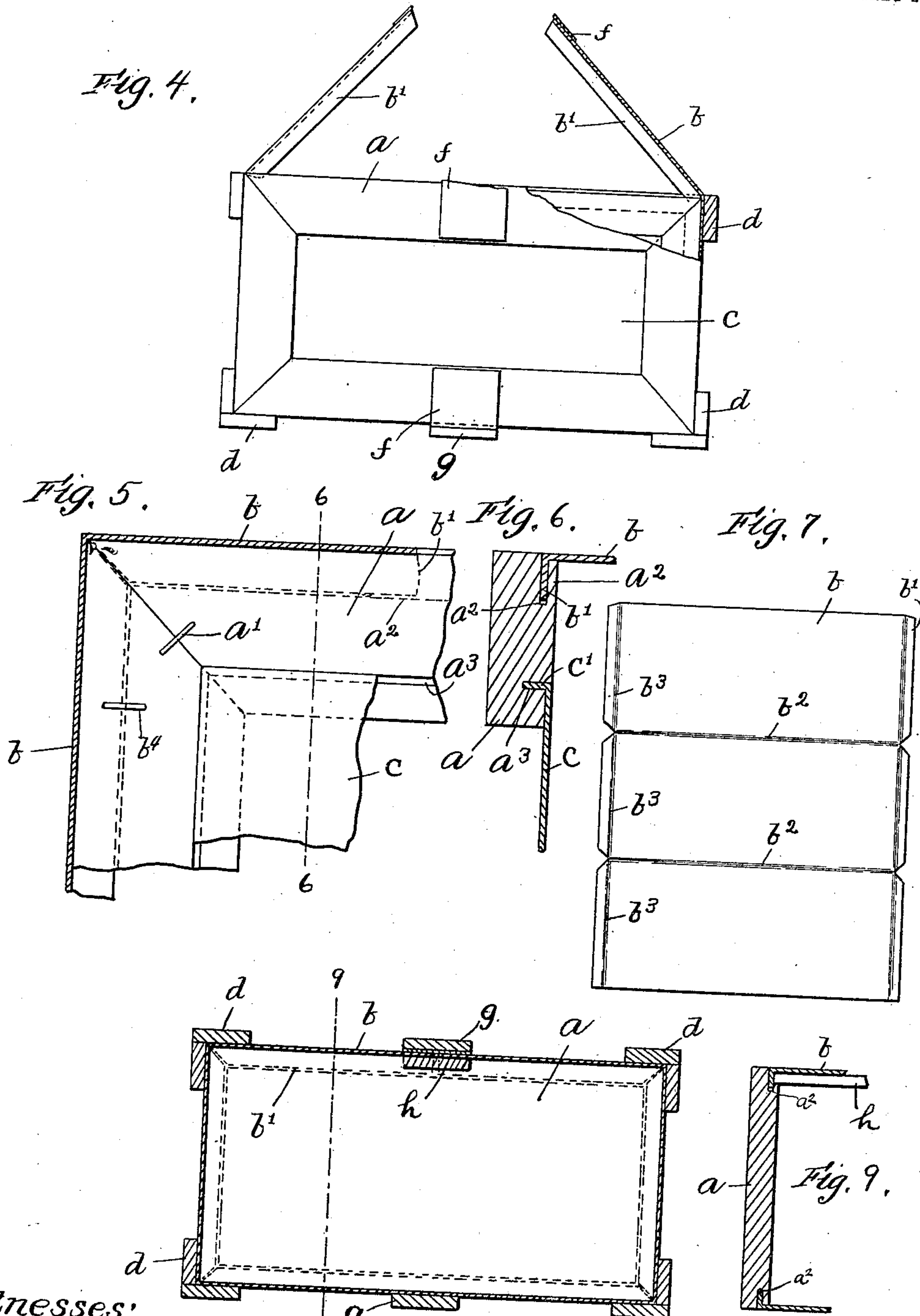
Inventor:

Joseph Kelley  
by Hugo & Harriman.  
attys

917,453.

