

*C. A. Wilson,
Steam Trap.*

No 69,057,

Patented Sep. 17, 1867.

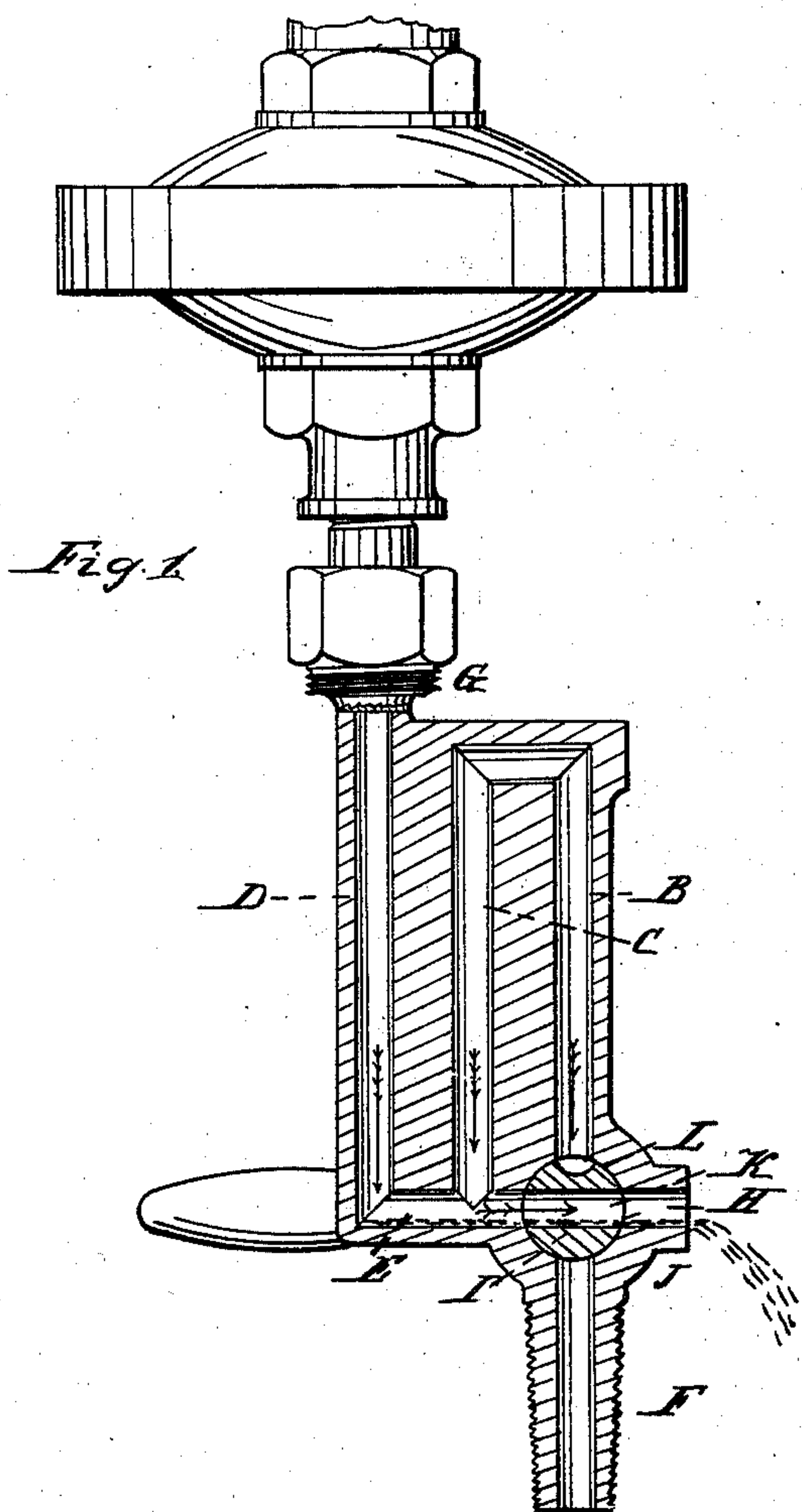


Fig. 1.

