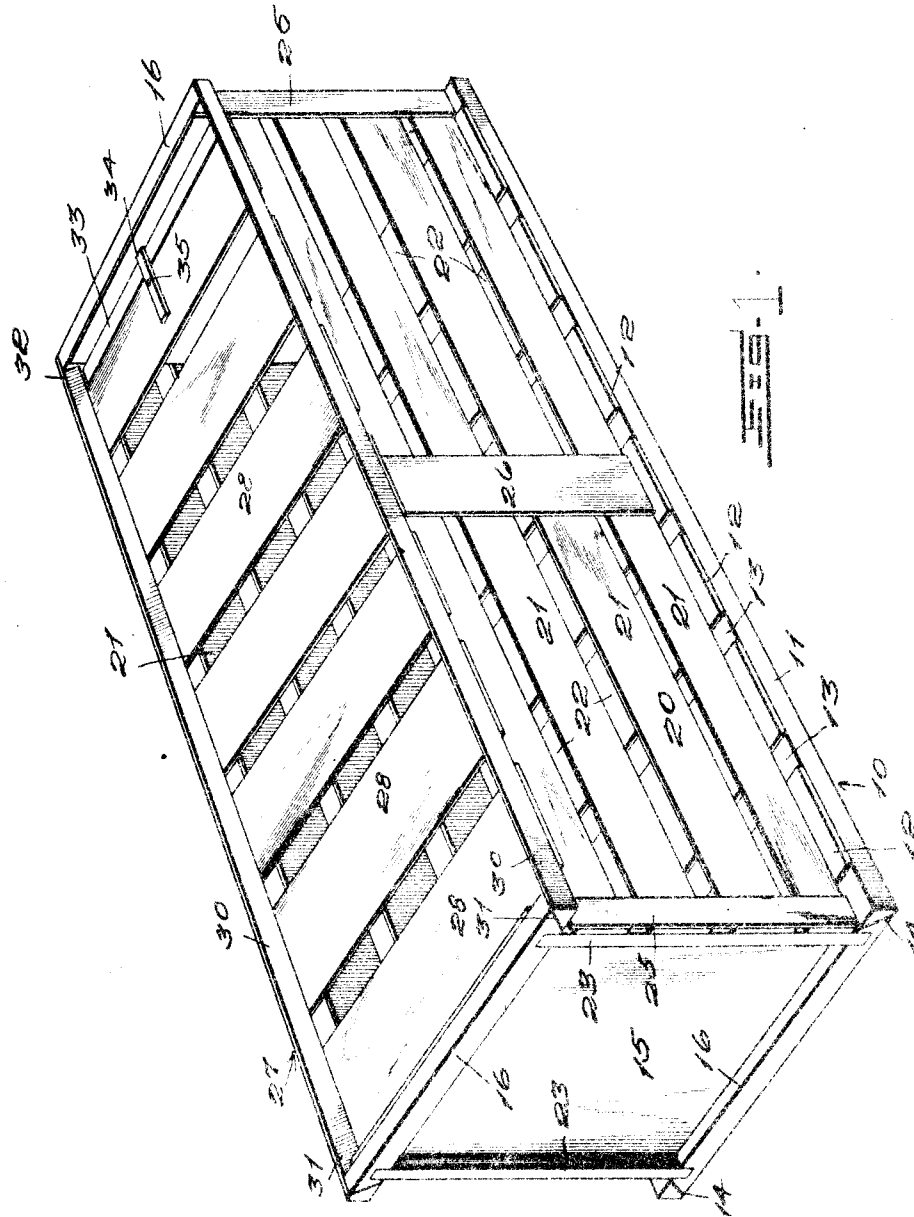


O. A. LANE & D. GUICE.
 BOX OR CRATE.
 APPLICATION FILED APR. 28, 1915.

1,193,567.

Patented Aug. 8, 1916.
 3 SHEETS—SHEET 1.



