

E. M. TILLEY.  
Beer-Cooler.

No. 221,005.

Patented Oct. 28, 1879.

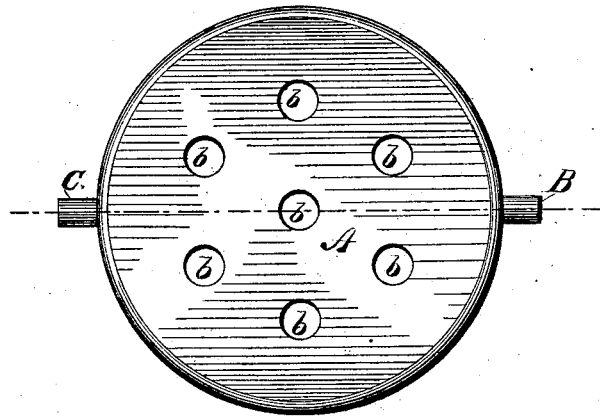


FIG. 1.

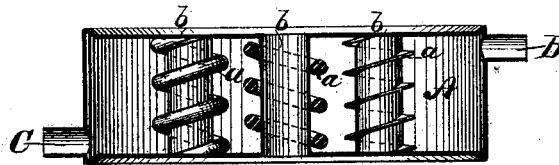


FIG. 2.

WITNESSES.

Asa Shove  
A. H. Arnold.

INVENTOR.

Edwin M. Tilley  
By Atty. Gen. Arnold

# UNITED STATES PATENT OFFICE.

EDWIN M. TILLEY, OF EAST GREENWICH, RHODE ISLAND.

## IMPROVEMENT IN BEER-COOLERS.

Specification forming part of Letters Patent No. **221,005**, dated October 28, 1879; application filed June 5, 1879.

*To all whom it may concern:*

Be it known that I, EDWIN M. TILLEY, of East Greenwich, in the county of Kent and State of Rhode Island, have invented certain Improvements in Beer-Coolers, of which the following is a full and correct description, reference being had to the accompanying drawings, forming part of this specification.

In the drawings, Figure 1 shows a top view of the cooler. Fig. 2 is a vertical cross-section, showing the arrangement of the interior.

The nature of this invention consists in a metallic case having vertical open tubes passing through it, the ice being placed on the top of this case, and the beer passed through the inside from an inlet-pipe on one side to an outlet-pipe on the other side of the case, and circulating around the tubes on its way.

A is a case, made preferably of tinned sheet-copper, but it may be made of other suitable material. *b b* are open tubes passing through the case vertically, and made tight in each head by soldering or otherwise. Spiral coils *a a*, of sheet metal or wire, are placed around the tubes, to increase the rotary circulation of the beer as it descends from the top of the case to the bottom, the inlet-tube B being at

the top of the side of the case, and the outlet-tube C at the bottom of the opposite side, so that as the beer cools and descends the spiral coils give it a circular motion, which facilitates its coming in contact with the metal and being quickly cooled.

The case is placed in a tub or box and a lump of ice put on the top, which is provided with a raised rim to help retain it, and then covered with a piece of thick cloth, when the ice will usually form into projections down into the tubes, producing great cooling effect upon the beer passing through the case.

The pipe from the cask containing the beer is attached to the tube B, and a faucet or delivery-pipe is attached to the outlet C.

Having thus described my improvements, what I claim as my invention is—

The combination of the metallic case A, with vertical open tubes *b b*, the spiral coils *a a*, and inlet and outlet tubes B C, substantially as set forth, and for the purpose specified.

In witness whereof I have set my hand.

EDWIN M. TILLEY.

Witnesses:

WANTON SHIPPEL,  
F. H. ARNOLD.