

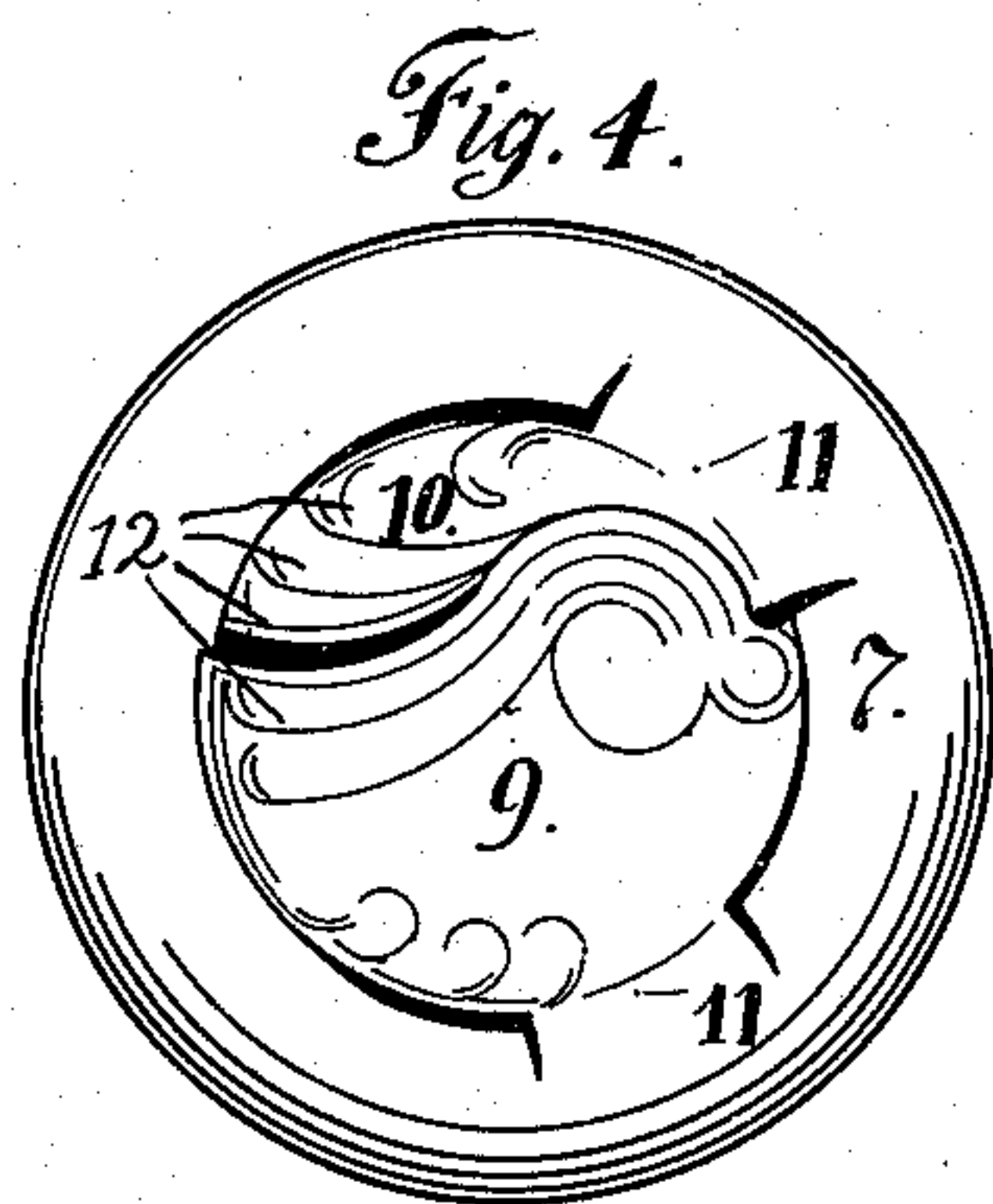
