

(No Model.)

J. E. WELSH.  
BOTTLE.

No. 584,438.

Patented June 15, 1897.

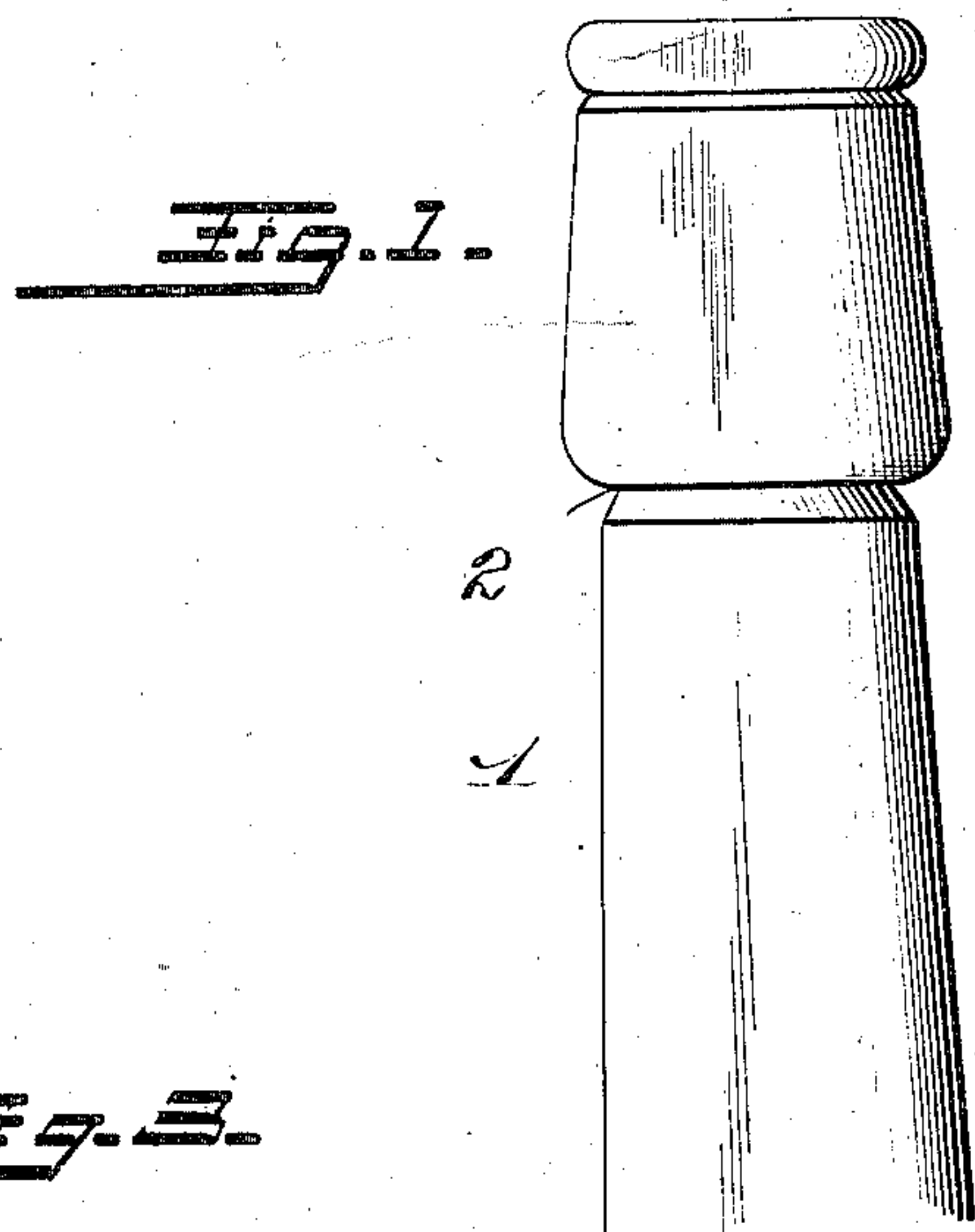


Fig. 3.

