A. A. BARTLETT.

CHIMNEY CAP AND VENTILATOR.

APPLICATION FILED JUNE 19, 1912.

1,110,102.

Patented Sept. 8, 1914.

Fig. 2.

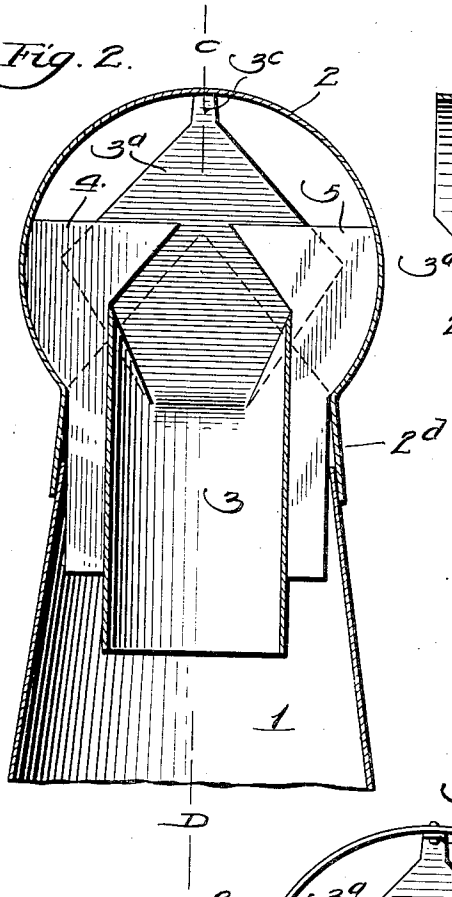
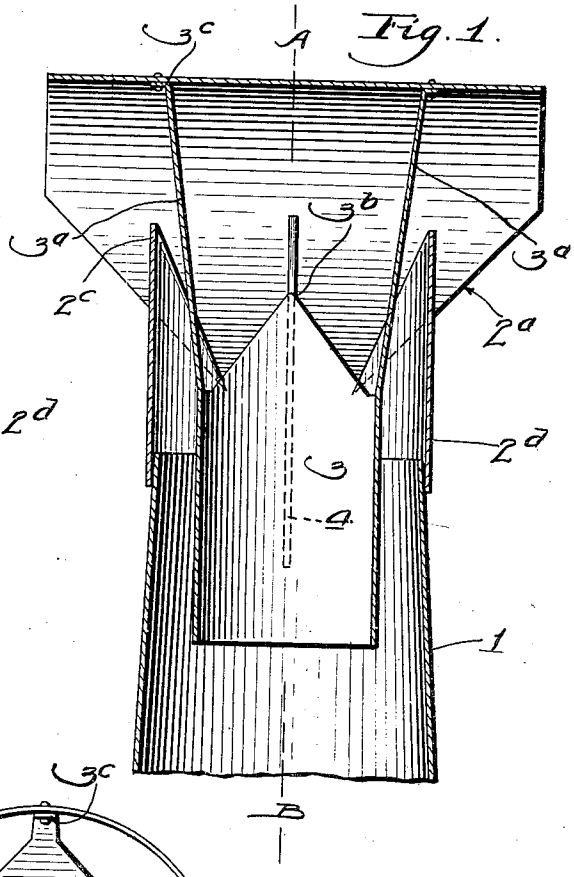


Fig. 1.



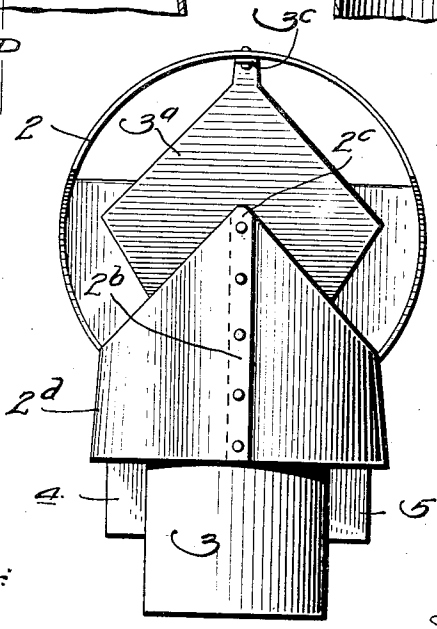


Fig. 3.

Witnesses:

Geo. J. Huting.

Elmer E. Rodabaugh.

Inventor:

Alton A. Bartlett.

by A. B. Bowman

his Atty.

UNITED STATES PATENT OFFICE.

ALTON A. BARTLETT, OF SAN DIEGO, CALIFORNIA.

CHIMNEY CAP AND VENTILATOR.

1,110,102. Specification of Letters Patent. Patented Sept. 8, 1914.

Application filed June 19, 1913. Serial No. 704,565.

To all whom it may concern:

Be it known that I, ALTON A. BARTLETT, a citizen of the United States, and a resident of San Diego, in the county of San Diego and State of California, have invented certain new and useful Improvements in Chimney Caps and Ventilators, of which the following is a specification.

My invention relates to improvements in chimney caps and ventilators, and the objects of my invention are, first, to provide an improved construction for facilitating the exit of the air from the chimney and to prevent downward drafts therein; second, to provide a device of this class that is simple of construction, economical of manufacture, and in the construction of which there is a very little waste of material.

With these and other objects in view as will appear, my invention consists of certain novel features of construction, combination and arrangement of parts, as will be hereinafter described in detail and particularly set forth in the appended claims,— reference being had to the accompanying drawings and to the characters of reference thereon, which form a part of this specification, in which:—

Figure 1 is a sectional view through C—D in Fig. 2, Fig. 2 is a sectional view at right angles thereto through A—B in Fig. 1, and Fig. 3 is an elevational view at right angles to that of Fig. 1, minus the connecting piece 1.

