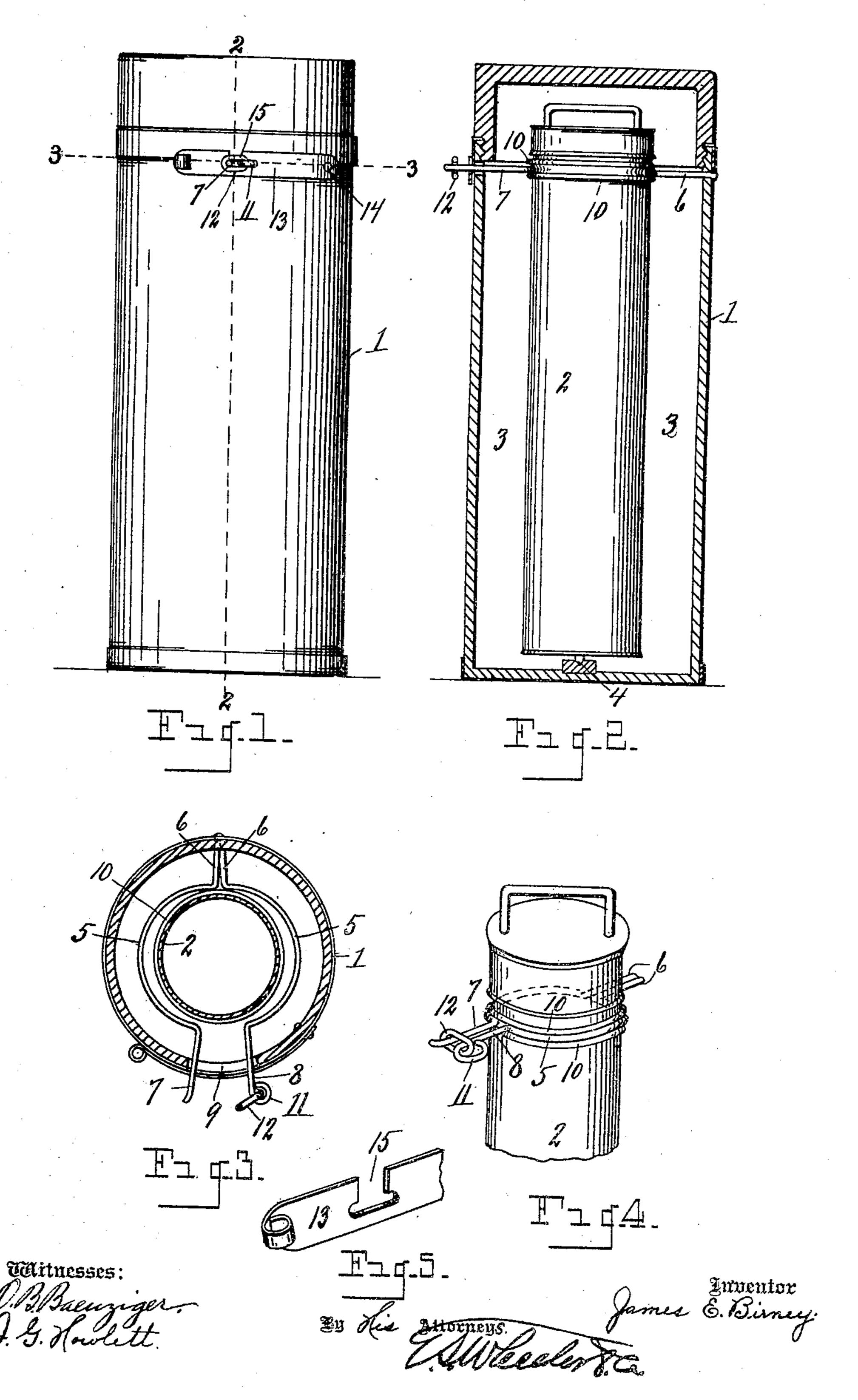
J. E. BIRNEY.

ATTACHMENT FOR ICE CREAM FREEZERS.

APPLICATION FILED AUG. 24, 1904.



UNITED STATES PATENT OFFICE.

JAMES E. BIRNEY, OF LESLIE, MICHIGAN.

ATTACHMENT FOR ICE-CREAM FREEZERS.

No. 814,109.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed August 24, 1904. Serial No. 221, 926.

To all whom it may concern:

Be it known that I, James E. Birney, a citizen of the United States, residing at Leslie, in the county of Ingham, State of Michigan, have invented certain new and useful Improvements in Attachments for Ice-Cream Freezers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to an attachment for ice-cream freezers; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out par-

ticularly in the claims.

The object of the invention is to provide simple and efficient means for maintaining the can centrally within the tub in a manner to prevent it from tipping sidewise and breaking down the ice packed around the can and at the same time holding the can firmly in place, so that it will not rise out of the ice when nearly empty and so that the beater may be readily withdrawn after the cream is frozen without having to hold the can down and without danger of drawing the can out of the ice.

