

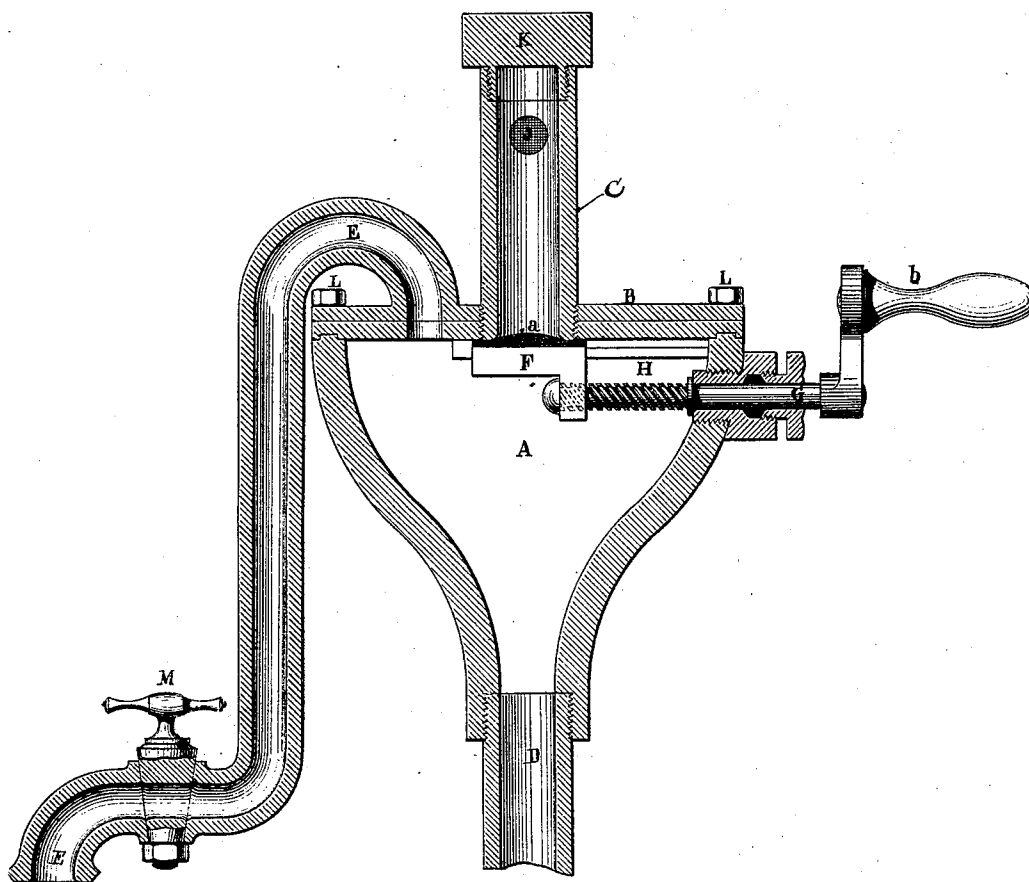
(No Model.)

H. DESCOURS.

SIPHON WITH CONTINUOUS JET.

No. 250,897.

Patented Dec. 13, 1881.



Witnesses.

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UNITED STATES PATENT OFFICE.

HIPPOLYTE DESCOURS, OF PARIS, FRANCE.

SIPHON WITH CONTINUOUS JET.

SPECIFICATION forming part of Letters Patent No. 250,897, dated December 13, 1881.

Application filed September 5, 1881. (No model.) Patented in France May 11, 1881.

To all whom it may concern :

Be it known that I, HIPPOLYTE DESCOURS, of Paris, France, have invented a new Improved Siphon, (patented to me in France May 11, 1881, No. 142,808,) of which the following is a specification.

My invention relates to an improved siphon for raising liquids and fluids in a continuous jet or stream, the principle consisting in interposing a movable hermetic valve or plug in the suction-column of the water or other liquid or fluid as soon as the rise is produced, by means of a suction-pump, in such a manner as to completely separate the suction-column from the body of water raised, thus constituting an independent and permanent discharge-column, and always primed.

The combination and working of this improved siphon with continuous jet or stream will readily be understood on reference to the annexed drawing, in which the construction of the apparatus is completely shown in vertical section.

A is a chamber, of metal or other suitable material, of any shape.

B is its cover, bolted down at L L, and receiving a tube, C, to which a suction-pump of any convenient size may be applied when it is desired to produce a vacuum in the apparatus. This tube C receives a closing-cap, K, after the vacuum is established, which can be readily ascertained as soon as the liquid or fluid reaches the sight-hole J, provided for this purpose.

D is the suction-pipe which enters the liquid or fluid to be raised.

E is the discharge-tube of the siphon. It is furnished with a cock, M, for arresting the flow of the liquid or fluid as required.

F is a horizontal sluice-valve, having a hermetic pressure-washer, *a*, which slides horizontally and opens or closes the tube C by means of the screw G, fitted with a handle, *b*, or other like contrivance.

H is the slide-guide of the sluice-valve F. The working of the apparatus is as follows: The chamber is applied to the place from whence the liquid is to be raised, its suction-pipe dipping into the said liquid. The sluice-valve F is then opened, and the pipe of a sufficiently

powerful suction-pump for the volume of liquid to be raised from the commencement is applied to the tube C. The pump started establishes the vacuum in the chamber, and when, through the sight-hole, the liquid is seen to rise and to replace the air the sluice-valve is operated by the screw G and the opening of the tube C, which is then closed by the washer or pad *a* pressing therein. All that now requires to be done is to remove the suction-pipe of the pump and to fit on the closing-cap K, after having first filled the tube C with water, or having closed it with mercury or plaster, or otherwise, so as to cut off all communication with the outer air. As soon as the cock M is opened the liquid flows out through the siphon E, and will continue to flow until the cock be closed.

As will be seen, this very simple apparatus will be of great use for feeding purposes, in agricultural industry, war, workshops, in extinguishing fires, &c.

I am aware of the patent of Barbarin, No. 83,024, and of Mainwaring, No. 232,525, which show a siphon having a chamber provided with valves between said chamber and the inlet and outlet tubes, and by means of which the air may be exhausted to set the siphon into operation, and therefore do not broadly claim such construction, or anything shown or described in said patents.

I claim—

The combination of the chamber A, the inlet-tube D, and outlet-tube E, provided with a cock, M, the suction-tube C, and the slide-valve within said chamber working over an opening from said chamber into said suction-tube, with mechanism, substantially such as described, attached to said valve and extending outside the chamber, whereby the said valve may be moved over or from said opening into the suction-tube, substantially as described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

H. DESCOURS.

Witnesses:

DAVID T. S. FOWLER,
ALBERT COHEN.