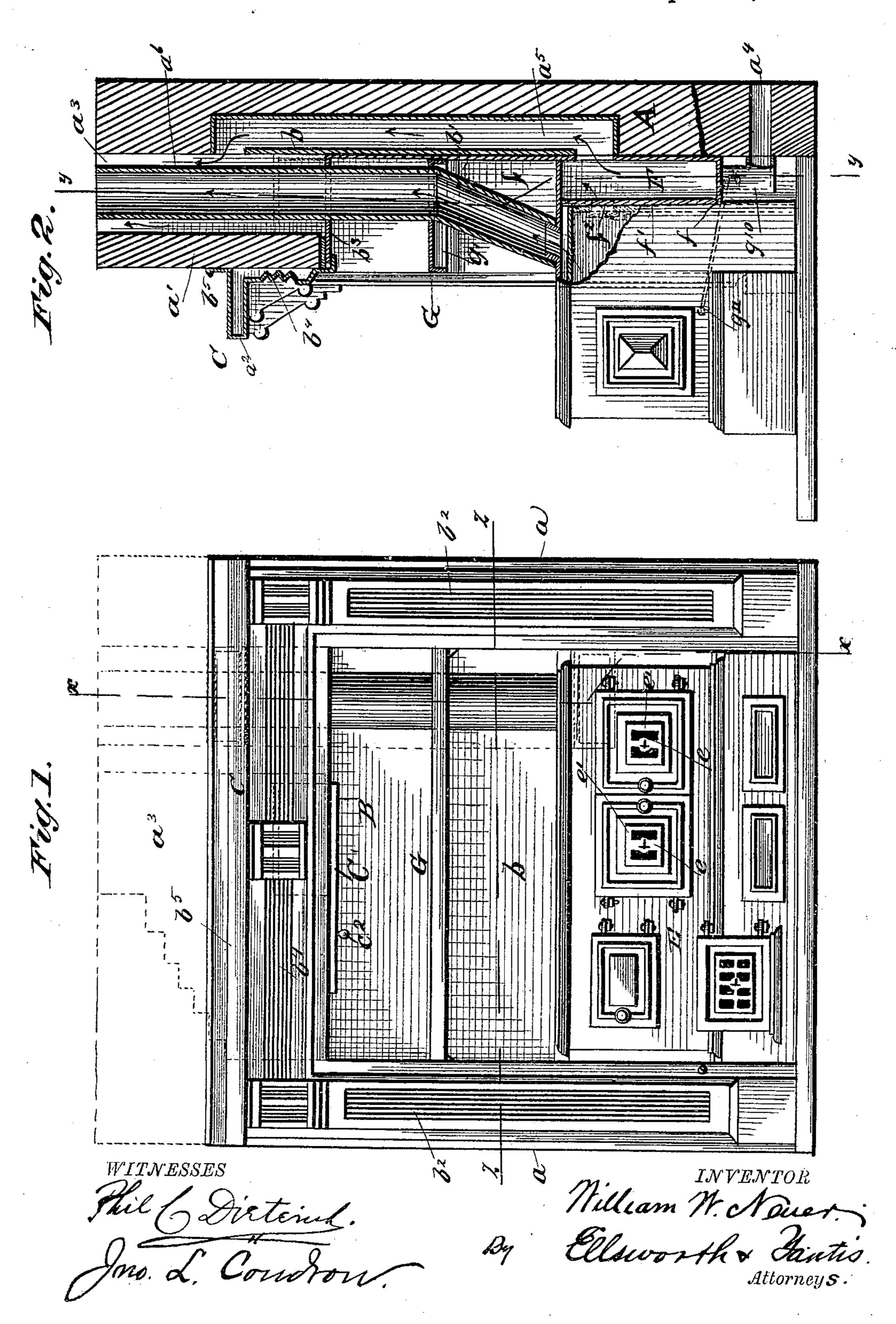
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COMBINED MANTEL AND FIRE PLACE LINING.

No. 370,155.

Patented Sept. 20, 1887.