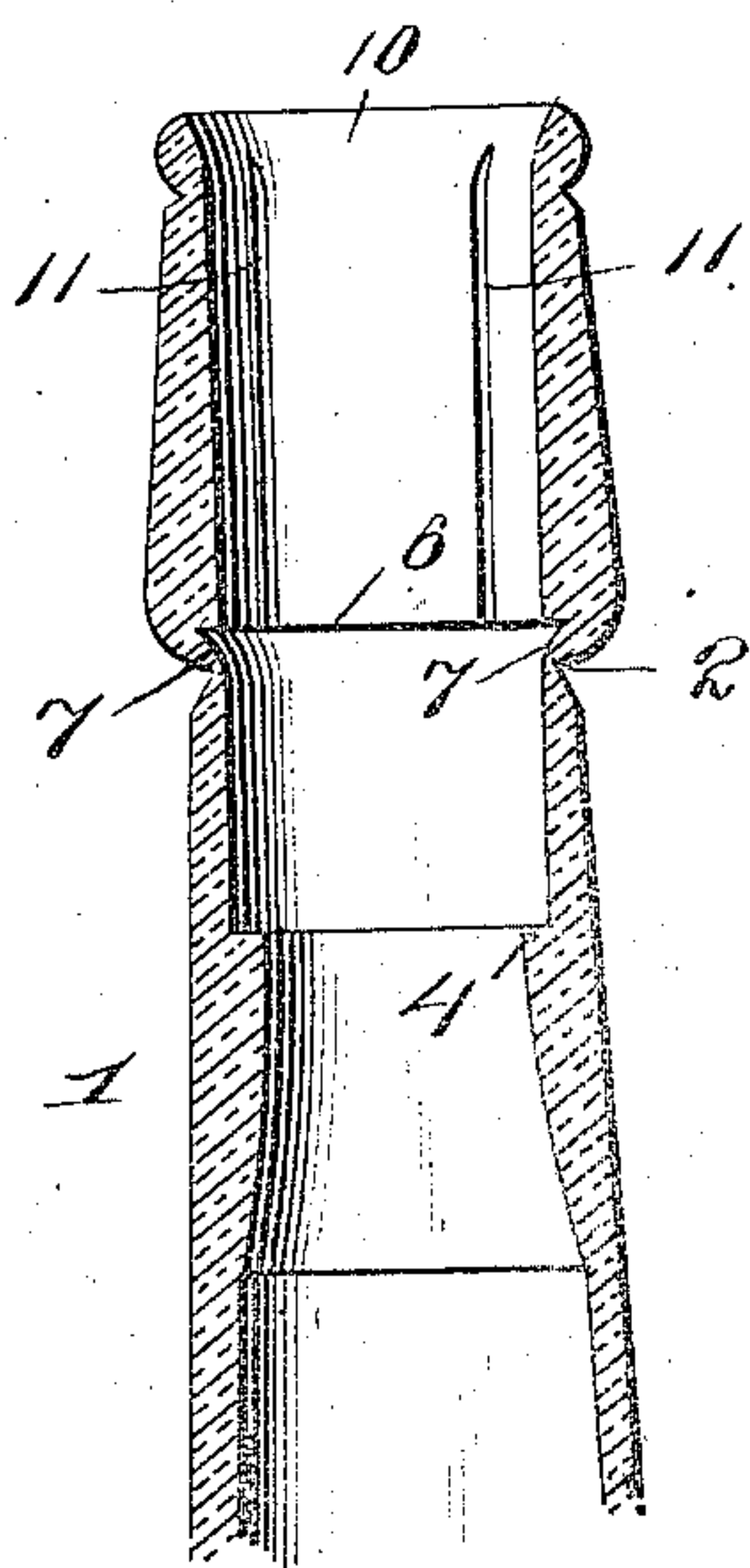


Fig. 2.

