

(No Model.)

2 Sheets—Sheet 1.

S. W. HURLBURT.
FOLDING CRATE.

No. 456,653.

Patented July 28, 1891.

FIG. 1.

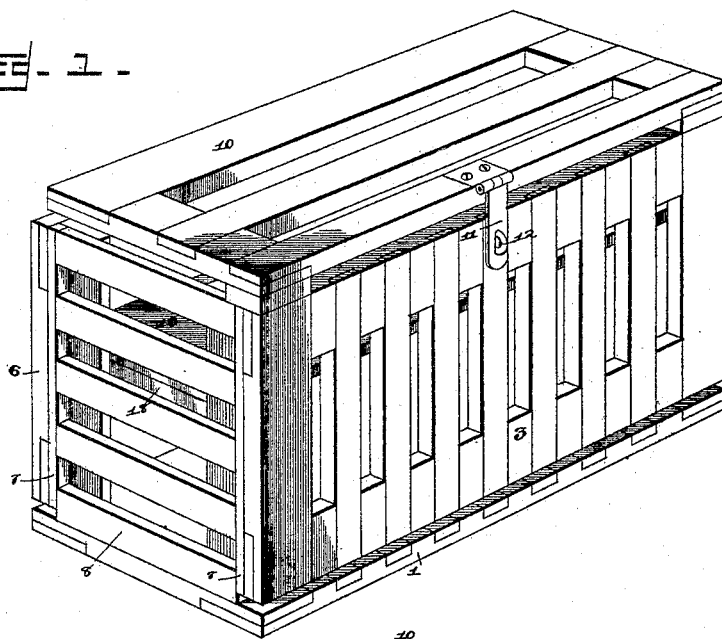


FIG. 4.

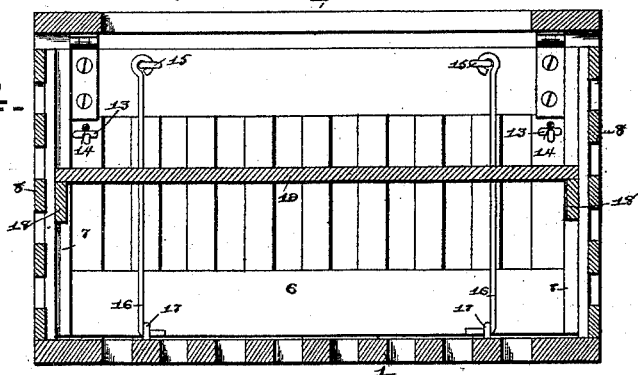
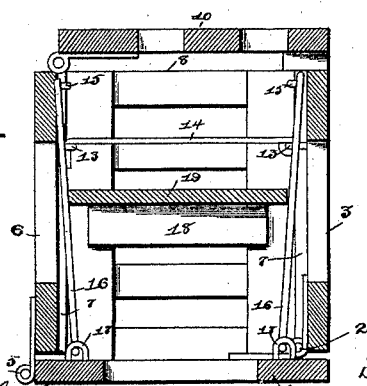


FIG. 5.



Witnesses

C. S. Duval Jr.
W. S. Duval

By his Attorneys,

Inventor

Samuel W. Hurlburt

C. A. Snow & Co.

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2 Sheets—Sheet 2.

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FIG. 2.

