

(No Model.)

E. M. ZERBE.
Hose Plug.

No. 238,544.

Patented March 8, 1881.

Fig. 1.

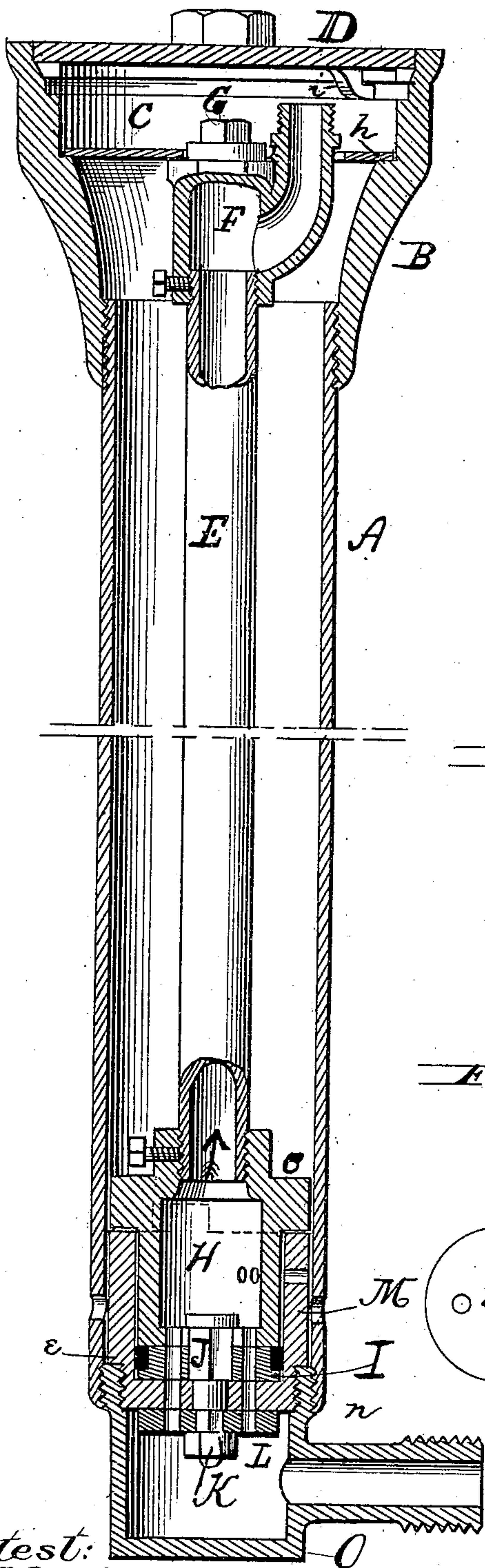


Fig. 2.

