

(No Model.)

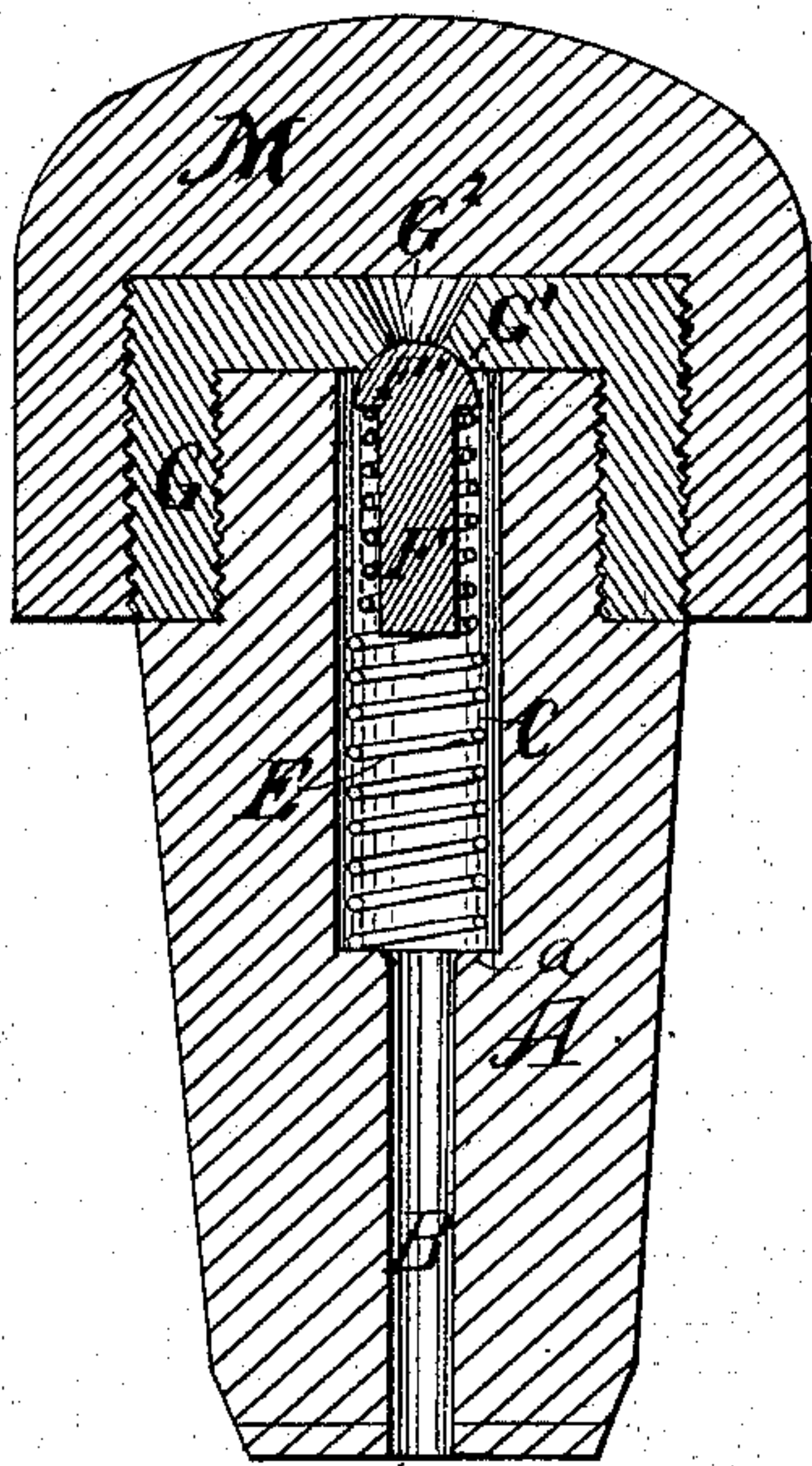
F. W. POLLE.

VENT PLUG.