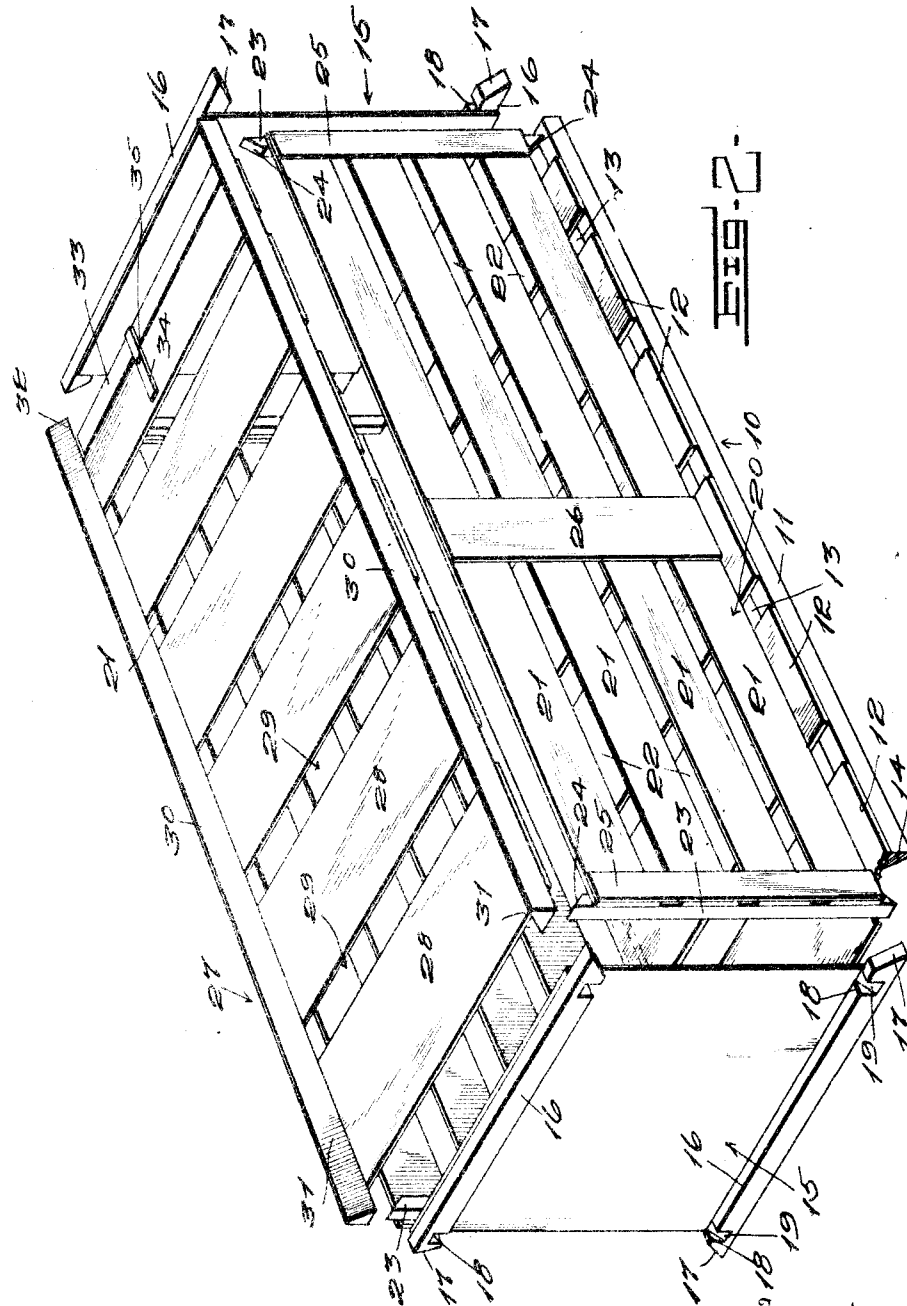
Witnesses
M. Lyles
R. W. Williams

Inventors
Oscar A. Lane
Duke Gulce,
C. L. Parkin Attorney

O. A. LANE & D. GUICE.
BOX OR CRATE.
APPLICATION FILED APR. 28, 1915.

1,193,567.

Patented Aug. 8, 1916.
3 SHEETS—SHEET 2.



