

H. MILLER.
ICE CHEST WATER COOLER.
APPLICATION FILED SEPT. 26, 1905.

Fig 1.

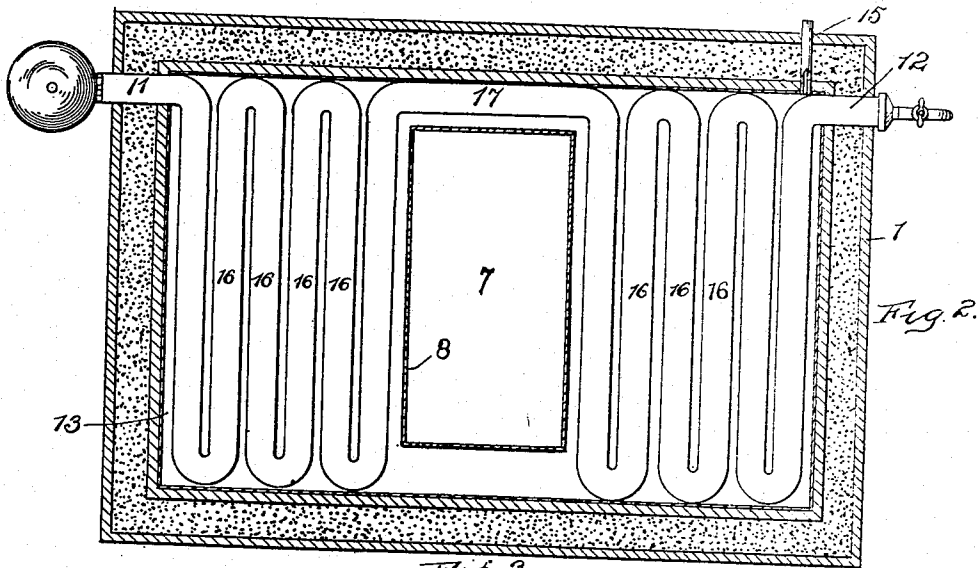
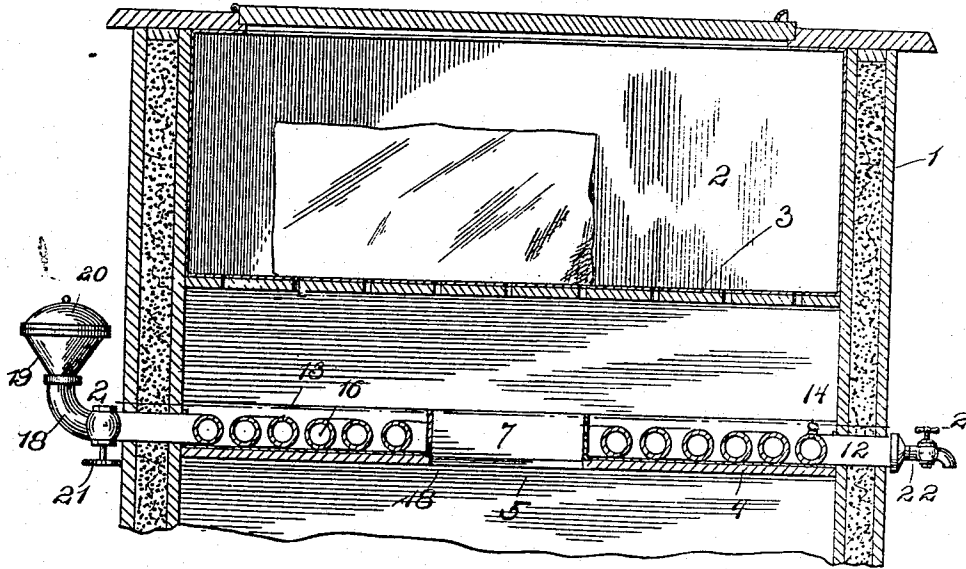
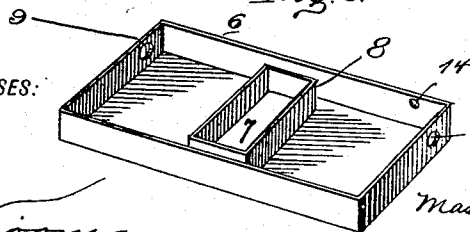


Fig. 3.



WITNESSES:
S. McSping

E. E. Vrooman.

INVENTOR

Henry Miller,

BY

Mason, Fennick & Lawrence,
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY MILLER, OF SEATTLE, WASHINGTON.

ICE-CHEST WATER-COOLER.

No. 825,855.

Specification of Letters Patent.

Patented July 10, 1906.

Application filed September 20, 1905. Serial No. 280,209.

To all whom it may concern:

Be it known that I, HENRY MILLER, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Ice-Chest Water-Coolers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in liquid-cooling means, and particularly to a drinking-water-cooling device.

The object of the invention is the provision of means for facilitating the cooling of liquid within an ordinary kitchen ice-chest.

With this and other objects in view the invention consists of certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the claims hereto appended.

In the drawings, Figure 1 is a fragmentary vertical sectional view of an ice-chest and the preferred structure of my invention. Fig. 2 is a horizontal sectional view taken on line 2-2, Fig. 1. Fig. 3 is a perspective view of the container or receptacle employed in constructing my device.

Referring to the drawings, 1 designates an ice-chest of any ordinary structure, preferably a portable kitchen ice-chest. The ice-chamber 2 is provided with a slatted or apertured bottom 3, through which water caused by the melting of ice in the chamber 2 may pass. A horizontal partition 4 is secured within the chest 1, contiguous to the floor or partition 3. A central opening is formed in the partition 4, which constitutes a well 5.

