

(Model.)

E. P. RAETHER.
Bottle Stopper.

No. 230,054.

Patented July 13, 1880.

Fig. 1.

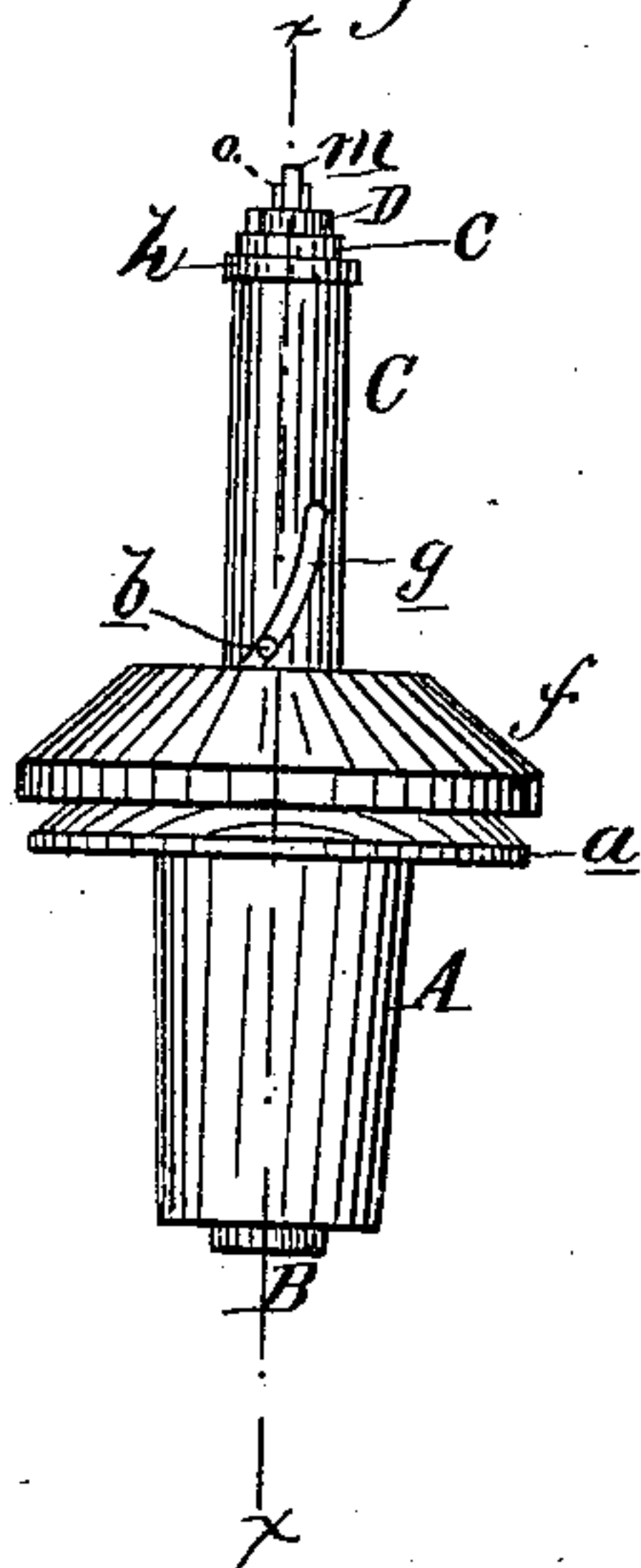


Fig. 2.

