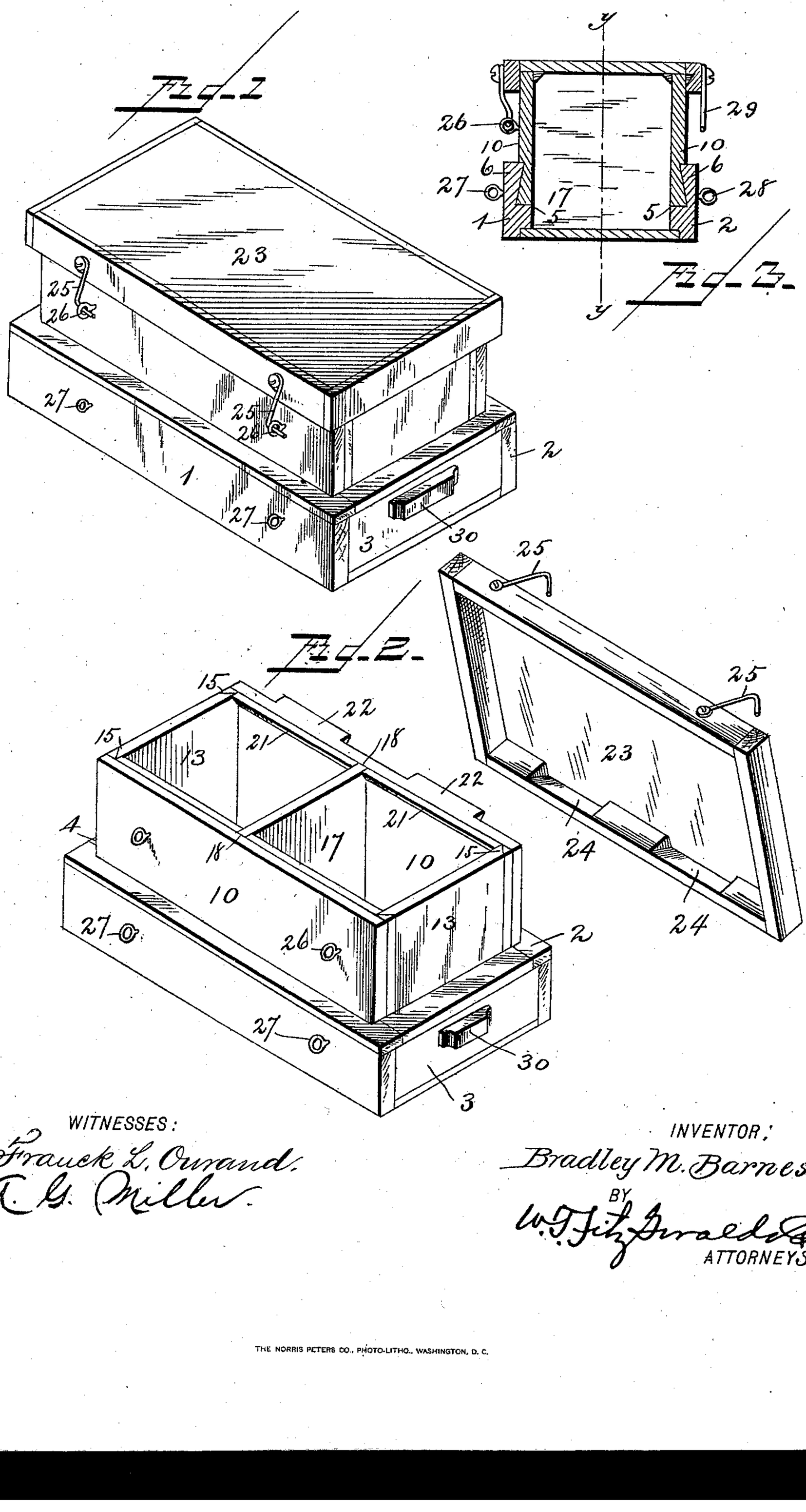
No. 647,361. Patented Apr. 10, 1900.

