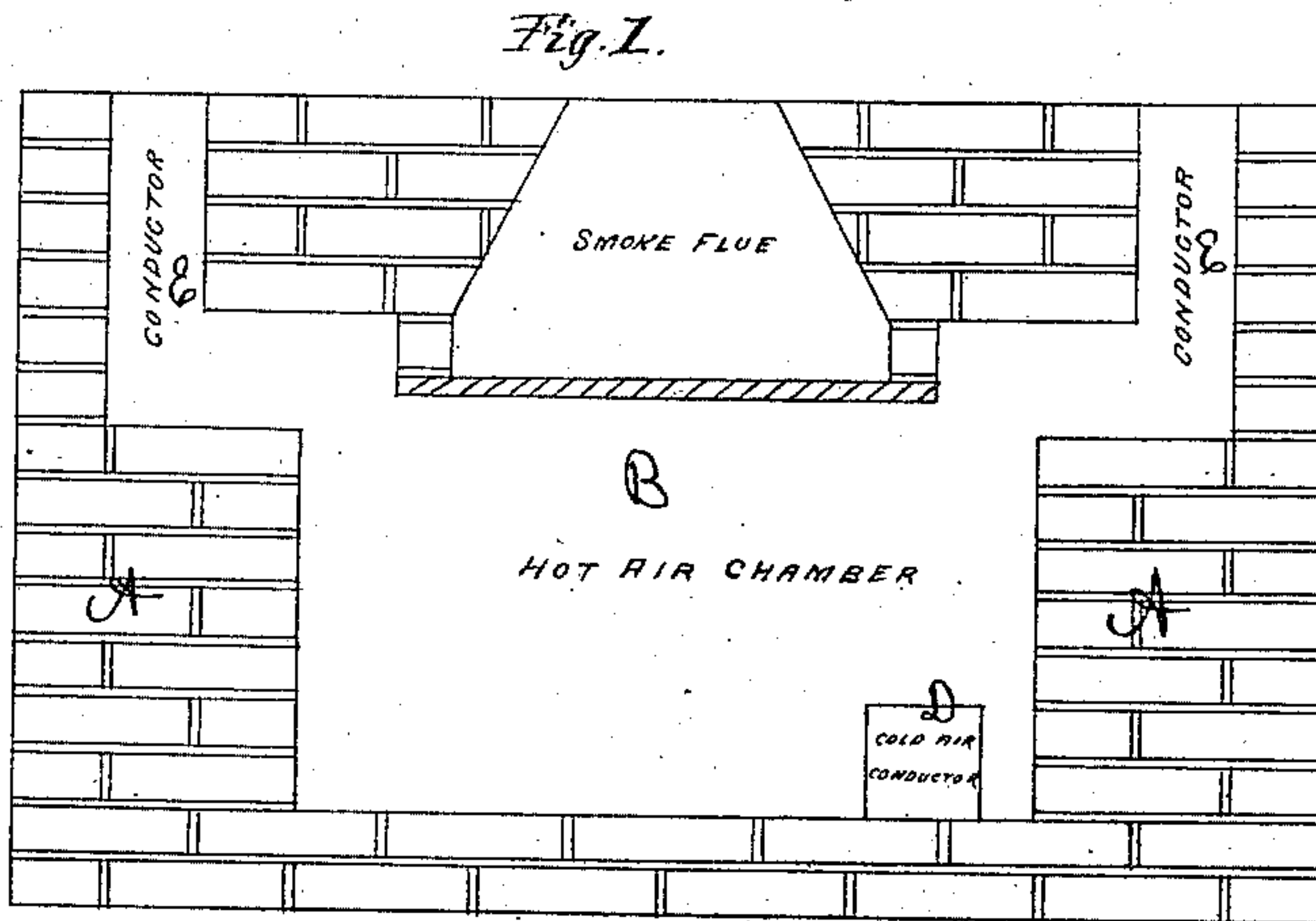
