

No. 668,966.

J. P. BADE.

Patented Feb. 26, 1901.

CRATE.

(No Model.)

(Application filed Mar. 16, 1900. Renewed Jan. 31, 1901.)

Fig. 1.

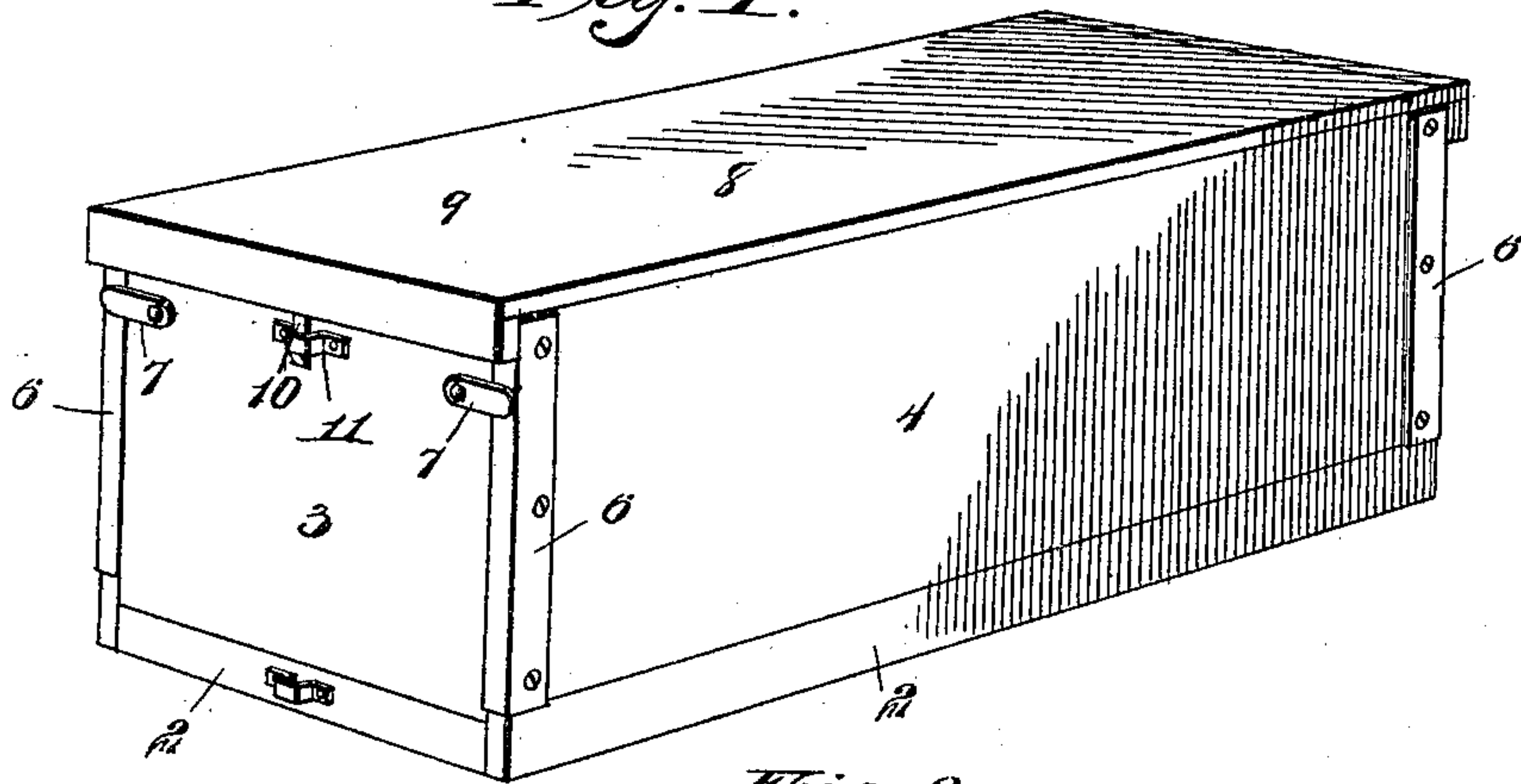


Fig. 2.

