

(No Model.)

2 Sheets—Sheet 1.

E. H. FLORY.  
CRATE.

No. 446,165.

Patented Feb. 10, 1891.

Fig. 1.

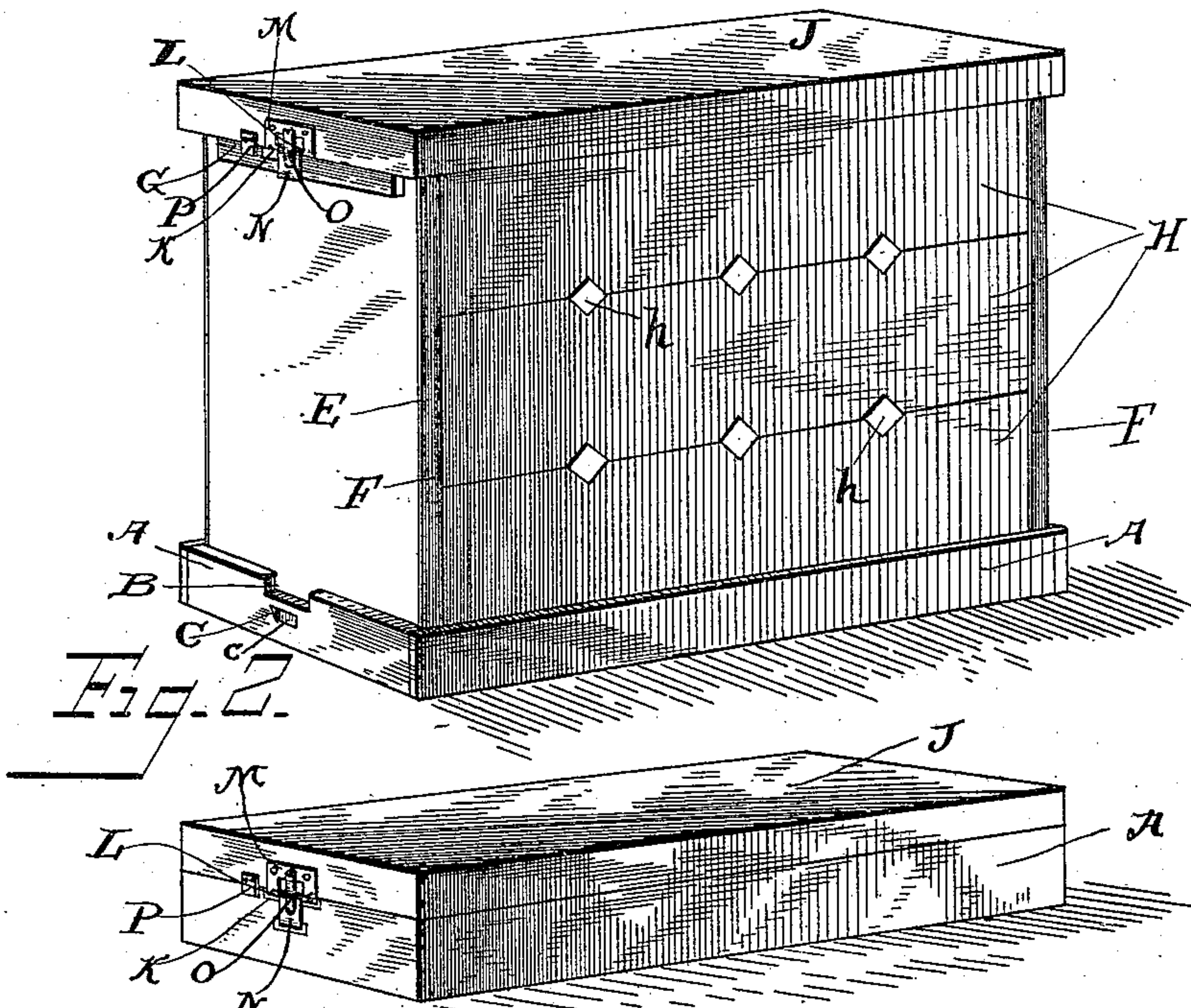


Fig. 2.

