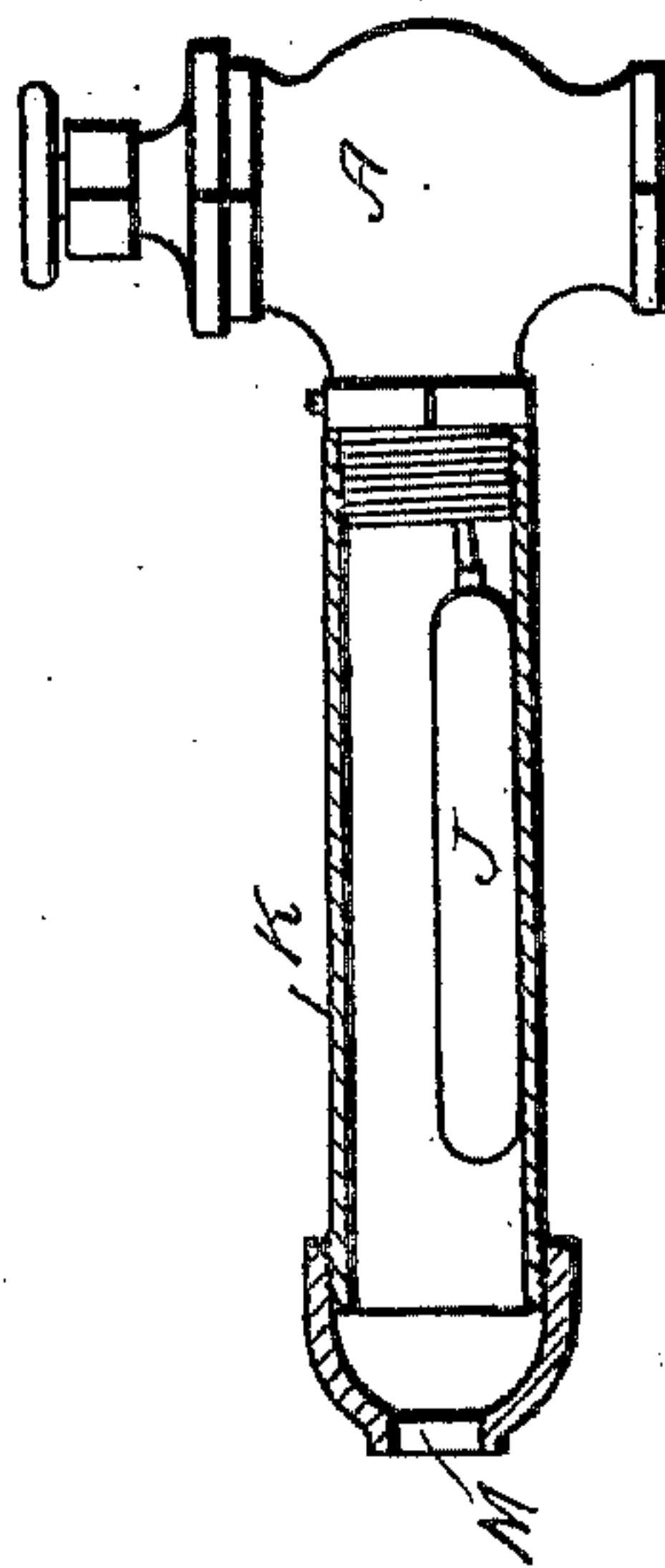
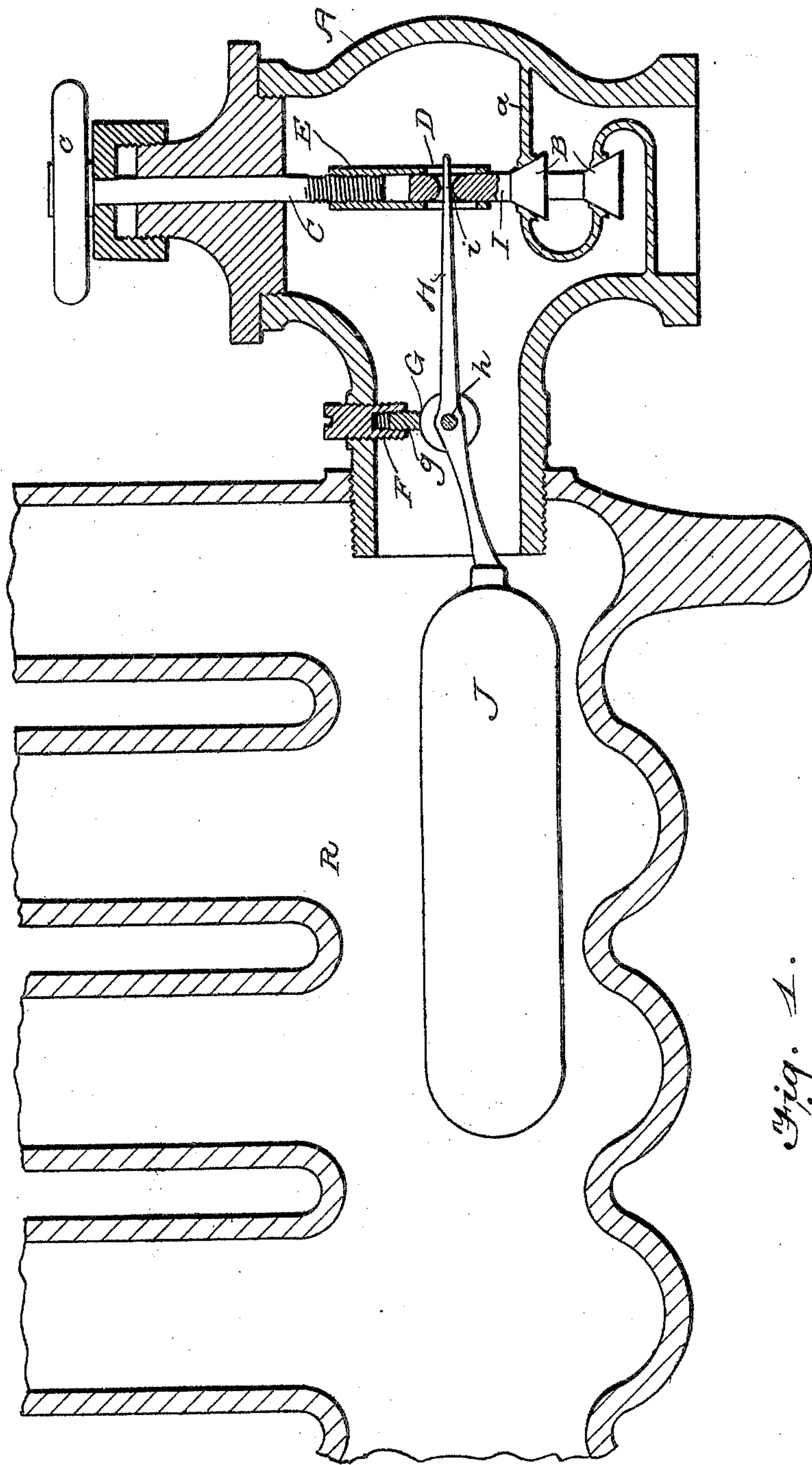


