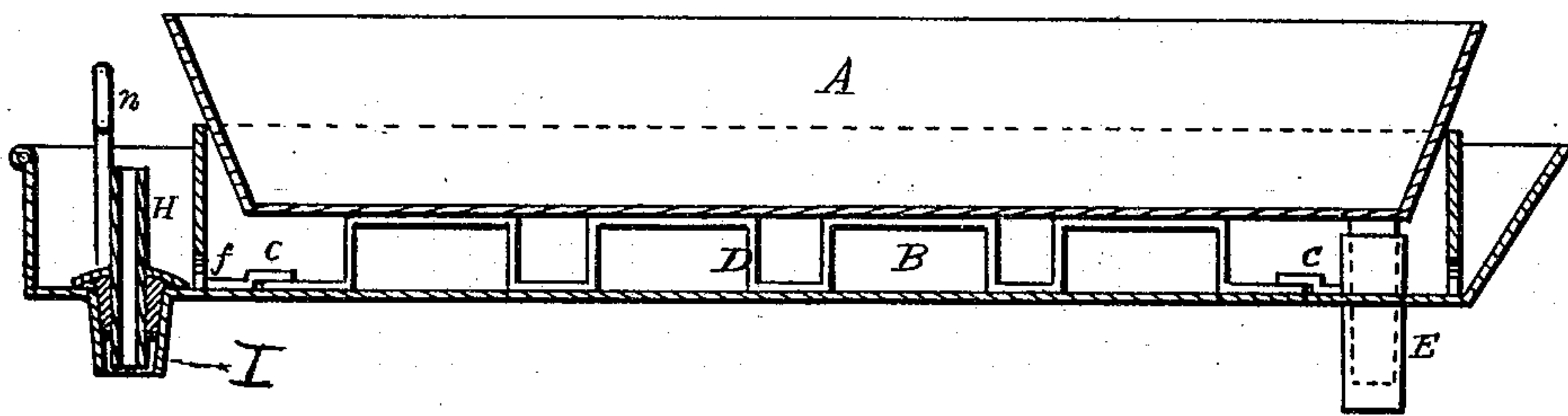


P. READ & J. H. ALLEN.  
Milk-Cooler.

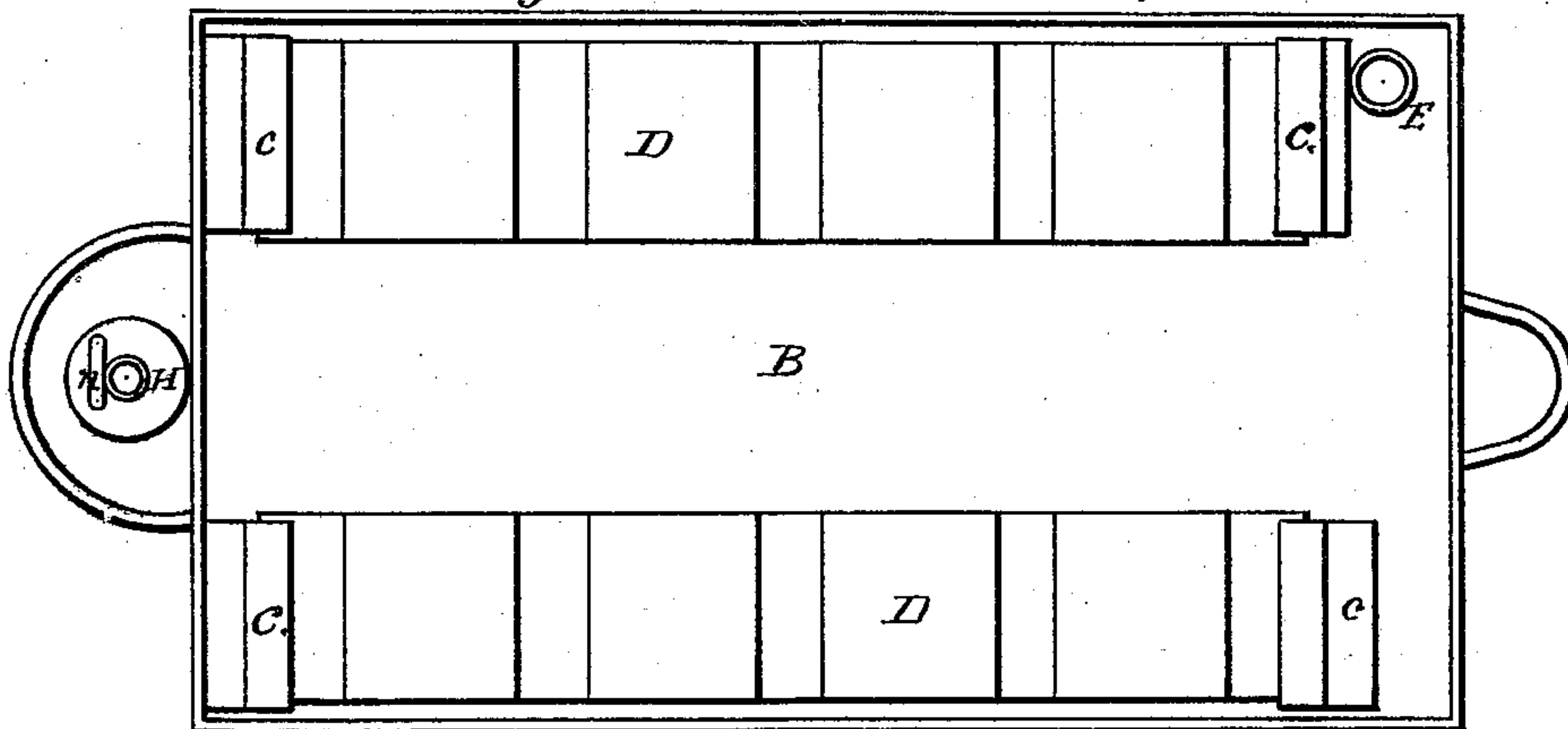
No. 164,480.

