

(No Model.)

J. E. KEENAN.

BOTTLE STOPPER.

No. 300,265.

Patented June 10, 1884.

Fig. 1.

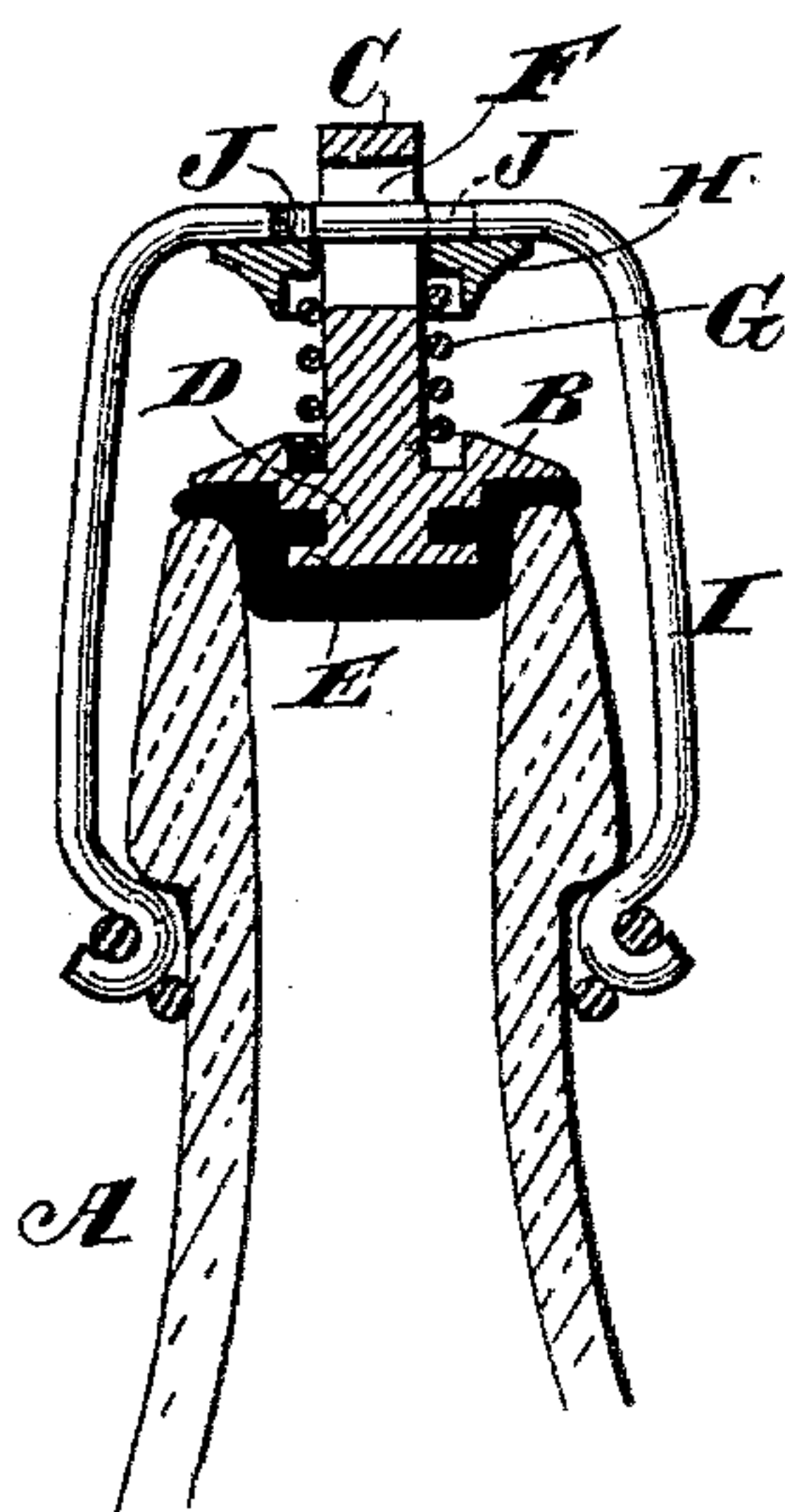
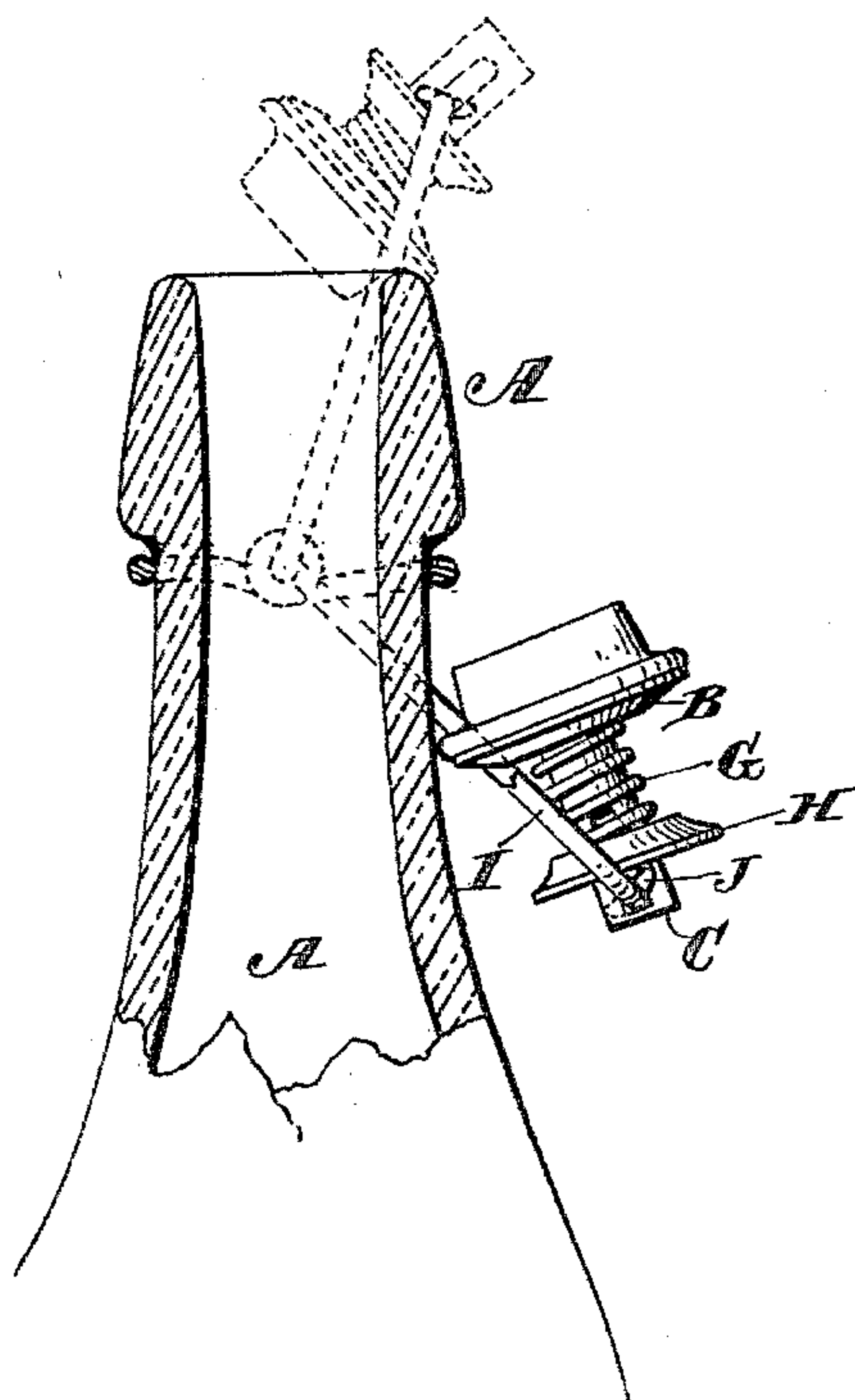


