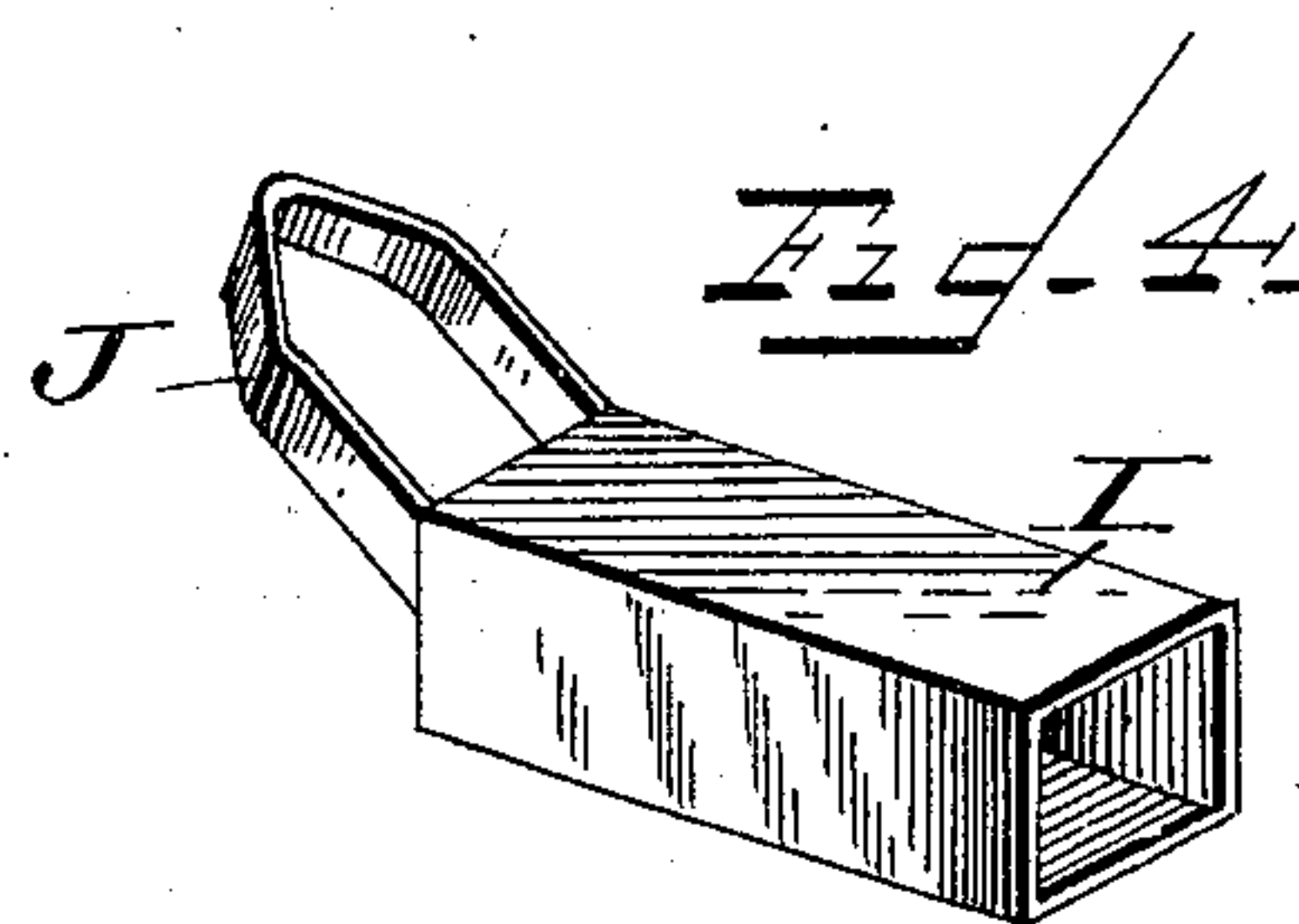