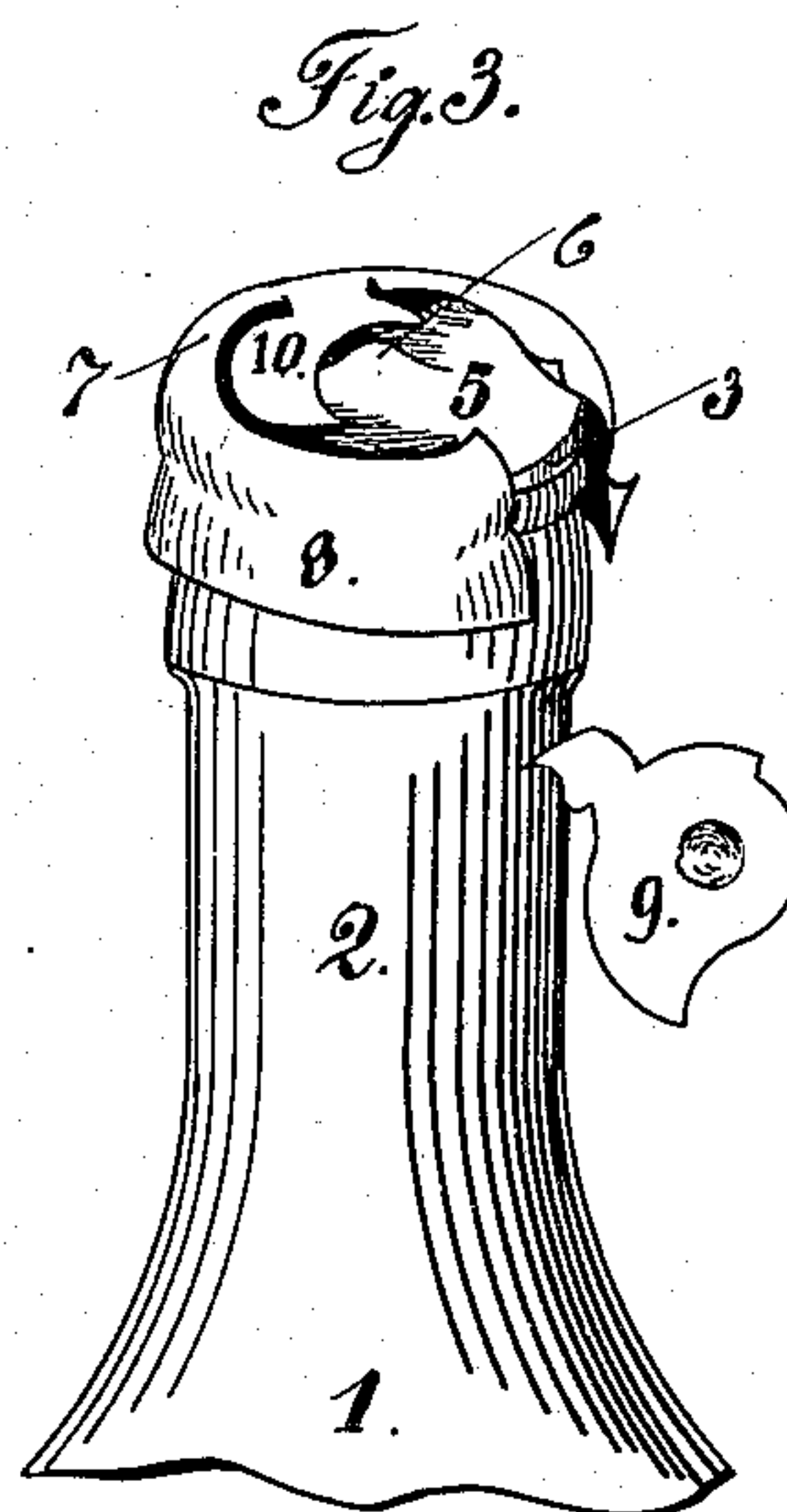
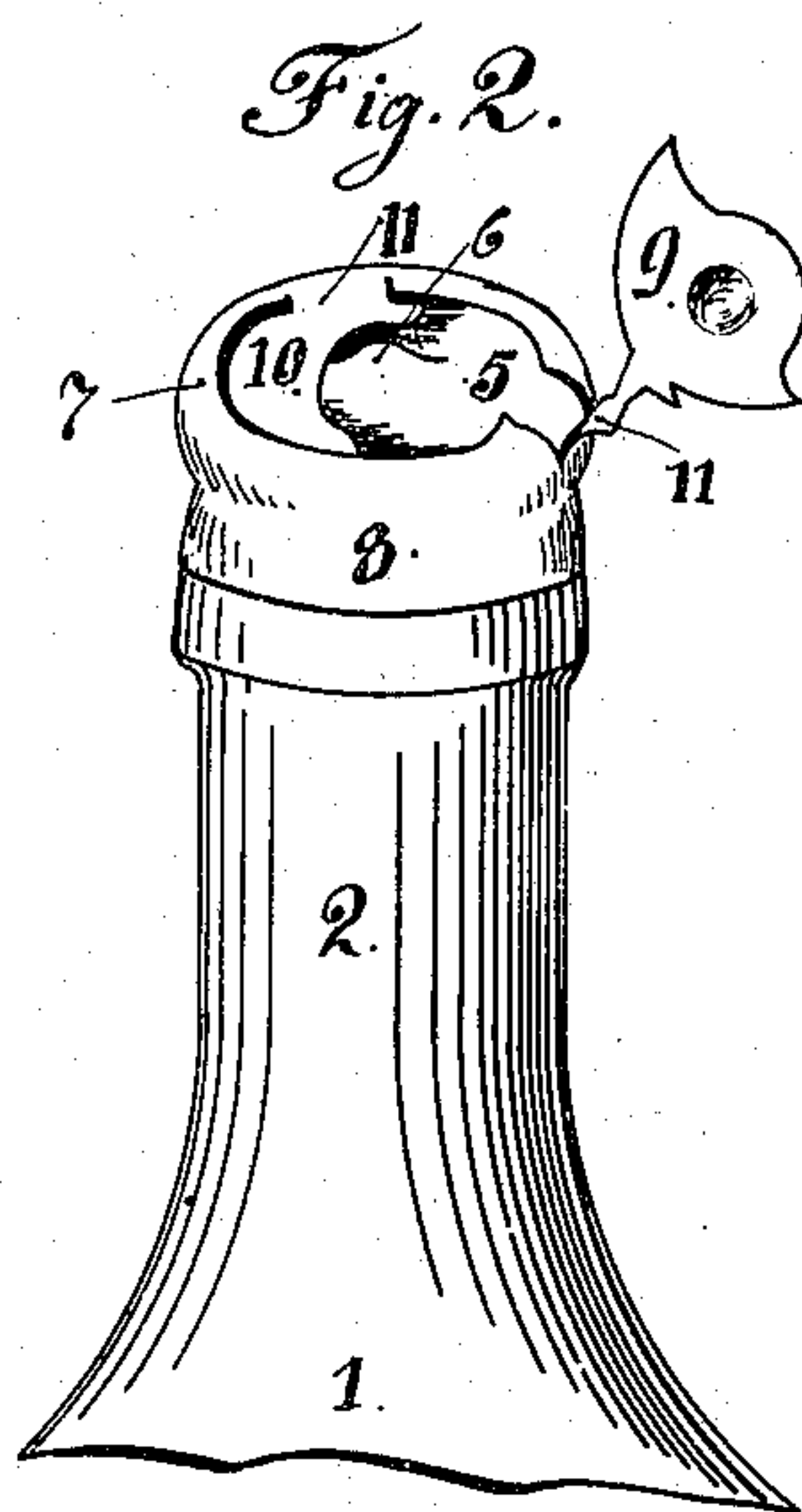
