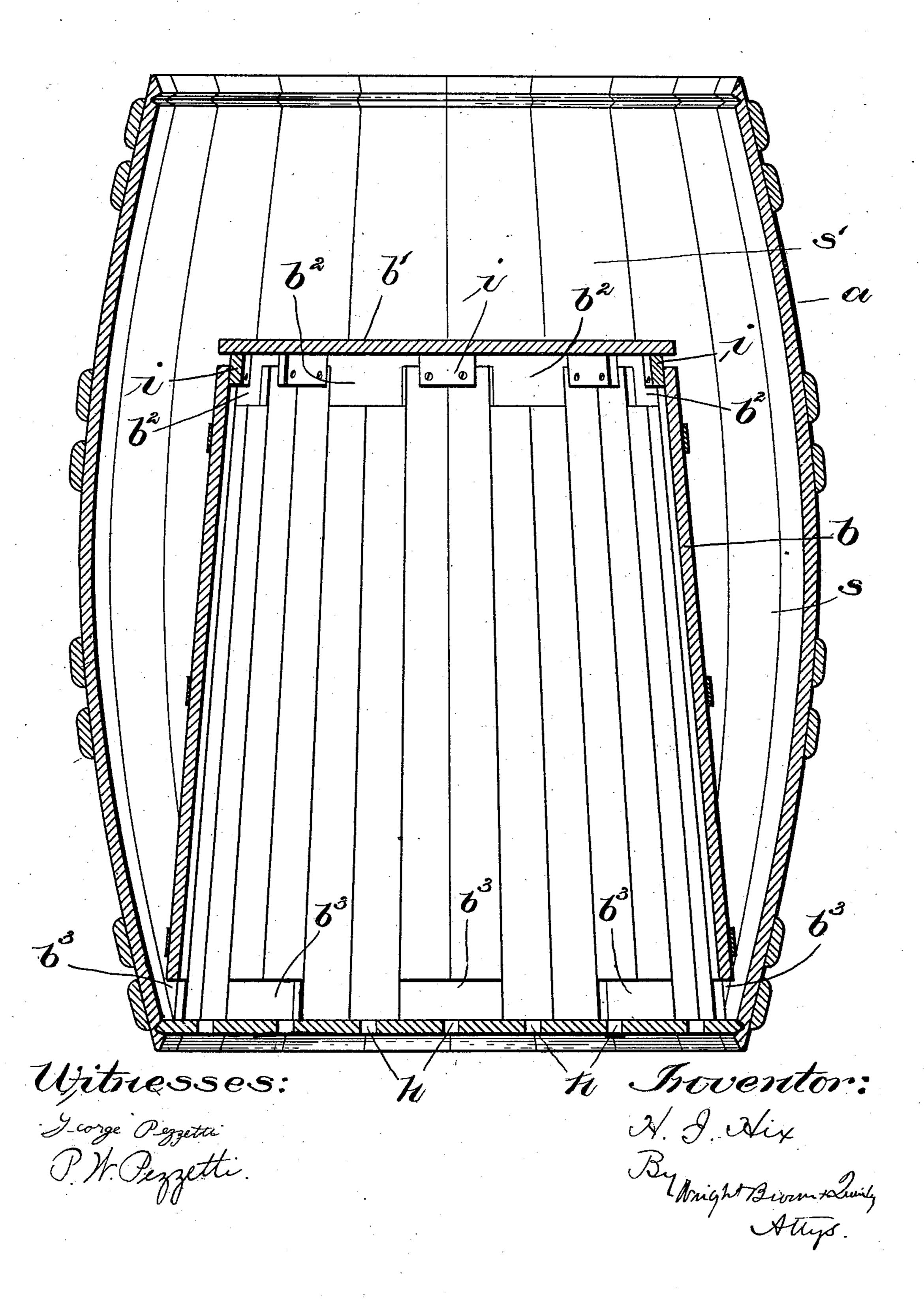
H. I. HIX.

REFRIGERATING PACKAGE.

(Application filed Sept. 11, 1901.)

(No Model.)



United States Patent Office.

HARRY I. HIX, OF ROCKLAND, MAINE.

REFRIGERATING-PACKAGE.

