

(No Model.)

L. HALSEY.
STEAM RADIATOR.

No. 403,936.

Patented May 28, 1889.

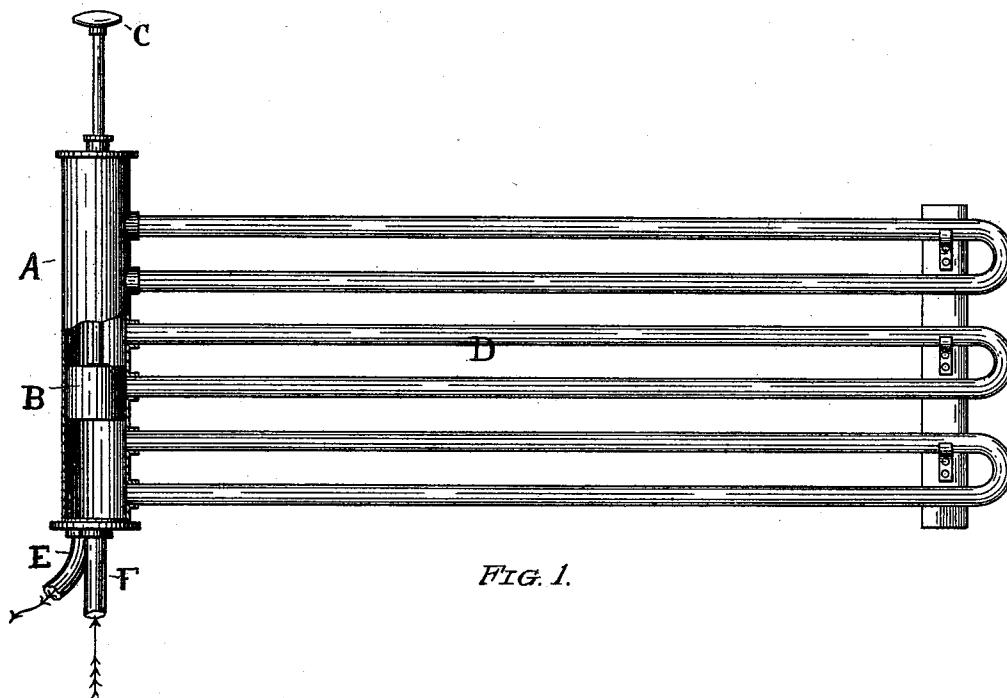


FIG. 1.

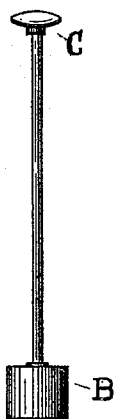


FIG. 2.

Witnesses:

J. B. Halpinny.
J. L. Mayne

Inventor:

Leroy Halsey
by
L. V. Le Mayne
his atty

UNITED STATES PATENT OFFICE.

LEROY HALSEY, OF BATTLE CREEK, MICHIGAN.

STEAM-RADIATOR.

SPECIFICATION forming part of Letters Patent No. 403,936, dated May 28, 1889.

Application filed August 4, 1888. Serial No. 281,935. (No model.)

To all whom it may concern:

Be it known that I, LEROY HALSEY, a citizen of the United States, residing at Battle Creek, in the county of Calhoun and State of Michigan, have invented a new and useful Improvement in Steam-Radiators, of which the following is a specification.

My invention relates to improvements in steam-valves for radiators by means of which the flow of steam through the radiator is regulated.

It consists in a radiator with a cylinder for the head, from which the coils lead, and a plunger working in the same adapted to admit the steam to any desired number of coils at one time, thus regulating the amount of heat given off.

It further consists in details of construction hereinafter more fully described, and particularly pointed out in the claims.

Figure 1 is a side elevation of a radiator embodying my invention. Fig. 2 is a detail view of the plunger.

A represents the cylinder, the lower portion of which is broken away, showing the plunger B.

C is the handle of the plunger.

D represents the coils of pipe.

E and F represent the escape and feed pipes respectively.

The cylinder A is made with smooth inner surface, and the plunger B fitted tightly within it and moved up and down by means of the handle C. The coils D lead off from the cylinder and return, allowing of a circulation of steam through them when the plunger is raised. With the plunger in the position shown in the drawings the steam entering through F circulates through the lower coil and passes out through E, heating only this lower coil.

If it is desired to increase the amount of heat supplied, the plunger may be raised, allowing the steam to enter the upper coils also, and in this way the amount of heat supplied by the radiator may be accurately regulated.

I do not wish to limit myself to the exact form and arrangement of the regulator herein shown and described, as it is obvious that the

same may be slightly varied without departing from the spirit of my invention—as, for example, the plunger may be raised and lowered by means of a screw-thread and hand-wheel or key, instead of by a rod and handle, as shown; also, the cylinder A may be replaced by a rectangular steam-chest and a rectangular valve sliding in it or other similar mechanism; also, my invention is equally applicable for regulating the flow of other fluids than steam—as, for example, water or air.

I am aware of the patent to Middleton, No. 11,675, and to Gordon, No. 21,047, and do not claim, broadly, a sliding valve such as therein shown and described, my invention being limited to a valve of the form described, which obstructs the flow of steam through the chamber, in addition to closing the orifices, and thereby prevents the steam admitted below the valve from entering the chamber above it and thus passing into the coils which are intended to be cut off.

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

1. The herein-described steam-supply regulator for radiators, consisting of a closed cylinder with a supply and exhaust pipe at one end and a series of coils of pipe opening into the same throughout its length, and a plunger or piston-head sliding in the same past the pipe-orifices and opening and closing any desired portion of them at one time, substantially as shown and described.

2. The herein-described steam-supply regulator for radiators, consisting of an elongated steam chest or chamber having a series of coils of pipe opening into the same throughout its length, a plunger or valve sliding in the same past the pipe-orifices and obstructing the flow of steam through said chamber, and the exhaust and supply pipes both on the same side of said plunger, all substantially as shown and described.

LEROY HALSEY.

Witnesses:

F. J. LE MOYNE,
L. V. LE MOYNE.