

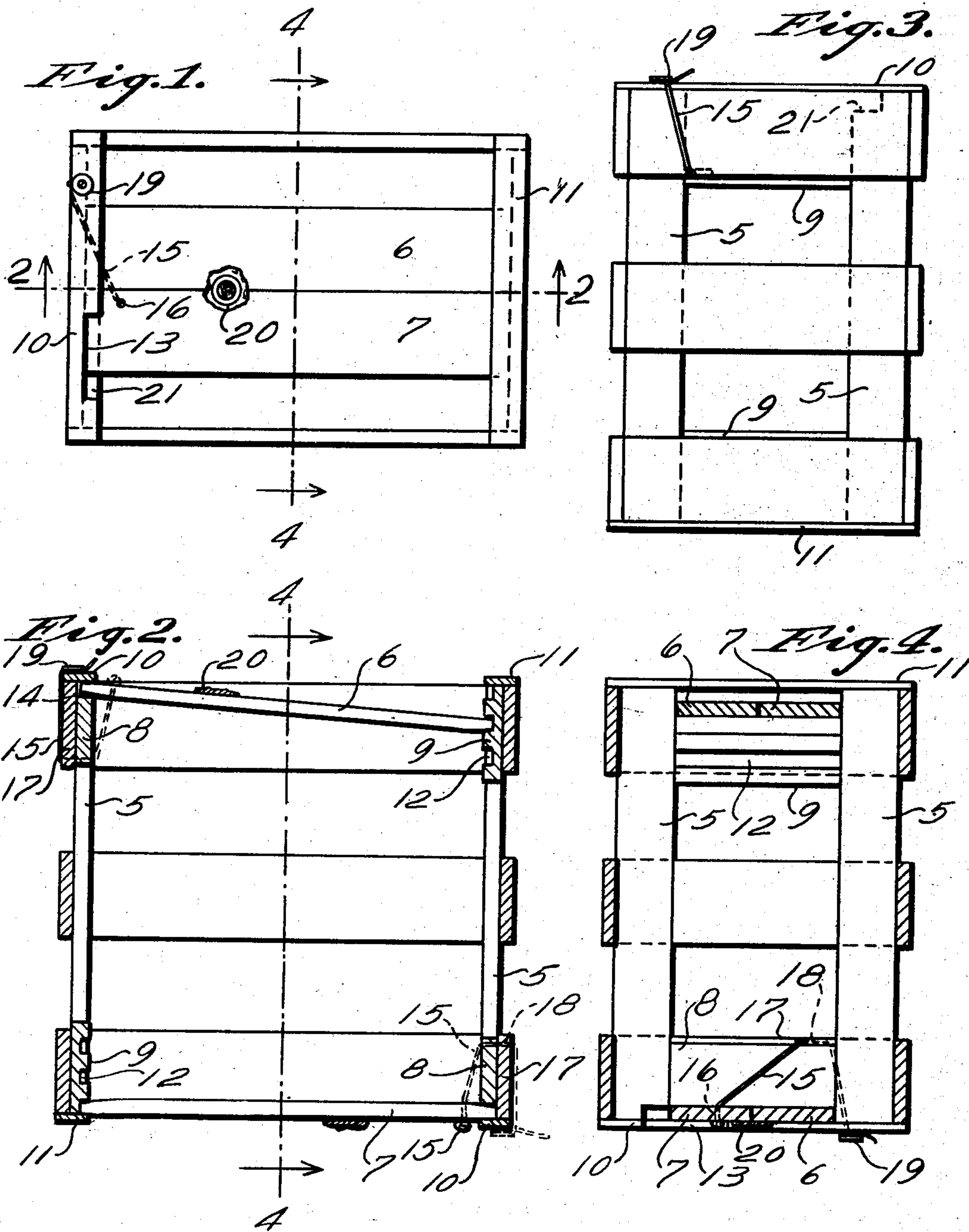
No. 746,075.

PATENTED DEC. 8, 1903.

