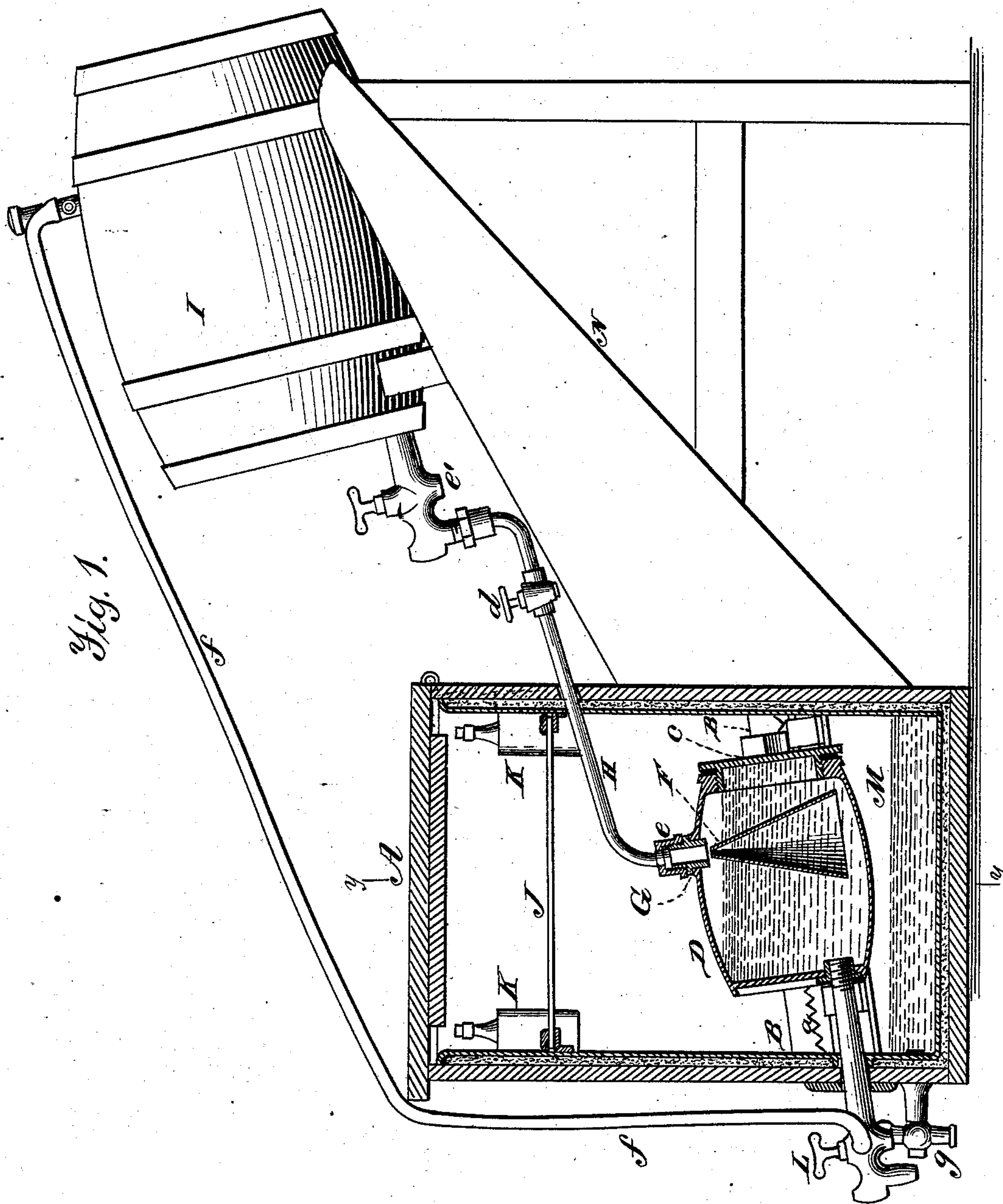


J. BURKHART.  
Beer-Cooler.

No. 224,869.

Patented Feb. 24, 1880.



*Witnesses.*  
*A. Ruppert,*  
*Robert Everett*

*Inventor.*  
*Jacob Burkhardt.*  
*By Theo. Munger atty*

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Fig. 2.

