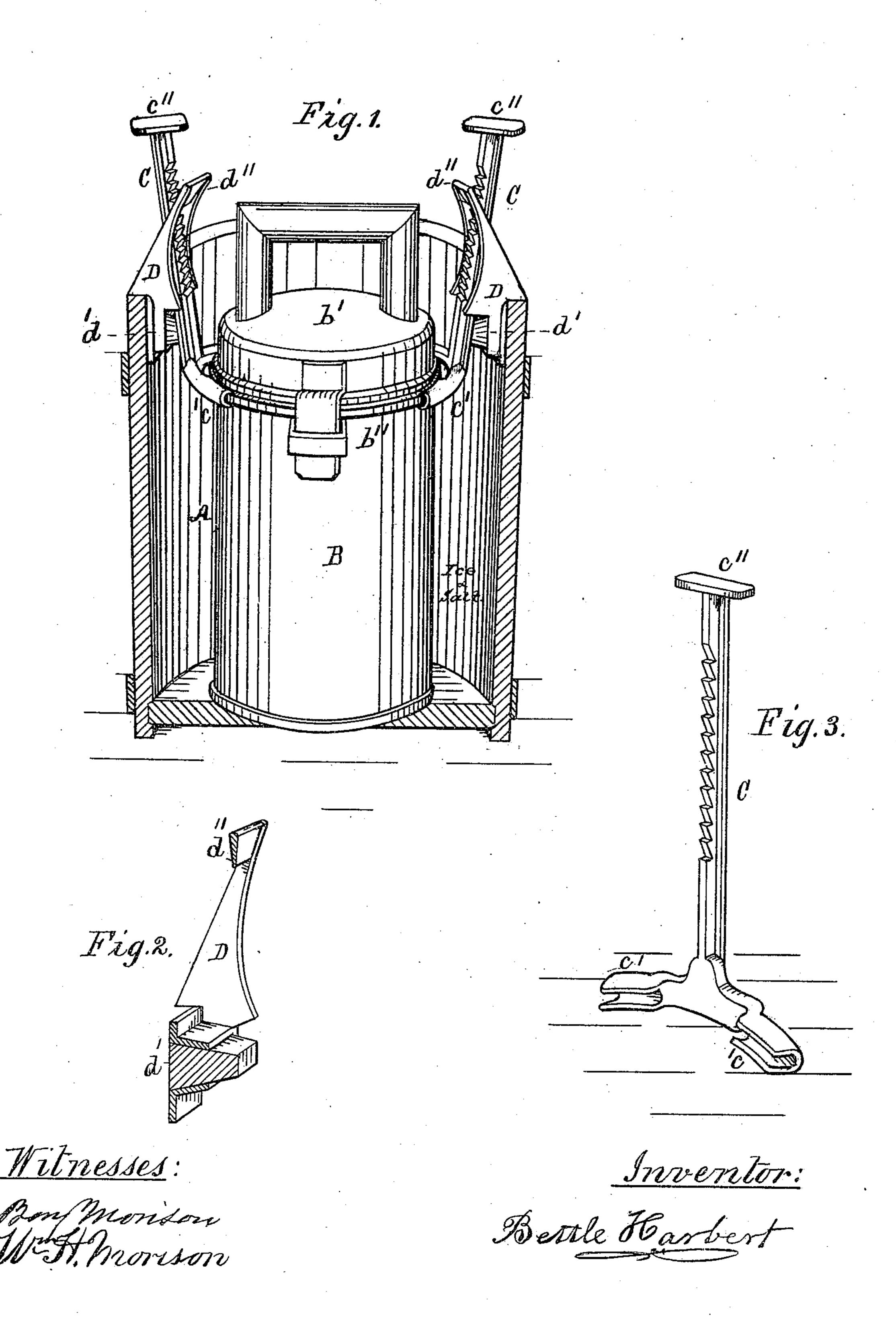
B. HARBERT.

ICE-CREAM FREEZER

No. 174,673.

Patented March 14, 1876.



UNITED STATES PATENT OFFICE.

BETTLE HARBERT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN ICE-CREAM FREEZERS.

Specification forming part of Letters Patent No. 174,673, dated March 14, 1876; application filed February 23, 1876.

