

(No Model.)

J. TURNER.
CREAMING CAN.

No. 356,511.

Patented Jan. 25, 1887.

Fig. 1

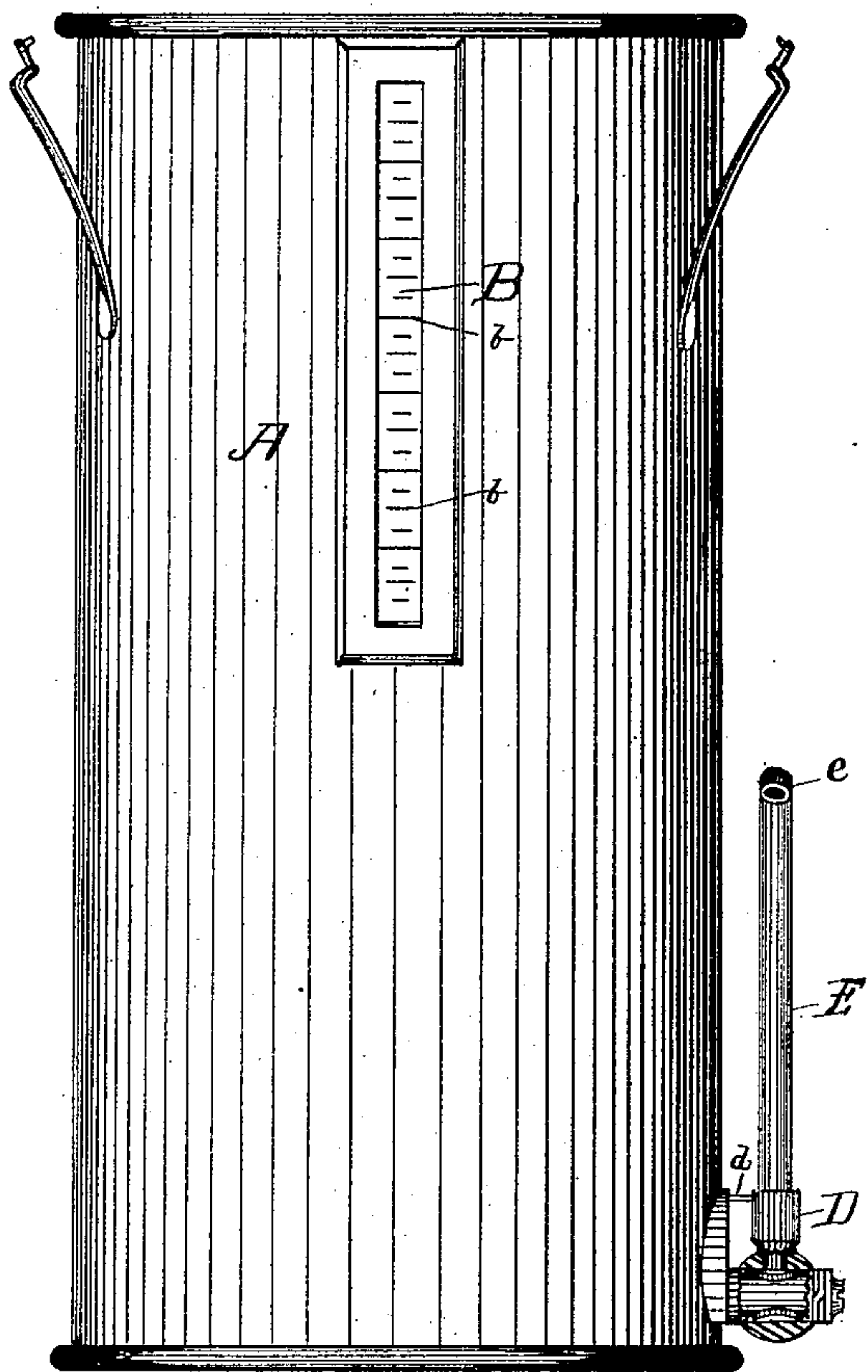


Fig. 2.

