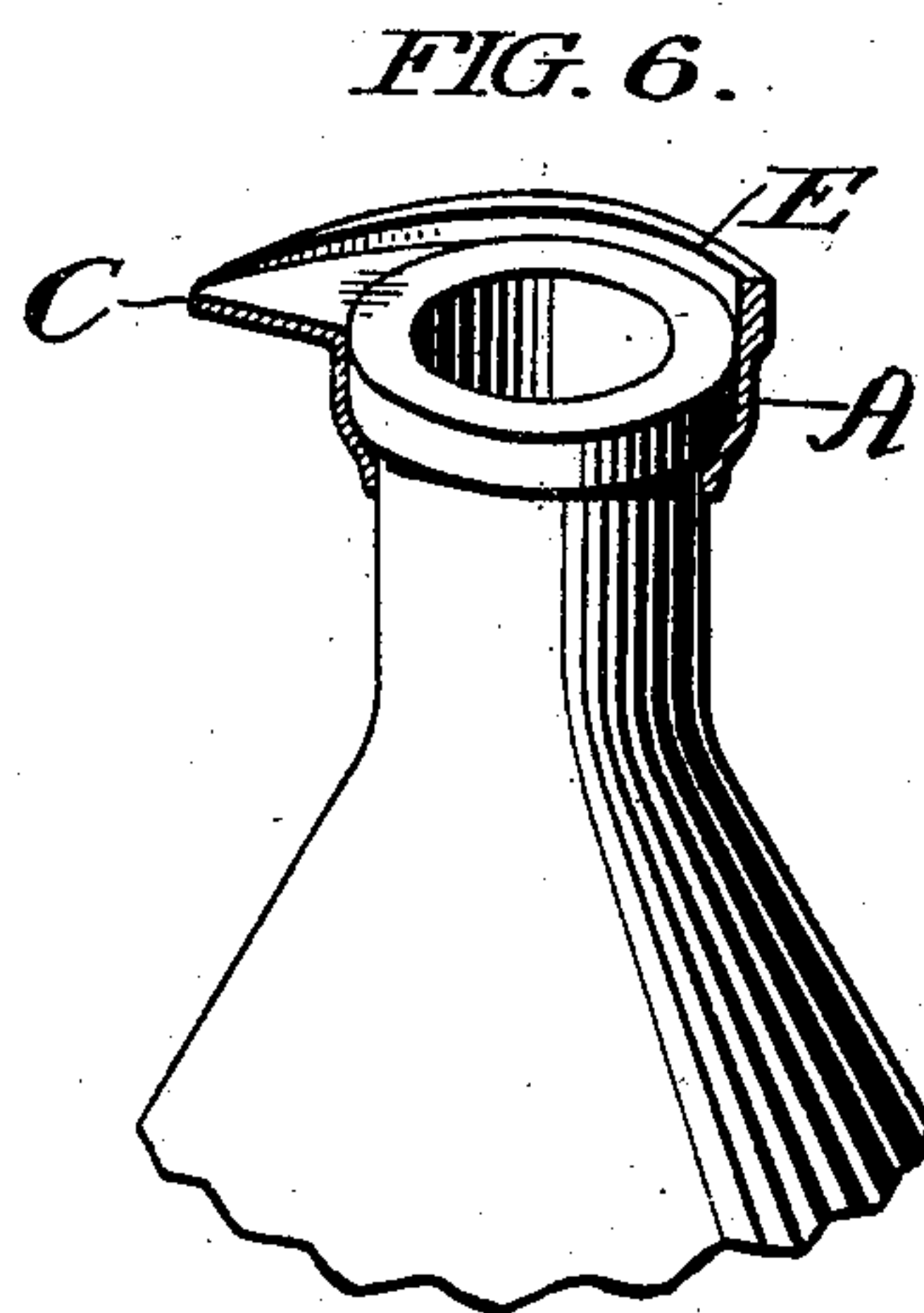