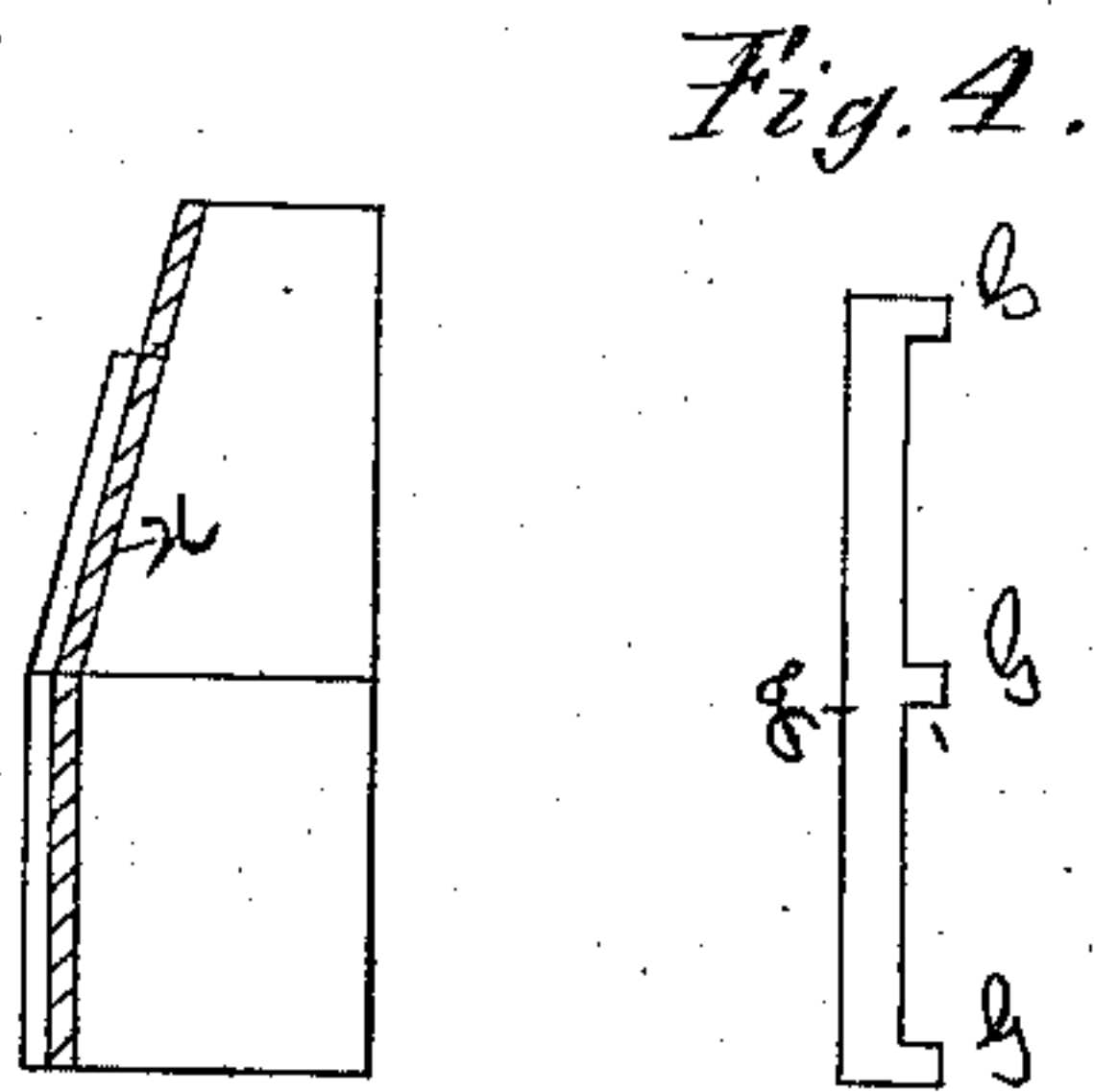