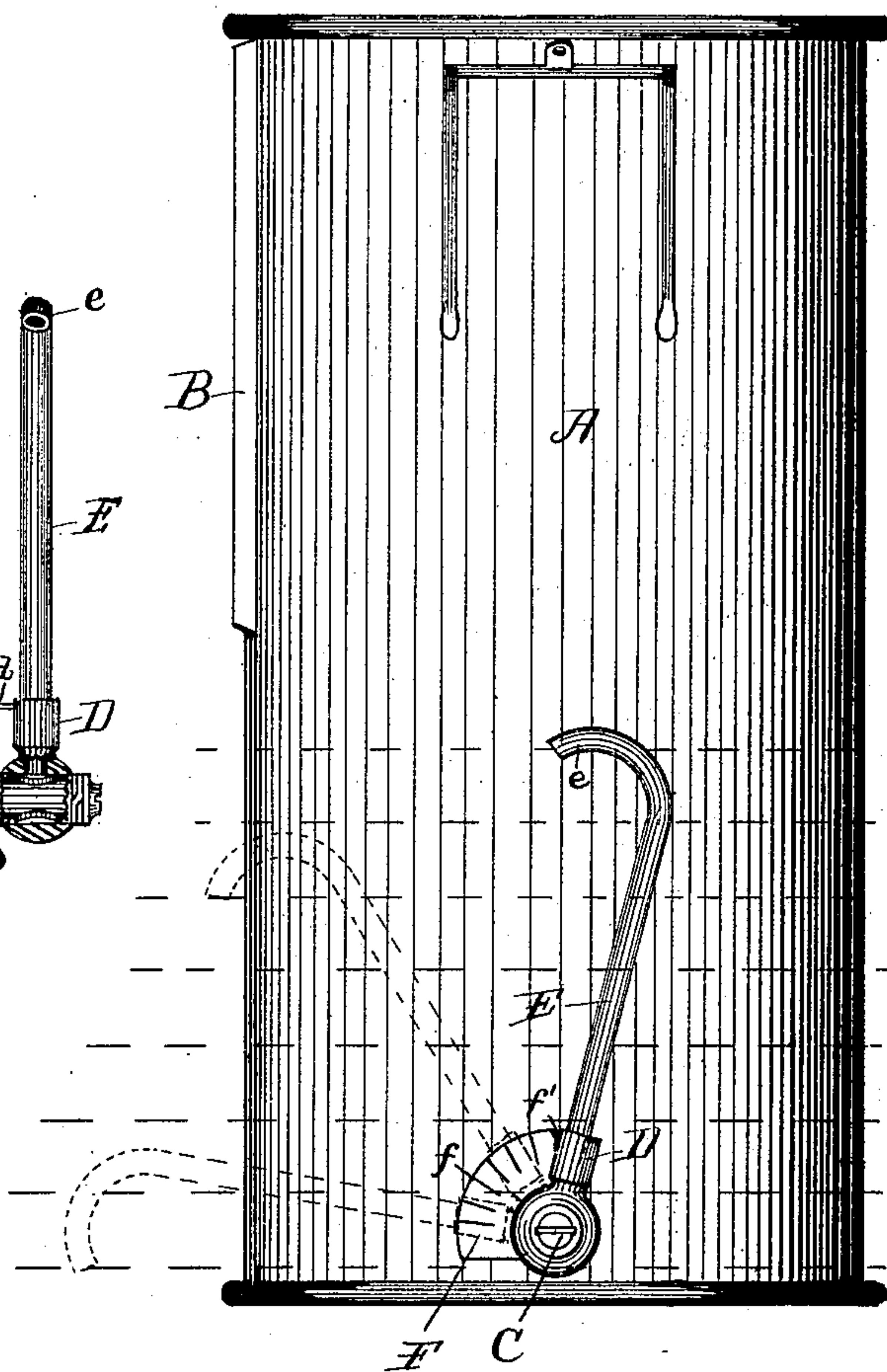
