

(No Model.)

J. L. RITTER.
CRATE.

No. 433,369.

Patented July 29, 1890.

Fig. 1.

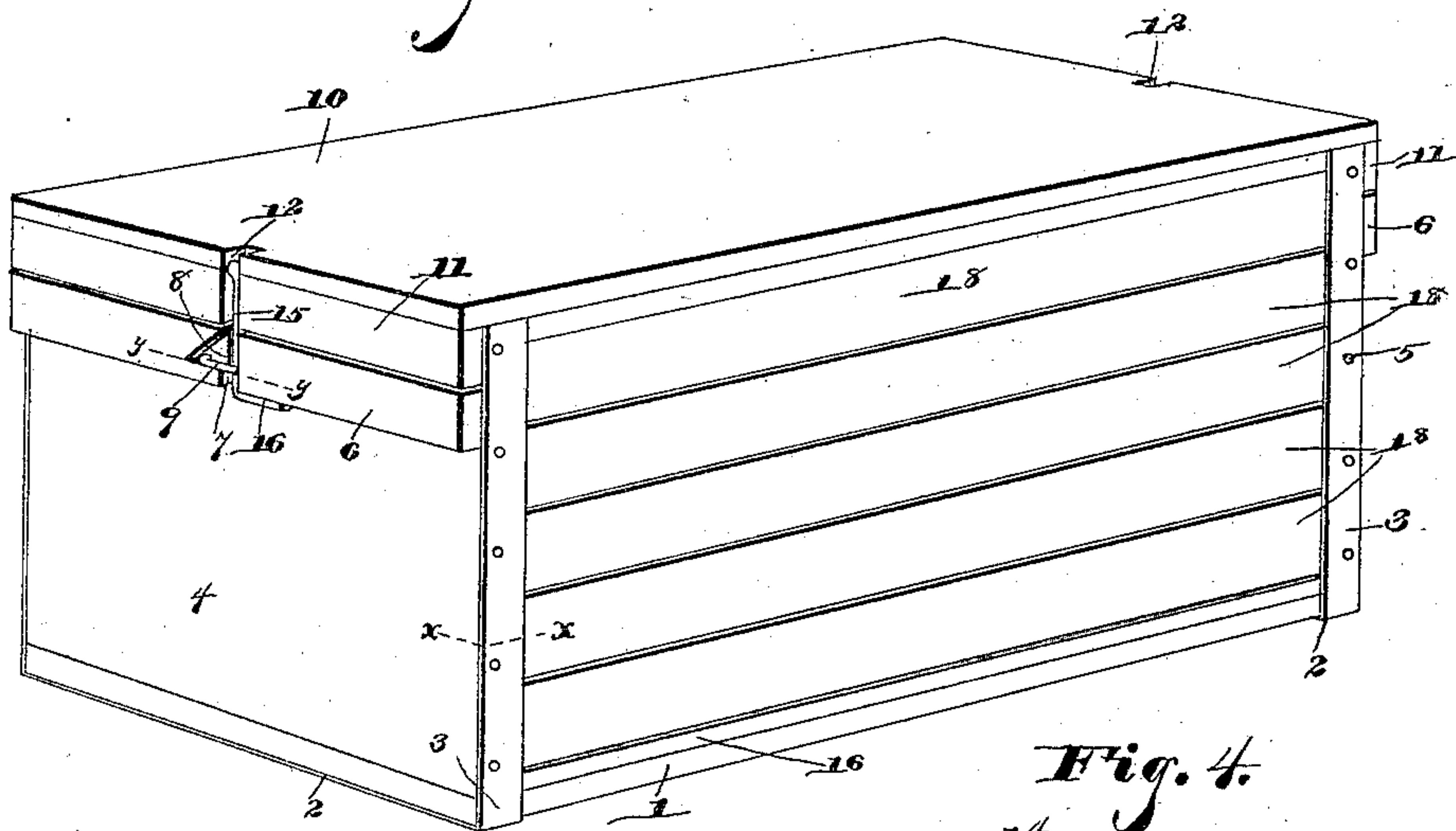


Fig. 2.