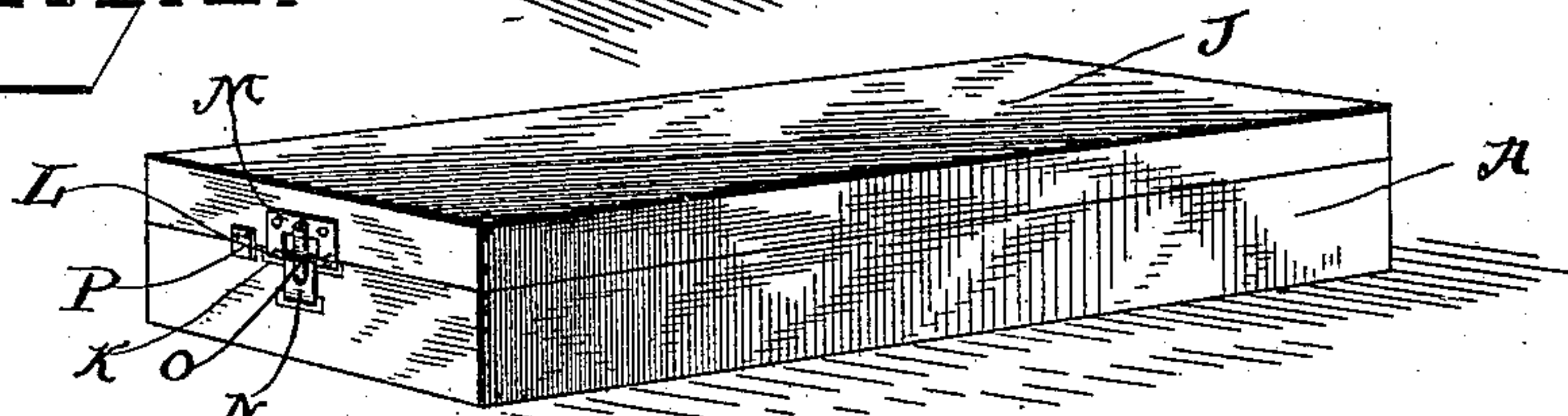
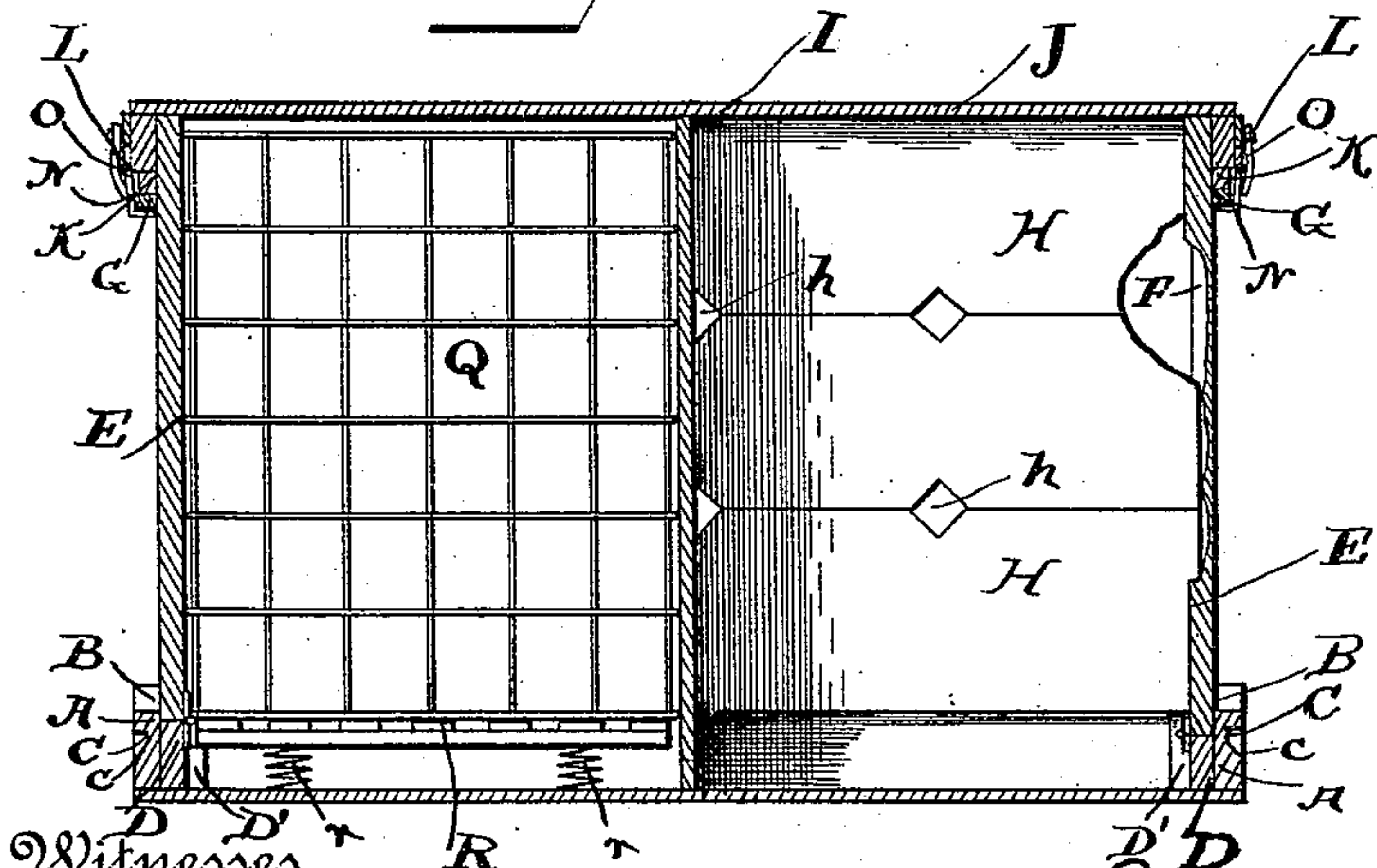


