

No. 744,284.

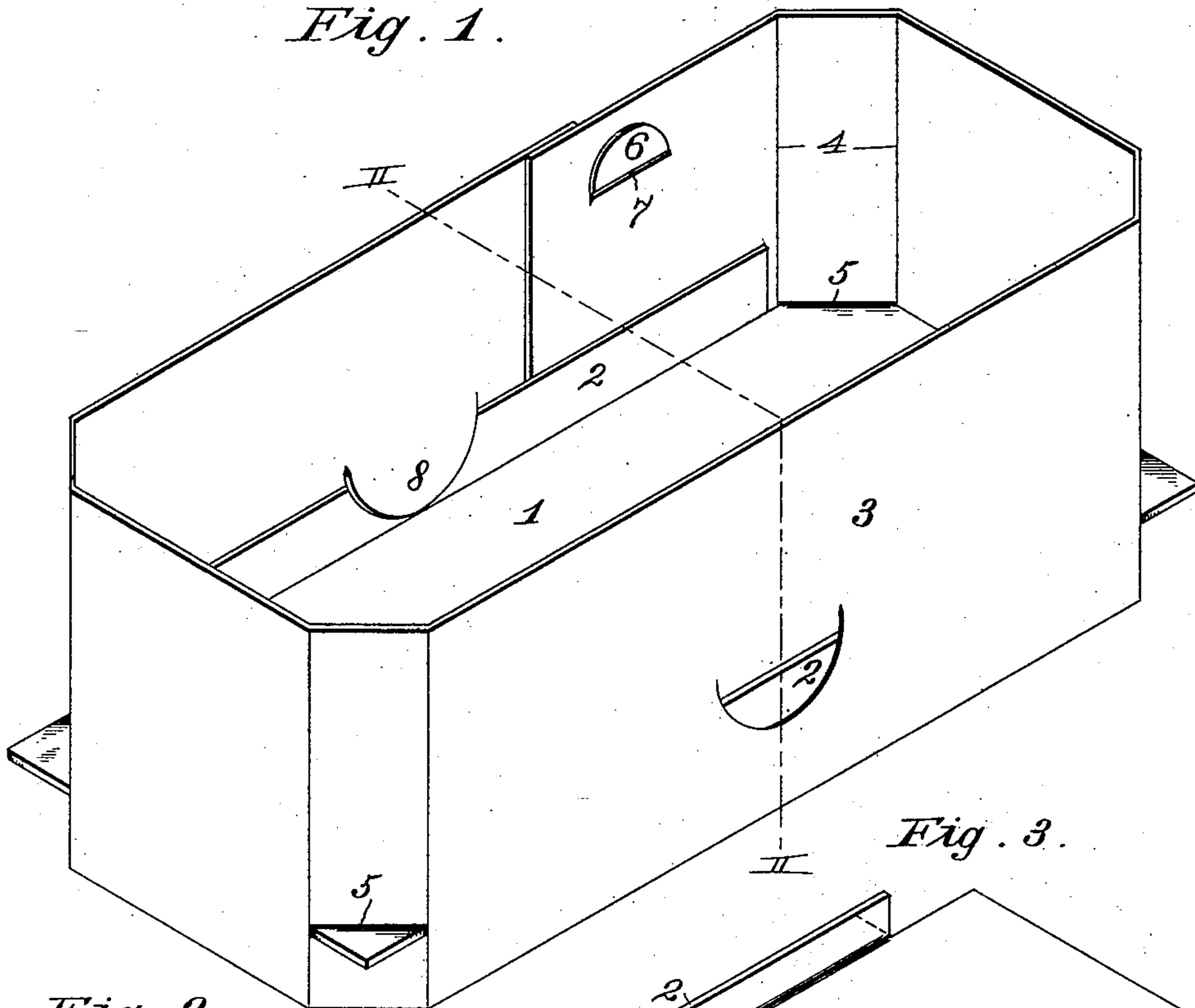
PATENTED NOV. 17, 1903.

