

No. 626,963.

Patented June 13, 1899.

W. BLACK.
GRATE.

(Application filed Mar. 2, 1899.)

(No Model.)

FIG. 1.

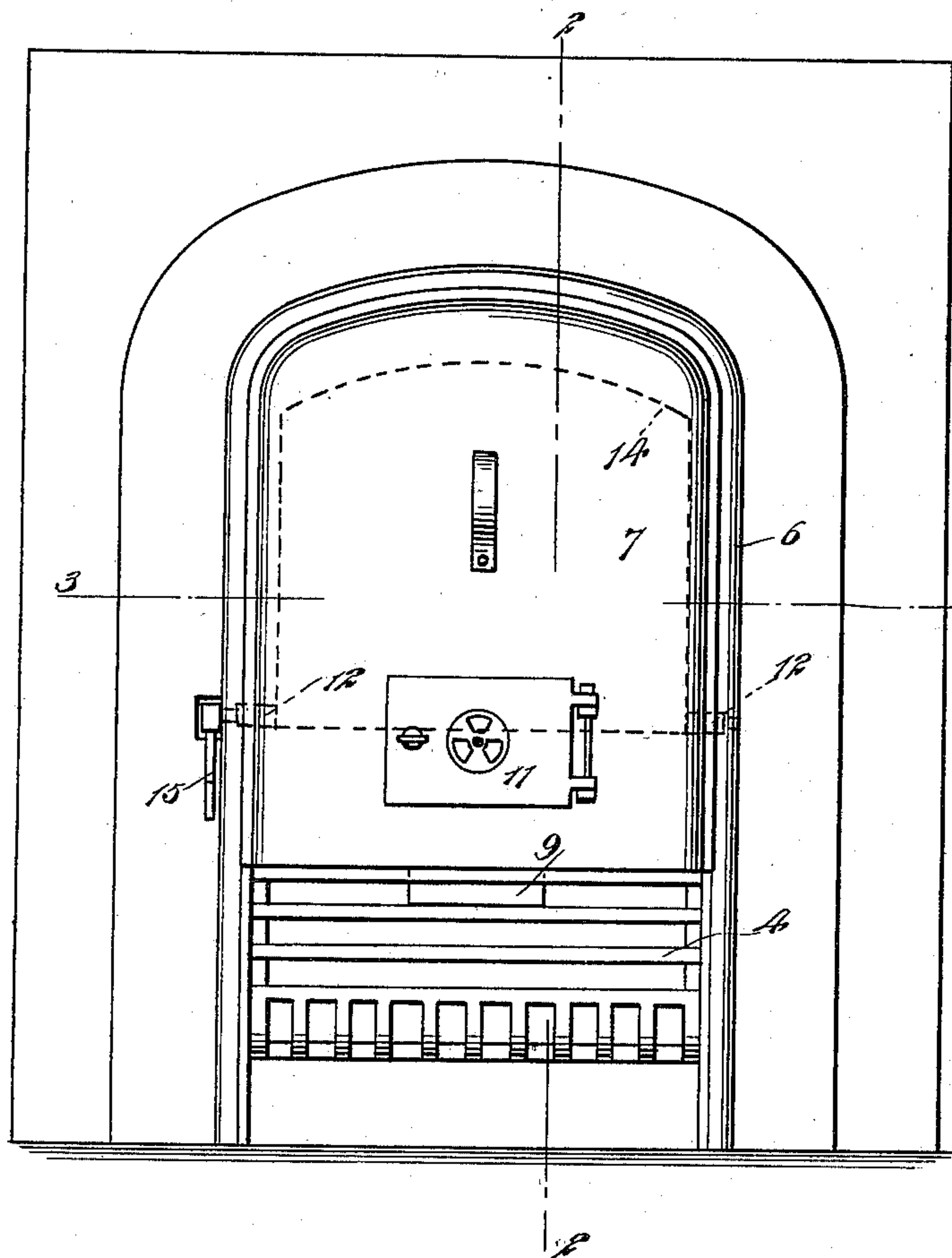


FIG. 2.

