

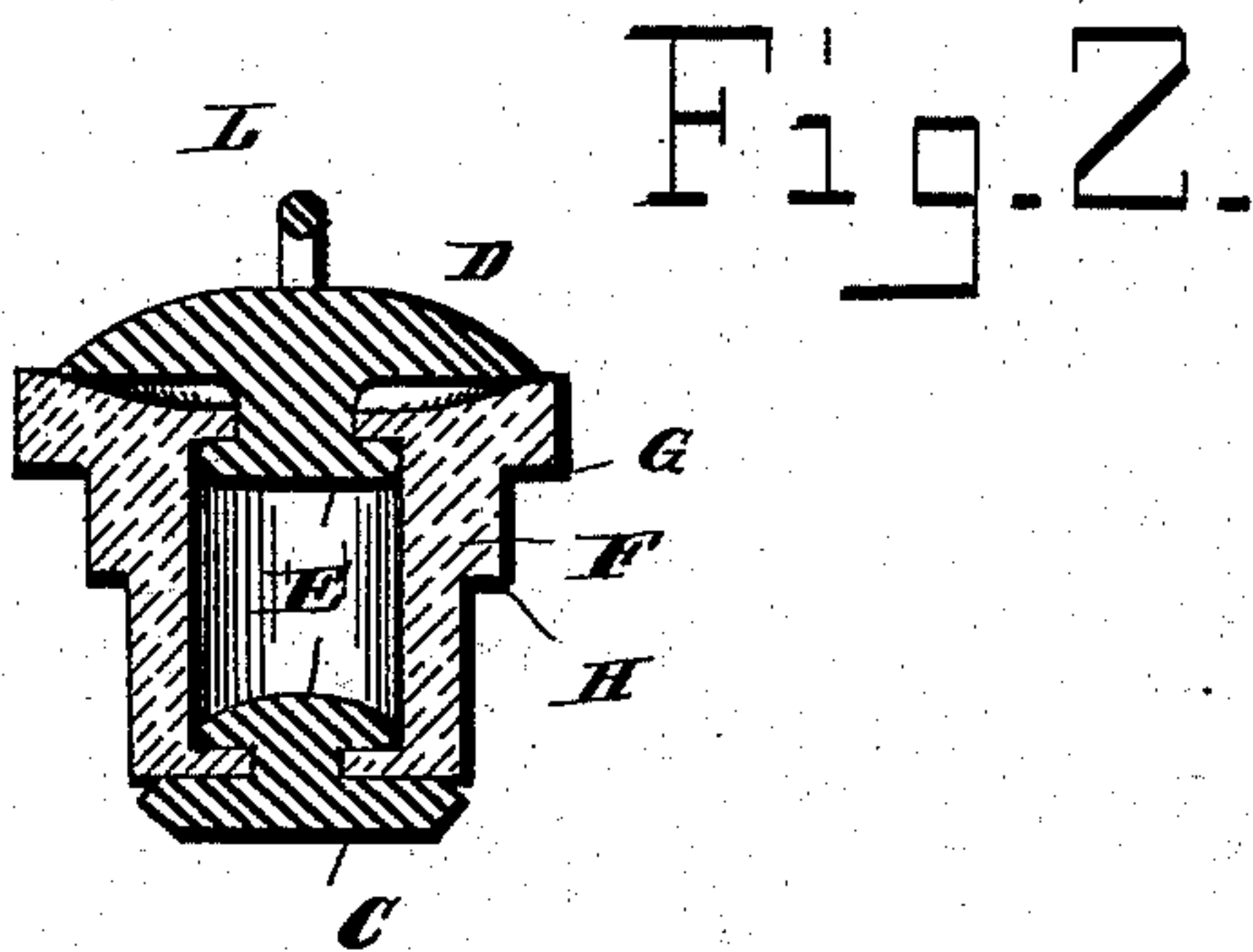
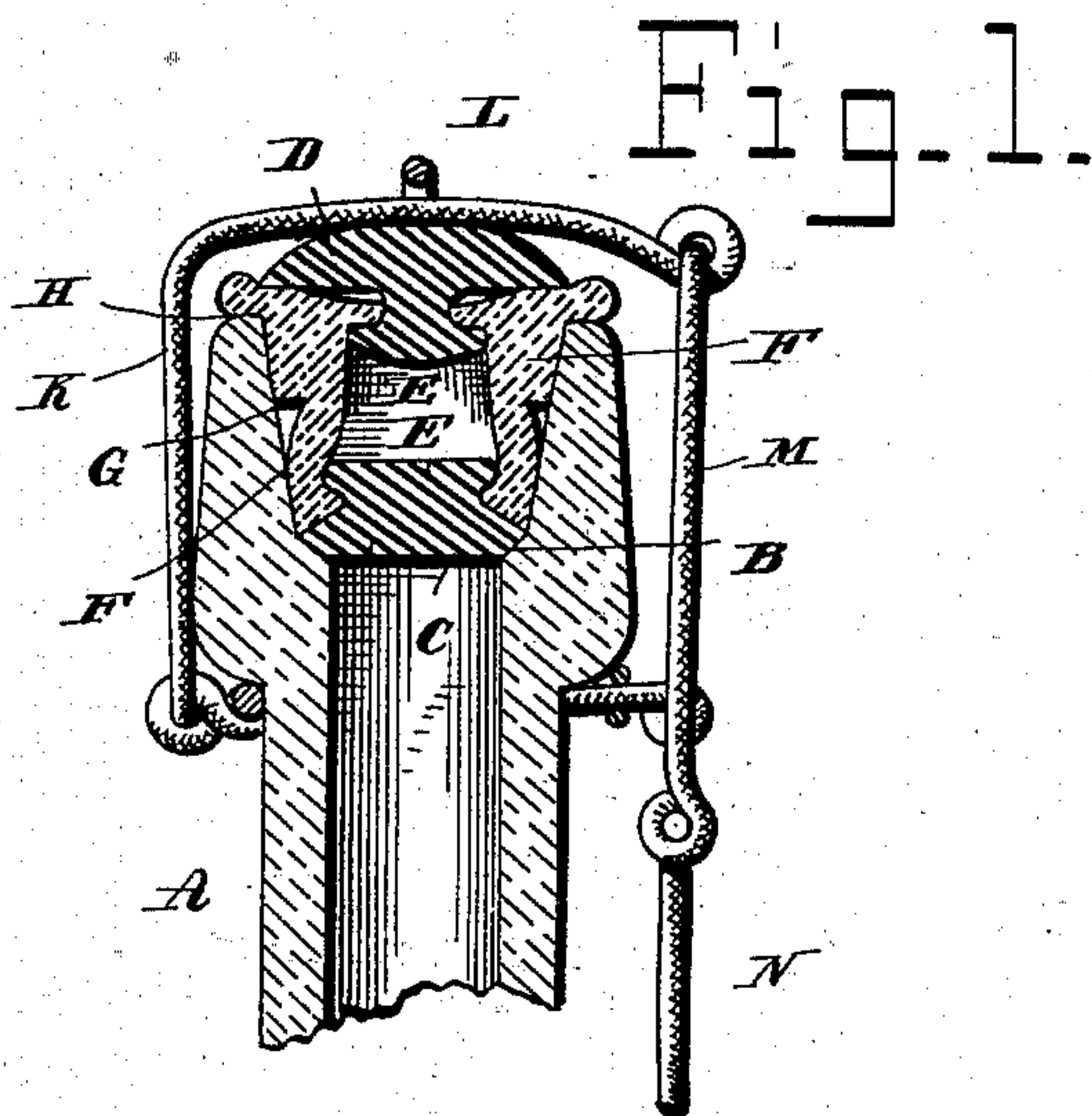
(No Model.)

