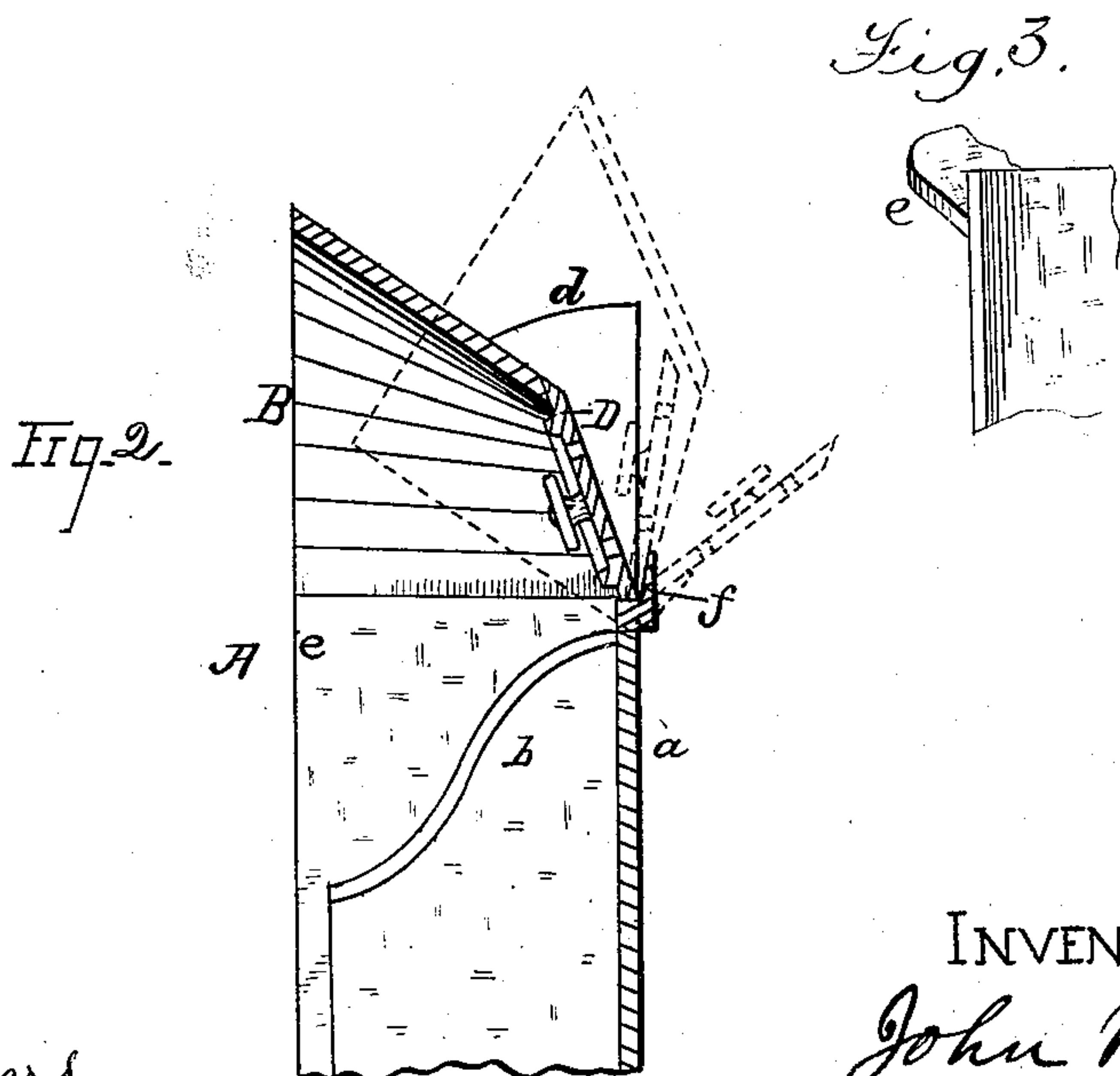
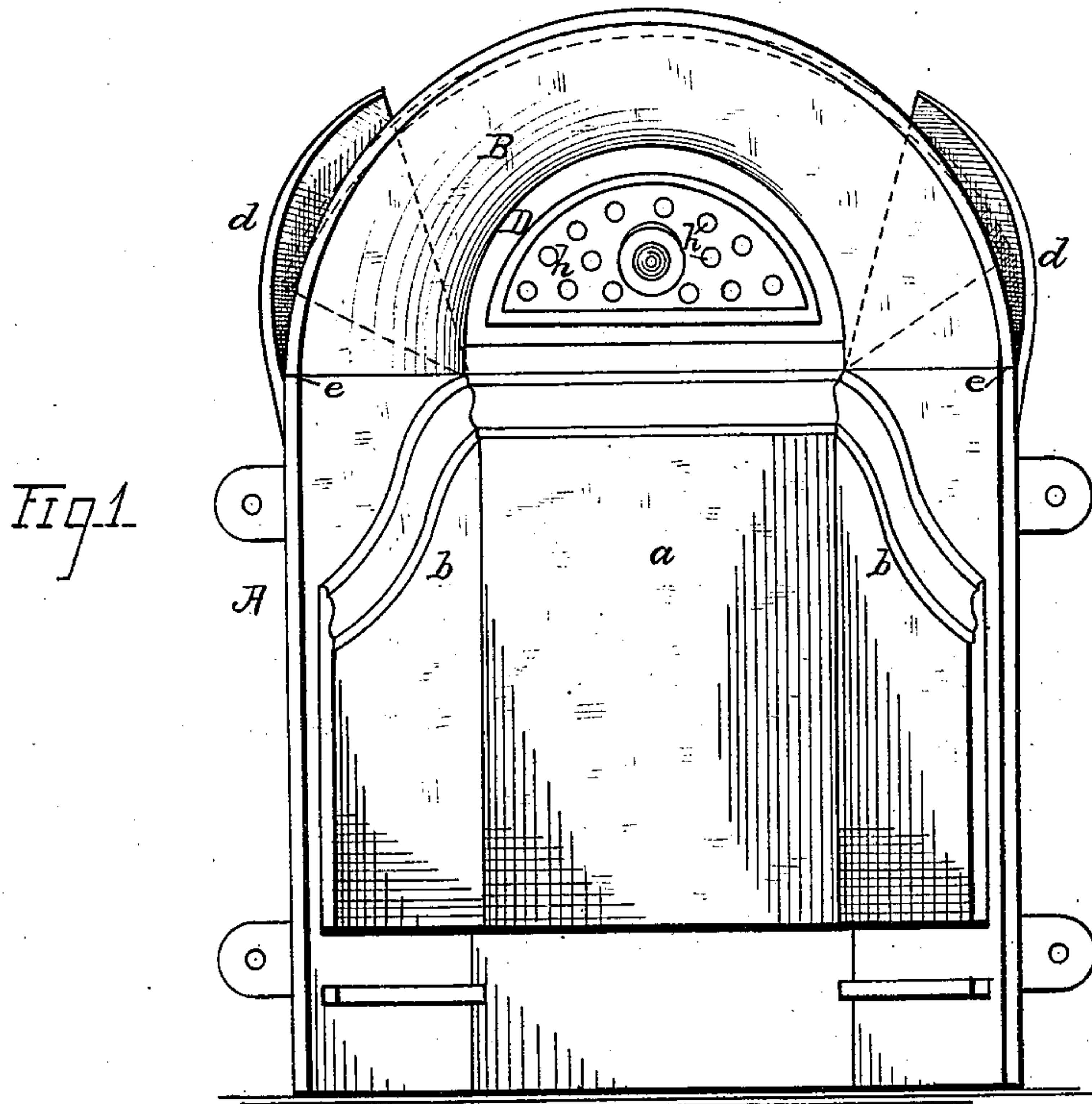