S. MARTIN.

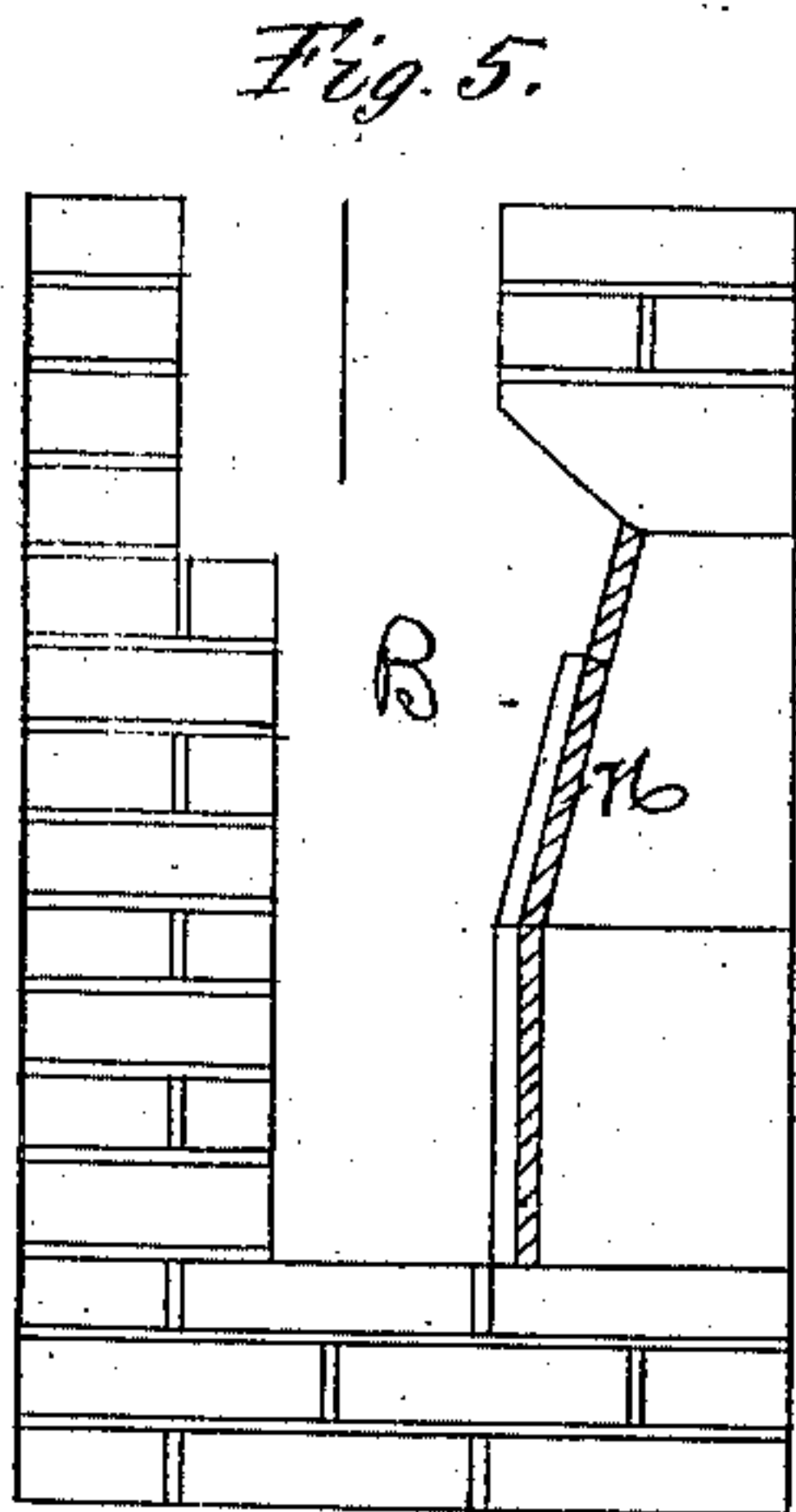
Fire Place.

No. 97,307.

