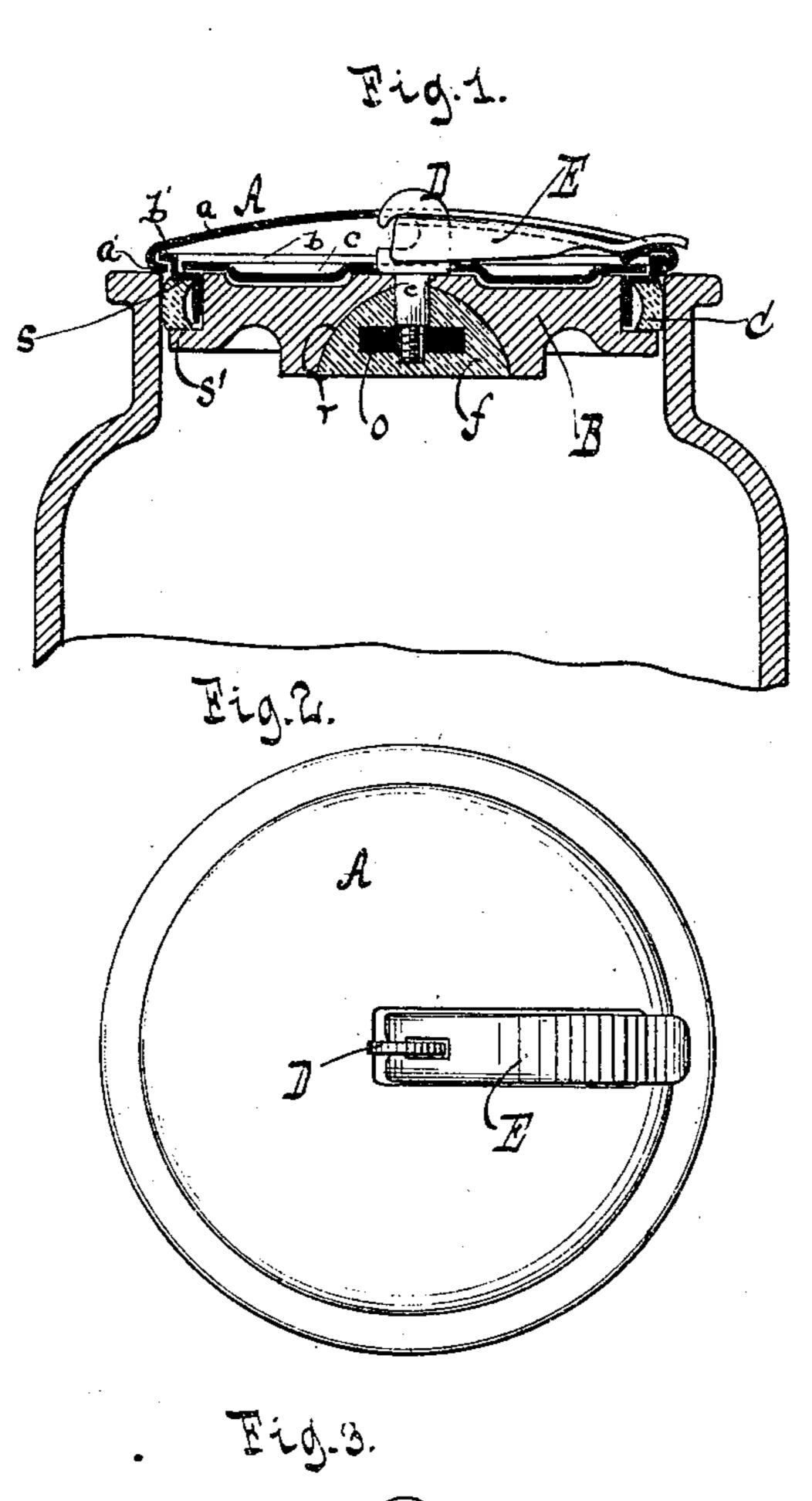
(No Model.)

## J. H. W00D.

## STOPPER FOR JARS AND BOTTLES.

No. 272,823.

Patented Feb. 20, 1883.



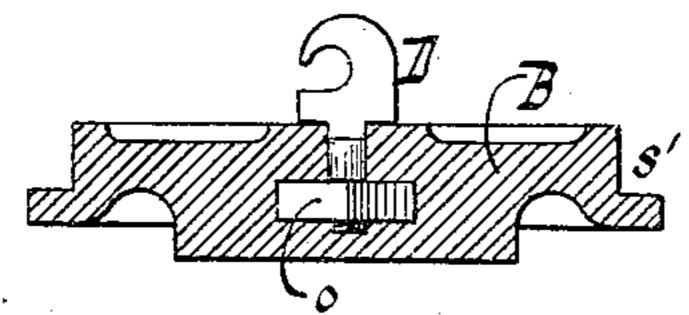
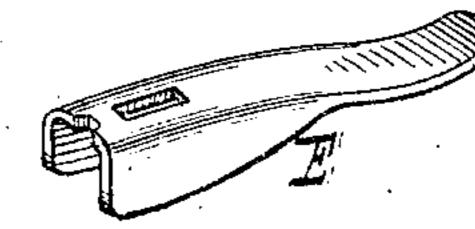


Fig.4.