Witnesses
J. M. Dyer
R. M. Williams

384

C. L. Parker

Inventors
Oscar H. Lane
Duke Guice

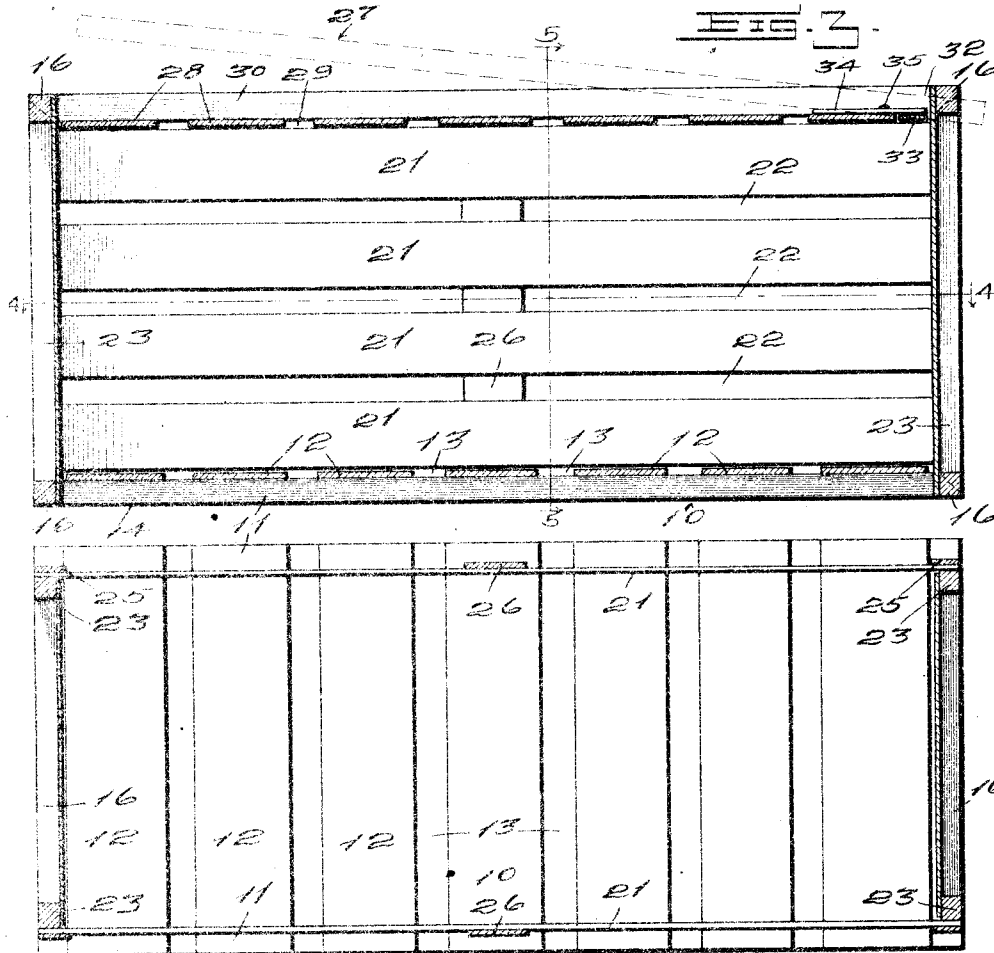
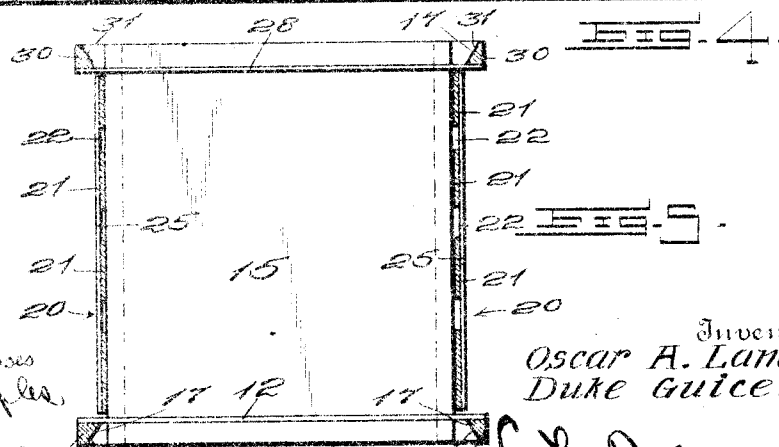
Attorney

O. A. LANE & D. GUICE.
 BOX OR CRATE.
 APPLICATION FILED APR. 28, 1915.

1,193,567.

Patented Aug. 8, 1916.