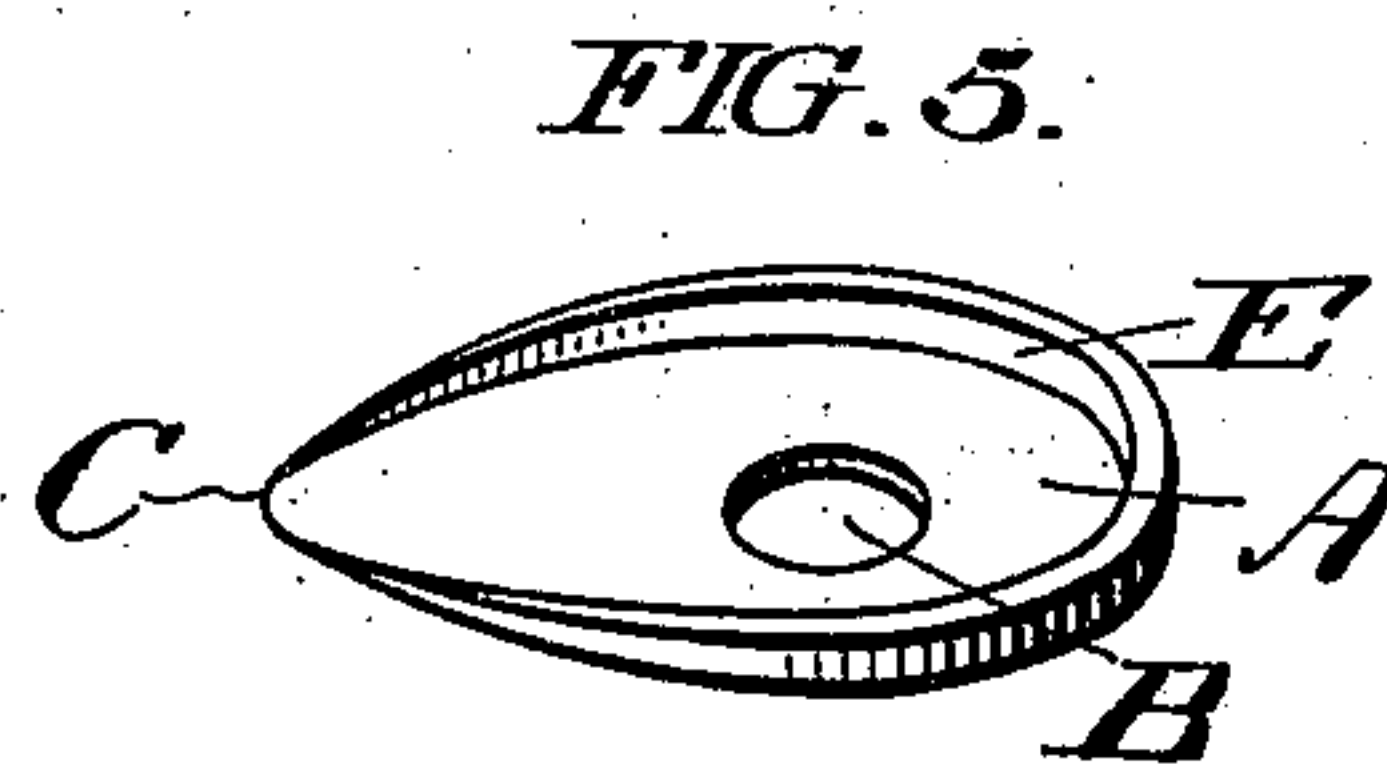