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES E. KEENAN, OF SCRANTON, PENNSYLVANIA.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 300,265, dated June 10, 1884.

Application filed April 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. KEENAN, a citizen of the United States, residing at Scranton, Pennsylvania, have invented new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

My invention relates to an improvement in bottle-stoppers, and has for its objects to provide a novel and efficient stopper for bottles, which is adapted to withstand any degree of internal pressure, and to be conveniently and readily operated to close or open the bottle. This I accomplish in the manner and by the means hereinafter described and claimed, reference being had to the accompanying drawings, illustrating the invention, in which—

Figure 1 is a vertical section of a neck of a bottle with the stopper in place. Fig. 2 is a section at right angles to Fig. 1, showing the stopper as removed from the bottle.

In these drawings, A represents an ordinary glass bottle. The stopper is composed of a flat plate, B, with which are formed a stem, C, a short shank, D, and a button, E. The stopper proper is molded from rubber and secured below the plate B by embedding the button E in such rubber, so that the parts are securely connected. In the stem C is formed a slot, F, and the stem is of such length that when the stopper is in position the stem will project beyond the mouth of the bottle. A spiral spring, G, surrounds the stem, its lower coil fitting in a circular groove in the plate B at the base of the stem, while its upper coil rests within a similar groove in a loose collar, H, through which the stem passes. The collar H has a beveled edge, as shown, and fits on the stem outside the neck of the bottle when the latter is closed, pressing the spring against the plate

B. The collar H is held in place by a swinging bail, I, the free ends of which are pivoted to an ordinary wire encircling the neck of the bottle at its base. The bail passes through the slot in the stem of the stopper above the collar H, and forces the latter down against the pressure of the spring, holding the rubber firmly in the position shown in Fig. 1. Shoulders J J are formed on the bail, which bear on the sides of the stem and prevent any side movement. To release the stopper the end of the stem is moved sidewise until the bail clears the edge of the neck, when the spring forces the collar and bail outward. The stopper may now be withdrawn and swung around on the bail into the position shown in Fig. 2. To close the bottle the stopper is inserted into the mouth of the bottle and the bail raised to its highest point, compressing the spring, as before described.

Having thus described my invention, what I claim is—

1. In a bottle-stopper, the combination, with the plate B and its slotted stem, of the collar H, the spring, and the swinging bail, substantially as described.

2. The combination, with a bottle, of the stopper having the outwardly-extending slotted stem, the spring, the collar, and the bail pivotally supported on the neck of the bottle, and passing through the slot in the stem, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAS. E. KEENAN.

Witnesses:

PATRICK TIERNEY,
GEO. FRABLE.