

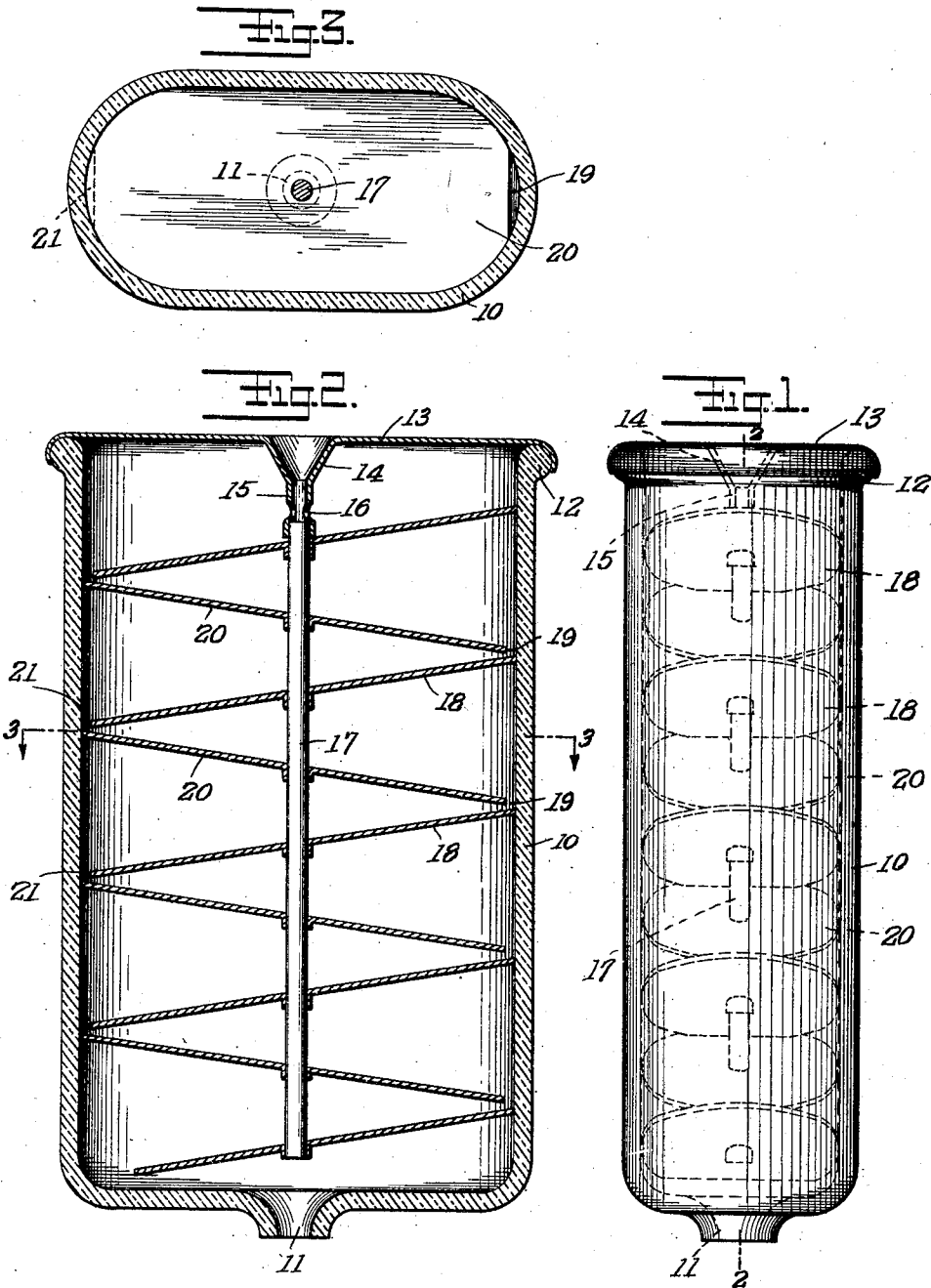
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LIQUID COOLING DEVICE

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UNITED STATES PATENT OFFICE.

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LIQUID-COOLING DEVICE.

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This invention relates to cooling devices with particular reference to an article of this type used in reducing the temperature of hot liquids, such for instance as milk too
5 hot for a child to drink.

It is therefore an object of this invention to provide a small and easily manipulated device capable of drawing heat out of liquids when the same is passed therethrough.

10 Another object is in the provision of a liquid cooling device that is readily dismantled thereby rendering the same positively sanitary.

These and other objects, which will become apparent as the description progresses, are accomplished by the novel construction, combination and arrangement of parts, hereinafter described and illustrated in the accompanying drawing, forming a material
20 part of this disclosure, and in which:—

Figure 1 is a side elevational view of the device.

Figure 2 is a longitudinal sectional view taken on line 2—2 of Figure 1.

25 Figure 3 is a transverse sectional view taken on line 3—3 of Figure 2.

In the drawing the numeral 10 generally designates a substantially elliptically shaped container made preferably of glass, having
30 in its lower wall a downturned nipple provided with an opening 11 and at its upper edge a beading 12.

Fitting snugly over the beading 12 is a metal cap 13 having a central down-reaching funnel 14 provided with a cylindrical
35 portion 15 containing a plurality of openings 16.

Secured in the lower enlarged portion of the cylinder 15 is a rod 17 extending down
40 into the container 10.

The rod 17 carries a multiplicity of spaced metal plates 18 tilted at an angle to the rod; one curved end of each plate closely fits the container 10, the other opposite curved end
45 being made to present a space 19 intermediate its edge and the wall of the container.

Also fixed on the rods, intermediate the plates 18, are similar but oppositely inclined plates 20 held, in relation to the container
50 10, in a manner like unto the plates 18, thus producing spaces 21.

In operation, the container 10 is held over a cup or glass to receive the cooled liquid and the hot fluid is poured into the con-
55 tainer through the funnel 14.

In passing, the liquid first flows down the top plate 18 through the space 21 onto the next oppositely tilted plate 20, through the space 19, etc., until it reaches the bottom of the container, from which it will pass by
60 way of the opening 11.

The liquid now received will be much cooler than when it first entered the funnel 14 therefore placing the same at a tempera-
65 ture suitable for drinking purposes.

To clean the device it is merely necessary to remove the rod 17 and plates 18 and 20 from the container, by lifting the cap 13 from the beading 12, or by passing a stream
70 of boiling water through the assembled device, whereby all parts are cleared of accumulations.

As changes of construction could be made within the scope of the invention, it is intended that all matter contained in the fore-
75 going description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

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

1. A liquid device comprising a container, an open nipple at the bottom of said container, a flat cap having a bead fitting over the top of said container, a funnel formed
85 on said cap, said funnel having a perforated cylindrical portion, a rod carried by said cylindrical portion, and a multiplicity of oppositely inclined plates fixed on said rod over which the liquid to be cooled is passed
90 progressively, said plates and rod being removable from said container together with said cap.

2. A liquid cooler comprising an open topped container having a bead at its edge
95 and a dispensing nipple in its bottom, a cover to engage said bead, a funnel formed on said cover, a tubular extension on said funnel, the upper portion of said extension being perforate, a support rod fixed in the
100 lower portion of said extension to reach nearly to the bottom of said container, and a series of divergently inclined plates fixed on said rod, the lower edges of said plates presenting open spaces through which liquid
105 may flow to the next succeeding plate.

Signed at New York in the county of New York and State of New York this 1st day of October A. D. 1926.

ROBERT WEST.