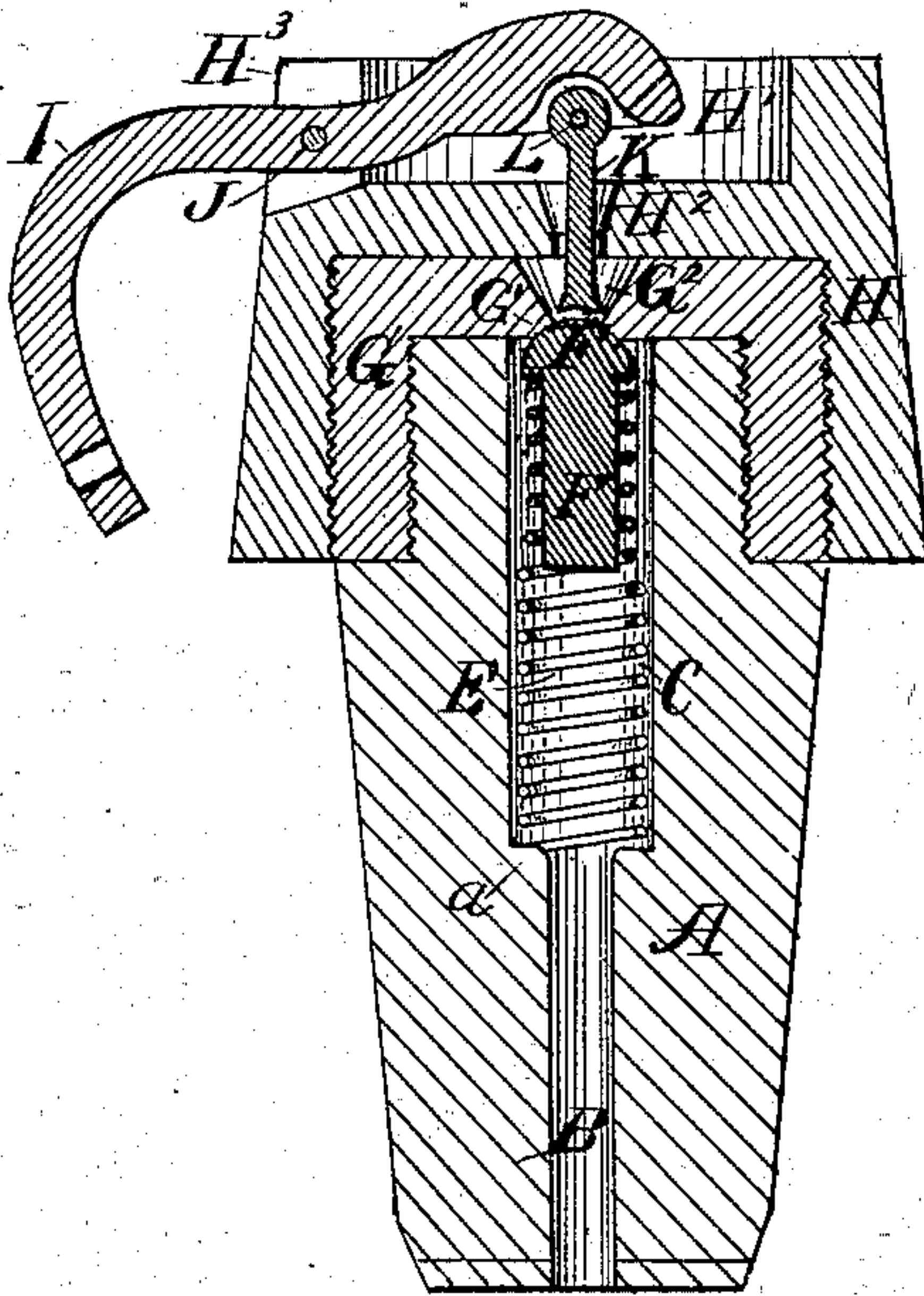
No. 284,479.

Patented Sept. 4, 1883.

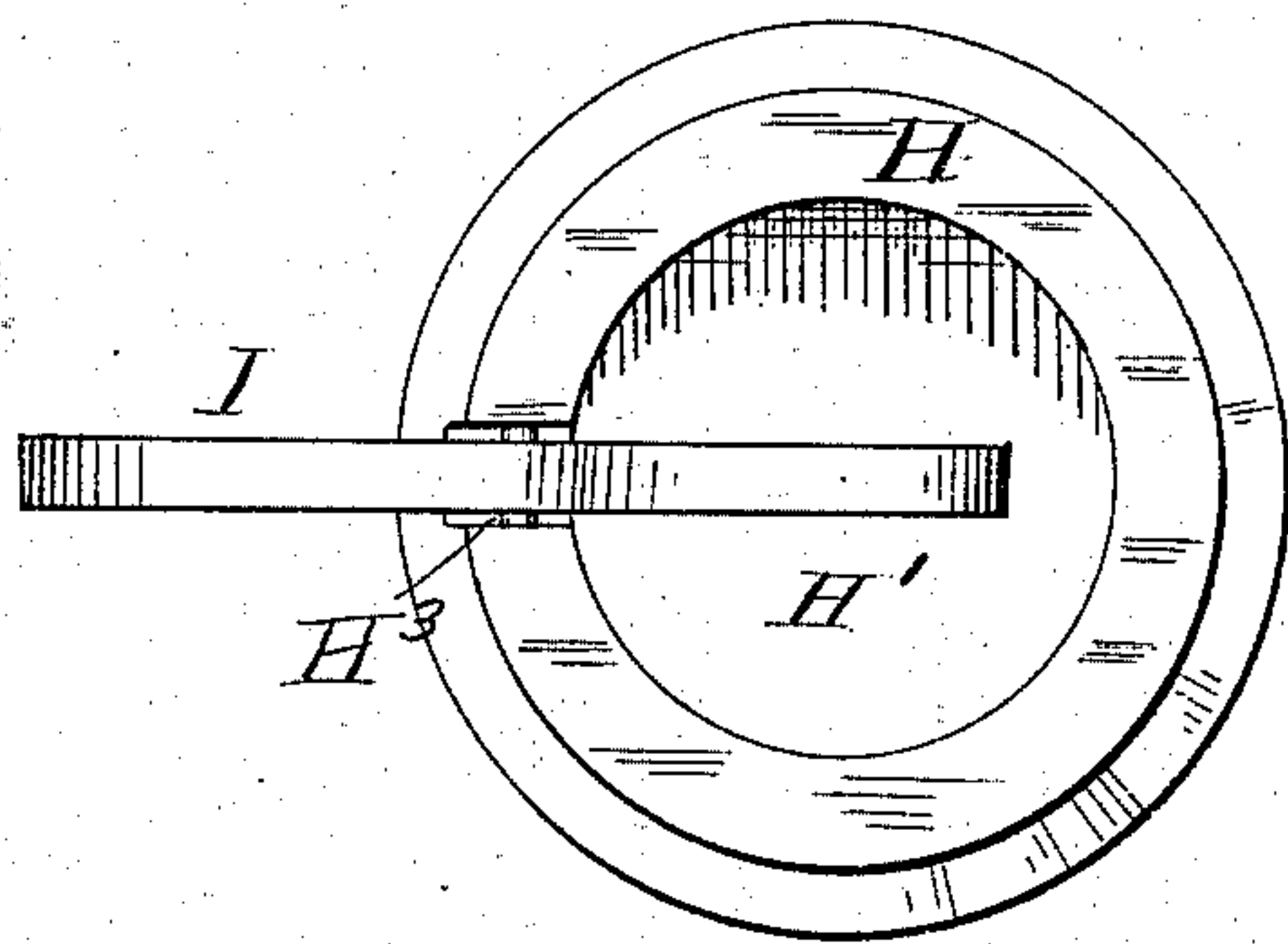
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*