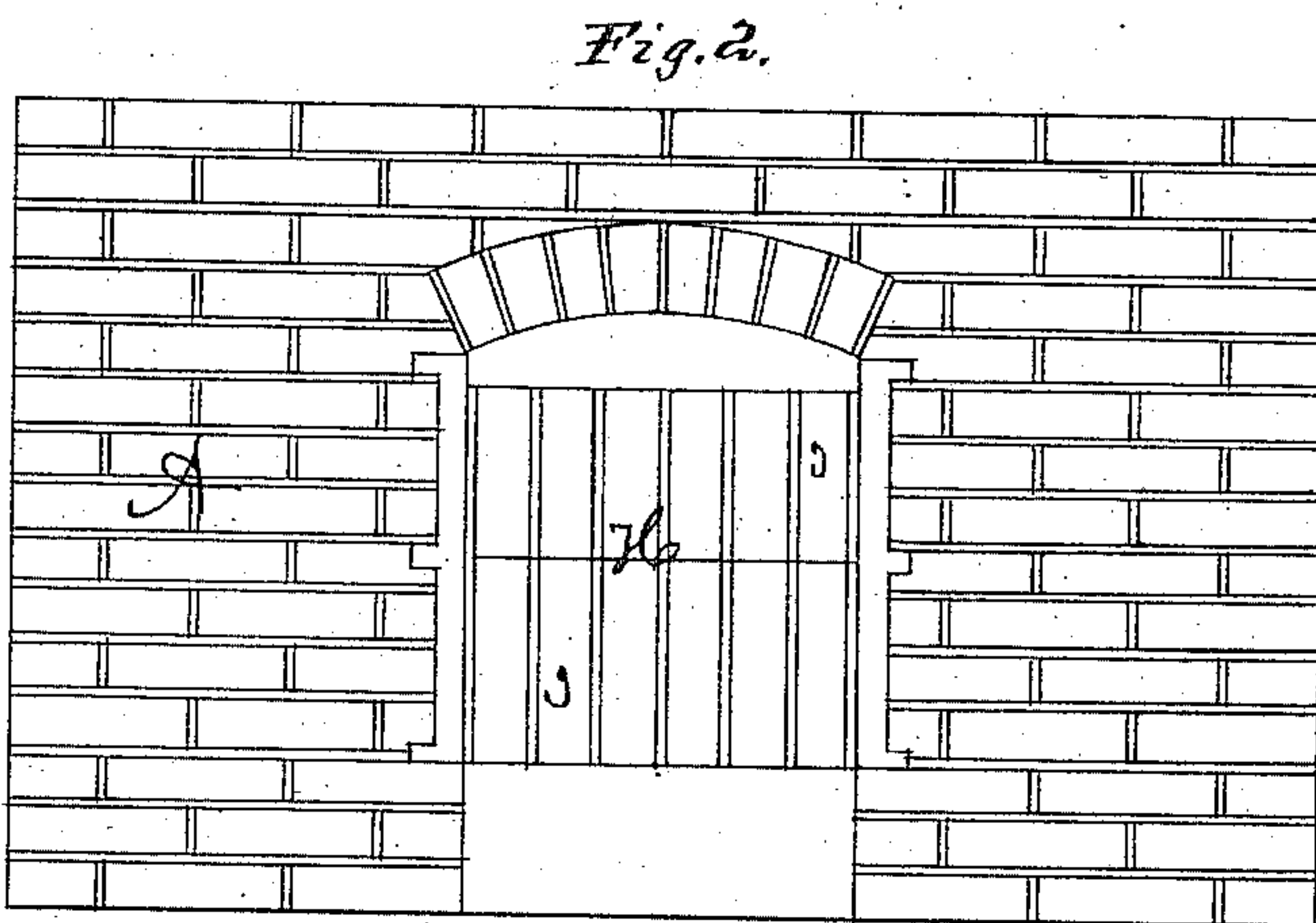
Patented Nov. 30, 1869.



