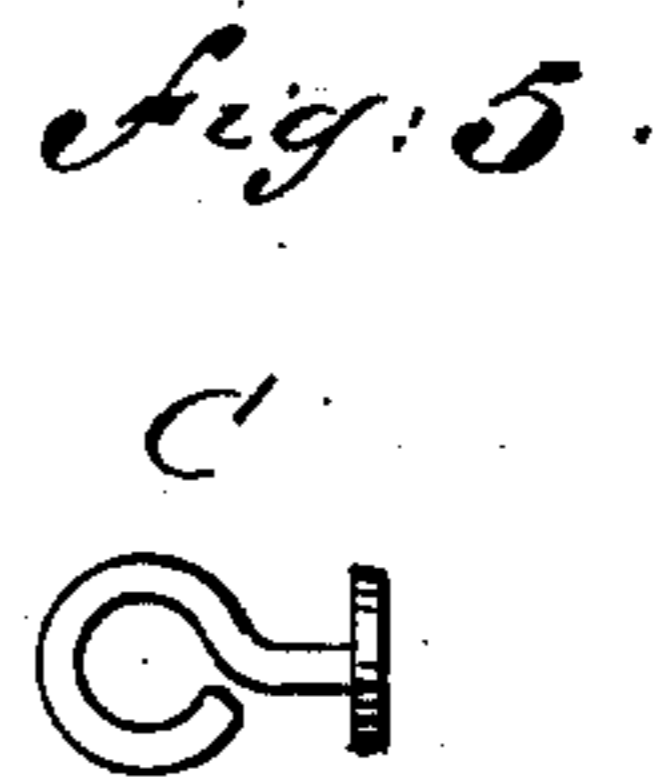
