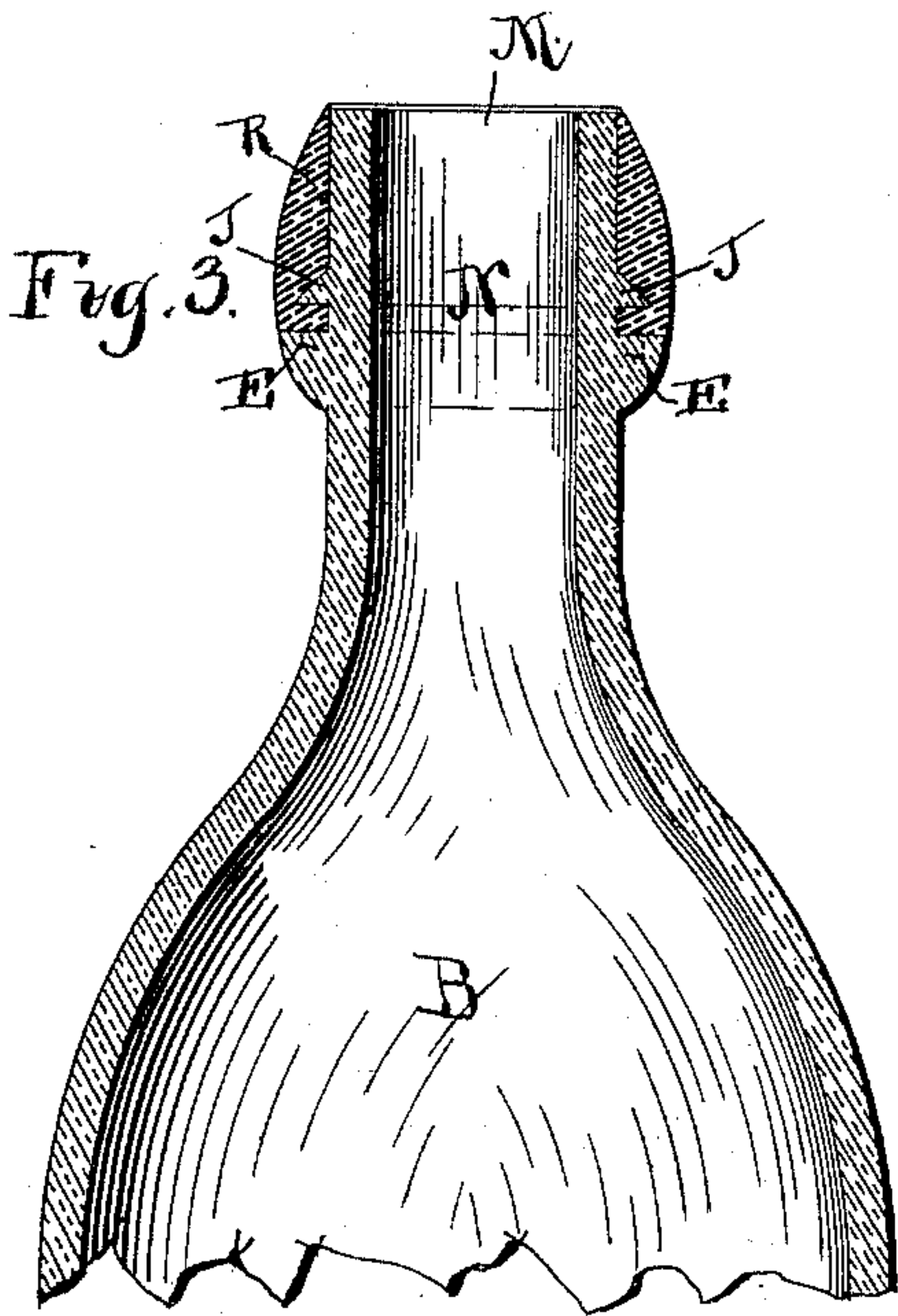