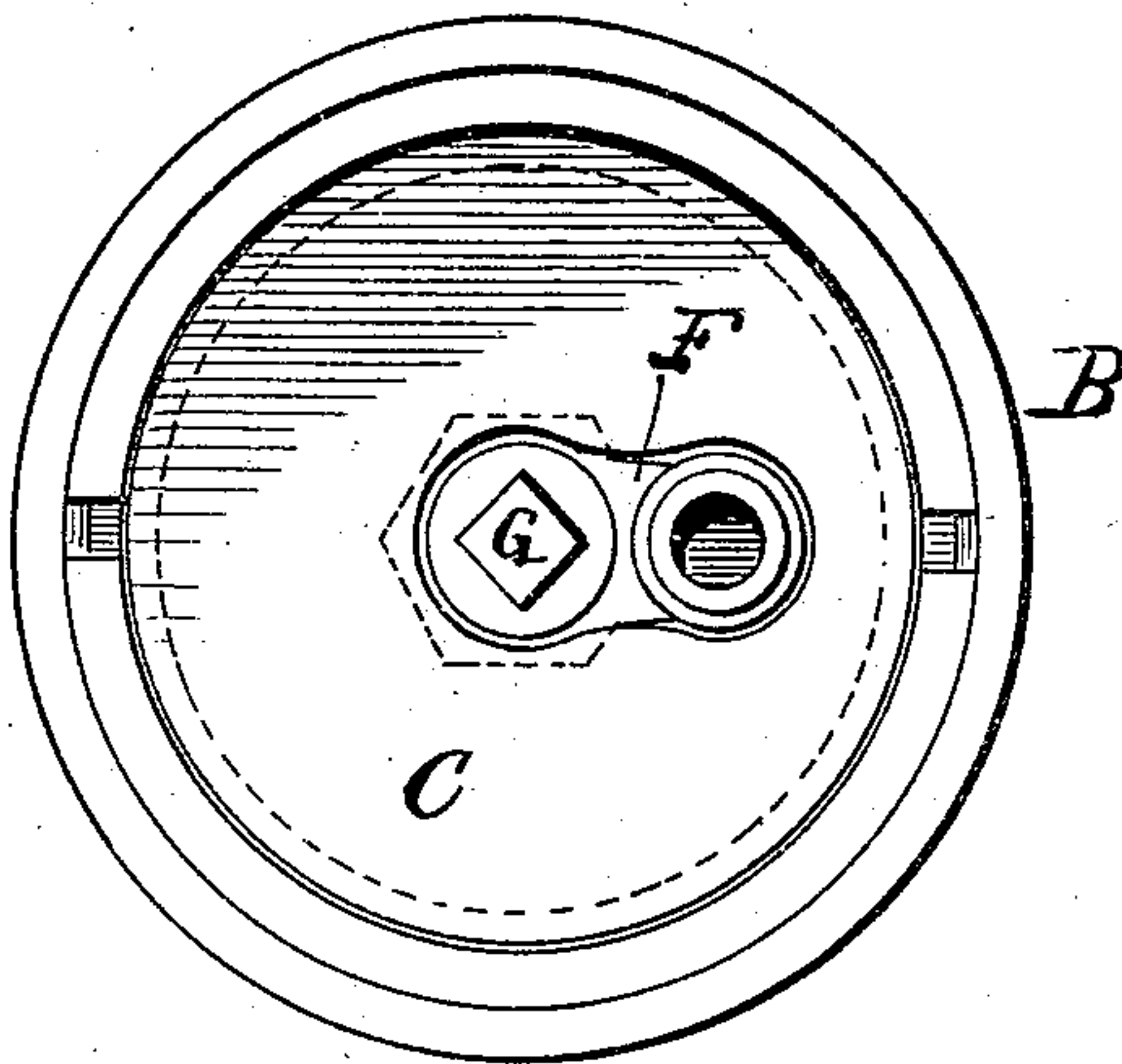


Fig. 3.

