

No. 701,845.

Patented June 10, 1902.

F. W. COLLINS.  
SHIPPING PACKAGE.

(Application filed Nov. 4, 1901.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

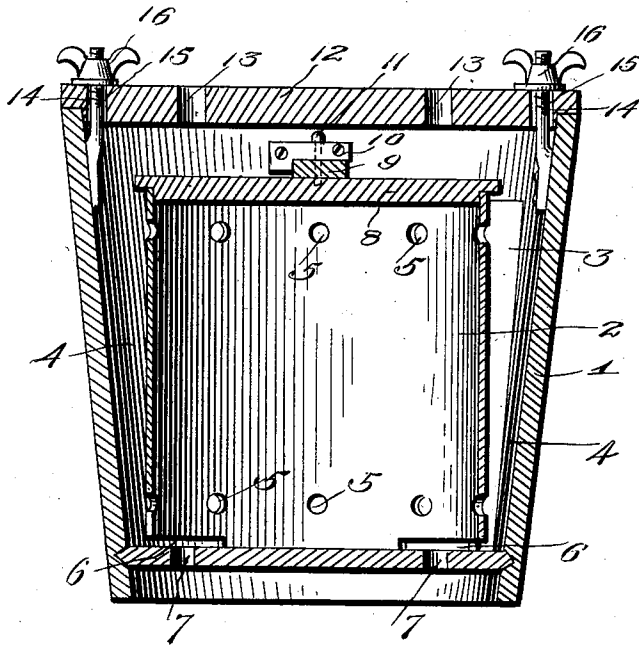


Fig. 2.

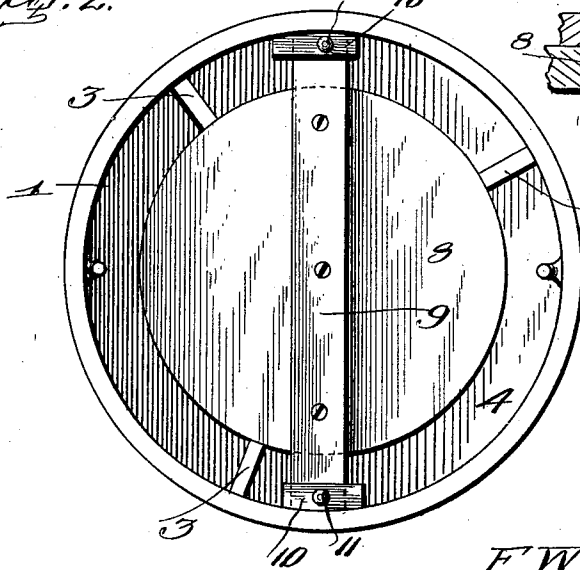
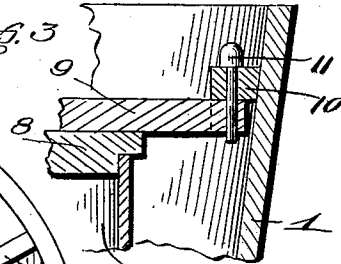


Fig. 3.



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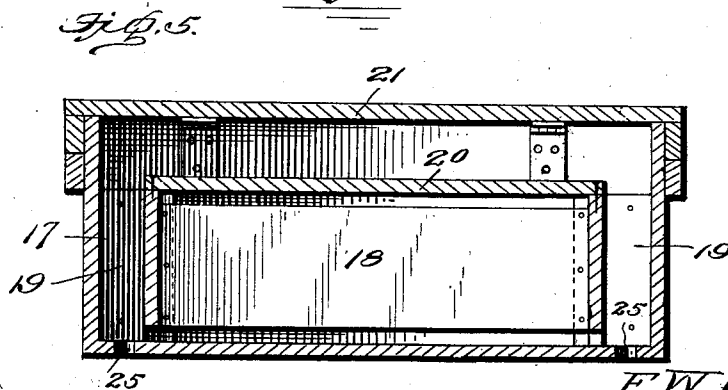
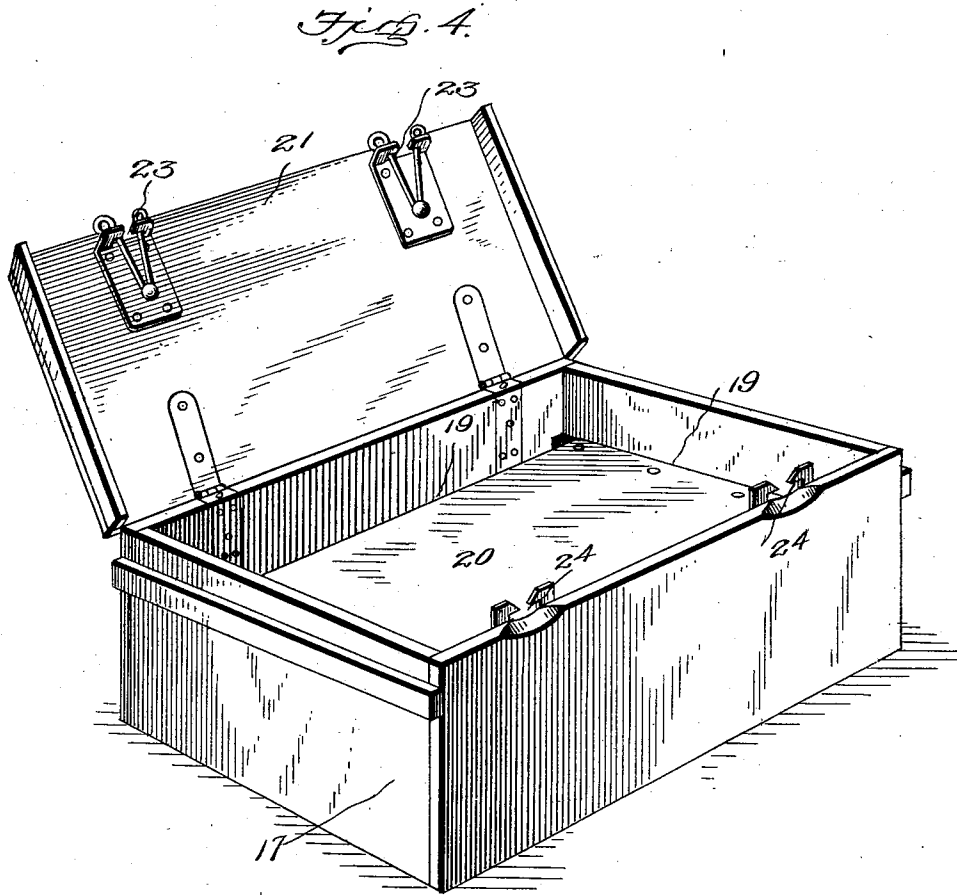
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2 Sheets—Sheet 2.



