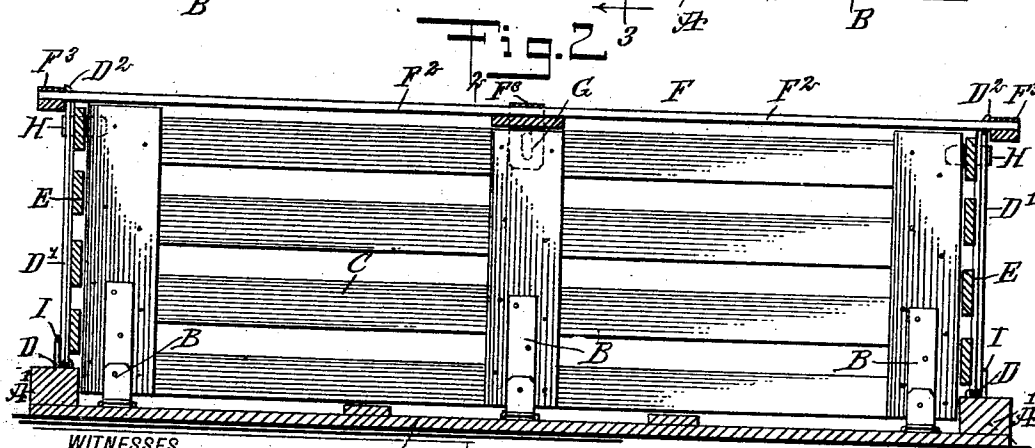
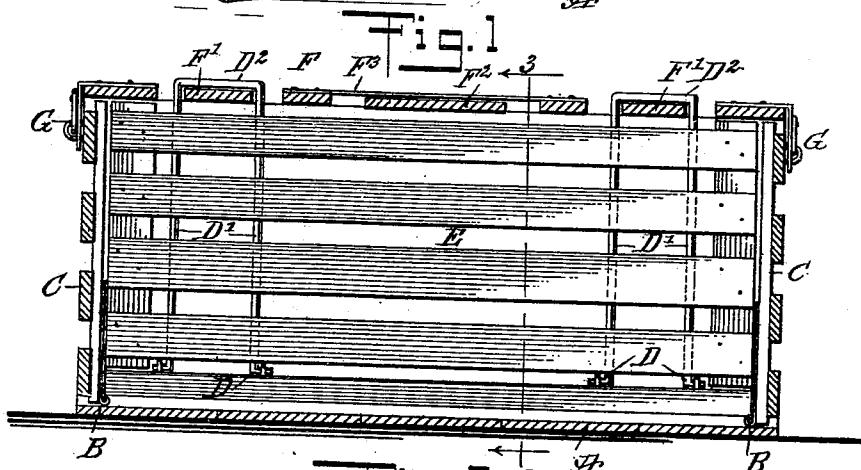
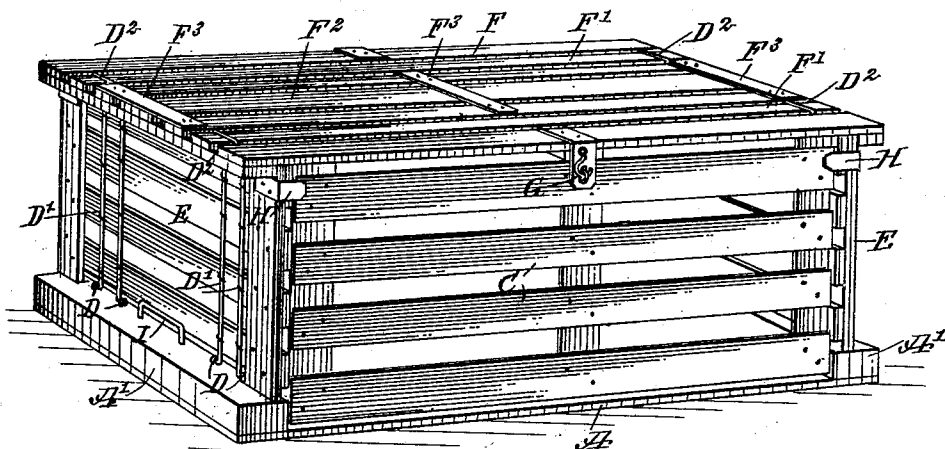


941,202.

F. L. MARY.
FOLDING CRATE.
APPLICATION FILED JAN. 27, 1909.

Patented Nov. 23, 1909.

