(Model.)

W. M. BAKER.

KNOCKDOWN CRATE.

No. 294,751. Patented Mar. 11, 1884.

Fig. 1.

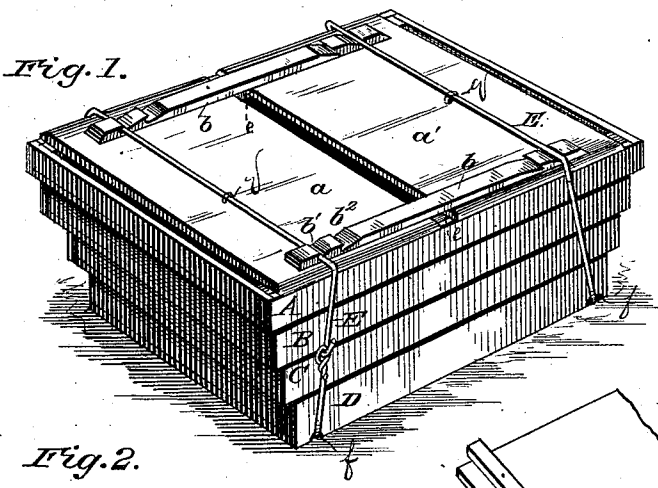


Fig. 6.

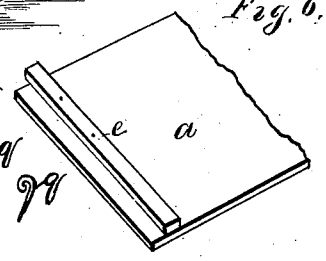


Fig. 2.

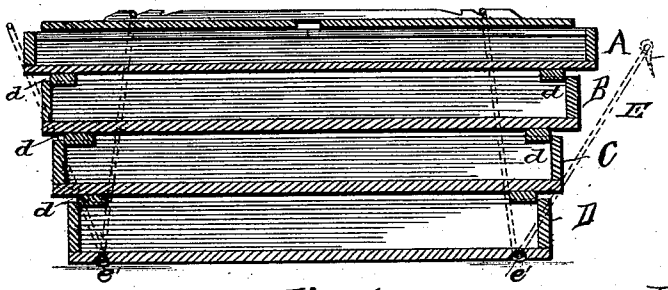


Fig. 4.

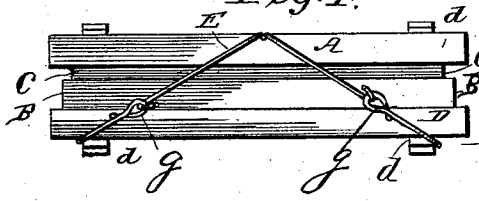


Fig. 5.

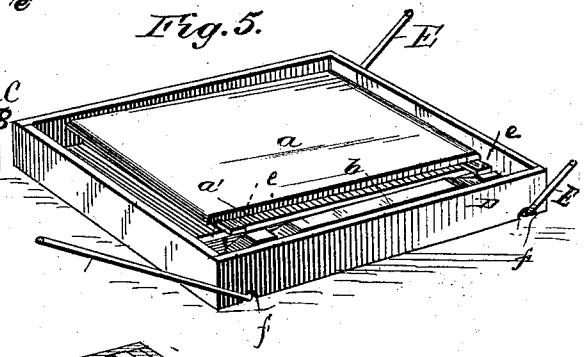
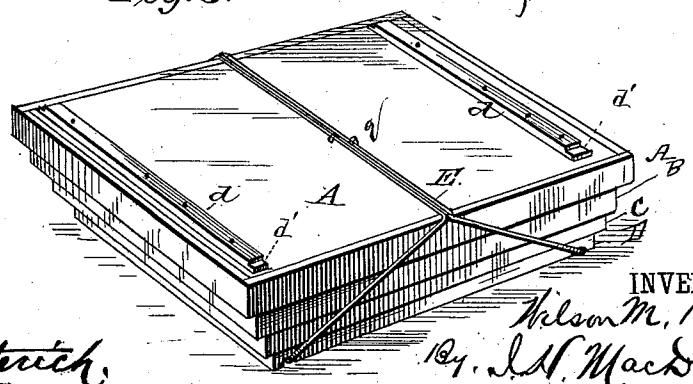


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILSON M. BAKER, OF URBANA, OHIO.

KNOCKDOWN CRATE.

SPECIFICATION forming part of Letters Patent No. 294,751, dated March 11, 1884.

Application filed January 8, 1884. (Model.)

To all whom it may concern:

Be it known that I, WILSON M. BAKER, a citizen of the United States, residing at Urbana, in the county of Champaign and State of Ohio, have invented certain new and useful Improvements in Knockdown Reshipping-Crates, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to knockdown reshipping-crates; and it consists in a series of trays gradually diminishing in length and width, whereby a nest can be made by setting one into another, the trays being set above and apart from each other, the upper tray being covered by a sectional cover of dimensions to fit into one of the trays, the several trays being fastened together by suitable means.