Patented June 15, 1875.

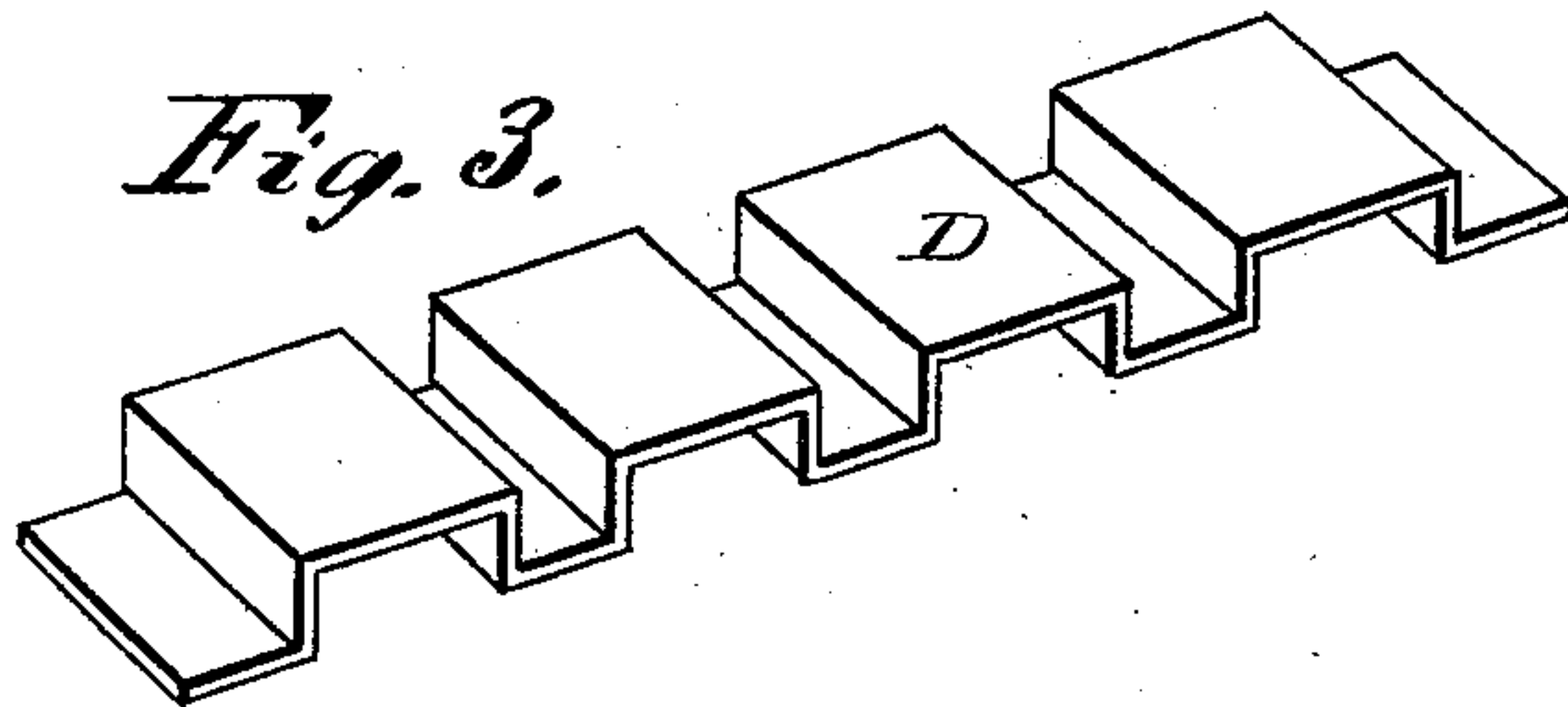
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

