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54 **A method for transport/distribution of products, especially sea products, and a packing means for carrying out the method.**

57 A method for transport/distribution of products, especially sea food products, e.g. herring, shrimps, lobster, crabs, etc., which require supply of moisture for a period of time, and cooling without being in direct contact with the cooling medium, e.g. crushed ice. The packing means (1) used comprise a case/box (2) opening upwards and made of a liquid tight material, with a cover (3), and a double bottom (4, 3a) comprising an upper bottom member (4) with drainage apertures (5), and a lower liquid tight bottom member (3a), which between them define a space (2c) for receiving an absorbent (6), into which case/box (2) the product (8) is placed. Cooling medium (A), e.g. crushed ice, is placed on a tray shaped insert (7) having a perforated bottom (7a) with apertures (9) above the product (8), whereupon the case/box (2) is closed by the aid of cover (3). Water from melted ice will trickle down through apertures (9) in the course of a desired period of time to moisten and cool product (8). The melted water and any liquids given off from product (8) will be drained down into space (2c) to be absorbed by absorbent (6).

Description

A method for transport/distribution of products, especially sea products, and a packing means for carrying out the method.

The present invention relates to a method for transport/distribution of products, especially sea food products, e.g. herring, shrimps, lobster, crabs, mussels, etc. which require addition of moisture for a period of time, and cooling without direct contact with the cooling medium, e.g. crushed ice, with utilization of a packing means as stated in the introductory part of the following independent method claim 1. Furthermore, the invention relates to a packing means for use in carrying out said method of the kind as stated in the introductory part of the following dependent claim 3.

When products of the above mentioned kind are transported the products should not have any direct contact with the cooling medium, e.g. crushed ice, due to reasons of quality, but in order to keep fresh and be prevented from becoming too dry the products should have a supply of a certain quantity of moisture during the entire period of transport/distribution at the same time as the temperature should be kept down to a certain level.

It is, indeed, known to transport, e.g. lobster and crab in cases and packed into moist seaweed, sea tangle, or possibly another moist material to maintain the desired moisture. Evaporation of this moisture will, obviously, provide a certain cooling effect as well. To the present date, however, no optimal solution to the above mentioned problem was found for transport/distribution of said products.

It is an object of the present invention to provide a method and a packing means for use in carrying out said method, which solve the above problem. According to the invention this is achieved by the characterizing features as stated in the characterizing part of the following independent method claim, and the the following dependent claim, as well as in the characterizing part of the following dependent claim 3 and the following dependent claims.

An embodiment of the packing means, and the method with use of said packing means will be disclosed below with reference to the drawing, the sole Figure of which shows the packing means in a cross sectional view with a product, e.g. crabs, placed in said packing means and in an exploded view of the packing components for clarity.

Packing means 1 consists of a case/box 2 of a watertight material, with a cover 3, and a double bottom 4, 3a, comprising an upper bottom member 4 with drainage apertures 5, and a lower watertight bottom member 3a. Said bottom members define a space 2c between them for receiving an absorbent 6 of moisture. A tray-shaped insert 7 with a perforated bottom 7a having apertures 9 is provided in the upper portion of case/box 2 and is, in the shown embodiment, provided with edge portions 7b for being suspended from the upper edges 2b of case/box 2 below cover 3.

As shown, said upper rims 2b and rims 3b of cover 3 provided with projections, and recesses,

respectively, which are complementary for achievement of an airtight and non-displaceable connection between cover 3 and case/box 2. Edge portions 7b of the insert 7 are shaped to be complementary with the cooperating portions 3b, and 2b of cover 3 and case/box 2. Due to the fact that insert 7 is manufactured from a thin material cover 3 is readily snapped in place.

Insert 7 may, e.g. consist of a thermo or vacuum formed plastic sheet material.

For carrying out the method according to the invention the desired product 8, in the Figure indicated as crabs, is placed in case/box 2 and then the insert 7, if desired with introduced crushed ice A, is suspended above the product on the upper rims 2b of case/box 2.

The crushed ice A may, obviously be provided on top of insert 7 after said insert is placed above product 8. Then the cover 3 is applied. Absorbent 6 may, if desired, be placed in space 2c before the product 8 is provided, which is most advantageous, or it may be provided after the product was supplied.

If transport takes more than a couple of days and it is generally necessary to replace absorbent 6, this may readily be done by loosening lower bottom member 3a, replacing absorbent 6, and then fastening bottom member 3a in place again. As will appear from the drawing bottom member 3a is provided with lateral portions 3c having recesses which cooperate with projections on the lower side edges 2a of the case/box 2 for watertight closure of space 2c, so that water from melted ice A and any liquids given off from product 8 cannot leak to the environment if absorbent 6 becomes saturated.

Claims

1. A method for transport/distribution of a product (8), especially a sea product, e.g. herring, shrimps, lobster, crabs, mussels, etc., which require supply of moisture for a period of time as well as cooling without direct contact with the cooling medium, e.g. crushed ice, with use of a packing means (1) comprising a case/box (2) of a watertight material and opening upwards, with a cover (3), and a double bottom (4,3a) comprising an upper bottom member (4) with drainage apertures (5), and a lower liquid tight bottom member (3a), which bottom members define a space (2c) for receiving an absorbent (6) of moisture between them, into which case/box (2) the product is placed, **characterized in** that cooling medium (A), e.g. crushed ice, is placed on a tray shaped insert (7) having a perforated bottom (7a) with apertures (9) above said product (8), whereupon the case/box (2) is closed by the aid of cover (3), so that water from melted ice will

trickle down through apertures (9) during a desired period depending of the size and number of apertures (9), and the quantity of ice, to moisten and cool the product (8) in case/box (2).

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2. A method as defined in claim 1, **characterized in** that insert (7) is suspended from the upper rims (2b) of case/box (2) before the cover (3) is provided.

3. A packing means for carrying out the method as defined in claim 1 or 2, and comprising a case/box (2) of a liquid tight material and opening upwards, with a cover (3) and a double bottom (4,3a) comprising an upper bottom member (4) with drainage apertures (5), and a lower liquid tight bottom member (3a) which, between them, define a space (2c) for receiving an absorbent (6), **characterized in** a tray shaped insert (7) having a perforated bottom (7a) with perforations (9) intended for supporting a cooling medium (A), e.g. crushed ice, in the upper portion of case/box (2).

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4. A packing as defined in claim 3, **characterized in** that the insert (7) consists of a thin material and is provided with rim portions (7b) for suspension on the upper rims (2b) of case/box 2 beneath cover (3).

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5. A packing as defined in claim 4, **characterized in** that the rim portions (7b) of insert (7) are complementary with the cooperating portions (2b,3b) of case/box (2), and cover (3).

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6. A packing as defined in one of claims 3-5, **characterized in** that insert (7) is a thermo or vacuum formed plastic sheet.

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