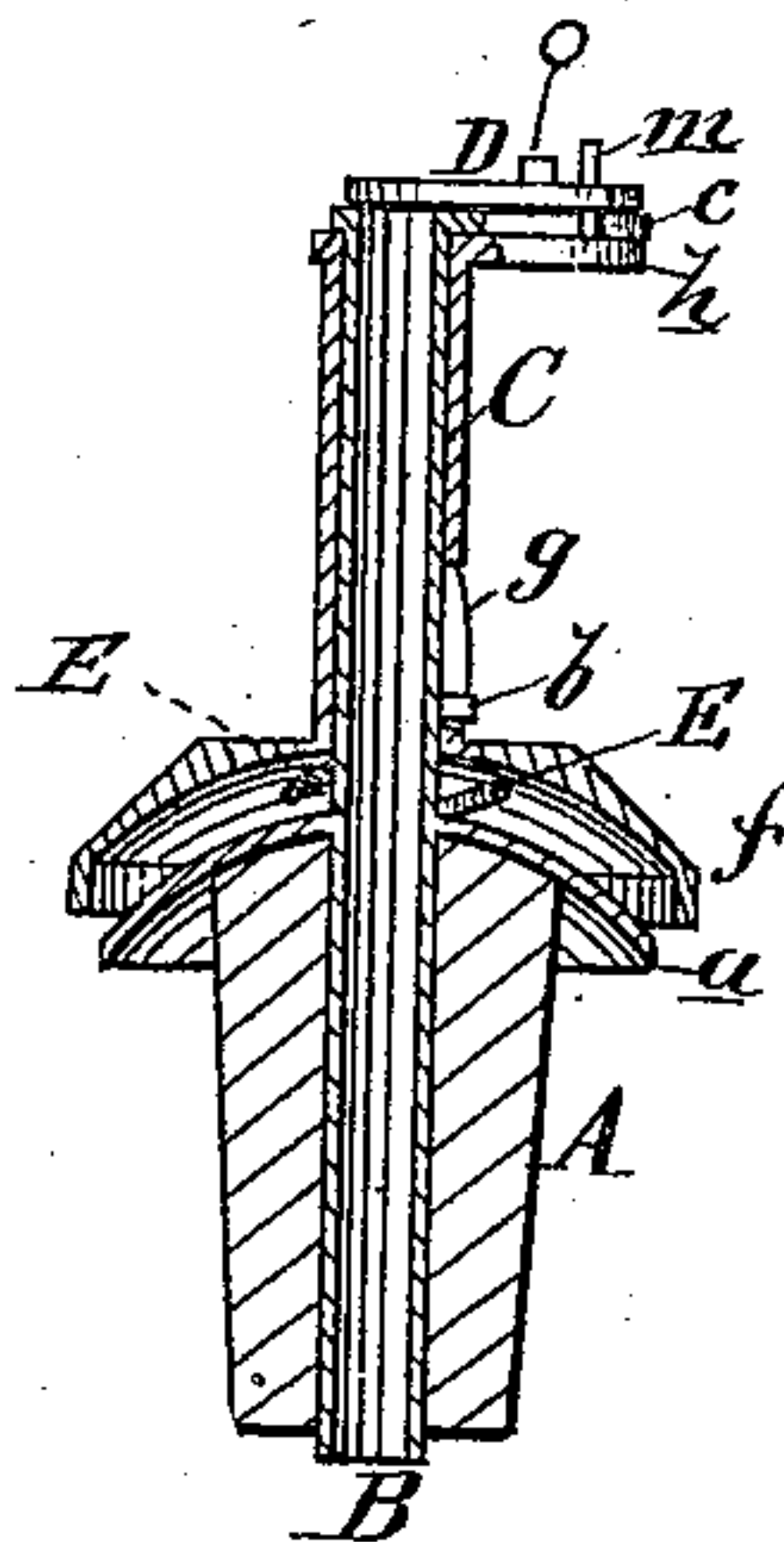


Fig. 3.

