(No Model.)

W. L. STEVENS.

CHIMNEY CAP.

No. 347,394. Patented Aug. 17, 1886.

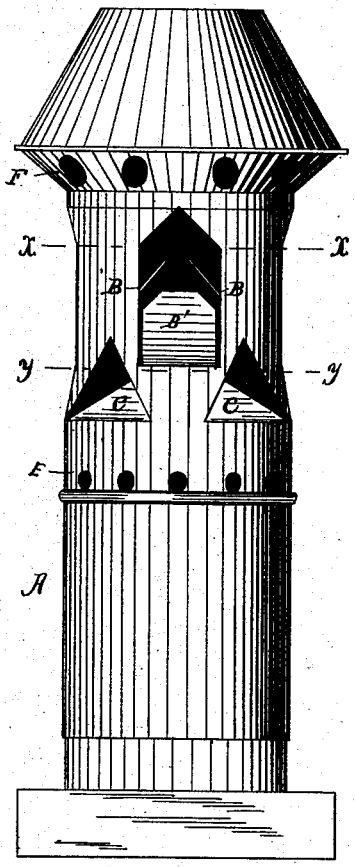

Fig. 1.

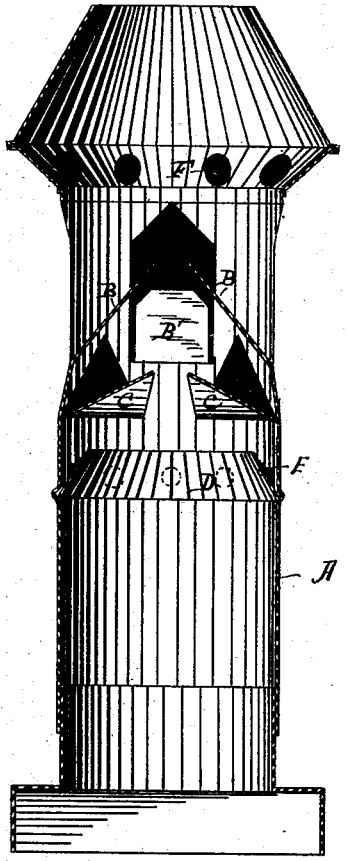

Fig. 2.

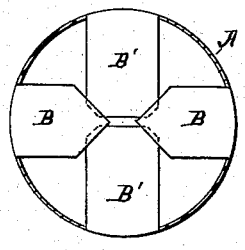

Fig. 3.

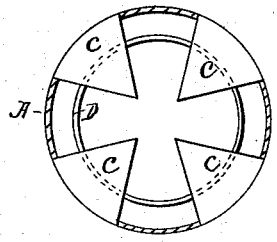

Fig. 4.

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CHIMNEY-CAP.

SPECIFICATION forming part of Letters Patent No. 347,394, dated August 17, 1886.

Application filed February 24, 1886. Serial No. 192,974. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. STEVENS, a citizen of the United States, residing at Cedarville, in the county of Cumberland and State of New Jersey, have invented certain new and useful Improvements in Chimney Smokers and Ventilators, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to furnish a smoke-pipe and ventilator for chimneys, which will, first, prevent wind from entering the chimney and causing the smoke and gases to be thrown off into the room or building containing the fire; second, which will prevent all sparks from being thrown out of the chimney; third, which will prevent rain or snow from entering the chimney and falling from thence into the house, and, fourth, which will, when the fire is extinguished, form a perfect ventilator for drawing the foul air from the chamber or house with which the chimney connects.

In the drawings, in which similar letters of reference indicate similar parts throughout the several views, Figure 1 is a side elevation of my smoke-pipe and ventilator; Fig. 2, a vertical central sectional elevation of the same; Fig. 3, a section of Fig. 1 on line *x x*, and Fig. 4 a section of Fig. 1 on line *y y*.

My smoke-pipe and ventilator consists of a cylindrical metal pipe, A, which is placed directly on top of the chimney, and, as is usual, it projects for some distance above the house-top.

B B B′ B′ are sections, which are stamped out on the four sides of the pipe A, and bent inward, as shown in Figs. 1, 2, and 3, one pair of the sections, as B B, overlapping the other pair, B′ B′, as shown.

C C C C are sections stamped out of the pipe A below the sections B B B′ B′, and midway between these sections, these sections C are bent inward, as shown in Figs. 1, 2, and 4.

D is a short truncated conical pipe placed within pipe A and below the sections C, as shown in Fig. 2.

E E E are holes in pipe A, the tops of which are slightly lower than the top of cone D.

F are holes in pipe A above sections B B′.

The sections B B B′ B′ and C C C C all have an upward inclination, and as the wind blows into pipe A through the holes formed by bending these sections in, it is immediately deflected upward and passes out through the top of the pipe A, and, owing to the arrangement of these sections one above the other, an artificial draft is created in the chimney which will be considerably greater than the natural draft, and which will draw out through the chimney all the foul air in the chamber or building into which the chimney opens, and so cause a perfect ventilation.

As the sections B, B′, and C are arranged, rain or snow cannot fall into the chimney, for if it fall into pipe A it is immediately carried out by running down the inclined sections.

The truncated cone D, which is placed in the pipe A below the sections C, is to guide the smoke toward the center of said pipe, and to prevent the air which enters said pipe through holes E from blowing down the chimney. The holes E are placed in the pipe in order to introduce air to increase the draft, and to let any rain-water out which may settle around cone D.

The arrangement of the sections B B′ C, which overlap one another, as shown, and the cone D form barriers which prevent cinders or sparks from being thrown out of the pipe.

Having thus described my invention, I claim—

1. The combination, in a smoke-pipe and ventilator, of the metal pipe A, with sections B B B′ B′, stamped out opposite each other on the four sides of the said pipe, and bent inwardly and overlapping each other, as shown, sections C C C C, stamped out of said pipe A below and between said sections B B′ and bent in, as shown, and the conical pipe D within pipe A and below sections C, all substantially as and for the purposes set forth.

2. The combination, in a smoke-pipe and ventilator, of the pipe A, having the sections B B B′ B′ C C C C stamped out of its sides and bent inwardly and arranged as shown, the holes E in said pipe A, and the conical pipe D, all arranged and operating substantially as and for the purposes set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM L. STEVENS.

Witnesses:
C. H. BATEMAN,
FRANKLIN LAURENCE.