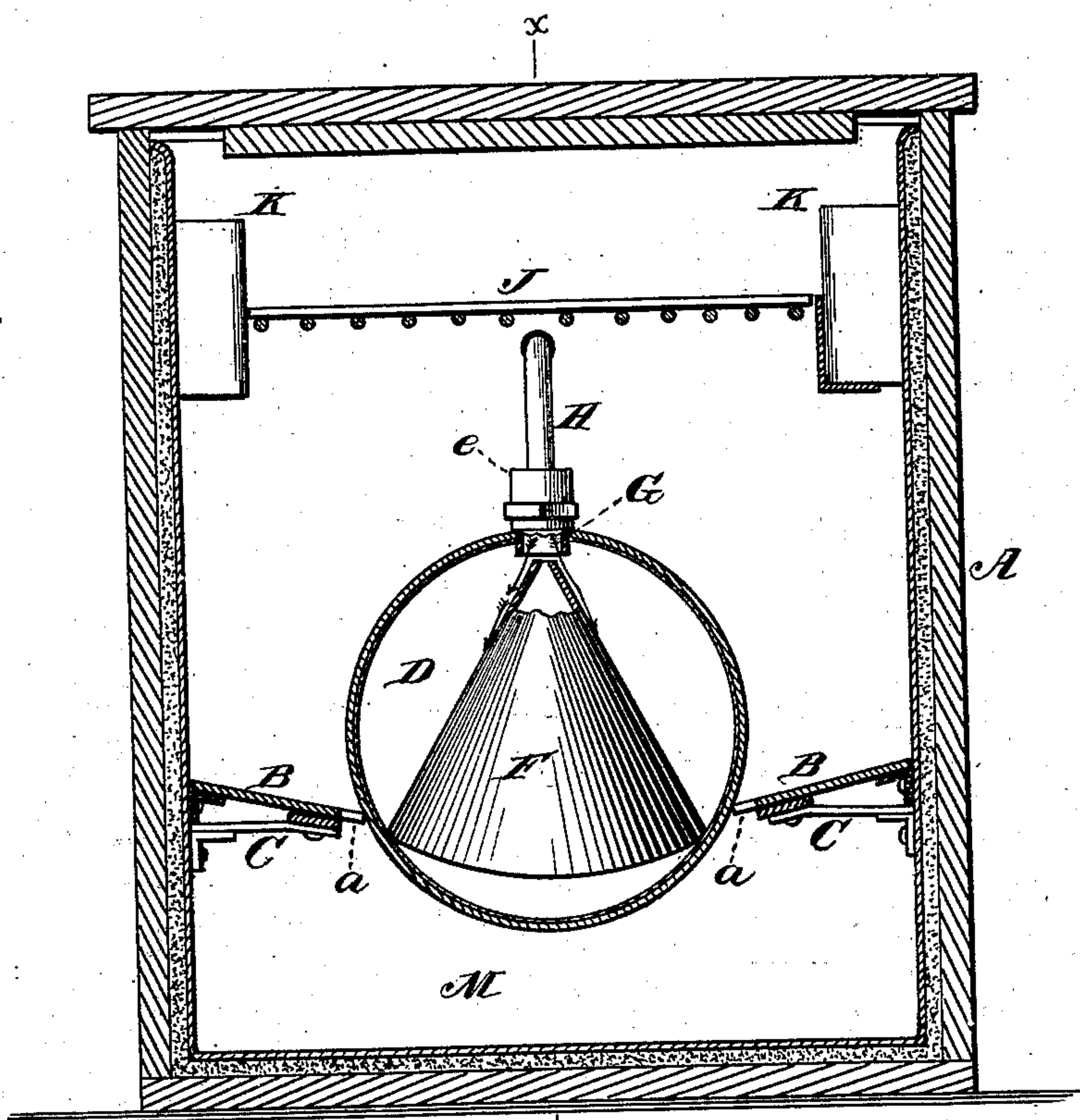


Fig. 3.

