

(No Model.)

A. VOELKER.
BOTTLE STOPPER.

No. 600,901.

Patented Mar. 22, 1898.

Fig. 1.

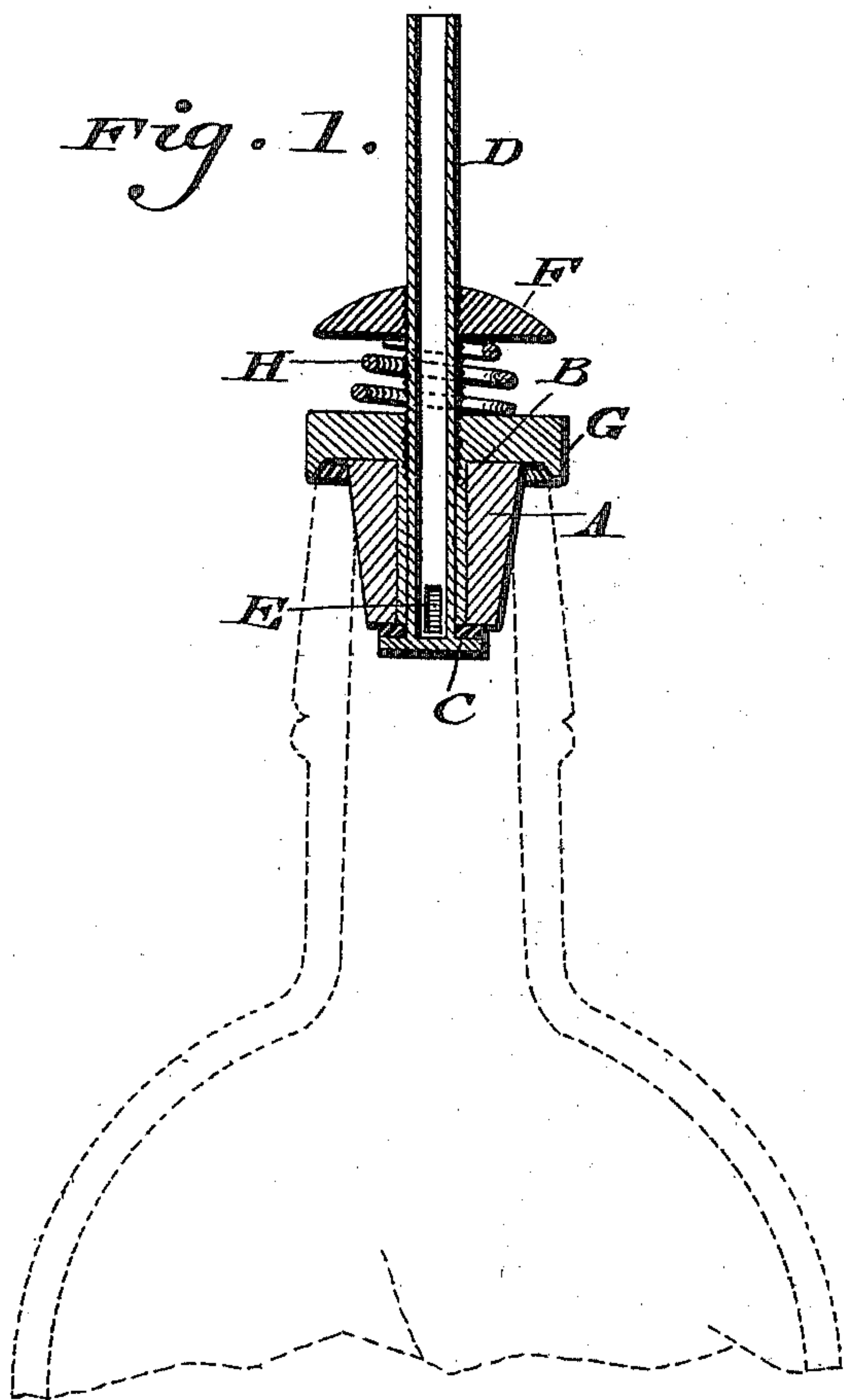


Fig. 3.

