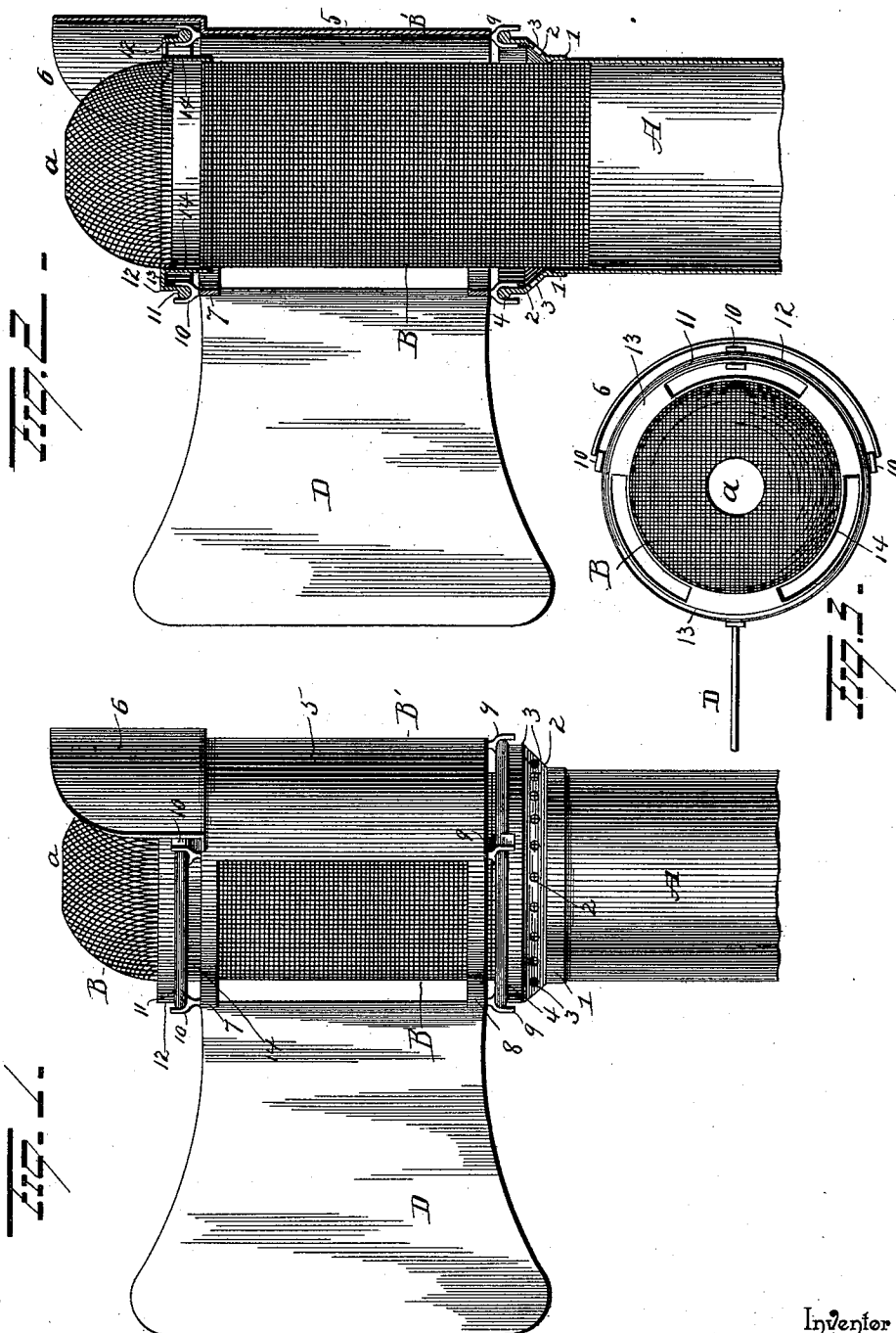


(No Model)

M. DUHIAM.
CHIMNEY COWL.

No. 583,847.

