

No. 658,381

Patented Sept. 25, 1900.

A. A. LOW.
CAP FOR CLOSING VESSELS.

(Application filed Nov. 27, 1899.)

(No Model.)

Fig. 1.

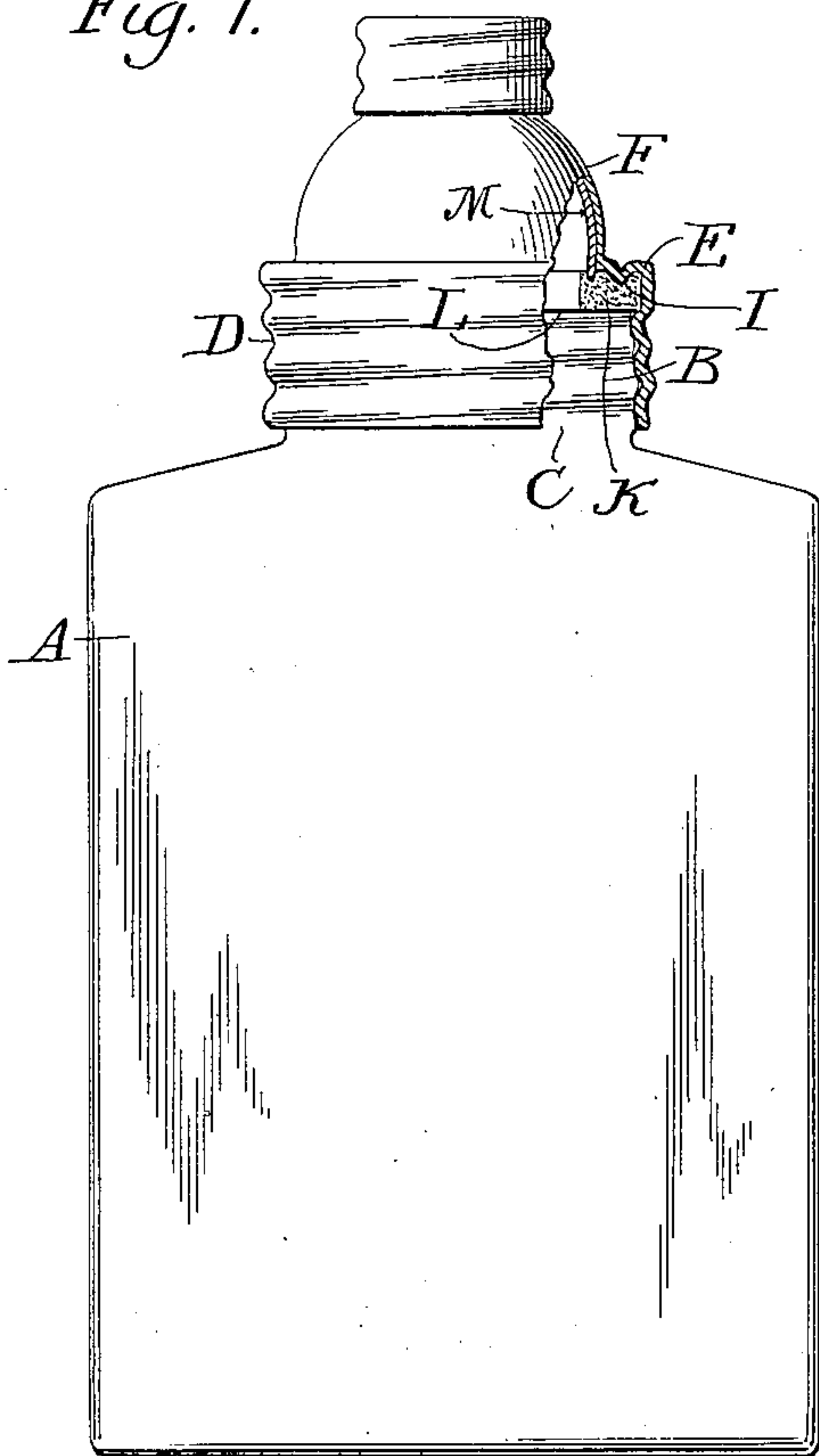


Fig. 2.

