

(No Model.)

G. J. WALLACE.
VALVE FOR RADIATORS.

No. 306,880.

Patented Oct. 21, 1884.

Fig. I.

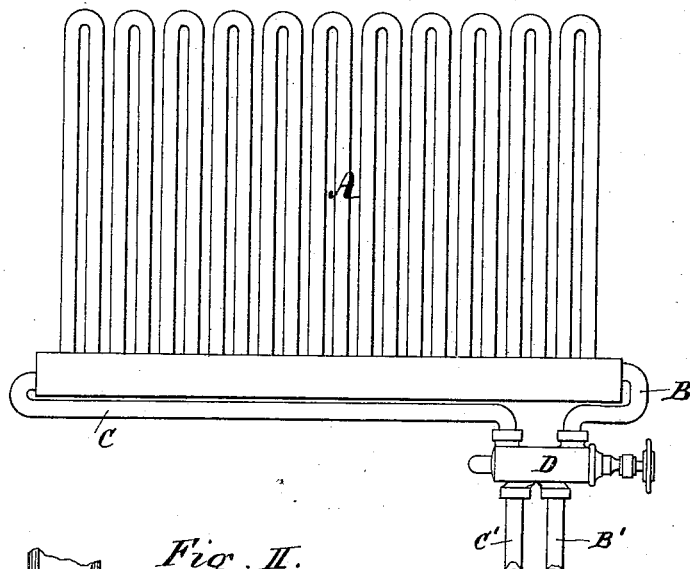
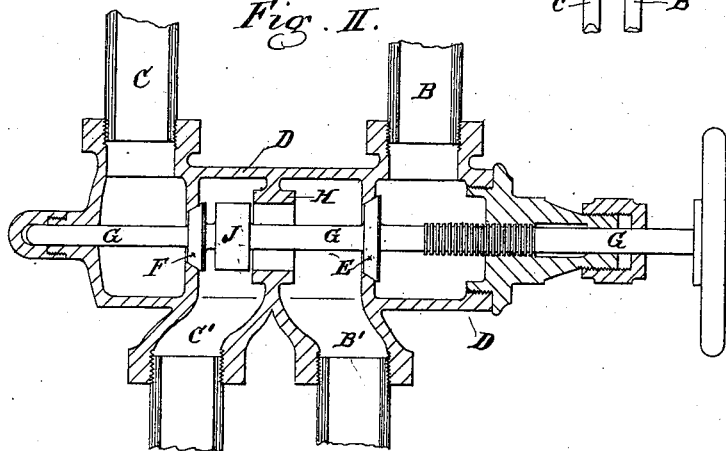


Fig. II.



WITNESS:

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VALVE FOR RADIATORS.

SPECIFICATION forming part of Letters Patent No. 306,880, dated October 21, 1884.

Application filed April 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. WALLACE, a citizen of the United States, residing at New York, in the State of New York, have invented a new and useful Valve for Heaters or Radiators, of which the following is a specification.

The nature of my invention consists in the combination of an auxiliary piston-valve between the steam and return valves placed on the same stem, whereby when the steam and return passages of the radiator are closed a communication between the steam and return pipes will be made to prevent freezing or collection of condensation in steam or return pipes, and avoiding water-hammering in the pipes, securing thereby a noiseless operation of the same.

In the accompanying drawings, Figure I represents a radiator with my improved valve attached. Fig. II is an enlarged view of the valve in section.

Similar letters represent similar parts in the figures.

A represents a radiator arranged and constructed in any desired manner, where B is the pipe for admitting the steam into the same, and C the return-pipe arranged in the usual manner.

D is the valve chamber, to the ends of which the steam-pipe B and return-pipe C, leading to and from the radiator, are connected, and to the central part of which the main steam-pipe B' and return pipe C' from the steam-boiler (not shown in the drawings) are connected. The steam and return passages are arranged with suitable valves, E and F, situated upon the valve-stem G, arranged and operated in the usual manner. Between the

main steam and return pipes or passages B' C' a valve-seat, H, is arranged in the case D, in which a piston-valve, J, attached to the valve-stem G, is made to operate. The three valves, E, F, and J, being placed upon the same valve-stem G, will be operated simultaneously. When steam is to be admitted into the radiator A, the valves E and F are opened at the same time and by the same operation, and at the same time the valve J is moved into its seat H, closing thereby the communication between the steam and return passages B' and C' and allowing the steam to enter through the valve E and pipe B into the radiator, while the return passes through pipe C, valve F, into the return pipe C', in the usual manner. As soon as the valves E and F are closed the valve J will come out of its seat H, forming thus a passage between the steam-pipe B' and return-pipe C', maintaining thereby the circulation and preventing a collection of condensation in the same, preventing thereby any possible freezing, and at the same time avoiding any water-hammer in the pipes, thereby securing a perfectly noiseless operation.

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

In combination with the steam-valve E and return-valve F, the intermediate valve, J, placed upon one and the same valve-stem G in a suitable casing, D, and arranged to operate in combination with the steam and return pipes and a radiator, in the manner and for the purpose described.

GEORGE J. WALLACE.

Witnesses:

HENRY E. ROEDER,

WILLIAM P. SKIFFINGTON.