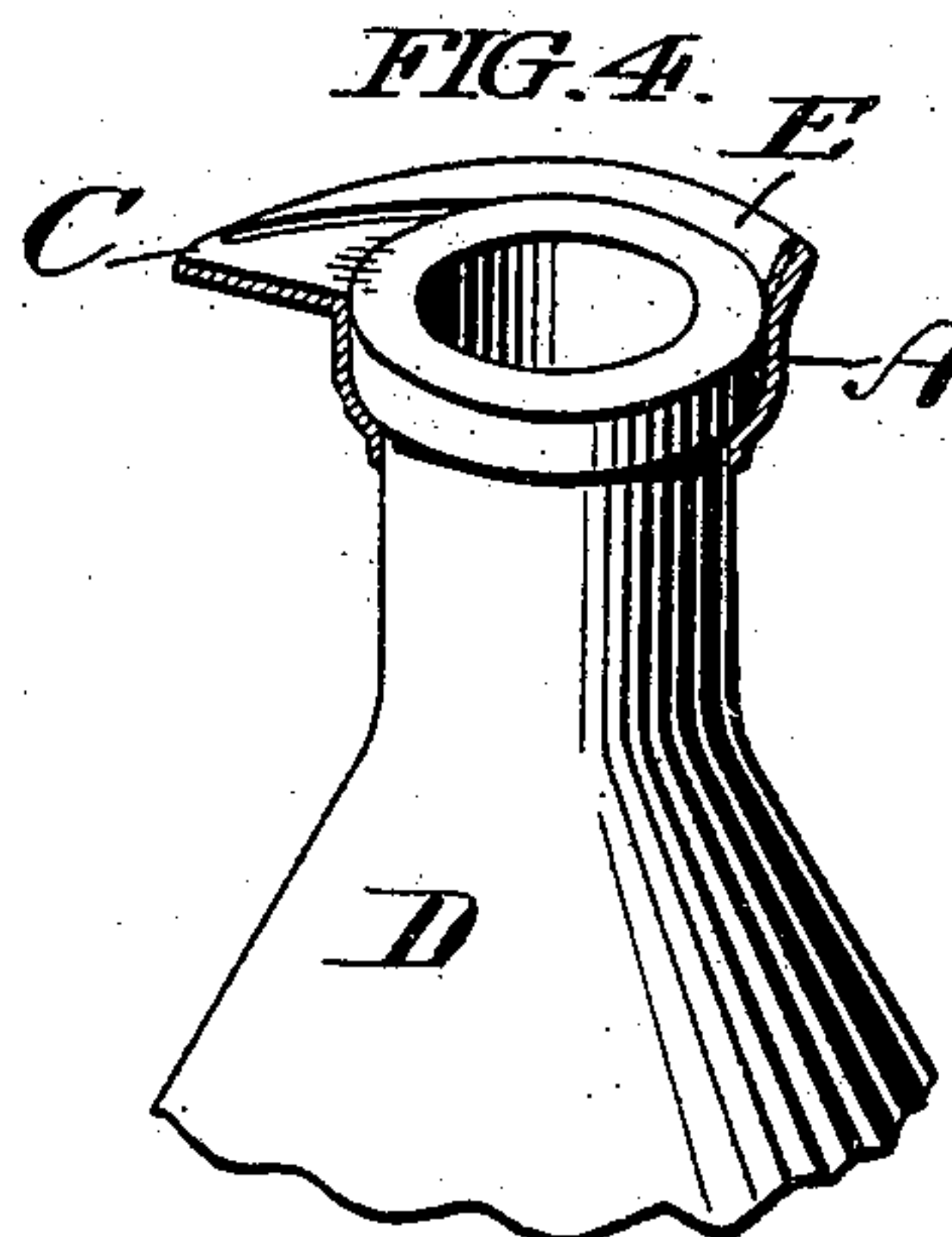
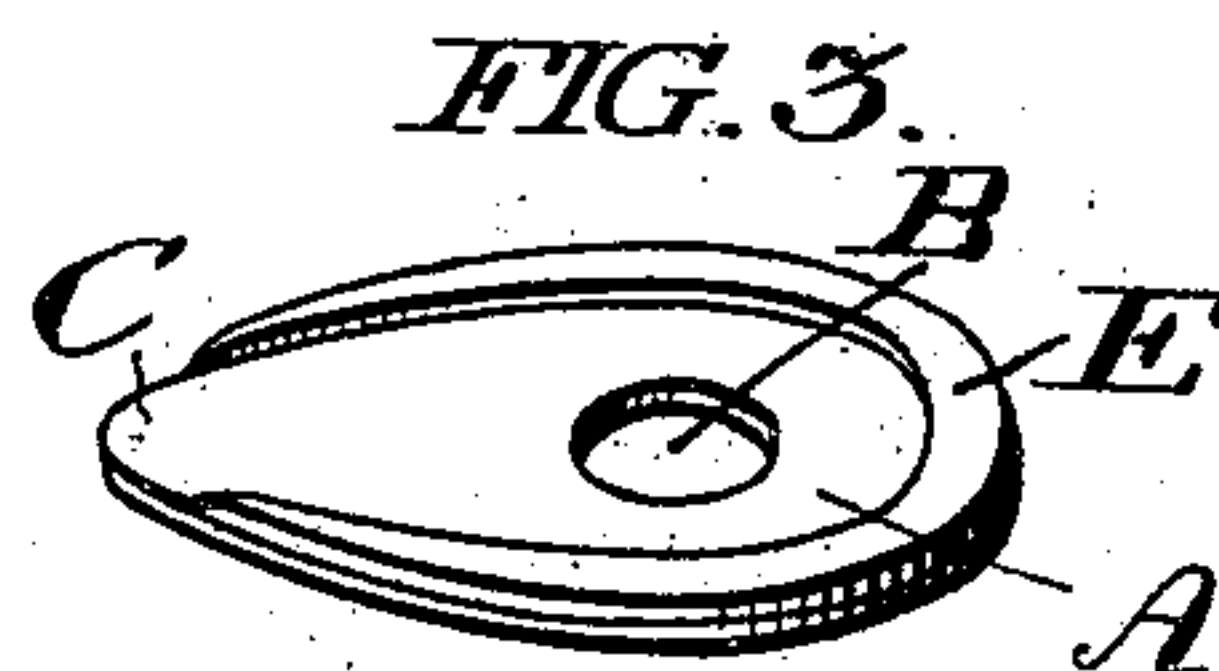
