G. Verplaetse,

Water Cooler.

No. 87,447. Patented Mar. 2. 1869.

Fig. 1.

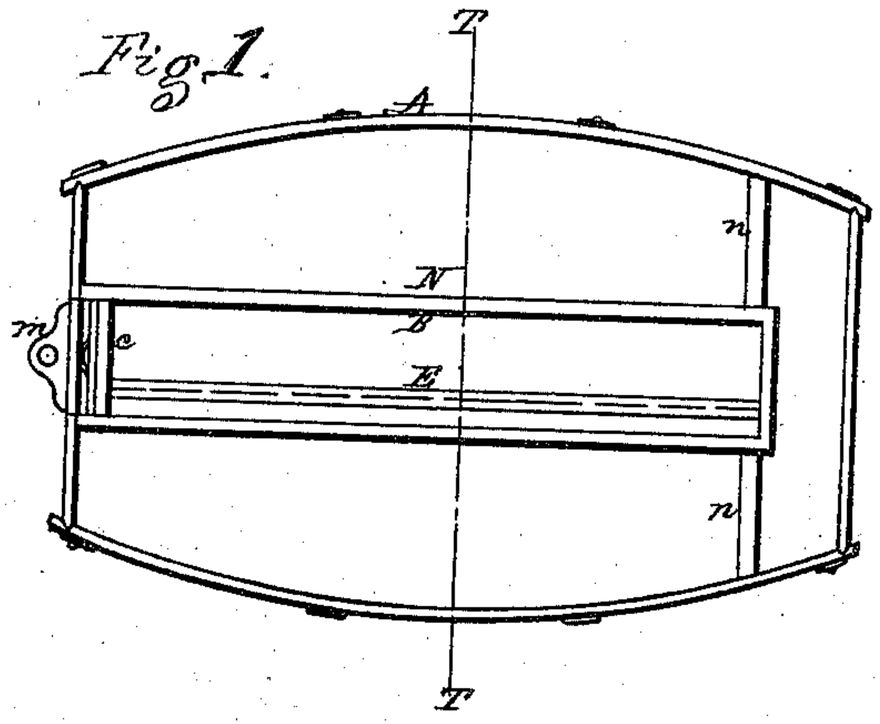
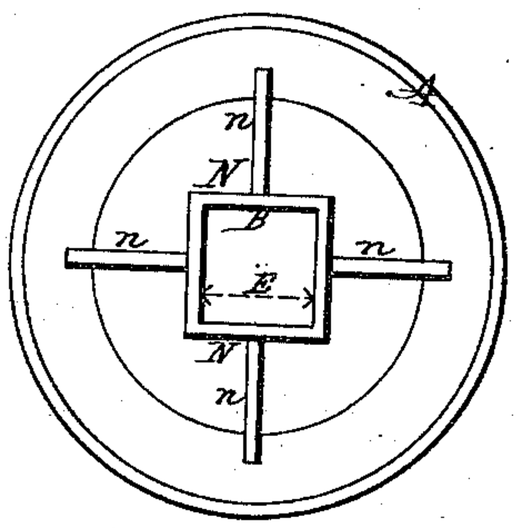


Fig. 2



Witnesses

C. C. Livings

W. C. Dey

Signature.

Gustaf Verplaetse

United States Patent Office.

GUSTAV VERPLAETSE, OF NEW YORK, N. Y.

Letters Patent No. 87,447, *dated March* 2, 1869.

IMPROVED BARREL FOR COOLING FLUIDS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GUSTAV VERPLAETSE, of the city and county of New York, and State of New York, have invented certain new and useful Improvements in Barrels and Analogous Vessels, for Cooling Fluids, and preserving them in a cool condition; and I do hereby declare that the following is a full and exact description thereof.

It is always desirable, and with some liquors is very essential, that the ice shall not be in contact with the beer or other fluid which is to be cooled, because the water produced by the gradual melting of the ice, even if pure and otherwise inoffensive, weakens or changes the character of the liquid by mingling therewith.

My invention is intended to overcome the difficulty in a manner more efficient and convenient than any before known, of equal simplicity and moderate cost.

I will first describe what I consider the best means of carrying out my invention, and will afterward describe the points which I believe to be new.

The accompanying drawings form a part of this specification.

Figure 1 is a longitudinal central section of a barrel provided with my invention.

Figure 2 is a cross-section on the line T T.

Similar letters of reference indicate corresponding parts in both the figures.

Referring to the figures, the casing B, of thin copper or analogous thin conducting-material, is introduced in a lateral position into a barrel.

It will be understood that, although I have represented in the figures only a barrel, my casing B may be introduced in buckets or various other vessels.

In the horizontal position of the casing B, the grating E, to support the ice, may extend horizontally along the whole extent of the casing B.

The mode of closing the mouth of the case B is a tight stopping, adapted not only to prevent the access of air, but also to retain the water produced by the melting of the ice.

An inside door, *c*, is introduced, fitted with India rubber, and adapted to form a closed joint, additional to and within the exterior door, *m*.

A casing of wood, N, surrounds the metallic case B, when in the horizontal position, and the whole is braced, as indicated by *n*.

The effect of the wood is to strengthen and protect the metallic lining; but if made absolutely continuous, it materially retards the transmission of the effect of the ice in lowering the temperature of the liquid.

When it is used merely as an enclosing-case, and strengthener for the metal case within, it may be made with openings.

In short, it may be a mere skeleton, or open-work frame, to strengthen the metal, without materially preventing the access of the liquid thereto.

The introduction of the ice, and the cleaning of any mud or other sediment left by its melting, are more easily effected in the horizontal form of the casing B than with the other forms.

A great number of inventions have been made for closing the mouths of self-sealing cans, and analogous vessels, with stoppers, which are made absolutely tight by the aid of India rubber and analogous material.

Any of these devices may be used with success in stopping the mouth of my casing B.

The casing B may be made of glass, porcelain, and various other materials, instead of thin metal or wood, but I prefer a metal which is not liable to oxidize or corrode. The precious metals, or copper or brass plated with precious metal, is preferable in situations where its expense would not be a too serious objection.

I propose to manufacture the casing B with stopper D and grating E, adapted to be attached with little labor, by means of a flange or analogous joining-means, to the heads of barrels, so that they may be introduced by the cooper when required, in the manufacture of barrels or other vessels.

Having now fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is as follows:

I claim the open-work case N, encircling the ice-case B, and adapted to serve as a strengthener thereof, without materially retarding the transmission of caloric thereto, the ice-case B having a tightly-closable mouth, and all the parts being arranged, relatively to each other and to the vessel A, substantially as and for the purposes herein set forth.

In testimony whereof, I have hereunto set my name, in presence of two subscribing witnesses.

GUSTAV VERPLAETSE.

Witnesses:

THOMAS D. STETSON,

C. C. LIVINGS.