

(No Model.)

T. KEYS.
CHIMNEY COWL.

No. 471,388.

Patented Mar. 22, 1892.

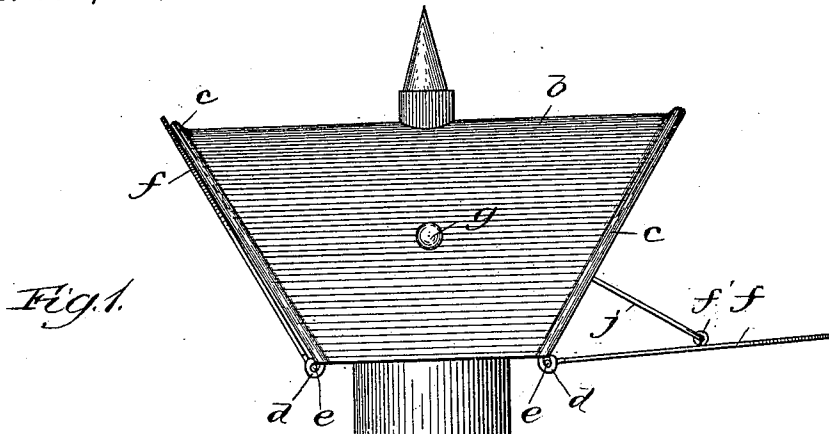


Fig. 2.

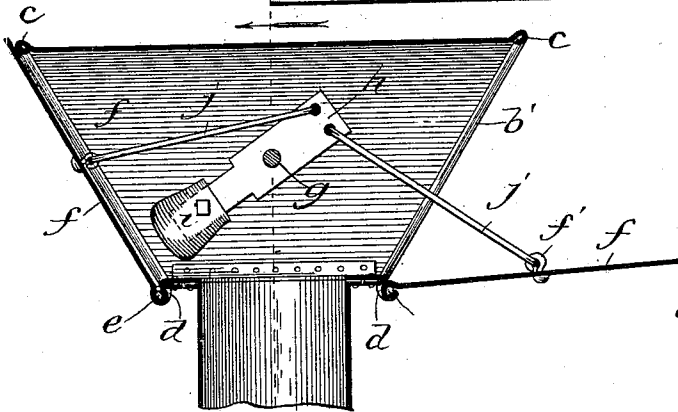
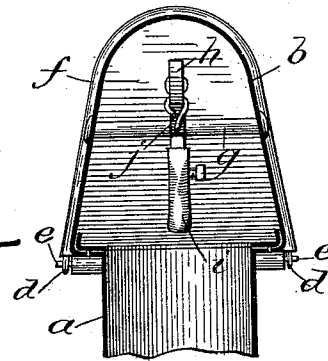


Fig. 3.



Witnesses:

Edw. C. Clegg,
Clifford V. White.

Inventor:

Thomas Keys.
By David H. Fletcher
Att'y.

UNITED STATES PATENT OFFICE.

THOMAS KEYS, OF CHICAGO, ILLINOIS.

CHIMNEY-COWL.

SPECIFICATION forming part of Letters Patent No. 471,388, dated March 22, 1892.

Application filed November 3, 1891. Serial No. 410,757. (No model.)

To all whom it may concern:

Be it known that I, THOMAS KEYS, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Chimney-Cowls, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

10 Figure 1 is a side elevation of an improved chimney-cowl embodying the features of my invention. Fig. 2 is a vertical longitudinal sectional view thereof; and Fig. 3 is a transverse vertical sectional view taken upon the
15 line 3, Fig. 2.

Corresponding letters of reference in the different figures designate like parts.

The object of my invention is to so construct a chimney-cowl that it may act automatically in such a way as to insure a continuous and uniform draft of the chimney regardless of the direction or the sudden changes and variations of the wind-currents.

20 To this end my invention consists in the combination of elements, hereinafter more particularly described and claimed.

Referring to the drawings, *a* represents the chimney-flue, which is provided with an enlarged base constructed in the usual way for
30 the purpose of attaching the same to the masonry. To the top of said flue is rigidly attached the body *b* of the hood or cowl, which is flared outwardly at the ends, as shown in Fig. 1, being preferably longer at the top than at the bottom. The edges at the respective ends
35 are wired, as shown at *c*, in order to impart rigidity to the structure, the ends *d* of said wires being bent in circular form for the reception of wires *ee*, attached to wings *ff*, which
40 are thereby hinged to the respective ends of said hood. Extending transversely across the hood midway between its ends and about midway between the top and bottom is a cross-bar *g*, to which is attached at right angles thereto a
45 bar *h*, which is so weighted at its lower end, as shown at *i*, as to normally retain a vertical position. Said weight is rendered adjustable by means of a set-screw, as shown. Rods *j* are loosely attached to the wings, re-

spectively, by means of eyes *f'*, the opposite 50 ends of said rods being in turn loosely secured to the bar *h*, preferably at a point above its axis, as clearly shown in Fig. 3. The rods *j* are of sufficient length to permit the wings to stand out obliquely from the ends 55 of the hood in an equal degree when the weighted bar *h* is in its normal position. It is obvious that when the pivoted or suspended bar *h* is in a vertical position a very slight force exerted upon either of the wings 60 will cause it to swing, and when raised to its full limit it exerts the greatest resistance to the power which holds it there. This enables the device to respond readily to suddenly-shifting wind-currents and renders it 65 so sensitive thereto that it is at all times protected upon the windward side, while the smoke-exit is correspondingly unobstructed.

My improved device is simple, durable, and cheap, and I have found in actual practice 70 that it is so responsive to the slightest variation in wind-currents as to insure a perfect draft in chimneys that have been subjected to the most trying conditions.

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

1. The combination, with a chimney-flue, of a horizontal cowl having openings at opposite ends, a weight attached to a bar pivotally suspended within said cowl, normally-open wings hinged in operative proximity to said openings, and rods loosely connecting said wings with said pivoted and weighted bar, substantially as shown and described. 85

2. The combination, with the openings of a chimney-cowl, of normally-open pivoted wings attached to a suspended bar pivoted within said cowl, said bar being in operative connection with said wings, and an adjustable weight 90 upon said bar, substantially as specified.

In testimony whereof I have signed this specification, in the presence of two subscribing witnesses, this 31st day of October, 1891.

THOMAS KEYS.

Witnesses:

D. H. FLETCHER,
C. N. WHITE.