*Wm. A. Rosenbaum*  
*N. J. Asgood*

*Inventor:*

*Friedrich W. Polle*  
*per H. A. Snow*  
*att'y*



# UNITED STATES PATENT OFFICE.

FRIEDERICH W. POLLE, OF GREENVILLE, MISSISSIPPI.

## VENT-PLUG.

SPECIFICATION forming part of Letters Patent No. 284,479, dated September 4, 1883.

Application filed May 24, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, FRIEDERICH W. POLLE, of Greenville, in the county of Washington and State of Mississippi, have invented a new and useful Improvement in Bungs and Vents; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use it, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to a vent-plug for beer-barrels and other liquor-vessels; and it consists in the parts which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a central vertical section of the device with the round-head cap thereon. Fig. 2 is also a vertical section. In this view the round head is removed and the lever-cap substituted. Fig. 3 is a plan view, showing the lever and the cap in which it is mounted.

Like letters indicate like parts throughout the views.

A represents the plug, provided with a central continuous opening of two different diameters—viz., B and C—and a shoulder, *a*.

E is a spiral spring in the central opening or chamber, C, the lower end of said spring resting on the shoulder *a*, while its upper end surrounds the valve F and bears against the head F' of the latter.

G is a valve-cap, having a circular flange or rim threaded on the inside and outside. The inside threads of said cap screw onto the top part of the plug, which has surface threads adapted to receive them. The outside threads of the valve-cap are adapted to receive either the threads on the round-head cap or those on the lever-cap, all of which will be more fully hereinafter specified. The cap G is provided with a dish-shaped depression, G', on its under side, into which the valve-head F' fits.

G<sup>2</sup> is a bevel depression. G' G<sup>2</sup> communicate and form an opening in the cap G.

H is a cap in which is mounted the lever I.

H' is an opening in the crown of cap H, to admit the working of the inner end of the lever.

H<sup>2</sup> is a lever opening in the cap H, to admit the plunger-rod K. Said rod is pivoted at L to the forward end of the lever. The lever is fulcrumed at J in the cap H. H<sup>3</sup> is a slot in the said cap to admit the lever.

M is a round-head cap, adapted to screw over the valve-cap G. The cap M is only used when the plug is driven into place. It is then removed and the lever-cap substituted.

The operation of the device is as follows: Assuming the plug A to be in the barrel and provided with the parts shown in Fig. 2, when thus arranged vent may be given the vessel by simply raising the lever I. Such action will force the plunger K onto the head F', thus depressing the spring E and valve F. A continuous opening is thereby made through the chambers B and C, and thence through the openings in the caps G and H. The head F' of the valve operates as the vent opening and closing medium, and it is operated by the lever-plunger, as shown.

What I claim is—

1. A vent-plug provided with a central continuous opening and a shoulder, *a*, in combination with a spring, E, and valve F, the cap G, having openings G' G<sup>2</sup>, and a cap, M, substantially as set forth.

2. A vent-plug provided with a central opening of different diameters, a valve and spring, and a valve-cap having a valve-seat and opening, as described, in combination with a cap, H, lever I, and plunger K, substantially as set forth.

3. A vent-plug having a central opening, B C, spring E, valve F, with head F', and the cap G, provided with beveled opening G<sup>2</sup> and disk-shaped opening G', in combination with the cap H, lever I, and plunger K, substantially as set forth.

In testimony that I claim the foregoing I append my signature.

FRIEDERICH WILHELM POLLE.

Witnesses:

W. J. OSGOOD,  
W. R. McKENNA.