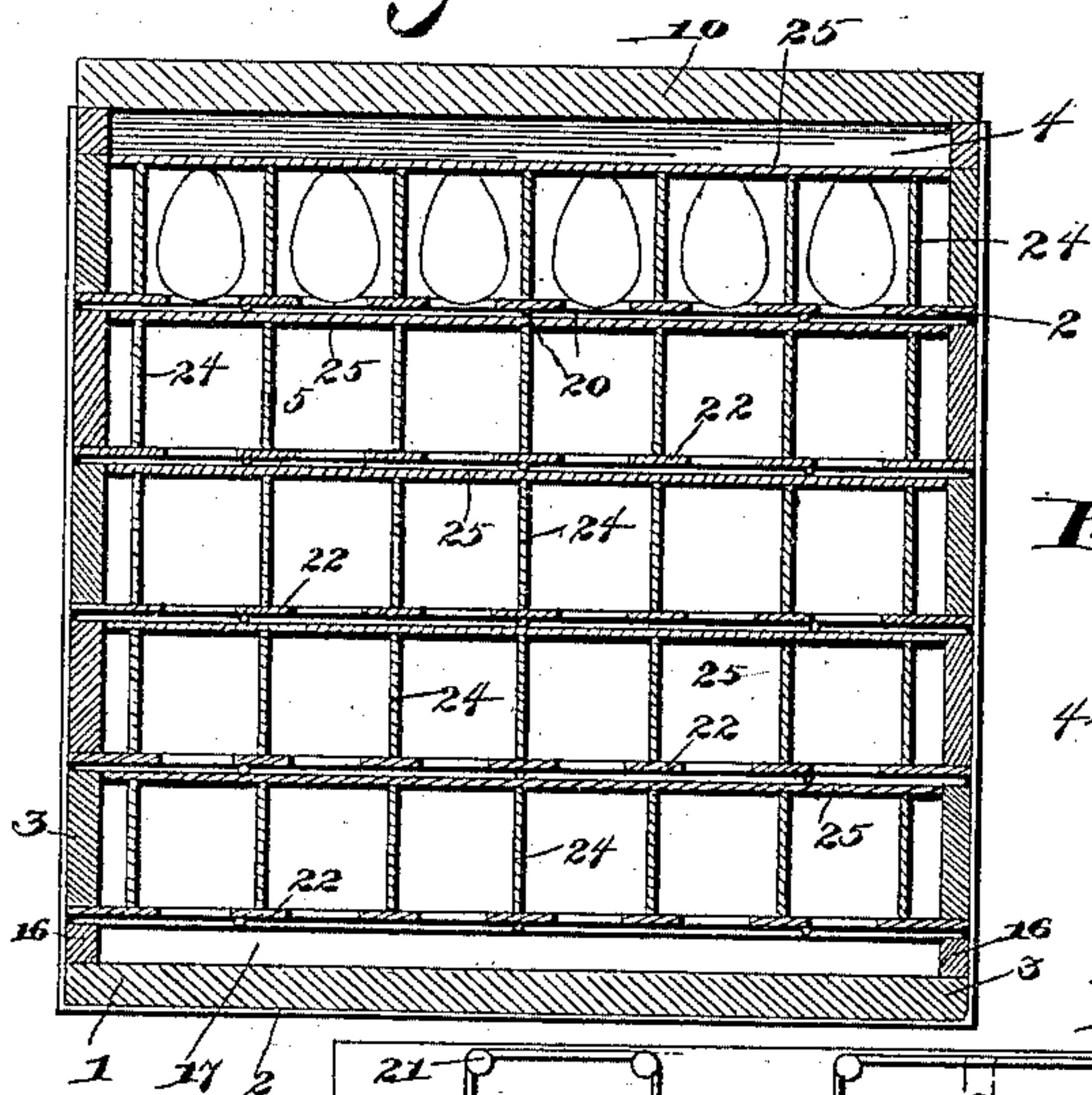


Fig. 3.