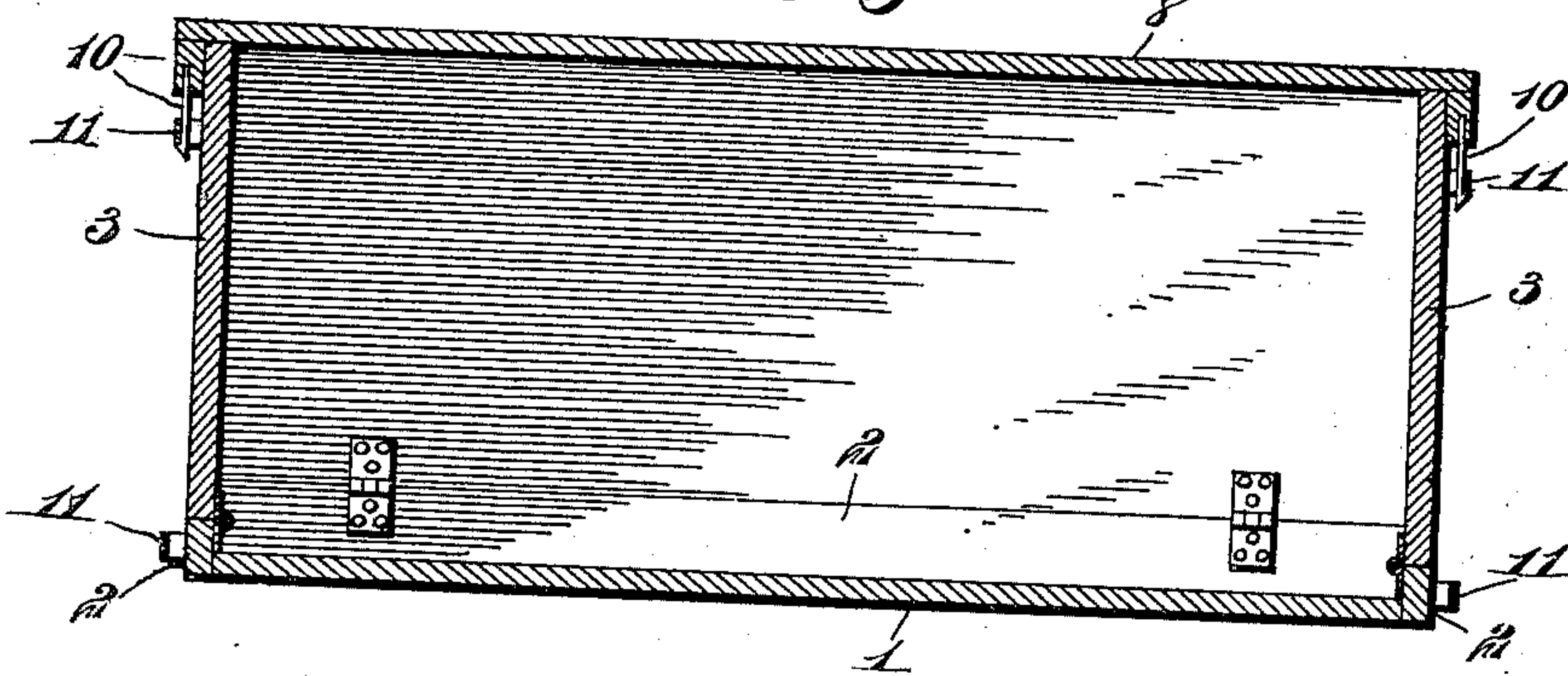


Fig. 3.

