

(No Model.)

D. H. STREEPER.

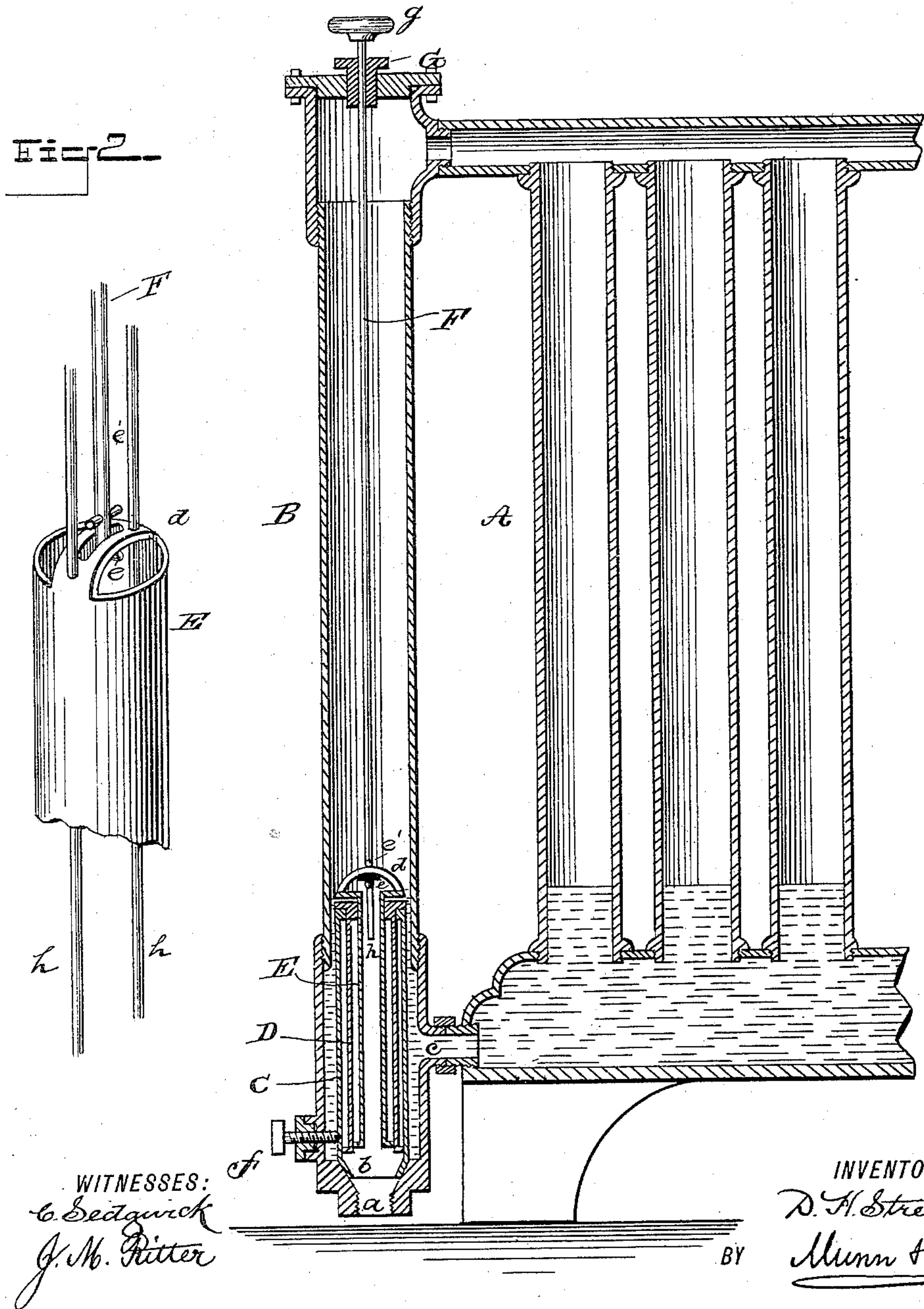
# WATER DISCHARGE REGULATOR FOR STEAM RADIATORS.

No. 398,552.