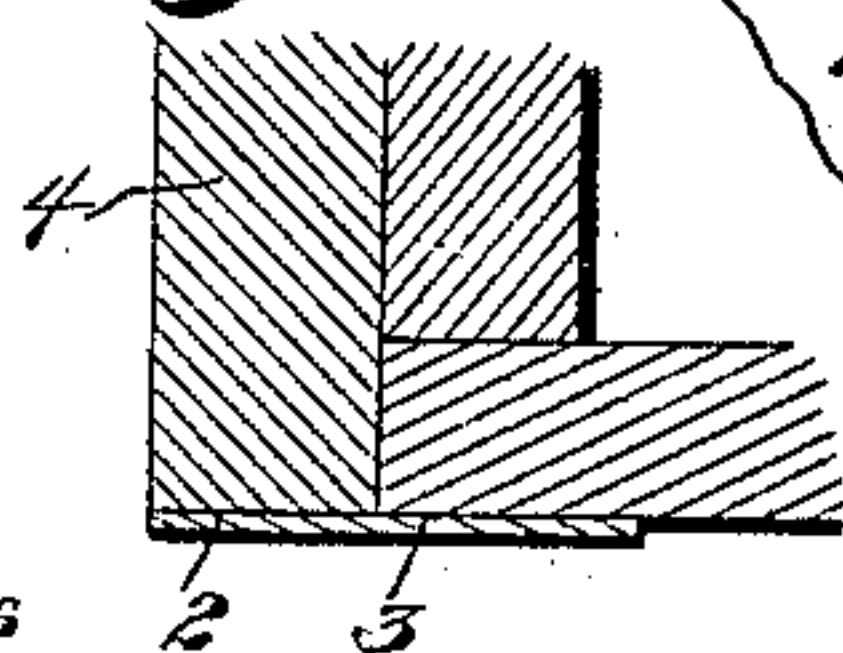


Fig. 4.