B. M. BARNES.

EGG CRATE.

(Application filed Oct. 20, 1899.)

(No Model.) 2 Sheets—Sheet 1.



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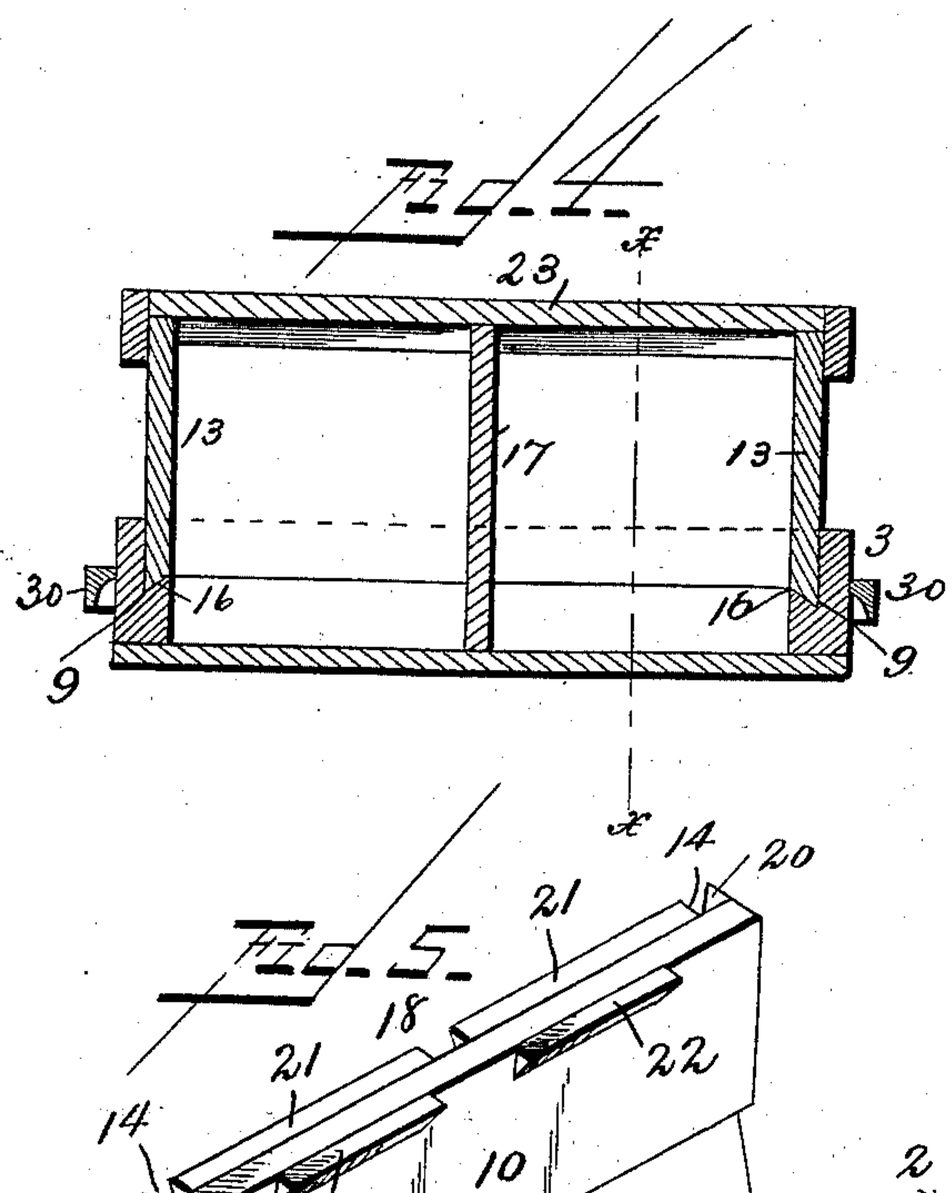


FIG. 4.