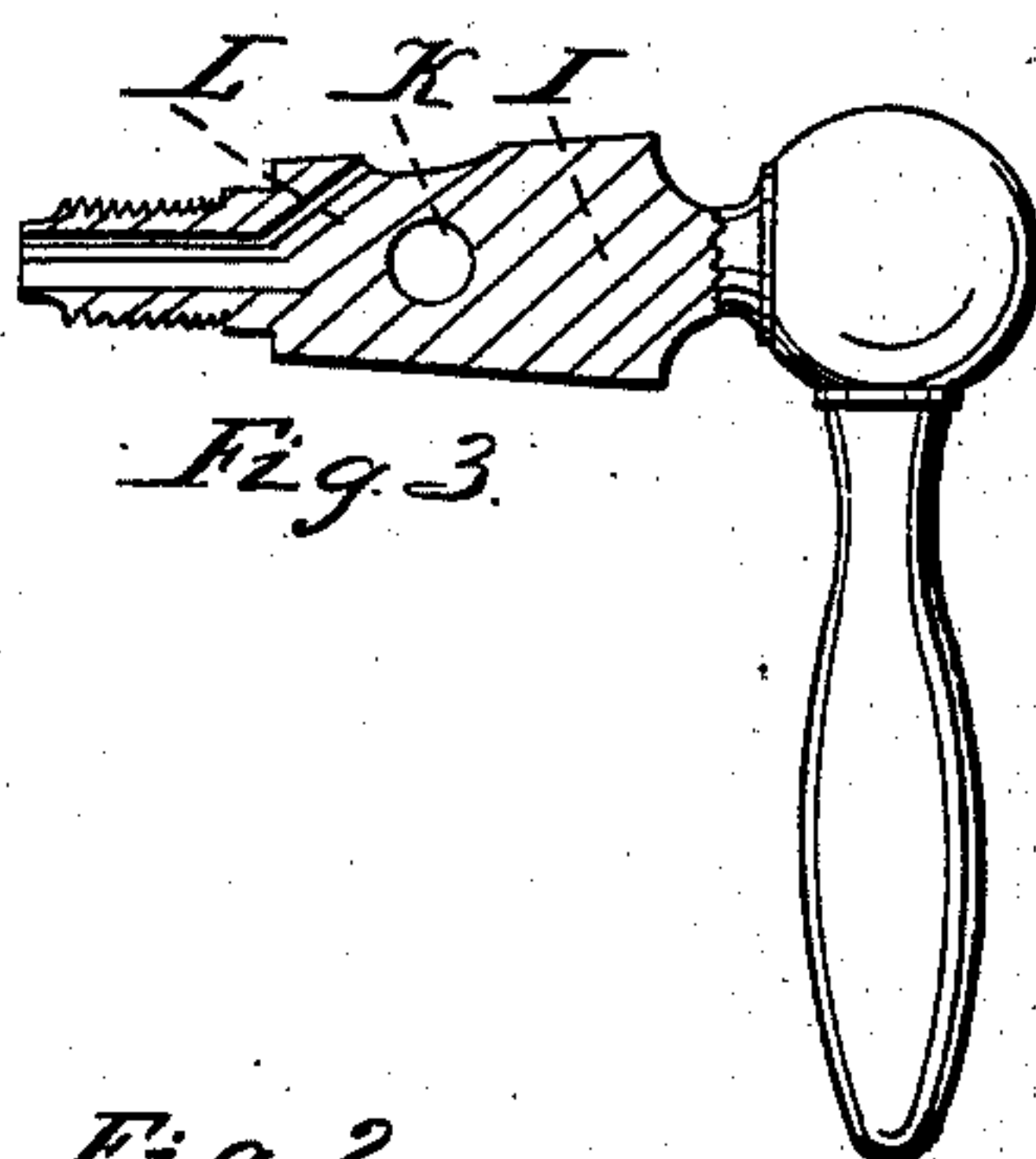


Fig. 3.