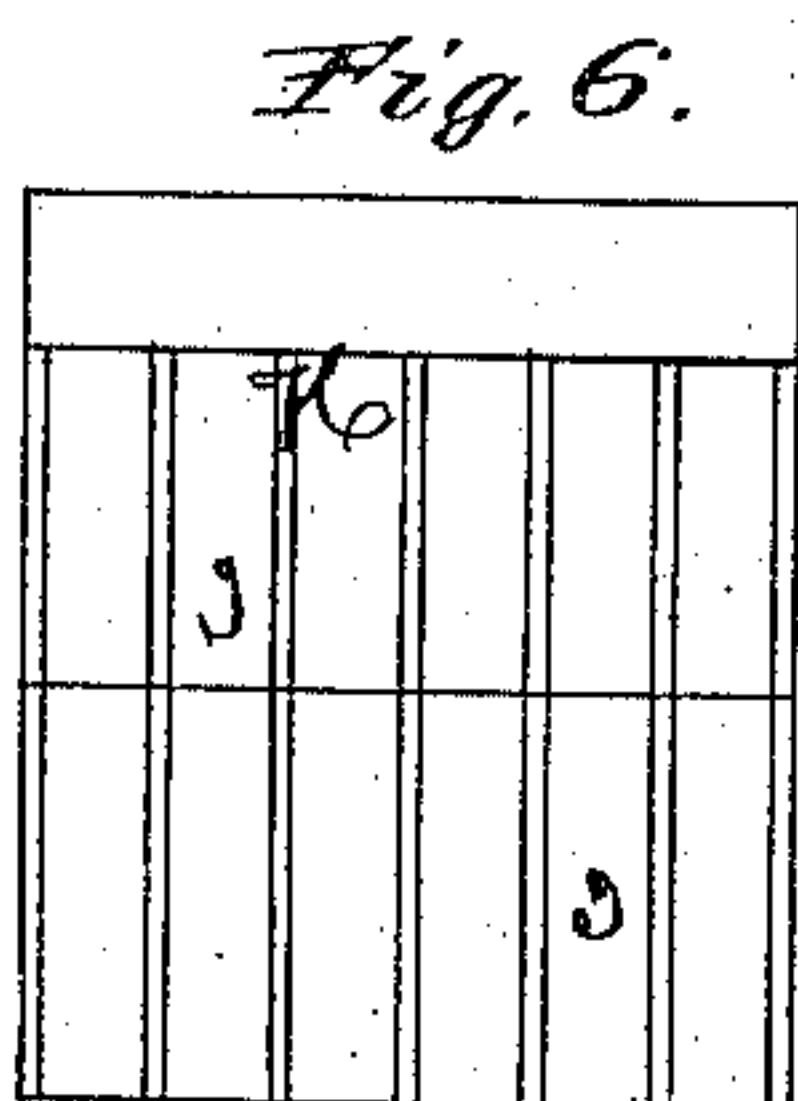
LONGITUDINAL SECTION



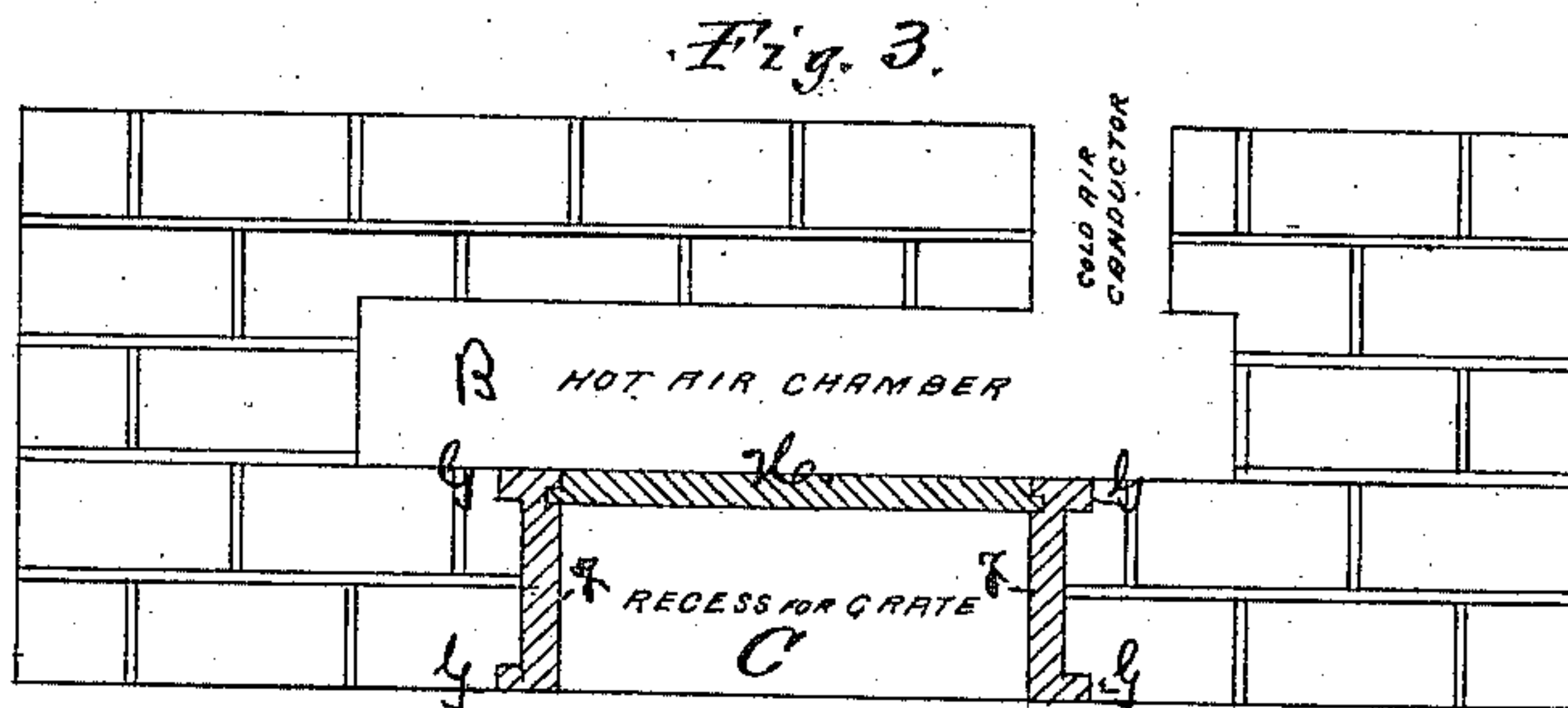
SECTION OF CHIMNEY BREAST



FRONT OF CHIMNEY BREAST AND BACK OF GRATE



BACK OF GRATE



PLAN OF CHIMNEY BREAST

WITNESS

William Slater  
A. C. French

INVENTOR

Stephen Martin

# United States Patent Office.

STEPHEN MARTIN, OF DETROIT, MICHIGAN.

*Letters Patent No. 97,307, dated November 30, 1869.*

## FIRE-PLACE.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, STEPHEN MARTIN, of the city of Detroit, in the county of Wayne, in the State of Michigan, have invented an Improvement in "Hot-Air Chambers;" and declare the following to be a full and exact account thereof, reference being had to the accompanying drawing, and to the letters marked thereon, in which drawing—

Figure 1 is a longitudinal section of my invention;  
Figure 2 is a vertical section of the same;  
Figure 3 is a ground plan of the same;  
Figure 4 is a side and front elevation of the cheeks of the grate;  
Figure 5 is a vertical section of the grate-recess; and  
Figure 6 represents the back of the grate-recess.

Like letters denote like parts in each figure.

The object of my invention is to use the heat radiating from the back of a grate in position in one room of a house, for warming other rooms in the same house; and

The nature of my invention consists in the arrangement of a chamber in the chimney of a house, immediately in the rear of the grate-recess, which chamber is provided with an inlet-pipe for the admission of cold air, and outlet-pipes or conductors, for the discharge of the heated air, and is separated from the grate-recess, and from the fire in the grate, by an iron casting, which also forms the back of the grate-recess.

