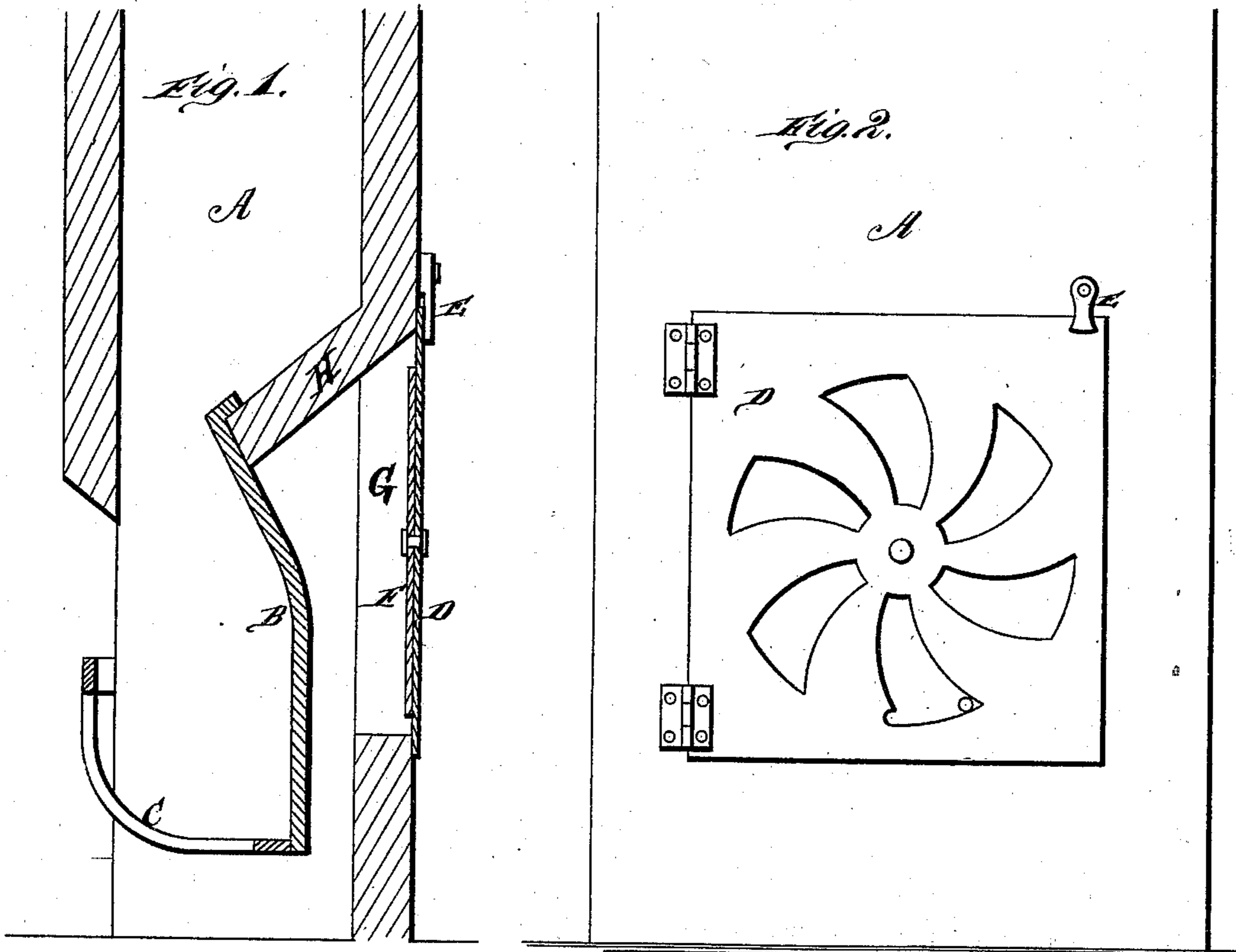


J. M. YAHRES.
Fire-Place.

No. 203,522.

Patented May 7, 1878.



WITNESSES

Robert Everett
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JOHN M. YAHRES, OF SHARON, PENNSYLVANIA.

IMPROVEMENT IN FIRE-PLACES.

Specification forming part of Letters Patent No. **203,522**, dated May 7, 1878; application filed February 16, 1878.

To all whom it may concern:

Be it known that I, JOHN M. YAHRES, of Sharon, in the county of Mercer and State of Pennsylvania, have invented a new and valuable Improvement in Fire-Places; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a vertical sectional view of the part of a chimney showing my improved fire-place. Fig. 2 is a back view of the same, showing the hinged door with its register more fully.

The nature of my invention relates to that class of fire-place heaters in which the fire-back is so arranged as to radiate heat into a second room; and it consists in the combination, with such fire-back and chimney, of a downwardly and inwardly projecting incline, which forms the upper wall of the heat-chamber, and against which abuts a hinged door, with register for regulating the heat, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my improvement.

A represents the chimney, which is made to have an opening entirely through from one room into another, as shown in Fig. 1. In this opening is inserted and secured a fire-back, B, and grate C, in any of the well-known and usual ways. This fire-back and grate C may be constructed in any desired manner, as I lay no claim to them by themselves. H represents the inclined portion of the chimney, which extends obliquely downward and inward, and to its lower surface is attached the fire-back B.

When fire is built in the grate C, the room on that side of the chimney of course becomes warmed or heated. The room on the other side of the chimney also becomes heated by

radiation from the back of the fire-back B, through the opening G. The opening G in the chimney A, behind the fire-back B, is provided with a hinged door, D, which extends upward to inclose the upper portion of the incline H, and is held close by means of a button, latch, or other suitable device, E.

In the door D is an ordinary register, F, which can be opened more or less, or entirely closed, as desired, and thus regulate the admission of heat into the room.

The register F, by itself, would be insufficient to heat the room quickly when such would be required. For this purpose, then, I provide the door D, which can be thrown entirely open, and allow the heated air to escape quickly into the room, and thus heat the same in considerably less time than could be done by simply opening the register.

By means of the inclined portion H, the entire volume of heated air may be utilized by opening the door D, and no chamber for dead air is left above the door-orifice G. When the door D is open the incline H not only acts as a deflector to turn the ascending heated air outward into the room, but also as a reflector to cast heat downward and outward.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the chimney A, having incline H, as shown, which forms the upper wall of opening G, and serves to deflect and reflect the heat, the fire-back B, and grate C, with the hinged door D E F, abutting against the incline H when closed, as and for the purposes herein specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN MATHIAS YAHRES.

Witnesses:

SAMUEL H. YAHRES,
THOMAS D. EVANS.