J. WALSH.
Grate-Frame.

No. 226,640.

Patented April 20, 1880.



WITNESSES =
Paris Chalmers
C. C. Fille

INVENTOR =
John Walsh
by his attorney
Evan George Jr.

UNITED STATES PATENT OFFICE.

JOHN WALSH, OF NEW YORK, N. Y.

GRATE-FRAME.

SPECIFICATION forming part of Letters Patent No. 226,640, dated April 20, 1880.

Application filed February 9, 1880.

To all whom it may concern:

Be it known that I, JOHN WALSH, of the city of New York, in the county and State of New York, have invented a new and useful
5 Improvement in Grate-Frames, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improvement in grate-frames; and it consists in the devices
10 hereinafter described, and particularly pointed out in the claim.

The object of the invention is to provide a grate of appropriate construction with a suitable damper and hood, to regulate the draft
15 and prevent the entrance of cold air or soot to the room in which the grate is placed.

Referring to the accompanying drawings, Figure 1 is a front view of the invention, and Fig. 2 is a central vertical transverse section
20 of same, the hood being shown in its tilted position in dotted lines. Fig. 3 is a detached view, showing the shoulder *e*.

A indicates the grate-frame, which consists of the back *a* and the sides or cheeks *b*, the
25 latter having at their upper ends the inclined corresponding wings *d*. The sides *b* are splayed outward in the usual manner, to throw the heat into the room, and, at the point where the wings *d* join them, are supplied with the
30 shoulders *e*, upon which and the upper edge of the back of the grate-frame is placed the hood B, which completely covers the interior of the grate, and is furnished at its rear portion with the hinged damper D. The hood B gradu-
35 ally contracts toward the rear, so as to snugly fit between the sides of the frame A and to cast off any soot or dirt falling upon it from the chimney. Another advantage derived by the hood being contracted or inclined toward

the rear is, that when it is tilted, as shown in dotted lines in Fig. 2, it occupies less space than if it were of other configuration.

The damper D is hinged in any convenient manner in the lower rear portion of the hood, and is supplied with a suitable stop, *f*, to prevent its being opened too far. The damper D
45 may be provided with apertures *h* and a sliding plate (not shown) for closing them, if preferred, the purpose of the damper and the apertures being to regulate the draft according to
50 the usual method, while the hood prevents the descent of cold air or soot from the chimney into the room.

When it is desired to create a strong draft for any purpose whatever the whole hood B
55 may be tilted back upon its lower rear edge, as illustrated in dotted lines in Fig. 2. This opens the main passage in the chimney, and of course creates a strong current of air through the grate. When the hood is in this tilted
60 position it rests upon the upper edge of the back of the grate-frame, and is sustained thereon by the lower portions of its sides coming in contact with the faces of the wings *d* at their rear or less-widely-separated parts.
65

The frame A may be all cast in one piece of metal, or the back *a*, in rear of the fire-chamber, may be of soap-stone, fire-brick, or other material.

I claim—

The grate-frame having the shoulders *e* and wings *d*, in combination with the tilting hood B, having a damper, substantially as specified.
70

JOHN WALSH.

Witnesses:

DANIEL CODY,
HENRY WALSH.