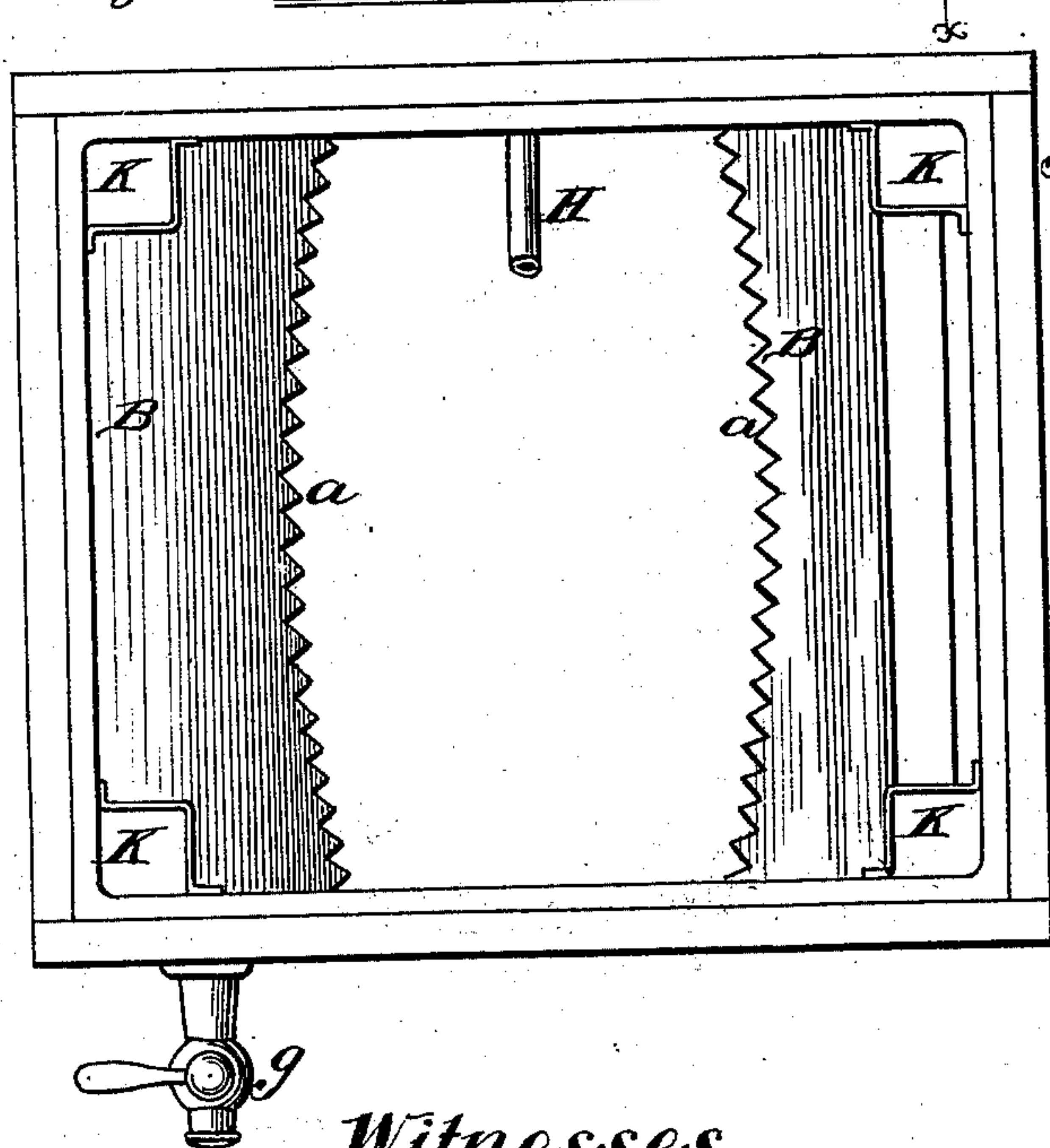
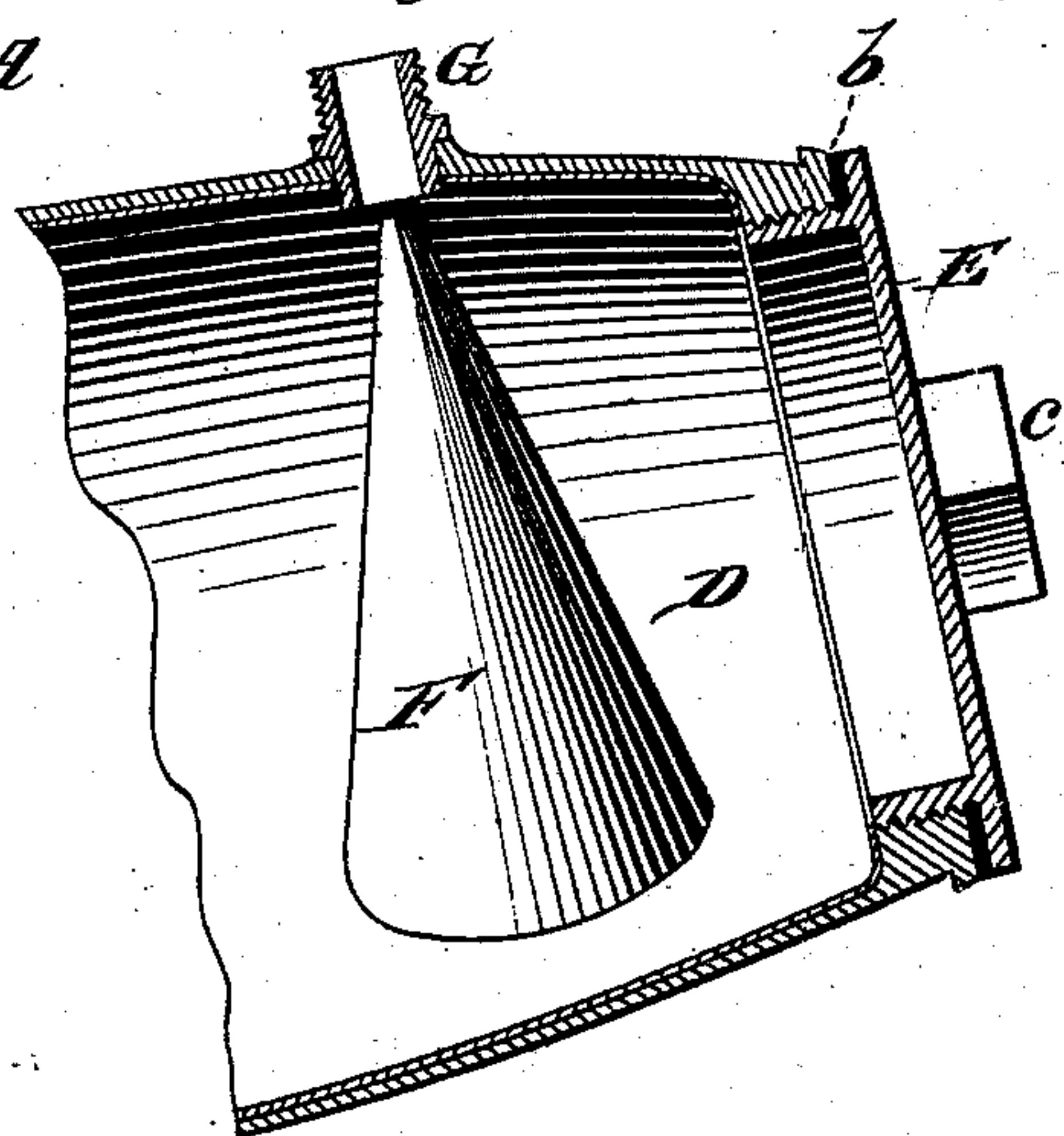


