

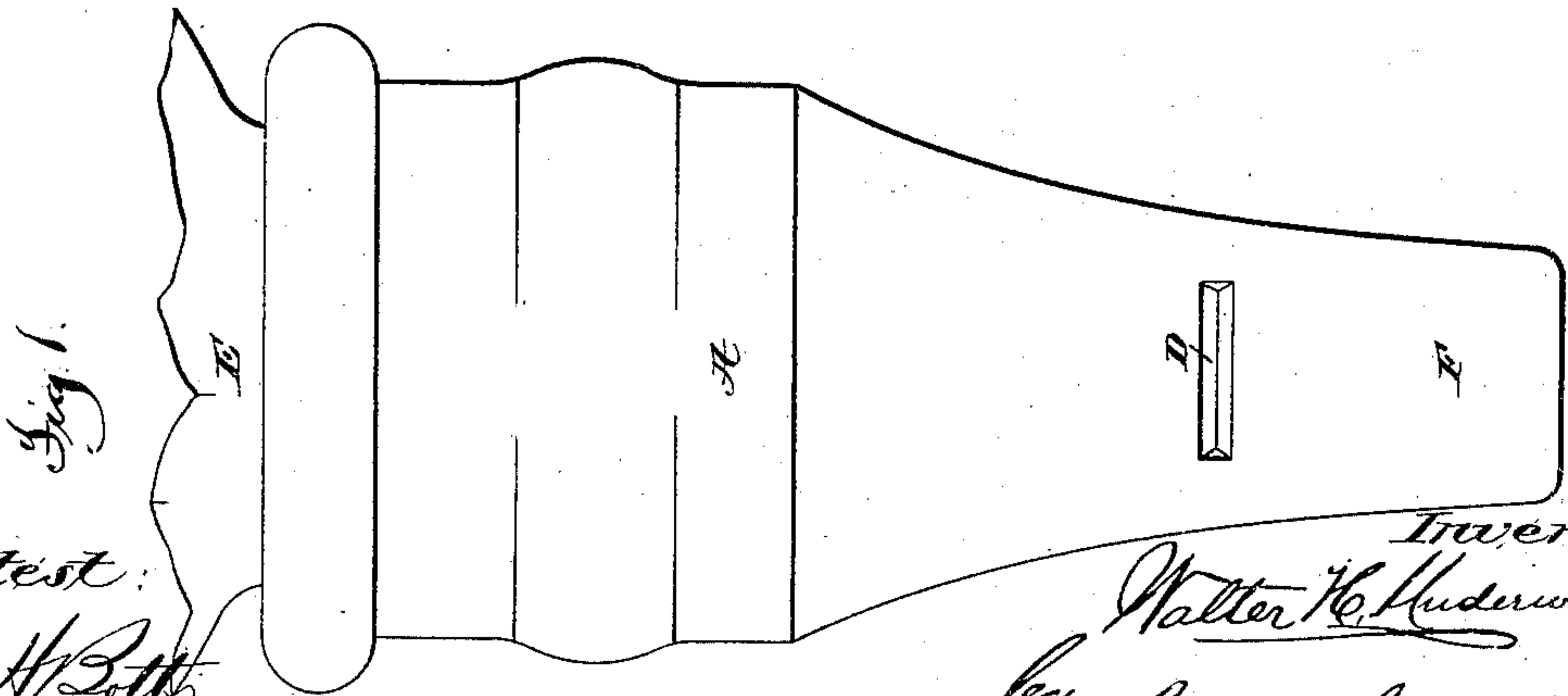
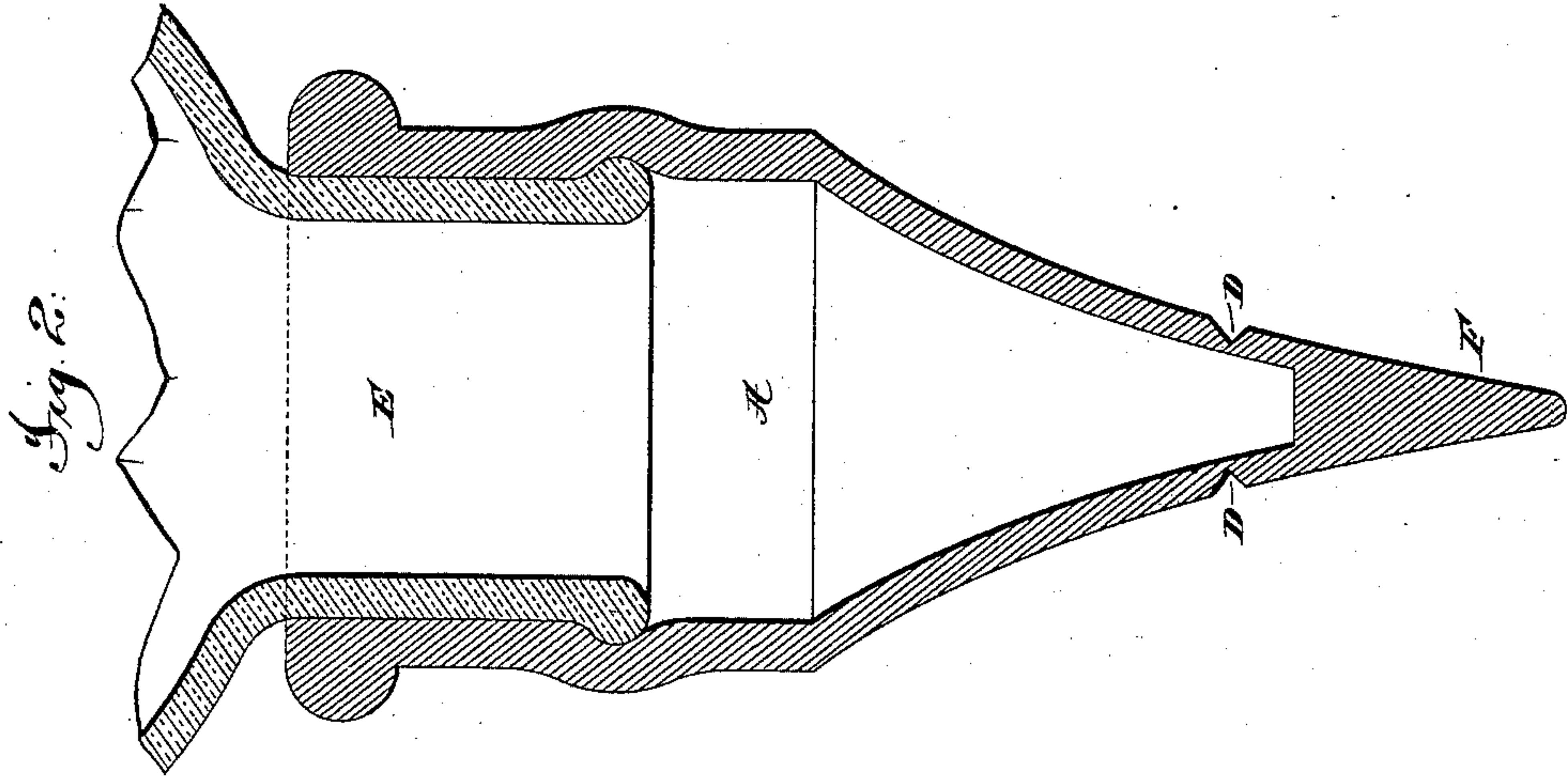
