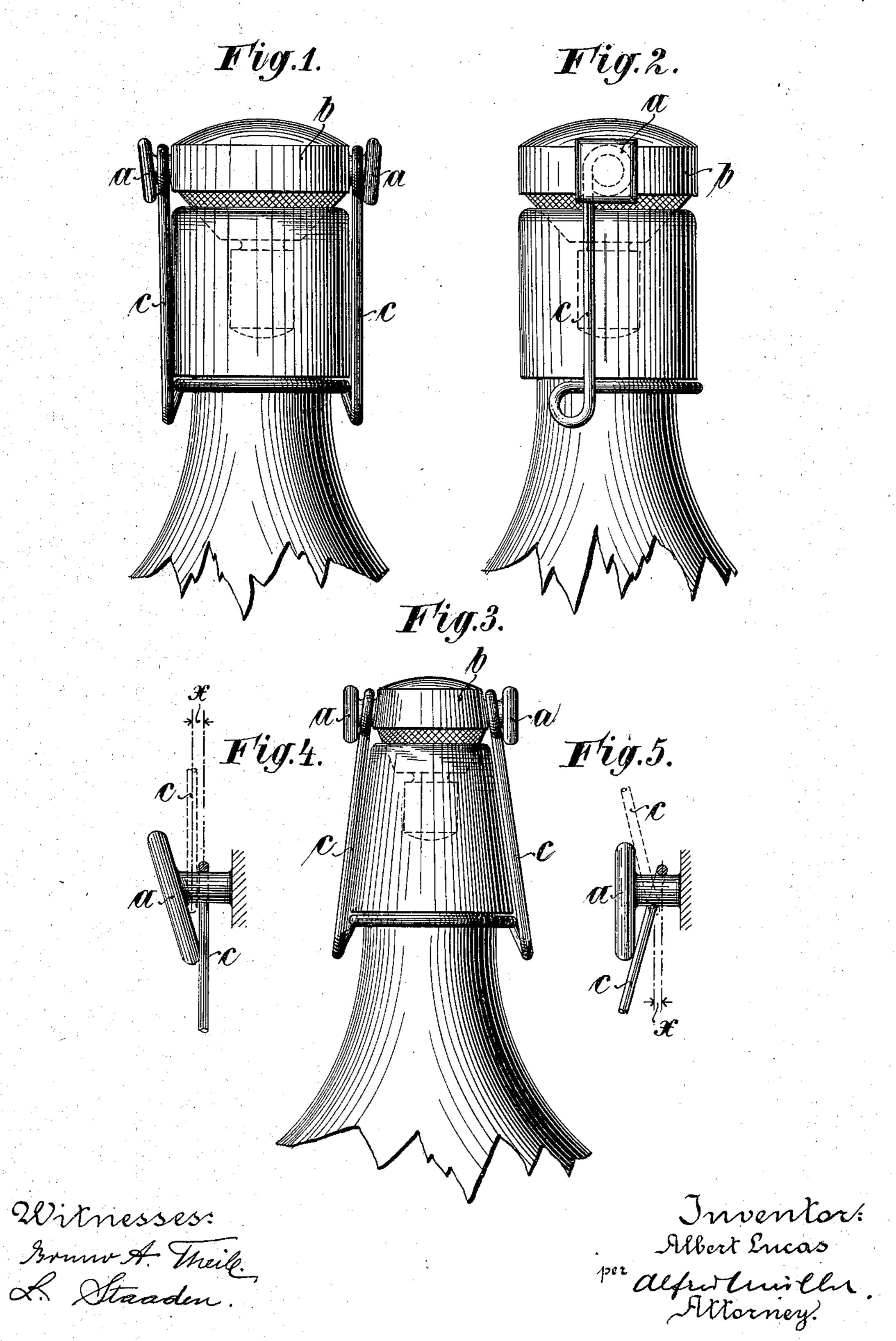
A. LUCAS. BOTTLE STOPPER. APPLICATION FILED FEB. 14, 1903.

NO MODEL.



United States Patent Office.

ALBERT LUCAS, OF MAGDEBURG, GERMANY.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 731,798, dated June 23, 1903.

Application filed February 14, 1903. Serial No. 143, 332. (No model.)

To all whom it may concern:

Beit known that I, Albert Lucas, a subject of the King of Prussia, German Emperor, residing at Magdeburg, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

My invention relates to improvements in bottle-stoppers having a bail turning on pins projecting laterally from the body of the stopper. The arrangement differs from prior stoppers of this kind, inasmuch as the vertical shanks of the bail in addition to their own resilience are held to the neck of the bottle by special devices, so that even when the elasticity of the bail is more or less lost the stopper is still securely held.

My invention is illustrated in the annexed

drawings, in which—

per applied to a bottle. Fig. 2 is a side elevation of the same, and Fig. 3 is a rear elevation showing a modified construction of the stopper. Figs. 4 and 5 show details to be hereinafter referred to.

The desired effect is obtained by providing the stopper b with pivots having broad flat heads a, lying in a plane either parallel to or at an angle to the axis of the bottle. The heads a are preferably of elongated form located ec-

centrically of the axis of the pins.

Figs. 1 and 2 show front and side elevations of a stopper, the body b of which has pins with heads a inclined to the axis of the bottle, the lower edges of the heads thus pressing the shanks of the bail c against the bottle when the latter is closed.

In the modification shown in Fig. 3 the heads

a lie parallel to the axis of the bottle, while the shanks of the bail c lie at a certain angle to the bottle-axis corresponding to the form of the head of the bottle. Thus here also the shanks of the bail c in the closed position are pressed against the neck or head of the bottle by the lower edges of the pin-heads a.

Figs. 4 and 5 illustrate the action exerted on the shanks of the bail c by the heads a of the pins. In these figures the heads a are elongated, constituting eccentrics, so that the lower portion of the head below the pin is 50 somewhat larger than the upper part. In this manner, as Figs. 4 and 5 show, the bail c on being turned over into the closed position is displaced laterally in the direction toward the bottle-head, the displacement being that in-55 dicated by the letter x.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. In bottle-stoppers having a swing-bail, lateral pins, by which the bail is pivoted to 60 the stopper, provided with heads located eccentrically of the axis of the said pins and acting to press the bail-shanks closely against the bottle-neck, substantially as described.

2. In bottle-stoppers having a swing-bail, 65 lateral pins by which the bail c is pivoted to the stopper, provided with heads a inclined to the bottle-axis, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of 70 two subscribing witnesses.

ALBERT LUCAS.

Witnesses:

PAUL MÜLLER, FRIEDRICH WEGNER.