PERRY READ AND JOHN H. ALLEN, OF HINESBURG, VERMONT.

## IMPROVEMENT IN MILK-COOLERS.

Specification forming part of Letters Patent No. 161,480, dated June 15, 1875; application filed May 1, 1875.

*To all whom it may concern:*

Be it known that we, PERRY READ and JOHN H. ALLEN, both of Hinesburg, in the county of Chittenden and State of Vermont, have invented a new and valuable Improvement in Milk Pans and Coolers; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of our milk-cooler, and Fig. 2 is a plan view of the same. Fig. 3 is a detail view.

Our invention relates to combined milk pans and coolers; and it consists in novel removable metallic supports for the pan, arranged upon the bottom of the cooler, and in a novel construction and arrangement of eduction pipes and plugs, as hereinafter described.

A, of the drawings, represents our milk-pan, and B the cooling-pan. Upon the bottom of the latter vessel, are cleats *c*, as shown, for the purpose of holding and providing for the removal of the metallic supports for the pan. These cleats are firmly secured to the bottom of the cooling-pan, and are arranged in two pairs, as represented, near the ends of the cooler, respectively. The letter D represents our corrugated supports. They are constructed of sheet metal, and in the form shown on Fig. 3. When in use these supports are attached to the bottom of the cooler by forcing their flattened ends under the cleats *c*, as shown on Figs. 1 and 2, and their office is not only to serve as supports for the milk-pan, but to allow the cooling fluid with which the cooler is filled to flow freely from side to side thereof, and around the milk-pan. Whenever it is desirable, these supports are removed by sliding them sidewise toward the center of the cooler. This is often found necessary for cleansing purposes. It is obvious that these supports provide an even and reliable support for the milk-pan, without materially obstructing the flow and circulation of water in the cooling-pan. The letter E represents an eduction-pipe

in the bottom of the cooler, closed by a cork, or other suitable means, at its lower end, and H represents a like eduction-pipe located outside the cooler, within a raised disk, as shown.

It will be observed that the educt E is raised within the cooler, considerably above its bottom, so that several inches of water would remain even after the cork is withdrawn. It will also be seen that the summit of educt H is considerably higher than educt E.

This arrangement is designed to allow the operator to regulate the depth of water in the cooler at will, and to avoid the danger of an overflow when the water is being supplied to the cooler. A small opening, *f*, on a plane with the upper surface of the bottom of the cooler, leads from said cooler into the disk or dish outside the cooler, through which all the water can be drawn from the cooling-pan when desirable so to do.

The educt H is constructed in the form of a hollow stopple arranged within an outlet-tube, I, and is removable by means of an ear or handle, *n*, as shown.

It will be observed that this stopple has overlapping lugs or flanges, that, when in position cover the main outlet, and adapts it to serve as a valve for said outlet.

What we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the water-vat B, having outlets E and I, with the removable outlet-tube H, provided with handle *n*, substantially as described and for the purpose set forth.

2. The water-vat B, constructed as set forth, in combination with the milk-pan A, removable corrugated supports D, and cleats *c*, substantially as described and for the purpose set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

PERRY READ.  
JOHN H. ALLEN.

Witnesses:

ELMER BEECHER,  
LEONARD ANDREWS.