Fig. 4.



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# UNITED STATES PATENT OFFICE.

JACOB BURKHART, OF WASHINGTON, DISTRICT OF COLUMBIA.

## BEER-COOLER.

SPECIFICATION forming part of Letters Patent No. 224,869, dated February 24, 1880.

Application filed August 5, 1879.

*To all whom it may concern:*

Be it known that I, JACOB BURKHART, of Washington, in the District of Columbia, have invented certain new and useful Improvements in Apparatus for Cooling Beer; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a vertical sectional view, taken through line *x x* in Fig. 2, of a beer-cooler embodying the improvements in my invention, a beer-jack and beer-keg connected thereto being shown in elevation. Fig. 2 is a transverse vertical sectional view taken through line *y y* in Fig. 1. Fig. 3 is a plan view, having the lid of the box, the rack, and the cooling-vessel removed; and Fig. 4 is a sectional detail view of the cooling-vessel, internal inverted funnel, and the removable head to said vessel.

This invention relates to certain improvements in apparatus for cooling beer; and to this end it consists, first, in the combination, in a beer-cooling apparatus, of a cooling-vessel having an inverted internal funnel located directly under the bung, where the liquid to be cooled enters, whereby the liquid, on its entrance to the cooler, will be spread out in a thin stratum and rapidly cooled, as more fully hereinafter specified; second, in a beer-cooling apparatus, inclined shelves having serrated edges and skeleton supporting-frames, in combination with a cooling-vessel, as and for the purposes more fully hereinafter specified; and, third, in the combination, in a beer-cooling apparatus, of an inclosing-vessel provided with a removable rack in its upper part, having pockets at its corners, and with inclined serrated shelves in its lower portion and a cooling-vessel, substantially as more fully hereinafter set forth.