G. E. HALLARON.
SHIPPING CRATE.

APPLICATION FILED SEPT. 8, 1903.

NO MODEL.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE E. HALLARON, OF CHICAGO, ILLINOIS.

SHIPPING-CRATE.

SPECIFICATION forming part of Letters Patent No. 746,075, dated December 8, 1903.

Application filed September 8, 1903. Serial No. 172,338. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. HALLARON, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Shipping-Crates, of which the following is a specification.

The main objects of my invention are to provide an inexpensive and improved form of crate for the protection of sheet-metal cans or caddies during the shipment of same, to provide in such crates top and bottom parts which may be readily adjusted to suit cans of varying heights, and to provide simple means for securing and sealing said top and bottom parts in any of their various vertical positions. I accomplish these objects by the device shown in the accompanying drawings, in which—

Figure 1 is a top plan of a shipping-crate constructed according to my invention. Fig. 2 is a vertical longitudinal section of the same on the line 2 2 of Fig. 1. Fig. 3 is an end elevation. Fig. 4 is a transverse section on the line 4 4 of Fig. 2.

In the form shown the framework of the crate consists of four upright corner-bars 5, secured together by means of a plurality of horizontal slats, as shown. The top and bottom of the frame are closed by means of removable end pieces 6 and 7. Both at the top and bottom of the crate blocks 8 and 9 are respectively secured to opposite walls of the frame near their ends, and metal strips 10 and 11 are secured across said ends at the top and bottom of the crate. The blocks 8 and 9 fit between the corner-bars 5 and are provided with a plurality of recesses 12, which are disposed in parallel relation to each other and to the adjacent end of the crate. The blocks 8 are considerably narrower than the blocks 9, so as to leave a groove 14 between them and the strip of metal 10. The bars 10 are recessed at 13 to form a contracted opening extending from the groove 14 to the open end of the crate.

To secure the end pieces 6 and 7 in position, one end of the piece 6 is placed in one of the grooves 12, while its other end is passed into the contracted opening 13 and seated into the groove 14. The piece 6 is then pushed

sidewise along the grooves 14 and 12 until it abuts against the side bars 5 at the inner end of said grooves. The end piece 7 is similarly inserted and moved inward against the piece 6 and under part of the bar 10. The bar 7 is then secured in position by means of a cord or wire 15, which is knotted and passed through a hole 16 in the end piece 7, then under the slat 17 and around a pin or clamp 19 at the top of the slat 17. The slat 17 is preferably grooved at 18 on its under side to receive the cord or wire 15. A seal 20 is then secured across the joint between the end pieces 6 and 7, so that same cannot be removed without breaking the seal 20. The construction is alike at both ends of the crate. In the crate shown one of the uprights 5 is recessed at 21 at each end of the crate in order to permit the end pieces 6 and 7 to be passed into and out of the opening 13. In the form shown the clamp 19 consists of a disk fastened down by a screw or nail, and the cord 15 is fastened by pressing it under the disk and winding it around the screw, so as to jam it. The end pieces 6 and 7 are beveled to about one-half their thickness at both ends of one face of same, as shown, thus providing for an adjustment equal to one-half the thickness of such end pieces by merely inverting the end pieces.

To open the crate, the cord is detached from one of the clamps 19 and the corresponding seal is broken, when the end pieces 6 and 7 may be removed. The crate may now be inverted, so as to bring the open end down, and may then be lifted off from the can.

The operation of the device shown will be understood from the foregoing description.

It will be seen that the construction shown permits of a considerable range of adjustment for varying heights of cans, since both top and bottom pieces may be adjusted vertically.

