

T. BINGHAM.
Air-Pump Faucet.

No. 162,888.

Patented May 4, 1875.

Fig. 1.

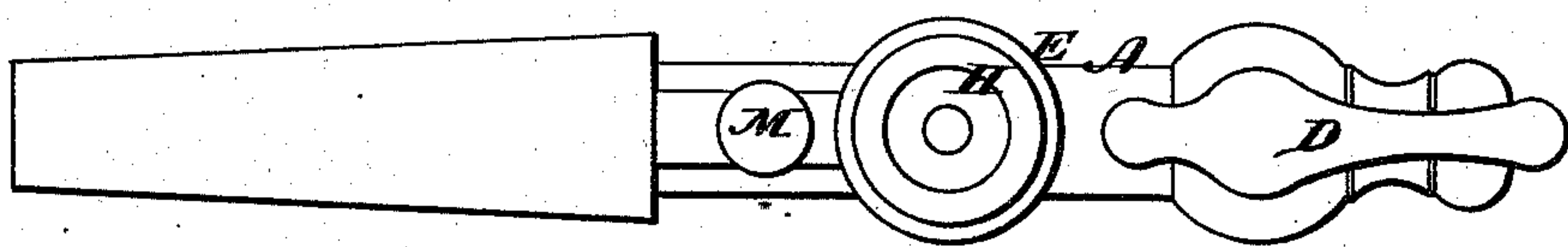
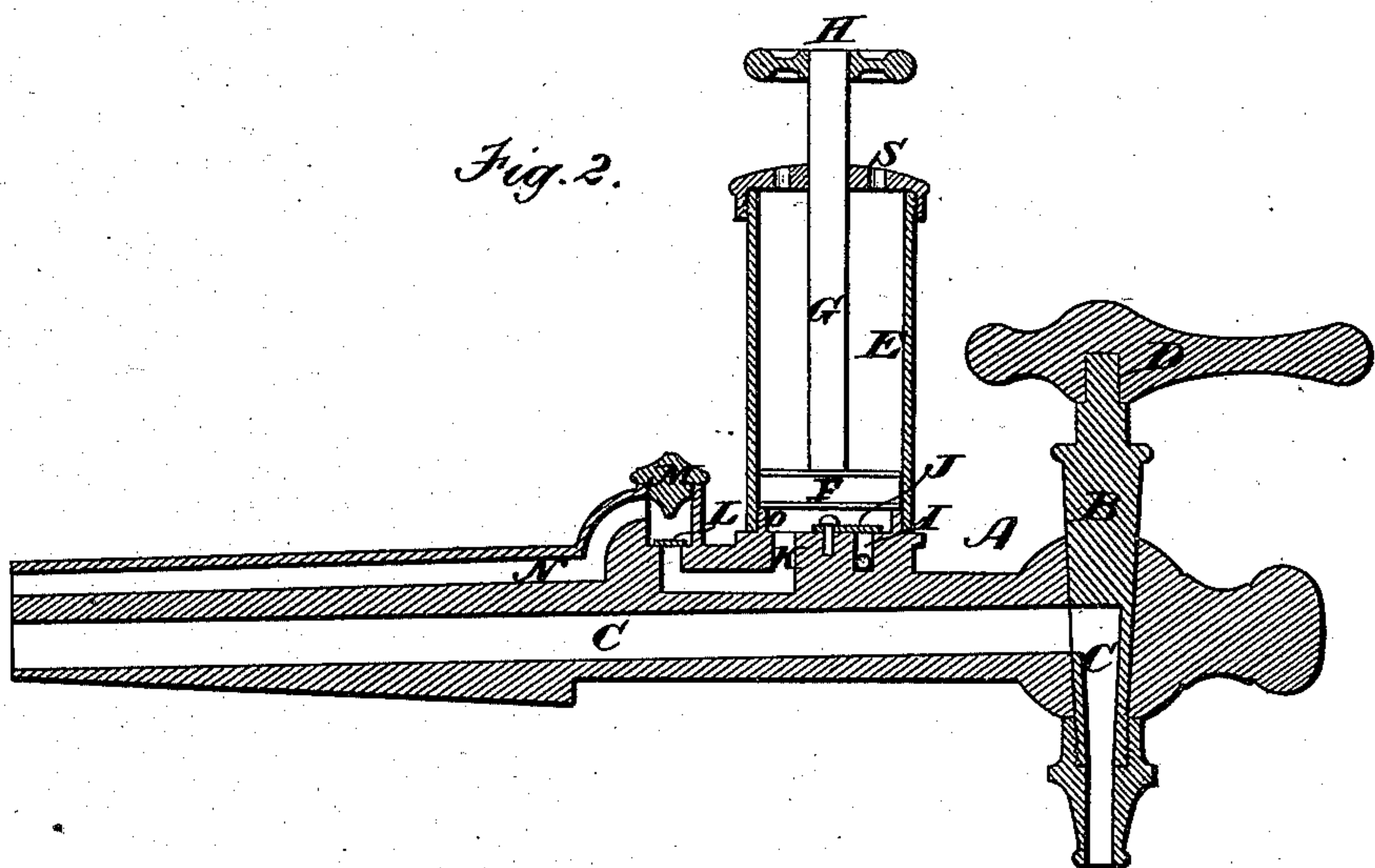


