No. 870,976. PATENTED NOV. 12, 1907.

M. LUDWIG.

CHIMNEY COWL.

APPLICATION FILED JULY 18, 1907.

Fig. 1.

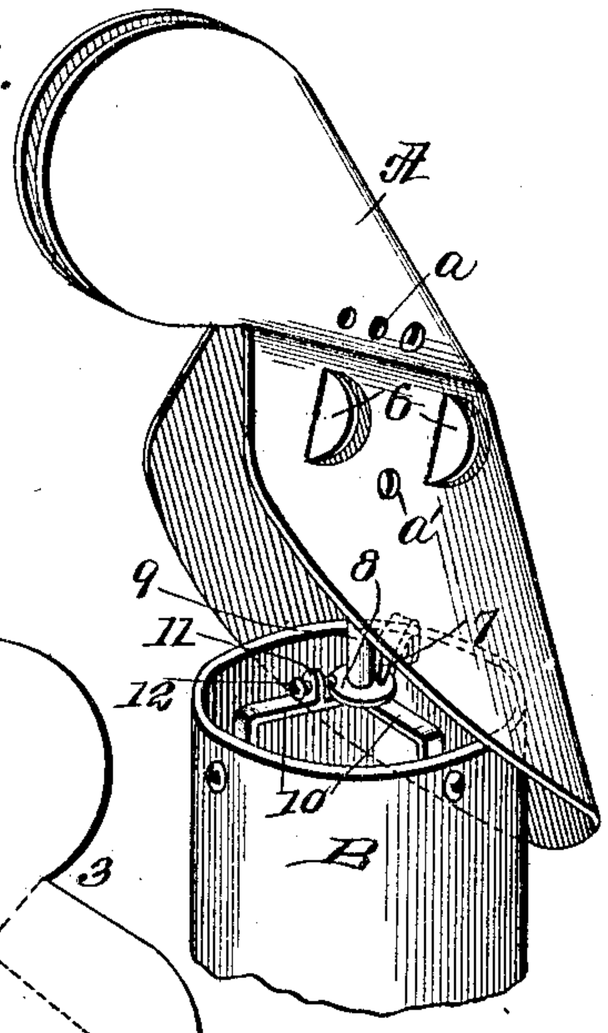


Fig. 2.

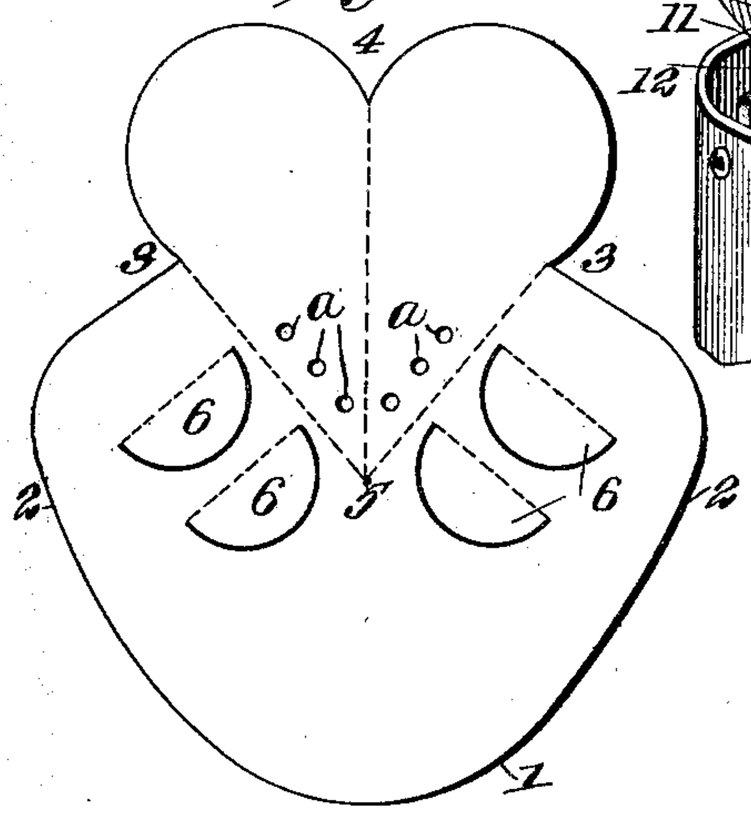


Fig. 3.