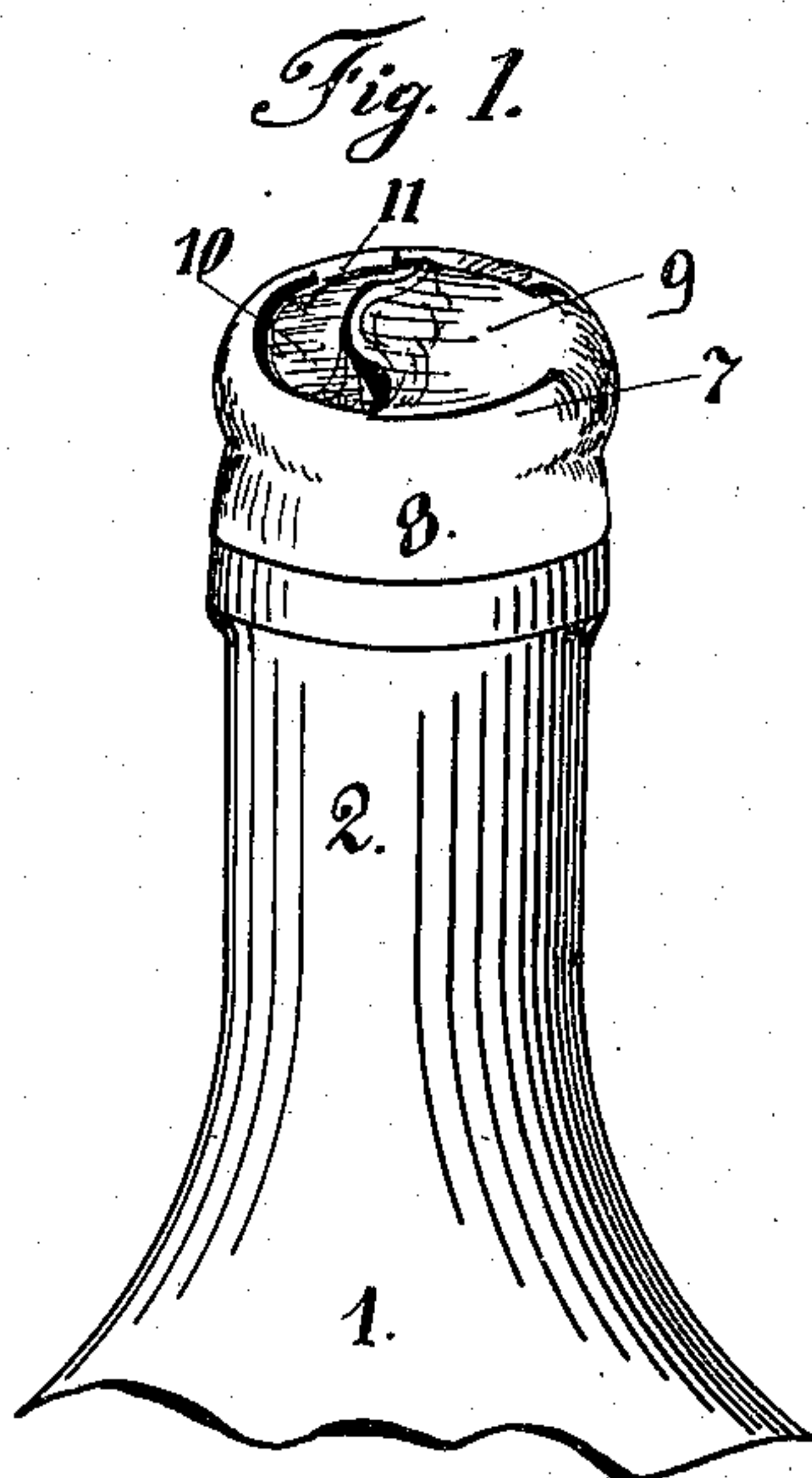
No. 847,994.