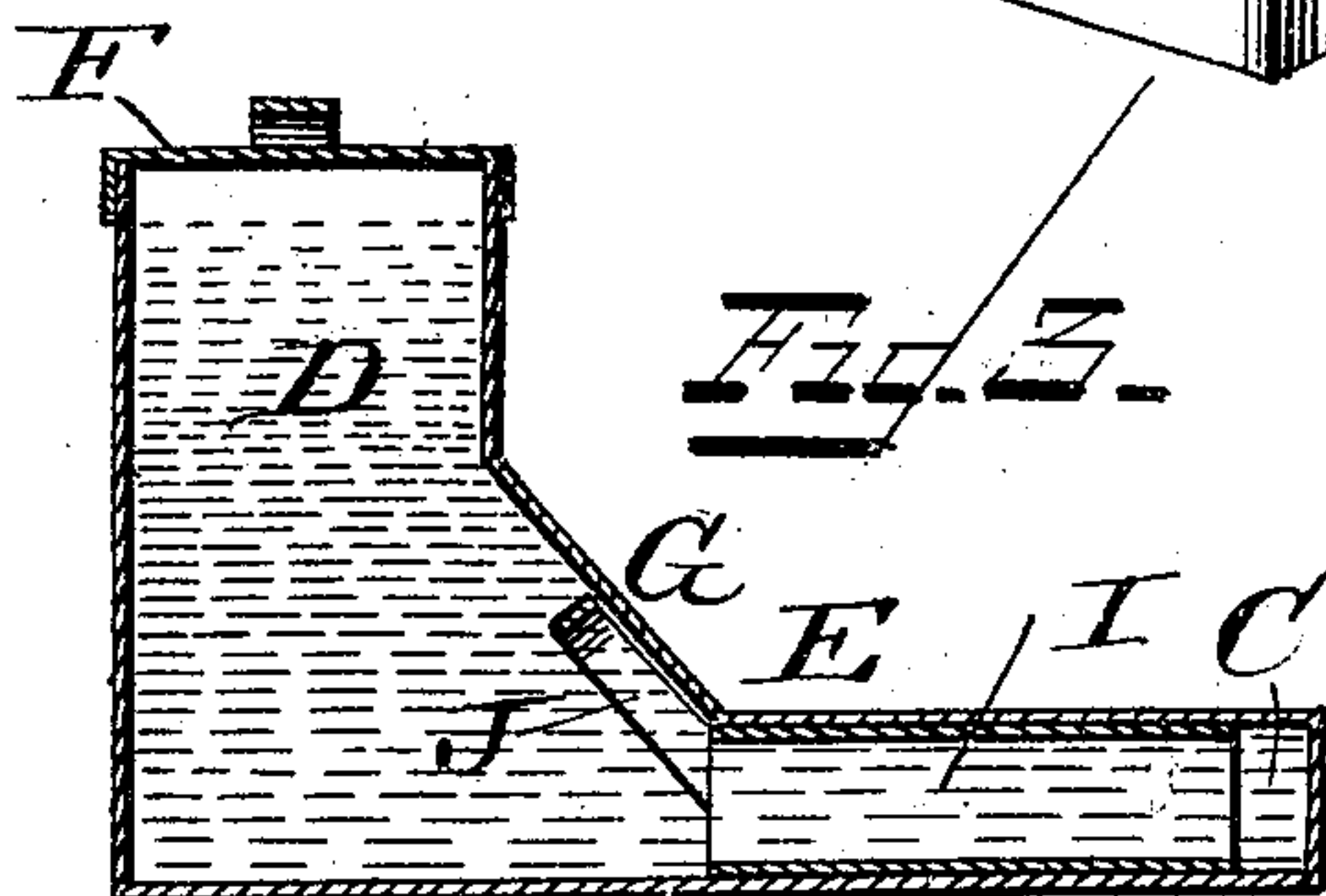
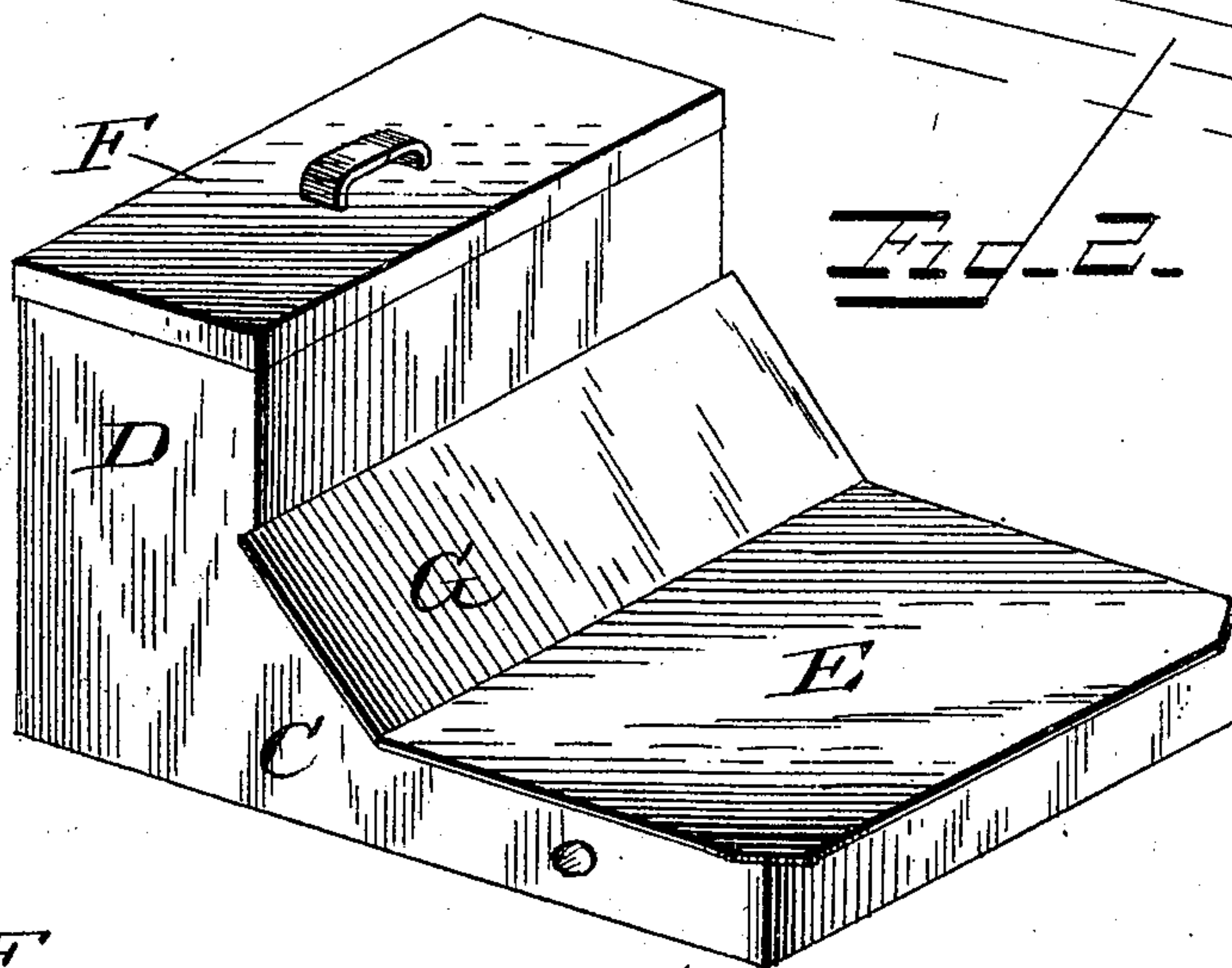