E. A. G. BIERWIRTH.  
BOX.

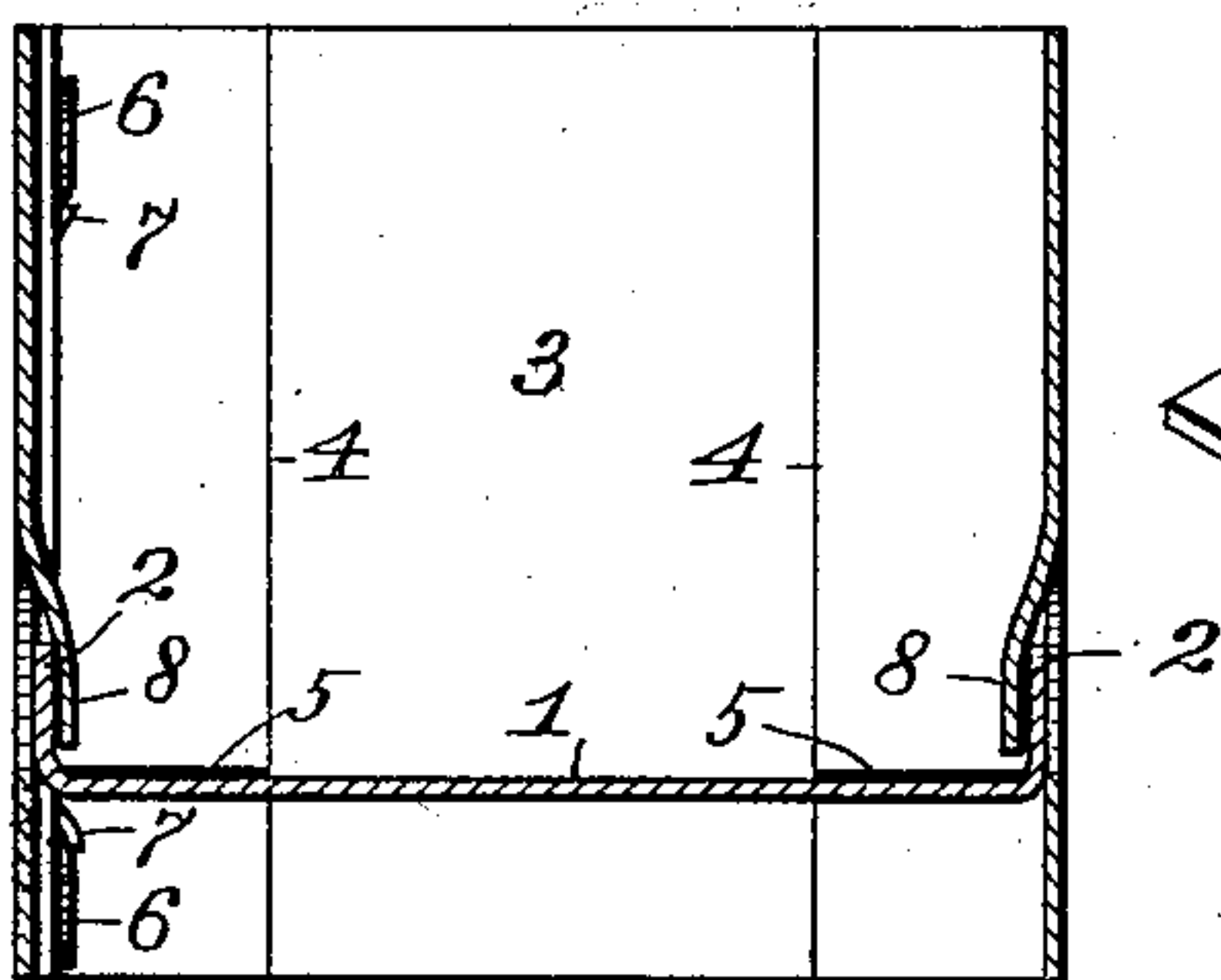
APPLICATION FILED JUNE 29, 1903.

NO MODEL.