WITNESSES:

Atto Stufeland Milliam Willer



INVENTOR

John H. Wood

BY Van Gantwoord i Hauf

ATTORNEYS

## United States Patent Office.

JOHN H. WOOD, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO FRANK L. McGOWAN, OF SAME PLACE.

## STOPPER FOR JARS AND BOTTLES.

SPECIFICATION forming part of Letters Patent No. 272,823, dated February 20, 1883.

Application filed December 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, John H. Wood, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Stoppers for Jars and Bottles, of which the following is a specification.

This invention relates to that class of stoppers in which an elastic ring is interposed between two disks combined with a central clamping device, whereby the disks may be drawn together to compress and expand the elastic ring in the mouth of a bottle.

My invention consists in the construction of the lower disk of glass, porcelain, or other similar material, it having confined therein a metallic shank for the attachment of the clamping device, as hereinafter fully set forth.

This invention is illustrated in the accompanying drawings, in which Figure 1 represents a vertical cross-section, showing the stopper inserted in the mouth of a bottle. Fig. 2 is a plan or top view. Fig. 3 illustrates a modification in the manner of securing the metallic shank to the glass disk, and Fig. 4 a detached perspective view of the cam-lever.

Similar letters indicate corresponding parts. The letter A designates the upper disk, and B the lower disk, both provided with a shoul-30 der, s or s', upon the circumference, between which parts thereof is interposed an elastic ring, C. As here shown, the upper disk is composed of a top cap, a, having its edge turned inward to form the annular lip a' and 35 an annular ring, b, bent outwardly near its upper edge to form the shoulder s, the upper edge being provided with an outward-projecting annular flange, b', overlying the annular lip of the cap a. Upon the annular shoulder 40 formed by the outwardly-bent portion of the ring b is arranged a plate, c, which overlies the disk B.

The letter D indicates a metallic shank secured to and rising from the lower disk, B, and E a cam-lever attached to said shank, this lever being so shaped and arranged that when it is swung to the position shown in Fig. 1 it bears upon the upper disk, A, and serves to clamp or draw the two disks toward each other, thereby compressing and expanding the elas-

tic ring C, while when it is swung to an upright position the disks are released and the elastic ring is permitted to assume a normal position.

The upper disk, A, may be made of metal, as heretofore; but the lower disk, B, is com- 55 posed of glass, porcelain, or other similar material, and the metallic shank D is held thereto by means of a head, o, which is formed on or applied to the lower end or portion of the shank, and confined or inclosed in the disk. 60 In the example shown in Figs. 1 and 2, the head o of the shank is embedded in a filling, f, of plastic material, contained in a recess, r, formed in the lower surface of the glass disk B, such recess surrounding a central opening 65 in the disk, through which the shank projects upward; and in the example shown in Fig. 3 said head is embedded directly in the glass or other material composing the disk. When the shank D is secured, as in Fig. 1, the glass disk 70 B may be formed independently of the shank, and a secure attachment of the shank is obtained without danger of chilling and cracking or breaking the disk.

By making the disk B of glass or other simi- 75 lar material and securing the metallic shank D in the manner set forth the surface of the stopper presented to the interior and contents of the bottle is left destitute of metal, and is not liable to corrode, which is a desideratum. 80

If desired, the shank D may be provided with a screw-thread and thumb-nut in lieu of the clamping-lever for drawing the disks together.

What I claim as new, and desire to secure 85 by Letters Patent, is—

1. A stopper consisting of the lower shouldered disk, B, formed of glass or similar material, and having permanently embedded within its body portion the head o at the lower end 90 of the metallic shank D, whereby the shank is held in a stationary position, the upper disk, A, provided with the shoulder s, and through which disk the metallic shank projects, an elastic ring arranged between the shoulders 95 of the said disk, and a lever for drawing the two disks together, substantially as described.

2. In a stopper of the character specified, the lower disk, B, formed of glass, porcelain, or other similar material, with the central open- 100

ing, e, and the recess r in the lower surface surrounding said opening, in combination with the metallic shank D, for the attachment of the clamping-lever or its substitute, having the head on its lower end or portion secured in said recess by means of a plastic filling, which entirely surrounds the head, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscrib- 10 ing witnesses.

JOHN H. WOOD. [L. s.]

Witnesses:

EDWARD J. JONES, ANNIE M. COUGHLIN.