(No Model.) 2 Sheets—Sheet 1.

C. A. WELLINGTON & A. CHASE.

FIRE PLACE.

No. 266,933. Patented Oct. 31, 1882.

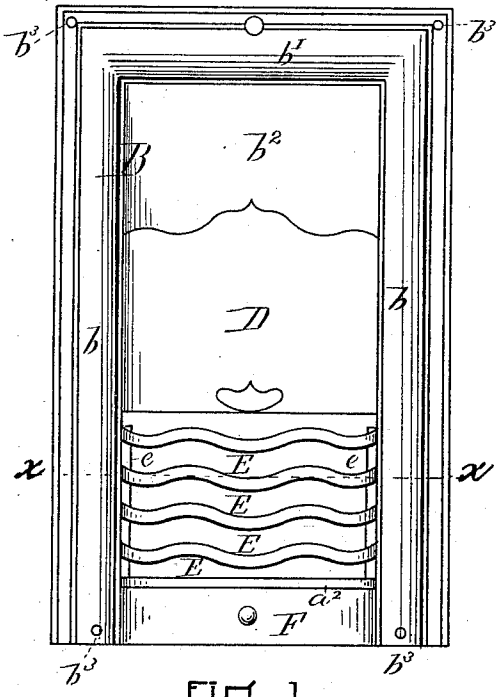

Fig. 1.

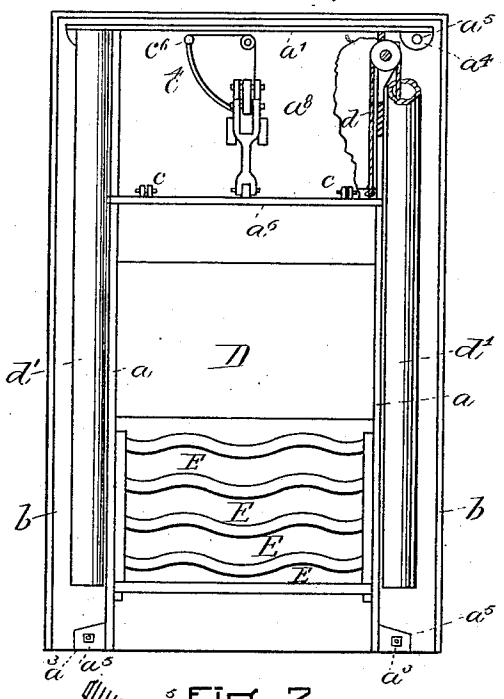

Fig. 2.

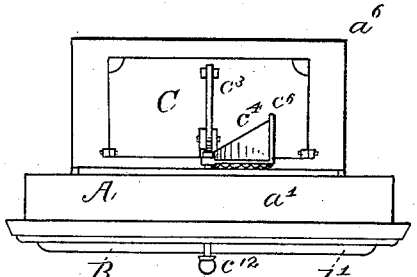

Fig. 3.

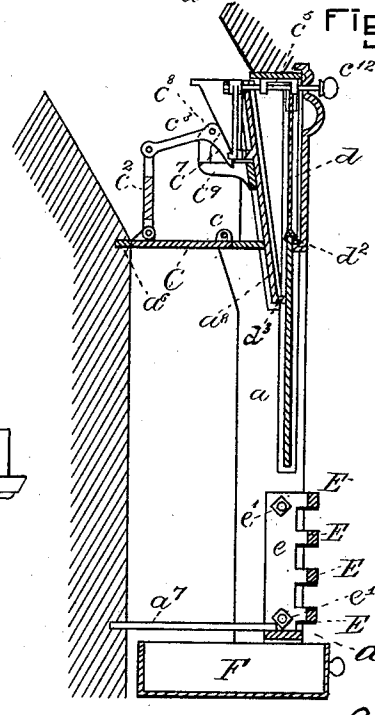

Fig. 4.

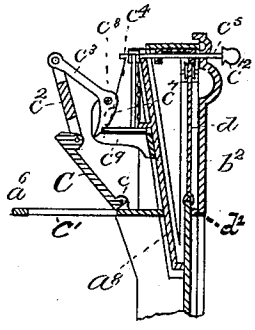

Fig. 5.

WITNESSES

W. L. Fogg.

Fred. Haynes

INVENTORS

Chas. A. Wellington

Albert Chase

by their attys

Clarke & Raymond.

(No Model.) 2 Sheets—Sheet 2.

C. A. WELLINGTON & A. CHASE.

FIRE PLACE.

No. 266,933. Patented Oct. 31, 1882.