In carrying out my invention I employ a container or receptacle 6, which is preferably rectangular in shape. This receptacle 6 is provided with a central opening 7, formed in its bottom. A flange 8 is formed on the bottom of the receptacle 6 and contiguous to the opening 7. This flange or casing 8 surrounds the opened portion 7 and is of substantially the same height as the sides and ends of the receptacle. Apertures 9 and 10 are formed upon the ends of the container or receptacle, through which the inlet end 11 and the outlet end 12 of the tubing, respectively, extend. An aperture 14 is formed upon one of the sides, preferably that positioned nearest to

the back of the chest when said receptacle 6 is placed therein. The aperture 14 permits liquid to pass from the receptacle 6 into a waste-pipe 15. The metallic tubing 13, constituting a receptacle in which the drinking liquid is contained, comprises, preferably, two integrally-connected parts. Each of said parts is formed by parallel coiled portions 16 of the single tubing 13. The inner parallel portion 16 of each of the parts which is contiguous to the flange 8 of the receptacle 6 is integrally connected by a portion 17, which is preferably straight. The inner portions 16 of the parts (which are contiguous to the central flange 8) and the portion 17 surround the two sides and end of said flange 8, which is preferably rectangular in shape.

By reason of the opening 7 and the flanged structure 8 of the receptacle 6 the well 5 of the ice-chest is unobstructed when said receptacle is within the chest. The tubing, constituting the drinking-water-containing receptacle, must partly surround the flanged structure 8 of the receptacle 6, and therefore necessitating the substantially U-shaped structure of the inner portions 16 and connecting portion 17 of the coiled tubing 13. The receptacle 6 is secured within the ice-chest 1 after the coiled tubing 13 has been positioned therein by means of the diametrically opposite extending inlet end 11 and outlet end 12 of said tubing. The receptacle is of greater height than the diameter of the tubing, thereby permitting said tubing to be submerged in liquid within said container or receptacle 6. The opening 14 is formed in the side above the top of the tubing 13, so that while the tubing may be submerged in liquid said liquid will not overflow, but will pass out through the waste-pipe 15. The receptacle 6 is filled with liquid, which is formed by ice melting in the chamber 2. Upon the inlet portion 11 of the tubing 13 there is secured means whereby said tubing is filled with liquid. This means comprises a curved or angular tubing 18, which carries upon its upper end a funnel 19. A removable cap or closure member 20 is positioned upon the funnel 19. A valve 21 is positioned within the tubing 18. Secured to the outlet end 12 of the tubing 13 is a valve member 22, preferably an ordinary faucet. The drinking liquid is poured into the funnel 19 and if the valve 21 is open liquid will pass into the coiled tubing 13. Upon opening the valve of the faucet 22 liquid may be discharged

from the coiled tubing 13 into any suitable receptacle

It is to be noted that in the figures of the accompanying drawings I have illustrated preferably a substantially rectangular receptacle, within which the drinking-liquid-containing receptacle is positioned (constituted by a coiled tubing 13) and said receptacle is provided with a transverse substantially rectangular flanged structure inclosing a similarly-constructed opening which conforms to the structure of the opening constituting the well 5 of the ice-chest. Atmosphere in the chamber 2 will pass downward and over the coiled tubing and thence through the well 5 into the lower compartment or compartments of the ice-chest or refrigerator. Not only will the cold air or atmosphere in the chest or refrigerator cool the tubing constituting the drinking-liquid-containing receptacle, but the waste liquid caused by the melting of the ice will also assist in cooling the drinking liquid.

It will be obvious from the foregoing description that I have provided means whereby the cold liquid formed by ice melting in the chamber 2 and the cooled air or atmosphere are employed for cooling the drinking liquid contained in a closed receptacle, which is positioned between the upper or ice-receiving chamber and the lower containing compartment or compartments of an ice-chest or refrigerator. My drinking-water-containing receptacle is preferably of a closed structure—to wit, the coiled tubing—for the reason that I thereby produce a structure which may be submerged in ice-cold waste liquid without necessitating the placing of ice into said drinking liquid, which would necessarily involve an additional consumption of ice.

What I claim is—

1. In a device of the character described, the combination with a chest, of a receptacle

provided with a well-opening positioned within said chest, said receptacle provided with apertures formed in its ends and with an aperture formed in one side near the upper edge, a waste-pipe engaging the apertured portion of the side of said receptacle, a coiled tubing positioned within said receptacle, said tubing comprising parts, each part comprising a series of parallel portions, a straight portion integral with said parts, the inner portions of said parts and said straight portion partly surrounding the well-opening, said tubing provided with inlet and outlet, horizontal ends extending through the apertures formed in the ends of said receptacle, a funnel secured to the inlet end of said tubing, a valve positioned in said tubing between said funnel and chest, a cap closing said funnel, and a faucet secured to the outlet end of said tubing.

2. In a device of the character described, the combination with a chest, of a receptacle positioned within said chest, a tubing positioned within said receptacle, said tubing provided with inlet and outlet ends positioned in the same horizontal plane and extending through opposite portions of said chest, the ends of said tubing being positioned near the back of said chest, a valve formed in the inlet end of said tubing, a funnel secured to the inlet end of said tubing, a cap carried by said funnel, a faucet secured to the discharge end of said tubing, and a discharge-pipe extending through said chest and secured to the said receptacle above the coiled tubing.

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

HENRY MILLER.

Witnesses:

G. WARD KEMP,
J. A. NAIN.