

No. 840,986.

PATENTED JAN. 8, 1907

H. M. ACKLEY.
MILK SKIMMING DEVICE.
APPLICATION FILED SEPT. 23, 1905.

Fig. 1.

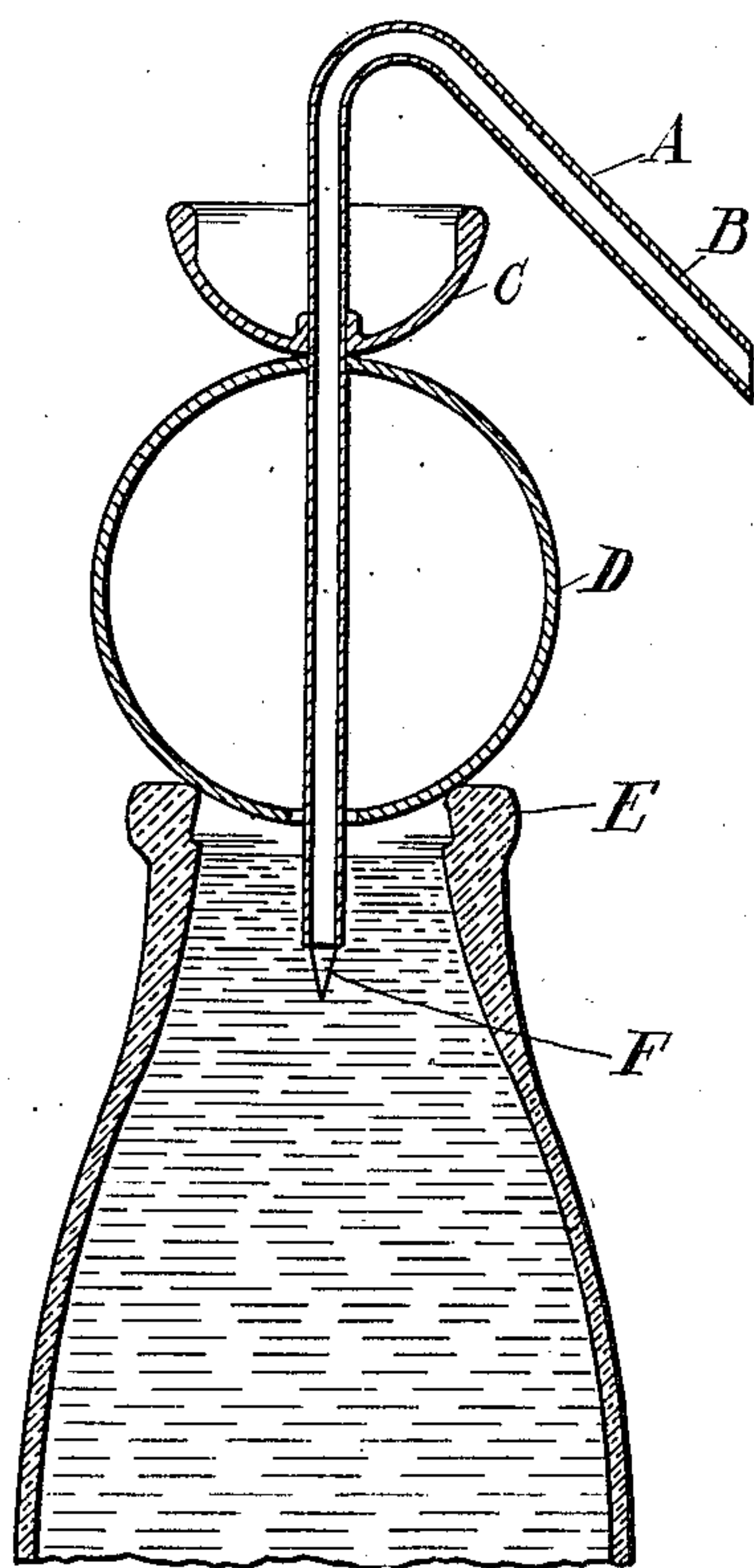
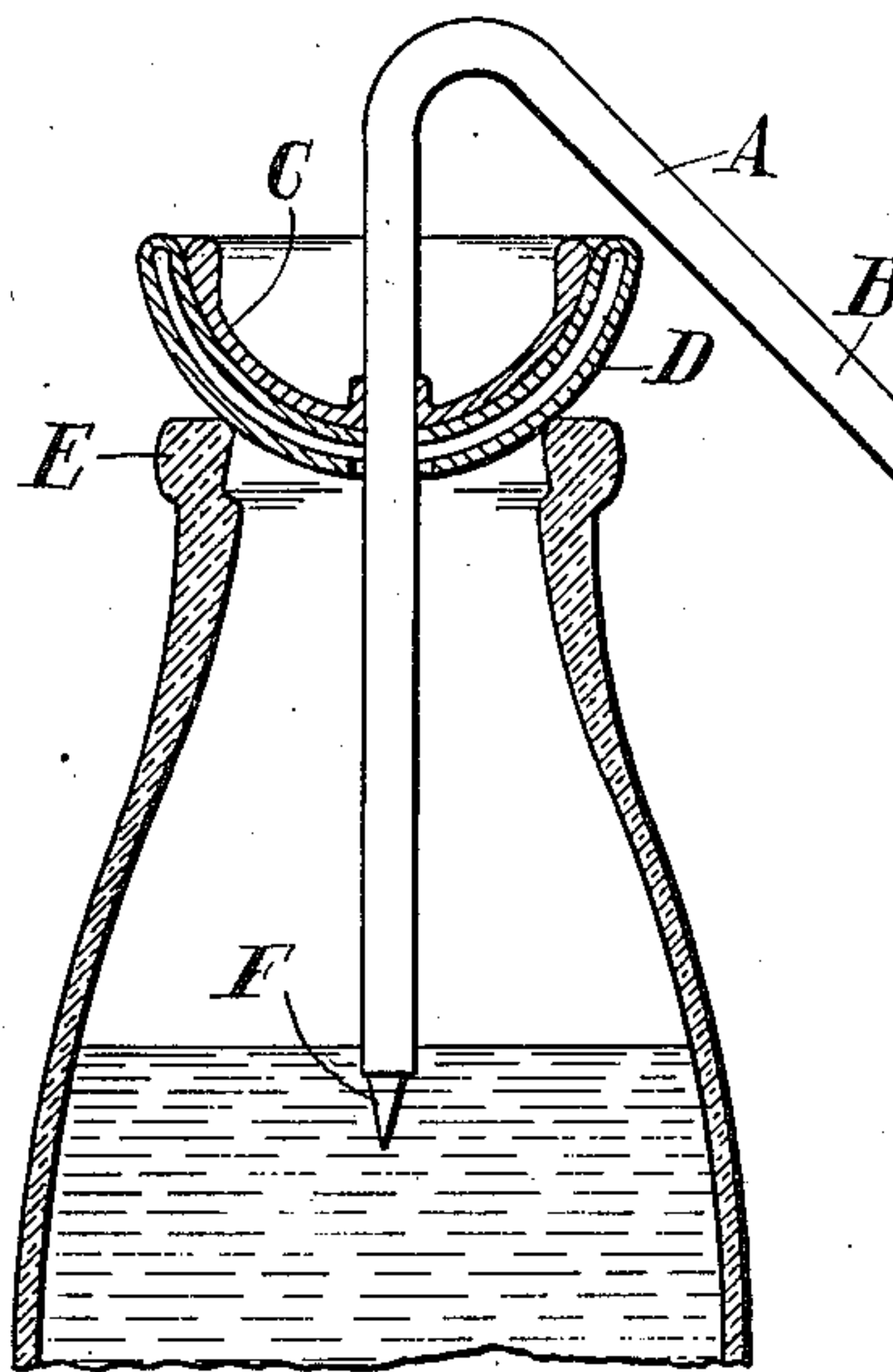