The object of the crate here presented is to provide one easily and quickly set up and knocked down, occupying about one-third the space occupied by it when set up, and having a construction so that two or more crates can be placed upon each other when knocked down, and then capable of being secured by the fastening device on the lower crate.

The box or crate here shown is an improvement over the one granted to me in Letters Patent of the United States No. 272,513, February 20, 1883. Generally the crates consist of four sections or trays, each containing a half-bushel. They may, however, contain any desired quantity.

The details of construction and arrangement of the several parts will be hereinafter more particularly described in the specification, and pointed out in the accompanying drawings, in which—

Figure 1 is a perspective view of the crate set up; Fig. 2, a section of same; Figs. 3 and 4, views of the crate knocked down; Fig. 5, a detail perspective view of the lower tray, holding the cover and the fastening piece, rods, or bands; and Fig. 6, a bottom plan view of the cover.

Referring more particularly to the drawings, it will be seen that each of the trays from the lower one, D, is shorter and narrower, but of greater depth, than the one above it, so that each may hold the same quantity. It is not absolutely necessary that the trays should be of the same capacity; but for the purposes of the trade in fruits, &c., it is preferable that the trays should hold the same quantity. Each tray or section A B C is provided with two end cleats, *d*, on the under side, each cleat having notched shoulders *d'*, which rest on the edge of the tray immediately below, and hold the trays in position. The lower tray, D, which serves as a cap or receptacle for the cover and securing-pieces *b*, has no cleats. When the crate is set up, the top tray, A, is covered by two removable pieces, *a a'*, having strips *e* secured to their under side and parallel with the longest side of the tray A. These strips prevent the cover-pieces from slipping. The crate or box is held in its set-up or knocked-down position by two pivotal fastening rods or bands, E, one at each end of the crate. These bands or rods pass underneath the lower tray, and are placed preferably in grooves *f*, cut in the under side of said tray, and held by staples *e'*. The rods may be made in two parts and hooked to each other, as shown at *g*, Fig. 4. This fastening device E is adapted to swing or turn forward and hold the trays together in either their set-up or knocked-down position.

In order to hold the fastening-rods when the crate is set up, I place detachable notched strips *b* on top of the cover, so that when the rods are turned forward they engage with one of the notches b' b^2. I may use a single central strip of the same construction as *b;* or I may secure the rods by staples or by wire twisted or sealed with a lead or other seal, or, as I prefer, by the pins *q*, which are bent over the rods E, their pointed ends entering holes in the covers *a a'*. The rods are lifted straight up, so as to disengage the pins, and when turned back the pins also swing back with them. When the box is knocked down for reshipment, the top cover, *a a'*, and strips *b* are placed in the lower tray, D. Then each tray, except the lower one, is reversed, so as to bring the cleats *d* on top, as shown in Fig. 3. In this way each tray from A downward is on the outside of the tray next beneath it, and the trays fit snugly within each other.

Instead of having the lower tray, D, shorter than the ones B C next above it, I may have the upper and lower trays of the same size and the intermediate trays narrower and shorter,

as shown in Fig. 4. This form of construction is sometimes advantageous in shipping vegetables and fruit short distances by persons living in the country. There is sufficient space left between the trays to afford ventilation, and the cleats *d*, which not only prevent the cover from slipping, but prevent the cover-pieces *a a'* from coming in contact with each other and the ends of the upper tray, thus affording ventilation for the upper tray.

The trays are preferably made of wood, but may be of any suitable material. When the trays are knocked down, I can place two of them together and hold them together by the fastening bands or rods of the lower crate.

Having thus described my invention, what I claim is—

1. A crate consisting of a series of trays gradually diminishing in size, whereby a nest can be made by setting one into another, the trays set apart and above each other, a sectional cover for the upper tray, and means for holding the trays in position, substantially as and for the purpose set forth.

2. A crate consisting of a series of trays of unequal length and width, each tray having means for supporting it upon and apart from the next lower tray when set up, whereby an air-space is left between the trays, and a holding device, substantially as set forth.

3. In a crate, the combination, with a series of trays of unequal length and width, of two swinging bails secured to the under side of the bottom tray, and means for fastening the bails near the ends when the crate is set up, and near the middle when it is knocked down, substantially as set forth.

4. In a crate, the combination, with the trays, the fastening device, and the covers *a a'*, of the holding-bars *b*, having notches *b'*, as set forth.

5. A crate consisting of trays of unequal length and width, each tray except the top one being covered by the one above it, and means for effecting an air-space between adjacent trays, and the top covers, *a a'*, of dimensions to fit into the lower tray when the crate is knocked down, as set forth.

6. A cover for a crate, consisting of the pieces *a a'*, of dimensions to fit into one of the trays, and provided with cleats, which prevent the cover from slipping and afford space for ventilation, substantially as and for the purpose set forth.

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

WILSON M. BAKER.

Witnesses:
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W. J. NEWTON.