(No Model.)

W. E. ESPERSON.

CHIMNEY CAP.

No. 417,415. Patented Dec. 17, 1889.

Fig. 1.

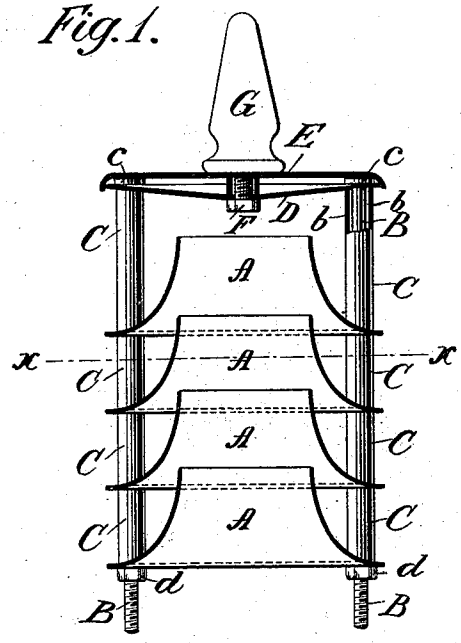
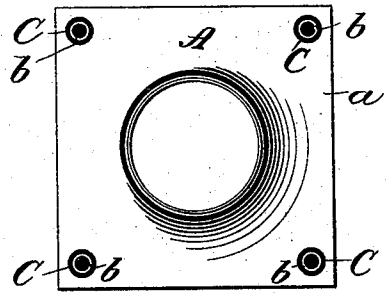


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM E. ESPERSON, OF BROOKLYN, NEW YORK.

CHIMNEY-CAP.

SPECIFICATION forming part of Letters Patent No. 417,415, dated December 17, 1889.

Application filed August 16, 1889. Serial No. 320,965. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. ESPERSON, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Chimney-Caps, of which the following is a specification.

My improvement relates to chimney-caps designed for facilitating the draft of chimneys.

I will describe in detail a chimney-cap embodying my improvement, and then point out the novel features in the claims.

In the accompanying drawings, Figure 1 is a vertical section of a chimney-cap embodying my improvement. Fig. 2 is a transverse section taken on the line *x x* of Fig. 1.

Similar letters of reference designate corresponding parts in both the figures.

A designates the deflectors. As shown more clearly in Fig. 2, each of the deflectors is approximately rectangular at its base and provided with a horizontally-extending flange *a*. Inward of the flange *a* the deflectors are, as shown, approximately conoidal in shape, and each has a concave vertical exterior. They are all hollow, having open upper and lower ends, and the truncated upper end of one extends into the base of another.

The deflectors A are supported upon vertically-extending posts or pillars B, of which there are four represented. These posts or pillars are shown as bolts, and they extend through suitable apertures *b*, formed in the deflectors A near the corners thereof and in the flange *a*. Surrounding the posts or pillars B, and arranged between the flanges *a* of the deflectors A, are tubes or sleeves C, which operate as spacing-pieces to maintain the deflectors A at proper relative distances from each other. The upper ends of the posts or pillars B are provided with heads *c*, which may be nuts. Near the upper end of the cap is a plate D, which plate D is provided near its corners with suitable apertures, through which the posts or pillars B extend. The plate D is arranged between the heads *c* upon the posts or pillars B and the upper of the tubes or sleeves C. Upon the lower end portions of the posts or pillars B are nuts *d*. By tightening these nuts the deflectors A, the sleeves or tubes B, and the upper cap-plate D are firmly secured together. I have shown another plate E, extending over the upper end of the cap. This plate has its outer edges turned downwardly, as shown, and extends about the outer edge of the plate D. I have shown a means for securing the plates D and E together, consisting of a bolt F, passing through the same, with which engages an ornamental top G. The lower end portions of the posts or pillars B may be engaged with the upper end of the chimney in any suitable manner.

The deflectors A may, when made in the form shown or of approximately such form, be struck up from single pieces of metal in suitable dies. If, however, they are more or less pyramidal in shape, they may be made of separate pieces, secured together by rivets or otherwise.

It is to be observed that the deflectors A will in any event have concave vertical exteriors. This is very advantageous, because it causes the wind striking them to be deflected upwardly with considerable force, and thus creates a strong draft up the chimney. It is also to be observed that the cap is open upon all sides, and is thus free to be acted upon by the wind in whichever direction the latter may be blowing.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a chimney-cap, the combination, with supporting posts or pillars, of a series of hollow approximately-conoidal deflectors having open upper and lower ends, the truncated end of one entering the base of another, said deflectors being provided near their lower ends with horizontally-extending flanges, through which said posts or pillars extend and having vertically-concave exteriors, substantially as specified.

2. In a chimney-cap, the combination, with supporting posts or pillars, of a series of hollow approximately-conoidal deflectors having open upper and lower ends, the truncated end of one entering the base of another, and thimbles or tubes surrounding said pillars or posts and operating as spacing-pieces to separate said deflectors, said deflectors having vertically-concave exteriors, substantially as specified.

WILLIAM E. ESPERSON.

Witnesses:
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