

W. H. MYERS.
Chimney Cows.

No. 137,561.

Patented April 8, 1873.

Fig. 1

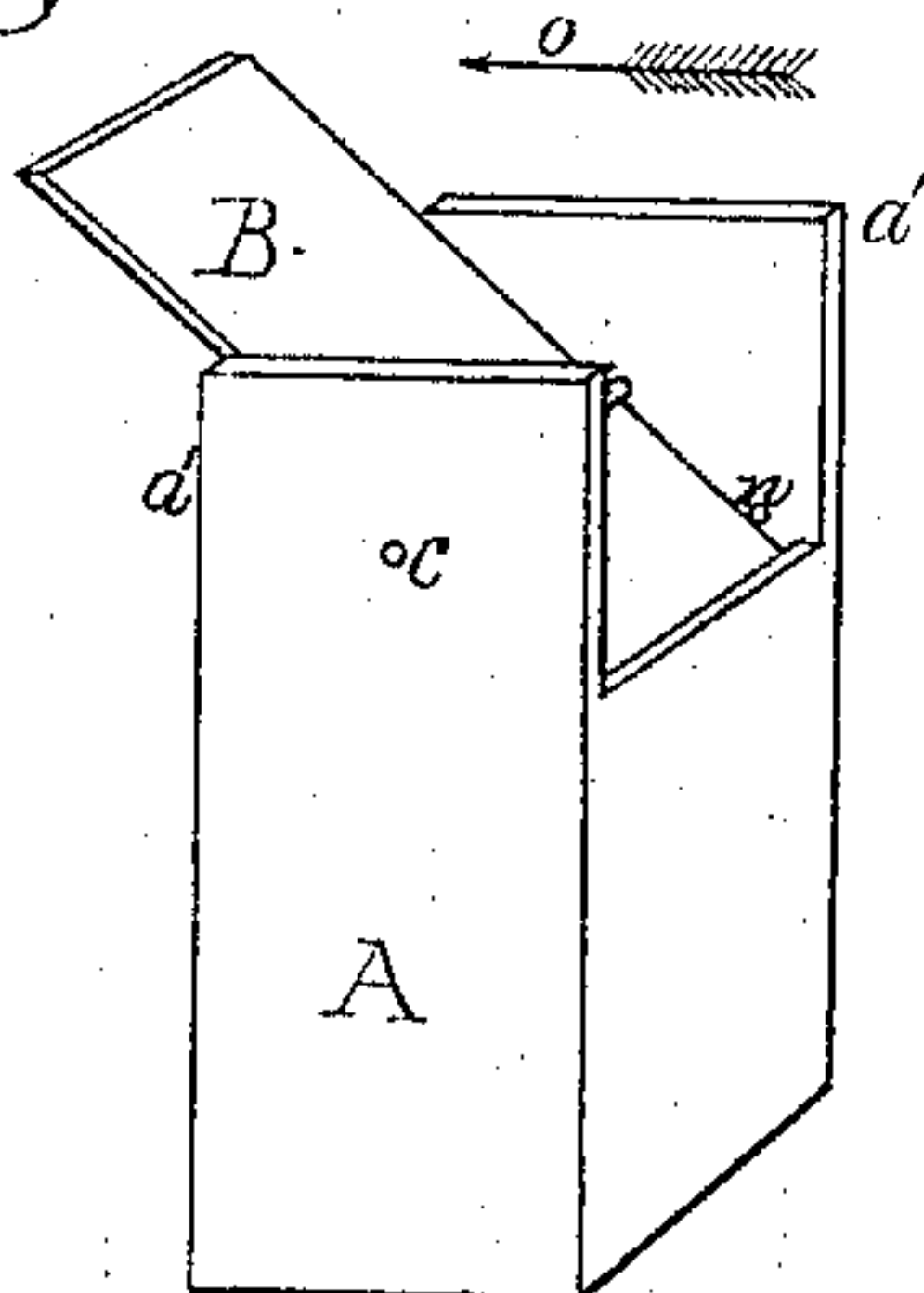


Fig. 2

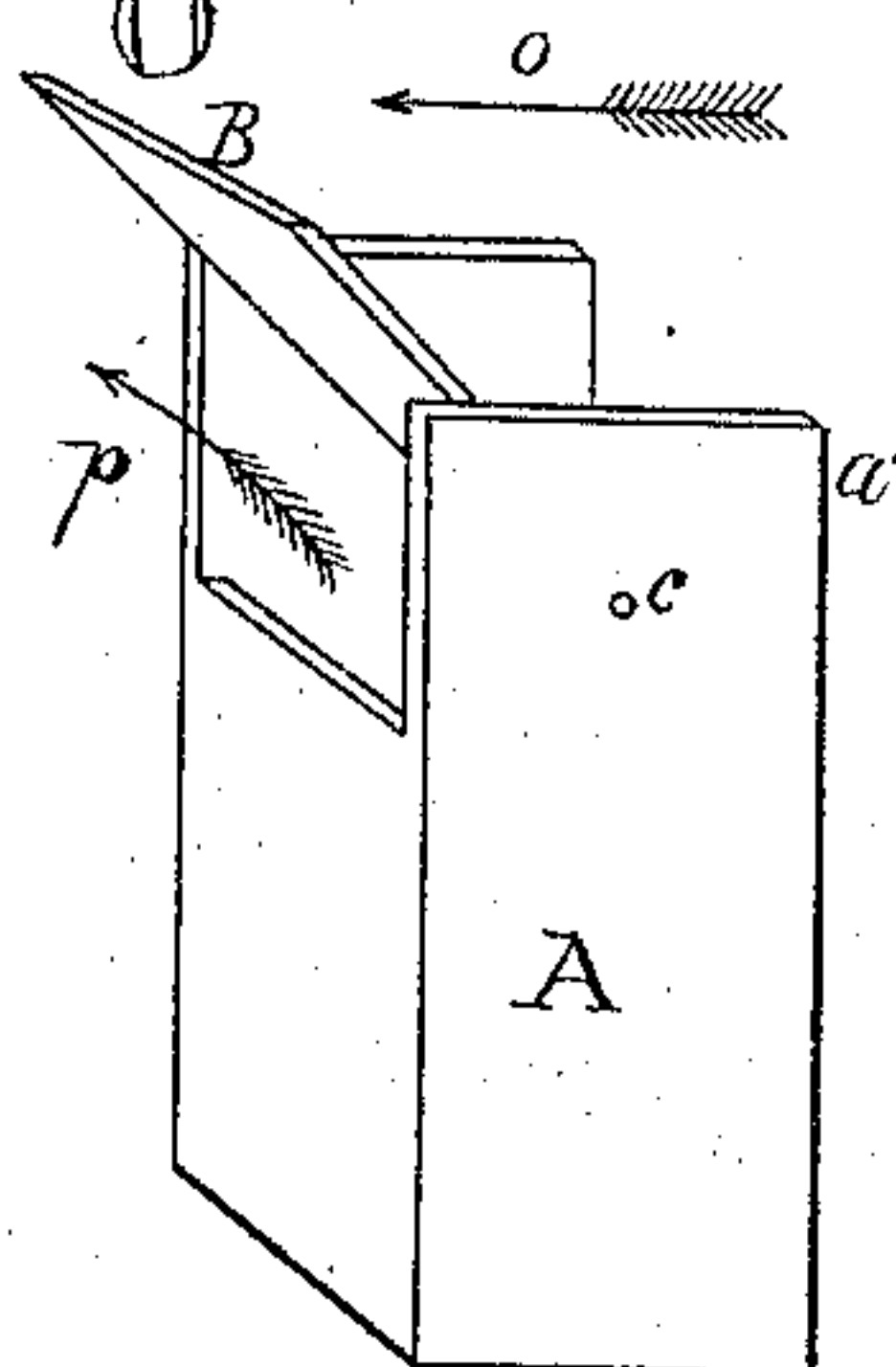