To all whom it may concern:

Be it known that I, Bettle Harbert, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in Freezers for Ice-Cream, which improvement is fully set forth in the annexed specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the can and my invention applied, the front portion of the tub or ice-holder being cut away in order to expose the former. Figs. 2 and 3 are detached portions, enlarged, of Fig. 1.

The object of my invention is to keep the can securely down on the bottom of the tub, or preventing it from rising or being buoyed upward by the water of the melting ice which surrounds it during the latter portion of the operation of freezing and smoothing the cream, and also during the retailing of the ice-cream from the can—a result of importance, not only in holding the can firmly down in its proper position, but in avoiding the necessity of frequently drawing off the ice-cold water, and consequently losing its refrigerating effect, and requiring the substitution of more ice and salt.

The nature of my invention consists in the combination, with the two opposite sides of the inner upper portion of the tub, of respective stationary supports, provided each with an elastic cushion or spring, which will bear against an adjustable ratchet-bar, provided with two curved and grooved arms, which will fit or grasp the circular rim which projects around the upper end of the can below the removable cover of the latter, and pressed against by the spring or cushion in its respective support, while the ratchet-bar is prevented by its appropriate tooth from slipping upward in its place in an appropriate opening provided with a stationary catch, and thus the two described holders, acting simultaneously on the two opposite sides of the rim of the can, keep the latter firmly down in its proper position upon the bottom of the tub, as required.

Referring to the drawings, A is the tub; B, the can; b', the lid or cover of the can, and b'' the rim around the upper end of the latter and below the lower edge of the former; CC, the two ratchet-bars, and c' c' their two re-

spective grooved arms; D D, the supports, and d' d' their respective springs or cushions. The ratchet-bars C are each straight, and can be readily introduced and withdrawn into and out of an oblong opening in the support D, and can be loosely suspended therein by their respective heads c''. The upper boundary of the oblong opening in D has a wedge-shaped edge, d'', which fits between the ratchet-teeth of C, which are inclined at their under side edges, as shown, and consequently the bar C will easily slip downward in contact with said teeth, but will at the same time be prevented from slipping upward. The grooved arms c'c' of C are curved horizontally, so as to grasp. the presenting side of the rim b'' of the can, when the latter is placed concentrically on the bottom of the tub B, and the ratchet-toothed bar C pressed downward by hand into contact with the said rim, and then by the pressure of the spring or elastic cushion d', in co-operation with the appropriate tooth of the bar C and the wedge-shaped edge d'' of the support D, substantially as represented in Fig. 1.

The mode of applying and using my invention is as follows, viz: The can B containing the cream being placed concentrically in the tub A, and surrounded with broken ice and salt in the usual manner, and then oscillated until the cream has ceased to flow, the operator removes the lid b', introduces the two ratchet-bars C C through the respective openings in the supports D, and forcing them downward by hand with their backs sliding and pressing against the spring or cushions d', and their ratchet-teeth against the wedge-shaped holders d'', respectively, until the can B becomes firmly and rigidly held down on the bottom of the tub A, as indicated in Fig. 1. The lid b' is then reapplied and removed, as occasion may from time to time require the cream to be worked and smoothed in refrigerating, and in retailing it from the can in the saloon.

It will be readily understood, without any further explanation, that after the ratchet-bars C C have been applied, as described, the can cannot be buoyed upward by the accumulating water of the melted ice and salt, and that the cold water consequently need not be drawn off and thrown away, as heretofore, and more

ice and salt used to compensate for the loss of its refrigerating effect upon the cream in the can. In time the water of the melting ice and salt will necessarily rise toward the cover or lid of the fixed can, and sufficient portions of the said-water must be drawn off in that case to prevent its entering the can.

I claim as my invention—

1. The combination, in a freezing-tub for ice cream, substantially as described, of the supports D D, provided with the springs or cushions d'd', respectively, for giving the elastic pressure upon the lower ends of the ratchet-bars C C.

2. The ratchet-bar C, provided with the se-

ries of teeth inclined upward, as shown, and the grooved arms c' c', curved to fit over the projecting rim b'' of the can B, substantially as and for the purpose set forth.

3. The combination, in a freezer for ice-cream, substantially as described, of the supports D D, and the adjustable ratchet-toothed bars C C, with the projecting $rim\ b''$ of the can B, for the purpose of holding the can firmly down in the tub, as occasion may require.

BETTLE HARBERT.

Witnesses:

BENJ. MORISON, WM. H. MORISON.