(No Model.)

W. E. LANDON.

RADIATOR.

No. 457,648. Patented Aug. 11, 1891.

Fig. 1.

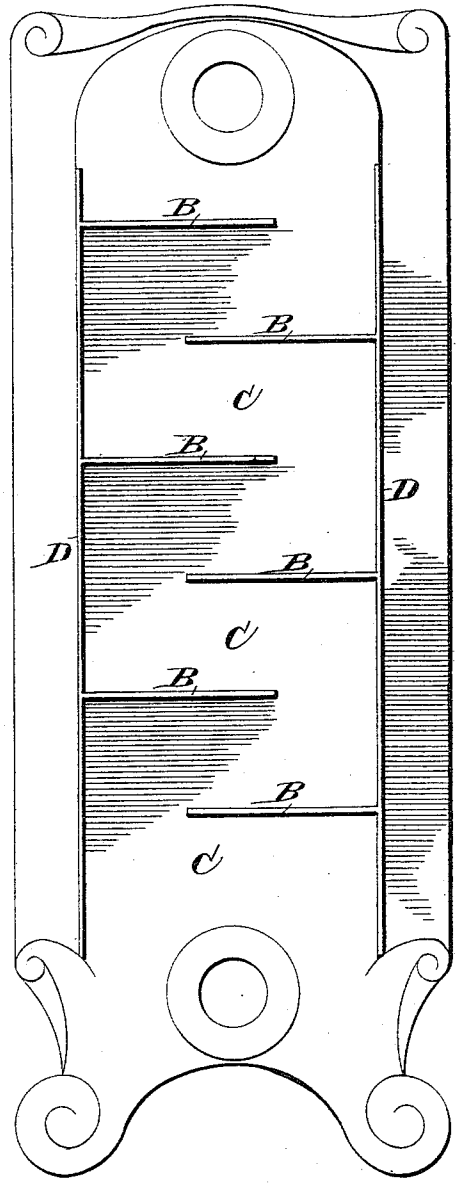
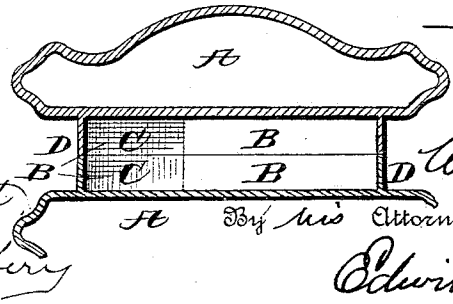


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM E. LANDON, OF PHILIPSBURG, PENNSYLVANIA.

RADIATOR.

SPECIFICATION forming part of Letters Patent No. 457,648, dated August 11, 1891.

Application filed December 29, 1890. Serial No. 376,100. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. LANDON, a citizen of the United States, residing at Philipsburg, in the county of Centre and State of Pennsylvania, have invented certain new and useful Improvements in Radiators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to radiators; and it consists of a peculiar construction, as hereinafter fully described and claimed.

The object of my invention is to so construct the radiator that it causes the cold, damp, and unpure air near the floor to pass up between the steam-sections of the radiator, where it is heated and purified, and causing the air in its heated state to pass out at the top of the radiator and circulate through the room. I effect this by casting on the side or sides of and integral with each section a series of partitions which lie in a horizontal position, as shown in the drawings, thus forming what might be termed a "staggered" flue or passage. These partitions are equal in height to one-half the distance between the sections when in position, so that when two or more sections are placed in position the partitions meet and form a passage or flue of the above form open at the top and bottom. It is obvious that by this construction the air is made to travel a greater distance and retarded to a certain degree. Consequently when it comes out at the top of the flue or passage it will have attained a very high temperature. Further, the air is by means of the partitions thrown directly against the steam-heated sections.

In the drawings, Figure 1 is a side elevation of a section of a radiator having cast integral therewith the partitions. Fig. 2 is a sectional view through one section and the ribs of the adjacent section.

A is one section of a steam-radiator, which may be of any size or shape.

B B are the horizontal partitions, which are cast integral with the section A. These partitions B are cast alternately with respect to each other.

C is the flue or passage formed by said partitions.

D is the outside wall of the flue C.

The partitions B and wall D are in height equal to one-half the distance between the sections of the radiator when they are in position, so that when two or more sections are brought together the partitions B and walls D of the respective sections meet and form the complete flue or passage.

The operation is as follows: The radiator being in position and connected with the steam or hot-water supply and the sections being filled, the air between the sections in the flues C becomes heated and ascends, passing out of the top of flues C. This causes a current in the flues, which draws or sucks the cold, damp, and unpure air off the floor of the room in the flue, and this air in turn becomes heated and passes off at the top of the flue or passage. The air on entering said flue strikes the first partition B, which is already heated by being integral with the section holding the steam or hot water. It is then deflected from its direct course over against the next steam-section, and so on until it passes off at the top of the flue in a highly heated and purified condition and circulated through the room.

It is evident that light changes and alterations may be made in this construction without departing from the spirit of my invention. Hence I would have it understood that I do not confine myself strictly to the construction herein described.

What I claim, and desire to secure by Letters Patent of the United States, is—

A radiator composed of two or more sections having vertical ribs cast integrally, and transverse alternating ribs, also cast integrally and forming a tortuous passage, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM E. LANDON.

Witnesses:
GEO. MAYER,
C. U. HOFFER.