

J. H. KIRKWOOD.

Chimney Cap.

No. 49,890.

Patented Sept. 12, 1865.

Fig. 1.

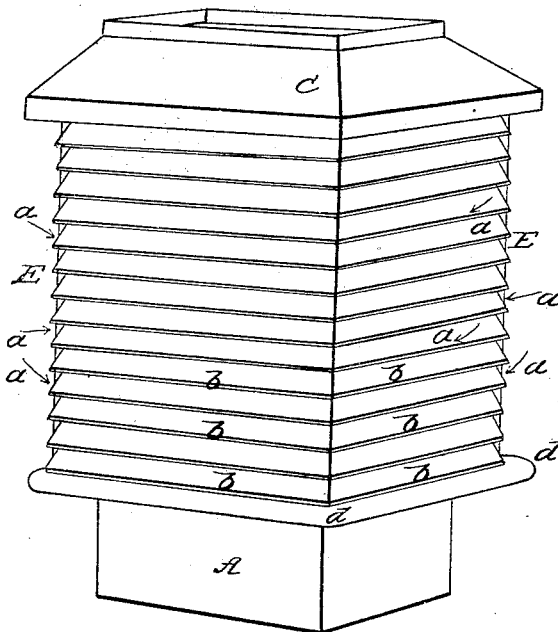
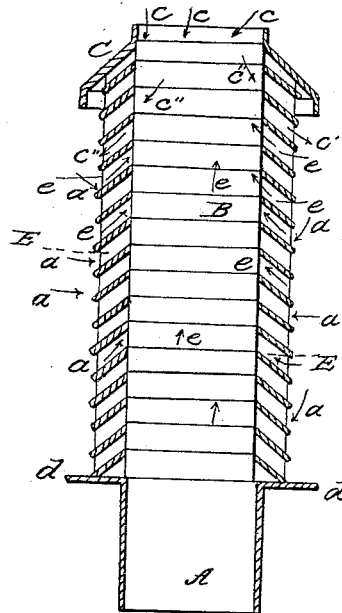


Fig. 2.



Witnesses:

W. H. Burridge
J. Holmes

Inventor:

J. H. Kirkwood,

UNITED STATES PATENT OFFICE.

J. H. KIRKWOOD, OF CLEVELAND, OHIO.

IMPROVEMENT IN CHIMNEY-CAPS.

Specification forming part of Letters Patent No. 49,890, dated September 12, 1865.

To all whom it may concern:

Be it known that I, J. H. KIRKWOOD, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Chimney-Caps; and I do hereby declare that the following is a full and complete description of the construction of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the cap. Fig. 2 is a vertical section.

Like letters of reference denote like parts.

My improvement relates to constructing a chimney-cap whereby the openings of chimneys can be protected against the changing and diving currents of the wind and made to draw equally well under all circumstances.

Fig. 1 represents the cap, the lower part, A, of which is designed to enter the chimney, fitting close inside of the walls, the flange *d* resting on the top. From this upward or the portion B of the cap is formed of a series of slats, *b*, on the sides and ends, inclined as represented, and secured to standards E at the corners that are placed angling to the slats. On the top is a bonnet, C, fastened to the corner standards, E, that is inclined downward similar to the slats and projects over them, as shown in the figures. When this cap is connected to a chimney it protects the opening from the downward and changing currents of the wind, for as the wind strikes the cap on any side, either in a downward direction or more directly sidewise, as indicated by the arrows *a*, the currents are deflected by the inclination of the slats, and made to take an upward direction between the slats, as indicated by the arrows *c* in Fig. 2, producing an up-

ward draft through the cap. The currents impinging on the inclined surface of the bonnet C are deflected also in a similar manner; and it has been found by practical tests that the bonnet, projecting over as it does, has a tendency to draw or concentrate the currents under it, producing a stronger upward draft in connection with the slats. If the currents are very directly downward, *c'*, or from any cause they drive down into the cap more or less, they are deflected or turned away from the center and made to pass out at the sides and ends, as noted by the arrow *c''*, by the outward draft there would be between the slats, in case of diving currents into the cap, together with there being more or less of an upward draft through the center of the cap from the chimney, which would aid in thus deflecting the currents and entirely prevent them from descending into the chimney to obstruct the draft. Hence it follows that a chimney provided with a cap of this kind will draw equally well, whatever may be its position or the direction of the wind.

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

The chimney-cap when constructed of a series of fixed rectangular slats, *p*, arranged on the sides and ends in an inclined position, overreaching each other, and each series connected at the ends to the single obliquely-set standards E, in combination with the bonnet C, furnished with a rectangular opening upon its top, and the flange *d*, in the manner and for the purpose set forth.

J. H. KIRKWOOD.

Witnesses:

W. H. BURRIDGE,
J. HOLMES.