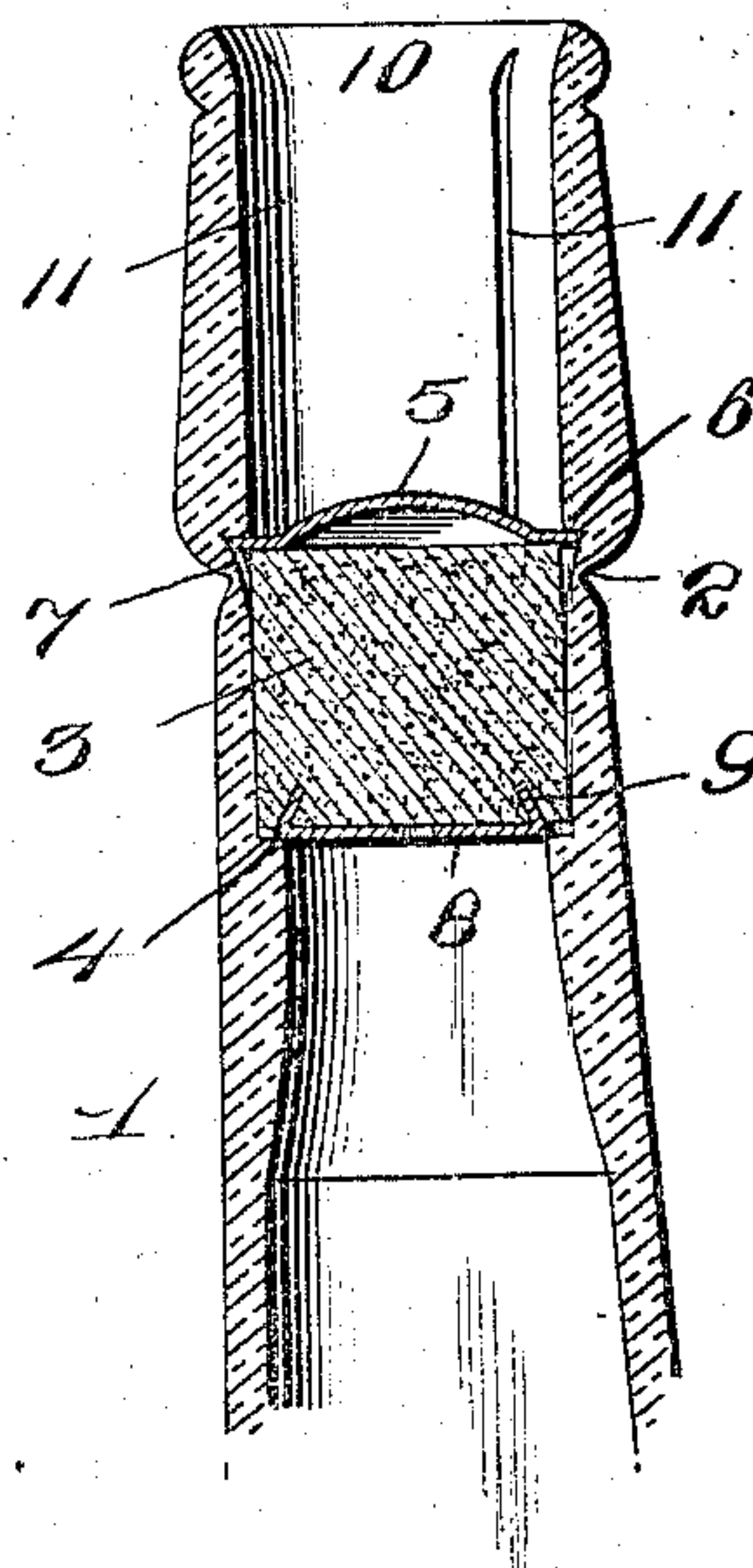
