

(No Model.)

C. P. WARD.  
CRATE.

No. 437,538.

Patented Sept. 30, 1890.

Fig. 1.

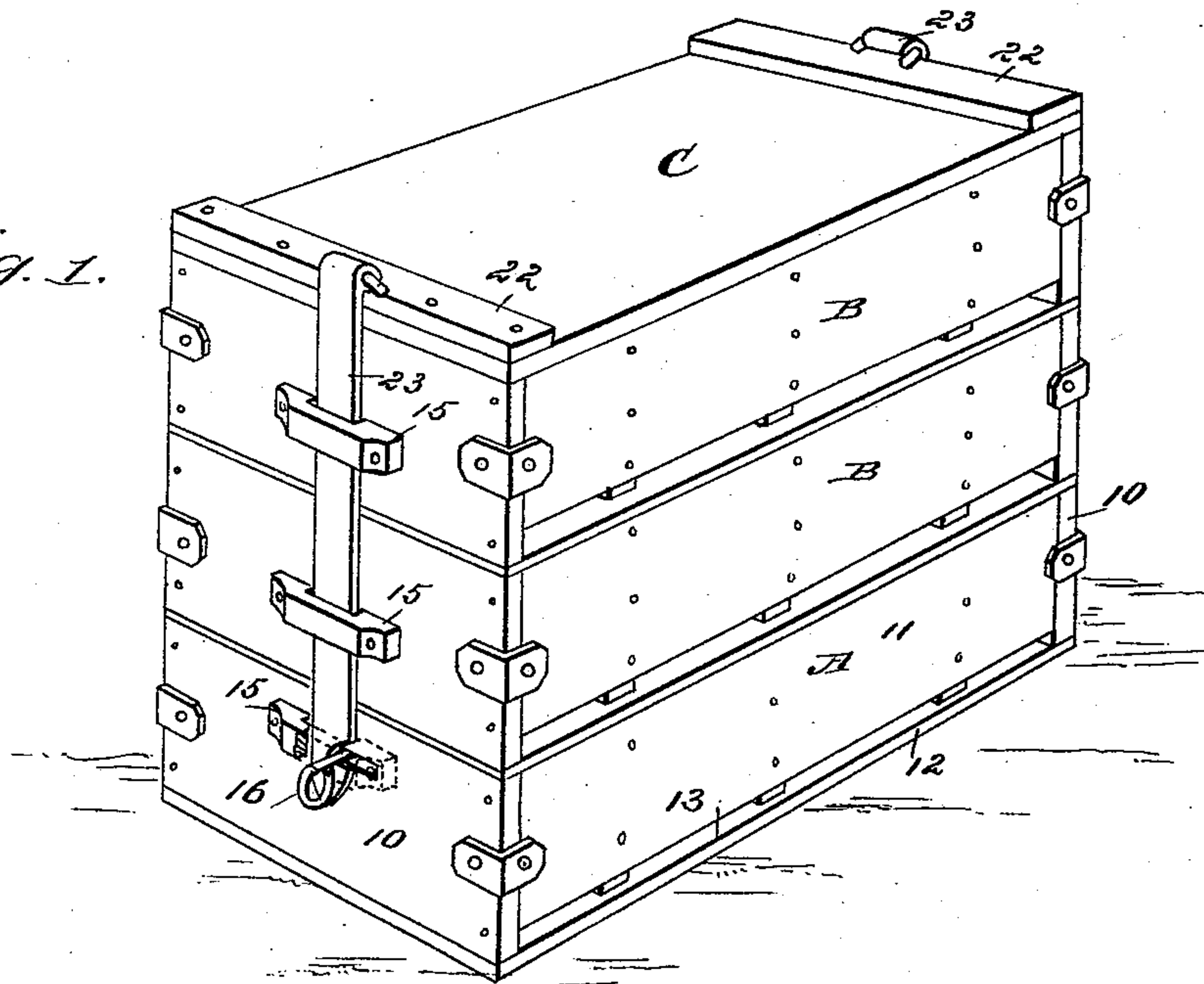


Fig. 2.