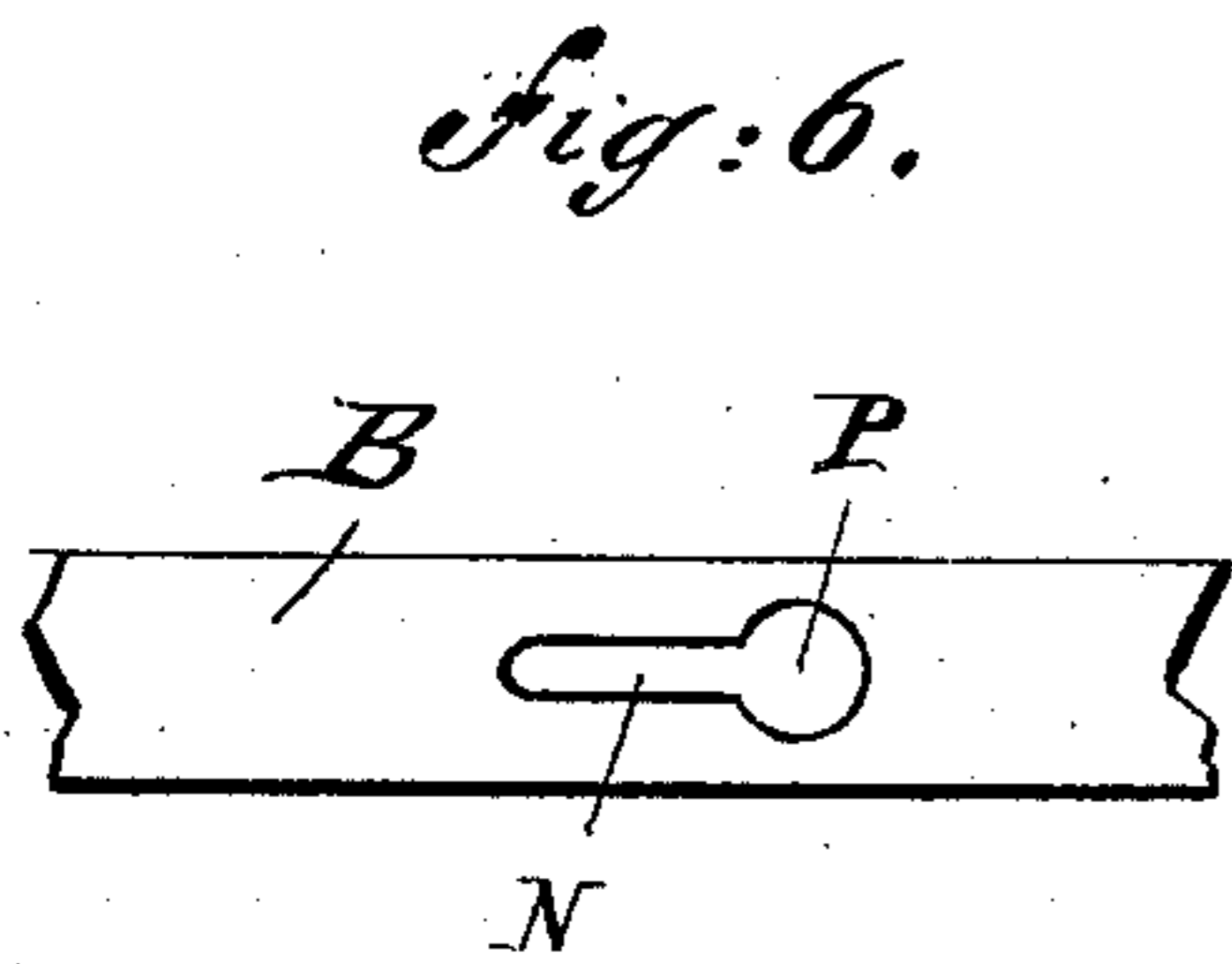