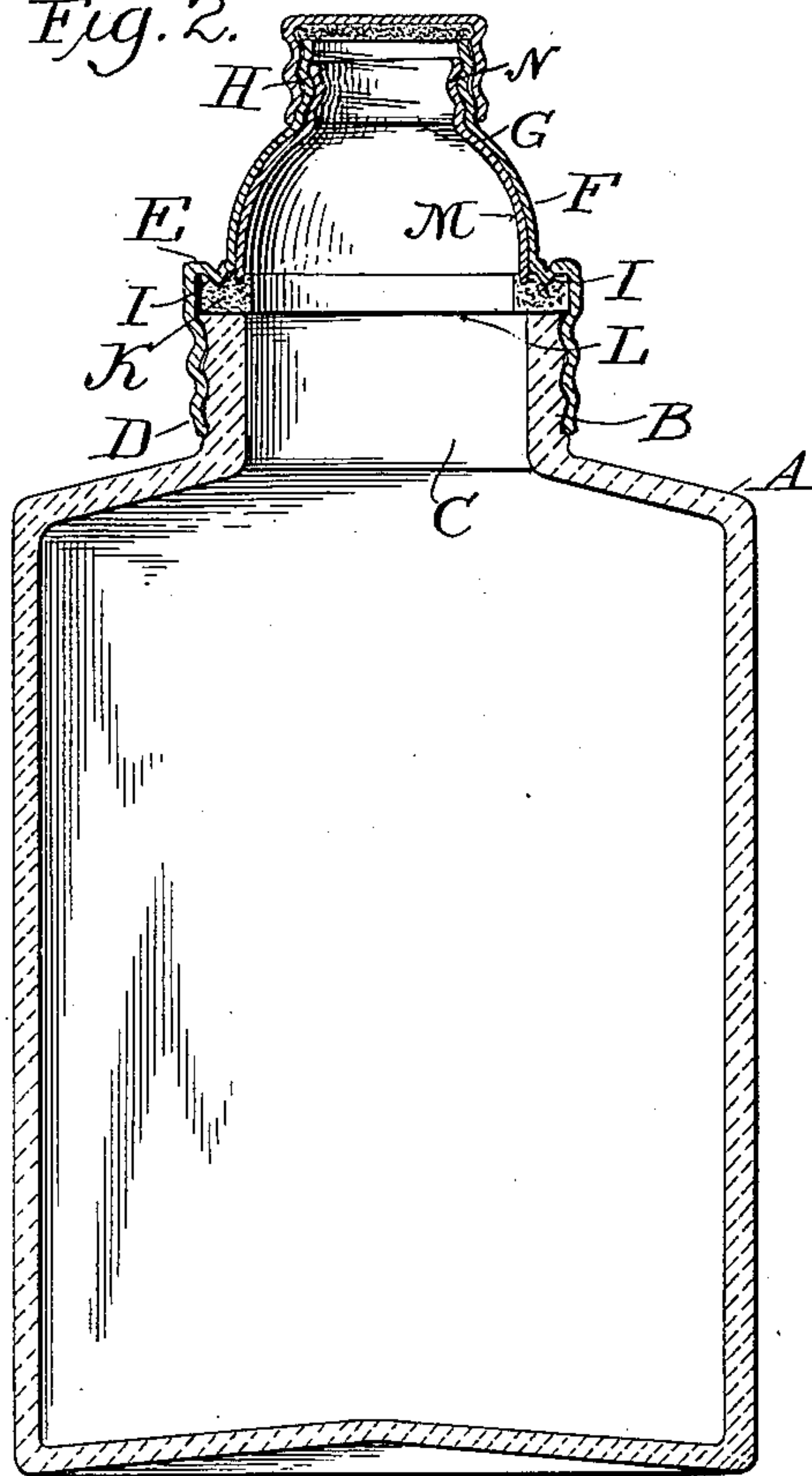
