

P. ROLLHAUS, Jr.  
Fire Place Heater.

No. 166,300.

Patented Aug. 3, 1875.

Fig. 1.

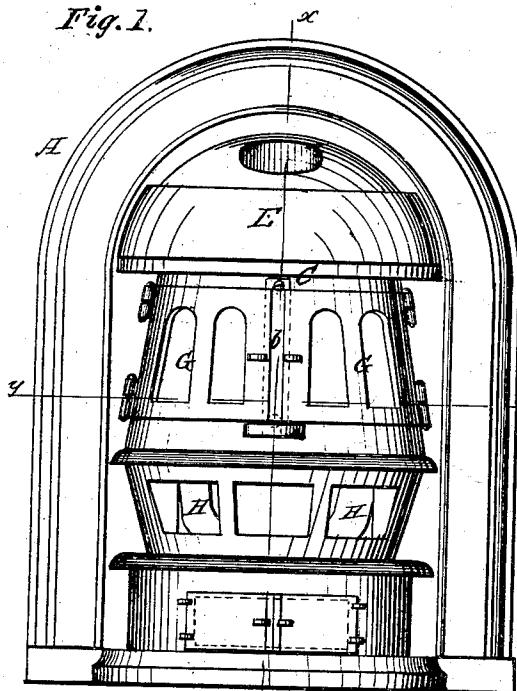


Fig. 2.

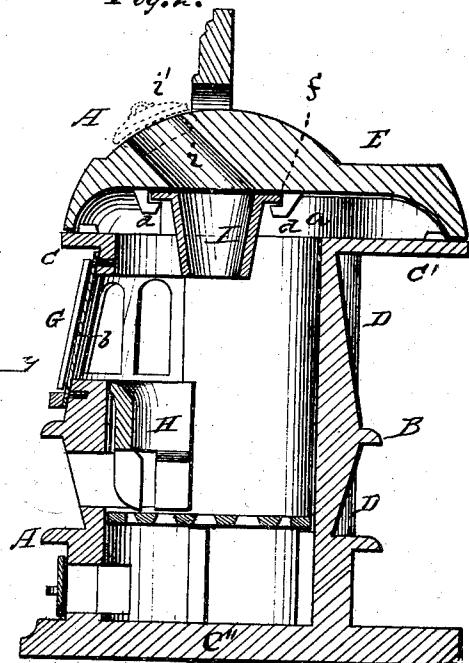


Fig. 3.

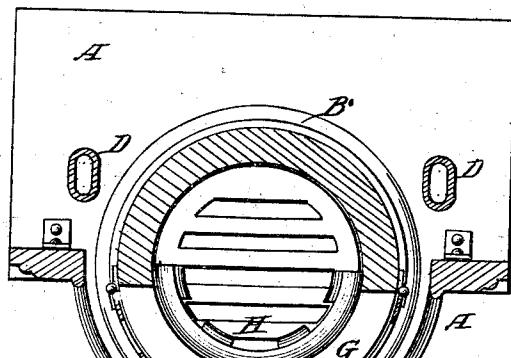


Fig. 4.

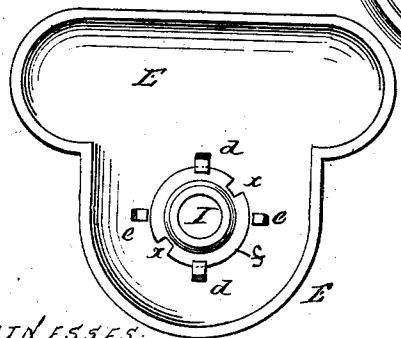
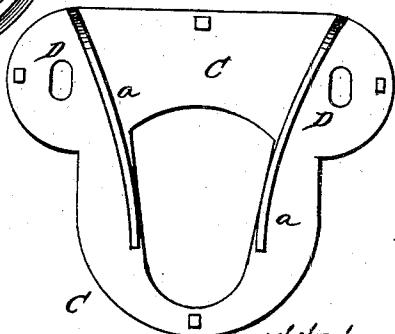


Fig. 5.



WITNESSES:

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Hob. Fdth.

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per  
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ATTORNEYS.

# UNITED STATES PATENT OFFICE

PHILIP ROLLHAUS, JR., OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN FIRE-PLACE HEATERS.

Specification forming part of Letters Patent No. **166,300**, dated August 3, 1875; application filed July 16, 1875.

*To all whom it may concern:*

Be it known that I, PHILIP ROLLHAUS, Jr., of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Fire-Place Heaters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of fire-place heaters which are used not only to heat the rooms in which they are placed, but also rooms above; and the nature of my invention consists in the construction and combination of parts, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a front elevation. Fig. 2 is a vertical section on line  $xx$  of Fig. 1, and Figs. 3, 4, and 5 are detached views thereof.

A represents the front, and B the back, of the heater. C is the top plate, with the smoke-pipes D D descending therefrom. E is the top or cap covering the whole. On the top plate C are two flue-plates,  $a a$ , commencing at the rear, being slightly curved, and extending nearly to the front at the inner sides of the smoke-pipes D D, whereby the products of combustion are compelled to pass to the front of the heater before passing off through the smoke-pipes. By this means the front of the heater is heated, as the heat passes directly to the front, and thereby giving more heat in the room where the heater stands by simply the use of these two flue plates placed on the top of the top plate, filling the space between the plate C and cap E. The two flue-plates  $a a$  may be connected together by a cross-plate, to hold them together and save trouble in mounting. In the front A of the heater is a suitable opening for the doors G G, which open from side to side, and in the center of this opening, where the doors close together, is a removable girder, b, which prevents the heater from breakage by expanding and contracting, as it leaves an open space in

the circumference of the body of the heater to compensate for expansion and contraction, and allows of the removal and replacement of the front grate H in repairing the heater without removing the heater out of the fire-place, or taking it apart.

The girder b is fastened by screws to the top and bottom of the heater, and can easily be removed, when desired.

On the under side of the cap E are two L-shaped lugs,  $d d$ , and two straight lugs,  $e e$ , for holding the magazine I, which is provided at its upper end with a circumferential flange, f, having two notches,  $x x$ , opposite each other, for the passage of the L-shaped lugs  $d$ . By this means the magazine can easily be taken out and replaced (for repairing) without taking the heater out or taking it apart, these lugs being on the under side of the cap E, and extending down so as to receive the flange f on a level with the bottom of the cap E, so that the magazine can be removed from the top with the cap, or may be removed from the inside of the heater without disturbing the cap at any time, when desired.

It will thus be seen that all the parts which are liable to burn out can be replaced while the heater is in its place by anybody in a short time.

The back of the heater is cast all in one piece from top to bottom, making it less liable to allow the leakage of gas than those heaters where the part is made up of several pieces, and is cheaper in manufacture, and requires no bolts and nuts to hold the parts together. The flange C' at the top and the base C'' are cast with the back, so that these parts which are less liable to breakage or damage may be set in place, and all other parts may be renewed when required, without disturbing the setting of the heater.

i represents an opening or chute, through which the fuel is fed, and  $i'$  is a cover for said opening.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The top plate C, having smoke-pipes D, and provided with the curved flue-plates  $a a$ , extending from the rear to a point near the

front, in combination with the cap E, all constructed and arranged substantially as and for the purpose specified.

2. The removable girder b, in combination with the bisected front A, doors G G, front grate H, and magazine I, all as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

PHILIP ROLLHAUS, JR.

Witnesses:

JOHN H. BUTCHER,  
JACOB GOERING.