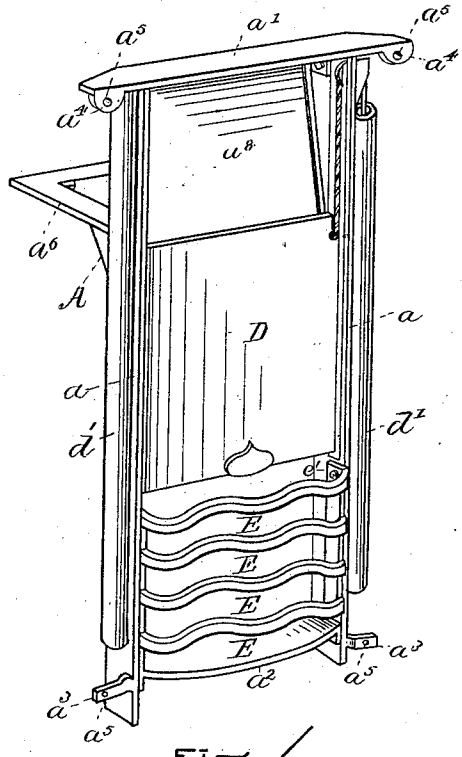

Fig. 6.

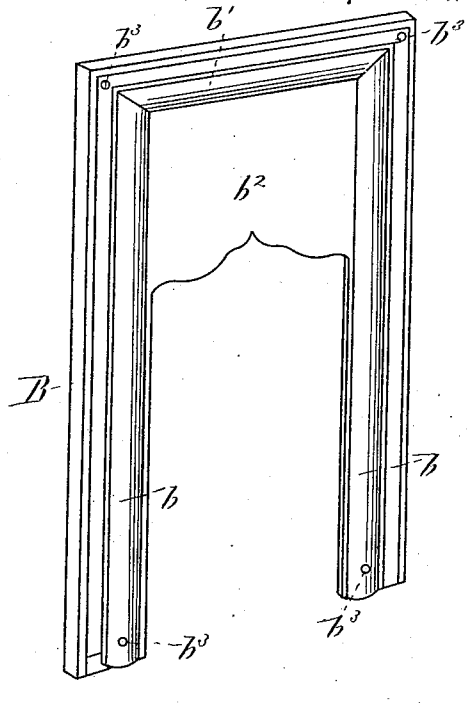

Fig. 7.

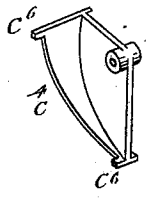

Fig. 9.

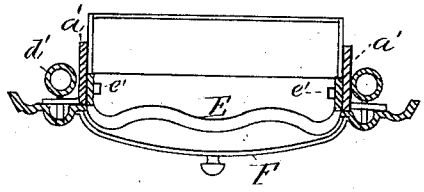

Fig. 8.

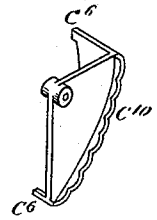

Fig. 10.

WITNESSES

H. C. Fogg.

Fred'k Harris

INVENTORS.

Chas. A. Wellington

Albert Chase

by their attys

Clarke & Raymond

UNITED STATES PATENT OFFICE.

CHARLES A. WELLINGTON, OF LEXINGTON, AND ALBERT CHASE, OF BOSTON, MASSACHUSETTS.

FIRE-PLACE.

SPECIFICATION forming part of Letters Patent No. 266,933, dated October 31, 1882.

Application filed July 17, 1882. (No model.)

To all whom it may concern:

Be it known that we, CHARLES A. WELLINGTON, of Lexington, in the county of Middlesex and State of Massachusetts, and ALBERT CHASE, of Boston, in the county of Suffolk, in said State, both citizens of the United States, have invented an Improvement in Fire-Places, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature, in which—

Figure 1 is a front elevation of our invention. Fig. 2 is a rear elevation thereof, with a portion of the upper right-hand corner cut out to illustrate a detail of construction. Fig. 3 is plan. Fig. 4 is a vertical cross-section. Fig. 5 is a vertical cross-section of a portion of the fire-place, showing especially the damper-operating devices. Fig. 6 is a perspective of the interior portion of the frame-work of the fire-place, the front being removed. Fig. 7 is a perspective of the front alone. Fig. 8 is a section and plans upon and below the line $x\,x$ of Fig. 1. Fig. 9 is a perspective of the damper-operating cam, hereinafter described. Fig. 10 is also a perspective view of said cam, but on the opposite side to that shown in Fig. 9.

This invention relates, first, to the improved construction of the frame, whereby the entire front may be removed to expose the interior of the fire-place and the various devices for operating the damper and blower; second, to the arrangement of the damper and the means for operating the same; third, to the blower and means for counterbalancing the same and for protecting the counterbalancing-weights and cord, and also for preventing the escape of gas and smoke about the blower; fourth, to the construction and arrangement of the ash-pan in relation to the grate; fifth, to various details of construction, all of which will hereinafter be more fully specified.

The fire-place preferably is made in two parts—namely, the interior section, A, which embraces the upright parts a, cross-piece a', projections or lugs $a^3\,a^4$, provided with the bolt or screw-threaded holes a^5, the horizontal damper-plate a^6, and upper cross plate, a^8. The outer section, B, is ornamental in character, and is of sufficient size to cover the front sides and upper portion of the inner section, and it has the side posts or portions, b, the upper cross-piece, b', and the upper plate, b^2. This section is fastened to the inner section by means of screws or bolts passed through the holes b^3 therein into the holes a^5 in the lugs of the inner frame.