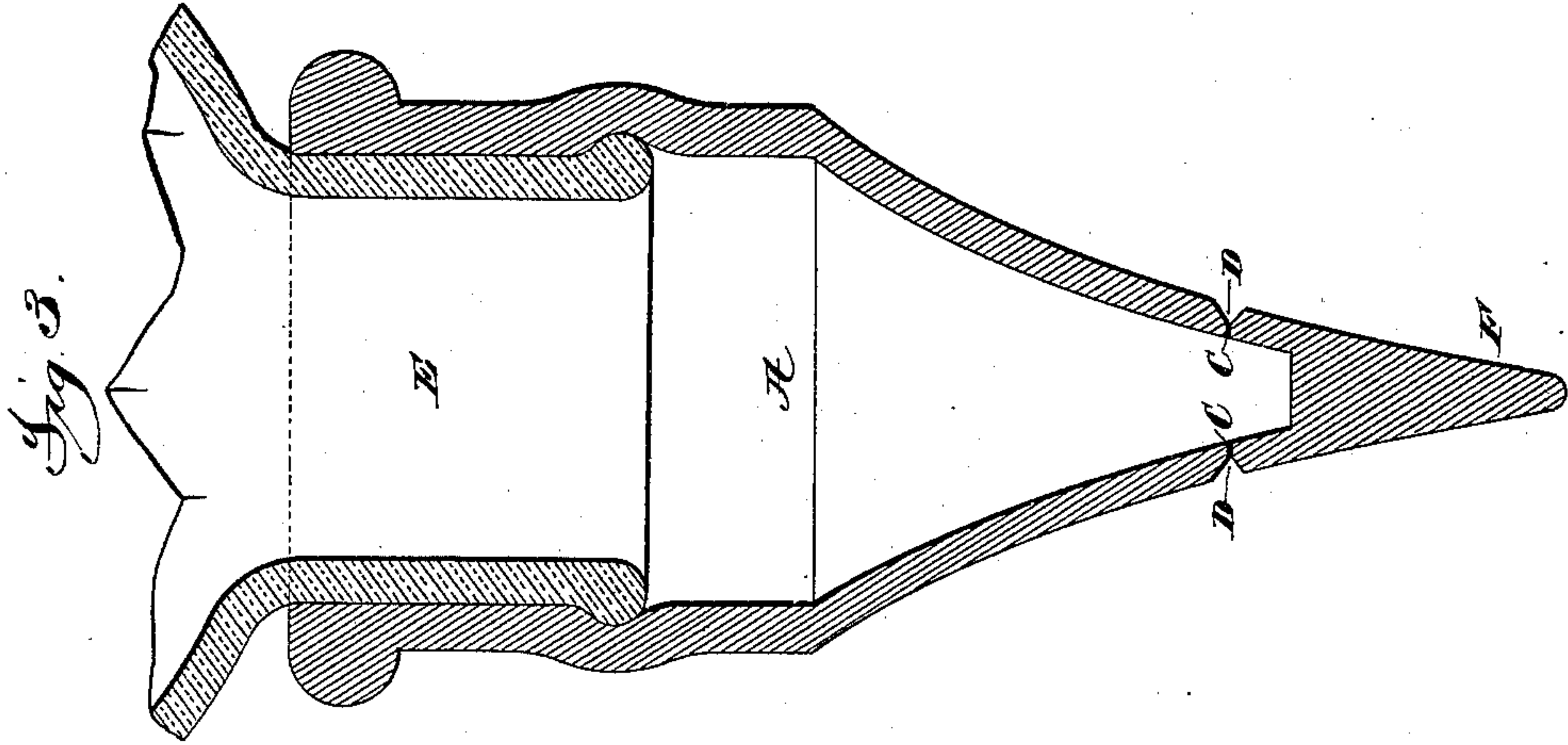
(No Model.)

