

J. MAYHER.
 REGULATING THE DISCHARGE OF WATER FROM PUMPS.
 No. 110,928. Patented Jan. 10, 1871.

Fig. 1.

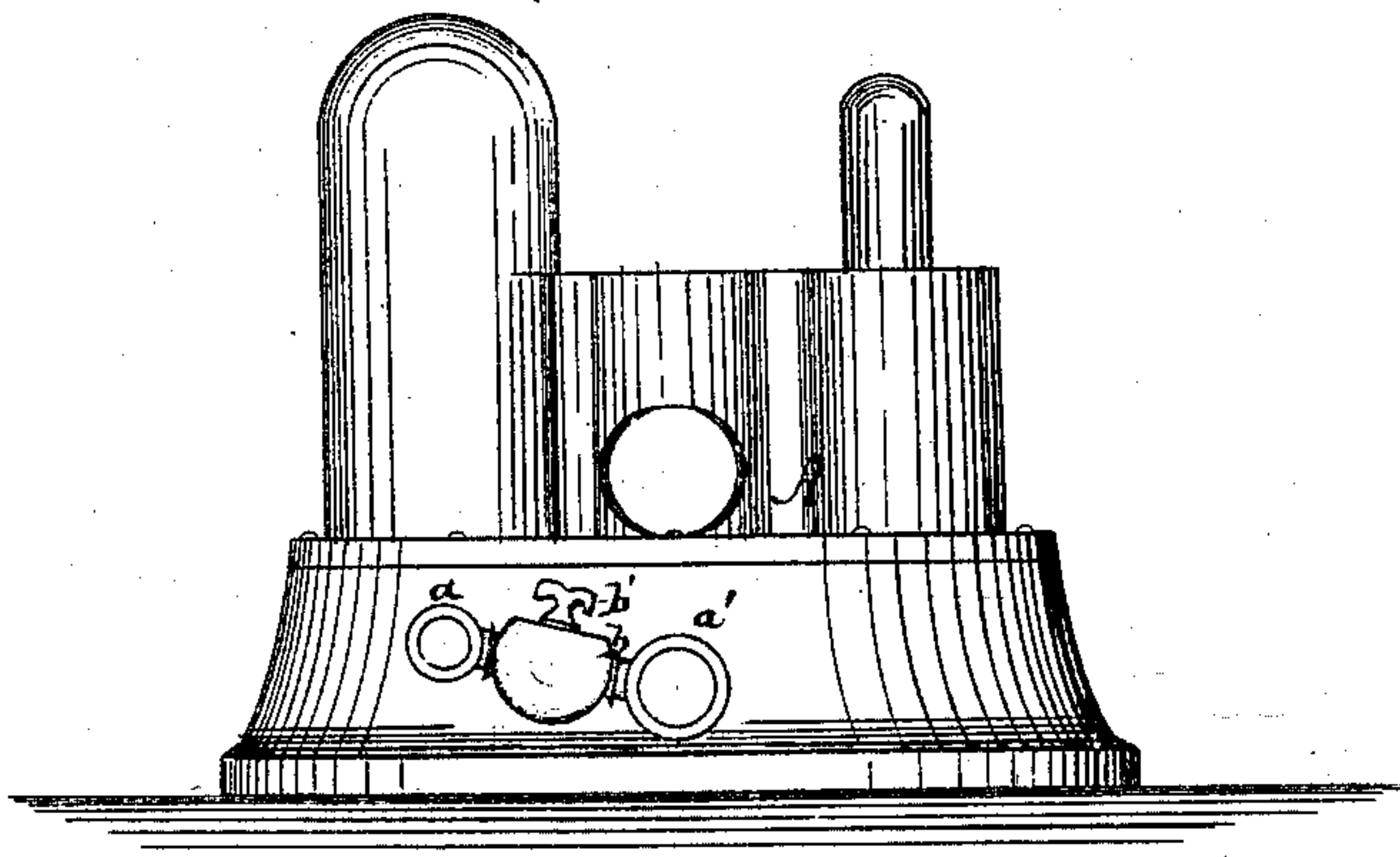
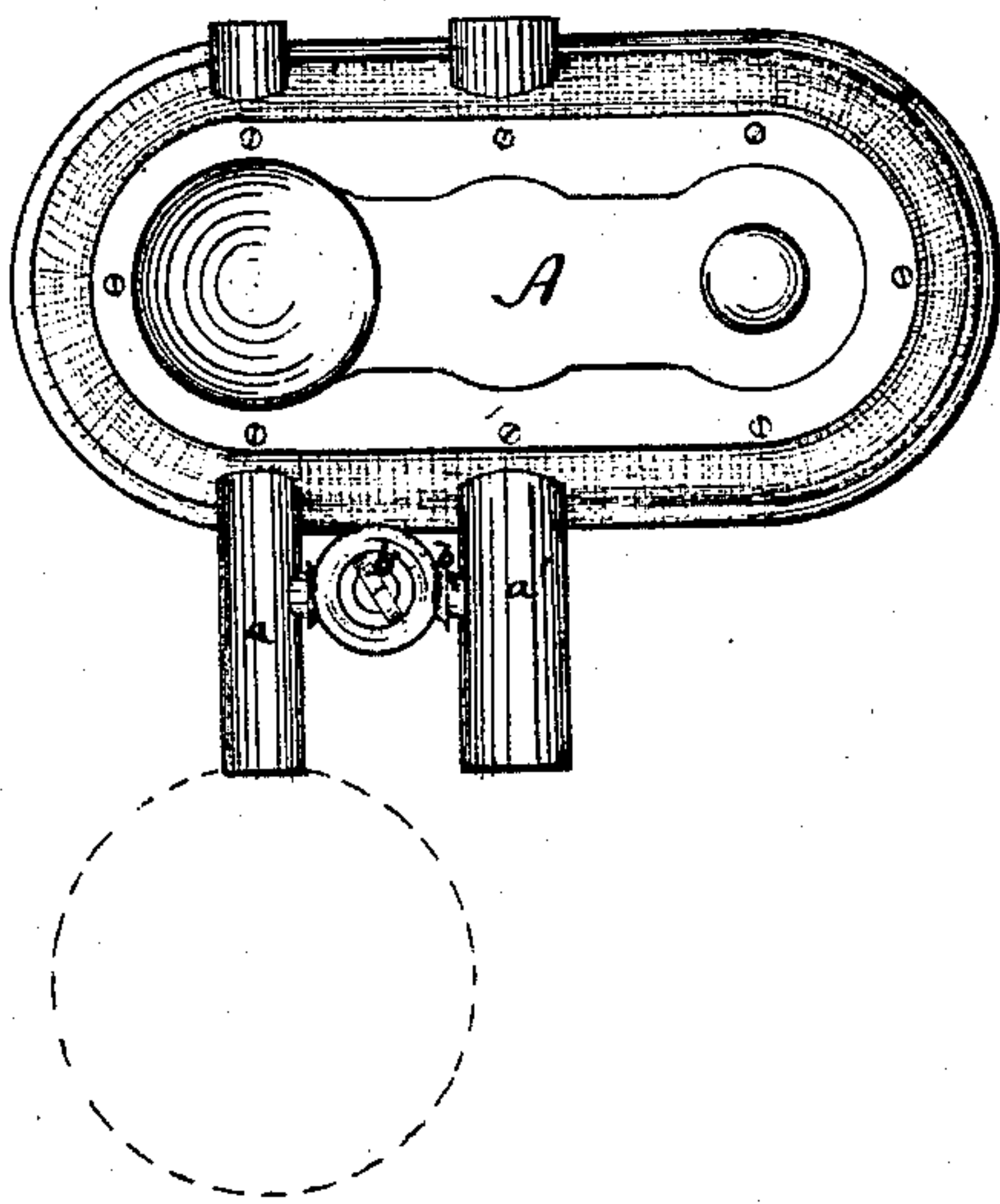