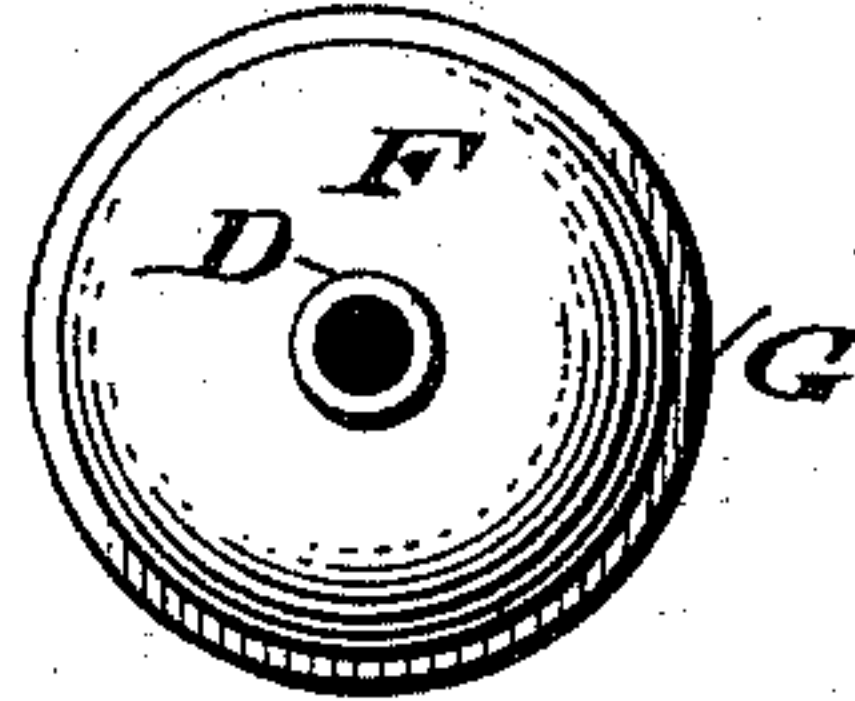


Fig. 4.