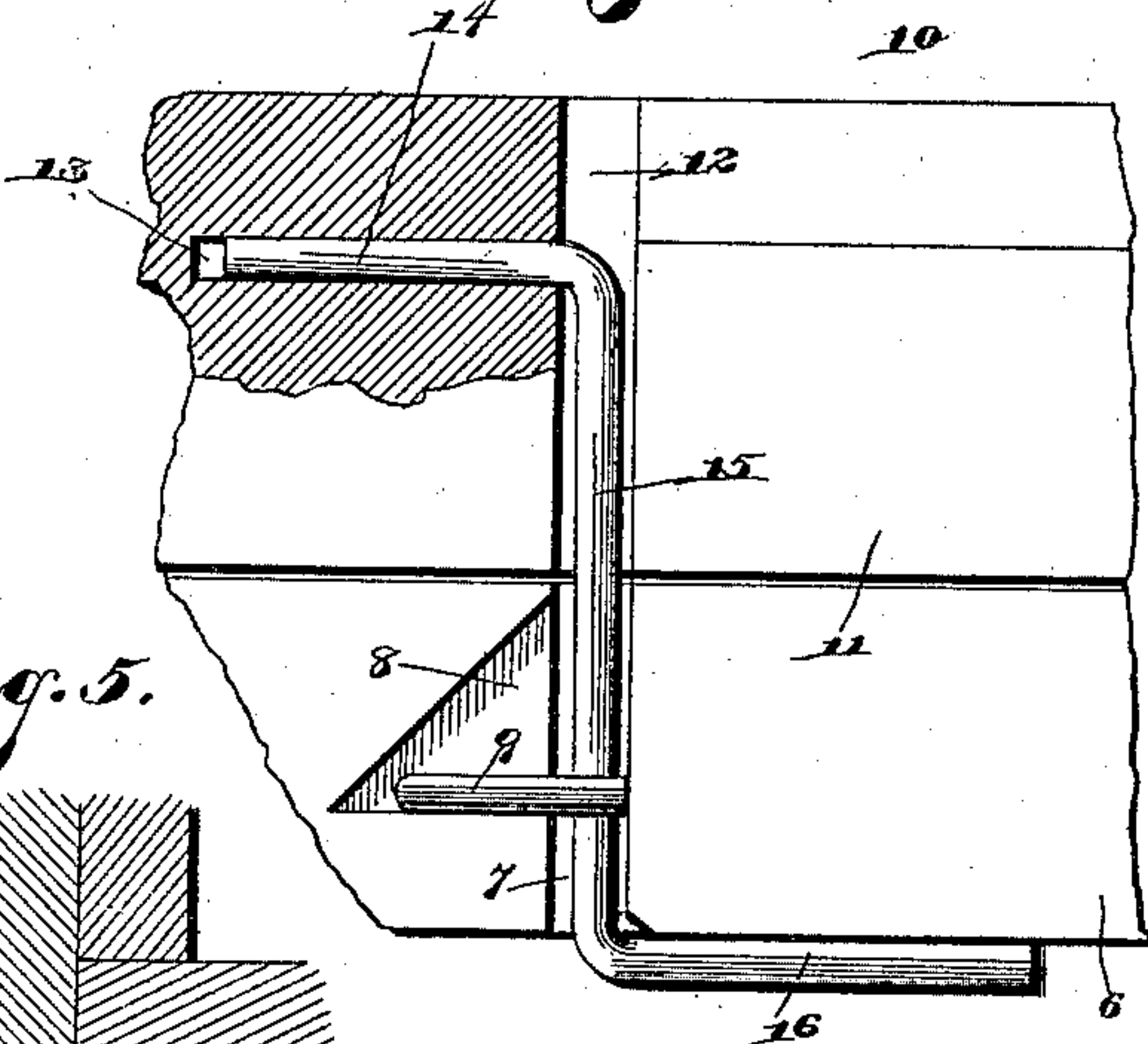
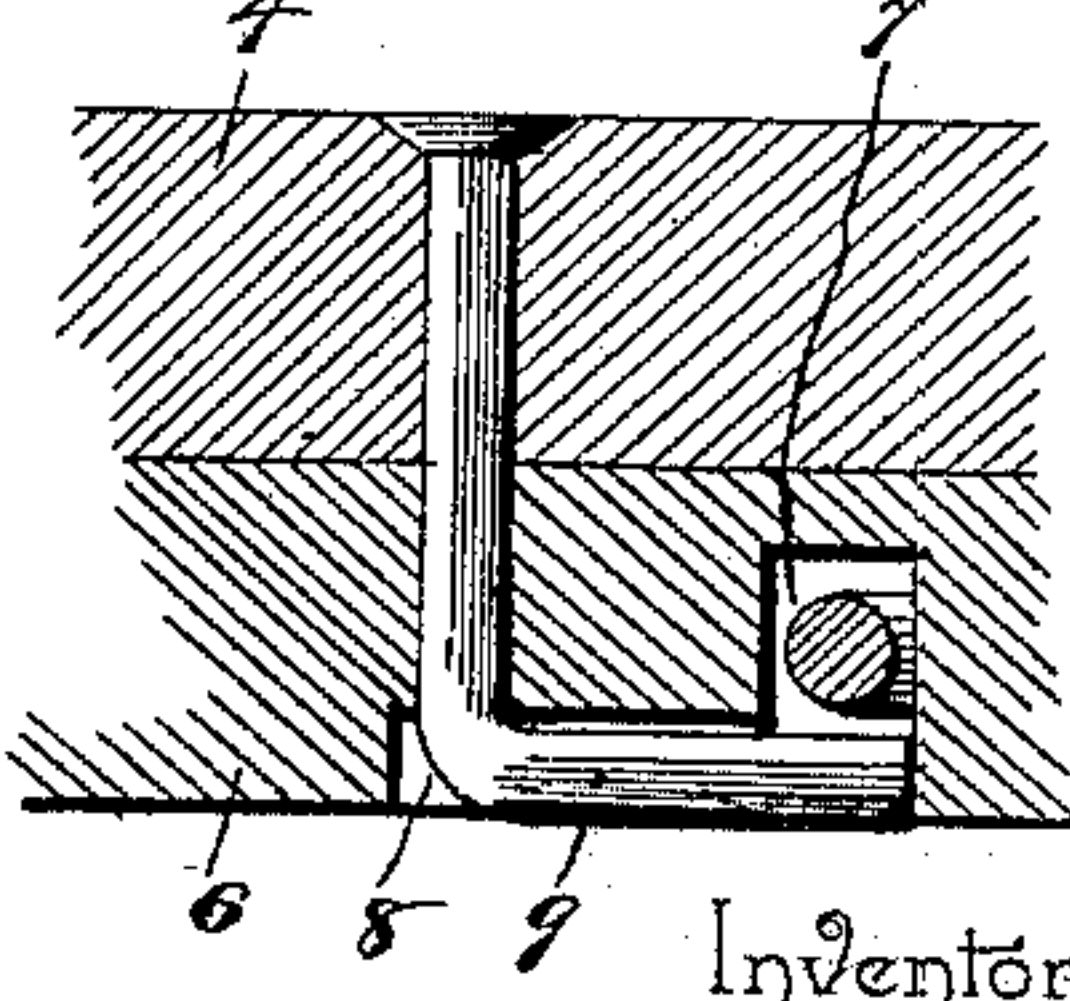