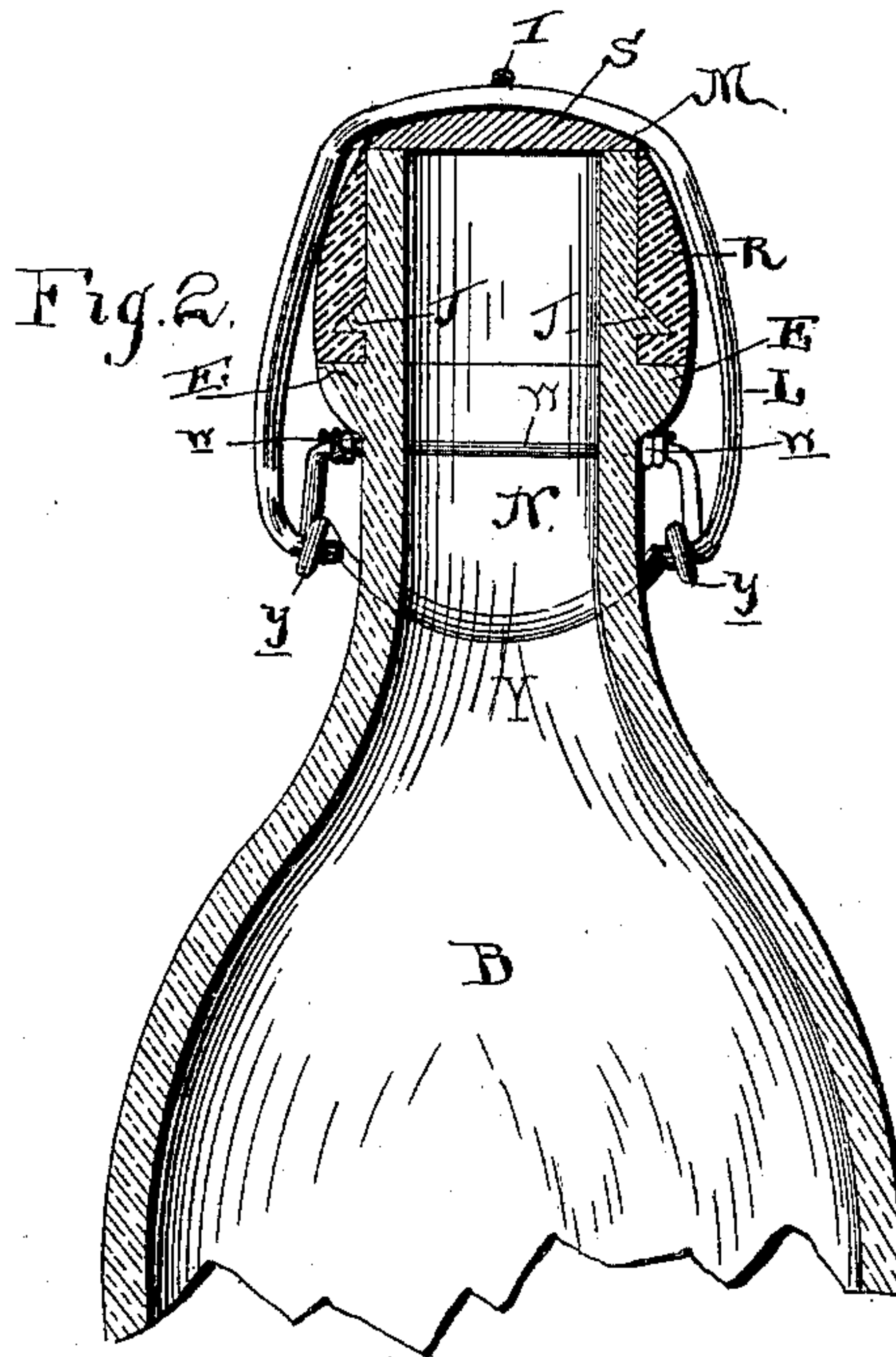