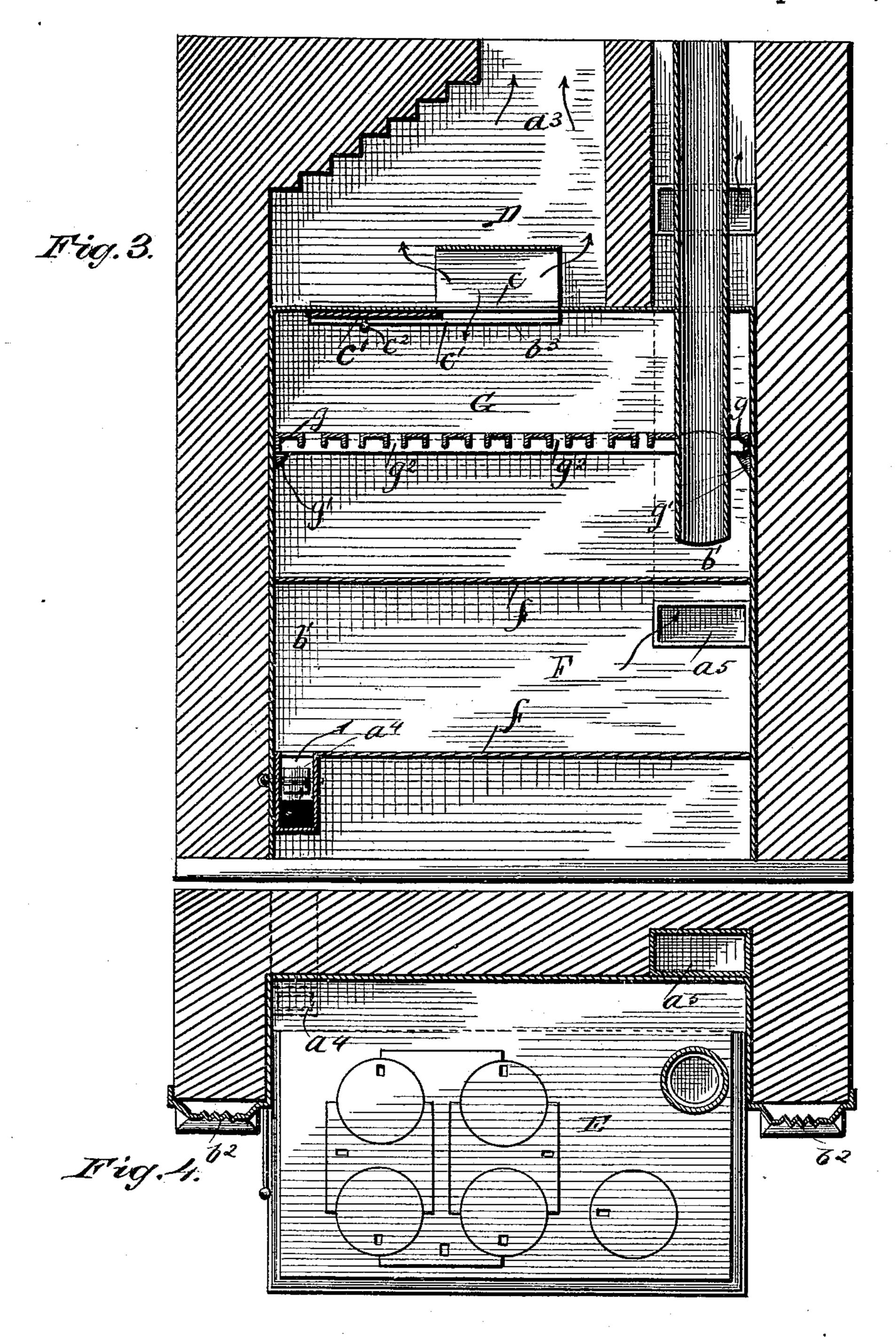


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WITNESSES

Phil Dieterich. Ins. L. Conston Milliam W. Nower. Ellsworth & Fantis, Attorneys.

United States Patent Office.

WILLIAM W. NEUER, OF WILKES-BARRÉ, PENNSYLVANIA.

COMBINED MANTEL AND FIRE-PLACE LINING.

SPECIFICATION forming part of Letters Patent No. 370,155, dated September 20, 1887.