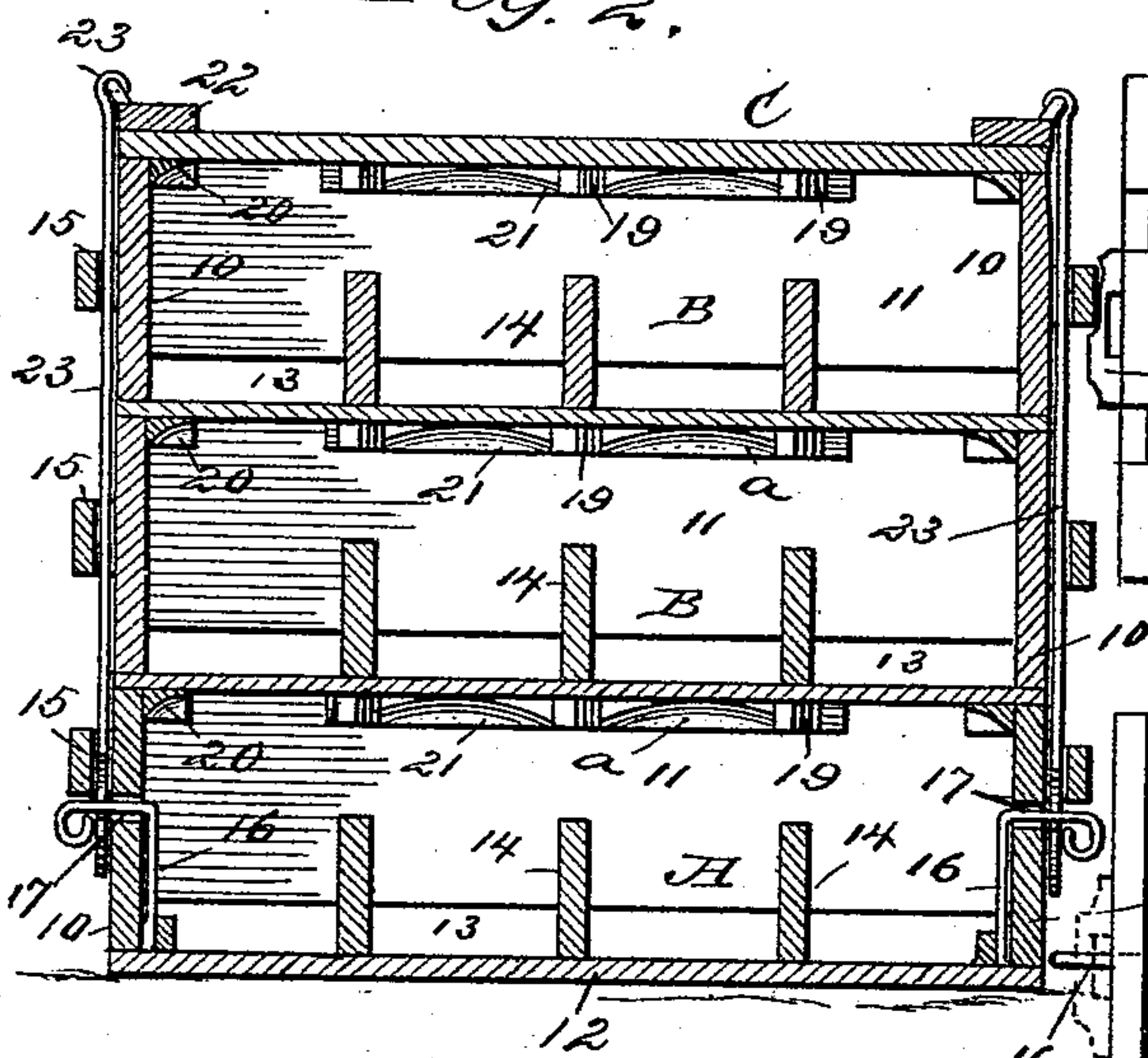


Fig. 3.