2 SHEETS—SHEET 1.



WITNESSES

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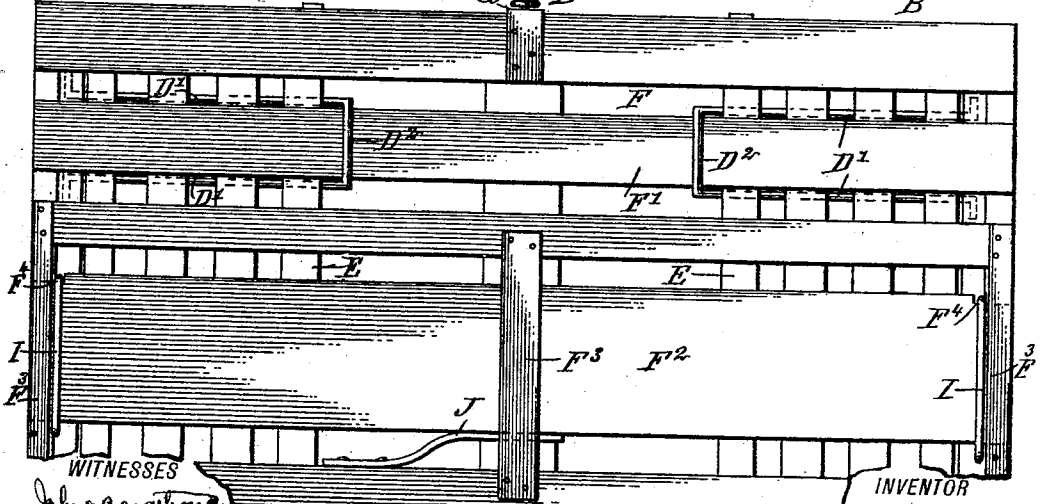
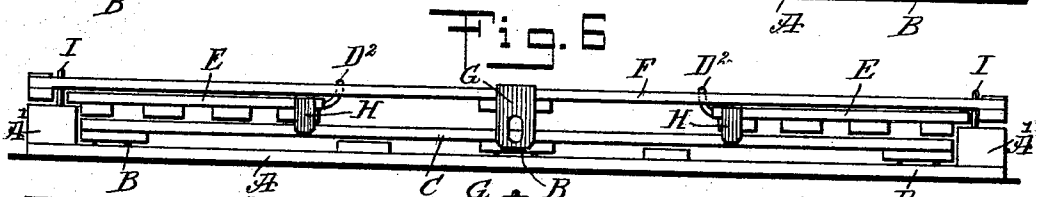
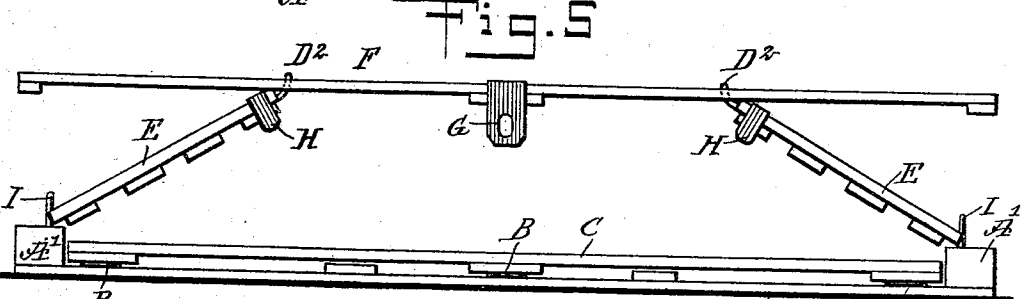
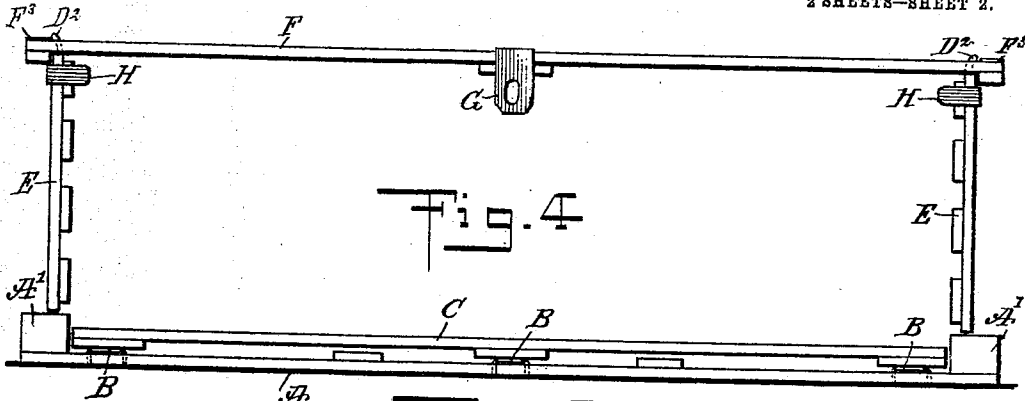
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