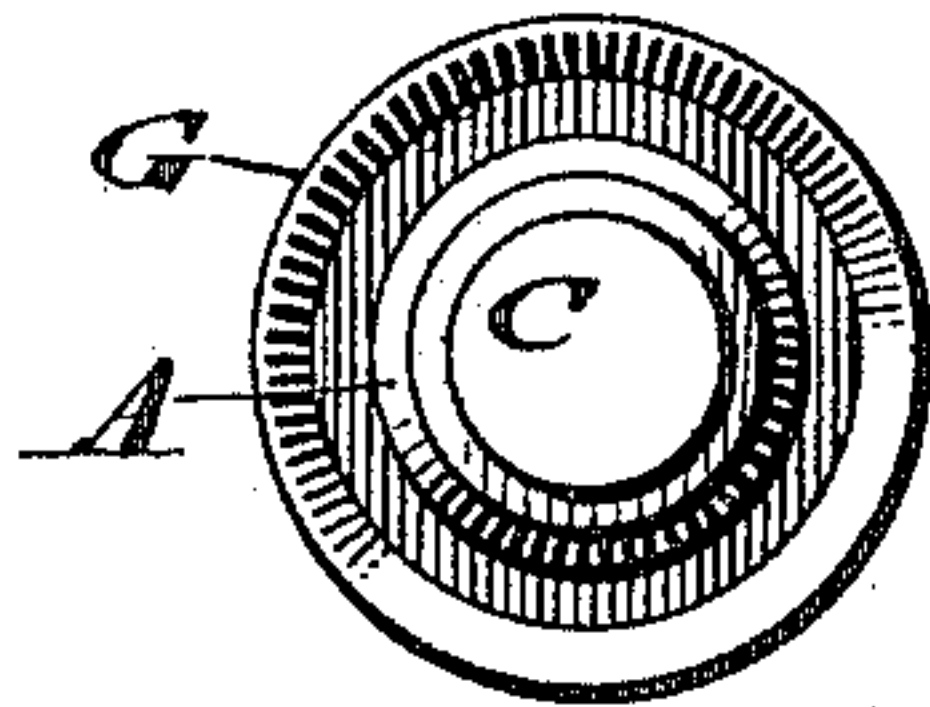
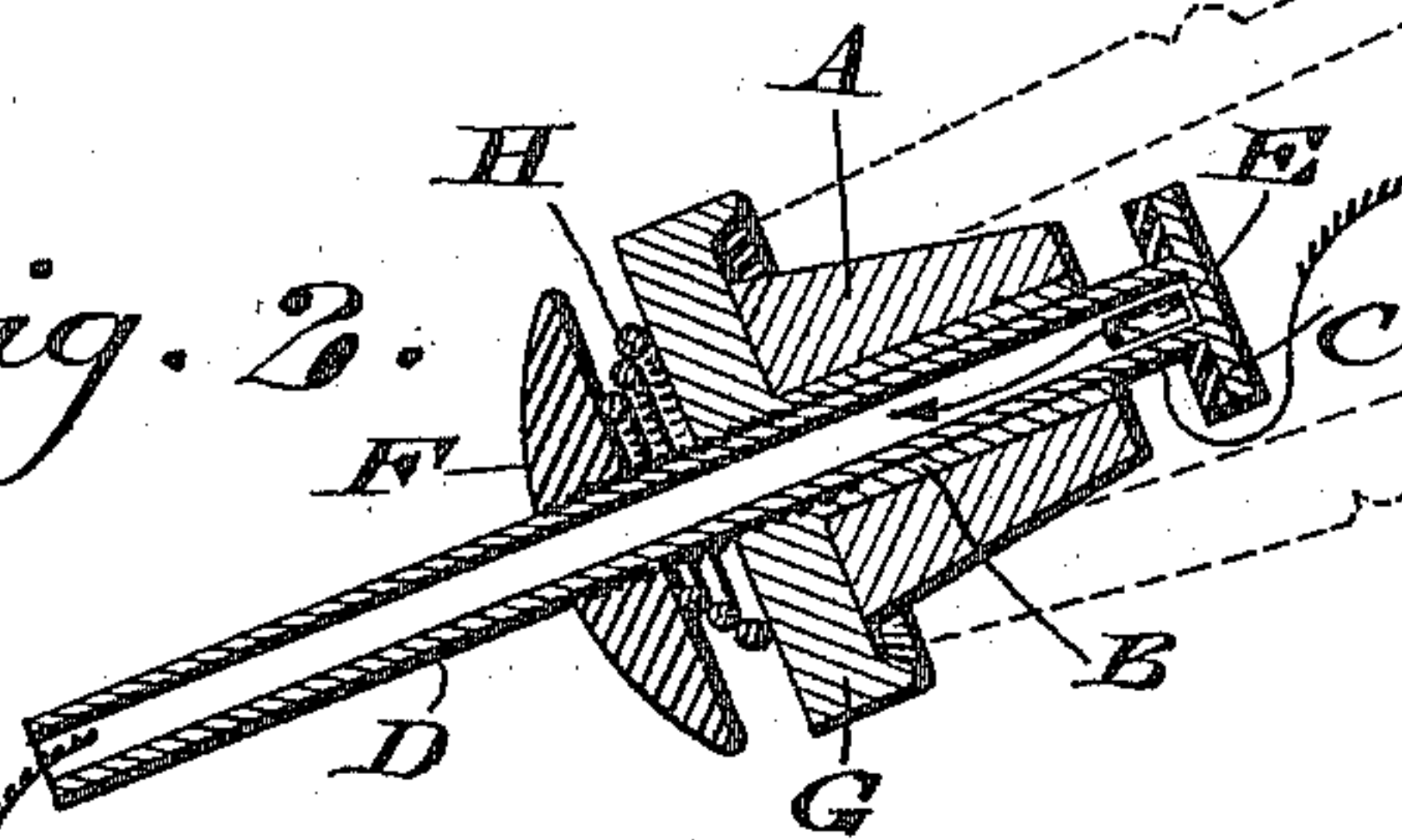


Fig. 2.



