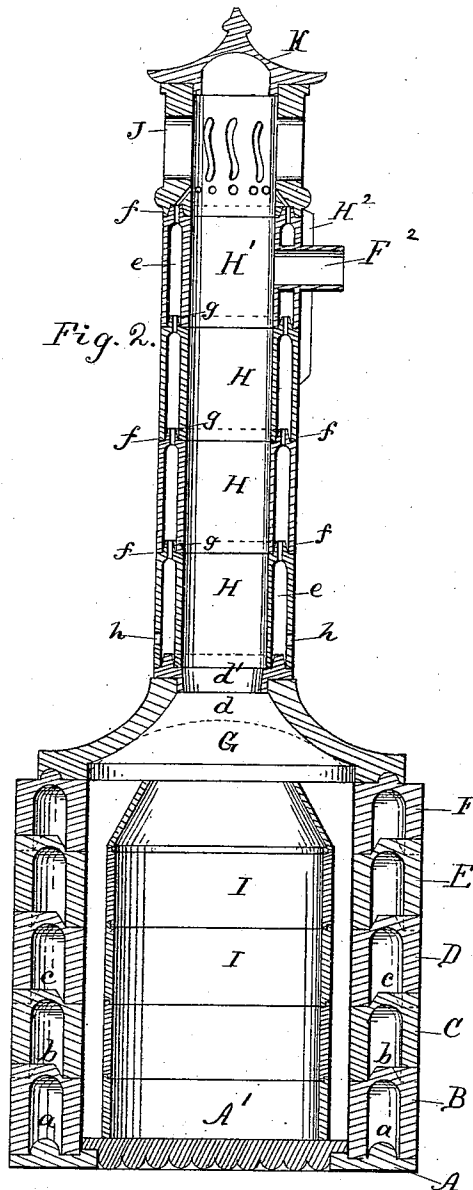
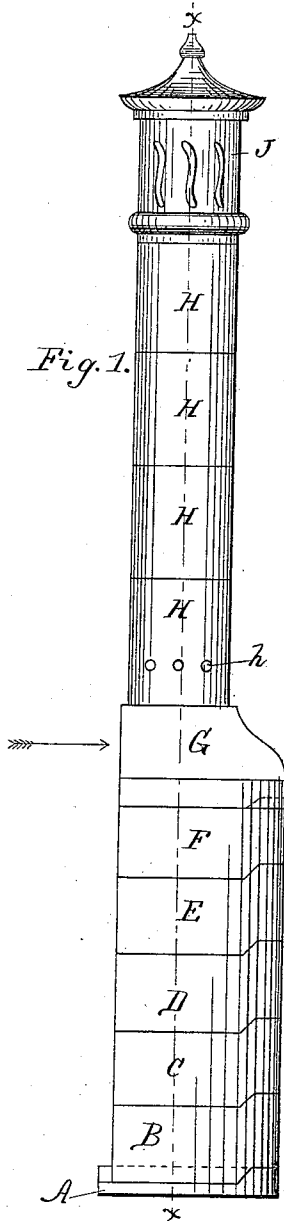


(No Model.)

T. C. NATIVEL.
FIRE PLACE AND CHIMNEY.

No. 313,441.

Patented Mar. 3, 1885.



WITNESSES:

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UNITED STATES PATENT OFFICE.

THEODORE C. NATIVEL, OF OAKLAND, CALIFORNIA.

FIRE-PLACE AND CHIMNEY.

SPECIFICATION forming part of Letters Patent No. 313,441, dated March 3, 1885.

Application filed May 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, THEODORE C. NATIVEL, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Fire-Places and Chimneys, of which the following is a description.

Figure 1 is a side view of my improved fire-place and chimney, and Fig. 2 is a vertical section of the same on line *xx* of Fig. 1.

My invention relates to fire-place heaters and ventilating-flues; and it consists in a fire-place formed of horizontal sections of burnt clay made in semicircular form, and having a tongue-and-grooved joint, and also a combined chimney and ventilating-flue rising from the fire-place to the top of the house, made up of horizontal tongued and grooved section of circular form, of burnt clay, having peculiarly-constructed ventilating hot-air chambers, as hereinafter fully described.

In the drawings, A B C D, &c., represent the fire-place, of which A is the base-plate, having detachable plate A', of semicircular form, constituting the hearth of the fire-place. On this base-plate is a semicircular flange or tongue, *a*, which enters a semicircular groove in the under side of a semicircular burnt-clay section, B. The upper edge of this section is also provided with a corresponding flange or tongue, *b*, that enters a groove in the lower edge of the next semicircular section, C, and this latter has at its upper edge a tongue or flange, *c*, that enters a groove in the under side of the section D, and so on throughout the sections E and F. There may be a greater or less number of these sections, dependent upon the height of the fire-place or the vertical depth of the sections, and all of said sections are made hollow, forming non-conducting air-spaces, as shown.

I is an inner lining, of brick or fire-tile. G is the top plate, of conical form. In the middle of this top plate there is an opening, *d*, for the escape of the smoke, and around this there rises a flanged ring, *d'*, upon which sets the lowest of the chimney-sections, H. These chimney-sections are in the nature of hollow rings with a central opening forming the

smoke-flue, and an annular chamber, *e*, which chambers are open at the bottom and fit over and inclose the flanges or tongues *f* of the subjacent sections, and are closed at the top with the exception of a series of holes, *g*, which open through the tongues or flanges from one annular chamber to the next above. One of the chimney-sections, H', on each floor above the first is provided with a nipple, F', which communicates with the inner or smoke flue, and which nipple provides means for using a stove on any of the floors above. On each floor, also, one or more of the chimney-sections is provided with holes *h*, opening into the room, for ventilating purposes. As the chimney becomes hot a draft of air is introduced through these holes into the annular chambers of the flue-sections, and passes up through the holes in the flanges or tongues to the top of the chimney, where it passes into the upper section, J, of the chimney, which has no annular chamber, but has a detachable top, K. At the point where the thimbles in the sections H' of the flue are located there is a sheet-iron casing, H'', forming an air-space to protect the walls from the heat of the thimble.

I am aware that it is not new to construct a chimney of burnt-clay sections having an inner smoke-flue and an annular air-flue, and I do not claim this, broadly.

Having thus described my invention, what I claim as new is—

1. A fire-place composed of hollow horizontal sections of material of semicircular form, connected detachably by tongue-and-grooved joints, substantially as shown and described.

2. A fire-place composed of a base-plate, A, with flange *a* and detachable plate A', and a top plate, G, with subjacent groove and two or more semicircular sections, B C, made hollow to form air-spaces, and connected by tongue-and-groove joints to form the walls of the fire-place, substantially as shown and described.

3. The chimney composed of sections H, formed with a central opening and an annular chamber open at the bottom and provided with perforated flanges *f* at the top, adapted

to enter and fitted into the open bottoms of the annular chambers, leaving a smooth continuous central opening, substantially as and for the purpose described.

- 5 4. The combination of the hollow semicircular sections B C D, connected by flanges, the base-plate sections A and A', the inner

lining, I, the converging cap-plate G, and the chimney composed of sections H, constructed substantially as shown and described.

THEODORE C. NATIVEL.

Witnesses:

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