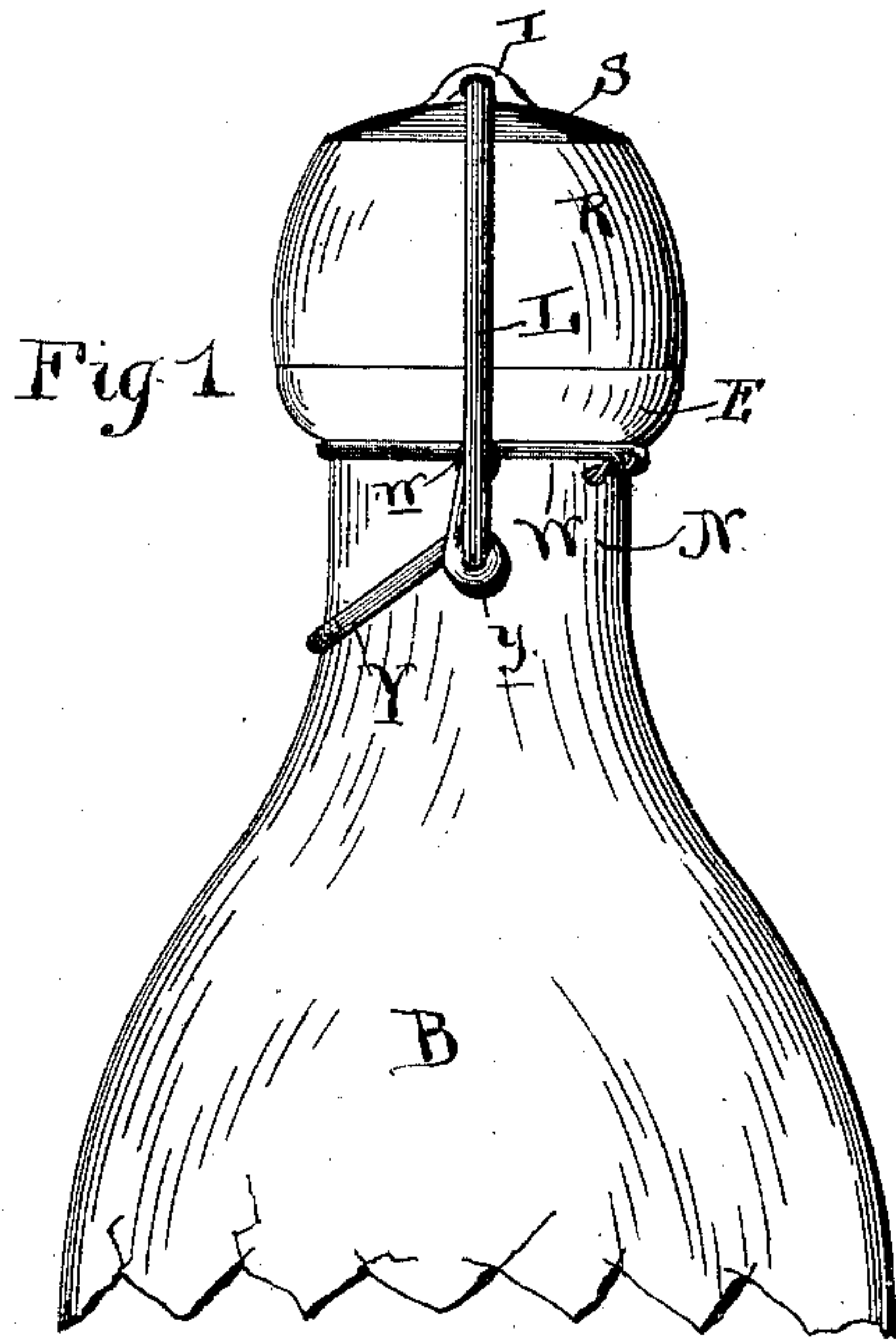