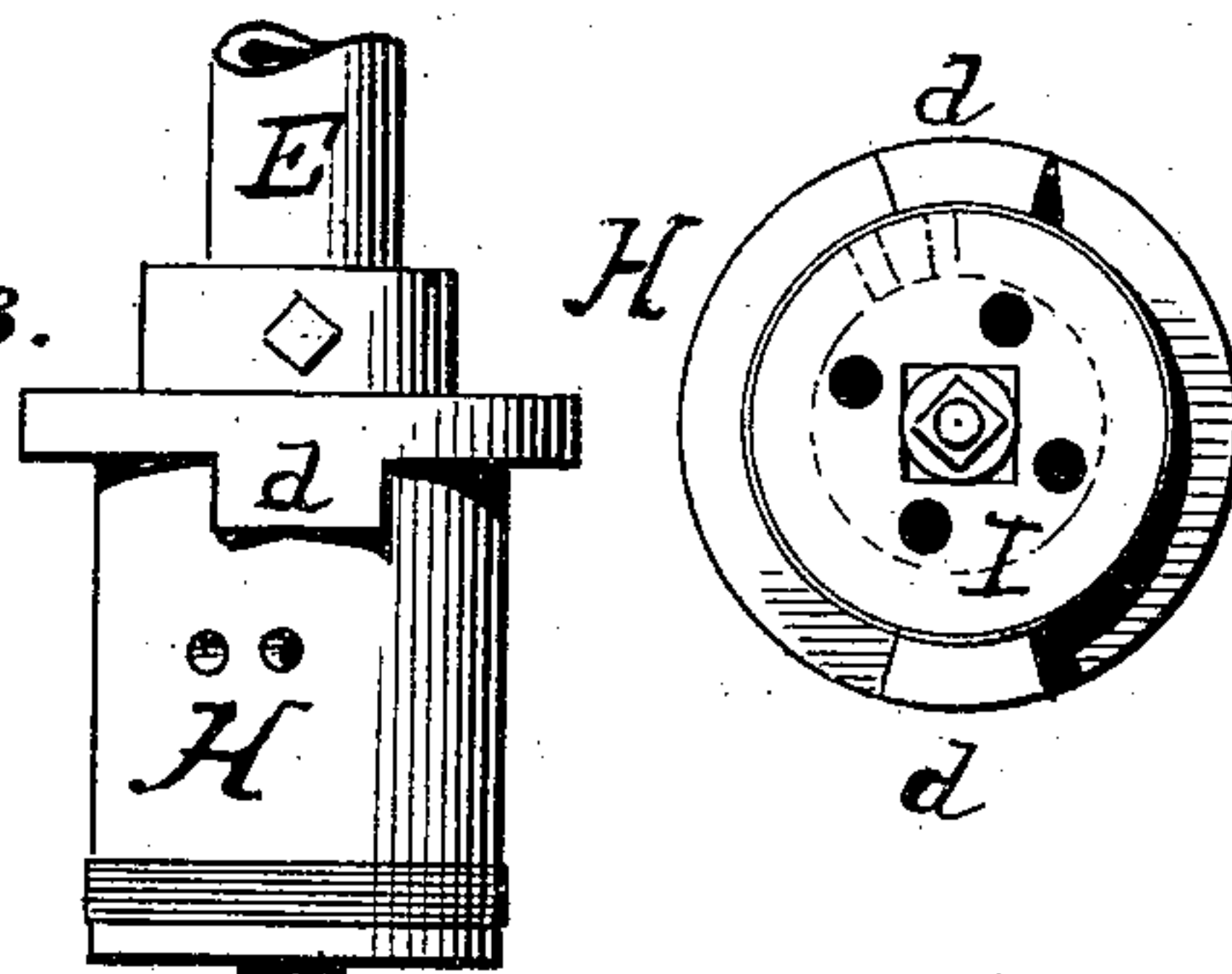