It will be seen that some of the details of the construction shown may be altered without departing from the spirit of my invention. I therefore do not confine myself to such details except as hereinafter limited in the claims.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A shipping-crate, comprising a frame having one of its side walls near one end

provided with a groove on its inner side extending parallel with said end and having a contracted opening extending from said groove toward said end, and having in the inner side of the wall opposite said first wall a plurality of recesses disposed in parallel relation to each other and to the end of said wall; an end piece adapted to have one end thereof seated in any of the recesses in said opposite wall while its other end is seated in the groove in said first wall, said other end being adapted to enter said contracted opening and be moved laterally into the groove in said first wall; and means for securing said end piece in engagement with said groove and recess, substantially as described.

2. A shipping-crate, comprising a frame having one of its side walls near one end provided with a groove on its inner side extending parallel with said end and having a contracted opening extending from said groove toward said end, and having in the inner side of the wall opposite said first wall a plurality of recesses disposed in parallel relation to each other and to the end of said wall; a plurality of end pieces each adapted to have one end thereof seated in any of the recesses while its other end is seated in said groove, said other end of each of said pieces being adapted to enter said contracted opening and be moved laterally into the groove; and means for securing within said groove the end piece nearest said contracted opening and thereby securing all of said end pieces, substantially as described.

3. A shipping-crate, comprising a frame having one of its walls near one end provided with a groove on its inner side extending parallel with said end and having a contracted opening extending from said groove toward said end, and having in the inner side of the wall opposite said first wall a recess extending in parallel relation to the end of said wall; a plurality of end pieces each adapted to have one end thereof seated in said recess while its other end is seated in said groove, said other end of each of said pieces being adapted to enter said contracted opening and be moved laterally into the groove; and means for securing within said groove the end piece nearest said contracted opening and thereby securing all of said end pieces, substantially as described.

4. A shipping-crate, comprising a frame having one of its side walls near one end provided with a groove on its inner side extending parallel with said end and having a contracted opening extending from said groove toward said end, and having in the inner side of the wall opposite said first wall a plurality of recesses disposed in parallel relation to each other to the end of said wall; a plurality of end pieces each adapted to have one end thereof seated in any of said recesses while its other end is seated in said groove, said other end of each of said pieces being adapted to enter said contracted opening and be moved laterally into the groove

in said first wall; and means for securing said end pieces together and thereby securing same against removal from said grooves and recesses, substantially as described.

5. A shipping-crate, comprising a frame having one of its side walls near one end provided with a groove on its inner side extending parallel with said end and having a contracted opening extending from said groove toward said end, and having in the inner side of the wall opposite said first wall a plurality of recesses disposed in parallel relation to each other to the end of said wall; a plurality of end pieces each adapted to have one end thereof seated in any of said recesses while its other end is seated in said groove, said other end of each of said pieces being adapted to enter said contracted opening and be moved laterally into the groove in said first wall; and a seal adapted to connect said end pieces and prevent their removal from said grooves and recesses without the breaking of said seal, substantially as described.

6. A shipping-crate comprising a frame open at opposite ends, one of the side walls near each of said open ends being provided with a groove on its inner side extending parallel with such end and having a contracted opening from said groove toward said open end, and having in the inner side of the wall opposite said first wall a plurality of recesses disposed in parallel relation to each other and to the end of said wall; top and bottom pieces each adapted to have one end thereof seated in any of said recesses while its other end is seated in one of said grooves, said other end being adapted to enter the contracted opening communicating with said groove and to be moved laterally into said groove; and means for securing said top and bottom pieces while same are in engagement with said grooves and recesses, substantially as described.

7. A shipping-crate, comprising a frame having one of its walls near one end provided with a groove on its inner side extending parallel with said end and having a contracted opening extending from said groove toward said end, and having in the inner side of the wall opposite said first wall a recess extending in parallel relation to the end of said wall; an end piece fitting said groove and recess and adapted to have one end passed through said opening and into said groove while its other end is seated in said recess; a cord or wire secured to said end piece; and a clamp secured to said frame and adapted to engage said cord or wire and secure said end piece in said groove, substantially as described.

Signed at Chicago, Illinois, this 2d day of September, 1903.

GEORGE E. HALLARON.

Witnesses:

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WM. R. RUMMLER.