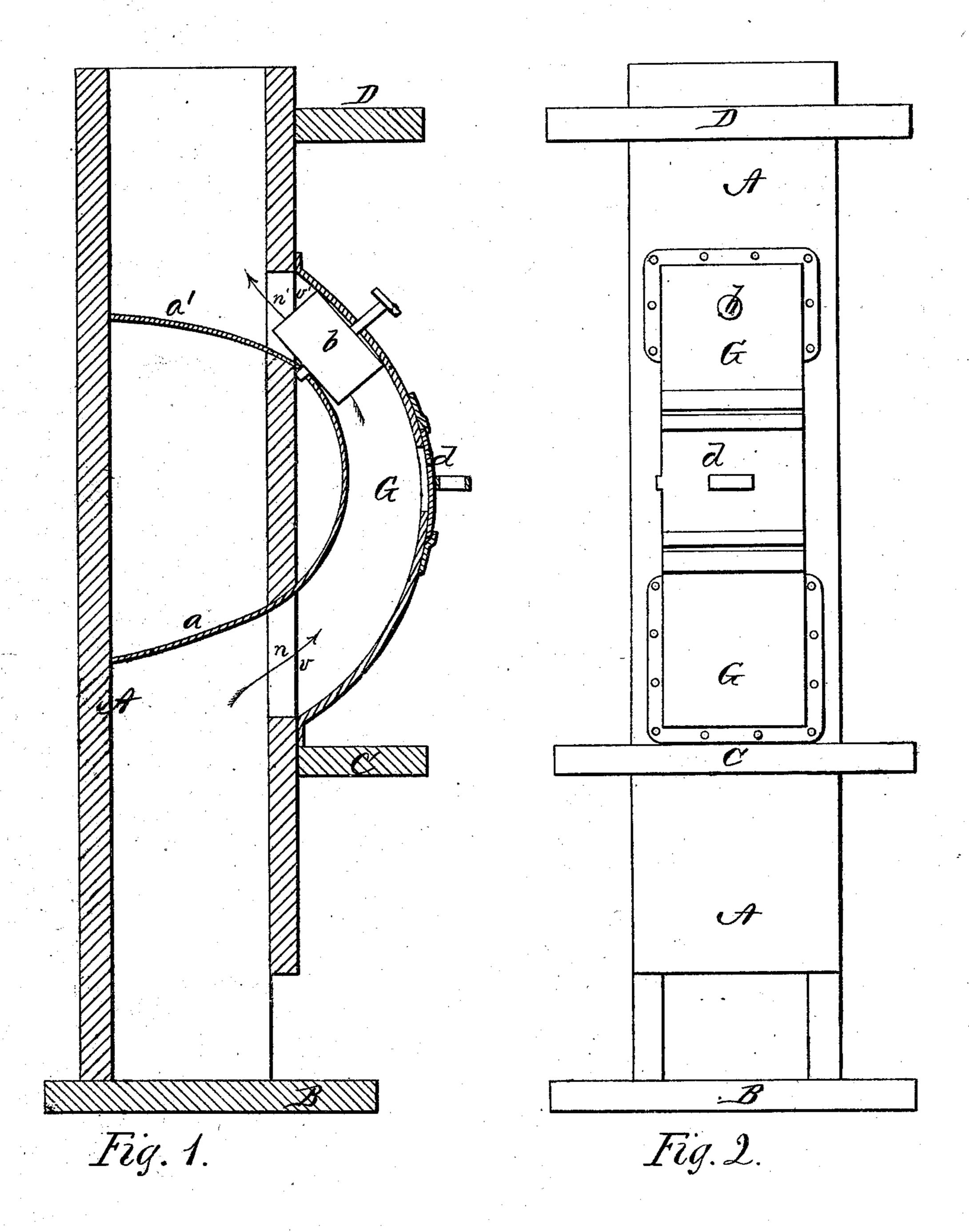
JANE ELIZA STARNES. Attachments to Chimneys or Flues.

No. 143,540.

Patented Oct. 7, 1873.



Witnesses. George E. Upham, Emory A. Bater Inventor.
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UNITED STATES PATENT OFFICE.

JANE ELIZA STARNES, OF WORTHINGTON, INDIANA.

IMPROVEMENT IN ATTACHMENTS TO CHIMNEYS OR FLUES.

Specification forming part of Letters Patent No. 143,540, dated October 7, 1873; application filed July 12, 1873.

To all whom it may concern:

Be it known that I, Mrs. Jane Eliza Starnes, of Worthington, in the county of Greene and State of Indiana, have invented a new and valuable Improvement in Attachments to Chimneys or Flues; 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 representation of my invention in longitudinal section, and

Fig. 2 is a front view of the same.

The nature of my invention consists in the construction and arrangement of an attachment for chimneys or flues, whereby a fire in one room may be made to heat the room directly above it, as will be hereinafter more fully set forth.

In the drawings like letters of reference in-

dicate corresponding parts.

A represents a chimney or flue of a house. B indicates the floor of the first or bottom story; C, the floor of the second story, and D the ceiling of the latter. At any suitable points between the floor C and ceiling D a curved drum, G, is attached to the chimney or flue A, and communicating with the same at both ends, vv', at the openings nv'. This drum may be made of sheet metal, or any other suitable material, and the inner wall of the drum be extended across the chimney or flue, as shown at vv' in Fig. 1; or suitable partitions may be inserted in the chimney to answer the same purpose.

A fire being built in a fire-place in the lower story, at the foot of the chimney, or a stove placed so as to communicate with the same, the heat and smoke ascending the chimney will strike the lower partition a, and pass into the drum G at the lower end, through this drum, and into the chimney again at the upper end of the drum, above the upper partition a'. During its passage through the drum G the smoke and heat, which would otherwise pass directly up the chimney and be lost, will heat the room in which the drum is placed.

To insure a perfect and thorough draft through the drum G the lower end of the same is made wider than the upper, as shown in Fig. 1. In the upper end of the drum G is a damper, b, for regulating the draft, and in the front side of the drum is a sliding door, d, for cleaning out the soot, &c. A similar drum may be used in the third story, also.

What I claim as new, and desire to secure

by Letters Patent, is—

The curved tapering drum G, having the extensions a a' of its inner wall, the damper b, door d, and open ends v v', the latter communicating, respectively, with the openings n n', arranged one above the other in the chimney-wall, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

JANE ELIZA STARNES.

Witnesses:

STEPHEN H. LOCKWOOD, ISAAC M. WOOD.