

No. 772,081.

PATENTED OCT. 11, 1904.

M. J. BERNHARD.
COIL SUPPORT FOR LIQUID COOLERS.

APPLICATION FILED MAY 16, 1904.

NO MODEL.

Fig. 1.

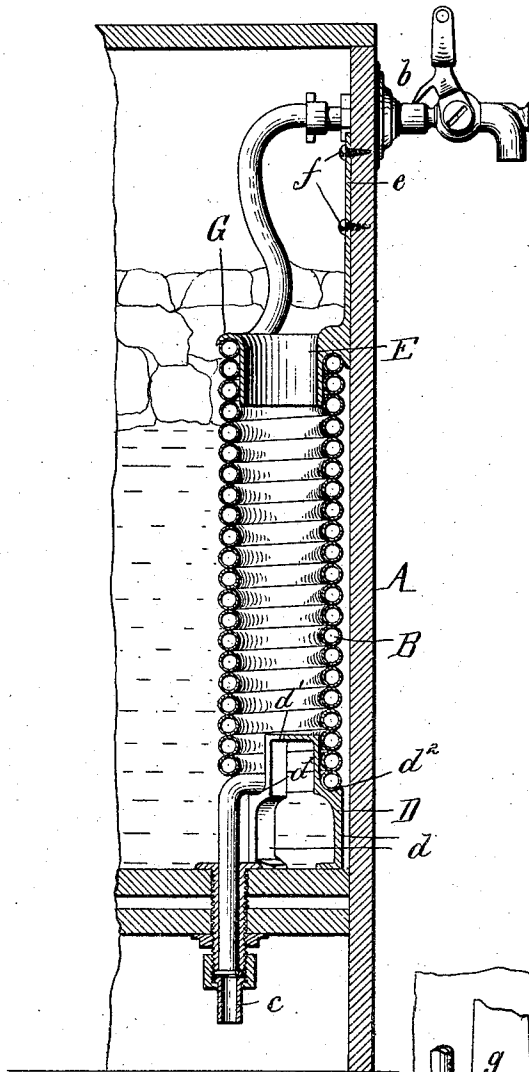


Fig. 2.

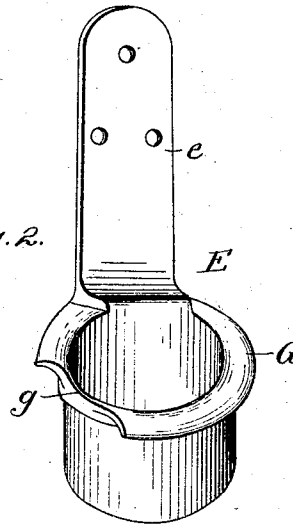


Fig. 3.

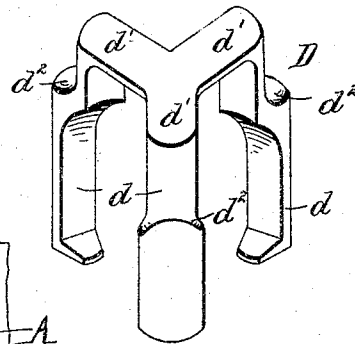
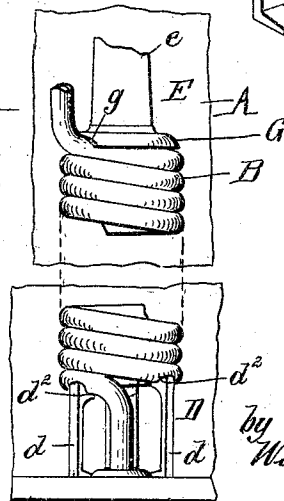


Fig. 4.



Witnesses:-
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UNITED STATES PATENT OFFICE.

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COIL-SUPPORT FOR LIQUID-COOLERS.

SPECIFICATION forming part of Letters Patent No. 772,081, dated October 11, 1904.