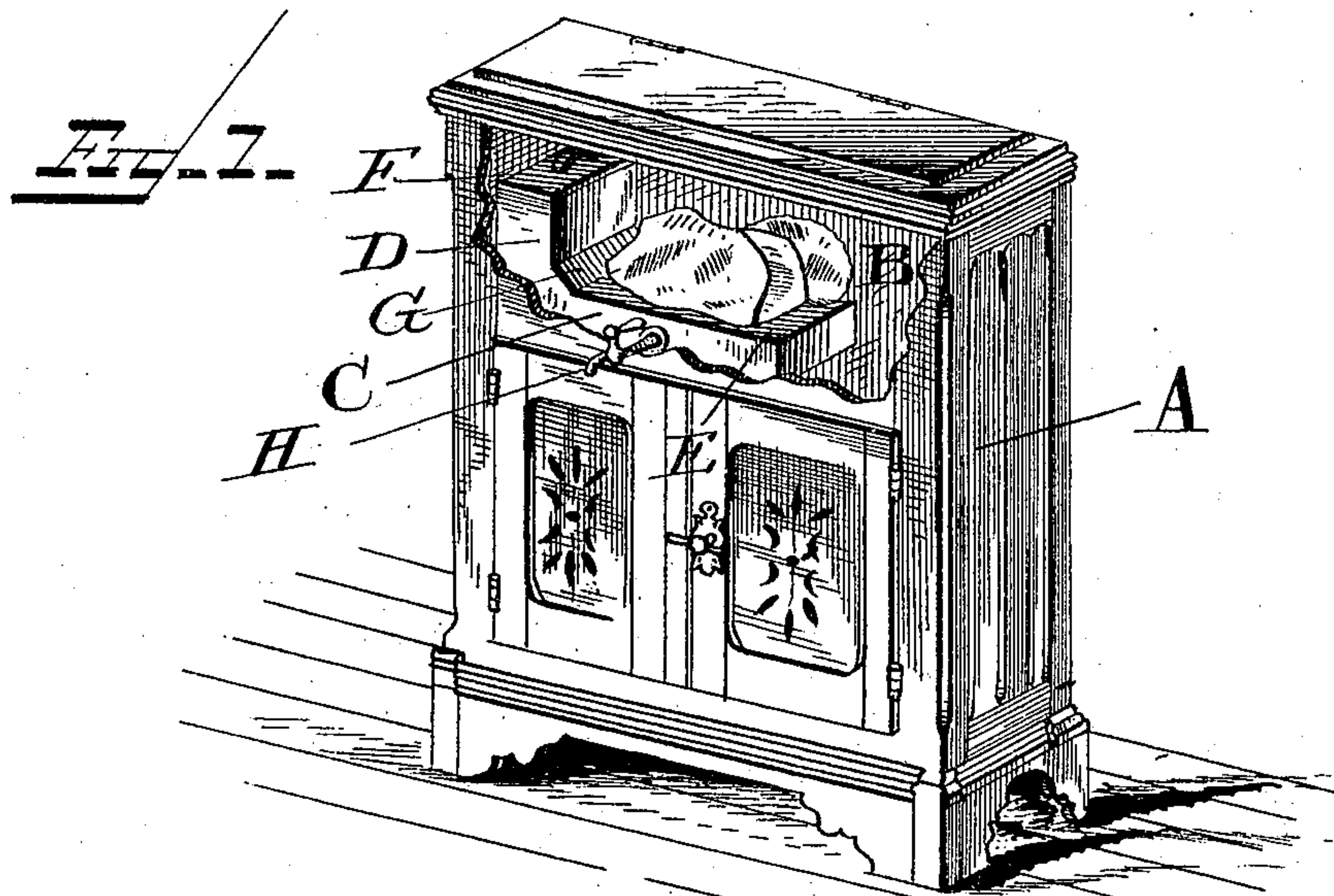


