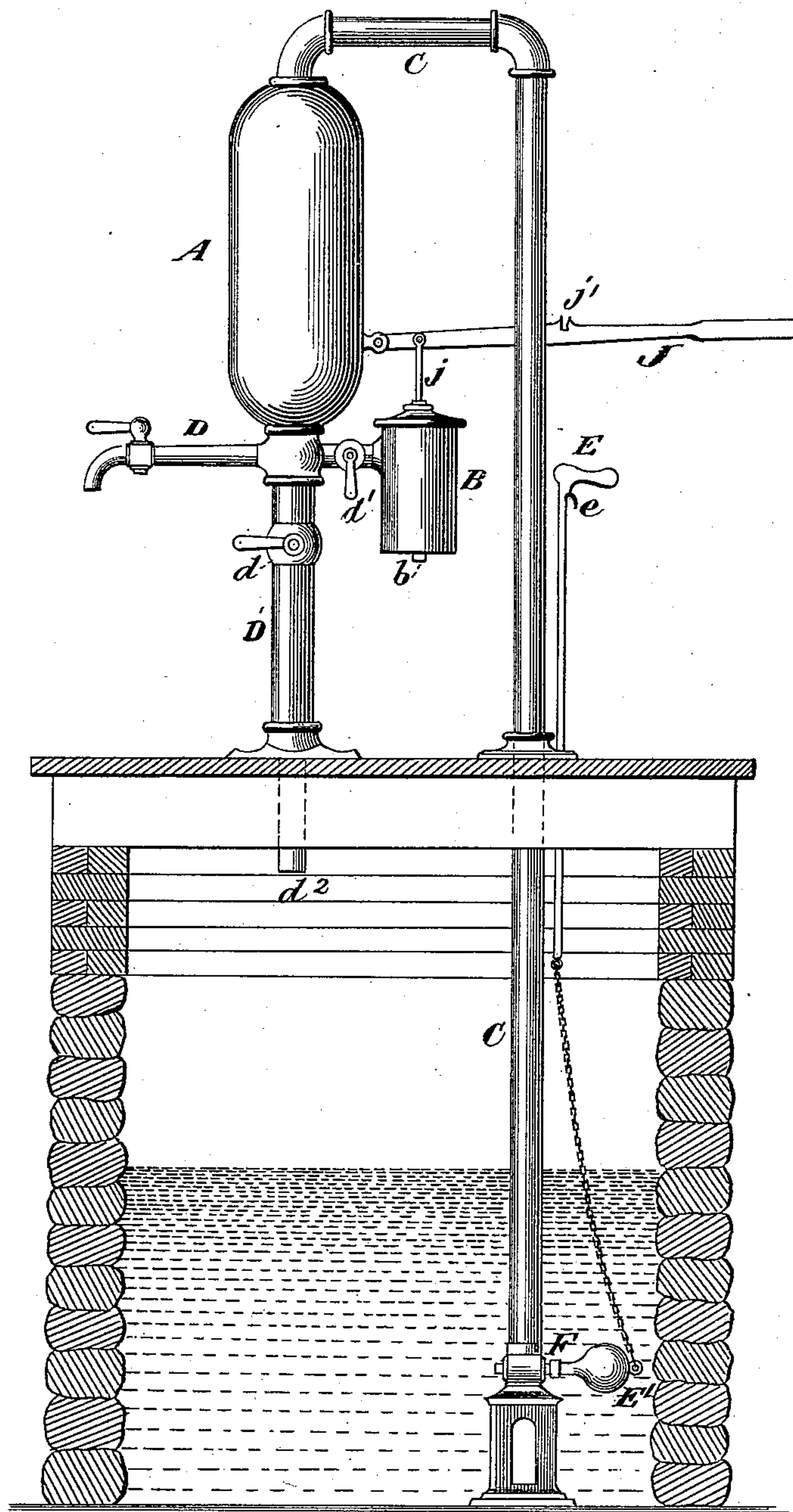


(No Model.)

W. S. TAYLOR.
HYDRAULIC AIR PUMP.

No. 326,346.

Patented Sept. 15, 1885.



Witnesses.
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HYDRAULIC AIR-PUMP.

SPECIFICATION forming part of Letters Patent No. 326,346, dated September 15, 1885.

Application filed March 30, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. TAYLOR, of Huntingdon, in the county of Huntingdon and State of Pennsylvania, have invented an Improved Hydraulic Air-Pump, of which the following is a specification.

The special object of the invention is to so combine an air-pump with hydraulic mechanism that by opening a water-valve the water may be forced by atmospheric pressure into a receiver automatically, and then opening a faucet a continuous stream may be discharged.

The drawing is a side elevation showing the local relation of all the parts in my hydraulic air-pump.

In the drawing, A represents a receiver supported on a suitable stand; B, an air-pump connected therewith, or not, by a cock, *d'*; C, a pipe connecting with the top of receiver, carried a short distance horizontally by preference, and then extended down about thirty to thirty-two feet to the water-supply. D is a discharge-faucet connecting with the lower end of receiver; D', an extension-pipe valved at *d*, and dripping at *d''* into the well. E is a handle-rod connecting by a chain or equivalent device and a weight with a valve, F. J represents a lever pivoted at its front end to the receiver, and connected intermediately by a pivoted rod, *j*, with the piston of air-pump B. *j'* is a notch in said lever, in which may be secured a latch, *e*, under handle E.

The operation is as follows: By opening cock *d*, dropping the weight E', and closing the faucet D, the insides of receiver A and pipe C are excluded entirely from the air. I

then actuate the air-pump until the air is completely exhausted from the pipe C and receiver A. The effect of this is to create a continuous vacuum in pipe and receiver. I then close valve *d'* and open valve F, which causes the water to ascend the pipe C and fill the receiver A. I now open the discharge-faucet D and let the water flow out. Thus it will be seen that the receiver, which may be of any preferred capacity, is filled with a very trifling exertion—namely, the working of an air-pump, while the lifting of the water is done entirely by atmospheric pressure.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. The receiver A, having cocked discharge-pipe D, the air-pump B, connected with the lower end thereof by a pipe having cock *d'*, and the bottom valved pipe, C, extending into well, but connecting with the upper end of receiver, the whole adapted only to fill the receiver A and then cease further supply, as described.

2. The combination, with the parts A B C, of the lever J, notched at *j'*, carrying piston-rod *j*, and pivoted to part A, and the rod E, having latch *e*, and connected by a chain with a weighted valve, F, whereby the air-pump may be conveniently worked, its outlet closed, and the water-valve held open, as described.

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Witnesses:

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