The above object is attained by the structure illustrated in the accompanying draw-

ings, in which—

freezer involving my invention. Fig. 2 is a central vertical section as on line 2 2 of Fig. 1. Fig. 3 is a horizontal section as on line 3 3 of Fig. 1. Fig. 4 is a fragmentary view in perspective of the upper portion of the can. Fig. 5 is a fragmentary view in perspective of the locking-plate which serves to hold the can against lateral movement.

Referring to the characters of reference, 1 designates the exterior case or tub in which the can is packed. Standing vertically within the tub is the can 2, in which the cream is placed for freezing, ice being packed within the space 3 between the tub and can, as commonly practiced, and the can being supported at the bottom upon a bearing-pin 4 to enable

it to revolve freely.

Ice-cream freezers as ordinarily constructed provide no support for the upper end of the can after the top of the tub which carries the means for rotating the can, which is not here-

in shown, has been removed, and as a result the top of the can is permitted to sway from side to side, thereby breaking down the ice and reducing its freezing efficiency. Fur- 60 thermore, there is no provision made for holding the can down, so that when the cream has been nearly used therefrom the accumulated water from the melted ice will float the can, causing it to rise out of the ice 65 and water, resulting in a rapid softening of

the frozen cream therein.

To provide for holding the can centrally within the tub after the operation of freezing and to prevent the can rising, I employ a 70 split ring or collar composed of the divided semicircular parts 5, supported centrally within the tub at the upper end thereof from the straight end portions 6, anchored in the wall of the tub. At the opposite terminals 75 of the semicircular portions of said ring or collar are the straight ends 7 and 8, which project through the horizontal slot 9 in the wall of the tub, which affords a lateral movement of said straight end portions whereby 80 they may be brought together, so as to cause the ring or collar to clamp the top of the can. To provide means for firmly securing the can by the operation of said clamping ring or collar, the upper end of the can is provided with 85 the opposed beads 10, between which the clamping-collar is adapted to lie when contracted about the can, whereby the can is securely held against vertical movement and is at the same time centrally supported with- 90 in the tub. In the end of the straight portion 8 of one of the parts of the clamping-collar is formed an eye 11, in which is secured a link 12, adapted when the ends 7 and 8 are brought together to engage over the end 7, 95 thereby holding the parts of the embracing collar in contact with the can. The straight. portions 6 of the parts of the divided collar are of spring metal whose tension is exerted to hold the sides of the collar separated, as 100 shown in Fig. 3, when the straight end portions 7 and 8 of the parts of said collar are not held together by the link 12, so that the parts of the collar normally separate when the end portions 7 and 8 are disengaged to 105 free the can and allow it to be readily removed from the tub, if desired. To hold the clamping-collar against lateral movement when embracing the top of the can, there is employed a locking-plate 13, which is piv- 110 oted at 14 to the exterior of the tub and is adapted to swing upwardly to engage the pro-

jecting ends 7 and 8 of said collar in the undercut notch 15 in the upper edge thereof, as clearly shown in Fig. 1, whereby any lateral movement of the clamping-collar when 5 embracing the can is prevented, so that after the can has been properly packed it need not be disturbed until it is empty. This arrangement is of material advantage where the cream is served directly from the can, as it 10 affords the operator both hands with which to dish the cream and does not require that the can be held down with one hand while the cream is removed therefrom as in the ordinary arrangement.

As the clamping-collar is always closed about the top of the can when it is being packed, said collar does not in any respect interfere with the placing of the ice around

the can within the tub.

Having thus fully set forth my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. The combination with the tub and can, of a contractible collar adapted to embrace 25 the top of the can, having laterally-projecting end portions, the wall of the tub being apertured to receive said end portions and means for locking said end portions to hold the collar in engagement with the can.

2. The combination with the tub and can, of a two-part clamping-collar adapted to embrace the top of the can, the parts of said collar having spring end portions anchored in the wall of the tub and having straight end

portions projecting from their opposite ter- 35 minals, affording means for contracting the parts of the collar about the can, the top of the can having projections between which the parts of the collar engage when contracted.

3. The combination with the tub and can, 40 of an engaging member at the top of the can, the two-part clamping-collar supported centrally within the tub, and having ends, the wall of the tub being apertured to receive said projecting ends, means for locking said 45 ends together to clamp the can, and means for holding said locked ends against lateral movement.

4. The combination with the tub and can, of a contractible collar adapted to embrace 50 the can, comprising semicylindrical parts, having spring end portions anchored in the wall of the tub, the parts of said collar having straight end portions projecting from their opposite terminals, there being in the wall of 55 the tub a slot through which said straight end portions of the collar project, means for holding said straight end portions of the collar together to clamp it upon the can, and means for locking said straight end portions 60 from lateral movement in said slot.

In testimony whereof I sign this specifica-

tion in the presence of two witnesses.

JAMES E. BIRNEY.

Witnesses:

ARTHUR J. TUTTLE, A. Perle Van Camp.