Referring to the drawings, A designates a box of the construction ordinarily used in refrigerators, in this, that it is lined with galvanized iron and packed in any of the well-known ways practiced by manufacturers of these articles.

B designates removable shelves having toothed or serrated inner edges, *a*, said shelves being located a short distance above the bottom of the box A and upon removable supporting skeleton-frames C, of heavy galvanized iron. The shelves B are also of galvanized iron.

A cooling-vessel, D, made of copper and lined both inside and outside with block-tin, is provided with a removable head, E, of similar material, similarly lined, and an inverted funnel, F, of copper, lined inside and outside with block-tin or other suitable material. The head E is screwed into the end of the cooling-vessel D, a packing, *b*, of rubber or the like, being interposed to make the vessel airtight, and is provided with a rectangular projection, *c*, to which a wrench may be applied for removing the head when it becomes necessary to clean the inside of the vessel.

The induction pipe or bung G of the cooling-vessel is located back of the center of the same, and the inverted funnel F is located directly beneath it, as shown. The cooling-vessel D rests upon the shelves B, which incline downward from the rear to the front of the box A, in order to give the necessary inclination to the cooling-vessel D to permit it to discharge its contents.

A pipe, H, of block-tin, is passed through the rear wall of the box A, and is provided on the outside of the box A with a stop-cock, *d*, and at its ends with the reverse couplings *e* and *e'*. Block-tin pipe is employed for the reason that it is sufficiently flexible to permit the coupling with the cooling-vessel and the spigot of the beer-keg I to be made and disconnected readily at will. The upper portion of the box A is provided with a hinged or removable rack, J, and pockets K at the corners or along its sides. The rack is for the reception of meats, vegetables, and the like, and the pockets to receive bottles containing liquors. A spigot, L, is screwed into front head of the cooling-vessel D, and its stop-cock is provided with means for attaching the usual flexible tubing *f*, which admits air to the vent of the beer-keg. The space below the shelves B is used to hold the ice-water created by the drippings from the ice, which latter is placed around the cooling-vessel D and prevented



from coming in contact with the water by the shelves B. The notches or serrations *a* permit the drippings from the ice to pass to the space M without permitting the ice to pass through them.

The beer-keg may be placed on a jack, N, attached to the box A, when space will conveniently permit, or it may be placed at a distance therefrom by lengthening the block-tin pipe; but it must always be placed at a greater height than the cooling-vessel D to insure a flow of the beer, except when air is used to force the beer from the keg. The ice-water space M is provided with a spigot, *g*.

The keg of beer having been connected to the cooling-vessel and the stop-cock *d* opened, the beer will flow to the cooling-vessel D, passing down over the inverted funnel F, as indicated by the arrows in Fig. 2, which will cause it to spread and be thereby rapidly cooled. After the vessel D has been filled to its capacity (and that should be to the extent of about two gallons) each glass of beer withdrawn from the cooling-vessel will be replaced by another from the keg until the beer in the latter has been exhausted, when the stop-cock may be closed, leaving the cooling-vessel still full, and another keg connected to the pipe.

By reason of the fact that the cooling-vessel is provided with a removable head no difficulty is experienced in keeping its interior clean.

The arrangements for keeping the ice from coming in contact with the water prevent unnecessary waste, and in fact afford a saving of nearly fifty per cent. in the consumption of ice. The internal mechanism being removable, the

inside of the box may be kept always clean. The inverted funnel causes the beer to be spread out as it enters the vessel D, and rapidly cools it, while by its location it introduces the beer near the rear of the vessel, so that the coldest beer will be first drawn therefrom.

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

1. The combination, with a beer-cooling apparatus, of the cooling-vessel D, having an inverted internal funnel, F, located directly under the bung G, whereby the beer, on its entrance to the cooler, will be spread out in a thin stratum and rapidly cooled, substantially as specified.

2. In a beer-cooling apparatus, the inclined shelves B, having serrated edges *a*, and the skeleton-frames C, in combination with the cooling-vessel D, substantially as and for the purposes set forth.

3. The combination, in a beer-cooler, of the vessel A, provided with a rack, J, in its upper part, having pockets K at its corners, and with inclined shelves in the lower part of said vessel, with the cooling-vessel D, the whole arranged substantially as and for the purposes specified.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of August, 1879.

JACOB BURKHART.

Witnesses:

THEO. MUNGEN,  
H. CLAY SMITH.