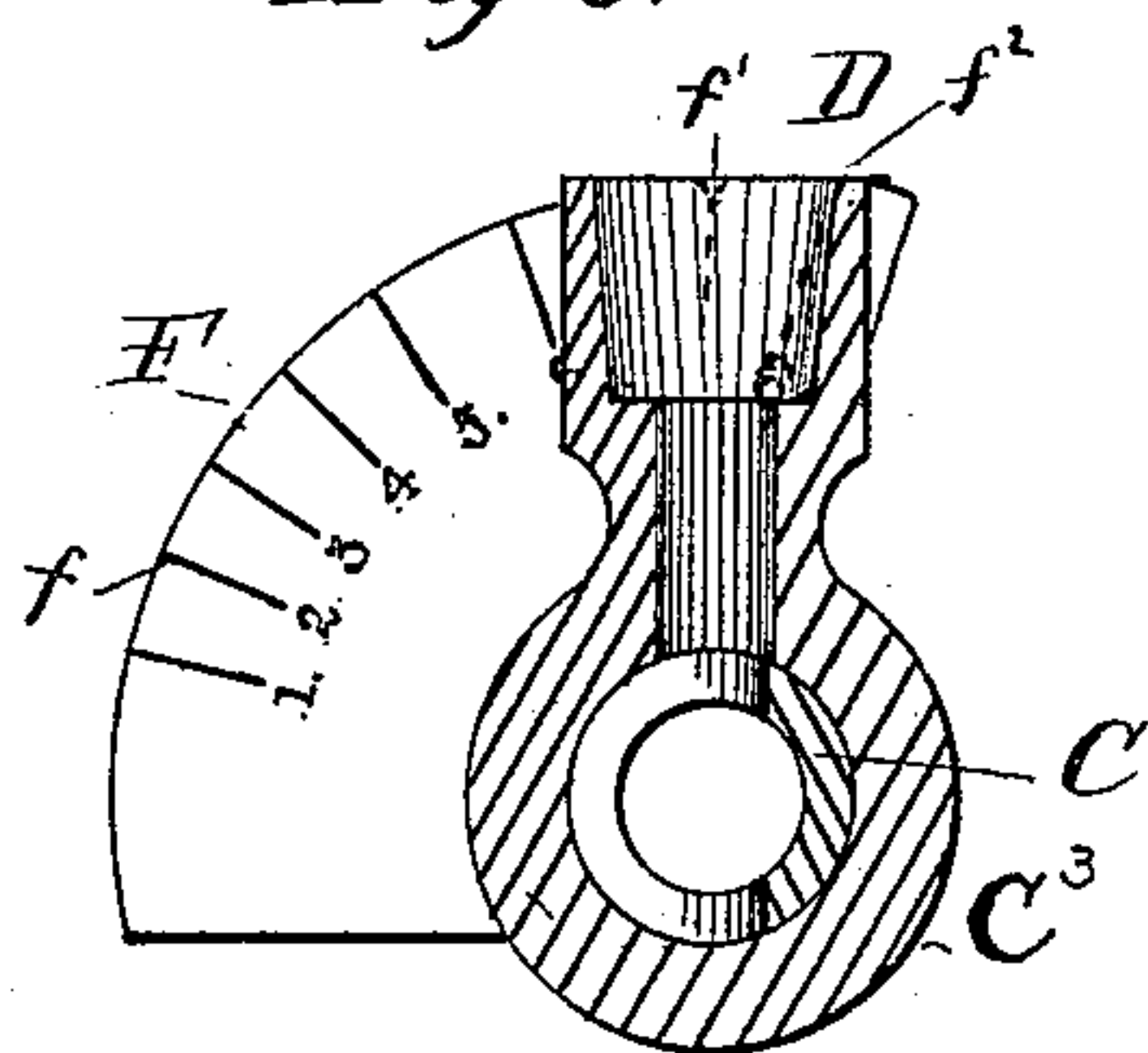