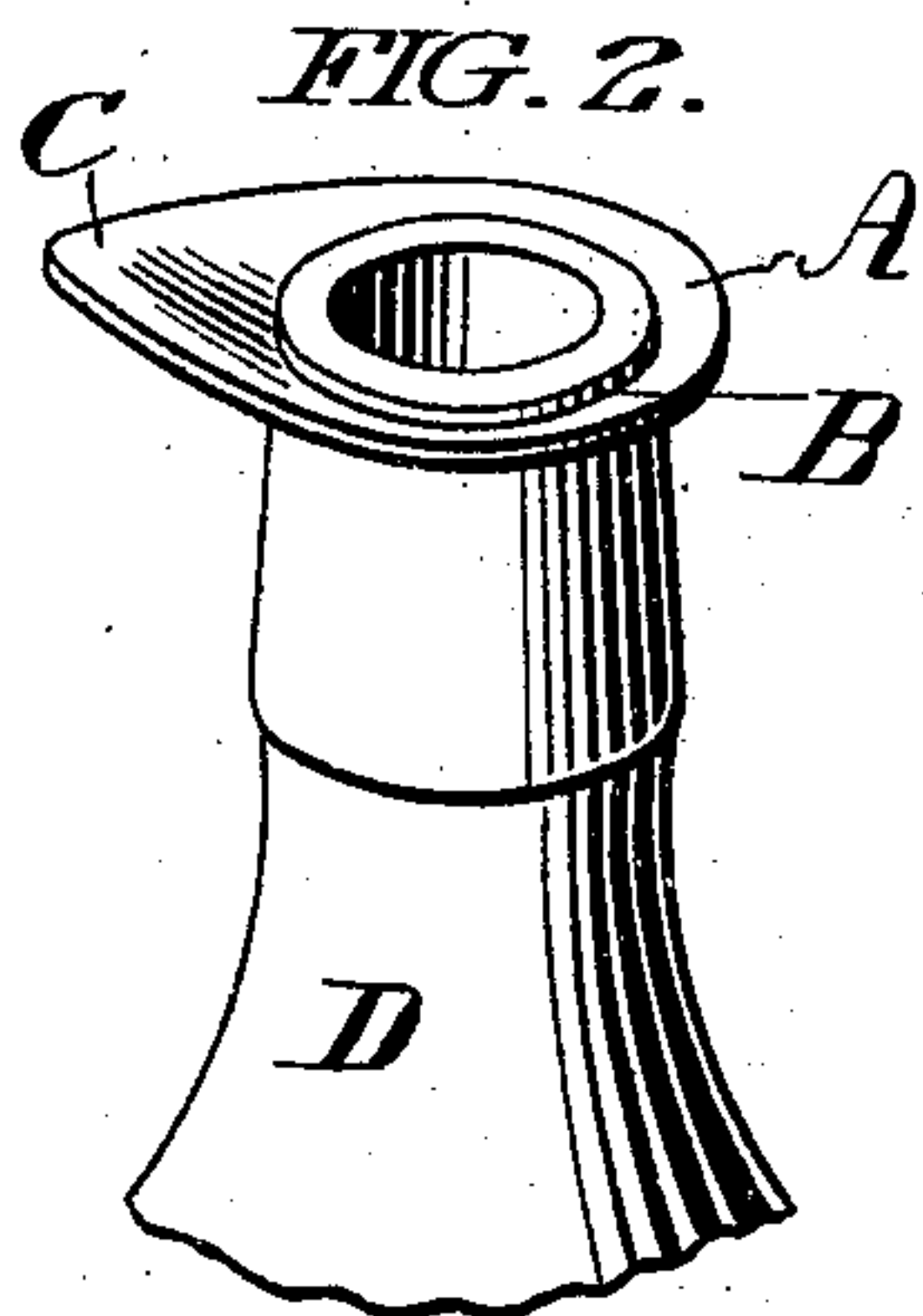