FRANK LORENZ MARY, OF CHEHALIS, WASHINGTON.

FOLDING CRATE.

941,202.

Specification of Letters Patent.

Patented Nov. 23, 1909.

Application filed January 27, 1909. Serial No. 474,359.

To all whom it may concern:

Be it known that I, FRANK LORENZ MARY, a citizen of the United States, and a resident of Chehalis, in the county of Lewis and State of Washington, have invented a new and Improved Folding Crate, of which the following is a full, clear, and exact description.

The invention relates to crates, such as shown and described in the Letters Patent of the United States, No. 890,525, granted to me June 9, 1908.

The object of the invention is to provide a new and improved folding crate or like receptacle, having its parts arranged for convenient erection or folding into a flat package and locking the folded parts in place. To attain this object, use is made of a bottom having end sills to which the ends are hinged, the front and rear sides being hinged to the bottom to allow of folding the said sides onto the top of the bottom between the sills, the ends having a sliding connection with a cover to fold the latter flat onto the top of the ends and to lock the cover and sills together.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improved crate; Fig. 2 is a transverse section of the same on the line 2—2 of Fig. 3; Fig. 3 is a longitudinal section of the same on the line 3—3 of Fig. 2; Fig. 4 is a side elevation of the improvement showing the sides unlocked and folded; Fig. 5 is a similar view of the same and showing the sides unlocked and folded and the ends and the cover partly folded; Fig. 6 is a side elevation of the crate folded and locked; and Fig. 7 is a plan view of the same.

The bottom A of the crate is connected by hinges B with the front and rear sides C, and on the ends of the bottom A are attached transversely-extending sills A' connected by hinges D with the ends E of the crate. The sides C and the ends E when in a vertical position support the cover F removably locked to the sides C by suitable fastening devices G, such as staples and

hasps, as indicated in the drawings. The fastening devices G are preferably located at or near the middle of the sides C and the top F, and abutting members H, such as angle irons, are attached to the ends E for the sides C to abut against, to give the desired rigidity to the crate when the parts are in erected position. The hinged members D' of the hinges D terminate in outwardly bent loops D² reaching beyond the upper edges of the ends E, and slidably engaging longitudinal slats F' of the cover F, so that when the ends E are swung inward and downward then the loops D² cause the downward movement of the cover F, and when the ends E are swung upward an upward movement is given to the cover F, as will be readily understood by reference to Figs. 5 and 6.

The cover F is provided with a longitudinally-extending gate F² extending under cleats F³, to permit of removing the gate F² for the insertion and removal of the poultry or the like. The gate F² is adapted to engage staples I on the top of the sills A', and the staples I are arranged to engage notches F⁴ formed in one side edge of the gate F², as plainly indicated in Fig. 7, it being understood that the gate F² is pressed on the opposite side edges by a spring J so as to hold the notches F⁴ in engagement with the staples I.

When the crate is in erected position, as illustrated in Figs. 1, 2 and 3, and it is desired to fold the same, then the operator unlocks the fastening devices G, to permit of swinging the front and rear sides C downward and inward, to fold the said sides on the upper surface of the bottom A. The operator next removes the gate F² and then swings the ends E inward and downward (see Fig. 5), to carry the cover F along, the ends E being finally folded upon the upper surfaces of the folded sides C, the cover F resting on top of the ends E, as plainly indicated in Fig. 6. When the cover F moves into a lowermost position, as shown in Fig. 6, the staples I project into the path of the gate F², which is now replaced by passing the same endwise into engagement with the staples I, and as the spring J presses the gate F² laterally, it is evident that the notches F⁴ engage the sides of the staples I,

thus locking the gate F^2 against accidental movement. Now as the gate F^2 engages the staples I secured to the ends sills A^7 , it is evident that the cover F is locked in place, and as the cover rests on the top of the folded ends E and the latter rest on top of the folded sides C, it is evident that all the parts are securely locked in place. From the foregoing it will be seen that folding of the several parts of the crate and locking the same in the folded position produces a package which can be conveniently carried about, transported or stored in a comparatively small space.

