

W. P. & H. A. ADAMS.

Radiator for Stoves.

No. 46,765.

Patented March 14, 1865.

Fig. 1.

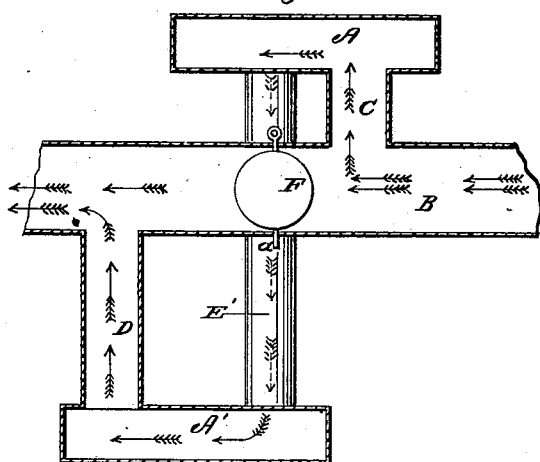


Fig. 2.

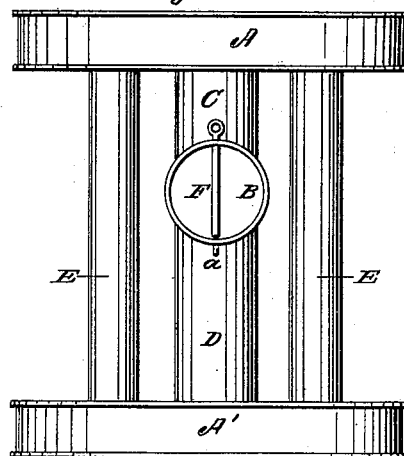
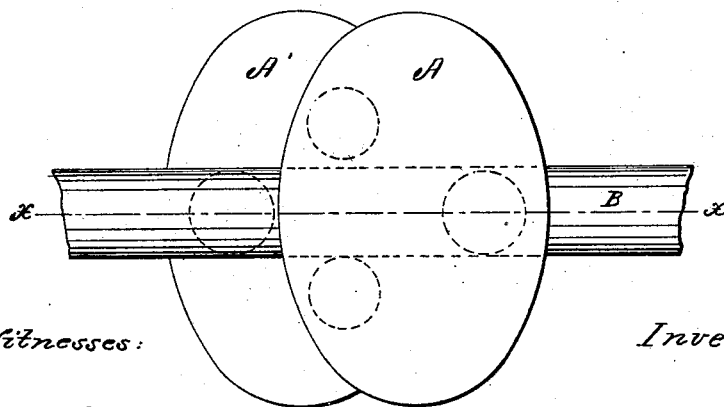


Fig. 3.



Witnesses:

C. L. Hopkiss  
Theo. Owen

Inventor:

W. P. & H. A. Adams  
per Wm. C.  
Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM P. ADAMS AND HENRY A. ADAMS, OF NORWICH, CONNECTICUT.

## RADIATOR FOR STOVES.

Specification forming part of Letters Patent No 46,765, dated March 14, 1865.

*To all whom it may concern:*

Be it known that we, WILLIAM P. ADAMS and HENRY A. ADAMS, of Norwich, in the county of New London and State of Connecticut, have invented a new and Improved Radiator for Stoves; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of our invention taken in the line *xx*, Fig. 3; Fig. 2, a front view of the same; Fig. 3, a plan or top view of the same.

Similar letters of reference indicate like arts.

This invention relates to a new and improved heat-radiator to be applied to stoves for the purpose of radiating the heat into the apartment, and which now escapes into the chimney or flue.

A A' represents two drums, which may be of oval or other form and of any suitable or desired dimensions. B represents a joint of stove-pipe which communicates with the upper drum, A, by means of an upright pipe, C, and communicates with the lower drum, A', by an upright pipe, D, as will be better understood by referring to Fig. 1.

The two drums A A' are made to communicate with each other by two upright pipes, E E, one at each side of the pipe B, and within the latter pipe B, between the two pipes C D, there is placed a damper, F, which works on a vertical arbor, *a*.

The operation is as follows: When a direct

draft is required, as in kindling a fire, for instance, the damper F is opened, and the products of combustion pass directly from the stove through pipe B into the chimney or flue, as indicated by the black arrow in Fig. 1, and when the damper is closed the products of combustion pass up pipe C into the upper drum, A, and thence down the pipes E E into the lower drum, A'; thence up pipe D into B and into the chimney or flue, as indicated by the red arrows in Fig. 1.

Thus it will be seen that when the damper F is closed heat will be radiated from the drums A A' and pipes C D, E E, and B, which combined form a large heat-radiating surface, and the heat thus radiated would, without the invention, pass into the chimney or flue.

The device may be made of any dimensions to correspond to the size of the stove to which it is designed to be applied, and its adoption will effect a great saving in the consumption of fuel. It may be applied to either wood or coal burning stoves.

We claim as new and desire to secure by Letters Patent—

The two drums A A' and pipes C D, E E, and B combined and arranged in connection with the damper F, and applied to a stove to operate in the manner substantially as and for the purpose herein set forth.

WM. P. ADAMS.  
H. A. ADAMS.

Witnesses:

EDWARD HUNTER,  
WM. H. COX.