Fig. 3

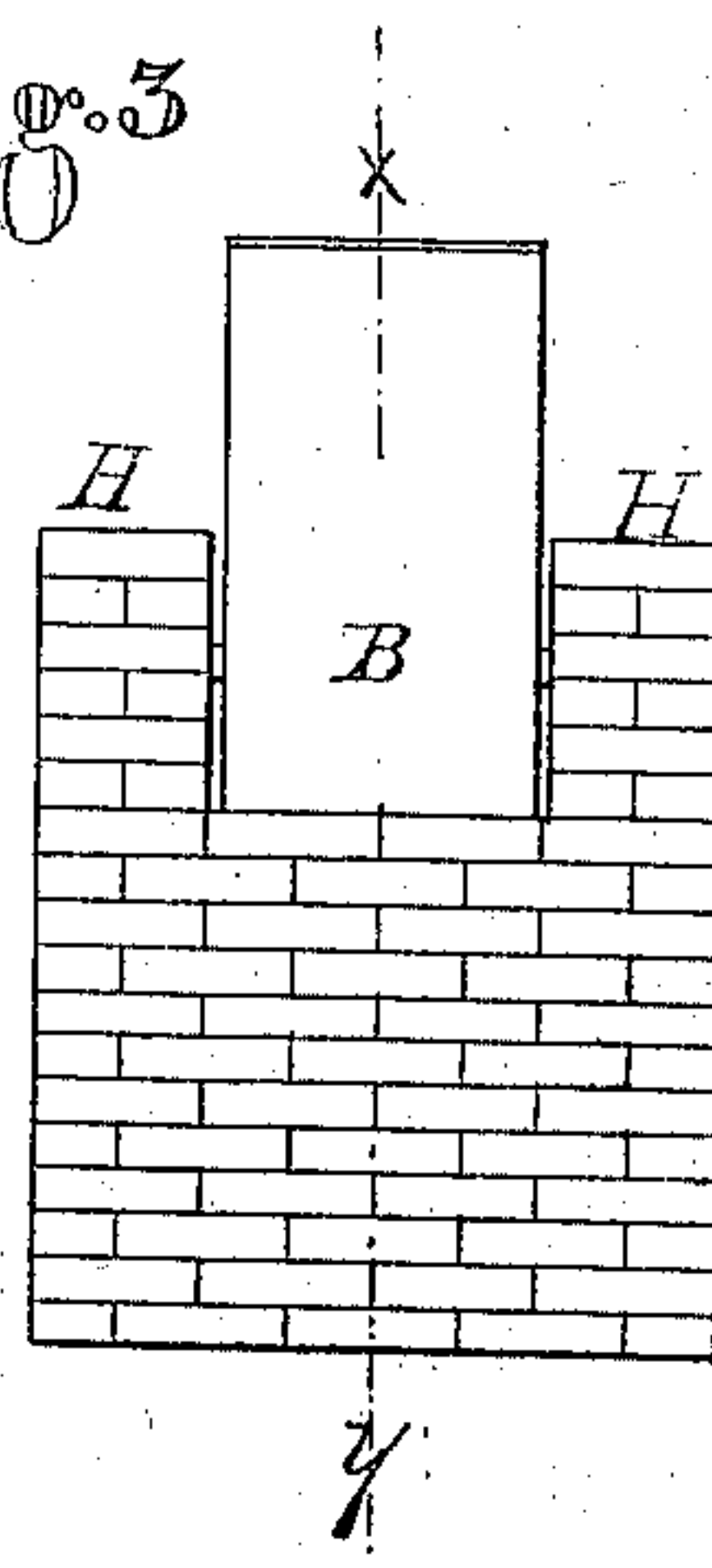


Fig. 4