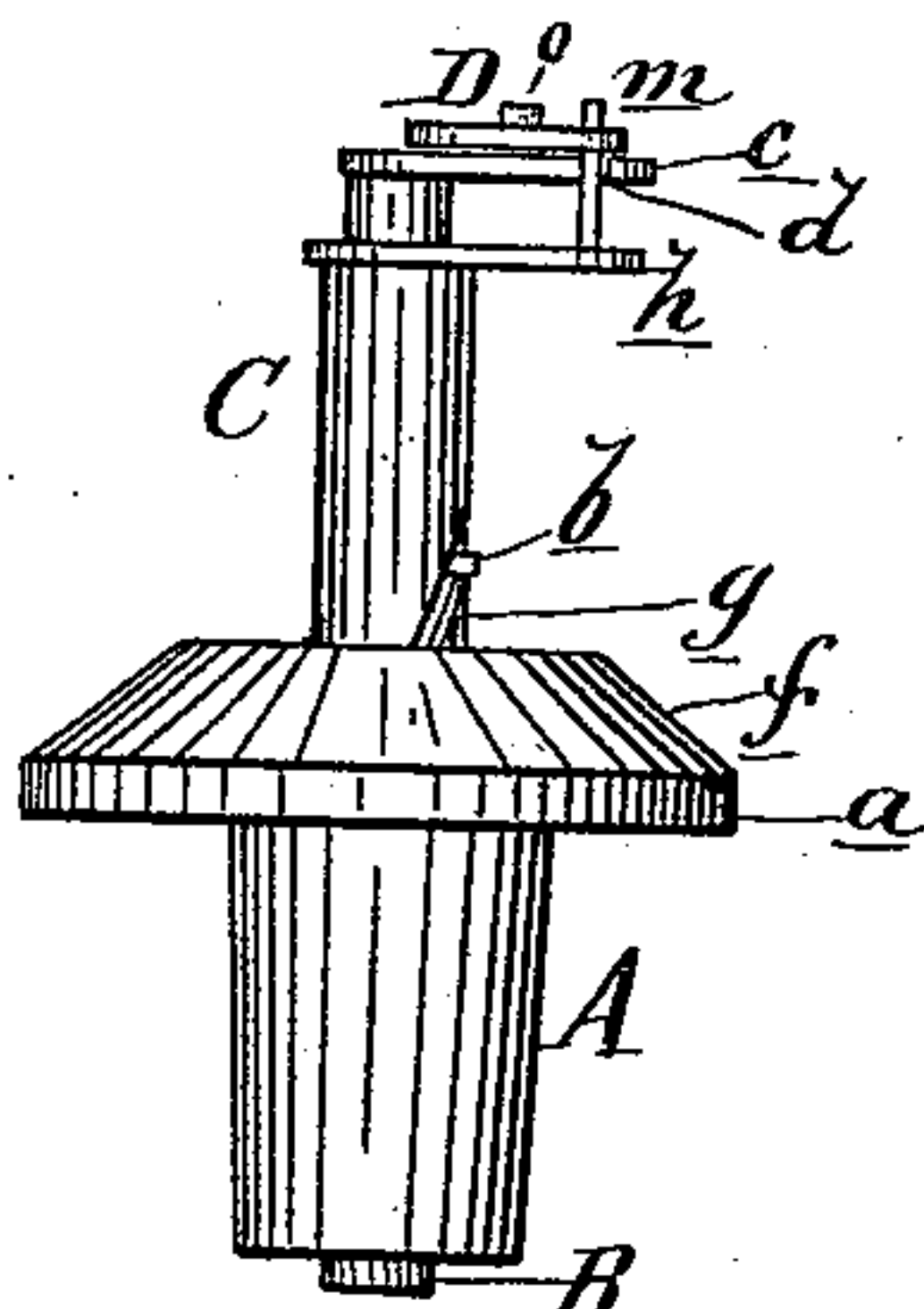


Fig. 4.