Fig. 2.



Witnesses:

E. F. Wilson
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UNITED STATES PATENT OFFICE.

HERBERT M. ACKLEY, OF CHICAGO, ILLINOIS.

MILK-SKIMMING DEVICE.

No. 840,986.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HERBERT M. ACKLEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Milk-Skimming Devices; and I do hereby 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.

My invention relates to a novel construction in a device for skimming or removing the cream from the top or neck portion of a milk-bottle, the object being to provide a simple, efficient, and sanitary device of this character; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a central longitudinal section of a device constructed in accordance with my invention, showing the same in position on the bottle preparatory to removing the cream. Fig. 2 is a similar section, the tube being shown in elevation and the bulb in its collapsed position.

My said device comprises a tube A, which is in the form of an inverted V, one of said arms being vertically disposed and the other thereof being shorter and disposed at an acute angle to form a delivery-spout B. Between the ends of the vertical arm a substantially semispherical cup C is rigidly mounted, and disposed below the same is a rubber or small flexible fluid-tight bulb D, preferably spherical in form, said bulb being provided with diametrically opposite openings, one of which is fitted closely by the tube A and the other of which is of larger diameter than said tube, said larger opening being disposed at the lowest point.

My device operates as follows: After removing the cap from the milk-bottle the tube A is inserted, and the bulb D rests upon the edge of the neck E of the bottle. The tube A is then moved vertically downwardly, so that the cup C bears upon and gradually collapses the said bulb D, thereby obviously ejecting the air, which latter passes into the bottle, and thus forces the liquid from the latter through the tube A and delivers the same into any suitable receptacle from the spout B. The said cup C is of less diameter than the largest diameter of said bulb D, so that in collapsing the latter by practically invert-

ing the upper half of said bulb the said cup will follow into the hollow thus formed—that is to say, the bulb becomes practically folded over the said cup and is thus readily practically completely collapsed and nearly all air contained therein ejected. During the downward movement of said tube A it is obvious that the liquid in the upper portion of the bottle only would be ejected, as the lower or body portion would be in no manner disturbed by the operation, and thus the cream collecting in the upper end of the bottle would be ejected, while the milk would remain.

For the sake of convenience the said tube A may be provided at its lower end with a prong F, by means of which the cap of the bottle may be primarily removed in a well-known manner.

I claim as my invention—

1. A device of the kind specified comprising in combination, a tube adapted to be inserted at one end into a bottle or the like and carrying a delivery-spout at its other end, a bulb mounted on said tube and having an air-exhaust opening adapted to discharge into the bottle, and a member disposed between the ends of said tube and rigid therewith adapted to bear upon and compress said bulb when said tube is moved downwardly substantially as and for the purpose described.

2. A device of the kind specified comprising in combination, an inverted-V-shaped tube one arm of which is adapted to enter a bottle or the like and the other arm of which constitutes a delivery-spout, a bulb disposed on said first-named arm having an air-discharge opening in its lower end and adapted to rest upon the rim of the receptacle entered by said tube, and a member rigidly mounted upon said first-named arm and adapted to bear upon and collapse said bulb to discharge the contained air into said receptacle when said tube is moved downwardly.

3. A device of the kind specified comprising in combination an inverted-V-shaped tube one arm of which is adapted to enter a bottle or the like and the other arm of which constitutes a delivery-spout, a substantially spherical rubber bulb disposed between the ends of said first-named arm and adapted to rest upon the rim of the receptacle into which the latter is inserted, said bulb having an air-discharge opening communicating with said receptacle, and a substantially semispherical

cup rigidly mounted upon and concentrical with said first-named arm, said cup being adapted to bear upon and collapse said bulb when said tube is moved downwardly.

- 5 4. A device of the kind specified comprising in combination an inverted-V-shaped tube one arm of which is adapted to enter a bottle or the like and the other arm of which constitutes a delivery-spout, a substantially
10 spherical rubber bulb disposed between the ends of said first-named arm and adapted to rest upon the rim of the receptacle into which the latter is inserted, said bulb having an air-discharge opening communicating with said

receptacle, and a substantially semispherical 15 cup of smaller diameter than said bulb rigidly mounted upon and concentric with said first-named arm, said cup being adapted to bear upon and collapse said bulb when said tube is moved downwardly. 20

In testimony whereof I have signed my name in presence of two subscribing witnesses.

HERBERT M. ACKLEY.

Witnesses:

RUDOLPH Wm. Lotz,
E. F. WILSON.