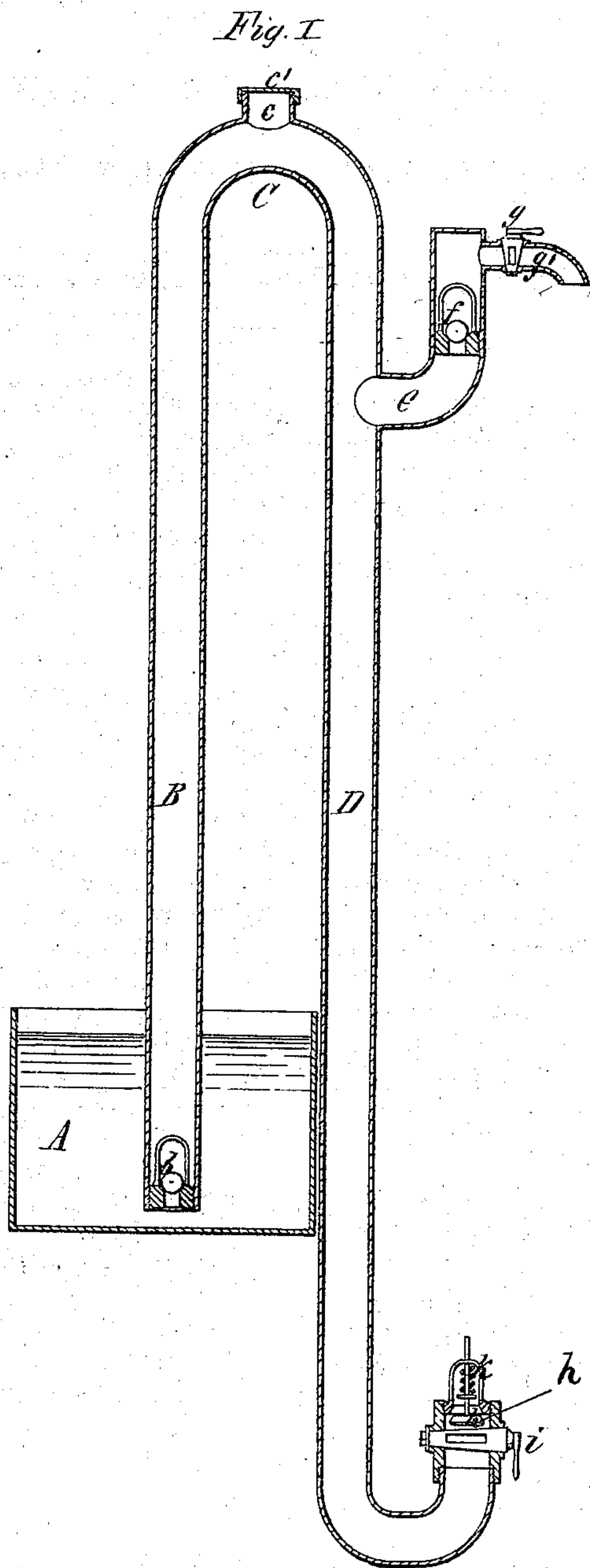


J. M. BOIS.

Siphon-Pumps.

No. 136,809.

Patented March 18, 1873.



Edward Wilhelm }
George J. Metzger } Witnesses.

James M. Bois
Inventor

UNITED STATES PATENT OFFICE.

JAMES M. BOIS, OF SALAMANCA, NEW YORK.

IMPROVEMENT IN SIPHON-PUMPS.

Specification forming part of Letters Patent No. 136,809, dated March 18, 1873.

To all whom it may concern:

Be it known that I, JAMES M. BOIS, of Salamanca, in the county of Cattaraugus and State of New York, have invented certain Improvements in Siphon-Pumps, of which the following is a specification:

This invention relates to an apparatus designed for raising water by siphonic action.

In the accompanying drawing, Figure I is a sectional elevation of my improved siphon-pump.

A represents the reservoir containing the water; B, the short leg of the siphon; C, its crown; and D, the long leg of the siphon. *b* represents the valve or stop-cock arranged in the short leg of the siphon at its lower end. *c* represents an opening provided in the crown of the siphon and closed by a screw-cap, *c'*. *e* represents the discharge-pipe arranged near the crown of the siphon in the leg D. It is provided with a valve, *f*, arranged so as to prevent access of the external air into the said leg. *g* is a faucet arranged in a continuation, *g'*, of the discharge-pipe *e*. *h* is an automatic valve arranged in the long leg D of the siphon at its lower end so as to prevent the outflow of the water when closed. Its spindle works against a spring, *k*, which throws the valve back into its open position. *i* represents a stop-cock arranged in the lower part of the leg D, near the valve *h*, so as to absolutely close the lower end of said leg when desired.

The operation of my apparatus is as follows: The cocks *b* *i* being turned so as to prevent passage of the water through their respective openings, and the opening *c* being opened, water is filled into the legs of the siphon through the latter, and the air contained in the legs is expelled, partly through the discharge-pipe *e* and partly through the opening *c*. When the water commences to flow out of the discharge-pipe *e* the faucet *g* is closed and the crown of the siphon filled, when the cap *c'* is again applied so as to close the opening *c* air-tight. Upon opening the cocks *b* *i* and the discharge-faucet *g*, the water is first discharged through the lower end of the leg D until its momentum closes the valve *h*, when the water will raise the valve *f* and discharge through the pipe *e* and faucet *g*, thus relieving the valve *h* of excessive pressure and enabling the spring *k* to return the latter to its open position, when the same operation is repeated. The discharges of water through the pipe *e* follow each other in such rapid succession that a comparatively steady flow of water is obtained.

I claim as my invention—

In combination with a siphon, the valves *b* *h* *f*, the cocks *g* *i*, and duct *e*, when arranged to operate as specified.

JAMES M. BOIS.

Witnesses:

EDWARD WILHELM,
GEORGE J. METZGER.