The damper C is hinged at c to the damper-plate a^6, which has the aperture or hole c', forming the outlet from the fire-place to the chimney-flue, and it is operated to open and close the passage by means of the link c^2, lever c^3, and cam c^4 upon the end of the shaft c^5. This cam is spiral in form, has the stops c^6, and the end c^7 of the lever c^3 bears near its end upon its face. This lever c^3 is pivoted at c^8 in front of the cam to a standard or bracket, c^9, projecting inwardly from the upper plate, a^8, of the inner section. The shaft c^5 has a limited extent of endwise movement, and the cam-sector has the notches c^{10}, which are adapted to engage with the latch c^{11}, which projects inwardly from the said plate a^8. The weight of the damper and its link causes the end of the lever c^3 to bear constantly against the cam and force it toward the plate c^8, so that the notches c^{10} are always in position to engage with the latch. To operate the damper, the knob c^{12} is pressed inwardly sufficiently to move the cam-sector sufficiently to disengage the notch c^{10} from the latch, and the knob is then turned, revolving the cam and causing the lower end, c^7, of the lever c^3 to be moved in or out in relation to the inner frame, according as the cam is revolved. If it be moved outwardly, the damper is opened, and if in the other direction it is closed.

The blower D is suspended between the outer and inner sections by means of the cords d, and is counterbalanced by means of suitable weights, the cords passing over pulleys secured to the inner frame. The weights and cords upon the outside of the pulleys are covered by the pipes d', and they are thereby protected from any débris that might otherwise fall into the passages left for them in setting the fire-place. As is obvious, this blower moves vertically between the plates b^2 and a^8. In order that there may be no escape of gas or smoke about the blower, we make the blower plain and form upon the inner end of the outer plate, b^2, the lip d^2, which bears against the

outer surface of the blower, and upon the inner plate, a^8, the lip d^3, which bears against the inner or back side of the blower.

The cross-bars E, forming the lower portion of the front of the fire-place, are cast in one piece with the side bars, e, and the cross-plate a^2, and this section is fastened to the inner frame, A, by means of the bolts e', so that it is readily removed.

The ash-pan F is made large enough to project beyond the front of the fire-place, as shown in Fig. 8, and is open at the top to receive ashes both upon the inside and outside line of the bars E.

The fire-place is adapted to be set into the wall or to be set out from the chimney in masonry built up especially for it, and the damper-plate a^6 serves also as a stay-plate in securing the fire-place in position. The grate-bars a^7 extend across from the cross-plate a^2 to any suitable support upon the inner side of the fire-place.

The advantages of this construction have been explained in connection with the description.

We are aware that fire-places have been constructed which use a counterbalanced blower, and which have chambers cast therewith in which the weights balancing the blower are moved, and we do not claim this construction.

Having thus fully described our invention, we claim and desire to secure by Letters Patent of the United States—

1. A fire-place comprising the inner section, A, to which the operative parts of the fire-place are secured, and which is adapted to be fastened in masonry or the wall, and the outer section, B, adapted to cover the inner section and conceal the said mechanism and detachably secured to said inner section, substantially as and for the purposes described.

2. The combination of the inner section, A, with the front bars, E, the side supports, e, cross-piece a^2, and the bolts e', all substantially as and for the purposes described.

3. The inner section, A, comprising the side frames, a, the cross-piece a', the plate a^8, and the damper-plate a^6, all substantially as and for the purposes described.

4. In combination with the inner section, A, of the fire-place, having a damper-plate, a^6, the damper C, hinged to said plate, the knob c^{12}, and intermediate mechanism, substantially as described, whereby upon turning the knob the damper is operated, all substantially as and for the purposes set forth.

5. The combination, in a fire-place, of the section A, having a damper-plate, a^6, and damper C, hinged thereto, the cam-sector c, link c^2, and lever c^3, and means for revolving the sector from the front of the fire-place, all substantially as described.

6. The combination of the damper C, the link c^2, the lever c^3, pivoted as described, the cam-sector, and means for revolving the same and for locking it in any desired position, all substantially as described.

7. In a fire-place, as a means for operating a damper-lever, the sector having a bearing on the section A, provided with a spiral cam, c^4, upon one side and notches upon the other, with means for revolving the sector and for locking it by the notches, all substantially as and for the purposes described.

8. In a fire-place, the combination of the counterbalanced blower D with the plates b^2 a^8 and their lips d^2 d^3, all substantially as and for the purposes described.

9. In a fire-place, in combination with the inner frame, A, the separate tubes d', arranged upon either side of the frame, as shown, and adapted to receive and protect the counterbalancing-weights, all substantially as described.

10. In a fire-place, the front grate comprising the bars E, the side supports, e, and the cross-piece a^2, in combination with means, substantially as specified, for attaching it to the section A, all substantially as and for the purposes described.

CHAS. A. WELLINGTON.
ALBERT CHASE.

Witnesses:
F. F. RAYMOND, 2d,
FRED. HARRIS.