Fig. 3.



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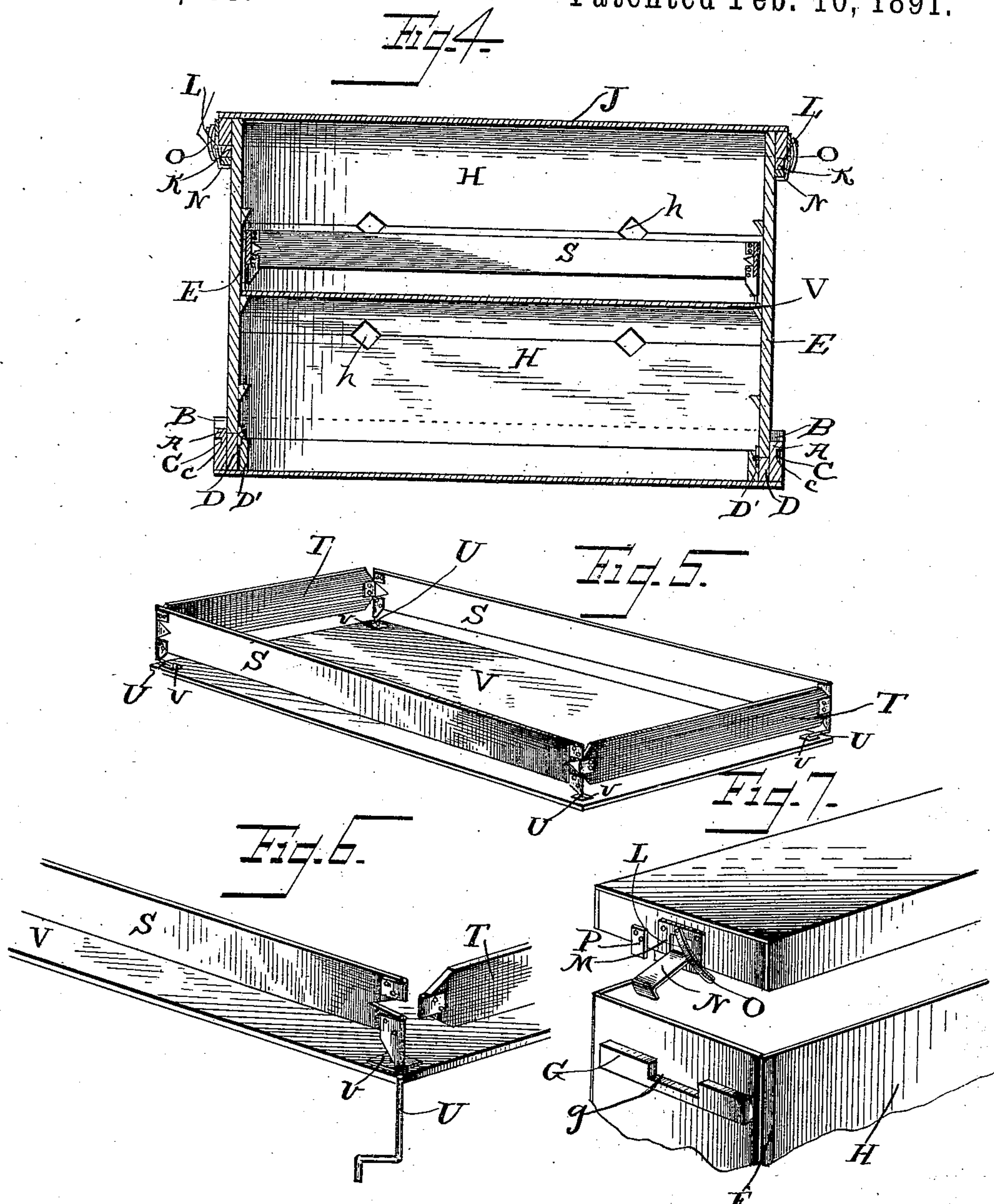
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2 Sheets—Sheet 2.