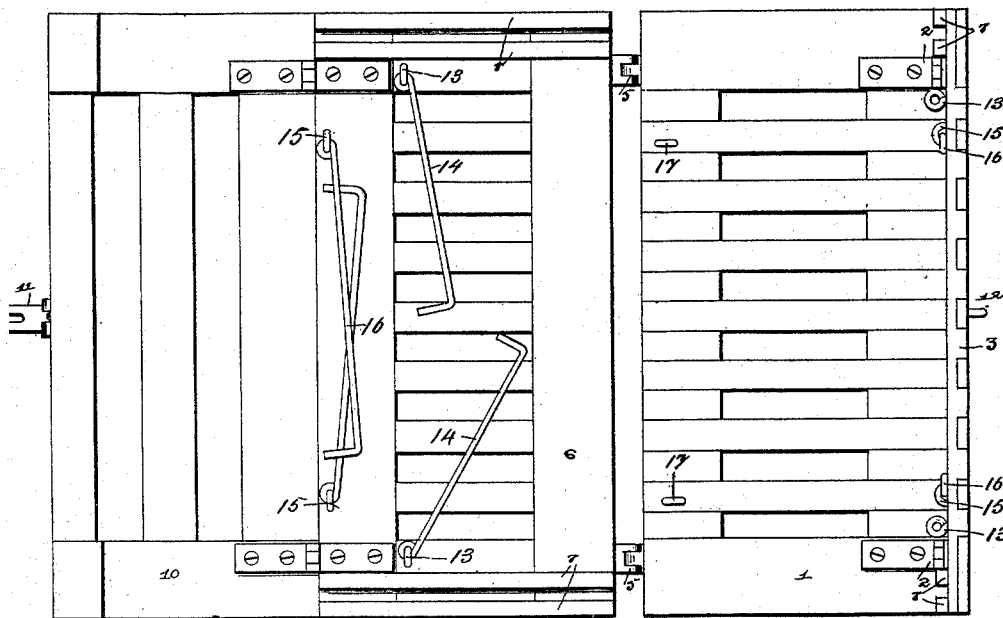
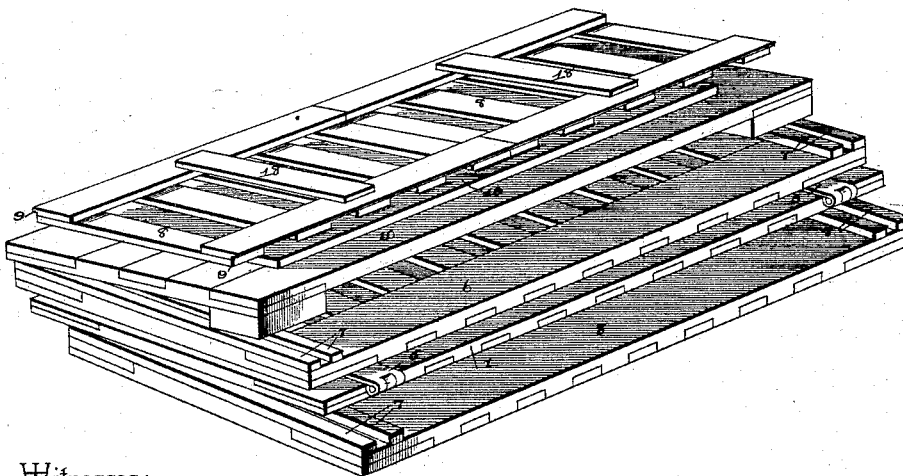


FIG. 3.



Witnesses:

E. S. Duvall Jr. By his Attorneys,
W. S. Duvall.

Inventor
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UNITED STATES PATENT OFFICE.

SAMUEL WESLEY HURLBURT, OF CRESTON, IOWA.

FOLDING CRATE.

SPECIFICATION forming part of Letters Patent No. 456,653, dated July 28, 1891.

Application filed May 6, 1891. Serial No. 391,787. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL WESLEY HURLBURT, a citizen of the United States, residing at Creston, in the county of Union and State of Iowa, have invented a new and useful Knockdown Crate, of which the following is a specification.

This invention relates to improvements in knockdown crates for transporting or shipping fruit, &c.

The objects in view are to provide a cheap and simple crate for the above purpose adapted to be packed flat for shipment and to be reopened and set up for the reception of such small fruits as berries, peaches, and the like.

Other objects and advantages of the invention will appear in the following description, 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. Fig. 2 is a plan of the crate, the same being open and ready to be folded, as when packed. Fig. 3 is a perspective view of the same after being folded. Fig. 4 is a vertical longitudinal section. Fig. 5 is a transverse section.

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

1 designates the oblong bottom section of the crate, and the same is formed open in the usual manner, so as to aid the similarly-constructed side, top, and end sections in maintaining a circulation of air through the crate. Upon the upper side of the bottom, some little distance from the front edge of the same and near the ends thereof, is located a pair of hinges 2, the companion leaves of which are secured to the inner face near the bottom edge and ends of a front or side section 3, also oblong in plan. Inserted between the strips of the bottom section 1, at the rear edge thereof and near its ends, are one leaf each of a pair of hinges 5, the remaining leaves being secured to the outer side near the bottom and ends of an oblong rear, back, or side section 6. The back section is not connected with the leaves of the hinges adjacent to the pin-
tles of the same, but a sufficient distance to permit of the back section swinging up and over until its bottom edge rests flatly upon

the upper surface of the bottom section 1. Secured to the inner faces of the side sections 3 and 6, near the ends thereof, are pairs of cleats 7, vertically disposed and parallel.

8 designates end walls, of which there is a pair, and said end walls are provided with rabbeted edges 9, adapted to be received by and fit loosely between the pairs of cleats 7. It will be obvious that these end walls may be withdrawn from between the side walls and as readily inserted in position when said side walls are in a vertical position.