When it is desired to erect or unfold the crate, the operator first disengages the gate F^2 from the staples I and removes it from the cover F, and then the operator swings the ends E upward, to raise the cover F, after which the sides C are swung upward and locked by the fastening devices G to the cover F. The gate F^2 can now be replaced after which the crate is filled, it being understood that the spring J holds the gate F^2 against accidental movement, but additional fastening means may be employed if desired. By bending the loops D^2 outwardly, as shown in the drawings, an easy sliding connection is had with the slats F^7 of the cover. When the crate is erected the loops D^2 extend adjacent to the inner side edges of the end cross bars, thus preventing lateral shifting of the cover F, and the ends E are prevented from accidentally collapsing by the loops D^2 engaging the fixed slats F^7 of the cover F held locked to the erected sides C by fastening devices G.

Although I have shown the crate parts in the form of slats, it is evident that frames covered with wire mesh fabrics or other perforate material may be used instead of the slats, and although the crate is primarily intended for shipping poultry, it may be used for other purposes, that is, the receptacle may be constructed in box form for the use of bakers, laundries, etc. It will be noticed that all the parts of the crate except the gate are non-separable, and consequently the connected parts are not liable to become loose and are always in proper position when folding or erecting the crate.

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

1. A folding crate or like receptacle, comprising a bottom having end sills, sides hinged to the sides of the said bottom to fold inward upon the bottom, ends hinged to the said sills and adapted to fold inward upon the said folded sides, loops on the said ends and projecting beyond the top edges thereof, and a cover slidably engaged by the said loops to move the cover toward or

from the said bottom on swinging the ends downward or upward.

2. A folding crate or like receptacle, comprising a bottom having end sills, sides hinged to the sides of the said bottom to fold inward upon the bottom, ends hinged to the said sills and adapted to fold inward upon the said folded sides, the hinge members on the said ends terminating in loops projecting beyond the top edges of the said ends, the loops being bent outward, and a cover slidably engaged by the said loops, to move the cover toward or from the said bottom on swinging the ends downward or upward.

3. A folding crate or like receptacle, comprising a bottom having end sills, sides hinged to the sides of the said bottom to fold inward upon the bottom, ends hinged to the said sills and adapted to fold inward upon the said folded sides, the hinge members on the said ends terminating in loops projecting beyond the top edges of the said ends, the loops being bent outward, a cover slidably engaged by the said loops, to move the cover toward or from the said bottom on swinging the ends downward or upward, the said cover having a removable gate, and staples on the said sills for receiving the said gate.

4. A folding crate or like receptacle, comprising a bottom having end sills, sides hinged to the sides of the said bottom to fold inward upon the bottom, ends hinged to the said sills and adapted to fold inward upon the said folded sides, the hinge members on the said ends terminating in loops projecting beyond the top edges of the said ends, the loops being bent outward, a cover slidably engaged by the said loops to move the cover toward or from the said bottom on swinging the ends downward or upward, the said cover having a removable gate provided with notches, a spring pressing the gate laterally, and staples on the said sills for receiving the said gate and engaging the notches thereof.

5. A folding crate or like receptacle, comprising a bottom, sides hinged to the sides of the said bottom to fold inward thereupon, said bottom having end sills, ends hinged to the sills to fold inward upon the folded sides, the ends having outwardly bent loops and the cover having longitudinal slats slidable through the loops, whereby to move the cover parallel toward or from the said bottom, when the ends are folded.

6. A folding crate or like receptacle, comprising a bottom, sides hinged to the sides of the said bottom to fold inward thereupon, said bottoms having end sills, ends hinged to the sills to fold inward upon the folded sides, the ends having outwardly bent loops

and the cover having longitudinal slats slidable through the loops, whereby to move the cover parallel toward or from the said bottom, when the ends are folded, a gate for the
5 cover, and means in connection with the crate whereby the gate will lock the crate in open and closed position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK LORENZ MARY.

Witnesses:

ERSKINE R. MERRELL,
JOHN D. ISAACS, Jr.