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Alfred T. Gage

Inventor

Elie H. Flory,  
By J. E. Henderson  
Attorney



# UNITED STATES PATENT OFFICE.

ELIE H. FLORY, OF ABBEVILLE, LOUISIANA, ASSIGNOR OF ONE-HALF TO  
MOSES FISCHER, OF SAME PLACE.

## CRATE.

SPECIFICATION forming part of Letters Patent No. 446,165, dated February 10, 1891.

Application filed August 27, 1890. Serial No. 363,201. (No model.)

*To all whom it may concern:*

Be it known that I, ELIE H. FLORY, a citizen of the United States, residing at Abbeville, in the parish of Vermillion and State of Louisiana, have invented certain new and useful Improvements in Crates for Eggs, Fruit, &c.; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to crates for transporting eggs, fruits, and other articles, and has for its objects to simplify, cheapen, and strengthen the construction of the crate and to increase its efficiency both in the storage of the articles therein and also in folding it compactly for its return to the shipper.

For the accomplishment of such ends the invention consists in the construction and combination of parts hereinafter particularly described and then claimed, reference being had to the accompanying drawings, forming a part hereof, and in which

Figure 1 is a perspective of the crate in position for transporting the articles; Fig. 2, a perspective representing the same folded and packed for return to the shipper; Fig. 3, a vertical longitudinal section through the same, one compartment represented as filled with egg-cells and the other empty with portions broken away to show details of construction. Fig. 4 is another vertical longitudinal section showing trays in position. Fig. 5 is a perspective of one of the trays with its sides in their raised position; Fig. 6, a perspective of a portion of a tray, showing manner of detaching the sides. Fig. 7 is a perspective of a portion of a crate with the top lifted from the body and showing on a larger scale the fastening devices.

In the drawings, letter A designates the base of the crate, formed with the fixed sides, the ends of which are formed with recesses B and cavities C, the latter having a beveled or retreating base *c* to facilitate the engagement of a hook or clasp hereinafter referred to. Within the base against the end walls

may be placed blocks or strips D, terminating below the top edge of the ends and having hinged thereto folding end boards E and blocks or strips D' for the side boards to rest on. The end boards E may be provided with the flanges F, of metal or other material, so as to form recesses at the ends or corners of the crate for the side boards to fit in or behind.

The end boards E are provided near their upper ends on their outside faces with blocks or strips G, which have a recess *g* formed in their upper edges to receive a depending lip from the top or cover, so that the cover will be held steadily against lateral movement and the parts braced against side wrenching.

The sides to the crate are formed in sections of boards H, which are set one upon the other to the desired height, with their ends fitting against the end boards and the flanges F. The sections of boards have recesses *h* cut in their meeting edges, so as to meet or register with each other in order to form ventilating-openings in the sides of the crate.

The crate is divided into more than one compartment by a partition I, which also serves to hold the side boards against falling inwardly.