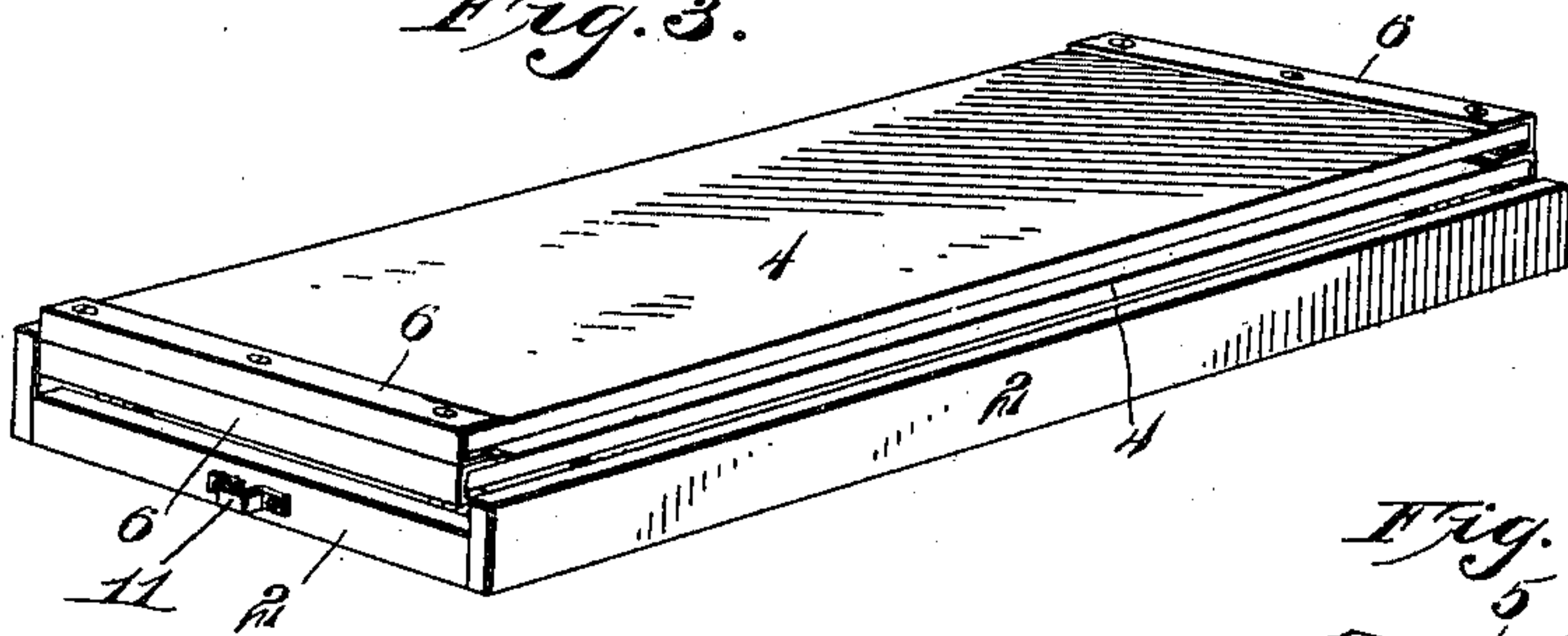
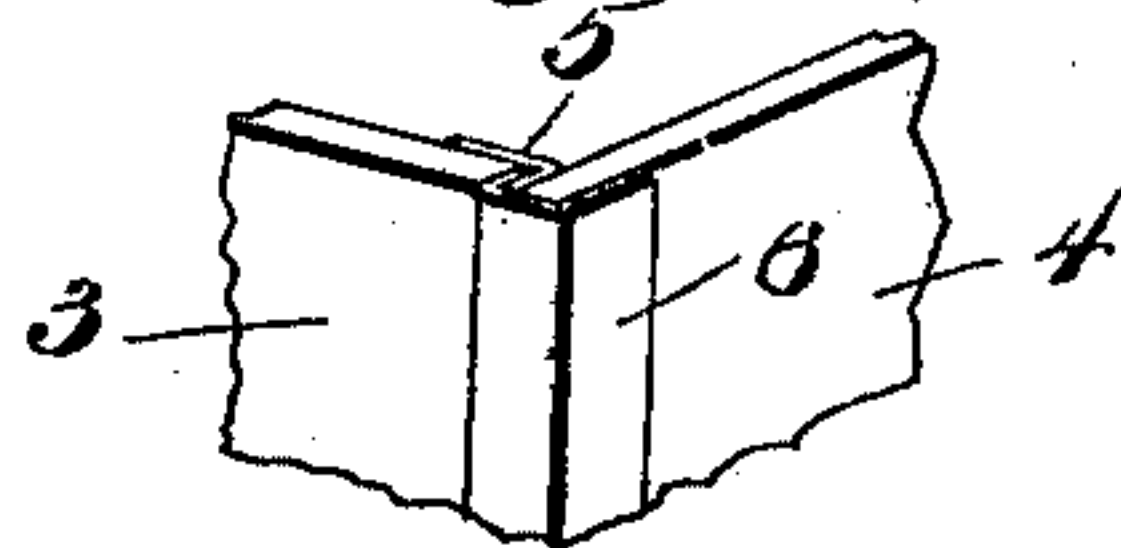


Fig. 4.



