

A. M. BASMAN.
VENTILATOR HOOD.
APPLICATION FILED JUNE 24, 1914.

1,126,348.

Patented Jan. 26, 1915.

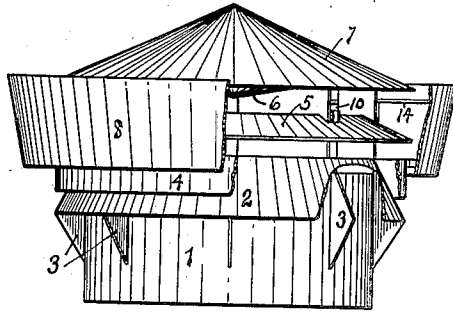


Fig. 1.

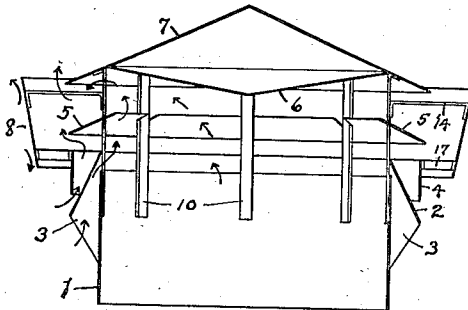


Fig. 2.

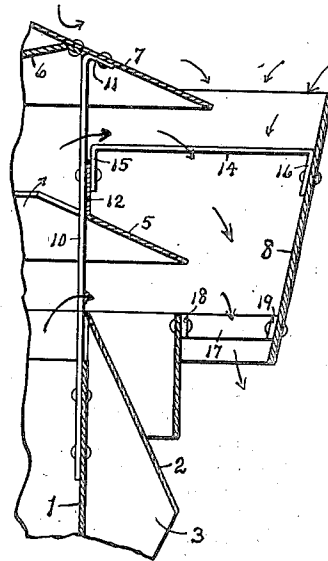


Fig. 4.

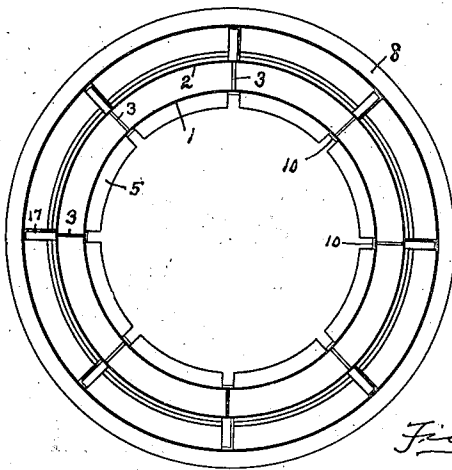


Fig. 3.

WITNESSES:

J. H. Herrault.

Hugo W. Kleinbring

INVENTOR

Anthony M. Basman.

BY

Edward N. Pagelee.
ATTORNEY

UNITED STATES PATENT OFFICE.

ANTHONY M. BASMAN, OF DETROIT, MICHIGAN.

VENTILATOR-HOOD.

1,126,348.

Specification of Letters Patent.

Patented Jan. 26, 1915.

Application filed June 24, 1914. Serial No. 847,099.

To all whom it may concern:

Be it known that I, ANTHONY M. BASMAN, a citizen of the United States, and a resident of Detroit, in the county of Wayne and State of Michigan, have invented a new and Improved Ventilator-Hood, of which the following is a specification.

This invention relates to hoods or cowls for the upper ends of ventilators, chimneys, smoke pipes and other conductors of gases, and its object is to provide a construction which will induce an upward current within the gas conductor, irrespective of the direction of the wind.

In this specification, the word "gas" is intended to include air, vapor and smoke.

This invention consists, in combination with the upper, preferably detachable end of a cylindrical stack, flue or pipe, of a frusto-conical skirting surrounding and extending slightly above said end, outer and inner storm bands mounted adjacent said skirting, a conical cap having its edge within and below the upper edge of the outer storm band, and a deflector within the outer storm band and below said cap.

In the accompanying drawing, Figure 1 is an elevation of this improved ventilator hood. Fig. 2 is a central vertical section thereof. Fig. 3 is a bottom plan thereof. Fig. 4 is a view on a larger scale of an outside portion of the construction shown in Fig. 2.

Similar reference characters refer to like parts throughout the several views.

When there is no wind, no hoods or cowls are necessary for the upper ends of stacks, flues or other conveyers of gases, but provision must often be made to prevent winds from any and all directions from forcing the gases back down the stack or flue, and to prevent rain from entering the same.