J. KELLEY.  
PACKING BOX.  
APPLICATION FILED OCT. 21, 1908.

Patented Apr. 6, 1909.  
2 SHEETS—SHEET 2.



Witnesses:  
H. B. Davis.  
Cynthia Doyle

Inventor:  
Joseph Kelley  
By Hayes & Harman  
Attys.



# UNITED STATES PATENT OFFICE.

JOSEPH KELLEY, OF WEYMOUTH, MASSACHUSETTS.

## PACKING-BOX.

No. 917,453.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed October 21, 1908. Serial No. 458,788.

*To all whom it may concern:*

Be it known that I, JOSEPH KELLEY, of Weymouth, county of Norfolk, State of Massachusetts, have invented an Improvement in Packing-Boxes, of which the following is a specification.

This invention relates to packing-boxes, particularly adapted for shipping goods from place to place.

It has for its object to construct a light, durable, water-tight and securely sealed box which is quite inexpensive to manufacture, and, if desired, may be shipped knocked down, to be subsequently assembled when put into use.

Figure 1 is a perspective view of a packing-box embodying this invention. Fig. 2 is a transverse section of the same taken on the dotted line 2—2. Fig. 3 is a longitudinal section of the same taken on the dotted line 3—3. Fig. 4 is an end view of the box showing the top open. Figs. 5 and 6 are enlarged details of one of the end pieces. Fig. 7 is a view of a blank prepared to form a part of the body portion of the box. Fig. 8 is a transverse section of the box having a modified form of body. Fig. 9 is a vertical sectional detail showing a modified end piece which may be employed.

The box comprises essentially two end pieces, a body arranged about said end pieces and attached thereto, and suitable reinforcing strips connecting the end pieces together and serving to reinforce the body.

$a$  represents one of the end pieces. It is made of wood or other material, and is of a substantial thickness. As shown in Fig. 1, it consists of a quadrangular frame composed of four strips having mitered or other shaped ends which are secured together by any suitable means, as by staples  $a'$ . Each end piece has a kerf or groove  $a^2$  extending entirely around its outer edge, which extends inward in parallelism with its sides to receive the intumed edges  $b'$  of a body  $b$ . Each end piece when made as an open frame also has a kerf or groove  $a^3$  extending entirely around its inner or it may be its outer side, near its inner edge, which extends inward at right angles to its sides to receive the intumed edges  $c'$  of a panel  $c$ . In lieu of forming the end pieces in this manner they may be made of solid pieces of wood or other material, as shown in Fig. 9, having the kerf or groove  $a^2$  only, which extends en-

tirely around its outer edge. For smaller boxes this modified form of end piece will be preferred, but for large boxes the form shown in Fig. 1 will be preferable.

The body  $b$  is composed of fiber board or some equivalent tough material, which is light and durable, and which is preferably water-proofed. It may be composed of any number of pieces, two being represented in Figs. 1 and 2, and one in Fig. 8. One of the blanks employed to form the two-pieced body shown in Figs. 1 and 2 is represented in Fig. 7. It is creased or scored crosswise and lengthwise as at  $b^2$  and  $b^3$ , to provide for bending it around the end pieces and for turning in its side edges. It is made long enough to extend half way around the end pieces, so that the two blanks will extend entirely around them and their ends meet.

As shown in Fig. 7, the blank has two creases  $b^2$  to form three sections. The middle section is designed to extend over and form one side wall of the box, and the other two sections to extend over and partly form the top and bottom walls of the box. The side edges of the blank at the junctions of the sections thereof are notched to permit the edges to be turned in without overlapping. To assemble the box the side edges of the blank are turned inward and forced into the kerf which is formed in the outer edge of both end pieces, as shown in Fig. 6, and said intumed edges are secured by staples  $b^4$  or other suitable means. In order that the side walls of the box may occupy a position flush with the outer edges of the end pieces, said outer edges, at the inner side of the kerf, will be cut away as shown in Fig. 6. The body having thus been secured to the end pieces reinforcing strips will be applied to the corners of the box, and such other places as may be desired, said strips extending lengthwise the box from end to end and attached at their ends to the end pieces. As shown in Fig. 2, two such reinforcing strips  $d, d$ , are applied at each corner of the box. The two meeting sections of the body which extend over and form the top wall of the box are designed to serve as a cover, which is adapted to be opened, and to provide for lifting said sections the intumed edges thereof will not be attached to the end pieces. As shown in Fig. 2, wherein the body is composed of two pieces, either the top or bottom of the box or both may be thus



employed, and referring to Fig. 8, wherein the body is composed of one piece only the top of the box may be thus employed.