(No Model.)

J. E. GUENTHER.
WATER COOLING ATTACHMENT FOR REFRIGERATORS.
No. 502,562. Patented Aug. 1, 1893.



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UNITED STATES PATENT OFFICE.

JOHN EDWARD GUENTHER, OF OWENSBOROUGH, KENTUCKY.

WATER-COOLING ATTACHMENT FOR REFRIGERATORS.

SPECIFICATION forming part of Letters Patent No. 502,562, dated August 1, 1893.

Application filed January 18, 1893. Serial No. 458,782. (No model.)

To all whom it may concern:

Be it known that I, JOHN EDWARD GUENTHER, a citizen of the United States, and a resident of Owensborough, in the county of Daviess and State of Kentucky, have invented certain new and useful Improvements in Water-Cooling Attachments for Refrigerators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a refrigerator, provided with my improved water-cooling attachment; a portion of the upper part of the refrigerator being broken away to show the interior of the ice-chamber fitted with my improved water-cooling attachment. Fig. 2 is a perspective view of the said water-cooling attachment, removed from the refrigerator. Fig. 3 is a transverse vertical sectional view of the refrigerator and water-cooling attachment, showing the removable inside brace of the latter; and Fig. 4 is a perspective view of said brace or support, removed from the water-cooling attachment.

Like letters of reference denote corresponding parts in all the figures.

This invention relates to water-coolers, or water-cooling-attachments for refrigerators, of the type described in Letters Patent of the United States No. 314,175, granted to me on the 17th day of March, 1885, and it consists in an improved construction of the device described and claimed in the aforesaid Letters Patent, having for its object to simplify and strengthen the same and make it more easy to clean, as will be hereinafter more fully set forth.