Similar characters of reference refer to similar parts throughout the several views.

The connecting piece 1, hood piece 2, inner pipe 3 and central deflectors 4 and 5 constitute the principal parts of my chimney cap and ventilator.

The connecting piece 1 is a pipe which is preferably circular at its top end, and which is adapted to be connected to a chimney or ventilator at its lower end. Over the connecting piece 1, at the top, is telescopically mounted the hood piece 2 which is cut from a rectangularly shaped piece of material and formed into a horizontal hood portion and a substantially cylindrical vertical portion 2^d adapted to fit over the connecting piece 1, having two triangularly shaped projections 2^c cut from the hood portion on lines 2^a as shown joined at 2^b and adapted for deflectors in the ends of the hood. Concentrically therewith in the lower portion 2^d of the hood piece 2 is rigidly mounted the inner pipe 3, which extends some distance below the portion 2^d. It is provided with oppositely disposed diamond shaped deflectors 3^a, the lower portion being cut from the material of the tube 3 and forming an integral part thereof, leaving the points 3^b, so as to be oppositely disposed to each other. These pieces 3^a are rigidly attached to the top of the hood by means of the extended portions 3^c and they are set at right angles to the open ends of the hood. Centrally disposed in said hood, between it and the inner pipe 3 are provided the two oppositely disposed central deflectors 4 and 5, which extend some distance below the hood piece.

It is obvious that with this construction, there is provided a chimney cap and ventilator which will deflect the air in various directions, but prevents its going down the chimney; that it will allow a ready exit from the chimney; that the hood is an absolute guard against the entrance of the wind at its sides; that the portions 2^c in the open ends of the hood provide deflectors covering portions of the openings thereof; that the diamond shaped pieces 3^a, by extending higher, cover other portions of said openings, but have an exit at each end between the two deflectors. The central deflectors being a guard to the central portion of the chimney on one side allow for an exit on the opposite side and leave only a small space for the wind to blow through while there is provided plenty of exit below said central deflectors; that the inner pipe being spaced apart from the vertical portion of the hood piece provides an additional space for exit besides that through the inner tube; that if the wind should blow into the end of the hood 2, a portion of it would be deflected by the point 2^a and a large portion by the diamond shaped deflector 3^a adjacent thereto. If some of the air should, however, be deflected downwardly it would only involve the outer surface on that side leaving ready passage for the smoke and heated air on the opposite side; that these deflectors 3^a would retard the rapid movement of the air and cause the heated air from below to heat it and carry it with it out of the opposite end of the hood; that the central deflectors 4 and 5 also retard a portion of that not retarded by the deflector 3^a and if any of said air would be deflected downwardly it would

only involve one-half of the chimney and the other side would be free to allow the air exit; all of said deflectors retarding the motion and allowing the heated air from below to heat it and carry it out on the free side of the cap, or the side opposite to which the wind comes from; that the construction is simple and the manufacture is economical as the deflecting parts are portions cut away from the tube or conducting portions, thus allowing the material to be cut with very little waste.

Though I have shown and described a particular construction and arrangement, I do not wish to be limited to this particular construction and arrangement, but desire to include in the purview of my invention, the construction and arrangement substantially as set forth in the appended claims.

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

1. A chimney cap and ventilator, comprising a chimney or ventilator connecting piece, a hood piece formed into a vertical tube and a horizontal hood, a small tube mounted concentrically therewith in the vertical tube portion thereof provided with oppositely disposed deflectors extending from said tube into the open ends of said horizontal hood portion, and central deflectors mounted between said smaller tube and said vertical tube portion of said hood piece and extending transversely into the horizontal hood portion of said hood piece.

2. A chimney cap and ventilator, comprising a chimney or ventilator connecting piece, a hood piece comprising a vertical tube telescopically mounted on said connecting piece and provided with an extended horizontal hood, a smaller tube mounted concentrically therewith in the vertical tube portion thereof provided with oppositely disposed deflectors extending from said tube into the open ends of said horizontal hood portion and connected to said hood portion near its top.

3. A chimney cap and ventilator, comprising a chimney or ventilator connecting piece adapted for the top end of a chimney or ventilator, a hood piece formed into a vertical tube and a horizontal hood telescopically mounted on the top end thereof, a smaller tube mounted concentrically therewith in the vertical tube portion, provided with oppositely disposed deflectors extending from said tube into the open ends of said horizontal hood portion and central deflectors mounted between said smaller tube and said vertical tube portion of said hood piece and extending transversely into the horizontal hood portion of said hood piece.

4. A chimney cap and ventilator, comprising a chimney connecting piece, adapted to fit over the top end of a chimney and diminishing in size upwardly, a hood piece formed into a vertical tube portion, and a horizontal hood portion, said vertical tube portion extending upwardly into the open end of said hood portion, a smaller tube mounted concentrically therewith in the vertical tube portion and extending some distance below the same, provided with oppositely disposed diamond shaped deflectors extending from the upper end of said tube into the open ends of said horizontal hood portion and attached thereto, and oppositely disposed central deflectors mounted between said smaller tube and said vertical tube portion of said hood piece and extending transversely into the horizontal portion of said hood piece above the top of said smaller tube.

In testimony whereof, I have hereunto subscribed my name in the presence of two subscribing witnesses.

ALTON A. BARTLETT.

Witnesses:
ABRAM B. BOWMAN,
ELMER E. RODABAUGH.