Patented June 1, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

MATHEW DUHAM, OF MENEKAUNEE, WISCONSIN, ASSIGNOR OF ONE-HALF
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CHIMNEY-COWL.

SPECIFICATION forming part of Letters Patent No. 583,847, dated June 1, 1897.

Application filed October 1, 1896. Serial No. 607,552. (No model.)

To all whom it may concern:

Be it known that I, MATHEW DUHAM, a resident of Menekaunee, in the county of Marinette and State of Wisconsin, have invented certain new and useful Improvements in Chimney Cows or Shields; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in chimney-cowls, the object of the invention being to provide a simple and efficient device for use more particularly on the chimneys of furnaces adapted for burning chaff or other fine fuel whereby to prevent the escape of burning particles and sparks from the chimney.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of my invention. Fig. 2 is a vertical section, and Fig. 3 is a horizontal cross-section.

A represents a portion of a chimney or chimney-pipe, to the upper end of which a cylindrical screen B of wire-cloth is secured, said screen being made to project some distance above the upper end of the chimney-pipe and is preferably made at its upper extremity with an opening *a*. A ring 1 encircles the upper end of the chimney-pipe A and is secured thereto in any suitable manner. The ring 1 is made with an outwardly and upwardly projecting flange 2, having perforations 3, and from the free or outer edge of this flange a vertically-disposed ring 3' projects, said ring 3' having a bead or enlargement 4 at its free upper edge to serve as a track or support for the revoluble cowl or shield B. The cowl or shield B is made with a portion 5 semicircular in cross-section, provided at its upper end with a cap or extension 6, which projects slightly above the screen B. To the upper and lower ends of the portion 5 of the cowl or shield semicircular bars 7 8 are secured, and to these bars (centrally between their ends) a vane D is secured and

projects outwardly at right angles to the portion 5 of the cowl. Several pairs of lugs 9 are secured to the lower edge of the portion 5 of the cowl and the lower curved bar 8 and serve to guide the movement of the cowl on the bead or track 4. The upper edge of the portion 5 of the cowl and the upper curved bar 7 are also provided with lugs 10, which embrace a bead or track 11 on the lower edge of a ring 12. The ring 12 is provided with flanges 13, which connect it with another ring 14, secured to the screen B, near the upper end of the latter.

From the construction and arrangement of parts above set forth it will be seen that the shield portion 5 of the cowl will be maintained at right angles to the direction of the wind by the vane D, so that the force of the wind cannot result in blowing sparks through the screen and scatter them. One-half and the top of the cowl being entirely open and the lower support of the cowl being perforated, ample draft will be permitted to prevent any possibility of the clogging of the screen.

My improvements are simple in construction, cheap to manufacture, and effectual in all respects in the performance of their functions.

Various slight changes might be made in the details of construction of my invention without departing from the spirit thereof or limiting its scope, and hence I do not wish to limit myself to the precise details herein set forth.

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

1. In a cowl or shield for chimneys, the combination with a cylindrical screen or netting adapted to be secured to the upper end of a chimney, and a circular track located at or near the upper and lower ends of the screen or netting, of a shield partially surrounding the screen or netting and constructed to embrace and turn on the tracks, and a vane connected with this shield.

2. The combination with a chimney and a screen thereon, of a ring secured thereto and having a perforated outwardly-projecting flange, a shield supported by said flanged ring and adapted to partially inclose the

screen, a ring secured to the screen, a vane, and lugs or flanges projecting from the shield and adapted to embrace the rings above and below the same, substantially as set forth.

- 5 3. The combination with a chimney, of a ring secured thereto and having a trackway at its upper end, a cylindrical screen secured to the chimney, a ring secured to the screen and having a trackway, a shield disposed between said rings and adapted to partially in-
10 close the screen, curved bars secured to the respective ends of the shield, lugs projecting

from said shield and curved bars and embracing said tracks, and a vane secured to said curved bars and disposed at right angles to the shield, substantially as set forth. 15

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

MATHEW DUHAM.

Witnesses:

JOHN BUSHELL,
MARTIN VAN DEN BERG.