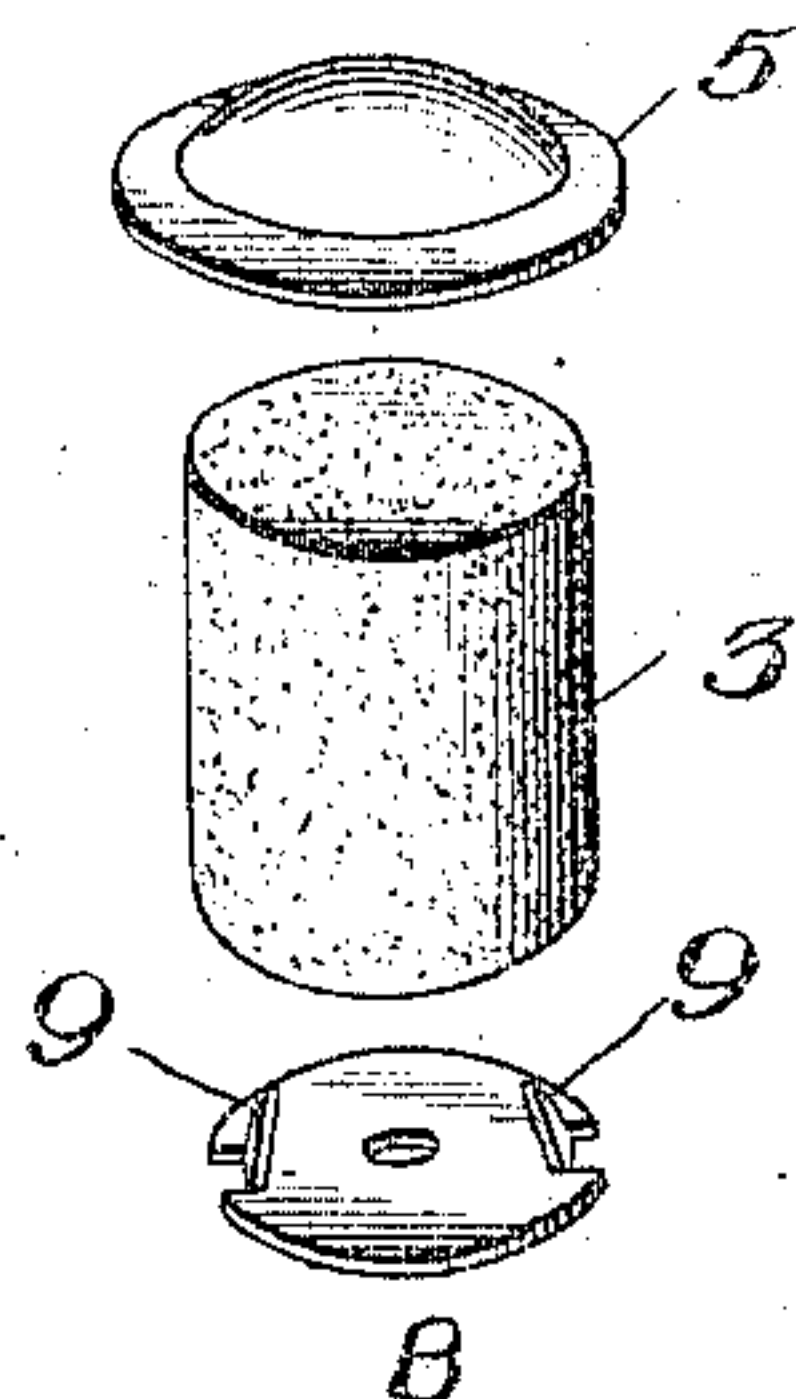


