

THOMAS KETCHEN.

Chimney Top.

Patented Dec. 5, 1871.

No. 121,633.

Fig. 1.

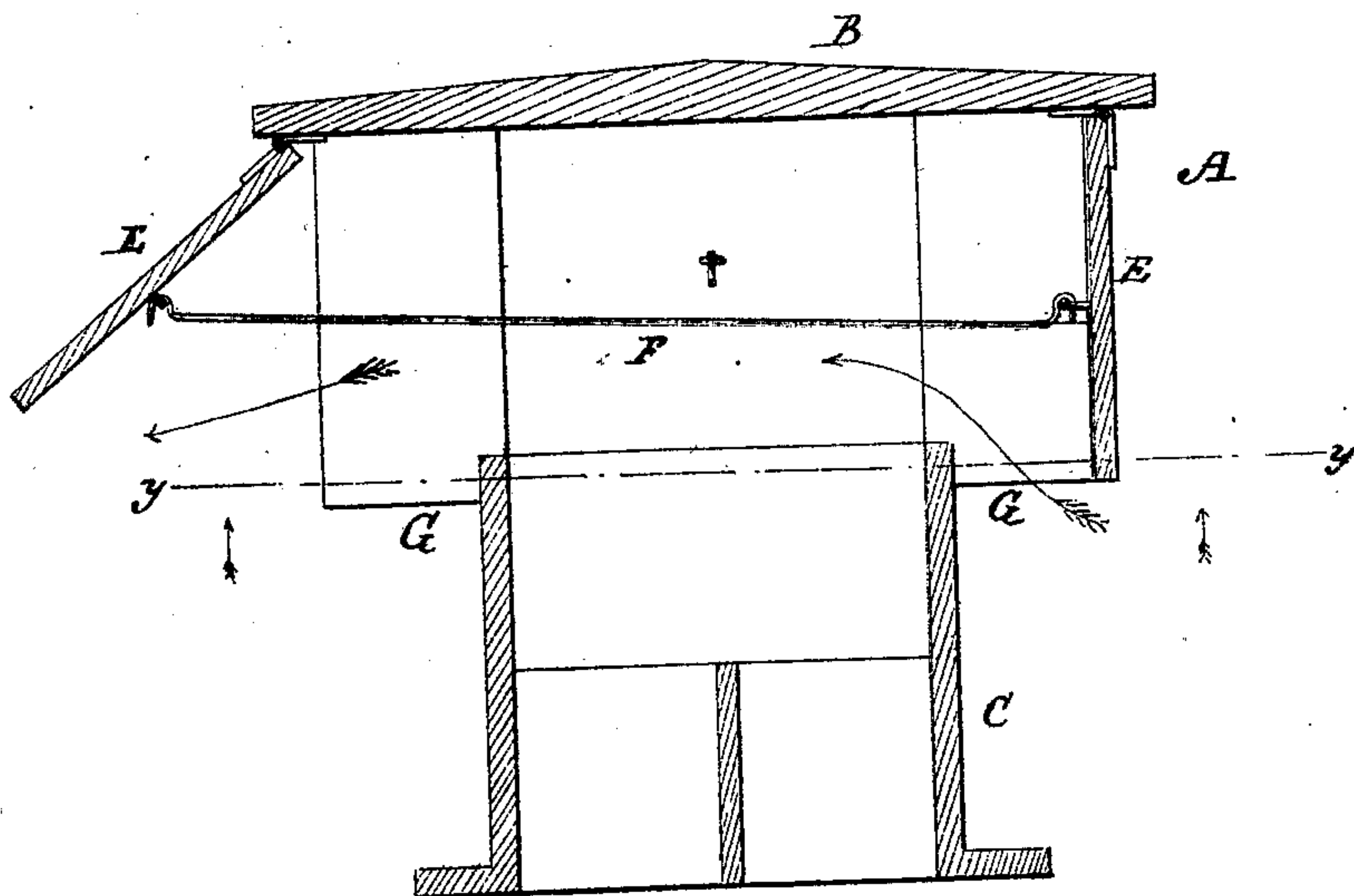
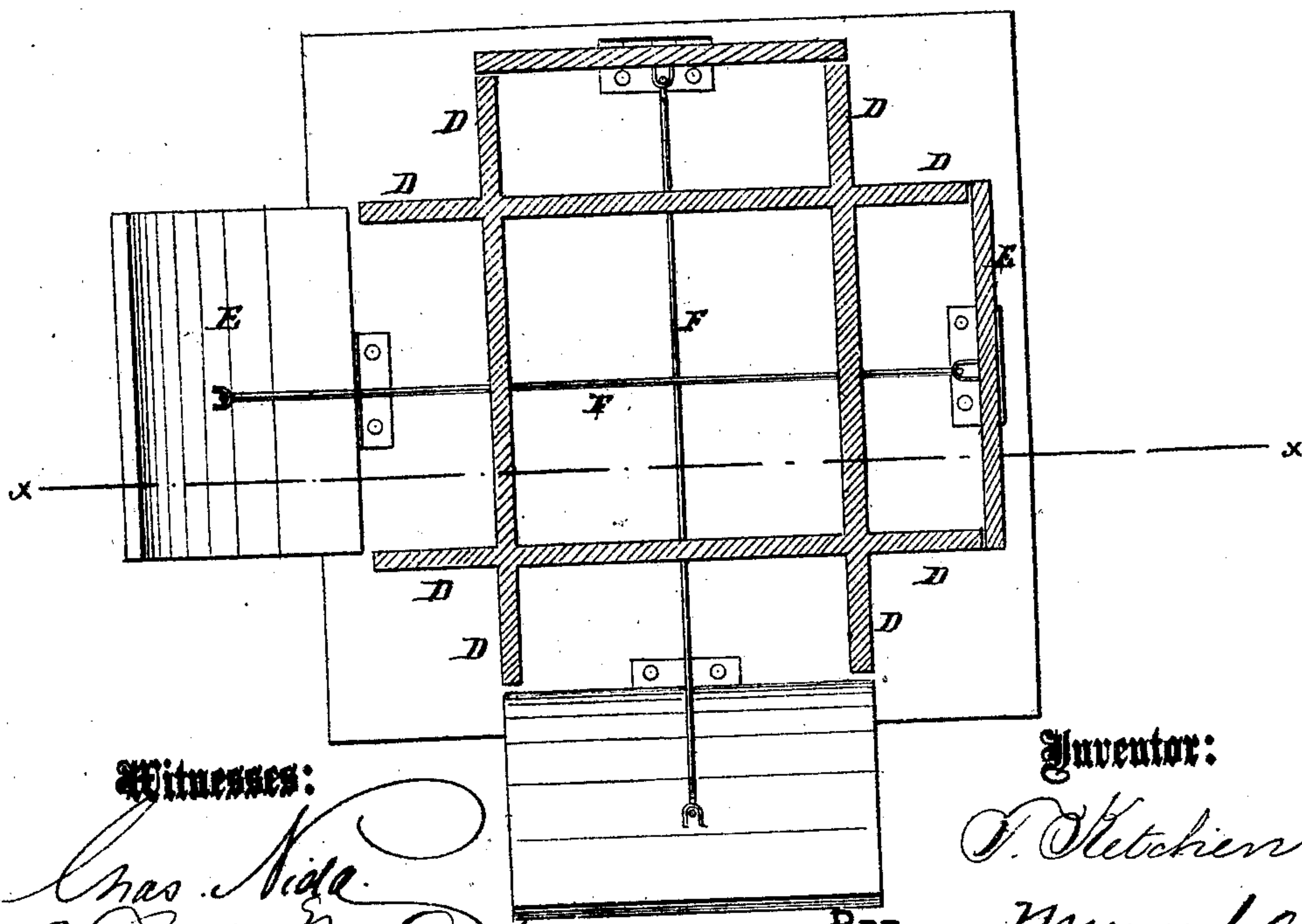