10 designates the oblong top or cover, which is adapted to fold forward flat upon the rear side wall or upon the upper edge of the front wall or rearwardly into the same plane with the rear wall, in which latter position the adjacent edges of the wall and cover abut. The front edge of the cover is provided with a hasp 11, and the front face of the front wall at its upper edge is provided with a staple 12 for engaging the same.

The front and rear walls near their cleats are provided with eyes 13, those of the front wall being located opposite those of the rear wall, and in the eyes of said rear wall is located a pair of hooks or connecting-rods 14, bent at their free ends to form hooks and designed to removably engage the companion eyes 13 of the front side. The rear wall is also provided near its upper edge with a pair of eyes 15, and a corresponding pair of eyes 15 is inserted in the inner surface of the front wall. In each of the eyes 15 is connected the upper end of a rod 16, the lower ends of the rods terminating in hooks adapted to removably engage eyes or staples 17, inserted in the bottom section 1 near the outer edges thereof, whereby when the hooks 16 and 17, are in engagement the front and rear walls are maintained at a right angle to the bottom section 1.

As shown in Figs. 4 and 5, when the crate is in operative position or set up the end walls are located between the cleats. The cross connecting-rods 14 are transversely disposed and serve to tie or connect the front and side walls, and are aided by the rods 16, engaging with the staples 17. Cleats 18 may be secured to the centers of the end walls and transversely disposed to receive a shelf or partition 19. When thus set up, the crate has the appearance of being ordinarily constructed,

and is used in precisely the same way for the purpose of shipping or storing such small fruits, as berries, peaches, apricots, &c. When it is desired to ship the crate back to the shipper, the hooks 14 and 16 are disconnected and the end walls withdrawn, as is also the partition or shelf 19. The front wall is now folded over upon the bottom, which is permissible by the arrangement of the hinges 2 being located upon the inner sides of the front wall and bottom. The lid or cover is folded upon the rear side section, which is permissible by the hinges being located upon the inner sides of the section and cover, and the outer surfaces of the bottom section and rear wall are brought together, which is permissible by reason of the fact that the hinges are secured to the rear wall upon the outer surface thereof. The four sections comprising the front, rear, top, and bottom walls of the foldable crate are now, as will be seen in Fig. 3, snugly packed. The partition 19 is now laid in position and the end walls mounted upon the latter, so that the entire crate is most snugly folded.

Having described my invention, what I claim is—

1. In a knockdown crate, the combination, with the bottom section, the front side section, the hinges secured to the inner surfaces of the two and near, but some distance from, the front edge of the bottom section, the rear side section, the hinges connected to the bottom section and to the outer surface of the rear section, the lower edge of the latter section being some distance from the pintles of the hinges, the lid or cover, the hinges connecting the inner surfaces of the rear section and the cover, the opposite eyes connected to the inner surfaces of the front and rear section, and the transverse connecting-rods engaging the eyes of one section and bent to form hooks for engaging the eyes of the opposite section, of the end walls 8, removably inserted in the

opposite pairs of vertical cleats 7, substantially as specified.

2. In a knockdown crate, the combination, with the bottom, the front and rear side walls hinged thereto and provided near their ends with vertical cleats, and the cover hinged to the rear wall, of the opposite pairs of eyes, connecting-rods connecting to one pair of eyes permanently and having their free ends bent to form hooks for removably engaging the opposite pair of eyes, the eyes 15, secured to the inner sides of the front and rear walls, the vertical hook-shaped rods 14, connecting the same, the eyes 17, connected to the bottom near its opposite edges and adapted to engage the hook-shaped rods, and the opposite end walls having their edges rabbeted to removably engage the cleats of the front and rear walls, substantially as specified.

3. In a knockdown crate, the combination, with the bottom section, the front side section, the hinges secured to the inner surfaces of the two and near, but some distance from, the front edge of the bottom section, the rear side section, the hinges connected to the bottom section and to the outer surface of the rear section, the lower edge of the latter section being some distance from the pintles of the hinges, the lid or cover, the hinges connecting the inner surfaces of the rear section and the cover, and the cleats 7, secured to the side sections, of the end walls 8, removably inserted in the opposite pairs of vertical cleats 7 and provided with cleats 18, and the partition 19, supported on the cleats 18, substantially as specified.

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

SAMUEL WESLEY HURLBURT.

Witnesses:

WALTER RATCLIFFE,
R. A. LEE.