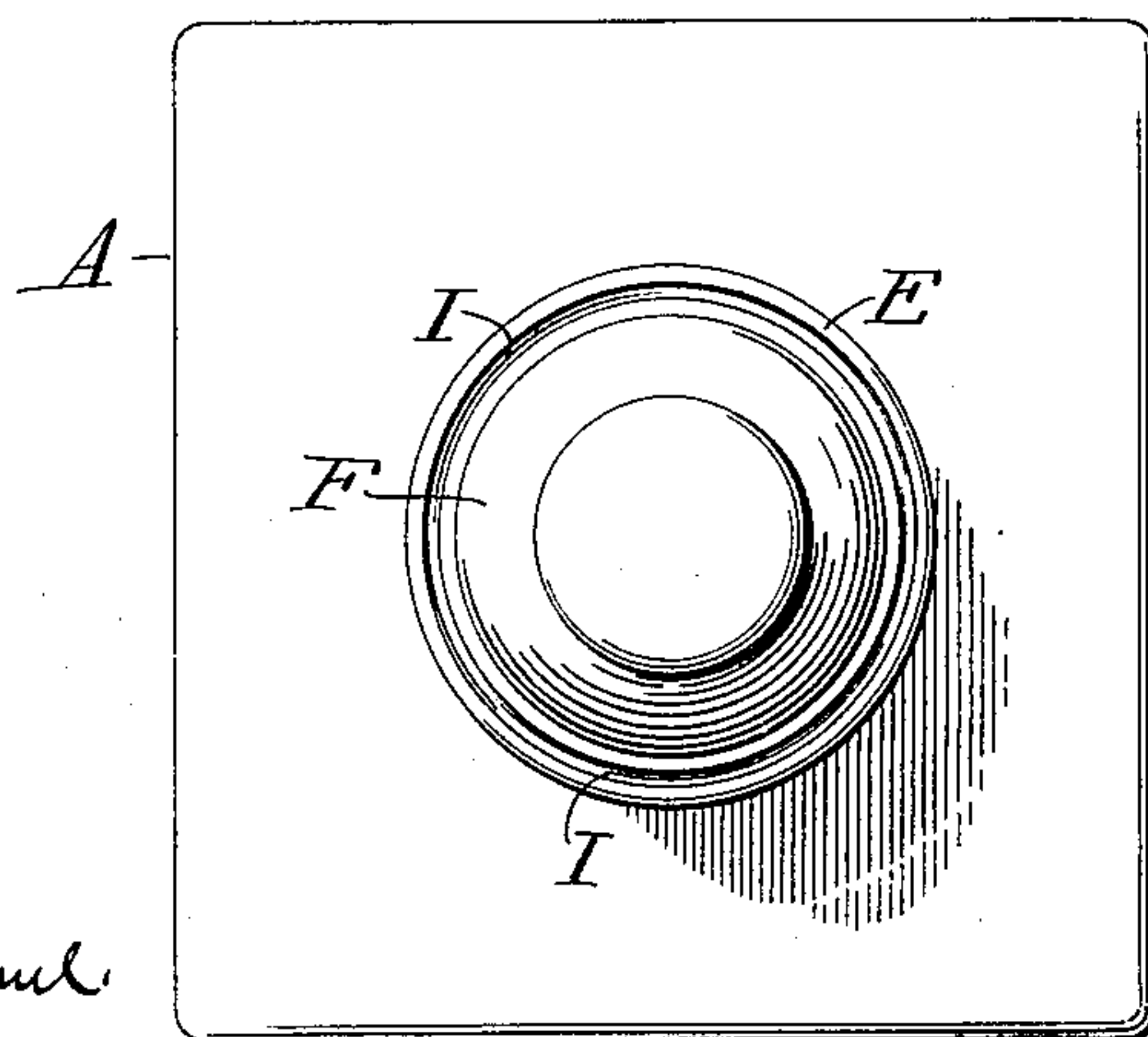


