(No Model.)

E. J. TROBRIDGE & R. H. CONERY.

CHIMNEY TOP.

No. 343,652. Patented June 15, 1886.

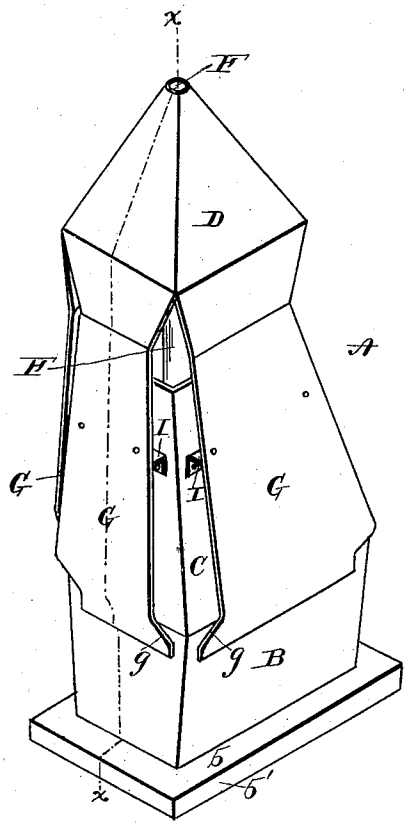

Fig. 1.

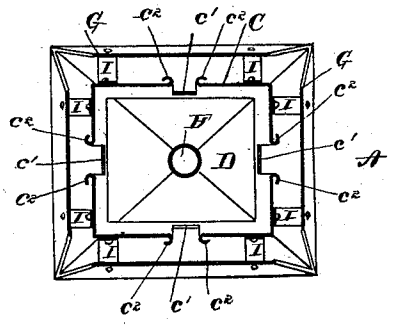

Fig. 2.

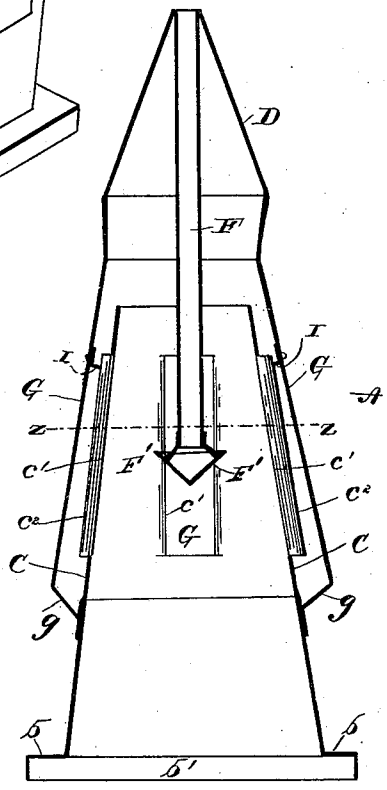

Fig. 3.

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UNITED STATES PATENT OFFICE.

EDWIN J. TROBRIDGE AND RILON HARESS CONERY, OF IRWIN, IOWA.

CHIMNEY-TOP.

SPECIFICATION forming part of Letters Patent No. 343,652, dated June 15, 1886.

Application filed April 21, 1886. Serial No. 199,651. (No model.)

To all whom it may concern:

Be it known that we, EDWIN J. TROBRIDGE and RILON HARESS CONERY, citizens of the United States, residing at Irwin, in the county of Shelby and State of Iowa, have invented a new and useful Improvement in Chimney-Tops, of which the following is a specification.

Our invention relates to improvements in chimney caps or tops; and it consists of the peculiar and novel construction and combination of the various parts for service, substantially as hereinafter fully set forth, and specifically pointed out in the claims.

The object of our invention is to provide an improved chimney cap or top, which shall prevent any downward draft in the chimney proper, and which shall effectually exclude wind from the chimney, and thereby obviate the serious objection that exists in a great number of chimneys—*i. e.*, that of the downward flow or entrance of air and wind into the stove, which is liable to put the fire out and fill the room or apartment with smoke.

A further object of our invention is to provide an improved chimney-top, which shall permit the free escape of the smoke and deflect the same into various directions, and which shall furthermore be very simple, strong, and durable in its construction, thoroughly effective in operation, and cheap and inexpensive of manufacture.