Application filed May 16, 1904. Serial No. 208,174. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL J. BERNHARD, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Coil-Supports for Liquid-Coolers, of which the following is a specification.

This invention relates to supports and protectors for the cooling-coils of liquid-coolers of that kind in which the pipe through which the liquid to be cooled passes is formed into a coil which is submerged in ice and water in a suitable chest or box.

The invention is particularly applicable to beer-coolers.

The cooling-coil of beer-coolers is ordinarily made of block-tin pipe, which is soft, and unless it is properly supported and protected it is liable to be dented and bent out of form, so as to obstruct the free passage of the beer, by carelessly throwing or packing the ice in the cooler.

The object of this invention is to provide a desirable device of simple and inexpensive construction for supporting the cooling-coil, preserving its form, and protecting it from injury.

In the accompanying drawings, Figure 1 is a sectional elevation of a liquid-cooler provided with a coil-support and protector embodying the invention. Figs. 2 and 3 are respectively perspective views of the top holder and base of the support. Fig. 4 is a fragmentary elevation of the cooling-coil and support.

Like letters of reference refer to like parts in the several figures.

A represents a portion of the chest or box of a cooler, and B a pipe-coil located in the cooler-box with one end connected to the faucet or draft device *b* and the other end passing through the bottom of the box and coupled to the pipe *c*, leading from the cask or other source of supply for the liquid to be cooled. Ice and water are placed in the cooler-box around the cooling-coil to cool the beer or other liquid passing through the coil.

The coil-support and protector consists of a base or stand D, on which the coil rests, and a top holder E, which enters the upper end of

the coil and is secured to the adjacent wall of the box or other suitable stationary support to steady the coil. The base or stand D consists of upright legs *d*, provided at their lower ends with suitable feet and connected at their upper ends by a spider or lateral portions *d'*. The legs are provided intermediate of their ends with supporting-shoulders or seats *d''*, on which the lower turn of the cooling-coil rests. The shoulders are arranged in an ascending series or in a helical line, so that the lower convolution or turn of the coil bears equally on all of the shoulders *d''*, and the upper faces of the latter are preferably concaved to better fit and hold the coil. The upper portions of the legs of the base or stand project up into the coil far enough to bear against several of the lower turns thereof and stiffen and hold the coil in proper form.

The top holder and protector E has a hollow cylindrical body, which extends down into the upper end of the cooling-coil far enough to bear against several of the upper turns thereof and stiffen the coil, and an upwardly-projecting shank *e*, which is attached to the adjacent wall of the cooler-casing or other stationary support by screws or the like, *f*.

G represents an annular flange which projects out from the upper end of the body of the holder and overhangs the top turn of the cooling-coil to protect the latter and prevent it from being battered or dented by ice thrown or dropped into the cooler-box. The protecting-flange is cut away at one side, as indicated at *g*, for the passage of the upright upper end of the cooling-pipe.

The base and top holder are simple castings and can be produced at a much lower cost and can be more readily placed in the cooling-coil than a support extending entirely through the coil, and they are much lighter. They hold the coil rigid and prevent it from being bent out of shape. The support does not obstruct the cooling-coil, and as the base holds the coil well up off of the bottom of the cooler-box ample space is provided enabling the coil to be readily flushed out and cleaned.

I claim as my invention—

1. The combination of a skeleton stand for the cooling-coil consisting of connected and

spaced upright legs which are provided with lateral shoulders on which the coil rests and which extend part way up through the coil to hold the convolutions thereof from distortion, 5 and a holder which extends part way down through the coil and has a shank which is attached to a stationary support to hold the coil stationary, substantially as set forth.

2. The combination of a lower support for 10 the cooling-coil provided with one or more openings allowing a free circulation through

the coil, and a separate hollow top holder which extends into the upper end of the coil and part way down through the latter and has a shank for attachment to a stationary sup- 15 port, substantially as set forth.

Witness my hand this 12th day of May, 1904.

MICHAEL J. BERNHARD.

Witnesses:

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