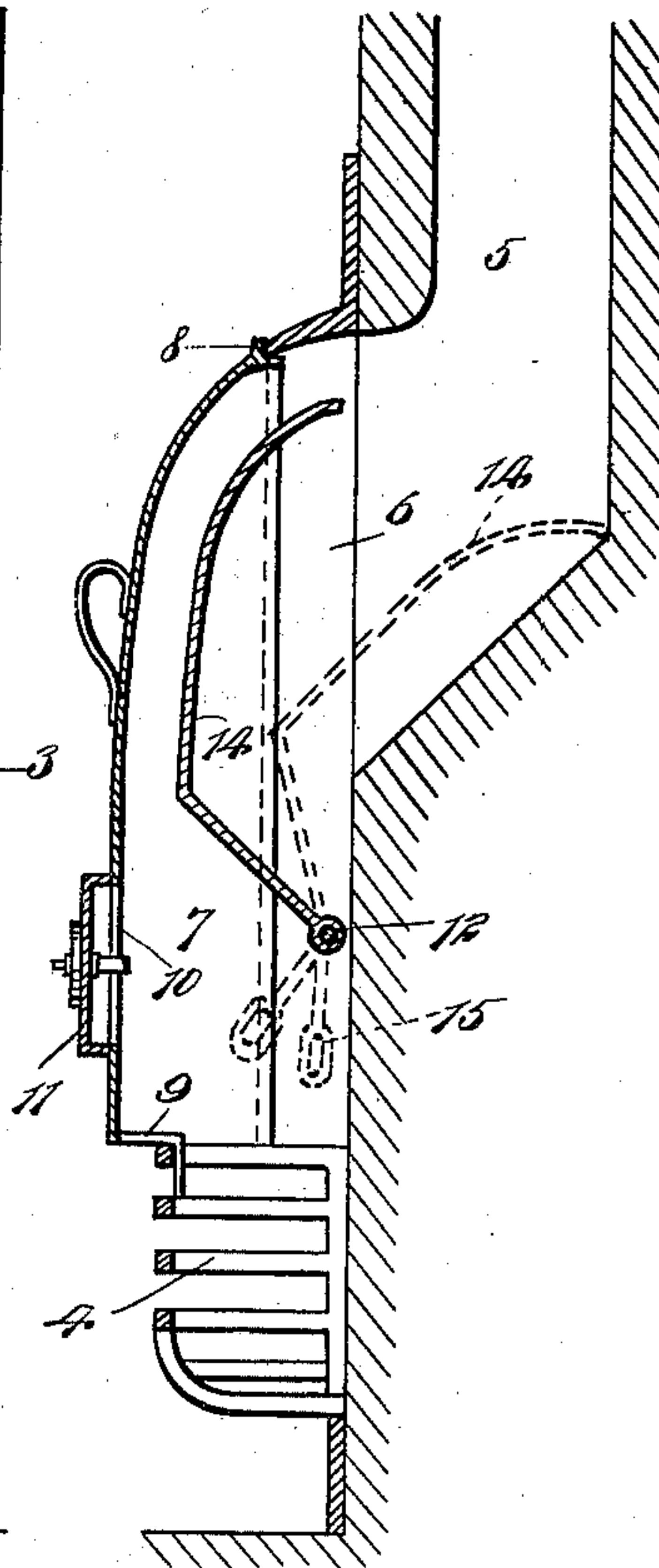
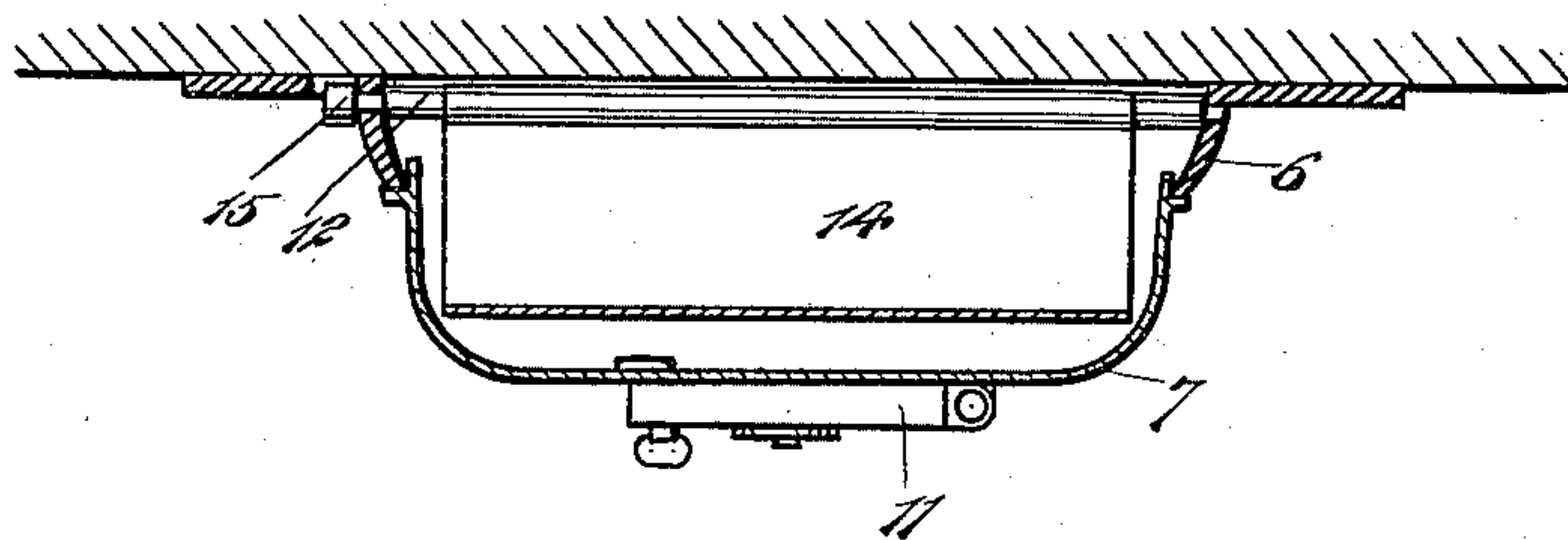