No. 797,677.

PATENTED AUG. 22, 1905.

C. W. FRANKLIN.
STEAM TRAP.

APPLIOATION FILED FEB. 28, 1905.



Witnesses

Maschmidt
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UNITED STATES PATENT OFFICE.

CHARLES WATSON FRANKLIN, OF LEIPSIC, OHIO.

STEAM-TRAP.

No. 797,677.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed February 28, 1905. Serial No. 247,725.

To all whom it may concern:

Be it known that I, CHARLES WATSON FRANKLIN, a citizen of the United States, residing at Leipsic, in the county of Putnam and State of Ohio, have invented new and useful Improvements in Steam-Traps, of which the following is a specification.

This invention is a steam-trap designed particularly to allow the escape of water of condensation from a steam-radiator, although suitable for other uses, as hereinafter pointed out. It is designed for either high or low pressure, and comprises a float-operated valve of novel construction, with improved means for adjusting and operating the valve mechanism.

In the accompanying drawings, Figure 1 is a sectional view showing the trap applied to a radiator. Fig. 2 is a sectional view of a modification suitable for other uses.

Referring specifically to the drawings, A indicates a valve-casing which in the form shown in Fig. 1 is tapped into the bottom of the radiator R. The partition or diaphragm *a* in the casing has valve-openings controlled by the double valve B. The stem I of these valves is slotted at the top, as at *i*, to receive the end of the lever H, which is pivoted and hung at *h* in a hanger G, which has a threaded stem *g* engaging a threaded bore in the lower end of an adjusting-screw F, extending through the top of the casing. The screw and stem *g* are right and left threaded, so that when the screw is turned the hanger will be raised or lowered accordingly. This adjusts the float and lever, so that it will operate at the proper or desired height. The float is indicated at J, located in the bottom of the radiator in position to be raised by collection of water therein.

To manually operate the valves B, a sleeve E is fitted loosely over the upper end of the valve-stem I, and this sleeve has slots D, through which the lever H extends. The slots are long enough not to interfere with the normal operation of the lever H. At the upper end the sleeve E is threaded to receive the stem C, which extends through a packing in the top of the casing and may be operated by a handle *c*. To open or close the valves by hand, the stem C is screwed down or screwed

up, the lever H striking the ends of the slots D and moving the valves accordingly.

For ordinary uses or otherwise than in connection with a radiator a chamber K is provided, as shown in Fig. 2, connected to the valve-casing to contain the float J, and this chamber has an inlet M at the end.

A noticeable feature of this invention is that it can be fitted to any steam-radiator and occupies a very small space, taking up no more room than a common valve. This gives the device a wide range of application, because it can be applied to standard radiators without modification thereof, the float J being inserted in the radiator through the ordinary connecting-tap at the bottom.

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

1. In a steam-trap, the combination with a casing and a reciprocating valve therein, of a float-operated lever connected to the valve and a manually-operated stem extending through the casing and loosely connected to the valve and the lever.

2. The combination with a steam-containing vessel having an opening near the bottom thereof, of a steam-trap valve-casing fitting said opening, a reciprocating valve in the casing, and an operating-lever connected to the valve and pivoted to the casing between said valve and vessel, and having an arm extending outside the casing and carrying a float insertible through the opening into such vessel.

3. In a steam-trap, the combination with a casing and a valve therein, of a float-operated lever connected to the valve, and a stem for hand operation extending through the casing and connected to the valve and having a slot through which the lever extends.

4. In a steam-trap, the combination with a casing and a valve therein, of a hand-operated stem having a slotted sleeve fitting over the valve-stem, and a float-operated lever extending through said slot and the valve-stem.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES WATSON FRANKLIN.

Witnesses:

A. A. SLAYBAUGH,
W. A. BELL.