WITNESSES:

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ALFRED VOELKER, OF PHILADELPHIA, PENNSYLVANIA.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 600,901, dated March 22, 1898.

Application filed December 28, 1897. Serial No. 663,984. (No model.)

To all whom it may concern:

Be it known that I, ALFRED VOELKER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Bottle-Stoppers, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a bottle-stopper formed of a cork or stopper proper, a valve thereon, a spring for closing said valve, and a collar on the stem of the valve for opening the latter, said head being movable, so that the tension of said spring may be adjusted.

Figure 1 represents a vertical sectional view of a bottle-stopper embodying my invention, showing the valve closed. Fig. 2 represents a vertical sectional view of said bottle-stopper, showing the valve open. Fig. 3 represents a top plan view of said stopper. Fig. 4 represents a bottom plan view of said stopper.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a piece of cork adapted to form the stopper proper, the same having therein the bushing B, which is open throughout and has its lower end constituting a seat for the valve C, whose stem D passes freely through said bushing B and is guided by the same, said stem being hollow and having in it, near its lower end, the opening E, which is uncovered when the valve C is lowered, so that the fluid in a bottle to which the stopper is applied may enter said stem and so be discharged. When, however, the valve returns to its closed or normal condition, the opening E is closed by the bushing, and thus the passage of the fluid through the stem is prevented.

F designates a collar on the valve-stem above the cork A, and G designates the head of the cork, which head is preferably formed of metal and has the bushing B connected with it, the valve-stem freely passing through said head.

Interposed between the collar F and head G is the coiled or other spring H, whose tendency is to force said collar, and consequently the stem D, upwardly or outwardly, whereby the valve C will be held on its seat or in closed condition. The collar is interiorly screw-

threaded, and the stem is exteriorly similarly constituted, whereby said collar may be rotated on the stem up or down, so that the tension of the spring H may be adjusted relatively to the pressure required to retain the valve properly on its seat.

It will be seen that the fingers may be applied to the collar and a proper part of the cork or neck of a bottle, so as to move said collar toward the head of the cork, whereby the valve C is opened and the opening E uncovered. The bottle will be overturned or decanted, and so the fluid or liquor flows through the stem and escapes therefrom at the outer end thereof, said end or end portion acting as a nozzle or pour-off.

When the collar is "let go," the spring H quickly closes the valve and restores the opening E within the bushing, whereby the flow of fluid or liquor ceases.

The head G strengthens the top of the stopper proper and supports the spring receiving the pressure thereof, avoiding injury to said head. Furthermore, when it is desired to close or lock the valve and render it immovable, especially for purposes of transportation, packing, &c., the collar will be screwed down to the full extent, thus controlling the stem and preventing opening of the valve, the effect of which is evident.

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

1. A bottle-stopper consisting of a stopper proper, a bushing therein, a valve at the base of said bushing, a hollow stem carrying said valve and freely passing through said bushing and outside of the head of the stopper, a collar and a spring interposed between said collar and head, said collar being movably fitted on said stem, whereby the tension of said spring may be adjusted.

2. In a bottle-stopper substantially as described, a stopper proper, a valve, a hollow stem carrying the same and passing through the stopper, a collar on said stem, and a spring interposed between said collar and head of the stopper, said collar and adjacent portion of the stem being screw-threaded, whereby the tension of said spring may be adjusted, and the valve locked.

3. In a bottle-stopper substantially as de-

scribed, a stopper having a bushing therein, a hollow valve-stem passing freely through said bushing, the base of the latter forming the seat of said valve, a head on the stopper,
5 a collar on said stem, and a spring interposed between said collar and stem, said head being connected with said bushing and said collar being movably fitted in said stem for adjusting the position of the valve and the tension of the spring.

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Witnesses:

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