The top or cover J is formed with depending flanges which fit down over the side and end boards when the crate is packed with articles, as shown in Figs. 1, 3, and 4, and which rest upon the top edges of the base portion, with the end projecting lip fitting in the end recess B when folded for return to the shipper, as illustrated in Fig. 2. The top or cover has at each end a depending lip K to fit into the recesses B and *g*, as hereinbefore mentioned. It also has at each end a fastening-clasp of a peculiar construction. This clasp or hook (designated by the letter L) is composed of a frame M, cut away in its central part, and having a hook N hinged at the lower end of the cut-away portion, and provided with a locking-finger O, hooked to the upper part of the frame, so as to be free to turn down onto the face of the hook when the latter is engaged with its keeper, and thus securely holding the hook to its fastening position. This finger is preferably arched, as shown, so as to give it strength and at the same time impart to it some slight elasticity,



whereby it will hold by somewhat of a spring-pressure. By having a cut-away portion to the frame and hinging the hook therein the sides of the hook are bound against lateral strain by the side walls of the frame.

To still further securely hold the cover to the base when the crate is folded, the two ends of the cover are provided with the hanging metal lips P, which prevent the cover from moving lengthwise, and thus relieve the fastening-hooks of strain and guard against the possibility of the same becoming accidentally unfastened.

To relieve the eggs from the force of jarring, the cells Q are set upon a grating R, supported upon springs r.

To provide a tray that can be quickly set up and knocked down and folded up in a compact form into a small space, I construct the same as follows: The side strips S are provided at each end with metal plates, which are folded so as to form loops, and a portion of the ends of the strips between said metal plates is cut away, preferably, to form a V-shaped recess, as shown, which will receive the pointed end of the end strips T, which are also provided with metal plates t, folded to form a loop. By thus constructing the side and end strips they are made to interlock one with the other, and the metal plates, besides strengthening the ends of the strips, also form eyes to receive the pins U, which, passing through the loops, securely lock the end and side strips together. The lower ends of these pins enter holes made in the bottom V of the tray, and thus connect the side and end pieces to the bottom of the tray. It is preferred to form a right-angled bend at the lower ends of the pins U, as shown, so as to stiffen the same and afford such a bearing for them that they will not break off corners of the bottom, which may be made of very light board. It is also preferred to brace the holes in the bottom of the tray by metal plates v. A tray constructed as described is light, strong, and cheap to manufacture, and can be easily and quickly set up and also folded for transportation.

The box when set up will be about sixteen inches high and will carry thirty-six dozen eggs, and when knocked down for reshipment will occupy about four inches in height, being reduced about one-fourth, and have all the interior parts folded and securely held within it.

The whole structure is light and yet strong, and can be put up and taken down by the most unskilled help, and is cheap to construct.

I have with particularity described the construction of the several parts; but it is obvious that changes therein can be made without departing from the spirit of my invention.

Having described my invention and set forth its merits, what I claim is—

1. The combination, with the body of the box having folding ends, of the cover provided at its ends with a depending lip K, fitting into a recess in the body of the box beneath said lip, and with an independent fastening device comprising a hook hinged to the cover to swing outwardly and having an inwardly-bent end to fit under a portion of the box, substantially as set forth.

2. The combination, with the body of the box having folding ends, of the cover provided at its ends with a depending lip K, fitting into a recess in the body of the box beneath said lip, an independent fastening device comprising a hook hinged to the cover to swing outwardly and having an inwardly-bent end to fit under a portion of the box, a locking-finger bearing against said hook to hold it in a locked position, and the lips P, depending from the ends of the cover and bearing against a portion of the body of the box below the cover to guard against endwise movement of the cover, substantially as described.

3. The combination, with the body of the box having folding ends and the cover, of the fastening device for securing the cover and body together, said device composed of the metal frame having a hook hinged thereto, with a portion thereof fitting in an opening of said frame, and a finger pivoted to said frame and bearing against said hook to lock it in position, substantially as and for the purposes set forth.

4. A carrier-tray composed of the bottom piece, the side and end strips, one of said strips having an opening formed in its end to receive a portion of the meeting end of the other strip, and both strips provided at their ends with metallic plates folded to lie upon opposite sides of the strips and form loops registering with each other, and a connecting-pin passing through said registering loops and having its lower end bent outwardly and then downwardly and bearing in the bottom piece of the tray, whereby the side strips are brought along the edge of the bottom piece, while the bearing-point of the connecting-pin is brought in from the edges the distance of the outwardly-bent portion of the pin, substantially as and for the purposes set forth.

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

ELIE H. FLORY.

Witnesses;

O. C. KIBBE,  
L. SOKELOST.