PATENTED MAR. 19, 1907.

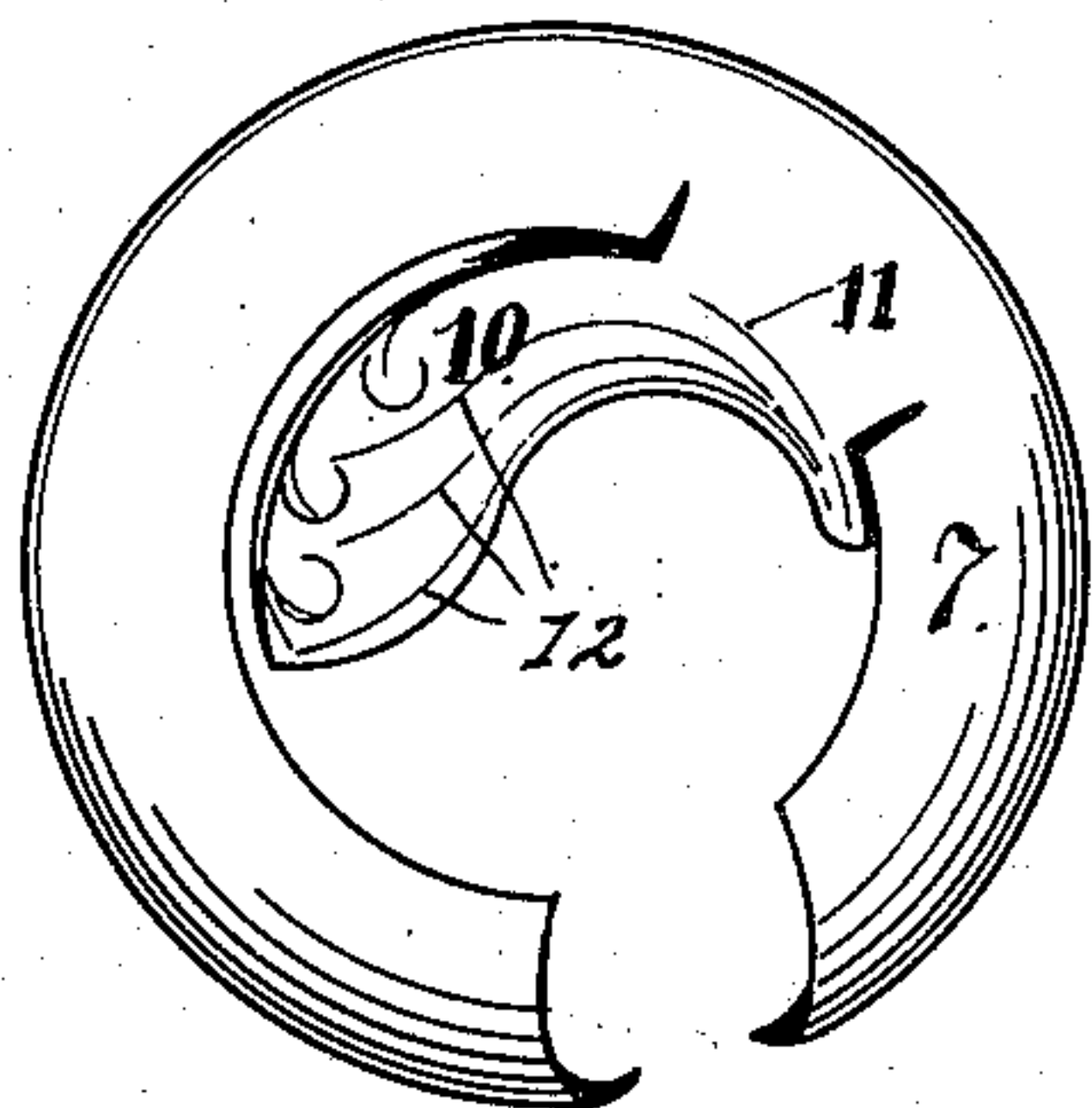
G. LIESSEM & J. BOMMER.