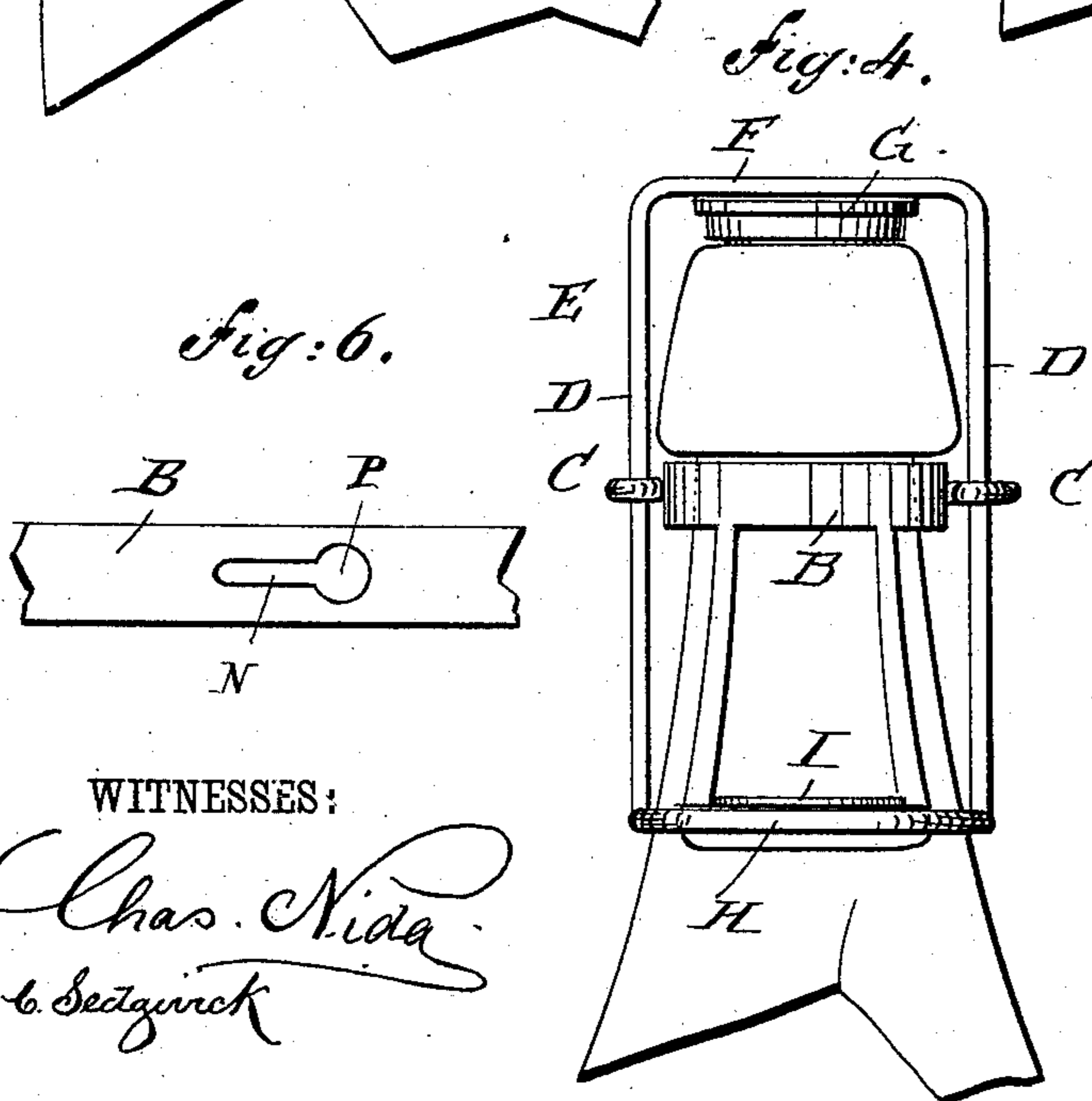
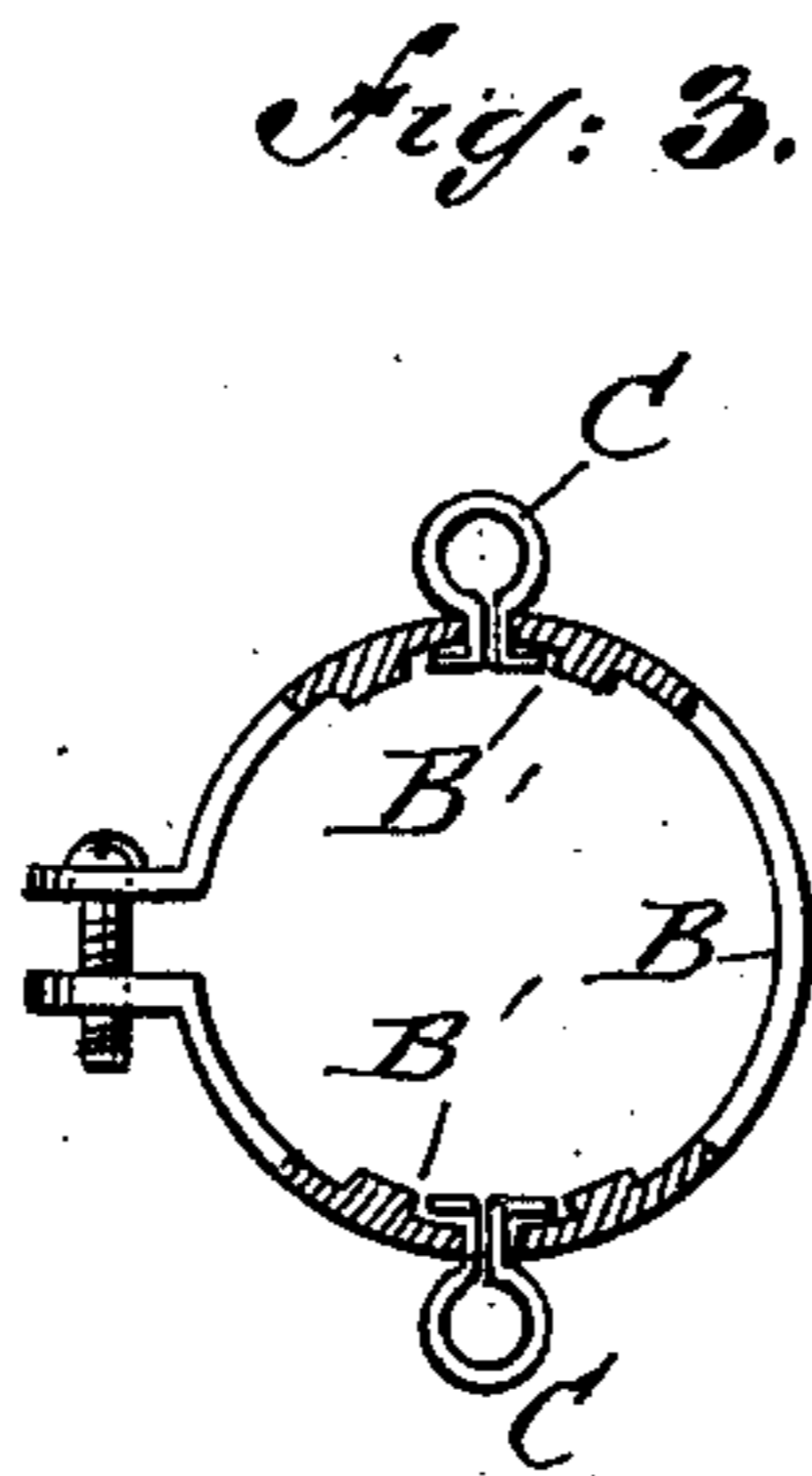