3 SHEETS—SHEET 3.



Witnesses
J. M. Dyer
W. H. Williams

Inventors
 Oscar A. Lane and
 Duke Guice.

C. L. Parker Attorney

UNITED STATES PATENT OFFICE.

OSCAR A. LANE AND DUKE GUICE, OF GREENVILLE, ALABAMA.

BOX OR CRATE.

1,193,567.

Specification of Letters Patent.

Patented Aug. 8, 1916.

Application filed April 28, 1915. Serial No. 24,489.

To all whom it may concern:

Be it known that we, OSCAR A. LANE and DUKE GUICE, citizens of the United States, residing at Greenville, in the county of Butler and State of Alabama, have invented certain new and useful Improvements in Boxes or Crates, of which the following is a specification.

The present invention relates to improvements in knock-down crates, or boxes.

An important object of the invention is to provide a knock-down crate embodying a plurality of detachable members, which may be conveniently assembled and separated, in a highly expeditious manner.

A further object of the invention is to provide a crate or box of the above mentioned character, which is adapted to afford proper ventilation for the contents thereof.

A further object of the invention is to provide a crate or box of the above mentioned character, the parts of which have detachable interlocking engagement, and are held in the assembled condition, without the aid of separate securing means, such as nails, screws, wire or the like.

A further object of the invention is to provide a crate or box of the above mentioned character, which is strong, durable, inexpensive to manufacture and light.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same, Figure 1 is a perspective view of a crate or box embodying the invention, Fig. 2 is a similar view of the elements constituting the same, shown separated and in a partly assembled position, Fig. 3 is a central vertical longitudinal sectional view through the assembled crate, Fig. 4 is a horizontal sectional view taken on line 4—4 of Fig. 3, and, Fig. 5 is a transverse sectional view taken on line 5—5 of Fig. 3.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numeral 10 designates a bottom-member, as a whole. This bottom-member comprises preferably exteriorly arranged longitudinal locking bars or members 11, which are rigidly connected by transverse strips 12, laterally spaced for providing ventilation openings

13. The longitudinal locking bars 11, as more clearly shown in Fig. 5, are substantially triangular in cross-section and have inner beveled or inclined faces 14, as shown.

The numeral 15 designates end-members, as a whole, which are arranged at the opposite ends of the bottom-member 10, as shown. Each end-member has preferably exteriorly arranged preferably horizontal transverse locking bars or members 16, which are rigidly secured thereto, adjacent the upper and lower ends thereof. Each of the horizontal locking bars 16, as more clearly shown in Fig. 2, projects at both ends laterally beyond the end-member 15, for a substantial distance, and has its ends tapered or beveled, as shown at 17. Arranged inwardly of and adjacent the beveled end 17, are recesses or notches 18, formed in the bar 16, and having inclined bottom walls 19, as shown.

The numeral 20 designates side-members, as a whole. Each side-member comprises longitudinal preferably horizontal strips 21, which are laterally spaced, providing ventilation openings 22. Rigidly secured to the ends of the strips 21 are preferably interiorly arranged preferably vertical locking bars or members 23, having their ends projecting outwardly beyond the side-member for a substantial distance, and inclined or beveled, as shown at 24. Outer strips 25 are preferably secured to the strips 21 at their ends and an intermediate strip 26 is secured thereto at a point equi-distantly spaced from the ends thereof.

The numeral 27 designates a cover-member, as a whole, including transverse strips 28, which are laterally spaced for providing ventilation openings 29. Rigidly attached to the strips 28, are preferably exteriorly arranged longitudinal locking bars or members 30, which are preferably triangular in cross-section, as more clearly shown in Fig. 5, and have inner beveled or inclined faces 31. The longitudinal locking bars or members 30 extend beyond the opposite ends of the cover-member and beyond one end thereof for a greater distance, as shown at 32.

The numeral 33 designates a key or key-strip, adapted to be removably mounted adjacent one end strip 28, for contacting therewith and with the adjacent end-member 15. The key 33 is normally held in place by means of a latch 34, pivotally connected with

the adjacent transverse strip 28, as shown at 35.