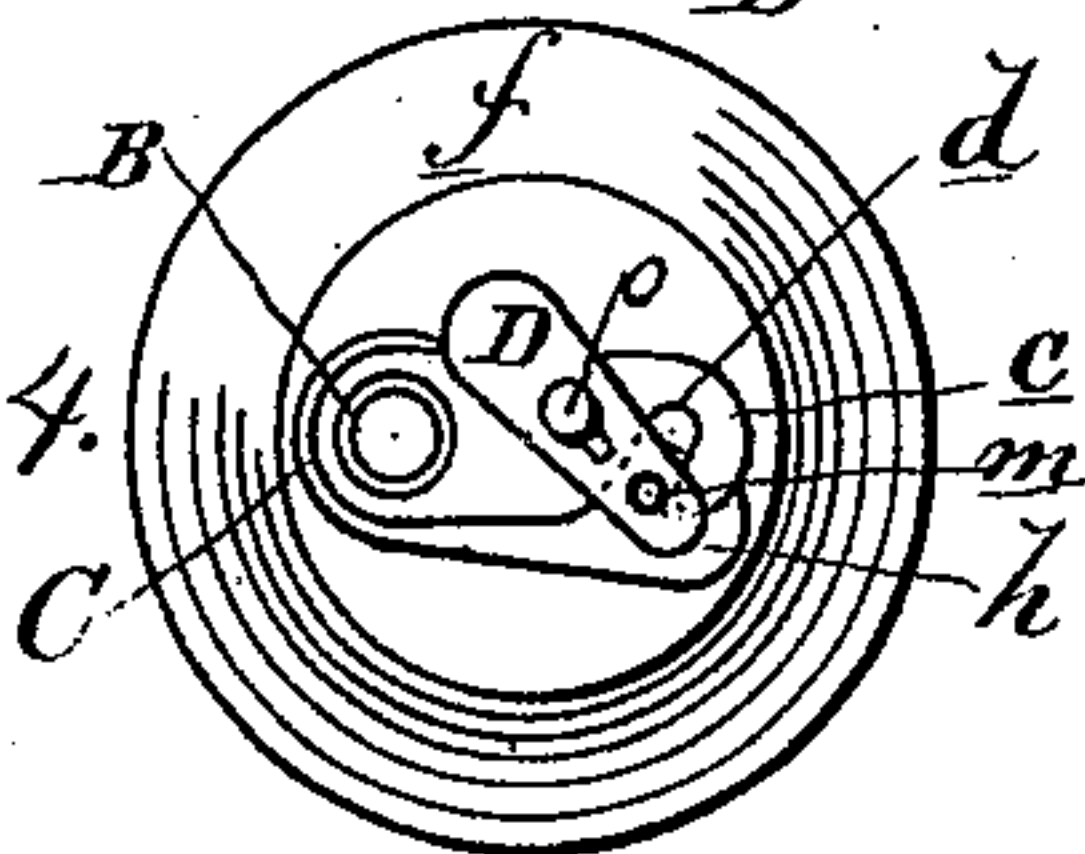
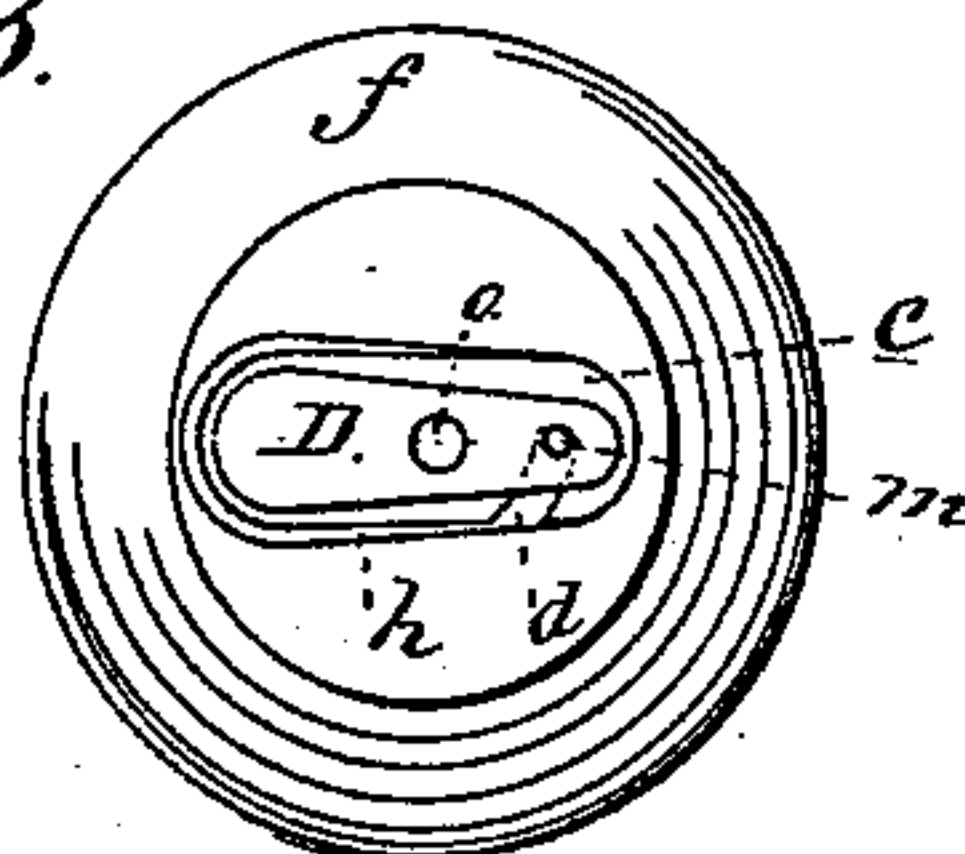


Fig. 5.



