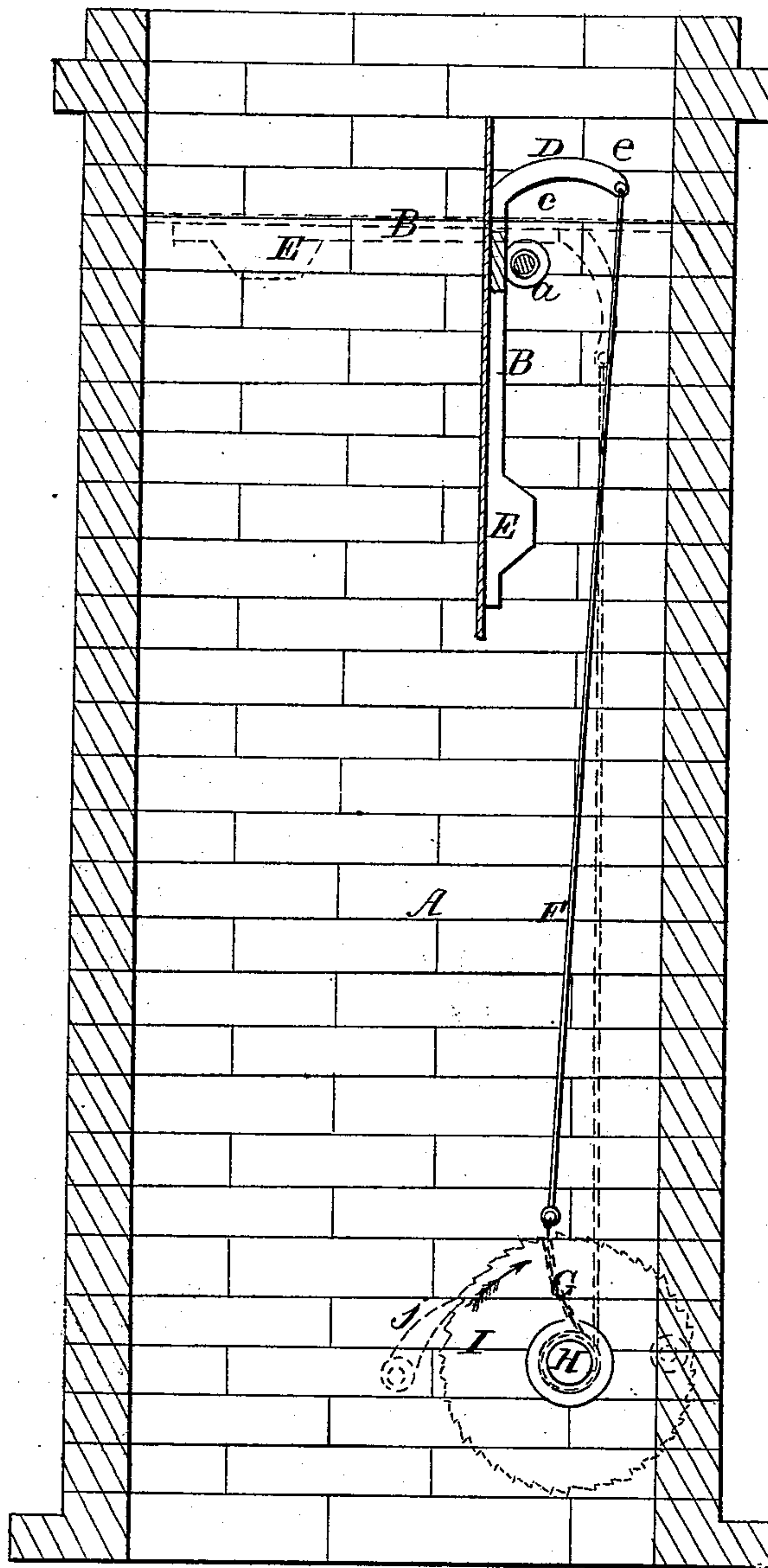


J. F. STAFFORD.
Chimney Damper.

No. 71,077.

Patented Nov. 19, 1867.



Witnesses;
Theo Fusch
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JOSEPH F. STAFFORD, OF NORTH GRANVILLE, NEW YORK.

Letters Patent No. 71,077, dated November 19, 1867.

IMPROVEMENT IN DAMPERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSEPH F. STAFFORD, of North Granville, in the county of Washington, and State of New York, have invented a new and useful Improvement in Chimneys; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming a part of this specification.

The nature of my invention consists in the employment of a damper located in the chimney, near the top, and operated by means of a lever attached thereto, having for its object the prevention of fire, which often occurs in the chimney, and communicates to the building, which is consumed.

By my invention I am able to prevent any catastrophe of this kind, as any child can operate it and prevent all danger from fire that originates in this manner.

I will now proceed to describe the construction and operation of my invention.

The figure represents a longitudinal vertical sectional elevation of a chimney, showing the damper and the attachments by which it is operated.

Letters of like name and kind indicate like parts in the figure.

A represents a section of a chimney of common construction, with my improvements attached. B is a damper, made of sheet metal or other suitable material, provided with lugs *a a*, through which are holes made to receive the shaft C, the said shaft having bearings in the walls of the chimney, so that the damper is allowed to turn on the shaft C. The lugs *a'* are secured some distance from the centre of the damper, so that by its own weight it will turn down, and the flue of the chimney be unobstructed. D is a bent or curved lever, secured to the damper B, upon the end of which is a weight, E, for the purpose of loading that end of the damper so that it will more readily turn down upon the pivot-shaft C, and open the flue of the chimney. At the outer or curved end of the lever D is connected, at *e*, by a joint, the rod F that extends down and connects to a small chain, G. The said chain G connects to and works around the shaft H, the shaft H having bearings in the wall of the chimney A. Upon the outer end of the shaft H is firmly secured a ratchet-wheel, I, in which works a pawl, J, shown in dotted lines.

In case the soot in the chimney takes fire, by turning the ratchet-wheel I in the direction of the arrow the chain G winds around the shaft H, which draws down the end of the lever D, and raises the damper B, which turns on the pivot-bolt or shaft C, and closes the flue of the chimney, as shown in red lines, so that the fire cannot burn.

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

The damper B, suspended upon a pivot, *a*, and weighted at E so as to assume a vertical position by gravity, and employed in connection with the elevating and sustaining apparatus D F G H I J, as and for the purpose set forth.

JOSEPH F. STAFFORD.

Witnesses:

JACOB SAVAGE,

CHARLES I. BAKER.