Application filed March 8, 1886. Serial No. 194,492. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. NEUER, of Wilkes-Barré, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Combined Mantel and Fire-Place Linings; 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 open fire-places for stoves, furnaces, open grates, or other forms of heating apparatus; and the objects of my invention are to protect the wood, brick, or stone work of such fire-places from injury and to prevent dust or dirt from falling into said fire-places from the chimney.

To the above purposes my invention consists in certain peculiar and novel features of construction and arrangement, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a front elevation of a fire-place with my improved lining applied thereto. Fig. 2 is a transverse vertical section of the same on the line xx of Fig. 1. Fig. 3 is a vertical longitudinal section of the same on the line yy of Fig. 2. Fig. 4 is a horizontal longitudinal section of the same on the line zz of Fig. 1.

In the said drawings, A designates the back of the open fire-place, a its sides, and a' the face of the mantel a^2 . From this fire-place open a ventilating-flue, a^3 , a cold-air flue, a^4 , a hot-air flue, a^5 , and a smoke-flue, a^6 .

B designates my improved shield or lining, the part b of which covers the back A of the fire-place, while the parts b' cover the sides a, and the part b' covers the jambs of the fire-place. This lining also extends at b' across the ventilating-flue a' and continues thence upward at b' over the mantel-face a'. The part b' extends over the lower and upper sides of the mantel-shelf C and joins the parts b', covering the jambs. Thus it will be seen that all parts of the fire-place are thoroughly protected by this shield or lining, and it is to be understood that such lining is to be made either integrally or in sections, as desired, and

that the exposed parts of the lining are to be ornamented in any suitable manner, if desired, or left plain, as circumstances may require. 55 The lining is of sheet-iron or sheet metal, either

plain or galvanized, as desired.

At the point b^3 , where the lining extends across the ventilating-flue a3, said lining is provided with an opening, c, by means of which 60 the fire-place is placed in communication with said flue. This opening is reduced or enlarged in area by a slide, C', working in guides c' beneath the edges of the opening and provided on its under side with a teat or lug, c^2 , 65 by which the slide is operated. Above the opening c, and resting upon the part b^3 of the lining, is placed a box, D. This box is bottomless, so as to communicate freely with the opening c, and its ends are open to communi- 70cate with the ventilating-flue. Thus it will be seen that while there is free communication through this box with the ventilating-flue no dust or dirt can fall from said flue into the fire-place.

A stove or range, E, is shown as set into the fire-place, and just behind said stove is placed a hot-air chamber, F, communicating at one end with the cold-air flue a^4 and at its opposite end with the kot-air flue a^5 . This chamber is formed by an upper and a lower ledge, f, extending out horizontally from the back portion, b, of the lining. The ends of these ledges come against the side portions, b', of the lining, while their front edges come directly 85 against the back of the stove or range E. Of course a front wall, f', (indicated by dotted lines in Fig. 2,) may connect the ledges f, if desired, so as to form a closed chamber at all times.

Immediately above the stove or range E, and below the part b^3 of the lining, is a sheet-metal shelf, G, which extends horizontally across the fire-place and is bent down at its edges g, so as to embrace supports g' of the lining. This shelf 95 is provided with a number of slots, g^2 , so that when vessels or articles are placed upon the shelf they may be kept thoroughly warm by air circulating through the slots.

It will be seen from the above description 100 that the lining is simple in construction and thoroughly protects the fire-place and mantel from injury. It also serves to perfectly regulate the action of the ventilating-flue, prevents

dust, &c., from falling into the fire-place, and permits the perfect heating of air for distri-

bution through the hot-air flue.

The doors e in front of the oven of range E 5 have slides e', by opening which the waste heat from the oven may be allowed to flow through slide f^2 in the rear of the range, and thus enter hot-air chamber F. The cold-air flue may also be provided with a damper, g^{10} , 10 operated by a rod, g^{11} , for regulating the action of the flue.

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

The combination, with the stove or range E,

with its smoke-pipe a^6 and damper f^2 , of the back portion and side portions of the sheet-metal lining, the portion b^3 , having the opening c, the box D, open at its ends and covering said opening, and the slide C for closing 20 said opening, substantially as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my name in the presence of two sub-

scribing witnesses.

WILLIAM W. NEUER.

Witnesses:

CHAS. A. ZIEGLER, STANLEY W. WALKER.