In the accompanying drawings, Figure 1 is a perspective view of our invention adjusted for use upon a chimney. Fig. 2 is a horizontal sectional view on the line *z z* of Fig. 3, and Fig. 3 is a vertical central sectional view on the line *x x* of Fig. 1.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates our improved chimney cap or top, which is constructed of either sheet or cast metal, and comprises a base, B, a body, C, and a cap, D, the peculiar construction and arrangement of the several parts of which we will now proceed to describe more fully and in detail.

The body C of the improved chimney-top is made substantially square, rectangular, or other angular form in cross-section, and the side inclosing-walls thereof are inclined inwardly toward each other at their upper ends; and the said upper end of the body is left open for the free passage or escape of the smoke and other products of combustion.

The side walls of the body C are each provided with a longitudinal slot or opening, c', also for the escape of the smoke, and around the edges of the longitudinal slots are provided protecting-flanges c^2, that extend outwardly from the vertical faces of the inclosing-walls of the body.

The base B of the chimney-top is suitably secured to or cast with the body C, and the walls thereof are inclined inwardly toward each other at their lower ends, so that they are contracted in diameter less than the diameter of the lower end of the body C. The lower end of the base B is provided with a lateral flange, *b*, that projects outwardly therefrom around its several edges, and from the outer free edges of the horizontal flange *b* depends a vertical flange, *b'*. The horizontal flange of the base fits or rests on the upper edges of the chimney, and the vertical flange thereof bears against the vertical faces of the said chimney, the said horizontal and vertical flanges being suitably secured to the chimney by means of through-bolts or other suitable devices.

The cap D of the chimney-top is fitted over the upper open end of the body C thereof, and with the side walls thereof out of contact with the said body. The walls of the cap are arranged at an acute angle to each other, so that the upper ends thereof come together at the center of the said body, and through the meeting ends of the cap or the apex thereof is passed a tubular standard, F, that is suitably secured to the cap, and depends downwardly therefrom within the body of the chimney-top.

G designate side shields, that are arranged parallel with the side walls of the body C, and at a short distance therefrom, to permit of the free escape of the smoke and exclude wind, &c., from the body, one of the said shields being provided for each of the side walls of the body. The upper edges of the shields are connected to the lower edges of the cap or joined therewith, and at the point where the side shields join the lower edges of the cap the shields are bent at an angle to bring the upper edges thereof and the lower edges of the cap away from and out of contact with the upper edges of the body, so as to leave a surrounding space

for the escape of the smoke from the upper open end of the body. The side shields are bent at an angle at their lower ends, as at *g*, and secured to the body C at points thereon below the lower ends of the slots therein, and the said shields are braced and strengthened along their edges by angle plates I, that are suitably secured to the body C and the inner faces of the shields.

The lower end of the tubular standard F carries a deflector, F′, that is arranged within the body C at about the middle thereof, with its side edges out of contact with the inclosing-walls of the body. It will be observed that the deflector causes the ascending smoke, &c., to pass out through the longitudinal slots of the body of the cap, while it permits a small portion of the smoke to pass through the open upper end of the body, and that the side shields cause the smoke to be deflected to various points and effectually prevent the entrance of wind, rain, snow, &c., into the chimney.

The operation of our invention will be readily understood from the foregoing description, taken in connection with the drawings.

We do not desire to confine ourselves to the exact details of construction and form and proportion of parts herein shown and described as an embodiment of our invention, as we are aware that changes therein can be made without departing from the spirit or sacrificing the advantages of our invention.

Our improved chimney-top is made in various sizes to fit different chimneys, and it can be made of sheet metal—as, for instance, galvanized iron—or of cast metal.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the body having the exit-openings in its walls, the deflector suspended therein out of contact with the body, and the cap arranged out of contact with open upper end of the body, substantially as described.

2. The combination of the body having the open upper end, the deflector arranged within the body and out of contact therewith, the side shields arranged over the openings in the walls of the body and out of contact therewith, and the cap fitted over the open end of the body and leaving an open space surrounding the lower edges thereof and the body, substantially as described.

3. In a chimney-cap, the combination of the base, the body having the exit-openings in its walls and the open upper end, the deflector suspended within the body and out of contact therewith, the cap fitted over the open end of the body, the side shields arranged over the openings in the walls of the body, out of contact therewith, and secured at their lower edges to the body and at their upper edges to the cap, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

EDWIN J. TROBRIDGE.
RILON HARESS CONERY.

Witnesses:
J. H. DUDLEY,
A. J. BLADES.