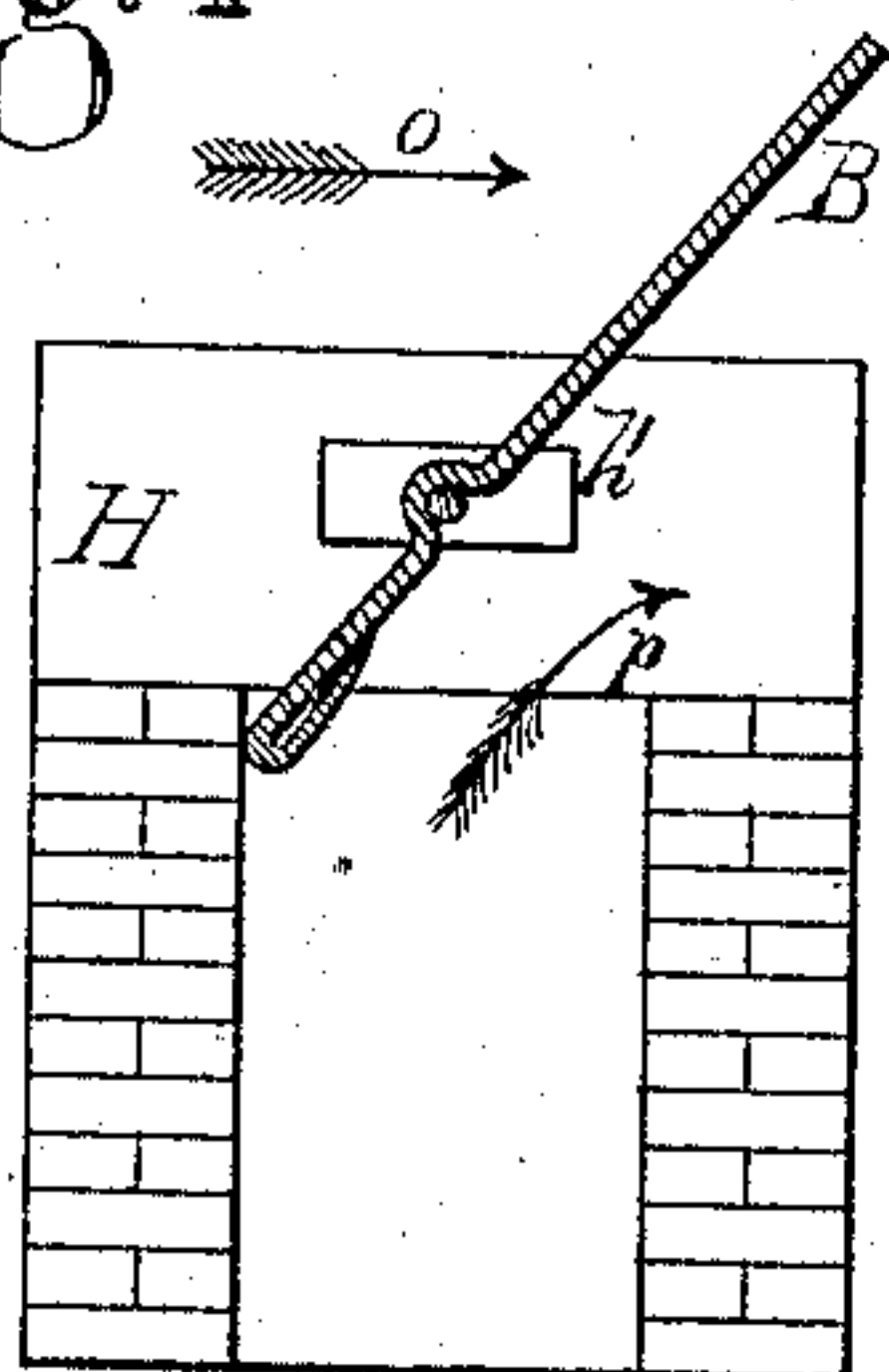
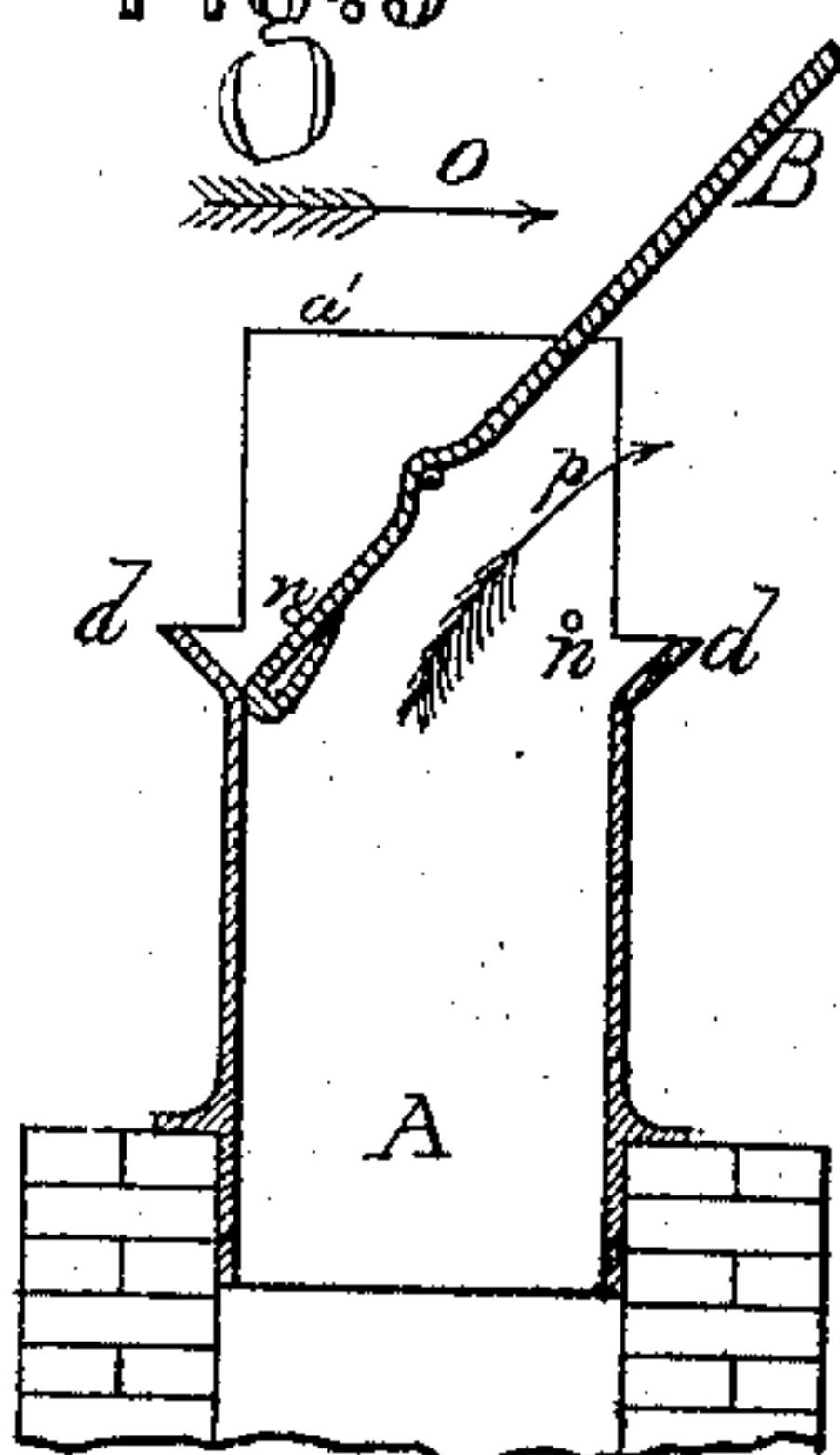