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# UNITED STATES PATENT OFFICE.

FRANK W. COLLINS, OF ROCKLAND, MAINE.

## SHIPPING-PACKAGE.

SPECIFICATION forming part of Letters Patent No. 701,845, dated June 10, 1902.

Application filed November 4, 1901. Serial No. 81,109. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK W. COLLINS, a citizen of the United States, residing at Rockland, in the county of Knox and State of Maine, have invented certain new and useful Improvements in Shipping-Packages; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to improvements in shipping-packages, and while designed primarily for the shipment of live lobsters and crabs the packages may be used for the shipment of other articles which are required to be kept cool and moist by artificial means during transportation.

In shipping live lobsters from one city to another it has been the common practice to pack them in barrels with a piece of ice in the center and broken ice on top and in some instances with a cone-shaped piece of ice in the center of the barrel, with the lobsters packed around it, and broken ice on top. The difficulties met in both of these methods are many. First, the chief difficulty and which causes the greater per cent. of deaths during transportation is the ice and water therefrom coming in direct contact with the lobsters. It is conceded by the best authority and those best acquainted with the habits of live lobsters that this element alone kills more lobsters during transportation than all others combined. Some persons have tried to overcome this by filtering the ice-water through cloths and other material filled with salt; but when subjected to a practical test it has proved of little or no benefit. All practical lobster dealers know how detrimental this feature has proved in their business, for when live lobsters have been in direct contact with ice and fresh water for any length of time it is impossible to successfully re-care them again in their floating cars in the water, which is the common custom of keeping lobsters alive, without being subjected to a heavy loss. Consequently live lobsters so shipped are nearly all obliged to be sold on arrival and often at a heavy sacrifice, while if they could be successfully re-cared they would become more valuable and often receive the benefit of an advancing market. Second, the weight

of the ice on top of the lobsters is detrimental and hastens their death. Third, when packages put up by either of these methods are placed one on top of another during transportation, which is the common custom of packing them on board steamships and in the cars by the transportation companies, the weight becomes so great that it crushes the ice through the shells of the lobsters, often breaking and killing many. Fourth, when the ice becomes partly melted in packages put up by either of these methods the lobsters are continually compelled to change their positions and become restless and crabbed, often biting and injuring each other. Also when transferring the packages in this partly-filled condition from one car to another or for any other purpose they are often rolled for convenience by the freight-handlers, which results in changing the position of every lobster in the package at each revolution, while the large center piece of ice in changing its position results in serious damage to the lobsters. During transportation to distant places, wherein it is necessary to re-ice the lobsters during the journey, the work of re-icing is often intrusted to inexperienced persons, who in placing carelessly large pieces of ice on top of the lobsters often crush and damage them.

It is the object of my invention to overcome these difficulties, and in the present instance I have shown two forms of my invention in which the same principle is embodied, and in which—

Figure 1 is a longitudinal vertical sectional view through a cylindrical package. Fig. 2 is a top plan view with the cover of the outer casing of the package removed and the cover of the inner casing in position. Fig. 3 is a sectional view through a fragment of the outer casing of the package, the lug, the clamping-bar secured to the cover of the inner casing, and the pin for holding the clamping-bar in position. Fig. 4 is a detail perspective view of my invention, showing it constructed in rectangular or box-like form, with the cover of the outer casing thrown back; and Fig. 5 is a longitudinal sectional view with the cover closed.