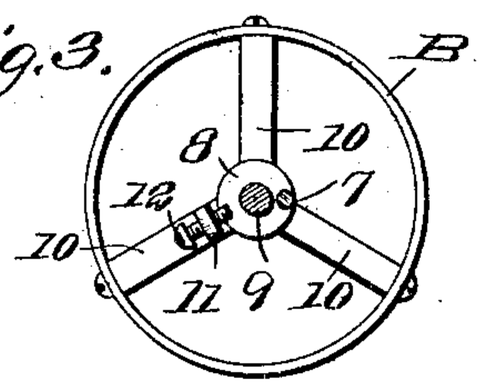


Fig. 4.

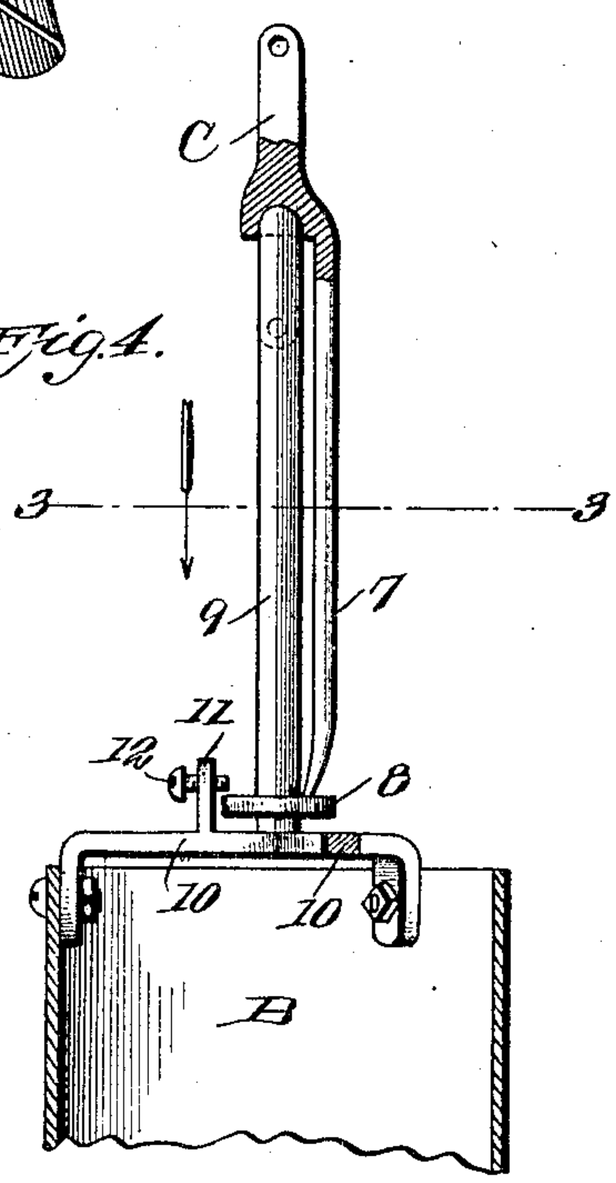
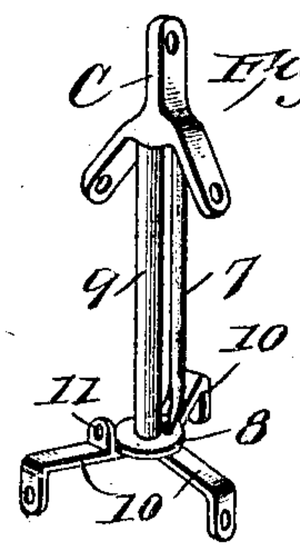


Fig. 5.



WITNESSES

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CHIMNEY-COWL.

No. 870,976. Specification of Letters Patent. Patented Nov. 12, 1907.

Application filed July 18, 1907. Serial No. 384,355.

To all whom it may concern:

Be it known that I, MARTIN LUDWIG, a citizen of the United States, and a resident of Albany, in the county of Linn and State of Oregon, have invented an Improved Chimney-Cowl, of which the following is a specification.

My invention is an improvement upon the one for which I have received United States Letters Patent No. 512,981; and the improvements relate to the construction of the top or cap proper of the cowl and to the means for supporting the same and securing it detachably yet rotatably.