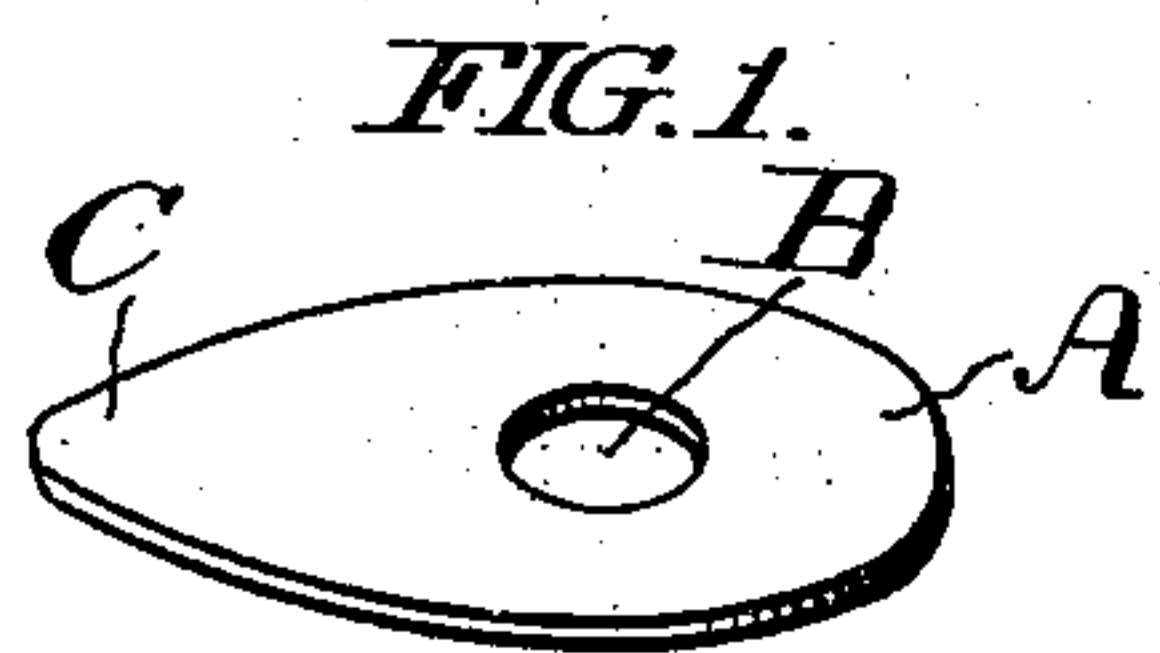