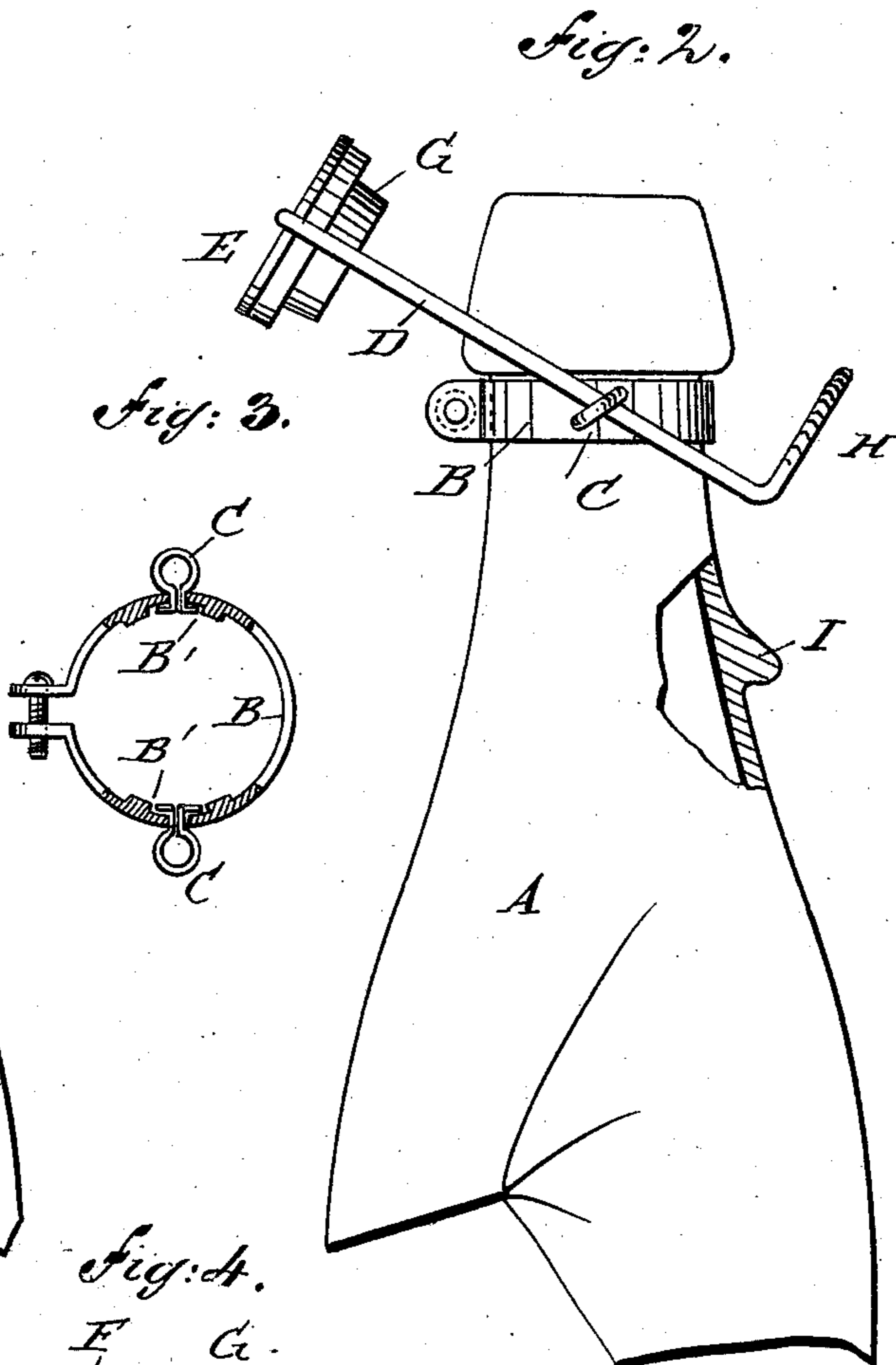