Fig. 4.



Witnesses

*W. J. Koerth.*  
*J. F. Riley*

By *his* Attorneys,

Inventor

*James E. Welsh*

*Chas. Snow & Co.*



# UNITED STATES PATENT OFFICE.

JAMES E. WELSH, OF LA CLEDE, MISSOURI.

## BOTTLE.

SPECIFICATION forming part of Letters Patent No. 584,438, dated June 15, 1897.

Application filed March 12, 1896. Serial No. 582,933. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES E. WELSH, a citizen of the United States, residing at La Clede, in the county of Linn and State of Missouri, have invented a new and useful Bottle, of which the following is a specification.

The invention relates to improvements in bottles and analogous receptacles.

The object of the present invention is to provide a simple and comparatively inexpensive bottle capable of preventing access to its contents without first mutilating it sufficiently to prevent it from being refilled and used under the same or any other brand, so that one manufacturer's bottle cannot afterward be used by another.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is an elevation of a portion of a bottle constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a similar view, the cork and its upper and lower plates being removed. Fig. 4 is a detail perspective view of the cork and the upper and lower plates.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a bottle provided on its interior with an annular groove or crease 2, forming a reduced connecting-ligament between the upper and lower portions of the neck of the bottle, whereby the upper portion of the neck is rendered frangible. The groove 2 is preferably arranged on the exterior of the neck of a bottle, as shown, but it may, if desired, be cut or otherwise made on the interior thereof.

The lower portion of the neck of the bottle, at a point directly beneath the reduced connecting-ligament, receives a cork or stopper 3, which is supported by a horizontal shoulder 4, arranged on the interior of the neck of the bottle and preferably extending entirely around the same.

The upper portion of the neck of the bottle has to be broken off before access can be had to the cork or stopper, and in order to

prevent the latter from being drawn without first severing the upper portion of the neck a shield or plate 5 is employed. The shield or plate 5 may be an ordinary flat disk, but it is preferably dished, as shown, but instead of the dish portion being curved it may, if desired, be conical or of any similar form. The plate or shield covers the upper face of the cork or stopper, and its periphery, which is flat, engages an annular shoulder 6, located at the upper terminus of the connecting-ligament of the neck of the bottle, whereby when the upper portion thereof is broken off the plate or shield 5 is freed and may be readily removed to enable the cork to be drawn. The interior of the neck of the bottle is beveled adjacent to the connecting-ligament at 7 to prevent any pressure from being exerted on the ligament by the cork when sealing the bottle.

In order to prevent the cork or stopper from being forced into the bottle, a lower plate or disk 8 is employed and is supported upon the shoulder 4, and is preferably provided with tongues 9, embedded in the cork or stopper and connecting the lower disk or plate with the same. The upper and lower plates may be constructed of metal or any other suitable material, unaffected, chemically, by the contents of a bottle, and, if desired, the lower plate or disk may be provided with a central perforation to receive the end of a corkscrew to enable the lower plate or disk to be removed simultaneously with the cork.

The top of the neck of the bottle is beveled at its inner face at 10 to facilitate the introduction of the cork or stopper and the upper and lower plates or shields, and the upper portion of the neck is provided at its inner face with a series of grooves 11, forming vents to permit the escape of air to relieve the bottle of pressure when the cork or stopper is being inserted.

It will be seen that the bottle is simple and comparatively inexpensive in construction and that it is absolutely impossible to gain access to its contents without first mutilating it sufficiently to prevent it from being refilled and resold.

It may also be apparent that the reduced portion or ligament, which renders the upper

portion of the neck of the bottle frangible, is located above the cork or stopper, so that broken glass cannot fall within the bottle.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit of the invention or sacrificing any of the advantages of this invention, such as applying the improvements to jugs and analogous receptacles.

What I claim is—

1. The combination of a bottle having a neck with a frangible upper portion provided on its interior with grooves, a cork or stopper arranged within the lower portion of the neck of the bottle, and upper and lower plates covering the top and bottom of the cork or stopper and interlocked with the bottle, substantially as described.

2. The combination of a bottle having a

neck with a frangible upper portion, and provided on its interior with upper and lower shoulders, a cork or stopper arranged within the neck of the bottle, a lower plate or disk supported upon the lower shoulder, preventing the cork from being forced into the bottle and provided with a tongue embedded in the cork, and an upper dished shield covering the top of the cork or stopper and provided with a flat peripheral edge engaging the upper shoulder, substantially as described.

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

JAMES E. WELSH.

Witnesses:

H. W. MARSHALL,  
J. A. ELLIOTT.