W. H. UNDERWOOD.

BOTTLE STOPPER.

No. 378,743.

Patented Feb. 28, 1888.



Attest:  
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Atty's.



# UNITED STATES PATENT OFFICE.

WALTER H. UNDERWOOD, OF DENVER, COLORADO.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 378,743, dated February 28, 1888.

Application filed June 21, 1887. Serial No. 241,967. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER H. UNDERWOOD, of Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

This invention relates to a flexible elastic cap or tip which is designed and adapted to afford a means for closing mucilage-bottles and similar liquid-receptacles during storage and transportation, and which can be readily converted into a drop-counter or self-feeding brush to apply the liquid when it is required for use.

To this end the invention consists in a flexible elastic tip or cap which is so formed as to be applied to the neck or opening of the receptacle in such manner as to close the same against the escape of the liquid and the entrance of air, said cap or tip being formed with solid or unbroken walls which are adapted to be slit to form a discharge opening or openings, and provided with a distributor which is adapted for use as a brush in applying the liquid.

As a full understanding of the invention can be best given by a description of the cap in connection with an illustration of the same, such description will be given, reference being had to the accompanying drawings, in which—

Figure 1 is a view of the cap applied to a bottle. Fig. 2 is a sectional view of the same, and Fig. 3 is a similar view of the cap after it has been converted into a self-feeding brush.

Referring to said figures, it is to be understood that the cap A is made of rubber or other similar elastic material and is formed to fit over or onto the neck or opening E of the bottle or other receptacle. The cap is formed with solid walls, so that when applied to the receptacle, as shown in Figs. 1 and 2, it effectually closes the same, and thus takes the place of a cork or other stopper. The end of the cap is flattened—that is to say, is made of greater diameter in one direction than in the other—so as to form a brush or distributor, and the walls of this portion of the cap are thickened, so as to make the distributor more rigid than the part in which the slit or slits are to be formed. With the cap thus constructed, it is only necessary, in order to convert it into a self-feeding brush, which can be used to apply the contents of the bottle to a

surface, to make an incision or slit, C, in one or both sides of the cap below the distributor, as shown in Fig. 3. This can readily be done by the use of an ordinary penknife. If the slit or slits C is or are so formed that none of the material is removed, the elasticity of the material will hold the slits closed, so as to prevent the entrance of air or the escape of the liquid. As soon, however, as external pressure is applied to the cap so as to bend it, as will be the case when the brush or distributor F is rubbed along a surface, the flexure of the cap thus produced will open the slit C, so as to allow the contents to escape gradually, and the liquid thus escaping will be spread or distributed by the brush F. As soon as the pressure is removed from the cap, the elasticity of the material will cause it to resume its normal condition, so as to again close the slit C.

To aid the user in making the slit or slits C when it is desired to convert the cap A into a self-feeding brush, the cap may and preferably will be provided with an index mark or marks, as D, to indicate the position in which the slit or slits C should be made.

What I claim is—

1. A flexible elastic cap or tip adapted to be applied to the neck or opening of a liquid-receptacle, said tip having solid walls and a flattened distributor, substantially as described.

2. A flexible elastic cap or tip adapted to be applied to the neck or opening of a liquid-receptacle, said tip having solid walls which are adapted to be slit to form a discharge opening or openings, and are thickened adjacent to the point of the slit or slits to form a distributor, substantially as described.

3. A flexible elastic cap or tip adapted to be applied to the neck or opening of a liquid-receptacle, said tip having solid walls which are adapted to be slit, an index mark or marks to indicate the position of the slit or slits, and a flattened distributor, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

WALTER H. UNDERWOOD.

Witnesses:

OSCAR F. GUNZ,  
CARL KARP.