Fig. 5.



Inventor
John L. Ritter.

Witnesses

Samuel Kev.
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By *his* Attorneys,

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UNITED STATES PATENT OFFICE.

JOHN L. RITTER, OF SHENANDOAH, VIRGINIA, ASSIGNOR OF ONE-HALF TO
JOHN P. BROWN, OF SAME PLACE.

CRATE.

SPECIFICATION forming part of Letters Patent No. 433,369, dated July 29, 1890.

Application filed May 31, 1890. Serial No. 353,791. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. RITTER, a citizen of the United States, residing at Shenandoah, in the county of Page and State of Virginia, have invented a new and useful Crate, of which the following is a specification.

This invention has relation to improvements in crates or carriers employed for storing and transporting eggs and fruit.

The objects of the invention are to provide a carrier suitably constructed as to prevent contact of the eggs with each other, thereby avoiding breakage, to facilitate the packing of the eggs and the subjecting of the same by the trayful to an improved egg-tester, for which Patent No. 405,601, and dated June 18, 1889, was granted me, thereby effecting a saving of time and labor. Furthermore, to provide an improved means for fastening or locking the cover of the plate to the trays and for maintaining said trays in proper relative position.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a crate constructed in accordance with my invention, the same being shown as locked and ready for transportation. Fig. 2 is a vertical transverse section of the same. Fig. 3 is a bottom plan of one of the trays removed. Fig. 4 is a side elevation of the upper end portion of the crate. Fig. 5 is a transverse section on the line $x x$ of Fig. 1. Fig. 6 is a similar view on the line $y y$ of said figure.

Like numerals of reference indicate like parts in all the figures.

In practicing my invention and in the construction of the crate proper, I provide a bottom board 1, and at the opposite ends of the same and extending under and nailed thereto are metal straps 2. The straps 2 are considerably longer than the width of the bottom, and beyond the side edges of said bottom are upwardly bent, as at 3. Between the opposite terminal of each strap are located the end walls 4 of the crate, said strap being nailed securely to the opposite edges of the

end walls, as at 5, and nails also being passed through the bottom portions of the straps, the bottom 1, and into the lower edges of said walls. The straps are of a width somewhat greater than the thickness of the end walls, and therefore the inner edges of the straps project some distance inwardly beyond the inner surfaces of said end walls, for a purpose hereinafter apparent.

Each of the end walls 4 is provided upon its outer surface and a short distance below its upper edge with a cross-cleat 6, said cleat having at its center a vertical and therefore transverse groove 7, and at one side of the same with a triangular recess 8, communicating with the groove.

9 designates an L-shaped locking-pin, the stem of which is passed through the end wall 4 and cleat 6 at each end of the crate, the outer or bent portion of said pin resting in the triangular recess 8, and the opposite or inner portion of the stem being headed upon the inner side of the end wall.