WITNESSES

Louis D. Heinrichs  
Herbert A. Larson.

INVENTOR

John P. Bade

By

Victor J. Evans.  
Attorney



# UNITED STATES PATENT OFFICE.

JOHN P. BADE, OF VIENNA, MISSOURI.

## CRATE.

SPECIFICATION forming part of Letters Patent No. 668,966, dated February 26, 1901.

Application filed March 16, 1900. Renewed January 31, 1901. Serial No. 45,510. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN P. BADE, a citizen of the United States, residing at Vienna, in the county of Maries and State of Missouri, have invented new and useful Improvements in Crates, of which the following is a specification.

This invention relates to new and useful improvements in shipping-crates especially adapted foreggs, &c.; and one object is to provide a device of this character which after the contents are removed can be folded together or collapsed and the parts arranged in a compact and reduced form, whereby the same will occupy the minimum amount of space, and thereby reduce the cost of transportation, storage, &c.

A further object is to so construct a box or crate that the cardboard, &c., commonly used therein can be held within the crate in its "knockdown" or collapsed condition.

A third and primary object of my invention is to provide means of novel construction whereby the crate may be quickly opened and securely fastened in such position.

With these ends in view the invention consists in the novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a perspective view of the crate in use. Fig. 2 is a central vertical longitudinal section through the crate. Fig. 3 is a view showing the same collapsed and ready for return shipment, and Fig. 4 is a detail view of the corner-fastening device.

Referring to said figures by numerals of reference, 1 is the bottom of the crate, having short permanent sides 2, to the upper edges of which are hinged in any suitable manner the end and side sections 3 and 4, respectively, which are adapted to swing inwardly. To the inner side of each end section 3, at each vertical edge thereof, is secured an L-shaped metal strip 5, which bends over the edge of said section and is adapted to project into engagement with a U-shaped strip 6, inclosing the adjacent edge of the side portion 4 and secured to the outer face thereof.

A button 7, of suitable material, is secured to the end portion and adapted to overlap the end of the side 4 and retain the strips 5 and 6 in engagement.

Each of the corners of the box is provided with a similar fastening device. A detachable cover, as 8, is provided for the crate, and this may be secured by means of any suitable fastening. I have shown the same provided with side strips 9, having spring-catches 10 thereon adapted to extend into and engage a strip 11 upon the end portions. Similar strips may be arranged on the permanent ends 2 and the lid secured thereto when the crate is collapsed.

In operation when the crate is empty the cardboard, &c., therein is placed upon the bottom 1 and the buttons 7 turned so as to release the corner-fastenings. The ends 3 are then swung down upon the bottom 1, and the sides 4 are free to swing downward in a similar manner. The cover is then placed over the parts and secured to the permanent sides of the box, as before described.

It will of course be understood that the sides 4 should be hinged at a point above the lower edges of the ends in order that they may be free to rest thereon when collapsed.

By my construction I provide a device which is neat and durable and which may be readily and firmly secured in position for use.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

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

In a shipping-box, the combination with a bottom having permanent sides of varying heights, of side and end portions hinged to said sides, an L-shaped strip secured to the inner surface of each end portion at each side thereof, a U-shaped strip secured to the outer face of each of the side portions at each edge thereof and overlapping said edges,

said strips extending the full length of the edges and adapted to interlock, buttons upon the end portions adapted to overlap the U-shaped strips and hold the strips in interlocked position, a cover, and means for locking the cover in position when the box is in open or in collapsed condition.

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

JOHN P. BADE.

Witnesses:

I. H. BURNS,

JAMES H. ROBERTS.