(No Model.)

W. S. HOW.
SPOUT ATTACHMENT FOR BOTTLES.

No. 599,784.

Patented Mar. 1, 1898.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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SPOUT ATTACHMENT FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 599,784, dated March 1, 1898.

Application filed May 18, 1897. Serial No. 637,048. (No model.)

To all whom it may concern:

Be it known that I, WOODBURY STORER HOW, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Spout Attachments for Bottles; 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 improvements in spout attachments for bottles and kindred liquid-containers; and my object is to provide attachments of this kind that are simple in construction, that can be cheaply made and readily applied to the mouths or necks of bottles of various shapes and sizes, and that when so applied will direct the pouring or dropping of the liquid from the bottle and also serve to prevent the liquid from soiling the neck or side of the bottle.

In the accompanying drawings, showing suitable embodiments of my invention, Figure 1 is a perspective view of one form of my improved spout attachment detached. Figure 2 is a perspective view showing the attachment as applied to the mouth or neck of a bottle. Figure 3 is a perspective view of a modified attachment detached; and Figure 4 is a view showing the modified attachment as applied to the mouth or neck of a bottle, the attachment being partly in perspective and partly in vertical central section. Figure 5 is a perspective view of another modification; and Figure 6 is a view showing the attachment shown in Figure 5 as applied to the mouth or neck of a bottle, the attachment being partly in perspective and partly in vertical central section.

My improved spout attachment consists, essentially, of a flat elastic annulus having an integral extension of approximately spout form and capable of being stretched over the neck or lip of a bottle. The form shown in Figures 1 and 2, it will be seen, consists of a flat disk or annulus A, having a central opening B and a flat elongated or extended portion C, constituting the spout of the attachment. This annulus is preferably made by cutting it from a sheet of rubber of suitable thickness

and elasticity for a purpose next to be explained. The central opening of the annulus should be of such a size and the rubber of such a thickness and degree of elasticity as to permit the attachment to be readily stretched over the lip of a bottle D, to which the attachment is to be applied, and when so stretched it will cling to the neck of the bottle and closely surround it, so as to be fluid-tight along the line of constrictive contact therewith. The constriction of the rubber around the bottle-neck tends to curve or bow the extension C until it assumes a concave spout-like form, which will effectually direct the pouring of the liquid from the bottle either in a stream or in drops, as may be desired, by simply inclining or tilting the bottle, as will readily be understood. The constriction of the rubber also causes the annulus to incline upward in such a way that its outer edge is higher than the edge of its opening which is in contact with the bottle-neck, thus forming a trough-like flange around the neck of the bottle. This construction effectually prevents all possibility of the liquid running down the neck or sides of the bottle when it has been returned to its upright position after the act of pouring liquid therefrom.

The modification shown in Figures 3 and 4 consists of an elastic attachment of substantially the same shape as before described and provided with a raised border or reinforced portion E around its outer edge. This reinforced portion E, which constitutes a wall or upturned flange, entirely surrounds the attachment, except at its spout or extended portion C, and may be made by uniting with the flat attachment a strip of rubber of substantially the same shape and size as the outer portion of the attachment. The reinforced flange E serves to increase the contractibility of the attachment and enables it to more tightly fit upon and embrace the neck of a bottle. It also serves to form a wall or flange around the upper surface of the neck or lip of the bottle, above which it may slightly project, except at that point next to the spout C. The advantage of such a construction is that it forms a more perfect spout for the better pouring or dropping of the liquid and also more effectually prevents the dripping of the

liquid down the neck or side of the bottle, any surplus liquid readily running back into the bottle.

In the modification shown in Figs. 5 and 6 the upturned flange or wall E, instead of being made by uniting a strip of rubber to the attachment, as with the modification just described, is integral with the attachment and may be made by molding or by forming in suitable dies from a single sheet of rubber of the proper shape. The same advantages are secured with this form as with the one previously described.

From the above description it will be seen that I have provided a spout attachment for bottles that can be simply and cheaply made by cutting from a sheet of rubber, that the attachment so made is perfectly flat, it not being necessary to form or mold the attachment save with the modified form of attachment shown in Figs. 5 and 6, and that when the attachment is applied to the neck of a bottle the flat spout extension is caused to assume

a concave form and the annulus a circular trough-like form.

Having pointed out several ways of carrying out my invention, I claim—

1. The spout attachment for bottles consisting of a flat elastic annulus having an integral spout-like extension, and capable of being stretched over the neck or lip of a bottle, substantially as and for the purpose set forth.

2. The spout attachment for bottles consisting of a flat elastic annulus having a raised border or upturned flange entirely surrounding its outer edge except at a point where it is extended to form a spout, substantially as and for the purpose set forth.

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

WOODBURY STORER HOW.

Witnesses:

W. SPENCE HARVEY,
KATHARINE M. TURNER.