Fig. 5



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UNITED STATES PATENT OFFICE.

WILLIAM H. MYERS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CHIMNEY-COWLS.

Specification forming part of Letters Patent No. **137,561**, dated April 8, 1873; application filed January 31, 1873.

To all whom it may concern:

Be it known that I, WILLIAM H. MYERS, of Philadelphia, Pennsylvania, have invented a certain Improved Chimney Cowl or Cap, of which the following is a specification:

The nature of my invention consists in the form and arrangement of a vibrating valve pivoted to the two raised sides of a chimney. The valve is pivoted near its center and balanced so as to hang vertically when there is no wind. The upper part of the valve above the pivots presents a greater surface to the wind than the lower part, so that the valve is forced over by the wind in a manner to prevent the wind blowing down the chimney. When the wind blows direct across the edge of the valve the raised sides of the chimney prevent the downward draft.

Figure 1 is a perspective view of the cap from the rear, the quarter from which the wind is blowing. Fig. 2 is a perspective view facing the wind. Fig. 3 is an end view of the valve in a brick chimney. Fig. 4 is a section through the valve and chimney on line *x y*. Fig. 5 shows a slight modification in the cap.

The cap A I make rectangular, of sheet metal, with two of the sides, *a'*, standing above the other two sides. A thin sheet-iron valve, B, is pivoted in holes C in the raised sides of the cap, so that the top of the valve can vibrate from side to side with the pressure of the wind. The portion of the valve projecting above the pivots is much larger than that below, so as to be more easily influenced by the wind, the extra weight being counterbalanced by turning up the bottom edge, or some other convenient mode, so as to make the bottom of the valve a little the

heaviest, which keeps the valve in a perpendicular position when there is no wind to influence it. The valve is prevented from turning over too far by its lower edge coming in contact with the end of the cap or against the studs *n*.

The arrows O show the direction of the wind, and the arrows *p* the current of smoke, gas, or foul air.

The exit of the smoke may be facilitated by flaring outward the edge of the cap, as at *d*, Fig. 5.

Brick chimneys are already built with the raised sides H, Figs. 3 and 4. I adapt my valve to them, as shown, by inserting a soap-stone brick, *h'*, drilled out so as to serve as a bearing for the pivot. The soap-stone prevents the creaking so objectionable about a cowl.

When the wind blows square across the chimney the valve hangs perpendicular, and the raised sides prevent the wind blowing down. As soon as it varies to either quarter the valve lies over, as shown in the drawing, preventing the wind from acting upon the current of smoke, except in the same direction only with itself.

I claim—

The valve B pivoted so as to tilt over by the pressure of the wind upon its upper surface, substantially as herein described, in combination with the raised sides *a'* of the chimney.

WM. H. MYERS.

Witnesses:

JAMES E. COOKE,
JOHN F. GRANT.