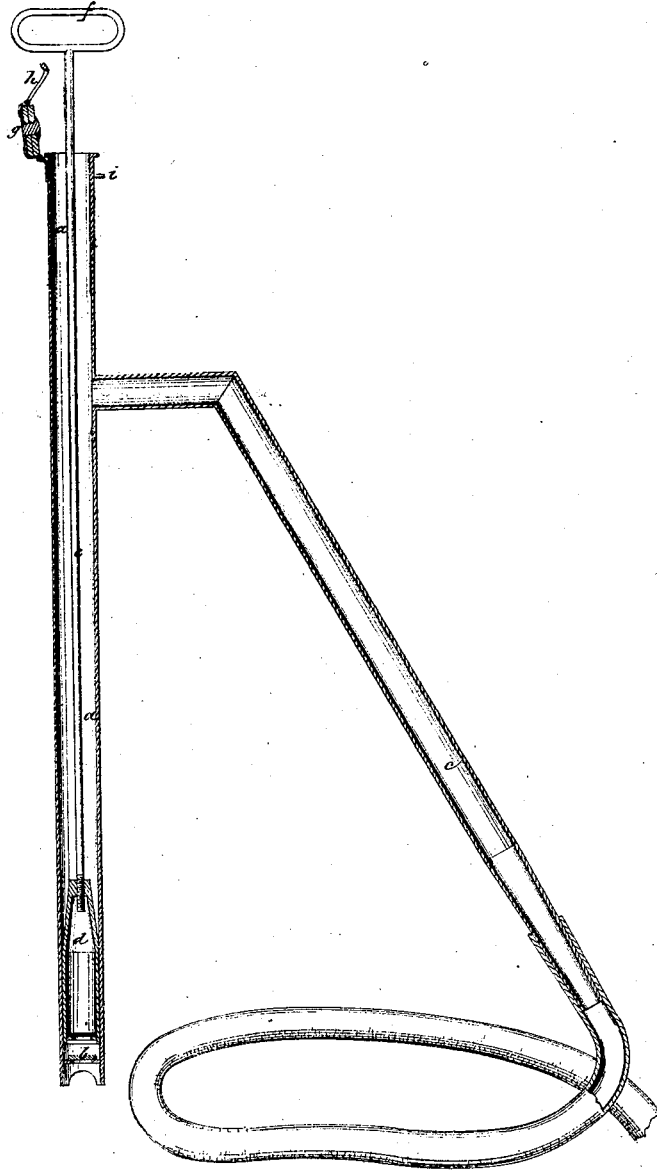


*T. J. Trapp,*

*Siphon.*

*No. 108652.*

*Patented Oct. 25, 1870.*



Witnesses:

*H. J. Smith*  
*Thomas D. Quinn*

Inventor:

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# United States Patent Office.

THOMAS J. TRAPP, OF WILLIAMSPORT, PENNSYLVANIA.

Letters Patent No. 108,652, dated October 25, 1870.

## IMPROVEMENT IN PUMP-SIPHONS.

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, THOMAS J. TRAPP, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and improved Pump-Siphon; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which the figure is a sectional elevation.

This invention consists of a pump and siphon combined, and has for its object to enable an operator, by working the pump for a few strokes, to start a flow of liquid in the siphon, after which the pump mechanism is removed from its barrel, and the liquid continues to run through the siphon without intermission until it is exhausted or the siphon removed.

Referring to the drawing—

*a* is a straight pump-barrel, having a valve, *b*, at its lower end, and slots in its sides, below the valve, to admit liquid freely when the barrel rests on the bottom of a liquid-reservoir;

*c* is the longer leg of a siphon, opening at its upper end into one side of the pump-barrel, that part of which that is below the leg *c* constituting the shorter leg of the siphon;

*d* is the pump-box, with its valve;

*e* is the pump-rod, extending a suitable distance above the top of the barrel, and having a handle, *f*, at its upper end; and

*g* is a cover provided with packing, hinged at one side to the top of the pump-barrel, and furnished with a hasp, *h*, by means of which the cover may be fast-

ened down on the top of the barrel, the hasp being passed under a stud, *i*, projecting from the side of the barrel.

The barrel having been inserted in a vessel containing liquid when any of the same is to be discharged, the pump-box is worked until the liquid rises in the barrel so far as to cover the mouth of the leg *c*. Then the pump-box and rod are drawn out of the barrel, the cover *g* shut down and fastened, and the siphon left to operate according to its own law, the function of the pump being merely to start the flow of liquid in the siphon.

This apparatus is applicable to a great variety of purposes of the same general nature; that is, the discharge of fluids from vessels. It is especially useful in conveying liquid nitrate of silver, for photographic use, from the bath into bottles, as it is dangerous to exhaust the air from a siphon employed in this business by sucking with the mouth in the ordinary manner.

It is also quite serviceable for removing bilge-water from canal-boats, the longer leg of the siphon being, when thus employed, connected with a pipe that lies along the bottom of the canal.

Having thus described my invention,

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

A pump and siphon combined, substantially in the manner and for the purpose specified.

Witnesses:

T. J. TRAPP.

SOLOM C. KEMON,

THOS. D. D. OURAND.