Fig. 3.



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

JOHN TURNER, OF CHICAGO, ASSIGNOR TO JOHN BOYD, OF ELMHURST,
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CREAMING-CAN.

SPECIFICATION forming part of Letters Patent No. 356,511, dated January 25, 1887.

Application filed March 15, 1886. Serial No. 195,239. (No model.)

To all whom it may concern:

Be it known that I, JOHN TURNER, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Creaming-Cans, of which the following is a specification.

My invention relates to cans for setting milk for cream which are provided with automatic devices for separating the milk from the cream by withdrawing the former from the bottom of the can and leaving the cream therein, by means of an adjustable faucet or draw-off nozzle. These cans are ordinarily provided with a transparent window having a graduated scale to indicate the thickness of the cream in the can. The draw-off nozzle, which communicates with the bottom of the can, is then adjusted in height to the thickness of the cream, whatever that may be, so that the faucet may be set by the attendant and the milk left running without further attention. The draw-off nozzle which is now commonly in use, and which for many obvious reasons is the best, simplest, and cheapest adjustable draw-off nozzle for the purpose, consists simply in a rotary valve carrying a tube of the requisite length, the curved mouth of which tube may be adjusted at different heights, or the valve entirely closed by simply swinging or turning the same into different positions. Great difficulty, however, has been experienced in the practical use of these rotary adjustable nozzle-tubes in setting or fixing the mouth of the nozzle at the required height to correspond to the depth of the cream. Owing to the curved or cylindrical surface of the can, an ordinary graduated scale corresponding to the transparent cream-scale at the top of the can cannot be used, or if it is employed it is of very little service or assistance in adjusting the position of the rotary nozzle, especially at its lower positions. To overcome this difficulty in the use of these rotary adjustable nozzles in my invention, which consists in the novel devices or combination of devices herein shown and described, and more particularly set forth in the claim, I provide the can near the valve with a graduated-arc scale and the swinging tubular arm of the valve with a pointer, so that the nozzle may be set by this

scale at any desired height to correspond to the depth of the cream as indicated by the cream-scale at the top of the can. The graduation-marks upon this arc scale correspond to the graduation-marks upon the graduated cream-scale; but it will be observed that the graduation-marks upon the arc scale are not equidistant apart, as the tube has to swing through different arcs to depress its mouth a unit distance as it moves from near a vertical position to nearly a horizontal.

In the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts, Fig. 1 is a side elevation of a Cooley creamer-can provided with my invention, and Fig. 2 is a front view of the same. Fig. 3 is a detail sectional view of the nozzle.

In said drawings, A represents the can, which may be of the construction shown or of any other suitable construction.

B is the transparent graduated cream-scale or window, having marks *b*, to indicate the depth of the cream in the can.

C is a valve communicating with the interior of the can near its bottom, consisting of a hollow stationary plug, C', having peripheral opening or port, and a rotary or revolving shell, C'', fitted thereon. This rotary part of the valve is provided with a tubular arm, D, in which fits the draw-off or nozzle tube E. The nozzle-tube E is furnished with a curved mouth or end, *e*, to properly deflect or direct the stream flowing therefrom when the nozzle-tube is turned in different positions. The tubular arm D is provided with a pointer, *d*, and the can or the plug part C' of the valve, is furnished with a graduated-arc scale, F, having graduating-marks *f*, to indicate when the arm D and its tube E is swung into position to bring the mouth *e* of the nozzle to heights corresponding to the marks or graduations *b* on the cream-scale B. The scale-plate F is preferably cast integral with the hollow plug part C' of the valve, and is soldered directly to the can, and it thus at the same time forms a flange or shoulder for the better and more secure attachment of the valve to the can. The draw-off nozzle or tube E may be made integral with the arm D and shell parts C of the valve; but it is preferable to make it de-

tachable, as shown in the drawings, for convenience in cleansing as well as manufacture and shipment. The distance between the graduating marks f varies, as the arm D must
5 move through different arcs to elevate or depress the mouth of the nozzle e an equal distance at different parts of its travel. The variation in the distance between the marks f is also somewhat due to the different siphoning
10 effects of the curved end of the tube E in its different positions as it swings from near the vertical to near the horizontal position.

The mark f' is used to indicate the vertical position of the valve part C' and scale-plate F
15 in attaching the same to the can. The mark or stop f^2 indicates when the rotary shell C³ is swung back sufficiently to entirely close the valve.

I hereby expressly disclaim, as forming no
20 part of my invention, the device shown and described in Letters Patent of the United States No. 321,340, granted June 30, 1885, to F. G. Butler. In said Butler patent the port is on one side of the plug or pivot on which

the shell turns, and it extends horizontally 25 through a flat vertical flange or collar surrounding the pivot. In my invention the hollow plug serves both as a passage for the liquid and a pivot for the shell and swinging draw-off tube. 30

I claim—

The combination, with can A, of cream-scale B, stationary hollow plug part C' of the valve, secured to said can and provided with
35 arc scale-plate F, cast integral therewith and having radial graduations, rotary shell part C³ of the valve, provided with tubular arm D, having pointer d , and detachable nozzle-tube E, having a downwardly-curved mouth-piece, e , to deflect the stream and prevent drip, the
40 graduations on said arc scale indicating heights or positions of the discharge-orifice of said mouth-piece corresponding to the graduations in said scale B, substantially as specified.

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Witnesses:

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