

(No Model.)

J. B. SMITH.  
AUXILIARY STEAM PIPE FOR RADIATORS.

No. 505,136.

Patented Sept. 19, 1893.

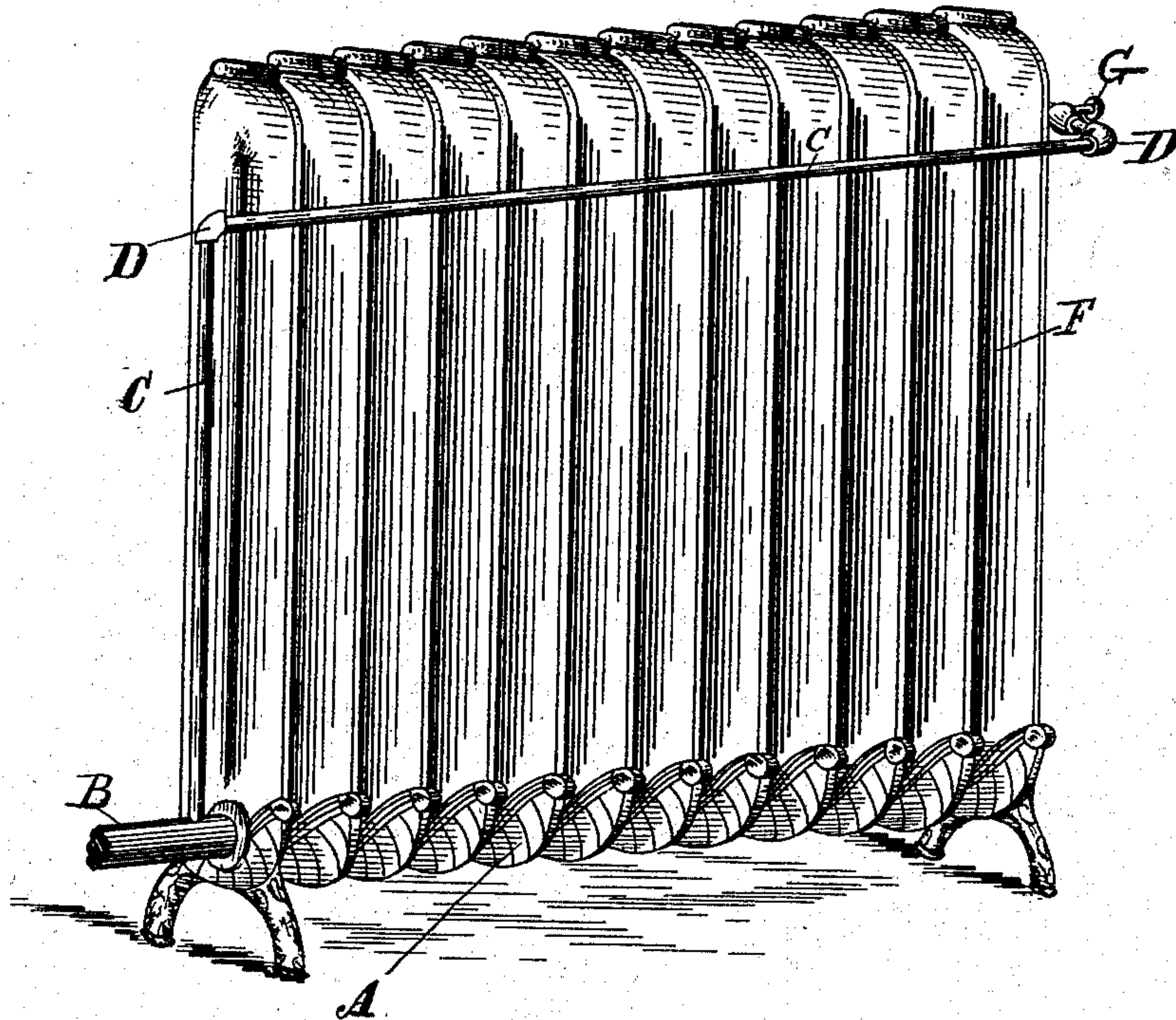


Fig. 1.