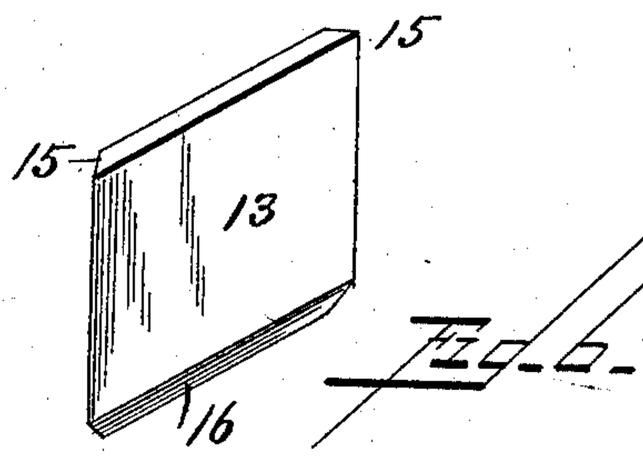


FIG. 5.

FIG. 7.

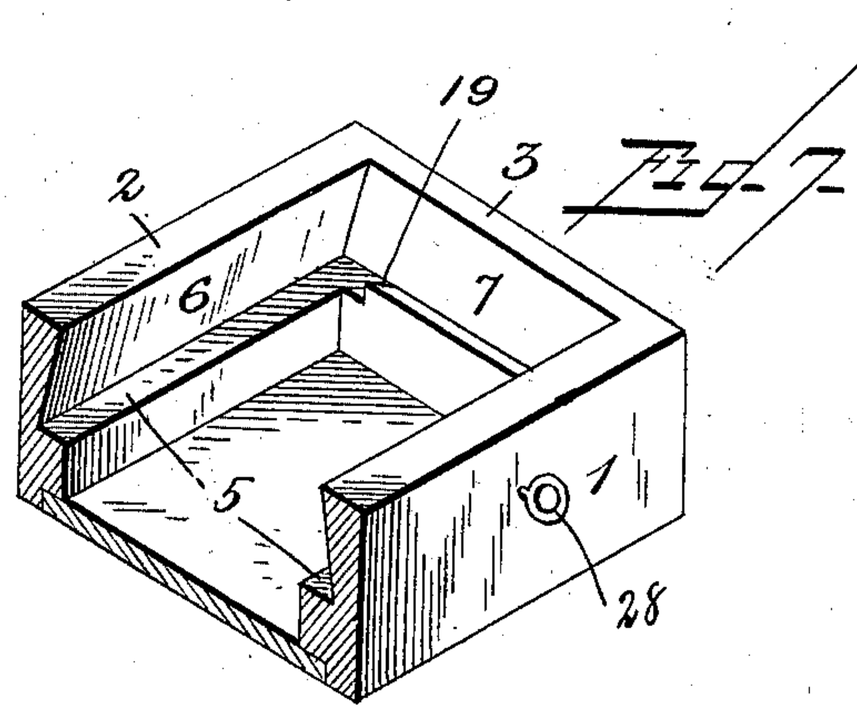
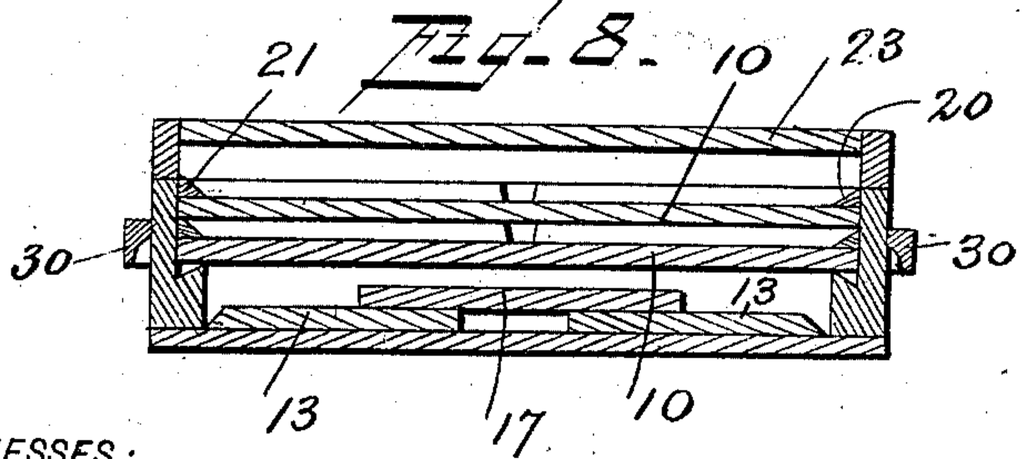


FIG. 8.