Fig. 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

THOMAS KETCHEN, OF NEW YORK, N. Y.

## IMPROVEMENT IN CHIMNEY-TOPS.

Specification forming part of Letters Patent No. 121,633, dated December 5, 1871.

*To all whom it may concern:*

Be it known that I, THOMAS KETCHEN, of the city, county, and State of New York, have invented certain Improvements in Chimney-Tops; 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 part of this specification.

The object of this invention is to provide a remedy for smoky chimneys; and it consists in a self-adjusting top with air apertures, the construction and arrangement being as hereinafter described.

In the drawing, Figure 1 is a vertical section of Fig. 2 taken on the line *x x*. Fig. 2 is a horizontal section taken on the line *y y* of Fig. 1, looking as indicated by the arrows.

Similar letters of reference indicate corresponding parts.

This chimney-top consists of an upper section, A covered by the cap B, and a lower section, C, which rests upon the top of the chimney, or is confined thereto in any substantial manner. This lower portion corresponds in shape and size with the chimney, and may be divided by vertical partitions arranged to correspond with the separate flues in the chimney. From the four corners of this lower section wings D project, which overhang the lower section, as seen in Fig. 1. E represents shutters, which are hinged to the cap B

so as to close down onto the wings D on each of the four sides, thus making two pairs of shutters. Each two shutters which stand opposite each other form one pair, and are connected together by a rod, F, as seen in Fig. 1, the rod being of such a length that when one shutter is closed the other shutter will be pushed open. G represents an opening beneath each shutter, through which the current of air will pass when the shutter is closed, as indicated by the arrows 2 and 3. By means of these openings the draught of a chimney is greatly increased when the wind is blowing against the closed shutter. When the wind strikes quartering, as indicated by the arrow, two of the shutters will be closed and two opened, as seen. The current of wind through the openings G and upper sections of the top carries the smoke with it as it escapes from the other side.

After making many experiments to discover a sure cure for smoky chimneys I have found the above-described arrangement to answer the purpose perfectly.

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

The arrangement of the shutters E and wings D in a chimney-top, as shown and described, for the purpose set forth.

THOMAS <sup>his</sup> × KETCHEN.  
mark.

Witnesses:

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(166)