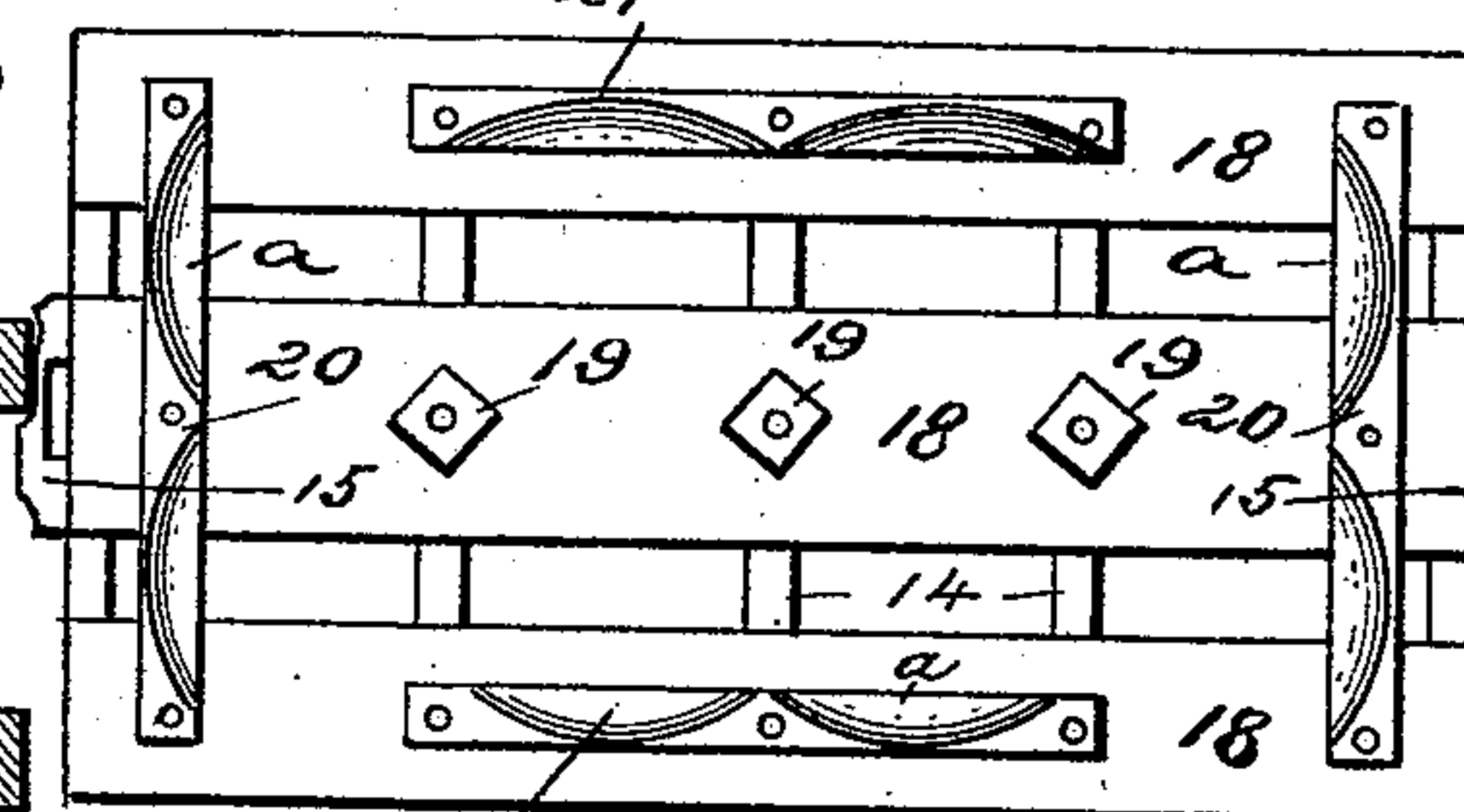
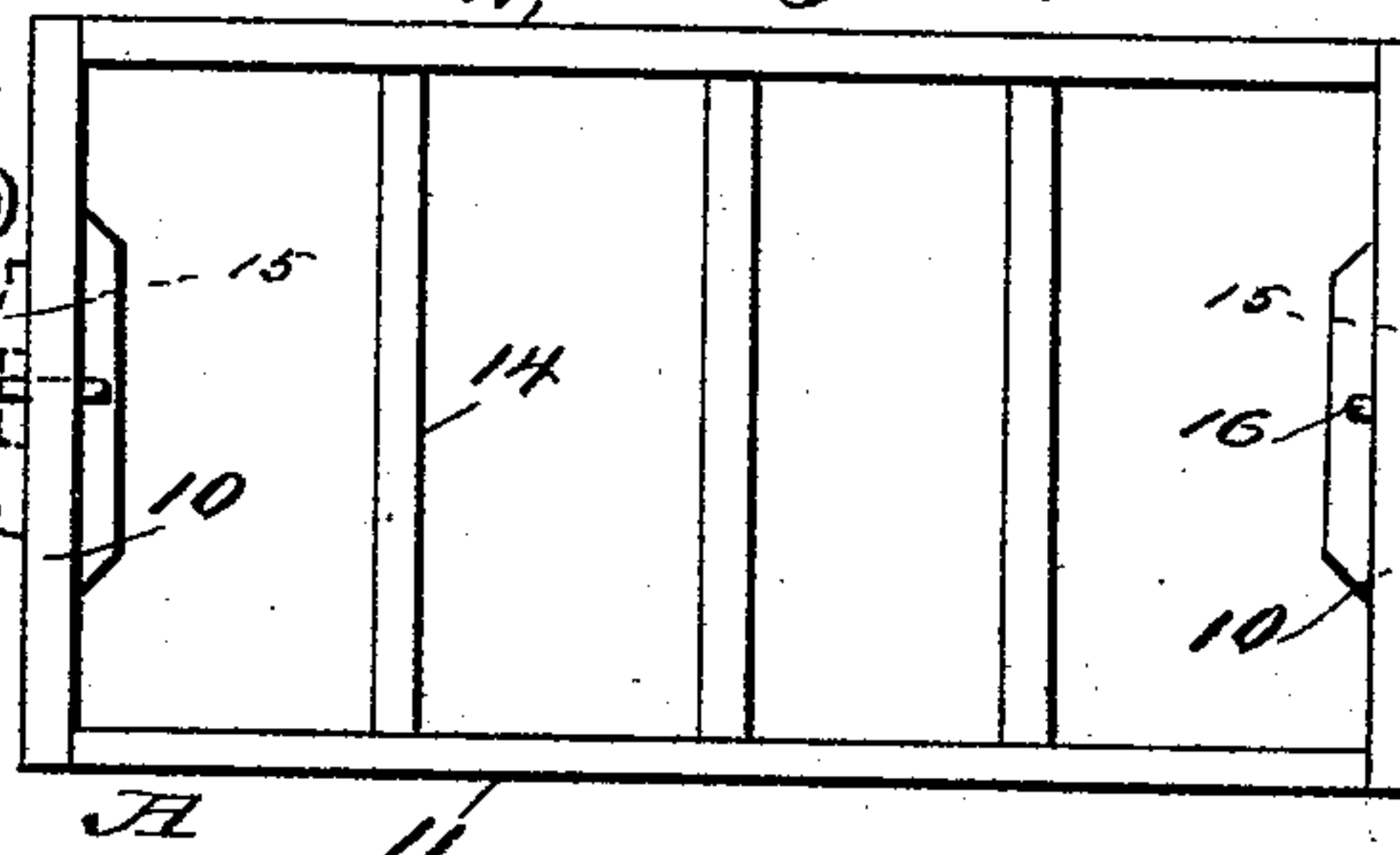


