T. K. GRIFFITH.

Chimney-Cowl.

No 168,738.

Patented Oct. 11, 1875.

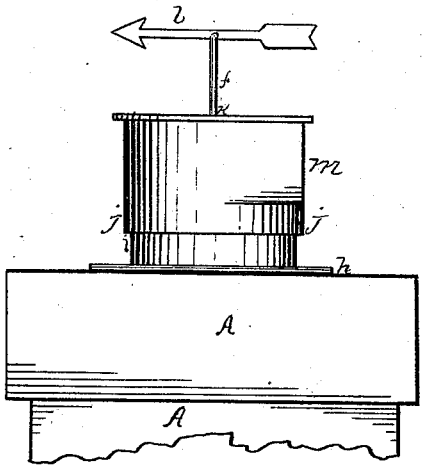


fig 1.

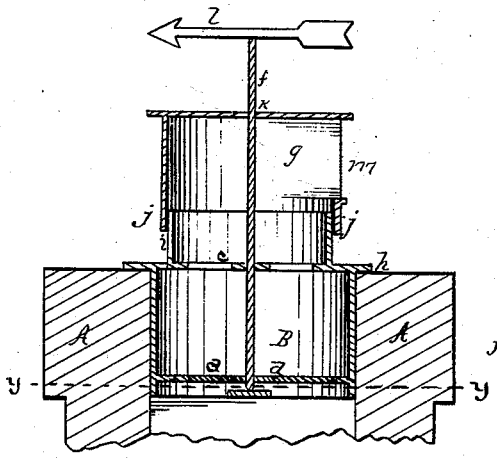
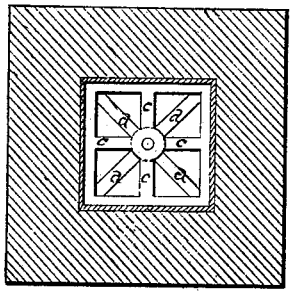


fig 2

Fig. 4.



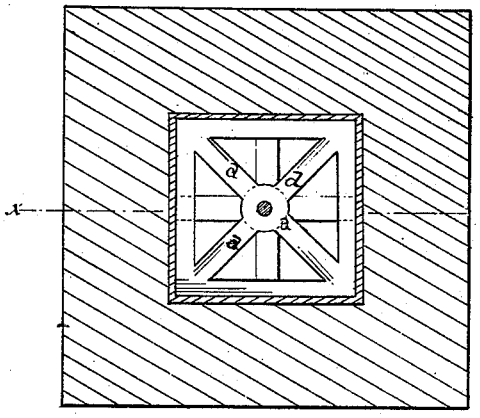


fig 3

Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS K. GRIFFITH, OF FAYETTE CITY, PENNSYLVANIA.

IMPROVEMENT IN CHIMNEY-COWLS.

Specification forming part of Letters Patent No. **168,738**, dated October 11, 1875; application filed August 6, 1875.

To all whom it may concern:

Be it known that I, THOMAS K. GRIFFITH, of Fayette city, in the county of Fayette and State of Pennsylvania, have invented a new and useful Improvement in Chimney-Cowls; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in cowls for chimney tops; and consists in a pedestal having two sets of spark-arresters, the arms of one being arranged to intersect the openings of the other, the device being provided with a bonnet and vane, substantially as hereinafter described and claimed.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 represents a section of a chimney provided with my improvement in cowl. Fig. 2 is a vertical section of the same. Fig. 3 is a transverse section of the chimney and pedestal of the cowl, taken on the line *y y*, Fig. 2, and illustrates the arrangement of the spark-arresters as viewed from below the pedestal. Fig. 4 is a reduced sectional view, showing the spark-arresters as viewed from above.

In the drawings, A represents the chimney. B represents the pedestal, the bore of which is furnished with two sets of spark-breakers, *c* and *d*, which consist of metal plates perforated, so that a set of radial arms are formed, extending from the center piece which forms a bearing for the vane-rod to the square-shaped edge piece which is connected with the pedestal. The arms of one set intersect the openings left between the arms of the other, and the spark-arresters are located about in the position shown in the drawing—that is to say, one near each end of the pedestal. These spark-breakers also serve the purpose of bearings for the axis *f* of the bonnet *g*. The upper end of the pedestal is provided with a horizontal projecting flange, *h*, which projects over the top edge of the chimney A. From the flange *h* projects a vertical flange, *i*, around which the flange *j* of the bonnet *g* moves. The bonnet *g* is secured at *k* to the axis *f*, the upper end of which is provided with a vane, *l*.

The operation of my improvement is as follows: The currents of smoke and sparks passing up through the pedestal B will come in contact with the breakers *c d e*, thereby forming an eddy-current which will smother out the sparks prior to issuing out of the mouth of the bonnet. The vane *l* will turn the bonnet so that its mouth *m* will always be in line with the line of travel of the currents of the wind.

Having thus described my improvement, what I claim is—

The pedestal B, constructed with upper and lower spark-arresters *c d*, arranged to intersect each other, as shown, and also constituting bearings for the shaft, in combination with the bonnet and vane, substantially as specified.

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Witnesses:

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