Referring particularly to Figs. 1, 2, and 3, 1 denotes the outer casing, and 2 the inner

casing, of the package, spaced apart by vertically-disposed cleats 3, thus forming ice-compartments 4 around the inner casing. The inner casing is provided near each end with ventilating-apertures 5 and at its extreme lower edge with waterways, 6 which allow the water from the ice to pass under the edge of the inner casing and discharge through the drain-orifices 7, formed in the bottom of the outer casing. 8 denotes a cover for the inner casing, which is provided with a cross-bar 9, which is adapted to engage under lugs 10, secured at diametrically opposite points to the inner wall of the outer casing, pins 11 being inserted through perforations in said lugs and into the ends of the cross-bar to prevent the cross-bar from turning from engagement with said lugs. Any other suitable means may be provided for removably connecting the cover to the inner casing. 12 denotes the cover for the outer casing, which may be provided with one or more vent-apertures 13 and which may be removably secured in place in any suitable manner, preferably by screw-threaded stems 14, which project through holes 15 in the cover and are provided with wing-nuts 16. The inner casing is packed with shell-fish and the cover to the inner casing secured thereto. The ice-compartments are now packed with ice, and the space between the upper end of the outer casing and the cover of the inner casing may also be packed with ice. As the ice melts the water will run down and discharge through the drain-apertures in the bottom of the outer casing and will not come in contact with the shell-fish. The vapors and cold air will freely circulate through the upper and lower apertures in the inner casing, and thus keep the shell-fish in a cool and moist condition.

In the manufacture and use of packages designed for the transportation of shell-fish, &c., it is essential to have them constructed in different forms in order to meet the requirements of the shippers of different varieties of shell-fish and also to comply with the requirement of the different transportation companies in order to obtain their lowest rates for transporting the same. As an illustration of this, it is safe to say that nearly all of the live lobsters shipped by dealers and shippers in the United States are packed in round packages, mostly barrels, tubs, &c. The different transportation companies have all made special rates to the shippers of packages of this form, so it has become a custom of the shippers to adopt no other form that would in any way interfere with these special rates for transportation. In the transportation of live crabs, strange to say, this condition is reversed, as nearly all of the live crabs shipped in the United States are packed in square crates, as they are better adapted for packing and shipping this variety of shell-fish. The crab dealers and shippers also have the advantage of special rates from all the

transportation companies on this form of package. Lobster dealers and shippers of Nova Scotia and Canada, who ship large quantities of live lobsters to the United States during certain seasons of the year, use nothing but the square lobster-crate. The reason for this is that nearly all the live lobsters shipped from Nova Scotia and Canada are transported in steamships, where displacement of room means extra cost for transportation. Consequently the Nova Scotia and Canada shippers universally adopt the square lobster-crate, which takes less room, makes closer stowage, and costs less for transportation. My invention is applicable to both forms of packages—that is, to the cylindrical or barrel-like form and to the square or crate-like form, which latter form is illustrated in Figs. 4 and 5 and which I will now proceed to describe.

17 denotes the outer casing of the package, and 18 the inner casing of the package, which is spaced from the outer casing to form ice-compartments 19. Each casing is provided with a cover, the cover of the inner casing being denoted by the numeral 20 and the cover of the outer casing by the numeral 21. The upper edges of the end pieces of the inner casing extend slightly higher than the edges of the side pieces of said casing, so as to form a ventilating-opening between the upper edges of the side pieces and the cover of the inner casing, and the watercourse is formed under the lower edges of both end pieces and side pieces and also serves to ventilate the shell-fish. The cover of the inner casing may be secured in place in any suitable manner—as, for instance, as shown, by nailing its ends to the end pieces of the inner casing—while the cover to the outer casing may be secured in place in any suitable manner, preferably by hinging, as shown, and by providing its free edges with spring-latches 23, which are adapted to engage keepers 24, secured to the front side of the casing. In shipping any suitable means may be provided for permanently locking or fastening the cover in place. In this form of the invention the shell-fish are placed within the inner casing, its cover secured in position, and ice packed in the ice-compartments and on top of the cover of the inner casing. As the ice melts the water will run off and escape through the holes 25, formed in the bottom of the casing. The cool and moist air will pass through the ventilating-openings immediately under the cover and also through ventilating-openings under the lower edge of the inner casing, thus keeping the shell-fish in perfect condition.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of my invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion,

and details of construction may be made within the scope of the invention without departing from the spirit or sacrificing any of the advantages thereof.

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

1. A shipping-package comprising an inner and an outer casing spaced apart to form an ice-compartment which entirely surrounds the sides and top of said inner casing, said compartment communicating with the inner casing at its upper and lower ends, whereby a cold-air circulation is maintained through the inner casing and ice-compartment, substantially as set forth.

2. A shipping-package comprising an inner

and an outer casing spaced apart to form an ice-compartment which entirely surrounds the sides and top of said inner casing, said compartment communicating with the inner casing at its upper and lower ends, whereby a cold-air circulation is maintained through the inner casing and ice-compartment, the outer casing being provided with a waste-drip in its bottom, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK W. COLLINS.

Witnesses:

ROBERT U. COLLINS,  
CHARLES A. EMERY.