The details of construction, operation and arrangement of parts are as hereinafter described and illustrated in the accompanying drawing, in which—

Figure 1 is a perspective view of my improved cowl and the support therefor. Fig. 2 is a plan view of the sheet metal blank from which the cap or top proper of the cowl is formed. Fig. 3 is a horizontal section on the line 3—3 of Fig. 4. Fig. 4 is a vertical section illustrating the construction of the support for the cowl proper. Fig. 5 is a perspective view of the support detached from the other parts.

The cap or top A constituting the body of the cowl is formed from a sheet metal blank, which is shown in Fig. 2 extended in the flat. The main portion of the blank is approximately heart-shaped and from the larger end of the same projects a portion which is practically of dove-tail form. In other words, the blank is rounded at one end 1, is broadened and has rounded swells at 2, is contracted or notched at 3 and the dove-tail portion is also notched centrally at 4. From the side notches 3, 3, and the end notch 4, dotted lines are drawn to a central point 5 and indicate the lines on which the blank is bent and creased. In other words, it is bent or creased along its central axis 4—5, and on the diagonal lines 3—5. Thus the tail portions, which may be said to be kite shape when taken in connection with the dotted lines, form the tail or vane *a* of the cowl A and the larger body portion is flared as shown in Fig. 1, so as to partly embrace the top of the chimney B. The body or lower portion of the cowl is provided with incisions 6, forming crescent-shaped tongues, which are bent outward to provide air openings and protecting flaps for the same.

As will be seen from Figs. 1 and 2, the flaps thus form in the rear side of the crescent shaped openings, or in other words, project beyond the front edge of the cowl so that they catch the air current to a certain extent and the portion which flows through the openings is directed rearward, thus increasing the draft of the chimney.

By constructing the cowl proper in the manner described, I provide a vane which is highly effective in holding the cowl in the eye of the wind or of causing it to revolve on its support for that purpose and the chimney draft is also promoted or increased by the means described.

The support for the cowl A comprises a spider or three pronged bar C, which is arranged in and attached to the cowl, and an arm 7 pendent therefrom, whose lower end is provided with a disk 8 that embraces the post or standard 9 whereon the spider is supported and adapted to rotate. The post 9 is formed integrally with or supported upon a three armed bracket 10 that is riveted or bolted to the chimney top B. The spider C is pivoted on the top of the post 9 and is held from lateral movement but free to rotate thereon by means of the pendent arm or rod 7 and the disk 8. To hold the spider from vertical movement or prevent its detachment from the post, the bracket 10 is constructed with a vertical lug 11, see Fig. 4, the same having a threaded opening to receive the screw 12, whose inner end projects over the rotatable disk 8. It is apparent that when the screw is in the position indicated in Figs. 1, 2, the disk is prevented from rising to any appreciable extent while perfectly free to rotate on the post 9 and thus the spider C and the cowl attached thereto are held securely yet rotatably and detachably.

In Fig. 1, *a*, *a'*, indicate openings through which rivets or bolts are inserted for attaching the cowl proper to the spider. It will be noted that a series of holes are formed at *a* to provide for shifting the point of attachment of the cowl proper to the upper or vertical arm of the spider C. Thus the inclination of the cowl proper may be changed at will in order to secure the best effect of an air blast or current thereon.

In practical construction of the cowl, I arrange the pendent arms or lugs of the spider C such distance apart and make them of such thickness that they will fit inside a seven-inch circle or chimney pipe B, as shown in Fig. 4, and will fit outside a six-inch circle or pipe. Thus the spider or cowl attachment is adapted for application to two different sizes of chimney pipes.

What I claim is—

1. The improved chimney cowl formed from a metal blank having side notches 3 and an end notch 4, the intervening projecting portions being rounded, whereby they are adapted when the blank is folded on the lines 3—5 and 4—5 as indicated, to lie parallel and close together, thus forming the vane or tail of the cowl as shown and described.

2. The combination with a rotatable support constituting a post and a three armed spider mounted thereon, of the cowl proper having openings in the side and a series of openings in the vane or tail portion whereby the same may be attached to the spider and its inclination changed at will as and for the purpose specified.

MARTIN LUDWIG.

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