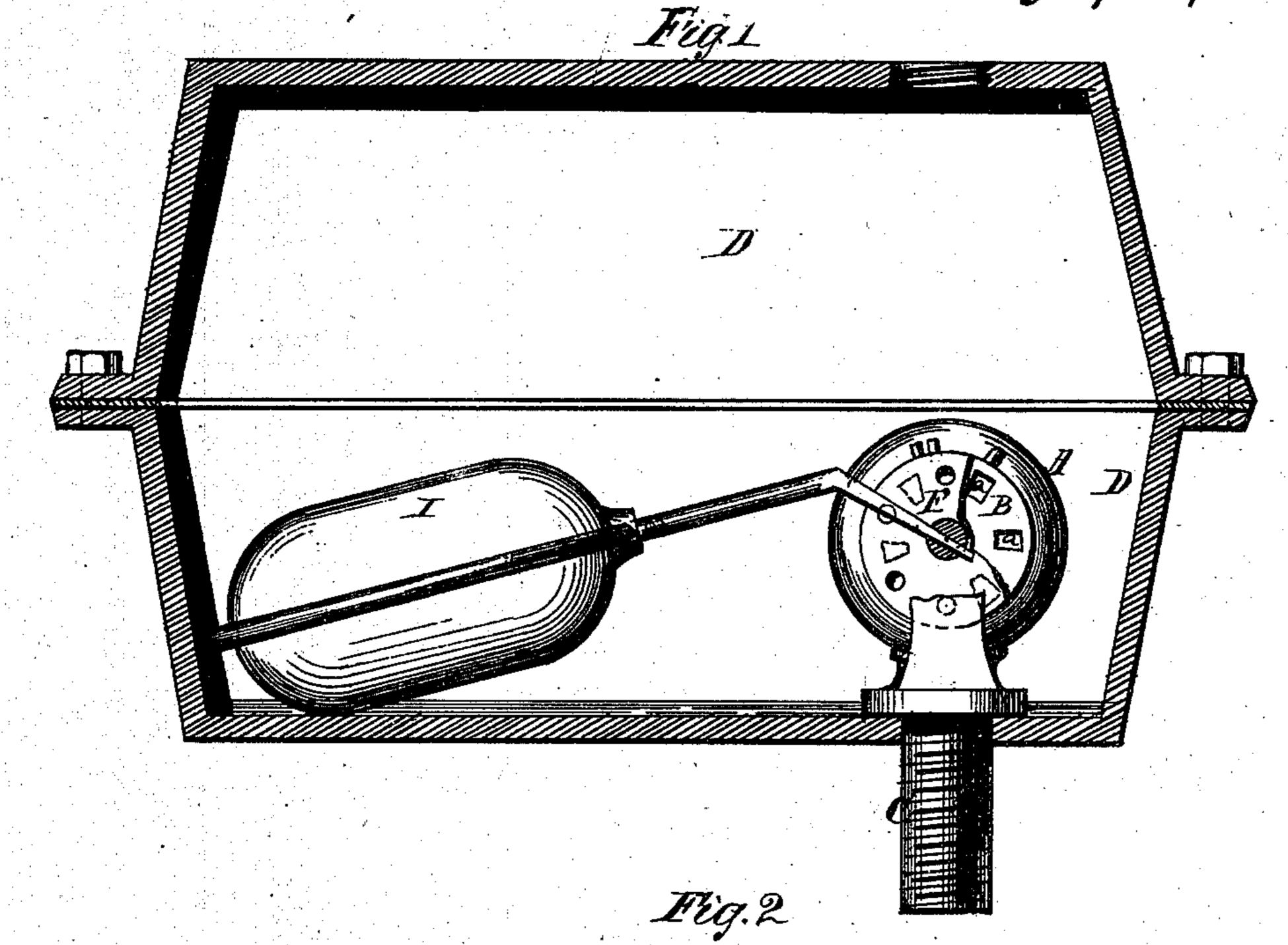
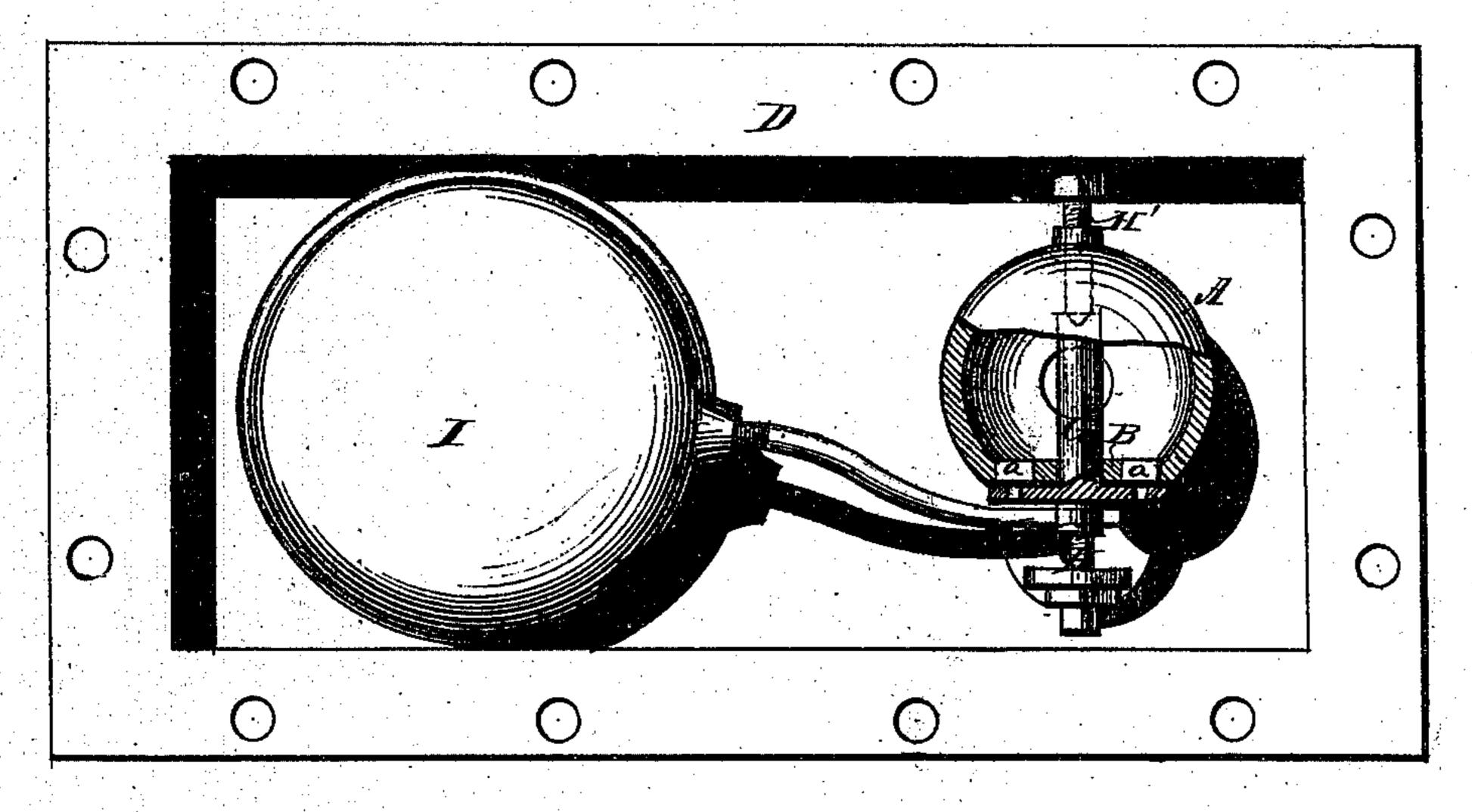
I. T. Colesson,

