

(No Model.)

W. A. PEARCE.
CHIMNEY CAP.

No. 482,851.

Patented Sept. 20, 1892.

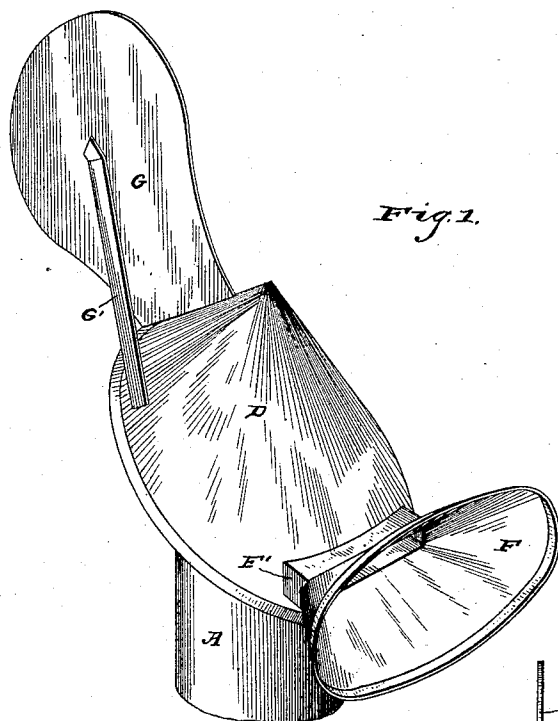


Fig. 1.

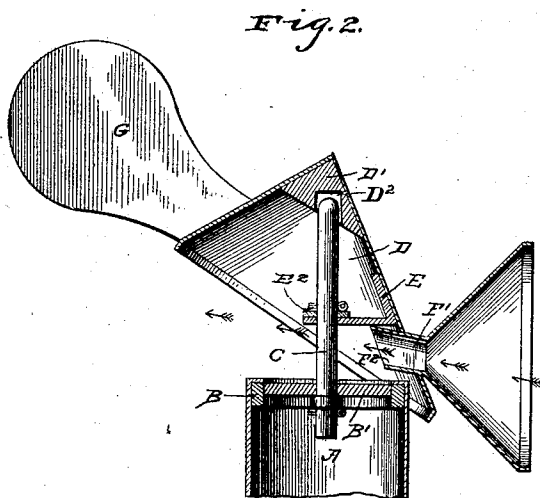


Fig. 2.

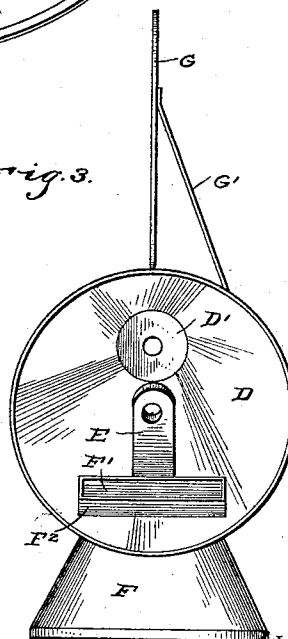


Fig. 3.

Witnesses

B. S. Ober

Chas. S. Nyer

By *his* Attorneys,

Calhoun & Co.

Inventor
William A. Pearce.

UNITED STATES PATENT OFFICE.

WILLIAM A. PEARCE, OF HOUGHTON, MICHIGAN.

CHIMNEY-CAP.

SPECIFICATION forming part of Letters Patent No. 482,851, dated September 20, 1892.

Application filed March 7, 1892. Serial No. 424,049. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. PEARCE, a citizen of the United States, residing at Houghton, in the county of Houghton and State of Michigan, have invented a new and useful Chimney-Cap, of which the following is a specification.

This invention relates to chimney-caps; and it consists in the construction and arrangement of the parts thereof, as will be more fully hereinafter described, and pointed out in the claim.

The object of this invention is to simplify the construction and arrangement of devices of this class and insure a perfect or approximately perfect updraft by a peculiar combination of parts, which are strong and durable, readily applied, and comparatively inexpensive in manufacture.