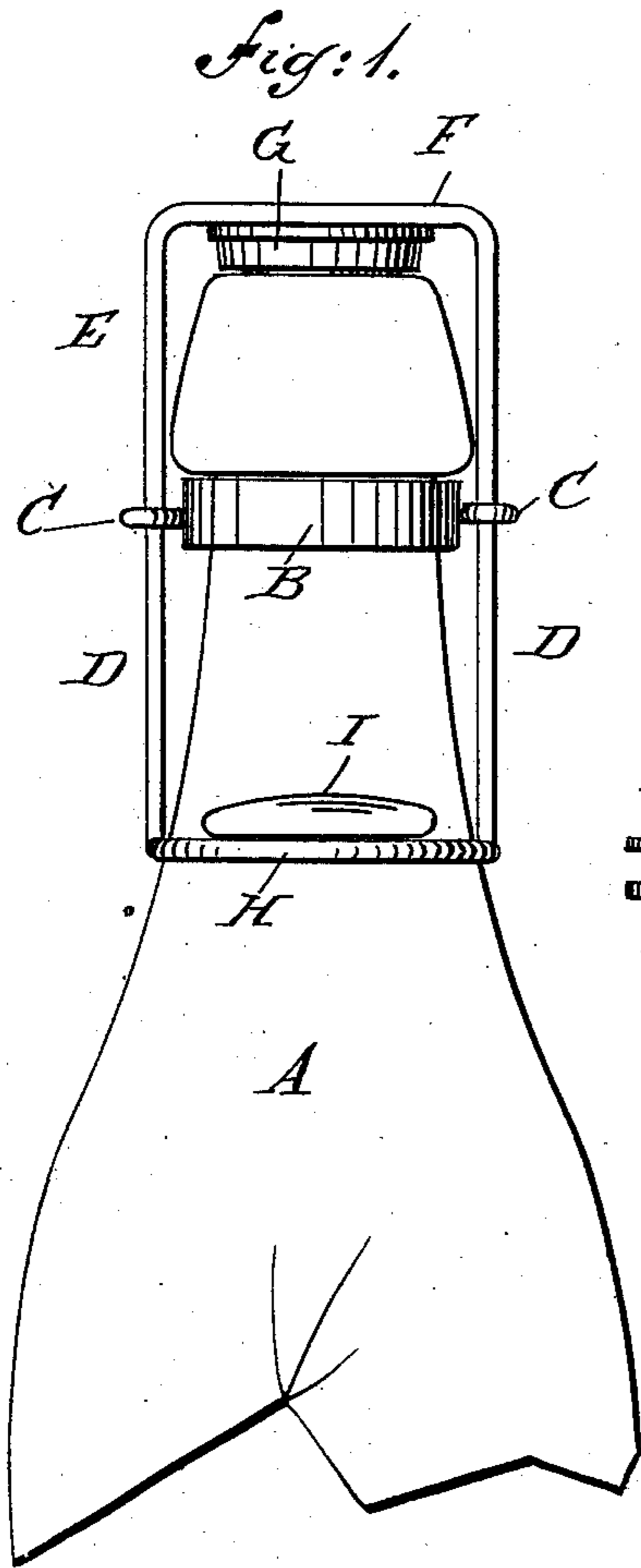