Fig. 3.



WITNESSES

James F. Duhamel

Charles W. Low

INVENTOR

Abbot Augustus Low

BY

James M. Hicks
ATTORNEY

UNITED STATES PATENT OFFICE.

ABBOT AUGUSTUS LOW, OF NEW YORK, N. Y.

CAP FOR CLOSING VESSELS.

SPECIFICATION forming part of Letters Patent No. 658,381, dated September 25, 1900.

Application filed November 27, 1899. Serial No. 738,491. (No model.)

To all whom it may concern:

Be it known that I, ABBOT AUGUSTUS LOW, a citizen of the United States, and a resident of New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Caps for Closing Vessels, of which the following is a specification, reference being had to the drawings herewith, making part thereof.

My invention relates to improvements on the invention set out in my application for "closing-cap" filed by me September 25, 1899, Serial No. 731,599, and particularly to means for securing a more perfect sealing of the vessel; and it consists in certain elements fully set out in the drawings herewith and specified and claimed herein.

In order that persons skilled in the art to which my invention appertains may understand, construct, and use my invention, I will proceed to describe it, referring to the drawings herewith, in which—

Figure 1 is an elevation of my improved cap secured upon a bottle and broken away partially to show the particular new feature for securing a more perfect seal in section. Fig. 2 is a central vertical section of the cap. Fig. 3 is a top or plan of same.

A is the bottle to which my invention is applied.

B is the usual screw portion outside the neck C of the bottle A.

D is the barrel of the sealing-cap, provided with female screw to match the screw B on the bottle-neck C for securing the sealing-cap upon the bottle.

E is a flange turned inward centrally of the barrel D a short distance.

F is a dome-shaped chamber rising from the inner extension of internally-directed flange E.

G is an opening in the top of dome F, surmounted by a threaded tubular projection H and covered by a screw-cap and packing of the usual construction, which can be tightly screwed upon it or removed at pleasure or as occasion may require to discharge the contents of the vessel to which the whole sealing-cap is attached, but not for the purpose of filling the said vessel.

On flange E a downwardly-projecting bead or depression I is formed at a point about

midway of the width of the flange, which bead extends continuously around the whole flange circularly.

K is an annular yielding packing-ring—such as cork, linoleum, or rubber—which rests upon the top L of the bottle-neck C.

In screwing or closing the barrel D upon the neck C of bottle A the flange E closes down upon the cork packing K, and in doing so the bead I presses into the said packing K and squeezes it tightly upon the top L of the bottle-neck C and secures a perfect sealing and prevents any leakage from the inner to the outer side of the said bottle-neck. This result is secured by means of the bead I. The necessity for this device arises from the neglect of the user to tightly screw the cap down upon the bottle-neck after use. It requires too much exertion to squeeze a broad packing-ring down tightly, while with a narrow bead, as I, a slight exertion causes a tight sealing and prevents the cause of annoyance which arises from carelessness in not properly screwing the cap down tightly with the usual cork packing.

M is an inner lining to the dome F, provided with a neck N at its top and screw-threaded to take into the inner side of the thread formed upon or in the tubular projection above dome F to hold it in its proper relationship to said dome F as a lining. Said lining extends downward a slight distance below the flange E, and when the sealing-cap is secured upon the vessel to seal it the lower edge of said lining M enters the substance of the sealing-cork or packing and aids in preventing any passage of material from the inside of the vessel to the outer side.

Having now fully described my invention and the manner in which I have embodied it, what I claim as new and as my invention is—

1. In a sealing-cap for vessels the combination consisting of the barrel as D; flange as E, provided with downwardly-projecting bead as I, dome or chamber as F, inside shield as M, constructed and arranged to fasten within the dome D, and extend downwardly slightly below the flange E, and to where the cap is secured to the vessel enter the packing-ring beneath said flange and means for securing the whole upon a vessel to seal it and to open and close it in use, all constructed, arranged

and combined to operate substantially as and for the purposes hereinbefore specified.

2. In a sealing-cap for vessels, the combination, consisting of the barrel; concentric
5 flange turned inward from the sides of the said barrel; dome springing upward from the inner edge of said concentric flange; and discharge-opening at top of said dome, adapted to be opened and closed in use; means for
10 securing the whole to a vessel and for removing it, and an internal shield adapted to pro-

tect the sealing-cap from contact with the contents of the vessel, all constructed and combined to operate substantially as specified.

Signed at New York, in the county of New York and State of New York, this 18th day
15 of November, A. D. 1899.

ABBOT AUGUSTUS LOW.

Witnesses:

MILTON A. WARREN,
SIDNEY S. PAINTER.