J. T. WALKER.

BOTTLE STOPPER.

No. 288,521.

Patented Nov. 13, 1883.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JAMES T. WALKER, OF BALTIMORE, MARYLAND.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 288,521, dated November 13, 1883.

Application filed September 4, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES T. WALKER, a citizen of the United States, residing at Baltimore, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain improvements in bottle-stoppers; and it has for its objects to provide a rubber-packed stopper wherein the rubber will be held out of contact with the contents of the bottle or vessel to which the said stopper is applied, as more fully hereinafter specified. These objects I attain by means of the devices illustrated in the accompanying drawings, in which—

20 Figure 1 represents a sectional view of the upper portion of a bottle, showing my invention applied thereto; and Fig. 2, a sectional view of the stopper detached.

The letter A indicates a bottle, the mouth of which is formed with a shoulder, B, constituting a seat for the lower portion, C, of the stopper. The said lower portion consists of a disk of suitable material, preferably wood or soft metal, beveled at its edges, as indicated, so as to form a tight joint when pressed against the beveled shoulder in the mouth of the bottle before mentioned. The upper portion of the stopper consists of a disk, D, of metal or other suitable material, and both portions are provided with buttons E, to which is secured the intermediate portion, F, which is constructed of rubber or other suitable elastic material. The said portion is hollow, and is formed with shoulders G and H, as indicated in Fig. 2, so as to pack within the mouth of the bottle and upon the edge of the mouth, as indicated in Fig. 1, when the stopper is confined in place.

45 It will be perceived that the hollow portion of the stopper constitutes an air-space, the air within which forces the rubber against the sides of the mouth, making an accurate and tight joint, and adapts the stopper to irregularities

in the mouth of the bottle. The said air contained in the hollow section also forces the lower portion of the stopper to its seat and holds it there, as any pressure from within the bottle would tend to increase the expansion and cause the lower portion to hold tighter to its seat.

The stopper may be held to its seat by means of any suitable fastening devices. In the present instance the fastening device consists of a wire or band passing around the neck below the shoulder on the outside of the same, and having a loop to which is attached an arm, K, passing through an eye, L, at the top of the stopper. The said arm is connected by means of a link, M, with a lever, N, secured to the ends of the wire or band, so that when brought down it will force the stopper to its seat.

As constructed, the elastic connection of the two disks is expanded in the throat of the bottle when secured by the fastening, causing the lower disk to be forced to its seat. An important advantage, also, in connection with the above, is that any pressure from within the bottle, instead of tending to loosen the stopper in the throat, causes it to expand additionally, and, instead of causing leakage, insures a tight seal.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with a bottle or vessel having an internal shoulder, of a stopper consisting of a lower disk seated upon said shoulder, an upper disk, and a hollow elastic section, the two disks being provided with buttons, to which the elastic section is secured, and suitable means whereby the stopper is compressed and held to its seat, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES T. WALKER.

Witnesses:

CHAS. D. DAVIS,  
THOMAS J. DUNN.