Fig. 4.



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CHARLES P. WARD, OF GUILFORD, INDIANA.

## CRATE.

SPECIFICATION forming part of Letters Patent No. 437,538, dated September 30, 1890.

Application filed May 31, 1890. Serial No. 353,717. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES P. WARD, of Guilford, in the county of Dearborn and State of Indiana, have invented a new and useful Improvement in Crates, of which the following is a full, clear, and exact description.

My invention relates to an improvement in crates, especially that class of crates known as "sectional," and utilized for packing berries and other small fruits.

The object of the invention is to provide a simple, durable, and economical device for locking the sections of the crate to place, and also to utilize portions of the locking device as handles for the sections.

Another object of the invention is to provide devices for effectually preventing a lateral movement of the sections, which devices also serve to hold the boxes containing the fruit in position without possible injury to their contents.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of a crate made in accordance with my invention. Fig. 2 is a central vertical section through the crate. Fig. 3 is a bottom plan view of one of the intermediate sections, and Fig. 4 is a plan view of the bottom section.

The bottom section A of the crate consists of end pieces 10, side pieces 11 of less width and which are attached to the end pieces, and a closed bottom 12, the said bottom being preferably constructed of one piece or a series of pieces having their adjoining side edges closely brought together. By constructing the side pieces 11 of less width than the end pieces 10 an air-space 13 is obtained, intervening the contiguous faces of the side pieces and bottom 12.

The bottom section A is further provided with a series of transverse partitions 14, which partitions extend from side to side and preferably rest upon the bottom 12, but do not extend upward more than about half the height

of the side pieces 11, as best shown in the sectional view, Fig. 2.

Each end piece 10 of the bottom section A is provided upon its outer face with an attached longitudinal staple 15, which staple is shaped to serve as a handle for the section, and an angled or L-shaped spring-latch 16 is secured at its inner end to the inner face of each side piece 10, preferably at or near the bottom of the latter, the horizontal member of which latch projects through and is capable of movement in a longitudinal slot or opening 17, produced in the end pieces 10 beneath the staple 15.