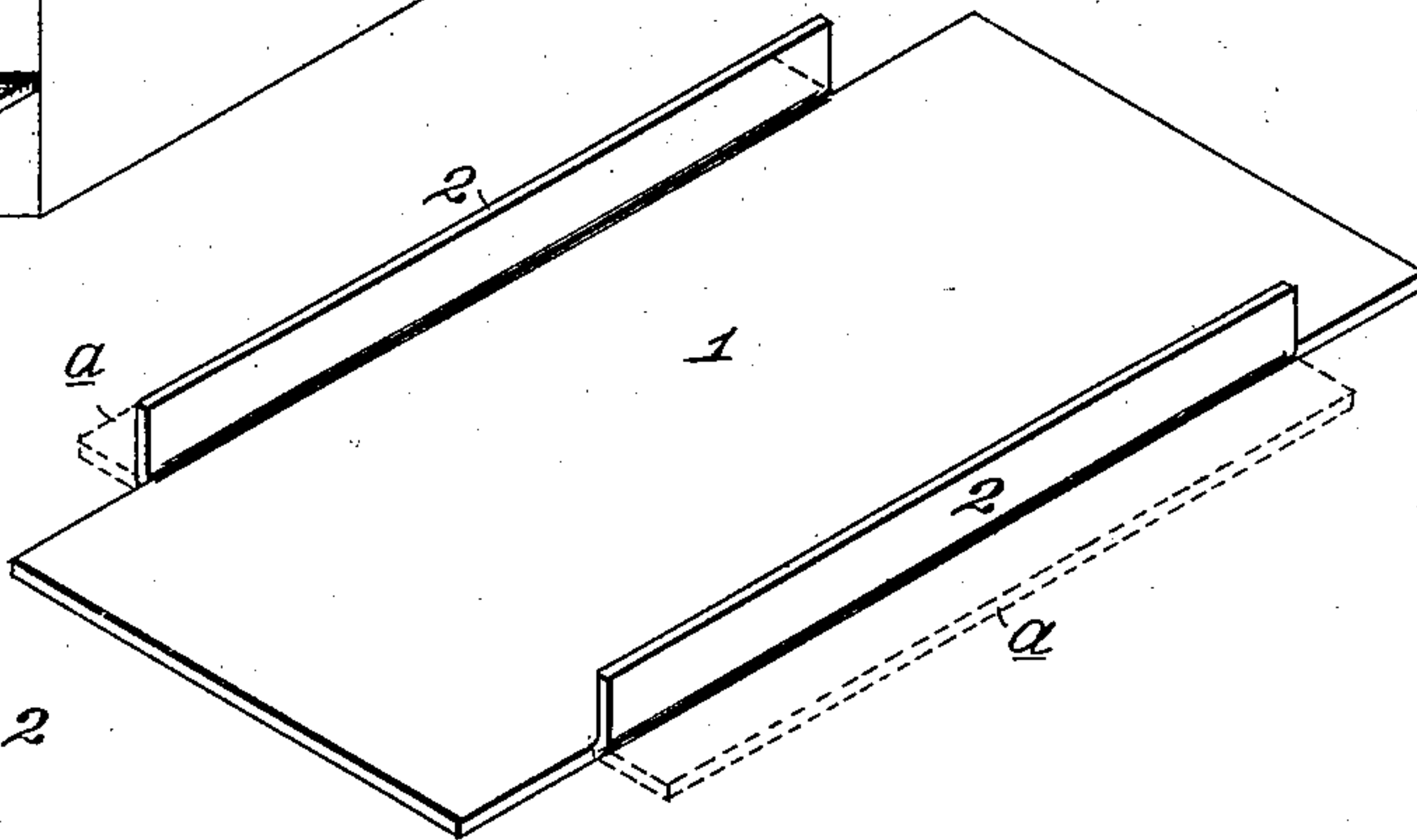
*Fig. 1.*



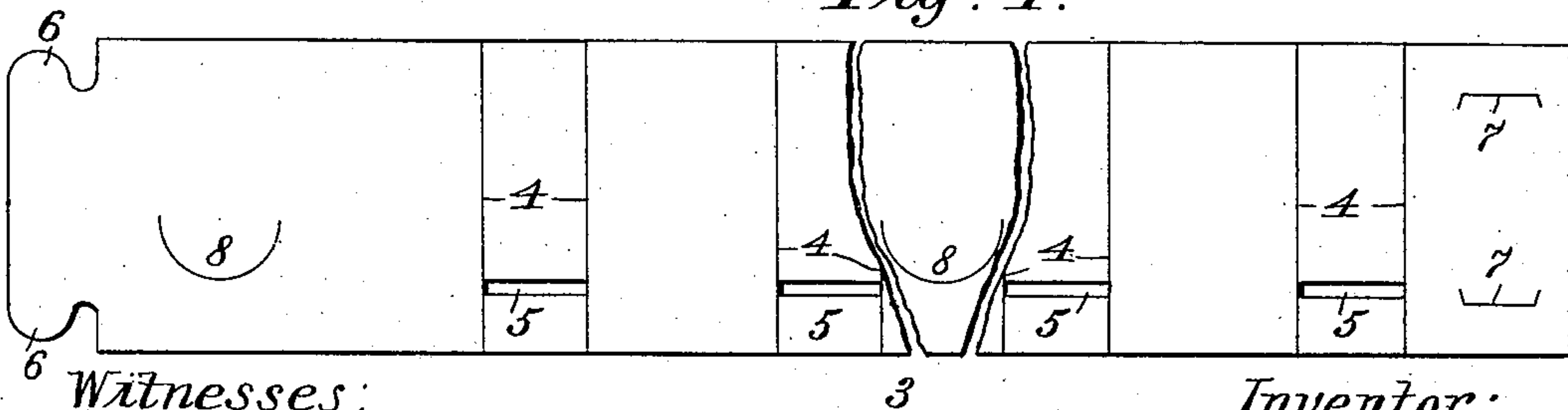
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:  
W. A. Lingle.  
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Ernst A. G. Bierwirth  
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# UNITED STATES PATENT OFFICE.