Patented Feb. 26, 1889.

Fig 1.

Fig-2-



WITNESSES:

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# UNITED STATES PATENT OFFICE.

DANIEL H. STREEPER, OF NORRISTOWN, PENNSYLVANIA.

## WATER-DISCHARGE REGULATOR FOR STEAM-RADIATORS.

SPECIFICATION forming part of Letters Patent No. 398,552, dated February 26, 1889.

Application filed October 11, 1888. Serial No. 287,819. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL H. STREEPER, of Norristown, in the county of Montgomery and State of Pennsylvania, have invented a new and Improved Water-Discharge Regulator for Steam-Radiators, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side elevation, partly in section, of a portion of a steam-radiator to which my improved regulator has been applied; and Fig. 2 is a perspective view of a portion of the discharge-tube.

Similar letters of reference indicate corresponding parts in both views.

The object of my invention is to provide apparatus for regulating the discharge of water from steam-radiators for the purpose of varying the steam-room of the radiator according to the amount of heat required.

My invention consists in the construction and arrangement of parts, as will be hereinafter described and claimed.

To the radiator A, which is of the usual construction, is attached a pipe, B, communicating with the upper and lower part of the radiator. The lower part of the pipe B is provided with a screw-threaded opening, *a*, for receiving a discharge-pipe. The inner portion of the opening *a* is flared to receive the conical end *b* of the tube C, the said tube extending upwardly above the passage *c*, communicating with the lower part of the radiator A.

To the tube C is fitted the tube D, and in like manner to the tube D is fitted a tube, E. The upper end of the tube E is provided with a cross-bar, *d*, which is slotted to receive the rod F, the said rod extending through a stuffing-box, G, in the cap of the pipe B. The rod F is provided with transverse pins *e e'*, which pass through the rod above and below the cross-bar *d*. Guide-rods *h h* extend from the cap of the pipe downward through the cross-bar *d* and into the tube E, to prevent the said tube from turning. The tube C when in use is held in its position in the pipe B by the binding-screw *f*. When the entire radiator

is in use, the tube C is raised up, allowing the discharge to pass out in the usual way. The water in the radiator flows through the passage *c* into the pipe B and overflows through the top of the tube E, the water in the radiator being at the same level as the top of the tube E.

If it is desired to increase the height of the water in the radiator, the rod F is pulled up by means of the handle *g*, thus extending the system of telescopic tubes C D E, so as to cause the water to rise higher in the pipe B before overflowing through the tube E. By extending or contracting the telescopic tubes in this manner the amount of heat given out by the radiator may be controlled.

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

1. The combination, with the radiator, of the vertical pipe B, having upper and lower lateral connections with the upper and lower ends of the radiator, and having an outlet, *a*, in its lower extremity, the longitudinally-extensible outlet-pipe within the pipe B, open at both ends and communicating at its lower end with the outlet *a*, and a rod extending down through the pipe B from its upper end to the extensible pipe, substantially as set forth.

2. The combination, with the radiator, of the vertical pipe B, having lateral connections near its upper and lower ends with upper and lower ends of the radiator, and provided with the outlet *a* below the lower connection, *c*, the longitudinally-extensible outlet-pipe open at both ends, with its lower end detachably connected with the outlet *a*, and a rod leading from said extensible pipe upwardly through the top of tube B, whereby said outlet-pipe may be extended and contracted in length and also be bodily moved away from the outlet *a*, substantially as set forth.

3. A water-discharge for steam-radiators, consisting in the tube B, having a cap at its upper end, a lateral opening adjacent thereto, a lateral water-inlet, *c*, near its lower end, and an outlet, *a*, in its bottom, the transverse

set-screw *f*, extending into the tube B above  
the outlet *a*, the longitudinally-extensible  
and vertically-movable outlet-pipe within the  
pipe B and detachably held in register with  
5 the outlet *a* by said set-screw, the cross-piece  
*d*, the rod F, extending down through the cap  
to said cross-piece, and the guide-rods *h h*,

extending down from the cap through said  
cross-piece, substantially as set forth.

DANIEL H. STREEPER.

Witnesses:

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