For the purpose of sealing the box a sealing strip *f* of stout paper, or cloth, or other suitable material is placed upon the meeting sections of the body at the meeting point, which is made wide enough to cross the space between said sections and to extend over both sections for a short distance, and said strip will be glued or otherwise secured to both sections thereby connecting them together and closing the space between them. Said sealing strip *f* may be made long enough to extend over the end pieces at each end and down upon the outside thereof, and in such case said ends will be glued or otherwise attached to the end pieces. A reinforcing strip *g* is then placed over said sealing-strip *f*, which is secured at its ends to the end pieces of the box. The reinforcing strip *g* may have a hole through it as shown at *g'* into which sealing-wax or equivalent sealing material may be placed to connect the strip with the sealing strip, so that it cannot be removed without breaking the seal. Said strip *g* may also have a slot *g<sup>2</sup>* cut through it, of any suitable length, through which slot the sealing-strip *f* may be observed, for the purpose of detecting whether or not the sealing-strip has been tampered with. To open the box the strip *g* is removed and also the top corner strips *d*, as shown in Fig. 4, then the sealing strip will be cut and the two meeting sections of the body lifted.

In case the box is quite large a strip or bar *h* may be placed beneath the meeting sections, at the meeting point, the ends of which enter mortises formed in the end pieces, the meeting sections engaging said bar when closed. For small boxes said strip is unnecessary.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A packing-box comprising a pair of end pieces, each having a continuous kerf around its outer edge and a body adapted to be bent around said end pieces having inturned edges at each side throughout its length adapted to enter the continuous kerf in the end pieces, said inturned edges being notched at intervals, and means for securing said edges to the end pieces, substantially as described.

2. A packing-box comprising a pair of end pieces, each having a continuous kerf around its outer edge, and cut away at the inside of said kerf, and a body adapted to be bent around said end pieces having inturned edges at each

side throughout its length adapted to enter the continuous kerf in the end pieces, said inturned edges being notched at intervals, and means for securing said edges to the end pieces, substantially as described.

3. A packing-box comprising a pair of end pieces each having a continuous kerf around its outer edge, and a body adapted to be bent around said end pieces having its edges turned inward at each side throughout its length, adapted to enter the continuous kerf in the end pieces and having its end portions arranged to form meeting sections at the top of the box, adapted to be lifted to open the box, and means for securing the inturned edges of said body, with the exception of the meeting sections thereof, to the end pieces, substantially as described.

4. A packing-box comprising a pair of end pieces, a body bent around and secured to said end pieces having meeting sections at the top adapted to be lifted to open the box at the top, a sealing-strip adapted to be applied to said sections to connect them together and close the space between them, and a reinforcing strip adapted to be placed upon the sealing-strip which is attached at its ends to the end pieces, substantially as described.

5. A packing-box comprising a pair of end pieces, a body bent around and secured to said end pieces having meeting sections at the top adapted to be lifted to open the box at the top, a sealing-strip adapted to be applied to said sections to connect them together and close the space between them, and a reinforcing strip adapted to be placed upon the sealing-strip and to be attached at its ends to the end pieces, having means for sealing it to the sealing-strip, substantially as described.

6. A packing-box comprising a pair of end pieces, a body bent around and secured to said end pieces having meeting sections at the top adapted to be lifted to open the box at the top, a sealing-strip adapted to be applied to said sections to connect them together and close the space between them, and a reinforcing strip adapted to be placed upon the sealing-strip and to be attached at its ends to the end pieces, having a hole through it above the sealing-strip, substantially as described.

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

JOSEPH KELLEY.

Witnesses:

H. B. DAVIS,  
B. J. NOYES.