In the present construction, which may be all of sheet metal, the upper cylindrical end 1, which may be removably mounted on or be a part of a stack or flue, has secured to it in any desired manner, a frusto-conical skirting 2, preferably by means of the triangles 3. The upper edge of this skirting is preferably of the same diameter and a short distance above the cylinder 1, so that air striking against the cylinder 1 may be accelerated in its upward movement and have an ejector action on the gases passing upward through the part 1.

Surrounding the skirting and positioned

so that its upper edge is of substantially the same height as the upper edge of the skirting, is an inner storm band 4. Irrespective of the direction of the wind, it strikes against the lower portion of the skirting 2 and passes up between it and the storm band 4, and because of the space between these parts increasing in size upwardly, the pressure of the air will decrease. Immediately above the skirting 2 and storm band 4 is a narrow deflector 5. Any gases which pass up from the cylinder 1 and between the cylinder 1 and skirting 2, will pass up within the deflector 5 and then flow outwardly in contact with the second or upper deflector 6 that is secured to the lower side of the cap 7. These gases will then strike the edge of the cap 7 and flow out and up, uniting with the air that passes up between the conical skirting 2 and the storm band 4, and between the storm band 4 and the outer storm band 8.

When a blast of air is directed downwardly against this hood, it strikes the cap 7, the deflector 5 and the storm band 4, being deflected outwardly by them so that it will pass between them and the outer storm band. Rain will similarly be prevented from entering the part 1. Air that strikes the outer storm band 8 will be deflected upwardly or downwardly and have no effect.

The several parts are secured relative to each other in any desired manner. One preferred way is to employ narrow pieces of metal cut into proper lengths to make the brackets and supports. Any desired number of upright supports 10 (eight preferred) are secured to the inner side of the part 1 and their upper ends 11 are bent outwardly and downwardly to receive the cap 7. Tongues 12 may be cut from the inner deflector 5 and secured to these supports. Braces 14 having down-turned ends 15 and 16 may be secured to the supports 10 to carry the outer storm band 8, while braces 17 may have laterally turned ends 18 and 19 secured to the inner and outer storm bands to support the former.

When this ventilator hood is employed in locations where blasts or currents of air are deflected downwardly by high buildings or from other causes, such blasts will usually strike the cap 7, as indicated in Fig. 4, and such portions thereof as do not again flow upwardly will flow down over the outer edge of the cap between it and the outer storm band 8. The gases which rise in the cylinder 1 will

flow out over the upper edge of the skirting 2, and through the opening in the inner deflector 5, and then outwardly and mingle with the currents passing downwardly through the space between the inner and outer storm bands. Any tendency of this current of air to pass to the cylinder 1 is met by the inner deflector 5, which directs the current outwardly toward the space between the inner and outer storm bands.

Many changes in the proportions and details of construction may be made by those skilled in the art without departing from the spirit of my invention as set forth in the following claims.

I claim:

1. In a ventilator hood, the combination of a cylindrical central member, a frusto-conical skirting mounted thereon, a plurality of storm bands, one within the other mounted so as to surround the upper edge of the skirting, a cap mounted above the central member, and a plurality of deflectors mounted above the space between the skirting and the central member.

2. In a ventilator hood, the combination of a central cylindrical member, a frusto-conical skirting mounted thereon with its upper edge substantially the same diameter as the central member but spaced vertically therefrom, a storm band surrounding the upper portion of the skirting with its upper edge at substantially the height of the upper edge of the skirting, a second storm band of greater height than the first and positioned with its lower edge at substantially the height of the upper edge of the central member, and a conical cap mounted above the central member with its edge below the upper edge of the second storm band.

3. In a ventilator hood, the combination of a central cylindrical member, a frusto-conical skirting mounted thereon with its

upper edge substantially the same diameter as the central member but spaced vertically therefrom, a storm band surrounding the upper portion of the skirting with its upper edge at substantially the height of the upper edge of the skirting, a second storm band of greater height than the first and positioned with its lower edge at substantially the height of the upper edge of the central member, a conical cap mounted above the central member with its edge below the upper edge of the second storm band, and a narrow frusto-conical deflector mounted within the second storm band with its outer edge substantially above the first storm band.

4. In a ventilator hood, the combination of a central cylindrical member, a frusto-conical skirting mounted thereon with its upper edge substantially the same diameter as the central member but spaced vertically therefrom, a storm band surrounding the upper portion of the skirting with its upper edge at substantially the height of the upper edge of the skirting, a second storm band of greater height than the first and positioned with its lower edge at substantially the height of the upper edge of the central member, a conical cap mounted above the central member with its edge below the upper edge of the second storm band, a narrow frusto-conical deflector mounted between the cap and the first storm band, and a second deflector in the form of an inverted cone secured to the lower side of said cap.

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

ANTHONY M. BASMAN.

Witnesses:

HUGO W. KREINBRING,
L. M. SPENCER.