Referring to the drawings, the letter A designates a refrigerator of any approved construction, having the usual ice-chamber, B, in its top-part. Upon the bottom of the ice-chamber is placed my improved water-cooling attachment, which consists of a flat rectangular closed box or tank, C, of tin, galvanized sheet-iron, glass, or any other suitable material, provided at either end or side with a raised reservoir, D, preferably of the same material as the tank and integral therewith.

The flat box or tank C is closed permanently on top by a flat plate or cover, E, forming a tray upon which the ice is placed; and the reservoir D has a removable cover, F, by removing which the reservoir may be filled with fresh water.

The flat top or tray E is connected to the adjacent vertical side of the reservoir by a slanting roof G, and the closed tank C is provided with one or more faucets, H, for drawing off the water, said faucets projecting through holes bored in the sides or ends of the refrigerator casing, according to the location of the faucets, which may be in the sides, ends, or back part of the tank, as convenience and expediency may direct.

In order to maintain the weight of the ice upon the flat tray or top E of tank C, and prevent it from sagging or buckling under the weight of the ice, the interior of the tank is provided with a removable brace or support, the construction of which is clearly shown in Fig. 4, from which it will be seen that it consists of a box I, of suitable length, square in cross-section, open at both ends, and of a height corresponding to the inside height or depth of tank C between its top and bottom. This box is open at both ends, so as not to impede the flow of water in the tank, and is provided at its end nearest the upright reservoir D with a bail or handle J, placed in a slanting position. By means of this handle, the device may readily be removed from, and reinserted into, tank C, in the position shown in Fig. 3, in which position it forms an inside bearing or support for the middle-part of the tank-top or tray E, which has to support the weight of the ice. By the use of this brace or supporting device, I am enabled to make the top of the tank of comparatively thin material, thus reducing cost of manufacture as well as weight; and when it is desired to clean out the tank, the brace can easily be removed, and in a moment of time, by means of its handle J.

In operation this water-cooling attachment is placed upon the bottom of the ice-chamber, as illustrated in Fig. 1; the brace I J having first been properly inserted. Cover E is then removed, and tank C with its feed-reservoir D is filled with drinking water, after which the cover is replaced. The ice placed upon

the flat top E will, in a short time, thoroughly cool off the water in the flat tank below, which may be drawn off through the faucet for drinking purposes as occasion requires. It is desirable to always keep the flat cooling-tank C filled with water, which is easily done by maintaining a proper "head" of water in the feeding-tank or supply-reservoir D.

After this attachment with its contents has once been thoroughly cooled, it will operate, in a measure, as a storage tank for the cold absorbed by it, thus assisting in the cooling of the contents of the refrigerator. As the water is neither in contact with the ice, nor with the contents of the provision chamber of the refrigerator, it cannot become contaminated by impurities in the ice, or become affected by the odor of articles placed in the provision chamber, but will remain pure and sweet to the last. Owing to the interior space afforded by the inclined roof G, the hand of a person can readily be inserted into the tank when it is desired to remove the interior brace or support and clean out the tank, which may thus always be kept perfectly clean and sweet. Where river water is used for drinking purposes, it is apt to contain considerable sediment which will settle on the bottom of the tank. Hence the desirability of so constructing this that it can be cleaned out easily and thoroughly when occasion requires.

I have illustrated and described the brace or support as being open at both ends, as this is the preferable manner of constructing the same, but it is obvious that the same may have one or both ends closed without depart-

ing from the principle of the invention. While the invention is more especially adapted for use in connection with refrigerators, it is equally applicable to ice chests and other similar objects being placed in the bottom or other convenient part thereof.

In constructing the invention any material found suitable may be employed, such for instance, as sheet-metal, wrought or cast-iron, painted, galvanized, or enameled, as may be desired.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination with a water cooling attachment consisting of a high reservoir and a low and flat closed box or tank attached to one side of and on a level with the reservoir, of the removable brace located in said box, substantially as described.

2. In a water-cooling attachment for refrigerators comprising a flat closed cooling-box or tank and a feed-tank or supply reservoir connected therewith, the removable interior brace or support consisting of a box square in cross-section, and provided with a bail-handle at one end, substantially as and for the purpose shown and set forth.

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

JOHN EDWARD GUENTHER.

Witnesses:

JOHN G. WEIR,
PAUL WEIR.