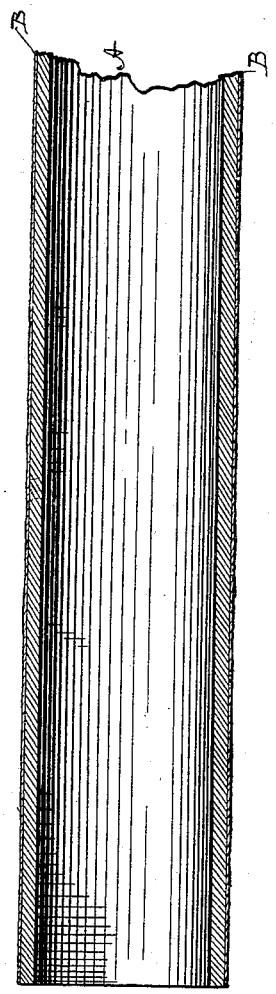
(No Model.)

C. F. SMITH.

COVERING FOR PIPES AND SURFACES IN ICE MACHINES, &c.

No. 345,549. Patented July 13, 1886.



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UNITED STATES PATENT OFFICE.

CHARLES F. SMITH, OF FITCHBURG, MASSACHUSETTS.

COVERING FOR PIPES AND SURFACES IN ICE-MACHINES, &c.

SPECIFICATION forming part of Letters Patent No. 345,549, dated July 13, 1886.

Application filed March 15, 1886. Serial No. 195,268. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. SMITH, of Fitchburg, Worcester county, Massachusetts, have invented a new and Improved Means for Preventing the Formation of Frost on Pipes in Ice-Making Machinery; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, making part of this specification, in which the figure illustrates a pipe to which my improved covering has been applied.

It is well known that the formation of frost on pipes in ice-making machinery to a very great degree impairs the capacity of such pipes, and the inclosed refrigerating material for the absorption of caloric, and any means for the prevention of the formation of frost will enhance the working capacity of ice-making machines.

The object of my invention is to prevent the formation of this frost on the pipes; and to this end my invention consists in covering the refrigerant-containing pipes with a mixture of the low distillate of petroleum, known as "petrolina," and glycerine, with or without a small percentage of salt.

In order that those skilled in the art may make and use my invention, I will proceed to describe the manner in which I have carried it out.

I take the pipes or coils already prepared or set up, or in single lengths, and heat them to a moderate degree, whereupon I plunge the said coils, pipes, or fittings into a bath of a mixture of the low distillate of petroleum, known as "petrolina," and glycerine in equal parts by bulk. If found desirable, a limited percentage of salt may be added to this bath, in the judgment of those practicing the invention. When the heated pipes, coils, or fittings are plunged into the bath, as described, and withdrawn, they remain covered with a thin coating of the mixture, which will closely adhere to the surface and permanently remain thereon. This coating prevents the moisture from reaching the metal of the pipes, coils, or fittings, and also acts in the matter as a moisture or water repellant, so that the moisture will not be deposited to enable the formation of frost.

In the drawing, A is a pipe, and B the coating.

I am aware that glycerine has heretofore been used to coat pipes in ice-machines to prevent the formation of frost, and I therefore lay no claim thereto; but

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

In ice-making machinery, pipe or other surfaces covered with a composition of equal parts of petrolina and glycerine, with or without salt, to prevent the formation of frost, substantially as set forth.

CHARLES F. SMITH.

Witnesses:
W. E. CHAFFEE,
L. BACON.