ERNST A. G. BIERWIRTH, OF KANSAS CITY, MISSOURI.

## BOX.

SPECIFICATION forming part of Letters Patent No. 744,284, dated November 17, 1903.

Application filed June 29, 1903. Serial No. 163,457. (No model.)

*To all whom it may concern:*

Be it known that I, ERNST A. G. BIERWIRTH, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Boxes, of which the following is a specification.

My invention relates to improvements in boxes, and pertains more particularly to that class having separable sides and bottoms for shipment in a knockdown condition, and which may be readily put together for use without the employment of glue, nails, screws, &c., said sides and bottoms having self-contained fastening elements.

In practice I prefer to construct the boxes of strawboard or similar material made in sheets, from which the sides and bottoms of the boxes are struck by suitable dies provided for that purpose.

When the boxes are to be used for holding berries, &c., the sheets from which they are composed are preferably coated with paraffin to prevent the absorption of moisture and the juices of the fruit.

The invention consists in the peculiar formation of the sides and bottoms of the boxes, whereby the latter are set up for use without the employment of extraneous fastening devices; and in order that the invention may be readily understood reference will now be made to the accompanying drawings, in which—

Figure 1 represents a perspective view of the box set up ready for use. Fig. 2 is a transverse section of the same, taken on line II II of Fig. 1. Fig. 3 is a detail perspective view of the bottom portion of the box. Fig. 4 is a broken elevation of the strip employed to form the walls of the box.

In constructing the box I employ an oblong bottom portion 1, provided with longitudinal marginal flanges 2, which terminate a suitable distance from the opposite ends of said bottom portion, as shown in Fig. 3. Bottom portion 1, when in use, is surrounded by a wall composed of a single strip 3, which is divided by four pairs of equally-spaced vertical creases 4, connected near their lower ends by horizontal slots 5 for the reception of the corners of the bottom portion 1, which project through said slots, as shown in Fig. 1.

When strip 3 is in position on bottom portion 1, it is bent at each crease, forming an octagonal wall, and the ends of the strip are detachably secured together by tongues 6, formed at the corners of one of said ends, which engage slits 7 in the corners of the opposite end.

The longitudinal walls of the box are prevented from spreading by centrally-located depending semicircular tongues 8, that overlap flanges 2, maintaining the latter in an upturned position against the longitudinal walls of the box, so they will brace the bottom portion 1 and prevent its sagging when loaded.

When ready for shipping, strip 3 is straightened out to the position shown in Fig. 4, and flanges 2 of the bottom portion are pressed down to a horizontal position, as shown by dotted lines  $\alpha$ , so that when placed together in large numbers they will occupy the least possible space and be reasonably safe from damage during transportation.

From the above description it is apparent that I have produced a box which is simple and durable in construction, and the ease with which it may be set up for use or knocked down for transportation renders it exceedingly desirable for the purposes intended.

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

1. A box consisting of a surrounding wall provided with a plurality of horizontal slots near its lower edge, depending tongues formed on said wall, a rectangular bottom portion held in position by its corners projecting through the horizontal slots in the surrounding wall, and upturned marginal flanges formed integral with the bottom portion and held in contact with the surrounding wall by means of the depending tongues.

2. A box comprising an octagonal wall having horizontal slots near its lower edge, depending tongues formed integral with the longitudinal sides of the wall, a rectangular bottom portion the corners of which project through the horizontal slots, and upturned marginal flanges formed integral with the longitudinal sides of the bottom portion and adapted to be held in contact with the longi-



tudinal sides of the wall by means of the depending tongues, substantially as described.

3. A box consisting of a rectangular bottom portion, upturned marginal flanges formed  
5 integral with the longitudinal sides thereof, an octagonal wall surrounding the bottom portion and provided with four short slotted sides to receive the corners of said bottom portion, and semicircular tongues depending

from the longitudinal sides of the wall and adapted to overlap the upturned flanges, for the purpose set forth and described. 10

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

ERNST A. G. BIERWIRTH.

Witnesses:

LESLIE E. BAIRD,

F. G. FISCHER.