

E. HOPKINS.
Fruit-Crate.

No. 197,470.

Patented Nov. 27, 1877.

Fig. 1.

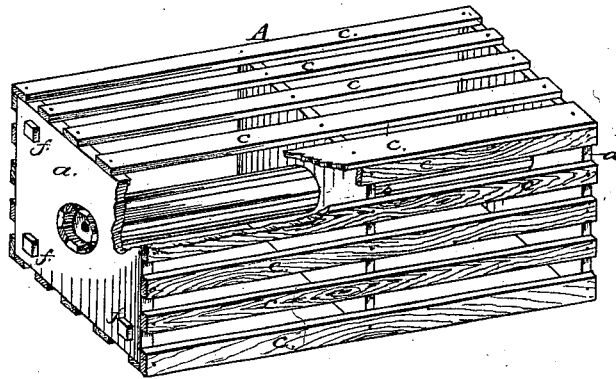


Fig. 2.

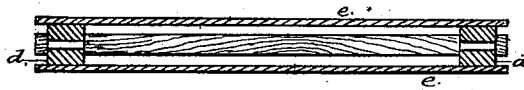
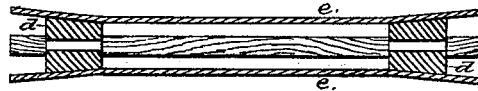


Fig. 3.



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EDWIN HOPKINS, OF MILFORD, DELAWARE.

IMPROVEMENT IN FRUIT-CRATES.

Specification forming part of Letters Patent No. **197,470**, dated November 27, 1877; application filed January 4, 1877.

To all whom it may concern:

Be it known that I, EDWIN HOPKINS, of Milford, in the county of Kent and State of Delaware, have invented certain new and useful improvements in crates, boxes, barrels, and other devices and utensils for the transportation of fruits, vegetables, and other perishable articles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a means for retarding and preventing the heating, sweating, or premature decay of articles of a perishable nature, such as fruit, vegetables, game, and the like, while in transit from the place of shipping to the place in which they are to be marketed or unpacked.

To this end my invention consists in constructing a ventilating attachment for shipping-cases, as hereinafter more fully described, reference being had to the accompanying drawings, in which—

Figure 1 represents a perspective view of a crate for fruit with my ventilator attached; Fig. 2, a longitudinal sectional view of the ventilator detached, and Fig. 3 a similar view of a modified form of my ventilator.

In all the figures similar letters of reference denote corresponding parts.

A designates a packing-case, consisting of the ends or heads *a a*, partition *b*, and slats *c c*. These ends or heads *a a* and the partition *b* are provided with suitable openings, into which is inserted the removable ventilating attachment B, consisting of the perforated end pieces *d d* and the slats *e e*, of any desired number. These perforated end pieces *d d* are, preferably, of polygonal shape, and are so located, near the ends of the slats *e e*, that the circulation of the air through the perforations may not be impeded when the case, in transportation, may have been placed upon end. For this purpose, also, if desired, end rests *f f* may be employed.

The object in having the ventilating attachment removable is to enable it to be readily removed in the event of injury to the case, and to allow others to be substituted in cases where the ventilator itself has become injured. These ventilators may also be supplied by manufacturers to consumers in large numbers, but little skill being required to adapt them to cases of suitable size.

The great utility and convenience of this form of ventilator is at once apparent, when it is considered that with but slight trouble and expense it can be applied to the well-known fruit-crates or other cases already in use.

The ventilator may be held in place by any suitable means, although in ordinary cases the friction of the parts will be found sufficient.

In the modification shown in Fig. 3, the perforated end pieces *d d* are of tapering or wedge shape, and hold the slats *e e* in place within the openings in the ends or heads *a a* by friction, no other means of attachment being found necessary when the end pieces *d d* have been driven in tight.

The ventilator has been here shown and described as attached to a fruit-crate. It is obvious, however, that it is equally applicable to all similar shipping-cases for like purposes.

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

1. The ventilator B, composed of the end pieces *d d* and slats *e e*, substantially as and for the purpose set forth.

2. In combination with a shipping-case, a central ventilating attachment, extending from end to end of said case, and composed of slats having spaces between them to admit the air, substantially as set forth.

3. The combination of the case A, having end rests *f f*, and ventilator B, as and for the purposes set forth.

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

EDWIN HOPKINS.

Witnesses:

CHARLES G. FISHER,
R. J. BESWICK.