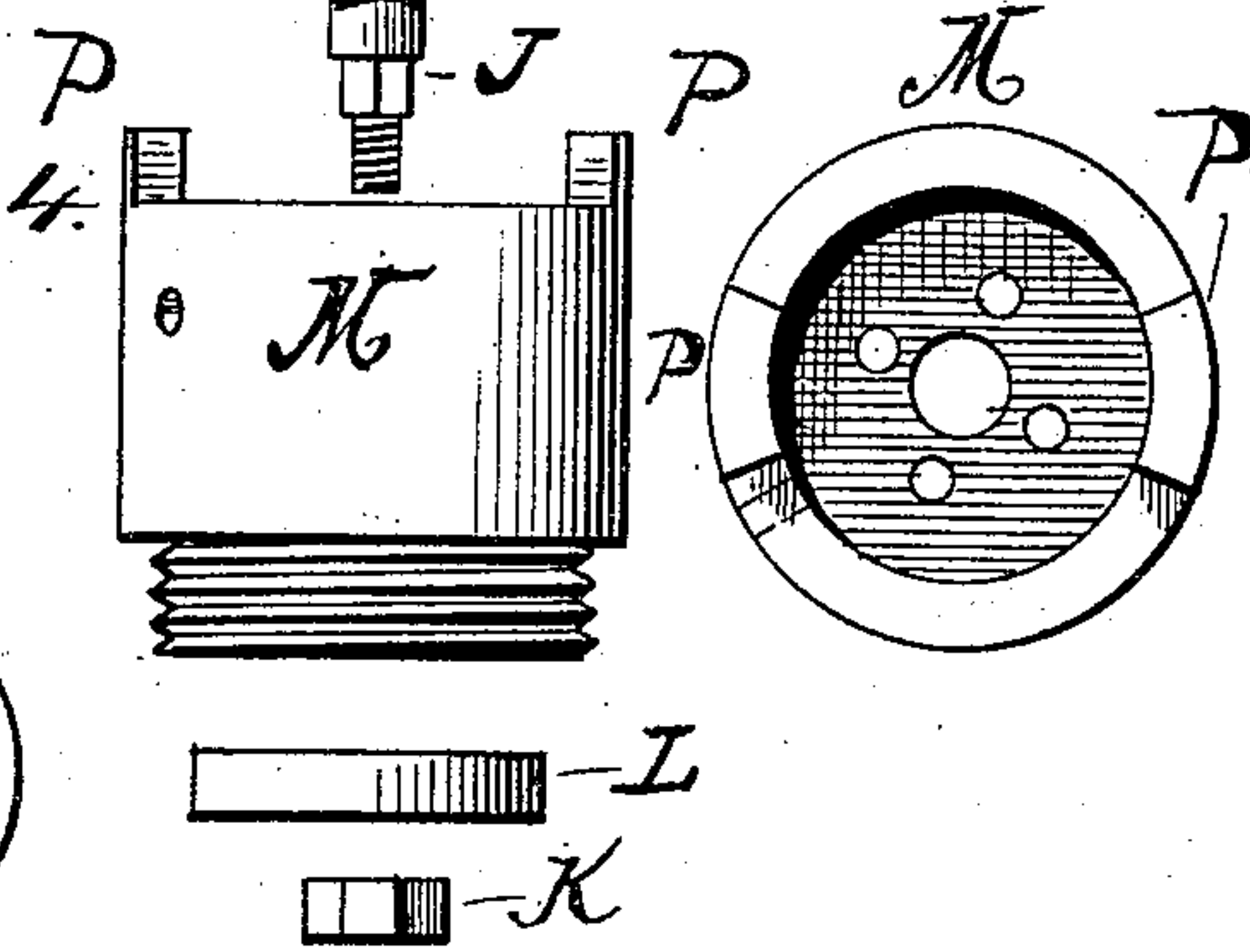