(No Model.)

F. THORN.  
BOTTLE STOPPER.

No. 365,554.

Patented June 28, 1887.



WITNESSES:

*Chas. Nida*  
*Co. Sedgwick*

INVENTOR:

*F. Thorn*  
BY *Munn & Co*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

FREDERICK THORN, OF WILKES-BARRÉ, PENNSYLVANIA.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 365,554, dated June 28, 1887.

Application filed November 12, 1886. Serial No. 218,710. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK THORN, of Wilkes-Barré, in the county of Luzerne and State of Pennsylvania, have invented a new and Improved Bottle-Stopper, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved bottle-stopper which is simple in construction and effective in operation.

The invention consists of the construction and arrangement of various parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of my improvement, showing the stopper in a closed position. Fig. 2 is a side elevation of the same, showing the stopper in an open position and parts of the bottle in section. Fig. 3 is a plan view of the neck-band with parts in section. Fig. 4 is a front elevation of a modified form of my improvement. Fig. 5 is a plan view of the swiveled eye, and Fig. 6 shows part of a neck-band of a modified form.

The bottle A is provided with the neck-band B, having on each side a swiveled or turning eye, C, through which pass the side bars, D, of the stopper-frame E, which is provided with the cross-bar F, uniting the said side bars, D, on top, and carrying the elastic stopper G, of any approved construction, and fitting upon the mouth of the bottle A. The side bars, D, of the stopper-frame E are united at their lower ends by the curved bar H, held, when the stopper is closed, under the lug I, formed on the front of the bottle A. The neck-band B and the eyes C are preferably constructed as shown in Fig. 3, in which construction each eye is made of a piece of wire, its inner ends being bent outward, and having sufficient play in the recess B', formed in the neck-band B; but I may also use the construction shown in Figs. 5 and 6, in which the eye C is provided with a shank and a button, and the neck-band is provided with a slot,

N, enlarged at one end, P, so as to permit of inserting the button and the shank, and then the enlarged part P of the slot is closed again, preferably by the parts stamped out of the neck-band in forming the slot, so that the eye is held securely in position on the neck-band, but is free to turn.

The bottle is opened by pressing the curved bar H outward, so as to disengage it from the lug I on the bottle. The frame E swings on the swiveled eyes C, turning in the neck-band, and after the curved bar H is disengaged from the lug I, then the elastic stopper G will force the frame E upward, as the side bars, D, are free to slide in the eyes C. The operator can then remove the elastic stopper G from the upper end of the bottle by pushing the frame E upward and swinging it to one side, turning in the eyes C, as shown in Fig. 2. In closing the bottle, the side bars, D, are swung into a vertical position, and the stopper G is placed upon the mouth of the bottle A. The frame E is then pressed downward, so that the curved bar H passes over the projection or lug I, and engages the under side of the same, thereby locking the frame E in position and pressing the stopper G firmly into the mouth of the bottle.

I can adapt my bottle-stopper to bottles not provided with the lug I by attaching the said lug or projection I to arms extending upward to the neck-band B, as shown in Fig. 4. The operation in this case is the same as above described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a bottle having the lug or projection I, of a neck-band held on the said bottle, eyes swiveled on the sides of the said neck-band, and a stopper-frame provided with side bars passing through the said swiveled eyes, and having a curved bar engaging the lug or projection I on the bottle, substantially as shown and described.

2. A neck-band held on a bottle, eyes swiveled on the sides of the said neck-band, and a projecting lug formed on arms extending from the said neck-band, in combination with the

stopper-frame carrying an elastic stopper and provided with side bars passing through the said swiveled eyes, and also provided with a curved bar engaging the said projection or  
5 lug, substantially as shown and described.

3. In a bottle stopper, a neck-band fitted on the bottle and eyes swiveled on the said neck-band, in combination with a stopper-

frame provided with side bars passing through said eyes and carrying the elastic stopper G, so substantially as shown and described.

FREDERICK THORN.

Witnesses:

WESLEY JOHNSON,

ADAM BEHLE.