Fig. 2.



Witnesses.

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Inventor:

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UNITED STATES PATENT OFFICE.

JOHN MAYHER, OF EAST HAMPTON, MASSACHUSETTS.

IMPROVEMENT IN REGULATING THE DISCHARGE OF WATER FROM PUMPS.

Specification forming part of Letters Patent No. **110,928**, dated January 10, 1871.

To all whom it may concern:

Be it known that I, JOHN MAYHER, of East Hampton, in the county of Hampshire and State of Massachusetts, have invented a new and Improved Attachment for Regulating the Discharge of Water from Pumps; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists in the combination of a pump and its induction and eduction pipes, with a connecting-pipe and valve, as will be fully described hereinafter, for the purpose of regulating the amount of water thrown from the pump.

Figure 1 represents a side elevation of my invention; Fig. 2, a plan view of the same.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully the construction and operation of the same.

A represents a pump of any suitable construction, which is provided with the usual supply and discharge pipes, *a a'*.

b represents a pipe connecting the two pipes *a a'*, which is provided with a valve, *b'*, of any desired construction.

The supply-pipe may be connected in any proper manner to a boiler or other receptacle.

The operation is as follows: The supply of water delivered by the pump is regulated by the position of the valve in the pipe connecting the supply and discharge pipes. If the valve is closed, the pump of course forces all

the water into the boiler that it is able to deliver; but if the valve is open more or less, a certain quantity of water is forced back into the supply-pipe, and is thus caused to pass through the pump again.

The marked advantage of this arrangement is that a pump of large size can be regulated so as to deliver a constant supply of any desired quantity less than its full capacity. Consequently manufacturers who desire a large pump for use in case of fire can use the same pump to supply the boiler, while heretofore two pumps were necessary, it being found in practice not to be economical to fill the boiler, then stop the pump until the water evaporates, and then fill again. Then, again, it is impossible to run a crank and fly wheel steam-pump at a sufficiently low rate of speed to give the required supply and have sufficient velocity to pass the center.

The connection described is extremely simple in its construction and effective in action.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the pump A and supply and discharge pipes *a a'*, with the pipe or passage *b*, having the valve *b'*, as described.

This specification signed and witnessed this 30th day of November, 1870.

JOHN MAYHER.

Witnesses:

LAFAYETTE CLAPP,
L. CLAPP, Jr.