No. 653,567. Patented July 10, 1900.

F. W. COLLINS.

PACKAGE FOR SHIPPING LOBSTERS, &c.

(Application filed Mar. 9, 1900.)

(No Model.)

Fig. 3.

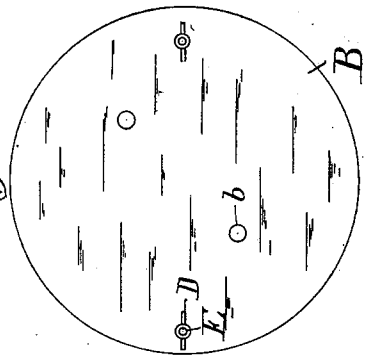


Fig. 4.

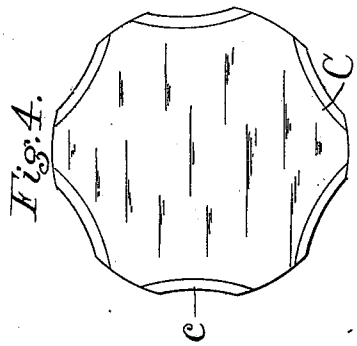


Fig. 2.

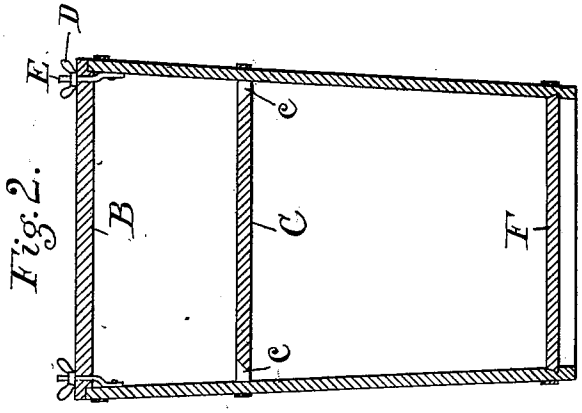
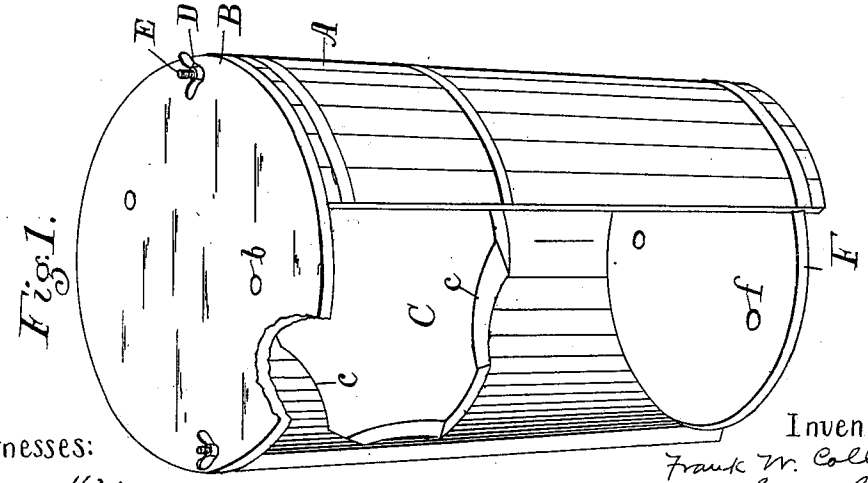


Fig. 1.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRANK W. COLLINS, OF ROCKLAND, MAINE.

PACKAGE FOR SHIPPING LOBSTERS, &c.

SPECIFICATION forming part of Letters Patent No. 653,567, dated July 10, 1900.

Application filed March 9, 1900. Serial No. 7,966. (No model.)

To all whom it may concern:

Be it known that I, FRANK W. COLLINS, a citizen of the United States of America, and a resident of Rockland, Knox county, Maine, have invented certain new and useful Improvements in Packages for Shipping Lobsters, &c., of which the following is a specification.

My invention relates to a package for shipping live lobsters, crabs, and other shell-fish where it is necessary to keep them cool and moist by artificial means.

In shipping live lobsters and crabs from one city to another it has been the common custom 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 lobsters packed around it and broken ice on top. The difficulties met in each of these methods are, first, the weight of the ice on the lobsters or crabs is detrimental and hastens their death; second, the fresh water caused by the melting ice when coming in contact with lobsters will kill them, and, 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 in the cars by the express companies, the weight becomes so great that it crushes the ice through the shells of the lobsters, often killing and breaking many.

According to my present invention I pack the live lobsters or crabs in a vessel flaring toward the top, provided with a diaphragm held in place by the flaring sides, dividing it into an upper and a lower chamber, the upper for the ice and the lower for the lobsters or crabs. The diaphragm has openings to admit the drip and cold air into the storage-chamber, and these openings are preferably made by forming recesses in the edge of the diaphragm, so that the drip and cold air will pass down next to the walls of the storage-chamber, thus preventing the shell-fish from coming in direct contact with the fresh water formed by the melting ice to any extent, and at the same time the whole body of shell-fish in the storage-chamber is kept cool and moist.

I illustrate my invention by means of the accompanying drawings, in which—

Figure 1 is a perspective view of the package with a portion cut away to show the interior. Fig. 2 is a central vertical section. Fig. 3 is a top view or plan, and Fig. 4 is a plan of the diaphragm.

A represents a vessel of generally cylindrical shape, here shown as flaring or larger at the top than at the bottom, like an elongated tub, F being the bottom, and B the top or cover, which is made removable and is secured by suitable means, as by the bolts E and thumb-nuts D. Ventilating-openings *b* are formed in the cover, and drip-openings *f* are formed in the bottom.

The interior of the package is divided into an upper or ice chamber and a lower or storage chamber by means of a removable diaphragm C, which is here shown as flat and substantially parallel with the bottom and top. In the form of my device here shown the diaphragm is retained in position by the slope of the walls of the vessel, and its size is such that when it comes to a bearing inside of the vessel the two chambers will be approximately of the right relative size. Openings are provided through the diaphragm by which the water from the melted ice and the cooled air may pass down into the storage-chamber. As here shown the edges of the diaphragm are cut away at *c c* to form shallow recesses and when in place in the vessel they form narrow openings next to the inner walls of the vessel through which the drip and cool air pass as stated. It will be seen that by the use of the diaphragm the weight of the ice is kept from the shell-fish and at the same time the cool water from the melted ice is made to pass down next to the inner surface of the vessel, thus keeping the fish cool and moist.

One of the important considerations in packages for this purpose is cheapness, because the express rates are so high that it does not pay to have the empty package returned.

My construction is exceedingly simple, and may be constructed with little more expense than an ordinary barrel.

While my invention is primarily designed for the shipment of live lobsters and crabs, it is adapted to be used for other articles which require to be kept cool and moist.

I claim—

The herein-described package for shipping lobsters, &c., consisting of a vessel flaring toward the top, a removable cover therefor and a diaphragm fitting the interior of said vessel and held in place by the inclined sides thereof, said diaphragm dividing the vessel into an upper and a lower chamber and having recesses formed in its edges to admit the drip and cold air to the lower chamber.

Signed at Rockland, Maine, this 28th day of February, 1900.

FRANK W. COLLINS.

Witnesses:

HENRY A. SMITH,

ROBERT U. COLLINS.