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EMIL P. RAETHER, OF NEW YORK, N. Y.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 230,054, dated July 13, 1880.

Application filed April 28, 1880. (Model.)

To all whom it may concern:

Be it known that I, EMIL P. RAETHER, of the city, county, and State of New York, have invented a new and Improved Bottle-Stopper, of which the following is a specification.

The invention consists of a bottle-stopper formed of a cork, a flanged tube provided with a stud and an eccentric notched collar, a plate pivoted to the said collar, a flanged and spirally-slotted sleeve provided with an eccentric collar carrying an upwardly-projecting pin, and a spring interposed between the flanges of the tube and sleeve, as will be hereinafter more fully described, and specified in the claims.

Figure 1 is an elevation of the device closed. Fig. 2 is a sectional elevation of the same on line *x x*. Fig. 3 is an elevation of the device open. Fig. 4 is a plan of the device open. Fig. 5 is a plan view of the device closed.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a cork. B is the tube passed perpendicularly through the cork A and extending above it, and provided with an annular downward-sloping flange, *a*, that fits upon the cork A and covers the lip of the bottle. A stud, *b*, projects laterally from the said tube B, and encircling the top of said tube is an eccentric collar, *c*, one of whose edges is notched, as shown at *d*.

C is a sleeve having about its lower end an annular downward-sloping flange, *f*, whose rim extends downward when the stopper is closed nearly in contact with the flange *a* of the tube B, and thereby prevents the ingress of flies between the two flanges. This sleeve C is provided with a spiral slot, *g*, extending upward from the flange *f* and about an eighth of the way around said sleeve, and in this slot *g* the stud *b* of the tube B engages.

About the top of the sleeve C is secured an eccentric collar, *h*, corresponding with the collar *c* of the tube B, and being parallel with and beneath it, and from the outer end of this collar *h* a pin, *m*, projects upward through the notch *d* of the tube-collar *c*, which notch *d* permits the collars *c h* to lie parallel with each other by admitting the pin *m*.

On the upper face of the tube-collar *c* is centrally pivoted a plate, D, whose inner end is designed to cover or close the end of the tube B, and through whose outer end the pin *m* of the sleeve C projects upward.

Between the flanges *a f* of the tube B and sleeve C, respectively, is a spring, E, that op-

erates to press the sleeve C upward, and thereby keep the plate D over the top of the tube B.

When this stopper is in a bottle with its several parts in the position as shown in Figs. 1 and 2 the bottle is securely corked, so that none of its contents can escape, the sleeve C being pressed upward by the spring E, so that the plate D is held over and firmly down upon the top of the tube B.

To open the stopper the operator presses down upon the flange *f* of the sleeve C, when said sleeve C is thereby drawn downward and at the same time turned partly around on the stud *b* of the tube B, and thereby the plate D is turned on its pivot by means of the engagement of the pin *m* in the said plate, so that the inner end of said plate D is turned aside from the top of the tube B, as shown in Figs. 3 and 4, to permit the escape of the contents of the bottle; and on removal of pressure from the flange *f* the said sleeve C and plate D are restored to their primary positions by the action of the spring E.

This device is especially adapted to bottles containing sirups, bitters, and other fluids used in restaurants.

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

1. As an improved article of manufacture, a bottle-stopper constructed substantially as herein shown and described, consisting of cork A, flanged tube B, provided with stud *b* and with eccentric notched collar *c*, flanged sleeve C, provided with spiral slot *g* and eccentric collar *h*, having a pin, *m*, pivoted plate D, and spring E, as set forth.

2. In a bottle-stopper, the combination, with the tube B, provided with the stud *b* and the eccentric notched collar *c*, carrying the pivoted plate D, of the spirally-slotted sleeve C, provided with the eccentric collar *h*, carrying pin *m*, substantially as and for the purpose set forth.

3. In a bottle-stopper, the combination, with the tube B, provided with the flange *a*, the stud *b*, and the eccentric notched collar *c*, carrying the plate D, of the spirally-slotted sleeve C, provided with the flange *f* and eccentric collar *h*, carrying pin *m*, and the spring E, substantially as and for the purpose set forth.

EMIL P. RAETHER.

Witnesses:

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