A more particular description of my invention is as follows:

A represents a chimney-breast, of sufficient depth to admit of a chamber, B, in the rear of the grate-re-

cess C, which chamber should be of the same width as the grate-recess, and extend from the bottom of the same, to a point a little above its top, where it will meet the flue to said grate, which, arching over the top of the chamber, forms a roof to it.

Into this chamber B, a proper air-pipe, D, admits cold air, and suitable conductors, E, take the heated air from this chamber to the rooms which are to be warmed.

The grate is fitted into cast-iron sides, F, provided with ears, G, on their outsides, for the purpose of more secure fastening to the brick-work of the chimney, and a cast-iron back, H, is in turn fitted into grooves made for that purpose in the sides F.

This back H is cast in corrugations I, for the purpose of avoiding fracture by expansion or contraction. The chamber B is lined with tin, for the purpose of keeping out smoke and radiating heat.

The operation of this device is so obvious, that it needs no special mention.

What I claim as my invention, and desire to secure by Letters Patent, is—

The chambers B, lined with tin, provided with cold-air pipe D and hot-air conductors E, in combination with grate-recess C, provided with corrugated cast-metal back H and sides F, provided with ears G, when constructed and arranged to operate as and for the purpose set forth.

STEPHEN MARTIN.

Witnesses:

JOHN MARTIN,  
JOHN McNAMARA.