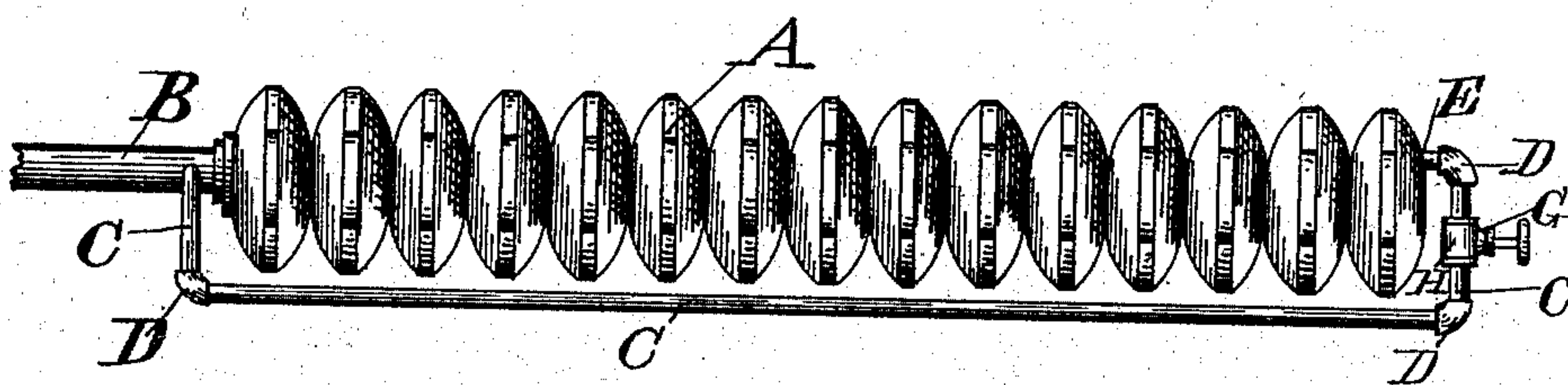


Fig. 2.

WITNESSES:  
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# UNITED STATES PATENT OFFICE.

JOHN B. SMITH, OF CHICAGO, ILLINOIS.

## AUXILIARY STEAM-PIPE FOR RADIATORS.

SPECIFICATION forming part of Letters Patent No. 505,136, dated September 19, 1893.

Application filed June 6, 1893. Serial No. 476,750. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN B. SMITH, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented new and useful Improvements in Auxiliary Steam-Pipes for Radiators, of which the following is a specification, reference being had to the annexed drawings, illustrating the invention, in which—

Figure 1, is a perspective representation of a steam radiator with my auxiliary pipe attached and in position for use; Fig. 2, a plan view of the same.

This invention consists in means for conducting the main body of steam to the ordinary radiator near its bottom portion as is now the custom, and in addition thereto to conducting a continuous small quantity of steam into the upper opposite portion of the radiator. To accomplish this purpose a small steam pipe is attached to, and communicates with the main steam induction pipe wholly outside of the radiator and extends to the upper portion of the loop-pipe farthest from the main induction pipe. The purpose of ejecting steam into the said loop-pipe is to produce an equilibrium throughout the several loops of the radiator and prevent the water of condensation from rushing back and forth therein and producing a disturbing noise by vibrating the radiator. It often occurs that cold air, after the steam is shut off, accumulates in the loops and prevents, for some little time the steam, when let on again, from operating properly to heat the radiator as the latter is at present constructed. But by the use of said auxiliary pipe such cold air is immediately driven down and out at the steam exit pipe, and an equilibrium is instantly produced.

A, represents an ordinary steam radiator, and B is the steam induction pipe.

C, D, represent the said auxiliary pipe and its couplings. This pipe, by a suitable screw thread, is connected with and communicates with the induction pipe, or steam supply pipe B, and extends upward nearly to the bends of the loops forming the radiator, and then across said loops to the outer upper portion of the opposite loop from the loop the steam supply enters, and there enters by a suitable screw thread the upper portion E of said loop whereby steam in the pipe B will supply, from a one-fourth inch pipe, steam to the loop F at E during all the time the pipe B supplies the radiator with steam in the usual manner. It is immaterial, however, in what direction the pipe C runs to reach the point E; it may run under the loops, between them, or back of them, as shown at Fig. 1, as most convenient. A cock G is inserted in the coupling H to determine if the passage in the pipe C is unobstructed.

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

With a steam radiator having a lower steam supply-pipe, the combination of a small exterior steam pipe at its lower end attached to and communicating with the exterior portion of said supply pipe, and its upper end attached to and communicating with the upper portion of the opposite loop from where the said supply enters; substantially as and for the purpose specified.

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Witnesses:

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