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN AIR-PUMP FAUCETS.

Specification forming part of Letters Patent No. 162,888, dated May 4, 1875; application filed September 4, 1874.

To all whom it may concern :

Be it known that I, THOMAS BINGHAM, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Air-Pump Faucets; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a top view of my improved air-pump faucet, and Fig. 2 is a longitudinal section of the same.

Similar letters of reference in the accompanying drawings denote the same parts.

The object of my invention is to draw liquids from a barrel, cask, or other similar receptacle without removing the bung or perforating the cask to allow the ingress of air to the interior, and at the same time to secure a more rapid flow of the liquid than when the ordinary faucet is used in connection with a vent; and to these ends my invention consists in the employment of an air-chamber situated on the upper side of a faucet, and provided with a piston, piston-rod, and handle, and valves governing the ingress and egress of air into passages connecting the air-chamber with the outer air and the interior of the barrel, by means of which air drawn from the outside of the barrel can be compressed and forced into the barrel, causing a rapid flow of the liquid contained therein through the faucet, all of which I will now proceed to describe.

In the accompanying drawings, A represents a faucet or spigot, provided with the ordinary plug B, having the passage C, and closed or opened by the revolution of the handle D, in the usual manner. E is an air-chamber, having screw-threads cut on its lower interior circular end, which are screwed over a screw-threaded circular projection, *c*, attached to the upper side of the faucet, thus securing the chamber E air-tight to the faucet. S is the cover of

the chamber E, fitting it air-tight, and provided with an air tight stuffing-box, in which the piston-rod G, carrying the piston F, is made to reciprocate by means of the handle H. I is a passage in the lower end of the air-chamber E, connecting the latter with the outer air, and provided at its junction with the air-chamber, with a valve, J, opening upward into the air-chamber. K is a similar air-passage, leading from the air-chamber E into an air-passage, N, on the upper side of the faucet, the air-passage N leading thence into the interior of the barrel or other receptacle from which the liquid is to be drawn. L is a valve opening upward at the junction of the air-passages K and N, the play of said valve being limited by an adjustable screw-plug, M.

The operation of my improved air-pump faucet is as follows: The passage C being opened, by turning the plug B by means of the handle D, the handle H is raised, elevating the piston F, rarefying the air in the chamber E, and causing the outer air to enter the air-chamber through the passage I and valve J, which is forced upward, the valve L being closed. On the descent of the piston the valve J is closed by the pressure of the air, and the latter, in a compressed state, is forced into the passage K, and, raising the valve L, is forced through the passage N into the interior of the barrel, thus forcing out the liquid rapidly through the passage C in the faucet into a vessel provided to receive it.

I claim—

The faucet A, provided with the liquid-passage C, plug B, air-passages I K N, and valves J L, in combination with the air-chamber E, provided with the piston F and piston-rod G, substantially as described, and for the purpose set forth.

THOS. BINGHAM.

Witnesses :

W. J. SHERIFF,
M. H. HOUSEMAN.