The upper or intermediate sections B of the crate are somewhat similar in construction with the bottom section A, each consisting of end pieces 10, side pieces 11, transverse partitions 14, resting upon the bottom, and attached end staples 15; but the bottom of the upper sections differs in construction from the bottom of the lower section, in that the bottom of the upper sections is made up of a series of spaced longitudinal strips 18, and upon the central strip beneath each partition 14 a lug 19 is formed, which lugs may partake of any desired shape, being, however, preferably rectangular, as shown, and may be formed integral with the strip, or may be attached thereto in any approved manner.

A rib 20 is transversely secured to the under face of the bottom of each of the upper sections a slight distance from each end, the inner surfaces of which ribs are chamfered and concaved at intervals, as illustrated at *a* in Fig. 3. Similar ribs 21, also chamfered upon their inner faces, are attached to each of the outer strips 18 about midway between the end ribs 20, the location of the side ribs being about the same distance from the side edges of the sections as the end ribs are from the ends of said sections.

A lid or cover C is provided for the crate, adapted to cover the upper section when all of the sections are in place. The lid or cover is provided, preferably, upon its upper face at each end with a batten 22, and the under face of the cover is provided with ribs and lugs similar in construction and location to the lugs and ribs described in connection with the upper sections. The staples 15 of the sections are so located that when the sec-



tions are in position the said staples will be in vertical alignment, and at each end of the lid or cover C the upper end of a lock-bar 23 is hinged, the said lock-bars being of sufficient length to extend downward below the top edge of the lower section A of the crate and of a width to permit them to pass readily through the staples 15. The lower end of each lock-bar adjacent to the latch is provided with a recess in its side.

In operation the several sections may be filled with baskets of fruit and the crate then made up, which is accomplished in the following manner: A section B is placed upon the top of the lower section A, the ribs 20 and 21 fitting inside of and in close contact with the side and end pieces of the said lower section and resting upon the edges of the boxes contained in the sections. The lugs 19 engage with the boxes at the central portions of the section, and as the lugs are small and the ribs chamfered or recessed upon their inner faces a comparatively small portion only of the ribs or lugs is brought in contact with the fruit. Other sections B—as many as may be desired—are placed in like manner in position, and the lid or cover C is then fitted to place, the lock-bars 23 being passed down through the staples, and as the lower ends of the lock-bars are curved when they come in contact with the horizontal outwardly-extending member of the spring-latches 16 the said latches are forced to one side, and when the recessed portions of the lock-bars are brought opposite the latches they fly back in place, enter the said recesses, and effectually lock each and every section in place.

It will be observed that the crate above described is not only durable and economic in construction, but may be made up of any desired number of sections, and in placing the sections one upon the other the ribs and lugs 20, 21, and 19 not only preserve the sections against the lateral movement, but also firmly hold the boxes of fruit in place and prevent their movement in any direction.

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

1. In a sectional crate, the combination, with the sections provided with staples at their ends, of a lid or cover provided at each end with a lock-bar hinged thereto, which

lock-bars are adapted to pass downward through the staples of the sections, and latch devices located at the ends of the lower section, and adapted to engage with the lock-bars, substantially as shown and described.

2. In a sectional crate, the combination, with the sections thereof, each provided with a staple at its ends, and an angled spring-latch secured within the lower section at each of its ends, one member of which latches is adapted to project through and is capable of sliding in the ends of the lower section, of a lid or cover and lock-bars hinged to the ends of the said lid or cover and adapted to extend downward through the staples of the sections to an engagement with the spring-latches, as and for the purpose specified.

3. In a sectional crate, the combination, with one section, of a second section provided upon its bottom near the center with lugs and at its sides and ends with ribs, the said ribs being adapted to enter the lower section and engage with the sides and ends thereof, as and for the purpose specified.

4. In a sectional crate, the combination, with one section, of a second section provided upon its bottom near the center with lugs and at its sides and ends with ribs, the said ribs having chamfered or recessed inner edges, as and for the purpose specified.

5. In a sectional crate, the combination, with a lower section having a closed bottom, openings in its sides, and angled spring-latches attached at their lower extremities within the section, one latch at each end, the horizontal members of which latches extend through the openings in the end of the section, of a cover-section provided with a spaced slatted bottom, lugs formed upon the under face of the said bottom near the center, and end and side ribs, also attached to the bottom, said ribs having chamfered inner edges, aligning staples attached to the ends of both sections, a lid adapted for engagement with the cover-section, and a lock-bar attached to each end of the lid, which lock-bar is adapted to pass through the staples of both sections and engage with the latches of the lower section, as and for the purpose specified.

CHARLES P. WARD.

Witnesses:

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