BOTTLE STOPPER.

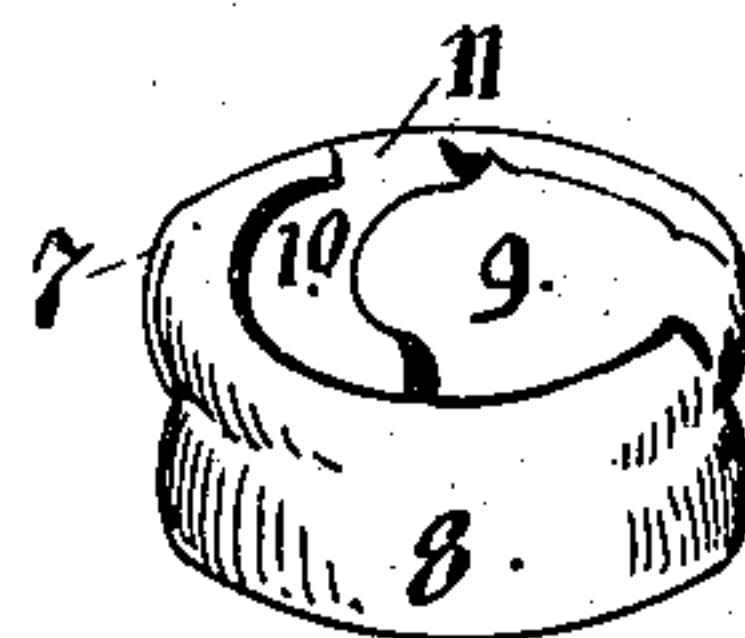
APPLICATION FILED NOV. 14, 1906.



*Fig. 5.*



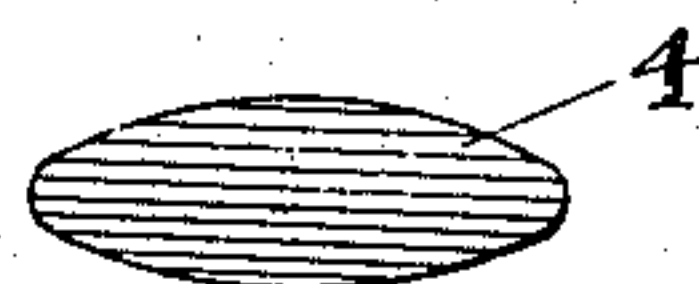
*Fig. 6.*



*Fig. 7.*



*Fig. 8.*



*Fig. 9.*



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# UNITED STATES PATENT OFFICE.

