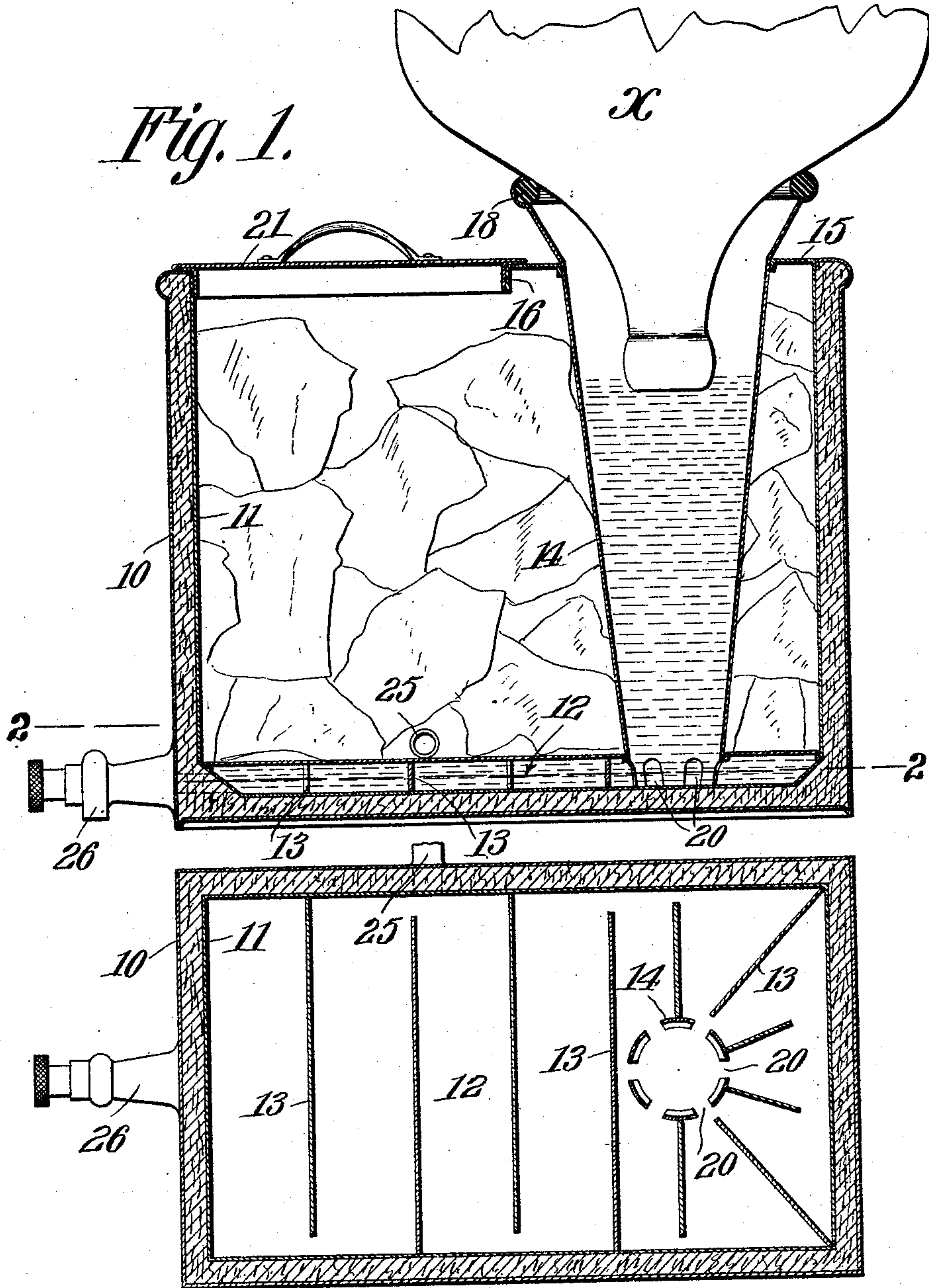


W. G. EADS.  
WATER COOLER.  
APPLICATION FILED AUG. 29, 1908.

928,908.

Patented July 20, 1909.



Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM G. EADS, OF KANSAS CITY, MISSOURI, ASSIGNOR TO THE EADS DISTILLED WATER COMPANY, OF KANSAS CITY, MISSOURI, A CORPORATION OF MISSOURI.  
**WATER-COOLER.**

No. 928,908.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed August 29, 1908. Serial No. 450,808.

*To all whom it may concern:*

Be it known that I, WILLIAM G. EADS, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Water-Cooler, of which the following is a specification.

This invention relates to water coolers and has for its principal object to provide a novel form of cooler that is adapted especially for use in connection with bottles or demijohns used in the supply of drinking water.

A further object of the invention is to provide a novel form of cooler in which a water cooling compartment is arranged at the bottom of an ice tank and is provided with partitions or baffle plates arranged to form a tortuous path for the water to the discharge faucet.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, more fully hereinafter described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, size and minor details of construction may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is a vertical sectional view of a water cooler constructed in accordance with the invention. Fig. 2 is a horizontal section of the same on the line 2—2 of Fig. 1.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The tank proper is formed of outer and inner casings 10 and 11 which may be made of galvanized sheet iron, or other metal, and these are spaced from each other for the reception of some non-conducting material such as mineral wool, or the like. In the bottom of the casing is arranged a shallow water cooling chamber 12 that covers the entire bottom of the tank and in said chamber are arranged a number of vertically disposed baffle plates 13 which serve in part as a support for the upper wall of the chamber and which also form a tortuous passage for the water to be cooled.

Extending upward from the chamber 12

is a tapered casing 14 that extends through a circular opening formed in the stationary top 15 of the tank, this stationary top covering approximately half the horizontal area of the tank and being provided at the front edge with a reinforcing flange 16.

The casing 14 tapers gradually from the lower chamber 12 to the stationary top 15 and thence flares outwardly and is provided at the top of the ring 18 that preferably is formed of rubber or other yieldable material, this rubber ring serving as a support for the water bottle *x* which is placed in inverted position so that the water may flow into the casing 14.

The lower portion of the casing 14 extends down to the bottom of the main tank so that, in connection with the stationary top 15, it may form a rigid support for the water bottle, and at the bottom of the casing are numerous openings 20 through which the water may flow into the lower cooling chamber 12.

The main tank is arranged for the reception of ice which may be placed in position by removing the cover 21 and the ice is firmly packed around the casing 14, while its weight is supported by the upper wall of the chamber 12 and the baffle plates 13, these baffle plates acting to reinforce the upper wall of the chamber and serving also as rigid braces for the lower end of the casing 14. The waste water due to the melting of the ice may be drawn off through a suitable opening 25, while the water cooling chamber is supplied with a discharge faucet 26 of any suitable character.

By extending the wall of the casing 14 along straight lines from the top to the bottom of the tank the weight of the bottle is transmitted directly from the top of the tank to the bottom thereof without danger of buckling the casing and it is therefore possible to form said casing of sheet metal which is comparatively thin and which will therefore offer the minimum resistance to the transmission of cold from the ice to the water contained within the casing 14.

What is claimed is:—

1. In a water cooler an ice-receiving tank, a water-cooling chamber upon the bottom of said tank, and a downwardly tapered casing projecting through the top of the tank and the top of the cooling chamber, the lower end of said casing bearing upon the bottom



of the tank, that portion of the casing within the cooling chamber being formed with outlet openings, the upper end of the casing constituting a support for a water-supply vessel, the wall of said casing extending along straight lines from the bottom to the top of the tank.

2. In a water-cooler an ice-receiving tank, a water-cooling chamber upon the bottom of said tank, and a downwardly tapered casing projecting through the top of the tank and the top of the cooling chamber, the lower end of said casing bearing upon the bottom of the tank, that portion of the casing within the cooling chamber being formed with outlet openings, the upper end of the casing constituting a support for a water-supply

vessel, the wall of said casing extending along straight lines from the bottom to the top of the tank, baffles radiating from the lower end of the casing and within the cooling chamber, and baffles extending transversely within the cooling chamber, there being an outlet from said chamber and the transverse baffles being interposed between the apertured end of the casing and the outlet.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILLIAM G. EADS.

Witnesses:

JENNIE M. EDSTROM,  
K. L. EADS.