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UNITED STATES PATENT OFFICE.

BRADLEY M. BARNES, OF WAUTOMA, WISCONSIN, ASSIGNOR OF THREE-FOURTHS TO ARTHUR LINDSEY AND LUTHER JENKS, OF OMRO, WISCONSIN, AND CHARLES CHAPMAN, OF THOMPSON, MICHIGAN.

EGG-CRATE.

SPECIFICATION forming part of Letters Patent No. 647,361, dated April 10, 1900.

Application filed October 20, 1899. Serial No. 734,212. (No model.)

To all whom it may concern:

Be it known that I, BRADLEY M. BARNES, a citizen of the United States, residing at Wautoma, in the county of Waushara and State of Wisconsin, have invented certain new and useful Improvements in Egg-Crates; 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.

My invention relates to shipping-crates, and more particularly to a knockdown crate, which is especially designed for shipping eggs; and it consists of certain novel features of construction and combination of parts, as will be hereinafter fully described and claimed.

One object of my invention, among others, is to provide a simple and inexpensive crate of the character specified, which will be found reliably efficient in meeting all the requirements.

A further object is to so construct the several parts of my improved crate that they may be instantly separated from their coöperation with the other parts and stored in a compact form for return shipment or after their load shall have been discharged.

In the accompanying drawings, made a part of this application, Figure 1 is a perspective view of my egg-shipping crate ready for use. Fig. 2 is a perspective detail view showing the lid of my crate removed and also showing the usual egg-holding cardboard as being absent. Fig. 3 is a central section of my improved crate when it is in a locked or closed position. Fig. 4 is a longitudinal central section of my improved crate as taken on the line $y\ y$ of Fig. 3, the line $x\ x$ of Fig. 4 indicating the line of division made for Fig. 3. Fig. 5 is a perspective detail view of one of the removable side sections of my crate. Fig. 6 is a perspective detail view showing one of the end sections removed. Fig. 7 is a detail perspective, partly in section, of the base portion of my improved crate. Fig. 8 is a transverse central section of my improved crate, showing the same in a folded or compact position ready for return shipment.

The several details of my invention will for convenience be indicated by numerals.

In materializing my invention I provide a main or base section, which is not only designed to form a rigid support for the upper portion of my crate, but will also be found convenient as a receptacle for storing in a compact form the various separable portions of my crate, as will be hereinafter made clear. This base portion comprises the side sections 1 and 2 and the end sections 3 and 4, which may be made of any desired size or extent, according to the capacity desired for the crate. The side sections 1 and 2 are each provided on their inner side with an offset or shoulder 5, which is formed by cutting into the said side sections the outwardly and downwardly inclined faces 6, while the end sections are provided with the vertical faces 7 and with the outwardly and downwardly tapered recess 9, which corresponds in location with the shoulder 5 upon the side walls. The object in providing the inclined faces 6 upon each side of the side walls is to afford means for engaging and retaining the lower edges of the upper side walls 10, each of which is provided with a shoulder or offset 11, designed to rest upon the shoulder 5, and, further, having the outwardly and downwardly inclined faces 12, which coöperate with the faces 6 and is designed to rest snugly in contact therewith, thereby preventing an upward movement of the upper side walls 10 when the end sections 13 are placed in position. Each of the end walls 10 is provided upon its inner face with a vertically-tapered recess 14, designed to receive the beveled edge 15 of the end walls 13. The lower edge of the end walls 13 is so beveled, as indicated by the numeral 16, that said edge will be received by the recess 9, formed in the inner faces of the end walls, as clearly indicated in Fig. 4. One or more central partitions may be disposed within the box thus provided, though I have indicated but one of said partitions, which is reliably held in its operative seat by the recess 18, it being understood that any desired number of recesses, according to the number of partitions employed, may be provided. I prefer to bevel the ends of the walls forming the seat 9, as indicated by the numeral 19 in order to fit the opening thus provided for the reception of the flange 20, formed upon the ends of each of the upper side walls 10, it being understood that said flanges may be integral with said