10 designates the lid or cover, which extends slightly beyond the end walls 4, and is provided at its ends and upon its under side with opposite cleats 11, designed to rest upon the upper edges of the cleats 6 and embrace the upper ends of the end walls 4. The ends of the cover 10 and the outer faces of the cleats 11 are vertically recessed, as at 12, which recesses or grooves are in vertical alignment with the grooves 7, formed in the cleats 6. A cylindrical opening 13 is formed in the cleat 11, which opening is at a right angle to the groove 12, and journaled in said opening 13 is the right-angularly disposed portion 14 of a crank-shaped gravity-latch 15, the opposite end of said latch being also bent at a right angle, but in an opposite direction to the portion 14, as shown at 16. The crank, it will be observed, is pivoted in the opening 13 and may be swung into the aligning grooves 12 and 7 of the cleats 11 and 6 and take under the lower edge of the said cleat 6. When in a lowered position, as shown in Fig. 4, the L-shaped pin 9 is turned to a horizontal position, so as to be disposed across said latch and prevent an outward swing of the same, and hence an unfastening of the cover.

When, however, it is desired to unfasten the cover, the pin 9 is given a partial rotation, so as to take within the recess 8, and the crank-shaped latch may be swung outwardly at the ends of the crate and the cover or lid 10 be readily removed.

The oppositelongitudinal edges of the bottom 1 have upon their upper sides supporting-ribs 16, so that the trays hereinafter described are elevated slightly above said bottom and combine with the bottom to form a space 17, which may be packed with excelsior or other soft and suitable material, whereby the eggs in the bottom tray will not come in contact with the hard bottom 1.

18 designates a series of oblong trays of a size adapted to fit within the end walls and between the overlapping edges of the sheet-metal straps 3. Each of the trays 18 is subdivided by a transverse partition 19, forming opposite compartments, and the bottoms or lower edges of the trays are crossed in opposite directions by a series of wires 20, passed back and forth thereunder and around suitable nails 21.

22 designates an oblong sheet or layer of vulcanized fiber or other suitable material, which is interposed between the lower edges of the trays 18 and their wires 20, the nails 21, around which the wires are passed, serving as a means for securing said layers in position. The layers are provided at regular intervals with circular openings 23, and registering with the same are superimposed fillers 24, of the usual construction, one filler being located in each of the subdivisions or compartments of the tray. A series of these trays are piled one upon the other, as shown in Fig. 1, and a piece of straw-board 25 is superimposed over each filler, whereby the eggs contained in one tray are entirely separated from the eggs in the trays above or below.

In the patent for egg-testers granted me, as indicated hereinbefore, the invention therein disclosed is adapted to receive entire trays of eggs at a time and to disclose at a glance any imperfection or unsoundness of any one of said eggs. My invention, therefore, as herein disclosed, is particularly adapted for use in connection with the said patented construction, in that the trays may be readily removed from the crate and inserted in the tester and subjected to the test without any individual handling of the eggs.

I do not wish to be limited to the use of my invention for transporting eggs, as I may use it for carrying fruit of all kinds.

Having described my invention, what I claim is—

1. The combination, with the opposite end walls of a crate provided with opposite transverse cleats below the upper edges of said end walls, of a lid or cover extending beyond the end walls and provided with transverse depending cleats adapted to rest upon the cleats of the end walls, the cleats of the cover and end walls being provided with aligning grooves, a double-crank-shaped gravity-latch pivoted in the grooves of the upper cleats and having their lower bent ends depending below and taking under the lower edges of the lower cleats, and a pivoted L-shaped pin located at one side of said groove of each of the lower cleats and adapted to be thrown across said grooves, substantially as specified.

2. In a crate of the class described, the bottom having the opposite end walls rising vertically therefrom, in combination with opposite metal straps secured to the bottom at its opposite ends and bent upwardly and secured to the opposite edges of the end walls, said straps being of a width greater than the thickness of the end walls, and a series of trays located between the end walls and inwardly-projecting portions of the metal straps, substantially as specified.

3. In a crate of the class described, the combination, with the bottom, the opposite end walls having the transverse cleats near their upper edges, and the opposite metal straps passing under the bottom and bent upward near their ends and fastened to the edges of the end walls, said straps being of a width greater than the thickness of said walls, of a series of removable trays fitting between the end walls and the opposite straps, a cover mounted over the trays and provided with opposite cleats embracing the before-mentioned end walls, and fastening devices connecting the cleats of the cover with the cleats of the end walls, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN L. RITTER.

Witnesses:

J. EDGAR SMITH,
GEO. E. FRICK.