In assembling the different elements of the crate, the end-members 15 are placed adjacent the opposite ends of the bottom-member 10, with the beveled ends 17 of the lower locking bars 16 arranged beneath and contacting with the beveled faces 14 of the longitudinal locking bars 11. While the end-members 15 are thus assembled, the side-members 20 are placed upon the bottom-member 10, in a more or less vertical position, and the upper ends of the end-members 15 are swung inwardly slightly. The lower beveled ends 24 of the vertical locking bars 23 now enter the outer openings or notches 18 upon the lower locking bars 16, while the upper beveled ends 24 are arranged outwardly of and in alinement with the openings or notches 18 upon the upper locking bars 16, and enter them upon the end-members being swung outwardly to assume a substantially vertical position. The bottom-member, end-members, and side-members, being thus assembled, the cover-member is placed thereon, with the ends 32 of the exterior bars 31 arranged beneath the beveled ends 17 of the adjacent upper horizontal locking bar 16. The cover-member 27 is now shifted longitudinally to the left, for bringing the opposite ends of the locking bars 30 beneath the beveled ends 17 of the opposite upper locking bar 16. The key-strip of key 33 is put in place, thus preventing longitudinal movement of the cover-member in that direction, and the latch 34 is swung to the active position for holding the key-strip 33 in place.

It is to be understood that the form of our invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described the invention, we claim:

1. In a knock-down crate or box, a bottom-member provided with longitudinal locking bars having their ends reduced and extending beyond the ends of the bottom-member; end-members provided with normally substantially horizontal upper and lower locking bars having reduced ends extending outwardly beyond the end-members with the reduced ends of the lower locking bars being adapted to be arranged beneath and contact with the reduced ends of the longitudinal locking bars of the bottom-member, said upper and lower locking bars being provided upon their outer sides with notches arranged near their ends; side-members having normally vertical locking bars secured thereto near their ends and extend-

ing outwardly beyond the same with the normally vertical locking bars being adapted to be arranged exteriorly of the end-members and their ends entering the notches in the upper and lower bars of the end-members; a cover-member having longitudinal locking bars extending outwardly beyond its ends, the ends of the last named locking bars being reduced and adapted to be arranged beneath and contact with the ends of the upper locking bars of the end-members; and means to prevent the cover-member from moving longitudinally with relation to the body portion of the crate or box.

2. In a knock-down crate or box, a bottom-member provided with longitudinal locking bars having inner beveled faces and extending outwardly beyond the ends of the bottom-member; end-members provided with normally substantially horizontal upper and lower locking bars having their ends beveled and extending outwardly beyond the end-members, the beveled ends of the lower locking bars being adapted to be arranged beneath and contact with the inner beveled faces of the locking bars of the bottom-member, the upper and lower locking bars being provided inwardly of and near their ends with notches; side-members having normally vertical locking bars secured to their ends, the ends of the normally vertical locking bars being beveled and extending outwardly beyond the side-members and adapted to enter the notches in the locking bars of the end-members; and a cover-member having longitudinal locking bars provided with inner beveled faces and extending outwardly beyond the ends of the cover-member and adapted to be arranged beneath and contact with the beveled ends of the upper locking bars of the end-members.

3. In a knock-down crate or box, a bottom-member provided with exteriorly arranged longitudinal locking bars having inner beveled faces and extending outwardly beyond the ends of the bottom-member; end-members provided with exteriorly arranged normally horizontal upper and lower locking bars having their ends beveled and extending outwardly beyond the end-members, the beveled ends of the lower locking bars of the end-members being adapted to be arranged beneath and in contact with the beveled faces of the longitudinal locking bars of the bottom-member, the upper and lower locking bars having notches formed upon their outer sides near and inwardly of the beveled ends thereof; side-members having interiorly arranged normally vertical locking bars secured to their ends, the normally vertical locking bars having their ends beveled and extending outwardly beyond the side-members and adapted to enter the notches upon the upper and lower locking bars of the end-members; a cover-member

ber having exteriorly arranged longitudinal locking bars having inner beveled faces and extending outwardly beyond the ends of the cover-member, the ends of the last named locking members being adapted to be arranged beneath and in contact with the beveled ends of the upper locking bars of the end-members; and means to hold the cover-member against longitudinal movement with

relation to the body portion of the crate or box. 10

In testimony whereof we affix our signatures in presence of two witnesses.

OSCAR A. LANE.
DUKE GUICE.

Witnesses:

J. H. STEINER,
F. M. LANE.