





# UNITED STATES PATENT OFFICE.

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## SHIPPING-CRATE.

979,085.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, JOSEPH L. NEWTON, citizen of the United States, and resident of Winthrop, county of Suffolk, Massachusetts, have invented certain new and useful Improvements in Shipping-Crates, of which the following is a specification.

This invention relates to shipping crates and is particularly intended to provide a crate of this class which is especially adapted for the transportation of crabs or similar shell fish.

The crates commonly used for this purpose involved a very large loss by reason of the death of the shell fish during transportation and it is the object of the present invention to reduce this difficulty to a minimum by providing a construction and arrangement which while preventing the crushing of the shell fish shall at the same time make most ample provision for ventilating and cooling the crate while in transit.

In the accompanying drawings I have illustrated the preferred mode of embodying the principles of my invention.

Figure 1 is a vertical longitudinal section of the complete shipping crate. Fig. 2 is a plan view thereof the cover being removed. Fig. 3 is a sectional plan view on the section indicated by broken line Fig. 1. Fig. 4 is an end elevation showing the method of locking the cover.

In the practice of my invention as illustrated in the drawings I provide a box or casing  $a$  which may be of any desired shape but which in this instance is shown to be rectangular and which is provided with a suitable cover  $a'$ . At either end near its top the crate is provided with horizontal strips forming handles  $a^2$  which are secured to vertical cleats  $a^3$  arranged near the corners of the box. The vertical cleats at one end of the box are notched or rabbeted as shown at  $a^4$  to receive the rabbeted edge of the cover  $a'$ . The opposite end of the cover is provided with a hook and eye  $a^5$  so arranged that the hook can fall between the handle  $a^2$  and the adjacent end of the box to engage the screw eye  $a^7$  fastened to the end of the box.

On the inside ends of the box are fastened three vertical cleats  $a^8$  which serve as a means for separating the interior trays from the end walls of the box to form air circulating passages. Similar cleats  $a^9$  are secured longitudinally to the bottom of the

box for a similar purpose. The end walls of the box are also provided at top and bottom with perforations  $a^{10}$  to allow external ventilation. Upon these bottom cleats  $a^9$  loosely rests a bottom tray  $b$  which consists of wire netting forming the open bottom of the tray and having its end edges upturned to form vertical end walls  $b'$  of the tray. Three vertically arranged wooden strips  $b^2$  secured to a middle cross strip  $b^3$  serve to form a framework for the tray to enable it to preserve its shape and also to form a support upon which may rest the superimposed tray and ice chest as hereinafter explained. The intersecting middle strips also divide the bottom tray into compartments which may have communication by means of perforations  $b^4$  to provide for the circulation of air.

The superimposed trays  $c$  are made to occupy rather less than half of the length of the box and comprise the wire netting bottom  $c'$  having upturned edges to form the end walls, the netting being secured to three vertical cleats extending longitudinally of the box to lie upon the longitudinal cleats of the bottom tray and to afford support for the tray above.

For the purpose of cooling the contents of the tray a sheet metal box  $d$  forming an ice chest is arranged transversely of the middle portion of the box between the two tiers of the superimposed trays.

As will be readily understood the trays are easily removable from the box for packing or emptying and as arranged make it possible to nest a large number of shell fish in the wet seaweed or grass deposited in each tray while the cold air coming in contact with the ice chest passes down through the whole series of trays along the bottom and up the sides of the crate. Thus a circulation of moist cool air is maintained for a long period, while the crushing of the shell fish is prevented, all this conducing the long continued preservation of the contents of the crate.

While I have described the trays specifically as made of wire netting, it will be understood that any open work or perforated construction that will permit the circulation of air is fully comprehended in the invention, the essential feature in this particular being the use of opened bottom trays to allow of free circulation of the cool and moist air throughout the crate.

What I claim is:—

A shipping crate for shell fish comprising a box or casing provided with ventilating holes in the top and the bottom of the end  
5 walls, vertical cleats secured to said end walls to form ventilating passages between them, bottom cleats arranged to form passages along the bottom of the casing communicating with said vertical passages, a bottom  
10 tray formed with reticulated vertical walls and a reticulated bottom, intersecting cleats vertically disposed inside said tray to divide it into partitions, a refrigerating chest ar-

ranged above the middle portion of said bottom tray and resting upon the said cleats, 15 end trays superimposed above the bottom tray between the refrigerating chest and the end walls of the casing, a cover and means for detachably locking the said cover to the casing, substantially as described. 20

In witness whereof, I have subscribed the above specification.

JOSEPH L. NEWTON.

In the presence of—

GEO. N. GODDARD,  
MYRON F. HILL.