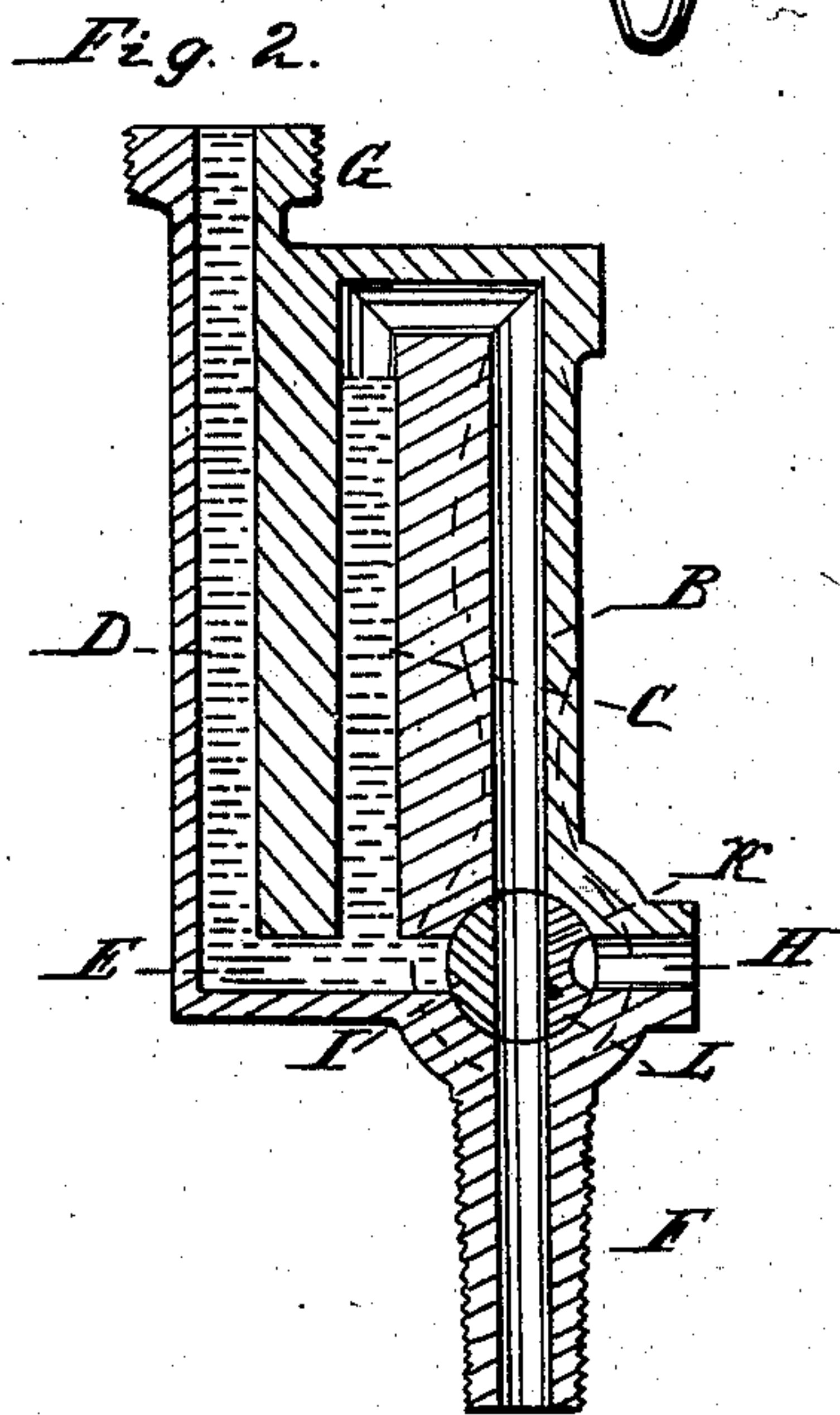


Fig. 2.

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Samuel Knight
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United States Patent Office.

CHARLES A. WILSON, OF CINCINNATI, OHIO.

Letters Patent No. 69,057, dated September 17, 1867.

IMPROVEMENT IN STEAM-PRESSURE GAUGES.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, CHARLES A. WILSON, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented a new and useful Improvement in Steam-Pressure Gauges.

My invention relates to a stop and blow-off cock and water-trap combined having two passages, which communicate respectively with the boiler and with the diaphragm-chamber of a steam-pressure gauge, and an intermediate passage, together with a plug of peculiar construction, which serves, according to its position, either to confine water in said passages so as to permit the transmission of the steam pressure without its direct contact, or to discharge the water externally so as to prevent freezing when the steam is shut off from the gauge.

Figure 1 is a vertical section of my device in the act of discharging.

Figure 2 shows the same in condition for use.

Figure 3 is an axial section of the plug.

A is a casting having three vertical tubes, B C D, of which B and C communicate at their upper and C and D at their lower portions through a single horizontal duct, E. F and G are screw-necked passages, by which the apparatus is connected to the steam pipe and pressure-gauge respectively. H is an external ventage in line with the horizontal duct E. I is the plug and J the socket of a four-way cock, said plug having an orifice, K, which traverses it diametrically, and another orifice, L, which entering the plug in the same latitude as the orifice K passes out along the axis and discharges at the end of the plug I. When it is desired to turn the steam on the plug is placed in the position indicated at fig. 2, so as to open a clear passage from the steam pipe to the tube B. In this position the tubes C and D soon become charged with the water of condensation, and while permitting the action of the steam pressure prevent its direct contact with the diaphragm, thus acting as an effectual water-trap. The closing of the cock is effected by simply turning it a quarter around, as shown in fig. 1, and this action opens the entire trap by allowing the tubes C and D to discharge their contents into the duct E and thence out through the orifice K at the end of the plug.

I claim herein as new and of my invention—

The arrangement of the three vertical tubes B C D, horizontal duct E, and four-way cock I, with passages F and G and ventage H, substantially as and for the purpose described.

In testimony of which invention I hereunto set my hand.

C. A. WILSON.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.