J. SOLTER.

ICE-CREAM FREEZER.

No. 191,725. Patented June 5, 1877.

Fig. 1.

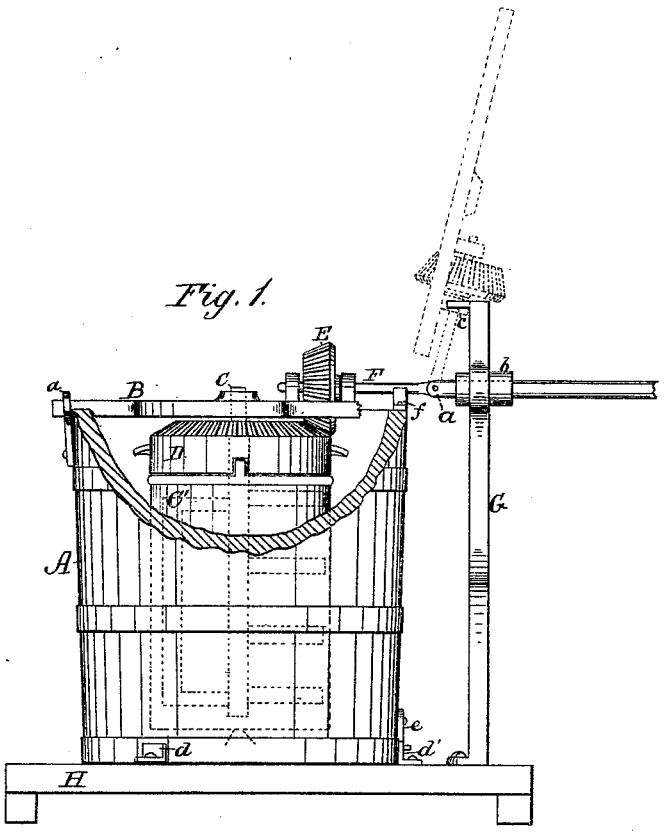

Fig. 2.

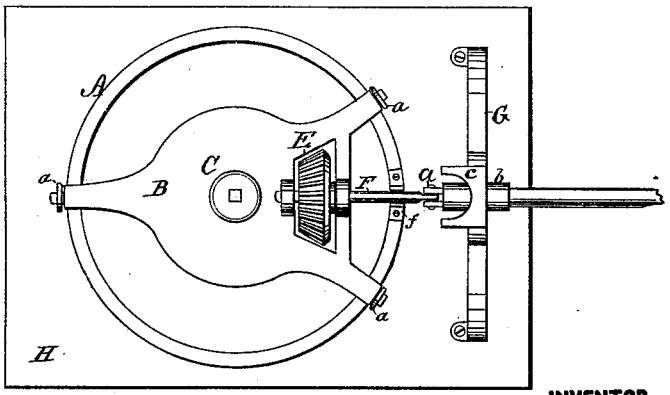

Fig. 3.

WITNESSES:

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JOHN SOLTER, OF BALTIMORE, MARYLAND, ASSIGNOR TO JOHN W. CONDON, OF SAME PLACE.

IMPROVEMENT IN ICE-CREAM FREEZERS.

Specification forming part of Letters Patent No. **191,725**, dated June 5, 1877; application filed April 17, 1877.

To all whom it may concern:

Be it known that I, JOHN SOLTER, of Baltimore city, State of Maryland, have invented a new and Improved Ice-Cream Freezer; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side view of the freezer, with the tub broken away and the elevated position of the top parts of the freezer indicated in dotted lines. Fig. 2 is a plan view; Fig. 3, a detail of one of the devices for fixing and locating the tub on the stand.

My invention relates to an improvement upon the patent granted to John W. Condon, July 13, 1875, for a similar invention, in which a stationary scraper is contained in a revolving cylinder, which scraper is held stationary by its connection with a top plate, while the cylinder is revolved by a horizontal shaft with a bevel-wheel that engages with corresponding beveled teeth on the top or cover of the cylinder.

The present improvement consists mainly in making the horizontal drive-shaft hinged or jointed, and fixing its outer extremity in an outside independent bearing, so that the inner portion of the shaft, with its bevel-wheel and the top plate of the freezer, may be together lifted from off the tub and supported away from the same whenever it is desired to remove the cylinder or inspect its contents, as hereinafter more fully described.

In the drawing, A represents the outer wooden case or tub, upon the top or rim of which is supported the top plate B, the same being held fixedly by means of hooks *a* upon the tub, which are passed around lugs upon the extremities of the three arms of the said top plate. In the central part of the top plate is loosely arranged the shaft of the scraper C, which is made square, so that it cannot turn. C′ is the cylinder which is arranged upon a step in the bottom of the tub, and is held steady by the shaft of the scraper, which extends through the cover D of said cylinder. This cover is provided with a set of beveled teeth upon its upper edge, which are engaged by a bevel-wheel, E, upon the horizontal shaft F, which latter is journaled in bearings in the top plate. This top plate serves as a bearing for the horizontal drive-shaft, and also protects the gear-teeth of the cover of the cylinder from being obstructed with ice and salt, which are liable to get into the same as they are added from time to time.

Now, it will be seen that, in order to remove the cylinder or inspect its contents during the freezing operation, it is necessary to lift off the top plates, which requires an adjustment of a coupling in the shaft each time the said top plate is lifted off. Instead of employing a detachable coupling in the shaft F, I simply construct the same with a joint or hinge, *a*, and locate the outer section of the shaft F (which connects with a crank or driving-wheel or pulley) in an independent bearing, *b*, in an outside frame, G. Now, it will be seen that in removing the top plate from the tub all that is necessary is to raise the same with its shaft and bevel-wheel upon the joint *a*, and allow the same to be supported in a nearly vertical position against the upper extension of the frame G. This upper extension I construct with a seat or support, *c*, in which the bevel-wheel rests, to prevent the top plate from slipping sidewise from its elevated position. The bearing *b* also is elongated, so as to make a better support for the shaft when the plate is elevated.

In order to fix the tub upon the base-piece H in proper position for the operation of the movable parts at the top of the tub, it is fixed in a given position by means of three or more lugs, *d*, affixed to the base; and to prevent the tub from turning axially, which would throw the open bearing *f* out of line with the shaft, one of these lugs, *d′*, is notched, and a locking-catch, *e*, on the tub is made to fit therein, so that the proper position of the tub is always determined, both as respects its distance from the frame G and the side of the tub to be presented to the same.

Having thus described my invention, what I claim as new is—

1. The shaft F, made jointed, as described, and having its outer extension arranged in a stationary bearing and its inner section com-

bined with the removable top portion of an ice-cream freezer, substantially as and for the purpose described.

2. The frame G, provided with a seat, *c*, combined with the jointed shaft, and arranged to support the removable top portion of the freezer, substantially as described.

3. The frame G, having a single elongated bearing, *b*, combined with the jointed shaft F, for the purpose described.

4. The tub, having open bearing *f* and catch *e*, in combination with the driving-shaft and the lugs *d d'*, one of which is notched for the reception of the catch, to prevent the turning of the tub, substantially as described.

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Witnesses:
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