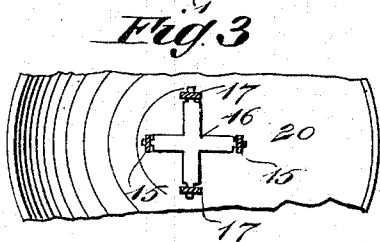
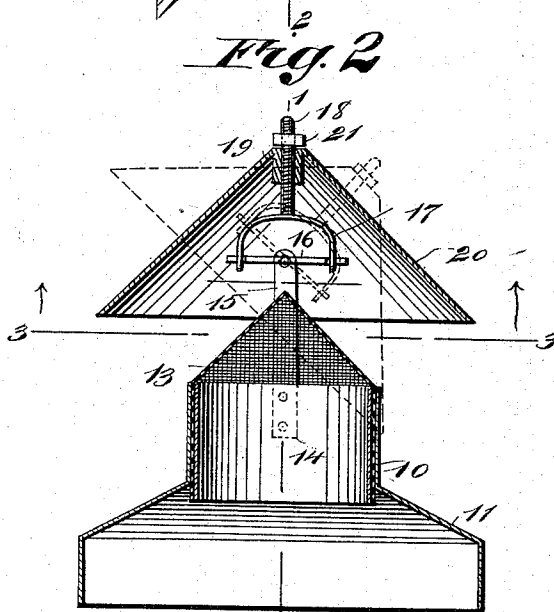
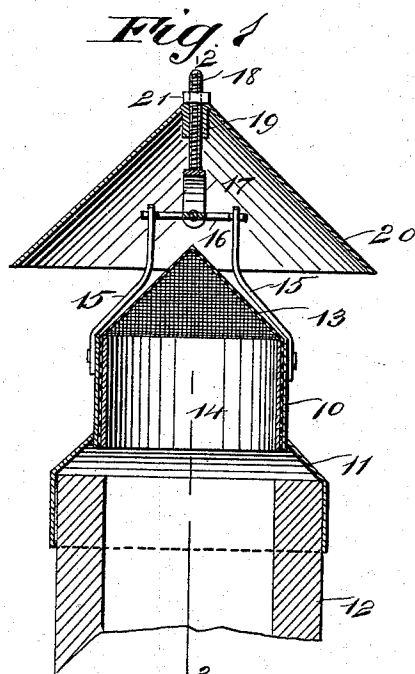


(No Model.)

M. H. INGALLS.
CHIMNEY COWL OR VENTILATOR.

No. 530,418.

Patented Dec. 4, 1894.



WITNESSES:

J. McArdle.
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BY

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UNITED STATES PATENT OFFICE.

MILO H. INGALLS, OF NORTH GRANVILLE, NEW YORK, ASSIGNOR OF THREE-EIGHTHS TO JOHN C. SHANNON, OF SAME PLACE.

CHIMNEY COWL OR VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 530,418, dated December 4, 1894.

Application filed May 10, 1894. Serial No. 510,745. (No model.)

To all whom it may concern:

Be it known that I, MILO H. INGALLS, of North Granville, in the county of Washington and State of New York, have invented a new and Improved Chimney Cowl or Ventilator, of which the following is a full, clear, and exact description.

My invention relates to improvements in chimney cowls and ventilators; and the object of my invention is to produce a cheap and simple apparatus of this kind, which is adapted to be applied to chimneys, airshafts, and in fact any kind of a flue in which it is desirable to have a draft, which when applied as specified promotes a draft, which prevents the rain or other matter from falling down through, which is immediately responsive to a gust of wind, no matter how light, and which, when impelled by the wind, assumes a position to guard the flue and prevent a down draft, but which when in this position serves to increase the up draft.

A further object of my invention is to produce an apparatus having its cap adjustable so that it may be held at any desired distance from the flue top, also to produce an apparatus which serves admirably as a spark arrester, and further, to produce a device which serves well as a ventilator, and is adapted to be attached to any kind of an outlet leading from milk coolers or any other articles in which it is desirable to have the foul air carried off and fresh air admitted.

To these ends my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a vertical section on the line 1—1 of Fig. 2, showing my improved cowl and ventilator as applied to a chimney top. Fig. 2 is a vertical section on the line 2—2 of Fig. 1; and Fig. 3 is an inverted sectional plan on the line 3—3 of Fig. 2.

The apparatus is provided with a flue 10, which is preferably of cylindrical shape, although this is not essential, and this merges

at its lower end in a base 11 which is adapted to be fastened to the top of a chimney 12 or to any other similar structure, while the upper end of the flue is provided with a conical spark arrester 13 made of wire screening and fastened to the flue by means of a bushing 14, between which and the flue the lower portion of the screening is held, but it will be understood that the spark arrester may be fastened in any other convenient way. The spark arrester does not interfere with the draft of the flue and it prevents any sparks from being ejected from the chimney. The flue has secured to its opposite sides arms 15 which project inward and upward, and between these arms is pivoted the cross shaped bracket 16, two of the bracket arms being pivoted in the arms 15 while its other two arms are pivoted to the fork 17, which has an upwardly-extending screw threaded shank 18 which fits the threaded lug 19 on the inner side and at the apex of the conical cap 20. Above the cap is a nut 21 which holds it securely in place. It will be seen that the bracket 16 and fork 17 form a universal joint, which permits the cap 20 to tilt in any direction, as indicated by dotted lines in Fig. 2, and thus when the wind blows, the cap is tilted so as to close one side of the flue and prevent the wind from blowing into it, while the shape of the cap divides the wind and causes it to rush by the open side of the flue, thus creating a suction or draft in the flue.

It will be understood that the shape of the bracket 16 may be changed, as desired, and the supporting arms 15 may also be differently arranged without departing from the principle of my invention.

The cap 20 is held high enough above the flue 10 to enable a good draft to be maintained when there is no wind and the cap is level, as shown in Fig. 1, and it will be seen from the above description that the cap may be readily adjusted vertically.

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

1. The combination with the flue having upwardly projecting arms 15, of a cruciform bracket 16 pivoted to rock vertically in said

arms, a bow or fork 17 pivoted at its ends to the bracket 16 at right angles to the arms 15, a screw rod extending up from the bow 17, a conical cap 20 having a nut 19 in its apex
5 screwing upon the rod to adjust the cap vertically and a set nut on the rod for securing the cap in its adjusted position.

2. As an improved article of manufacture, a cowl or ventilator comprising a flue 10, hav-
10 ing a screen on its upper end and an inter-

nal band securing the screen in place, external vertical arms 15, a vertically adjustable conical cap provided with a supporting and adjusting screw, and a universal joint connecting the lower end of the screw with said
15 arms, substantially as described.

MILO H. INGALLS.

Witnesses:

FRED W. SPOOR,
JOHN B. DAVIS.