

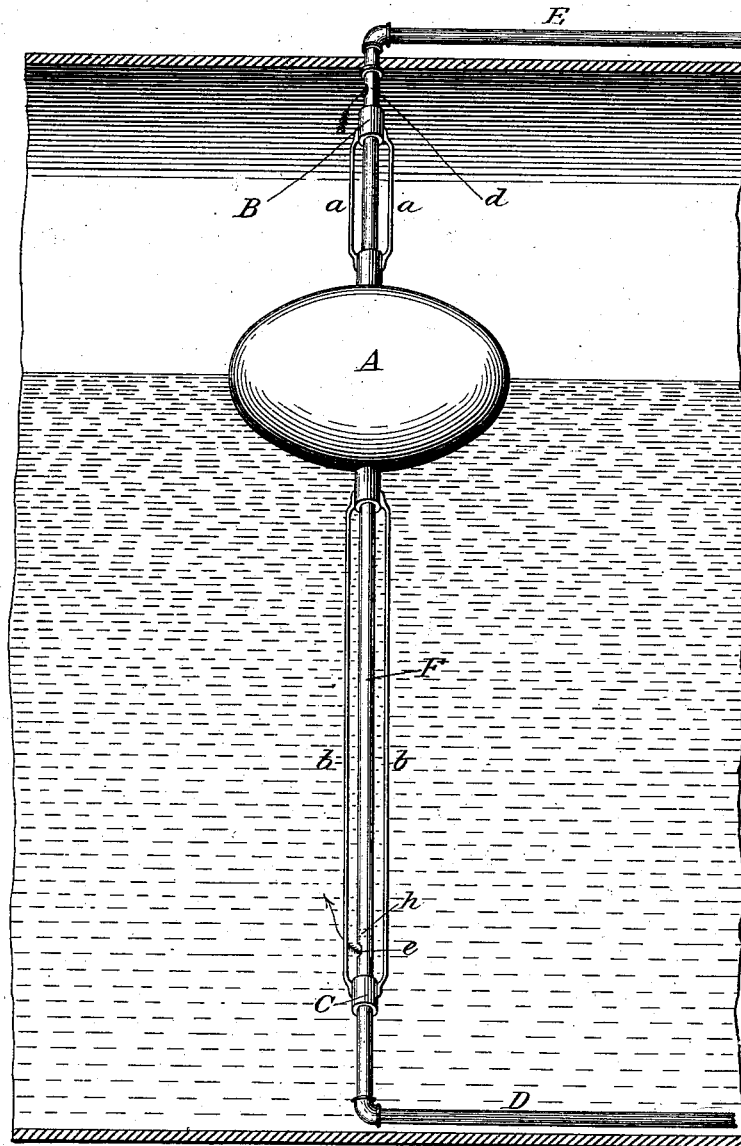
(No Model.)

C. O. WYMAN.

BOILER FEED WATER REGULATOR.

No. 259,787.

Patented June 20, 1882.



Witnesses:

John F. Hughes
John F. Arnold

Inventor.

Charles C. Wyman
By Willis E. Parsons,
att'y.

UNITED STATES PATENT OFFICE.

CHARLES O. WYMAN, OF HOWARD, MAINE.

BOILER FEED-WATER REGULATOR.

SPECIFICATION forming part of Letters Patent No. 259,787, dated June 20, 1882.

Application filed March 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES O. WYMAN, of Howard, in the county of Piscataquis and State of Maine, have invented a new and useful Automatic Boiler Feed-Water Regulator; and I hereby declare the following to be a full, clear, and exact description thereof, which will enable others to make and use the same, reference being had to the accompanying drawing, forming a part of this specification, in which the figure shows a perspective view of my invention within a sectional view of that part of a steam-boiler in which it is to be operated.

The object of my invention is to keep the water in a steam-boiler nearly stationary, or at about the same height, while in use, thus avoiding boiler-explosions from low water, by the combination of a float, A, resting on the water in the boiler, and connected with the sliding valve B by the rods *a a*, and connected with the sliding valve C by the rods *b b*, which valves regulate the egress of steam which propels the pump and the ingress of water to the boiler. As the water lowers in the boiler the float A slides down on the pipe F, opening the sliding valves B and C, and the steam passes through the orifice *d* into the pipe E, which pipe is connected with the pump which supplies the boiler and sets the pump in motion, forcing the water into the boiler through the supply-pipe D and orifice *e*. As the water rises in the boiler the float A closes the sliding valves B and C over the orifices *d* and *e*. The pump that supplies the boiler is thus kept in

motion at short intervals, and the water remains nearly stationary, falling but a few inches before it is again pumped in.

The pipe F may be either hollow its entire length, with a partition or solid joint just above the orifice *e*, as represented in the drawing by the letter *h*, to prevent the water rising higher in the pipe than said orifice *e*, or that part of said pipe between said orifices *d* and *e* may be entirely solid, the entire machine on which I desire a patent being substantially as shown in the perspective view of the accompanying drawing.

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

1. The combination of the float A, constructed upon the rod or pipe F, with the valves B and C, said valves regulating the steam which propels the pump that supplies the boiler, the inflow of water to the boiler, and the connection of the pump and boiler by the pipe E, which conducts steam from a valve in the boiler to the pump, substantially as set forth.

2. The combination, in steam-boilers, of a float with valves operating in connection with a pipe or pipes in the boiler, regulating the passage of steam from the boiler to the pump and the flow of water into the boiler, substantially as set forth, and for the purpose indicated.

CHARLES O. WYMAN.

Witnesses:

AUGUSTUS G. LEBROKE,
HIRAM ROBINSON.