SPECIFICATION forming part of Letters Patent No. 688,521, dated December 10, 1901.

Application filed September 11, 1901. Serial No. 75,028. (No model.)

To all whom it may concern:

Be it known that I, HARRY I. HIX, of Rockland, in the county of Knox and State of Maine, have invented certain new and useful Improvements in Refrigerating-Packages, of which the following is a specification.

This invention relates to packages for the storage and shipment of perishable articles of food, such as fresh fish, poultry, &c.; and it has for its object to provide a strong, durable, and relatively inexpensive package adapted to hold a body of ice in position to surround the goods to be preserved and to maintain a circulation of air through the ice and through the said goods, the air being kept cool by the ice and effectively refrigerating the goods.

The invention consists in the improvements which I will now proceed to describe and claim.

The accompanying drawing, forming a part of this specification, represents a vertical section of a package embodying my invention.

In the drawing, a represents an outer cylindrical receptacle, which is preferably a cask or tub of ordinary form and construction.

b represents an inner cylindrical receptacle, which is of tapering or frusto-conical form and is preferably composed of staves and hoops, like an ordinary cask or barrel. The inner receptacle b is shorter than the outer receptacle a, and its larger end is formed to enter and fit somewhat loosely the lower 35 end of the outer receptacle. The taper and the relative shortness of the inner receptacle cause the formation of an annular ice-space s between the cylindrical bodies of the two receptacles and an end space s' between the upper ends of the receptacles.

The inner receptacle b is provided with a removable cover b', which supports a mass of broken ice deposited in the space s'. The ice settles from the space s' into the annular space s and keeps the latter filled so long as the space s' is sufficiently supplied.

The inner receptacle b is provided with openings b^2 at its upper end and corresponding openings b^3 at its lower end, said openings permitting a free circulation of air through the interior of the inner receptacle and through the ice surrounding the latter.

The goods in the inner receptacle are therefore continuously subjected to cold air kept in circulation.

It will be seen that the ice is kept from direct contact with the goods and that the goods are separated from the external air by the ice and air spaces s s'.

The air-openings b^2b^3 are preferably formed 60 by longitudinally displacing or driving endwise some of the staves of the inner receptacle, as shown in the drawing.

The bottom of the outer receptacle a is provided with holes h h for the escape of the was 65 ter formed by the melting of the ice. I prefer to provide the outer receptacle a with a covering of straw matting, which may be nailed or otherwise secured to said receptacle.

The inner receptacle b is preferably provided with blocks i i, which are nailed to the upper ends of some of the staves, to support the top b', which may be attached to said blocks by screws or otherwise. These blocks may project above the upper end of the receptacle b to form an air-space between said upper end and the bottom of the cover. The block may be either on the inner or the outer surface of the receptacle b.

I claim—

1. A refrigerating-package comprising an outer cylindrical receptacle having a bottom, an inner cylindrical receptacle of tapering form and having a larger end which is substantially equal to the internal diameter of 85 the bottom end of the outer receptacle, and a smaller end which is sufficiently reduced to form an annular ice-space between the two receptacles, the said inner receptacle being shorter than the outer receptacle, so that an 90 ice-space is formed above the upper end of the inner receptacle, and having a cover at its upper end and air-openings at its upper and lower ends communicating with the annular ice-space.

2. A refrigerating-package comprising an outer cask or tub, a shorter inner cask made larger at one end than at the other, and having a removable cover at its smaller end, its larger end internally fitting the bottom end 100 of the outer cask, an annular ice-space being formed between the two casks extending the entire length of the inner cask and between the upper ends of the casks, said inner cask

having air-openings at its upper and lower ends communicating with said annular space.

3. A refrigerating-package comprising an outer cask or tub, a shorter inner cask made 5 larger at one end than at the other and having a removable cover at its smaller end, its larger end internally fitting the bottom end of the outer cask, an annular ice-space being formed between the two casks, extending the entire length of the inner cask and between

the upper ends of the casks, some of the staves of the inner cask being displaced endwise to form air-openings at the ends of said cask.

In testimony whereof I have affixed my signature in presence of two witnesses.

HARRY I. HIX.

Witnesses:

A. S. LITTLEFIELD, SUMNER P. MILLS.