(No Model.)

J. H. LUCKEY.
BOTTLE STOPPER.

No. 461,941.

Patented Oct. 27, 1891.



Witnesses

H. G. Seitz

A. J. Gollamer

Inventor

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

JOHN HENRY LUCKEY, OF NEW YORK, N. Y.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 461,941, dated October 27, 1891.

Application filed November 20, 1890. Serial No. 372,016. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY LUCKEY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Bottle-Stopper, of which the following is a specification.

This invention relates to bottle-stoppers; and the object of the same is to improve the construction of devices of this character. Heretofore much difficulty has been experienced in bottle-stoppers wherein a rubber stopper was used to make an air-tight closure, owing to the fact that the sulphur in the rubber impaired the flavor of the contents of the bottle if it came in contact therewith. In the present case I so arrange the rubber ring that it will not come in contact with the contents of the bottle, and yet will serve the double purpose of assisting in forming an air-tight closure and preventing the breaking or chipping of the mouth of the bottle. This is accomplished by the construction of parts hereinafter more fully described and claimed, and as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved bottle with the stopper closed. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a similar section of the mouth and neck of the bottle with the stopper removed.

Referring to the said drawings, the letter B designates the body, N the neck, and M the mouth, of an ordinary bottle—such, for instance, as is used for beer. Around the neck is a wire W, having eyes *w*. Pivoted in these eyes are the ends of a yoke Y, which yoke has eyes *y*. Pivoted in the eyes *y* are the ends of a large yoke L, which is of sufficient length to extend over the mouth of the bottle.

S is the stopper-plate proper, having an eye I at its center on its upper face, through which passes the large yoke L. When the stopper is brought into position over the mouth and the yoke Y is depressed, as shown in Fig. 1, the large yoke L is drawn upon, so as to clamp the stopper S tightly against the mouth of the bottle, all as is well known in bottle-stoppers and their fastenings.

Coming now to the present invention, the letter J designates an outwardly-projecting

ridge having a flat lower face and a beveled upper face and formed integrally with and upon the outer surface of the mouth M of the bottle.

R is a rubber ring having an internal groove of proper shape to fit the ridge, and whose lower end is flat, so as to rest upon the annular enlargement E, which is broader than the ridge J, and which ordinarily surrounds the neck N of the bottle, and below which the wire W stands, as shown in Fig. 2. The length of the rubber ring is sufficient to cause it normally to extend from the enlargement E slightly beyond the mouth M, as seen in Fig. 3, and its thickness is such as to effectually protect the mouth from breaking and chipping during the rough handling of the bottle, being greatest at its center and rounded off at its upper and lower ends, so as to form a practically globular rubber ball around the mouth. The stopper S is also of a shape to continue this globe over the closed end of the mouth.

In operation, when the stopper proper S is brought into position over the mouth its edge, which projects outwardly over the upper end of the ring, rests thereon, and when the yoke Y is borne downwardly to bring the stopper tightly against the mouth the ring is compressed. The density of this ring being such that it will afford considerable resistance to compressure, when the stopper is brought down thereon an air-tight closure will be produced, and yet the contents of the bottle will not have access to the rubber, because the glass mouth interposes. The ridge J will prevent the accidental dislocation of the ring R, as will be clearly understood, and the flat upper face of the enlargement E abuts squarely against the lower end of said ring and prevents its slipping down the neck N. This enlargement also preferably continues the globular shape above mentioned, and by this means no corners are formed to be struck in handling and the glass is thoroughly protected from breaking.

A bottle-stopper of this character will be found highly efficient in bottling beer, where the chemical action of the beer upon the rubber detracts from the flavor of the beer, and at the same time the ring by surrounding the

mouth of the vessel prevents the same from being chipped or broken.

What is claimed as new is—

In a bottle-stopper, the combination, with
5 the bottle having upon its neck an exterior annular enlargement with a flat upper face and a rounded lower face and above said enlargement an exterior ridge of less breadth than said enlargement and having a beveled
10 upper and a flat lower face, of a rubber ring surrounding the neck and normally extending from the face of the ridge slightly beyond the mouth of the bottle, the inner face of the ring having a groove closely fitting said ridge

and the outer face thereof being rounded, 15 and a stopper covering the mouth and bearing upon the upper end of the ring, the upper face of said stopper being rounded, all said rounded faces forming a globular mass around the mouth and neck when the bottle 20 is closed, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN HENRY LUCKEY.

Witnesses:

H. S. WILLIAMS,
A. J. BIGELOW.