Fig. 4.



Attest:
H. L. Perrine,
Chas. H. Fowler.

Inventor:
Edward M. Zerbe.

By *H. A. Abbott*, Atty.

UNITED STATES PATENT OFFICE.

EDWARD M. ZERBE, OF LEWISTOWN, PENNSYLVANIA.

HOSE-PLUG.

SPECIFICATION forming part of Letters Patent No. 238,544, dated March 8, 1881.

Application filed July 27, 1880. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. ZERBE, a citizen of the United States, residing at Lewistown, in the county of Mifflin and State of Pennsylvania, have invented certain new and useful Improvements in Hose-Plugs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings; and to letters or figures of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a vertical section of the washer. Fig. 2 is a top view thereof; Fig. 3, a detached side view of the valve, also a bottom view thereof separate; Fig. 4, a side view of the valve boxing and seat, a top view thereof, a bottom and a side view of the washer, and also the securing-nut.

My invention relates to hose-plugs; and it consists in the construction hereinafter described, and then specifically pointed out by the claims.

In the accompanying drawings, the letter A indicates the casing of the plug, and B the boxing, which is screwed to the casing, and is formed on its inside with a seat, *h*, for the plate C, which fits over the goose-neck hereinafter described, and prevents any debris from falling down into the casing, and is so fitted to its seat that it will turn in order that the goose-neck may be turned to the right or left in the act of turning on or off the water. The boxing is also provided with an inwardly-projecting flange near its top, with which are to engage hooks *i*, formed on the bottom of lid D, for the purpose of holding the lid to its place. The lid is also provided with a projection on top that, by the aid of it and a suitable key, the lid may be removed.

The hollow valve-rod E connects with the goose-neck attachment F, which is screwed into the top of the valve-rod and held there by a thumb-screw. The exit of this neck is threaded, so that a hose may be screwed thereto. It is also provided with hexagonal or other angular head G, to afford a hold for a wrench or other device by means of which the valve-rod is turned when the parts are to be re-

moved for repair. The valve-rod is connected at its lower end to the hollow valve H, it being screwed therein and held from turning by a thumb-screw passed through the valve and made to impinge against the rod. This valve is formed near to its upper end with a flange, *a*, and on its sides, extending a short distance from the flange, are two lugs, *d*. The body of the valve-chamber is somewhat enlarged, and is provided with several orifices in its sides for the escape of waste water, and its bottom is perforated to admit water into the valve from below. This valve has a washer, I, of brass, copper, or other metal, against the lower face of which it is held by means of a square shouldered and headed bolt, J, passed through the two. This bolt also passes loosely through the valve-seat, which forms a part of the valve-box, and then through another washer, L, which bears against the bottom of the valve-seat, and is held thereto by a nut, K, screwed onto the end of the bolt. That part of the bolt that passes through the lower washer is formed with square shoulders, so that when the valve and the washer I are turned the valve L will also be turned. Both washers I and L and also the valve-seat are formed with corresponding perforations or ports, as illustrated in the drawings.

The valve H is fitted in a box, M, the bottom N of which constitutes the valve-seat. The lower exterior of this box is threaded and screwed into an extension which is screwed into the lower end of casing A, as indicated. A shoulder, *e*, of the valve-box rests on the top edge of the extension O, and a portion of the upper edge of the box is cut away or recessed, as shown in Fig. 4, into which recesses the lugs *d* on the valve fit and play when the valve is turned to open or cut off the supply of water. These lugs bear against the shoulders P of the recesses when the valve is turned in the operation of separating the parts, as hereinafter described. The valve-box is provided with openings corresponding with those in the valve. The diameter of the valve-box is so much smaller than the diameter of the inside casing A as to leave a space between the box and the casing, into which through the openings in the side of the box, and out of which through openings in the casing A, as illus-

trated in Fig. 1, may escape waste water from the valve. The sides of the valve-box may be recessed, so as to form chambers between the valve and valve-box for the waste water before passing out through the casing. Suitable packing *j*, of leather or other suitable material, fits between the valve (preferably next to the washer I) and the valve-box.

In operation, to turn the water on a wrench is applied to the part G and it turned until the ports in the valve H and washers I and L are brought opposite the ports in the valve-seat, which is determined by the flow of water from the main in the direction indicated by arrow in Fig. 1. When the water is to be turned off the wrench is further turned in the same or in the contrary direction until the ports in the valves and washers are removed from those in the valve-seat, which closes the ports in the seat. This last movement brings the ports in the side of the valve opposite those in the valve-box, and any water in the valve will then pass out through said side ports and those in casing A.

When the plug is to be repaired the water is turned off from the main and cover D and plate C removed and the valve-rod turned until the lugs on the valve are brought into contact with the shoulders on the valve-box, and then continued to be turned until the valve-box is unscrewed from its connection with the extension O, after which the parts are lifted out of the casing.

Having described my invention, what I claim is—

The goose-neck F, secured to the hollow valve-rod E by a thumb-screw, and provided with angular head G, in combination with boxing B and the plate C, fitted over the goose-neck, as shown and described, and adapted to turn therewith and be removed from the boxing, as and for the purposes set forth.

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

EDW. M. ZERBE.

Witnesses:

T. J. HILESHMAN,
A. H. BOEHNER.