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Fatented May 17. 1870.





John Beobles. Exgan Sate Juventor:

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Attorneys.

## Anited States Patent Office.

## ISAIAH B. COLEMAN, OF DETROIT, MICHIGAN.

Letters Patent No. 103,016, dated May 17, 1870.

## IMPROVEMENT IN STEAM-TRAPS.

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

To all whom it may concern:

Be it known that I, Isaiah B. Coleman, of Detroit, in the county of Wayne and State of Michigan, have invented a new useful Improvement in Steam-Traps; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to improvements in steam and water-traps, and consists in combining a pair of pointed centering-pins with the shaft of the trap, and the other parts usually appertaining thereto, to prevent sticking or frictional pressure.

Figure 1 is a side elevation of a trap constructed according to my improvement, a part of the valve being broken out to show the valve-seat, and

Figure 2 is a plan view partly sectioned.

Similar letters of reference indicate corresponding parts.

A is a hollow globe or other suitably shaped hollow vessel provided at one side with a vertical plane disk or valve-seat, B, with ports a, and having an exhaust or discharge-pipe, C, leading from it and through the case or reservoir D. This escape-pipe is preferably seated to the floor of the reservoir, so as to form a support for the vessel A.

F is the rotary disk-valve mounted on a shaft, G, supported in the horizontal axis of the seat B on

"needle points" or center pins H H', suitably arranged in supports attached to the globe A, to which shaft the stem of the float I is connected, so as to turn it as the water rises or falls. This valve F is also provided with ports which, when the float is raised by the water in the case D, will be turned to coincide with the ports in the valve-seat, to allow the escape of the water, and which will be turned when the water falls to cut off or close the passages or ports, and prevent the escape of the steam.

The valve is adjusted against the seat by the center-pin H, which is set up to press it with the required force to insure a water and steam-tight joint before the pin H' is set up. Both these pins have jain nuts to hold them in place.

This arrangement provides a very efficient trap, which, it is believed, will be very durable and uniform in operation. It may be adjusted from time to time to tighten the valve, in case that it wears so as to leak.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The pointed centering-pins H H', constructed, arranged, and applied in a steam-trap, as and for the purpose described.

ISAIAH B. COLEMAN.

Witnesses:

Z. R. BROCKWAY, HENRY H. SWAN.