

CHARLES WILLIAMS.
 Improvement in Air-Circulating Radiator and Distributing
 Attachments for Stoves.

No. 126,431.

Patented May 7, 1872.

Fig 1.

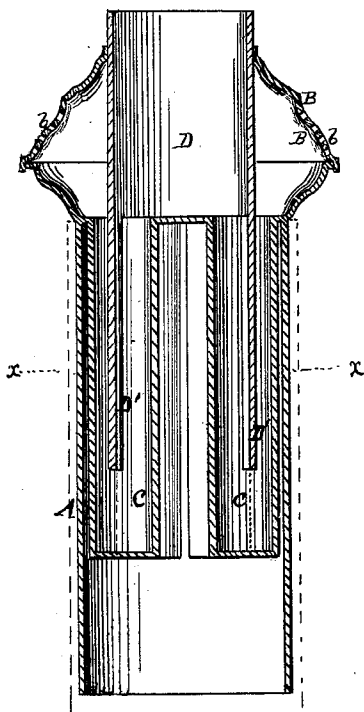


Fig.3.

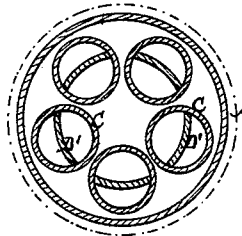


Fig 2.

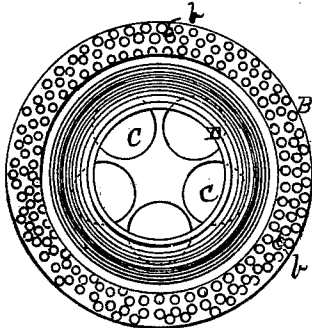
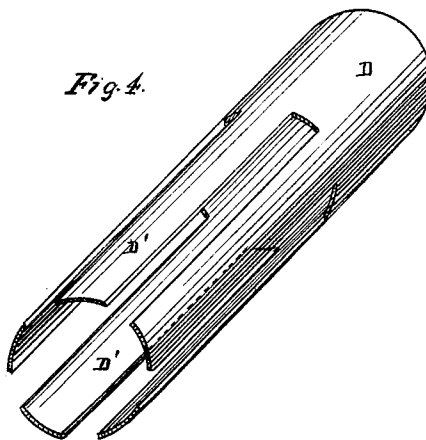


Fig.4.



Witnesses:
 Fred. Hayes.
 Ferd. Buck.

Inventor
 Charles Williams

UNITED STATES PATENT OFFICE.

CHARLES WILLIAMS, OF VINELAND, NEW JERSEY.

IMPROVEMENT IN RADIATORS FOR STOVES.

Specification forming part of Letters Patent No. 126,431, dated May 7, 1872; antedated April 20, 1872.

To all whom it may concern:

Be it known that I, CHARLES WILLIAMS, of Vineland, in the county of Cumberland and State of New Jersey, have invented a new and useful Improvement in Air-Circulating Radiators and Distributing Attachments for Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a vertical section of my improvement; Fig. 2, a plan of the same; Fig. 3, a horizontal section taken as denoted by the line *xx* in Fig. 1; Fig. 4, a view in perspective of one of the details of the improvement.

Similar letters of reference indicate corresponding parts.

My invention consists in a tubular structure or device designed to be inserted within the fire-chamber of a stove, from its top, and comprising a series of tubes, closed at their lower ends and divided for a portion of their depths by partitions, which serve to conduct the air first in a downward direction and afterward in an inwardly one through said tubes, and from thence through a distributing-pipe or outlet.

Referring to the accompanying drawing, A represents a main or outside cylinder, connected with or forming the body of the stove; and B, an ornamental perforated top thereto.

Projecting down within this cylinder A, from the top of the stove into the fire-chamber of the latter, are a series of pockets or tubes, C

C, closed at their lower ends, but in open communication at their upper ends with the space covered by the cap or top B, and with a distributing-pipe or outlet, D, which latter has plates or partitions, D', projecting downward from it and arranged to enter the pockets or tubes C C, but stopping short of the bottom of the latter, so that air entering through the perforations *b* of the cap or top B will pass down the tubes C C on the one side of the partitions D' within them, and up through said tubes on the opposite sides of said partitions to the distributing pipe or outlet D. In this way the air is made to circulate within the tubes C C, that are heated by radiation through their arrangement within the fire-chamber.

Such construction and combination of devices at once forms a very simple, cheap, and economical means, in connection with a stove or other heater, for circulating and heating air that may afterward be distributed as desired.

What is here claimed, and desired to be secured by Letters Patent, is—

The pockets or tubes C, closed at their lower ends and arranged to enter the fire-chamber of a stove from its top, in combination with the air-circulating partitions D' and distributing-pipe or outlet D, substantially as specified.

CHARLES WILLIAMS.

Witnesses:

FRED. HAYNES,
FERD TUSCH.