C. O. G. KENNEL.

Chimney-Cowl.

No. 211,333. Patented Jan. 14, 1879.

Fig. 1.

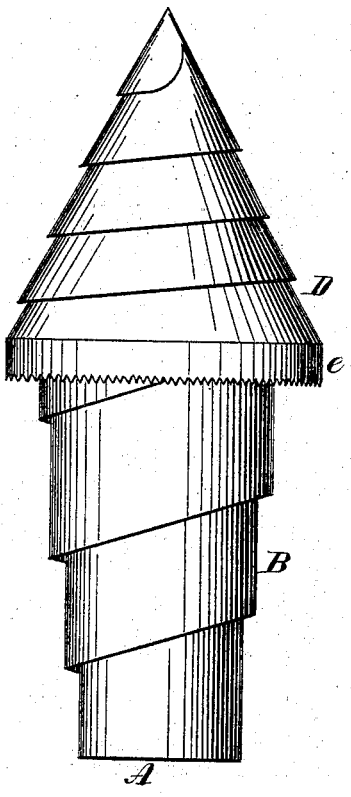
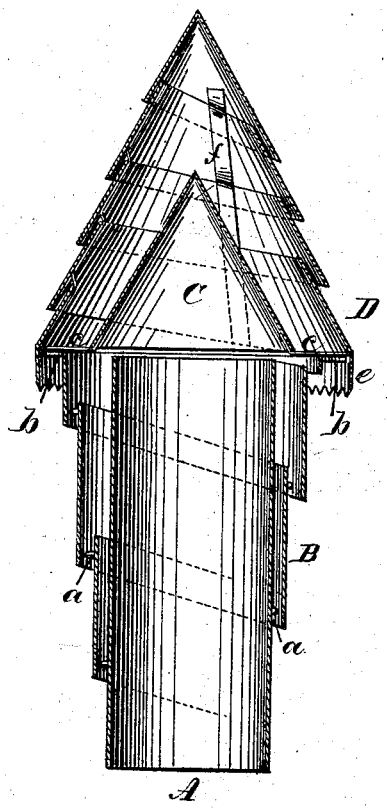


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES O. G. KENNEL, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, THOMAS C. HOLLAND, AND RALPH IRVIN, OF SAME PLACE.

IMPROVEMENT IN CHIMNEY-COWLS.

Specification forming part of Letters Patent No. **211,333**, dated January 14, 1879; application filed July 5, 1878.

To all whom it may concern:

Be it known that I, CHARLES O. G. KENNEL, of the city, county, and State of New York, have invented a new and Improved Chimney-Cowl, of which the following is a specification:

Figure 1 is a side elevation of my improved cowl. Fig. 2 is a vertical section.

Similar letters of reference indicate corresponding parts.

The object of my invention is to construct a chimney cowl or ventilator that will deflect the natural current of air so that a draft in the chimney or ventilating-shaft is continually maintained; also, to protect the chimney or ventilating-shaft from downward currents and from rain or snow.

In the drawing, A is a sheet-metal chimney-top, to which is attached, near its upper end, a strip of metal, B, bent into a spiral form, and having spaces between the successive convolutions of the spiral. The spirals overlap each other and increase in diameter toward the top.

The coils are connected, at intervals, by stays *a*, and the end of the upper and outer coil is lapped onto the one that precedes it, and is trimmed off horizontally, and upon it a flange, *b*, is formed, which is notched or serrated. The pipe of which the chimney-top is formed extends nearly to the top of the spiral.

The top of the cowl consists of an inner cone, C, and an outer cone, D, which are secured together by attachment to arms *c*, which radiate from the base of the inner cone and are fastened to the base of the outer cone.

The inner cone, C, is of larger diameter than the chimney-top, and is supported a small distance from it. The outer cone is larger at its base than the top of the spiral attached to the chimney-top, and it is provided with a narrow downwardly-projecting rim, *e*, which surrounds the serrated flange *b* and keeps the cones in place.

The cone D is made from a strip of sheet metal, which is coiled spirally, the upper coils overlapping the lower ones and diminishing in diameter toward the top, where it terminates in a point. There is a small space between the successive convolutions for the escape of smoke. The several convolutions of the spiral of which the cone is formed are stayed by strips *f*, which are either soldered or riveted to the coils.

It will be seen that this construction renders it impossible for the wind to blow down the chimney, and also prevents the entrance of snow or rain, while it permits of the free exit of heat and smoke.

A side current of air from any direction promotes the draft, and the effectiveness of the device is increased by the extension of the chimney-top through the spiral.

I am aware that a chimney cap or pot has been proposed in England which is constructed of a lower metallic cylinder, to which is attached a plate which is curved or convoluted in the manner of a helix around an assumed vertical axial line, the convolutions gradually increasing upward in diameter, and a sufficient space being left between each convolution to allow a free current of air to pass through the same. The convoluted plate is surmounted by a cylinder, which forms the top of the chimney-pot, said top being perforated or slotted for the passage of air.

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

1. The combination of the spirally-bent strip B with the chimney-top A, when the latter extends nearly, or quite, through the spiral formed of the said strip B, substantially as shown and described.

2. A cowl for chimney-top consisting of a conical spiral formed of sheet metal, in which the upper convolutions overlap the lower convolutions, substantially as herein shown and described.

3. A chimney-cap consisting of the outer cone, D, formed of a spirally-bent strip of metal, and the inner hollow sheet-metal cone, C, substantially as herein shown and described.

CHARLES O. G. KENNEL.

Witnesses:

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