In the drawings, Figure 1 represents a perspective view of a chimney-cap embodying the improved construction and arrangement of parts. Fig. 2 is a transverse vertical section on the line *xx*, Fig. 1. Fig. 3 is a bottom plan view of the cap detached.

Referring to the drawings, A designates a tube or pipe, which is fitted to the chimney as ordinarily done in devices of this character, or said pipe may be directly connected to the flue and extend upward and form of itself the chimney. In the upper part of this tube or pipe A is secured a rim B, having a diametrically-arranged brace B', with a central screw-threaded opening to receive the lower screw-threaded end of a vertical rod C, which is securely fastened therein.

A cap D is provided and formed of irregular conical shape—that is, the apex thereof is eccentrically arranged, so as to form a long sloping side and a short side. On the inner side of the apex thereof is secured a step or bearing D', which receives the upper end of the rod C, so that the said cap may readily turn on said rod, the said cap also having a brace E extending from the inner surface of the long sloping side thereof and having an opening in the free end of same, through which is passed the said rod C. A washer E' is inserted between the end of said brace E and a pin E², passing through the rod, and thereby prevents disengagement of the cap from its supporting-rod, and at the same time,

by means of the said washer interposed between the pin and the brace, the friction is materially reduced between the said parts. It will be understood that the upper end of the rod C is loosely fitted in the step or bearing D'. The lower portion of the sloping side of said cap extends over the top of the tube or pipe A, and at this point in the cap is secured a funnel F, which is provided with an extended rectangular neck F', secured over a similar rectangular opening in the said side of the cap. The mouth of the funnel is considerably flared to assist in the passage of a larger volume of air, as will be readily understood, and the neck F' thereof is arranged at an angle of inclination and opens through the said cap over the top of the tube or pipe A, adjacent to one edge of the latter, but the air passing through said funnel is prevented from forcing itself directly down into the tube or pipe A by a continuing flange F², surrounding the said funnel-opening in the cap at the inner lower surface thereof, and thereby the said air is directed in the line of the dotted arrows, (shown in Fig. 2,) which will produce an increased upward draft through the pipe or tube A by creating a suction as the air passes over the top of the said tube or pipe A. The short side of the cap D is elevated considerably above the top of the pipe A, and thereby gives free passage of the current of air coming through the funnel F. To said shorter side of the cap is secured a vane G, which is secured to said cap by a brace G', and by means of said vane the cap is turned for the purpose and in the manner readily understood.

The lower flaring portion of the funnel projects below the lower edge of the sloping side of the cap, and thereby prevents air from entering under said cap at this point, and causes all of the air to pass through the said funnel; also, the eccentric arrangement of the apex of the cap provides for the shield or cover formed thereby for one side or portion of the upper end of the tube or pipe.

The utility and advantage of this form of cap is readily apparent to those skilled in the art.

The step or bearing D' is formed with an enlarged opening D², which receives the upper end of the rod C; but the walls of said open-

ing do not touch the end of said rod C, as the support of the cap D is provided by the brace E and the pin E², as heretofore set forth. By this means the friction between the several
5 parts is materially reduced.

Having thus described the invention, what is claimed as new is—

In a chimney-cap, the combination of a tube or pipe having a rod extending vertically there-
10 from, a conical cap having an eccentric apex and mounted over said tube or pipe and rotatably supported by said rod and having the apex thereof nearer one side than the other to provide an oblique arrangement and a de-
15 pending elongated sloping side, which projects over and below a portion of the said tube or pipe, said cap having a vane in connection

with the upper shorter side thereof, and an elongated tubular neck of substantially rectangular form extending through the depend- 20
ing portion of the cap at an oblique angle to the top portion of the tube or pipe and having an elongated flaring funnel secured to the outer end thereof, whose lower edge depends below the lowermost portion of the cap to 25
prevent passage of air under the edge of said cap, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM A. PEARCE.

Witnesses:

GRAHAM POPE,
RICHARD B. LANG.