GOTTFRIED LIESSEM AND JOSEPH BOMMER, OF SAN FRANCISCO,  
CALIFORNIA.

## BOTTLE-STOPPER.

No. 847,994.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed November 14, 1906. Serial No. 343,406.

*To all whom it may concern:*

Be it known that we, GOTTFRIED LIESSEM and JOSEPH BOMMER, subjects of the Empire of Germany, and residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

This invention relates to an improved bottle-stopper, the same being particularly applicable to stoppers for beer-bottles or the like in which the stopper does not have to be replaced on or in the bottle by the consumer. A common form of stopper for such bottles is one in which a thin cork disk is laid upon the top of the bottle and is secured in position by a metallic cap, the edge of which is crimped around the mouth of the bottle. This form of stopper requires a special bottle-opener for removing the cap from the neck of the bottle, and these bottle-openers are sometimes misplaced or are not supplied with the bottles, and in any case the necessity of so providing them is troublesome and expensive. By the present invention it is no longer necessary to provide such a bottle-opener.

In the accompanying drawing, Figure 1 is a perspective view of the upper portion of a bottle having the improved stopper secured thereon in its normal or closed position. Fig. 2 is a similar view showing the stopper in an intermediate stage of removal. Fig. 3 is a similar view showing the stopper entirely broken for the purpose of removal. Fig. 4 is an enlarged plan view of the stopper intact. Fig. 5 is a similar view of the same broken. Figs. 6, 7, 8, and 9 are perspective views of different parts of the stopper detached.

Referring to the drawing, 1 indicates a bottle, and 2 the neck thereof. Upon the top of the neck is placed a thin cork disk 3, such as is common with this class of stoppers, and upon the disk is again placed a disk of waxed paper 4. Over the waxed paper is placed a thin saucer-shaped metal disk 5, having its convex side uppermost and having a central protuberance 6. Over the metallic disk 5 is a cap 7, formed, preferably, of aluminium, hav-

ing its edge 8 crimped around the neck of the bottle.

The central portion of the cap is cut to form two wings 9 10, united to the cap only at their bases 11. Both of these wings are formed with curved corrugations 12, forming an ornamental pattern, and the line of division between the two wings is in a direction in harmony with the general direction of the lines of corrugations or of the pattern. The larger wing 9 has a slight concavity lying over central bulge or protuberance 6 of the metallic cap, the effect of said protuberance being to prevent said larger wing being unduly depressed, which would render it difficult to raise it with the finger-nail. Said protuberance forms a stop for the larger wing when placing the cap upon the bottle, raising the edge of the larger wing slightly above that of the smaller wing, so that the finger-nail can be inserted beneath said edge and the wing can be easily raised. It will be observed, moreover, that said wings when in position form in appearance a continuous cap. For this reason and on account of the ornamental pattern formed on the wings the device is neat and attractive in appearance and is readily introduced on the market.

In order to remove the stopper, the operator first lifts one of the wings 9 and 10 into the position shown in Fig. 2. This may be accomplished either with the finger-nail or with a knife-blade. When the wing has been raised by pulling it outward, the operator tears the same from the cap and in so doing severs the edge of the cap, as shown in Fig. 3. Should the removal of the first wing 9 fail to sever the cap, the second wing 10 may be used. Thus the cap is readily removed from the bottle and the bottle thereby opened.

We claim—

A bottle-stopper comprising a disk, a thin metallic disk over the first disk and having a central protuberance or boss, a cap around the same adapted to be crimped to the neck of the bottle, said cap being formed of thin metal which will readily tear, and said metal being made with corrugations forming an

ornamental pattern and being divided into  
two wings, the line of division between the  
wings extending in the same direction as the  
lines of corrugations to conform to the gen-  
5 eral pattern, each wing being connected to  
the base of the cap, and the two wings to-  
gether completely covering the underlying  
disk, substantially as described.

In testimony whereof we have hereunto set  
our hands in the presence of two subscribing 10  
witnesses.

GOTTFRIED LIESSEM.  
JOS. BOMMER.

Witnesses:

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