

WILLIAM RICHARDS.

Improvement in Chimney-Tops.

No. 114,342.

Patented May 2, 1871.

Fig. 1.

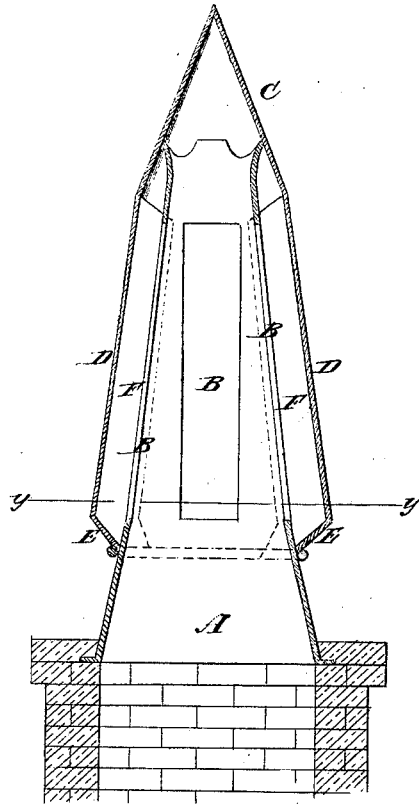
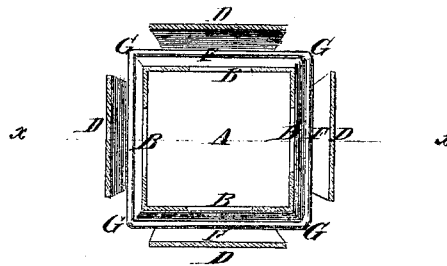


Fig. 2.



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United States Patent Office

WILLIAM RICHARDS, OF LONDON, ENGLAND.

Letters Patent No. 114,342, dated May 2, 1871.

IMPROVEMENT IN CHIMNEY-TOPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM RICHARDS, of London, in England, have invented a new and useful Improvement in Chimney-Tops; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The purpose of my invention is to improve upon the construction of the Whitely chimney-top, which has been well known to the public for many years. That top is flat, and in the event of a downward current of wind retards the draught very seriously.

This objection I have overcome by making the top pointed or conical, whereby a downward current only augments the ordinary draught.

In the accompanying drawing—

Figure 1 represents a vertical section of the top taken on the line *x x* of fig 2.

Figure 2 is a horizontal section on the line *y y* of fig. 1.

Similar letters of reference indicate corresponding parts.

A is a square hollow metallic stand of obelisk form, with a long slot, B, in each of its four sides. Around its base there is a flange by means of which it is securely fastened in the brick-work of the chimney, directly over the smoke-flue, as seen in the drawing.

C is a conical cap, which is placed over the top of the part A, and larger in diameter, as represented.

D is a plate of metal on each side of A, and of about the width of the side, and attached to the base of the cap C at the upper end, and to the lower part of A (below the slot B) at the lower end.

The lower ends of these plates are bent inward, as seen at E, so that the plates stand out from A and in front of the slots B, thus forming air-passages F of a length equal at least to the length of the openings or slots B.

This leaves open spaces G at the angles, through which the air or wind passes into and escapes from the passages F, and also through which the smoke escapes.

The wind, in striking the chimney-top, will pass through two of the passages F at the same time, and these currents, in passing the slots B, will cause by their greater velocity currents to flow upward and through these slots.

A partial vacuum is thus produced, or the pressure of air in the chimney is so much reduced that the smoke rises and finds a ready exit.

Experiment has proved that this top is a cure for smoky chimneys. Every part being stationary, it is much more durable and much less liable to get out of order than the apparatus ordinarily used for this purpose.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The conical cap C D E, combined, as described, with the slotted stand A, for the purpose described.

The above specification of my invention signed by me this 30th day of August, 1870.

WILLIAM RICHARDS.

Witnesses:

GEO. W. MABEE,
ALEX. F. ROBERTS.