walls or otherwise provided. If desired, the upper side walls may be reinforced with the flange 20, corresponding to the flange 21, the object thereof being to impart a greater rigidity to said side walls, thus making it possible to adopt a lighter construction.

In order to obviate the necessity of providing hinges, which are always more or less liable to become broken or otherwise inefficient, I secure to the upper edge upon the outer side of one of the upper side walls 10 the ears or brackets 22, while in the contiguous portion of the lid 23 I form the recesses 24, designed to register with and receive said ears, and it is obvious that the lid will be prevented from rising upward when the hooks 25 are properly seated in the keepers 26.

By reference to Fig. 2 it will be observed that I provide upon the side walls 1 and 2 properly mounted keepers 27 and 28, respectively, the former being designed to engage the hooks or latches 25, while the latter is designed to coöperate with the latch or hook 29, it being understood that any preferred number of said coöperating parts may be provided as desired. The object in providing the keepers 27 and 28 is to insure that the lid 23 may be securely locked in coöperation with the base-section when the several removable parts are assembled in said base, as indicated by the sectional view in Fig. 8.

In order to conveniently grasp my improved egg-crate, suitable handles, as 30, may be secured upon the base-section, preferably upon the ends thereof, and it is clear that the lid 23 may be reliably locked in position by replacing the hooks 25 with hasps designed to coöperate with the keepers 26, through the eye of which may be passed a securing device, as a padlock.

By reference to Fig. 3, which shows transverse sections of my improved egg-shipping crate, it will be clear that when the several parts are assembled in their respective operative positions and the lid of the box secured, as by the hooks 25, it will be practically impossible for the box to become casually open, inasmuch as the faces 12 of the upper side walls 10 will be brought tightly to bear against the inclined faces 6 upon the slightest upward movement of said walls. Furthermore, it will be impossible for the side walls to spread, and thereby release the end walls 13, inasmuch as the base-section and the lid will hold said side walls reliably to the performance of their office.

My improved egg-shipping crate may be quickly placed in a knockdown or folded condition, as will be seen by reference to Fig. 8, inasmuch as the end walls 13 and the partitions 17 may be quickly disposed in the bottom of the base portion when the two upper side walls 10 may follow said parts, when the lid 23 may be laid over said parts so that it will rest upon the upper edges of the base-section and the hooks 25 engaged with keepers 27, while the hook 29 may be brought to coöperate with the keeper 28 upon the opposite side, thus holding said parts in a snugly-disposed position until required for further use. It is obvious from the description of the construction of my egg-crate that said parts may be as quickly assembled ready for use.

It will be seen that I have provided an egg-shipping crate the parts of which may be very cheaply manufactured of any preferred material and of any desired size, and believing that the advantages and use of my invention have been made fully apparent from the foregoing description, considered in connection with the accompanying drawings, further reference thereto is dispensed with.

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

The herein-described shipping-crate comprising a base having the interior inclined faces 6; upper side walls coöperating with said base, and having a shoulder and an inclined face 12, the latter designed to coöperate with the face 6 upon said base; end walls having beveled edges designed to fit corresponding recesses provided in said base and upper side walls; brackets or ears 22 formed upon the edge of one of said upper side walls, and a coöperating lid having recesses designed to receive said ears and suitable means to secure said lid in a hooked position, all combined in the manner specified and for the purpose set forth.

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

BRADLEY M. BARNES.

Witnesses:
C. A. McINTYRE,
C. D. MOORE.