FIG. 3.



WITNESSES:

Donn Twitchell
Isaac B. Owens

INVENTOR

Wilbert Black.

BY

Mumford

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILBERT BLACK, OF NEW ORLEANS, LOUISIANA.

GRATE.

SPECIFICATION forming part of Letters Patent No. 626,963, dated June 13, 1899.

Application filed March 2, 1899. Serial No. 707,461. (No model.)

To all whom it may concern:

Be it known that I, WILBERT BLACK, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Grate, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide a fireplace-grate in which the draft may be more effectually controlled than in grates as heretofore constructed, which end I accomplish by arranging above the grate a peculiarly-constructed damper which, acting with the blower-shield, serves effectually to regulate the draft in the flue, and thus control the combustion of the fuel in the grate.

This specification is the disclosure of one form of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front view of the grate. Fig. 2 is a vertical section on the line 2 2 of Fig. 1, and Fig. 3 is a cross-section on the line 3 3 of Fig. 1.

The grate proper, 4, is so mounted in the fireplace that the products of combustion of fuel on the grate will pass up the flue 5. Surrounding the fireplace is a flange 6, projecting outwardly and running down to the grate, against which flange the blower-shield 7 is engaged, the blower-shield having a rabbet-groove 8 formed in its edges to receive the front edge of the flange. The blower also has a hook 9 at its bottom to engage the top bar of the grate. Formed in the front of the blower 7 is an opening 10, closed by a door 11.

The flange 6 carries respectively at the sides of the fireplace the shaft 12, on which a damper 14 is fixed, so that the damper is mounted to swing back and forth toward and from the blower 7, as indicated by the dotted lines in Fig. 2. The damper 14 is in the form of a plate bent on a line parallel with the shaft 12, the upper portion of the damper being curved rearwardly, so that it will conform to the shape of the upper portion of the blower, as indicated by the full lines in Fig. 1, and so that the damper when thrown rearwardly will pre-

sent no obstacle to the unrestrained passage of the draft into the flue 5, which latter position is indicated by the dotted lines in Fig. 1. One end of the shaft 12 is provided with an arm 15, by which the shaft may be rocked to throw the damper into the desired position.

With a grate thus constructed the fuel in the grate proper may be caused to burn with any desired degree of intensity, which is effected by regulating the draft by means of the damper 14. When the damper 14 is thrown forwardly to or beyond the position shown by full lines in Fig. 2, the passage of the draft into the flue will be reduced to the minimum and combustion in the grate thereby restrained. When, however, the damper is thrown back to the position shown by dotted lines in Fig. 2, the full strength of the draft in the flue will be exerted through the grate and the combustion will be promoted in the highest degree.

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

1. The combination with a fireplace, of a flange extending around the fireplace and capable of carrying a blower, a shaft mounted in the flange, an arm attached to the shaft outside of the flange by which to drive the shaft, the shaft extending horizontally across the fireplace, and a damper attached to the shaft and moving with the same, the damper being movable toward and from the blower to regulate the draft in the fireplace.

2. The combination with a fireplace, of a damper and means for mounting the same to swing toward and from the blower to regulate the draft in the fireplace, the damper being in the form of a plate with a horizontal bend therein, the upper portion of the damper being curved rearwardly so that it will conform to the shape of the upper portion of the blower, and so that the damper when thrown rearwardly will enter its upper portion into the base of the flue and thus open the flue.

WILBERT BLACK.

Witnesses:

MAX HUBERT,
J. A. BATT.