Aug. 1, 1933. D. STAINHOFER 1,920,918

VENTILATOR CAP

Filed June 22, 1932

Fig. 1.

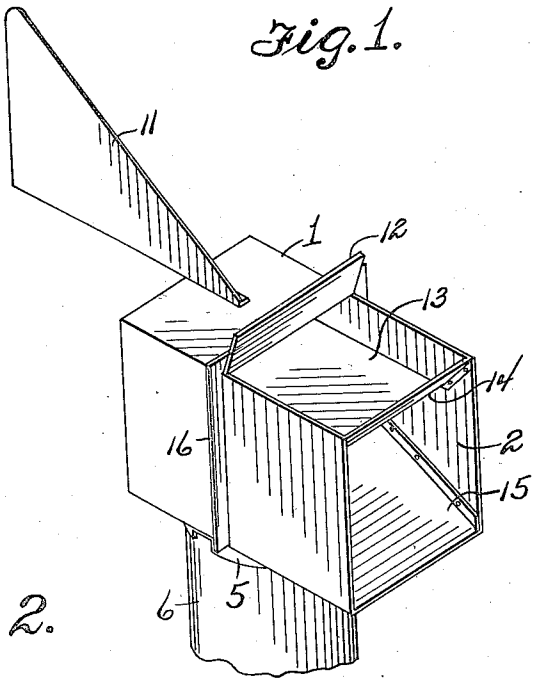


Fig. 2.

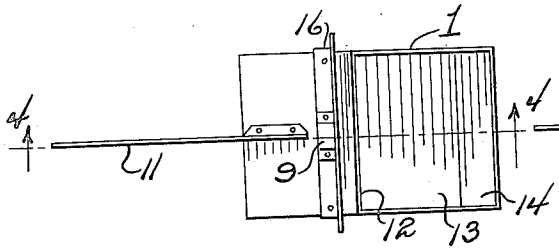


Fig. 3.

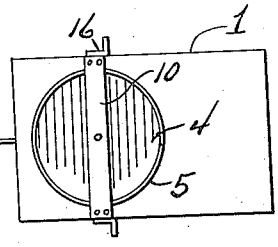


Fig. 4.

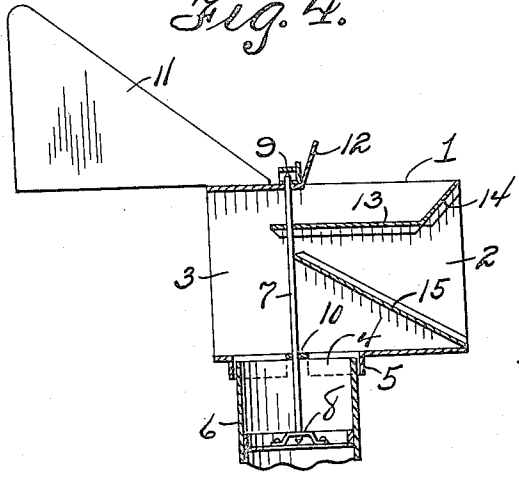
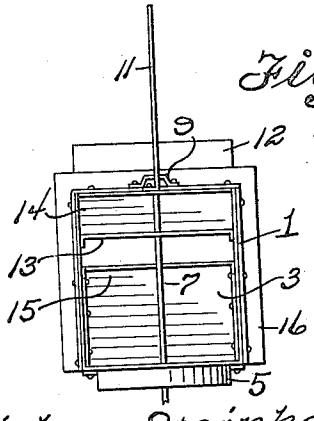


Fig. 5.



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Patented Aug. 1, 1933 1,920,918

UNITED STATES PATENT OFFICE

1,920,918

VENTILATOR CAP

Dickson Stainhofer, Lewistown, Mont.

Application June 22, 1932. Serial No. 618,768

2 Claims. (Cl. 98—70)

This invention relates to ventilator or chimney caps and has for the primary object, the provision of a device of the above stated character which may be easily and quickly installed on a ventilator or chimney flue and is so constructed as to prevent down drafts in the flue from air currents by causing the latter to pass through the device in such a manner to to develop a suction in the flue to assure proper ventilation or draft.

With this and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which

Figure 1 is a perspective view illustrating a cap constructed in accordance with my invention.

Figure 2 is a top plan view illustrating the same.

Figure 3 is a bottom plan view illustrating the device.

Figure 4 is a vertical sectional view taken on the line 4—4 of Figure 2.

Figure 5 is a front elevation illustrating the device.

Referring in detail to the drawing, the numeral 1 indicates a substantially rectangular shaped casing having its ends opened to provide an intake 2 for the cap and an exhaust 3. The bottom wall of the casing adjacent the exhaust 3 is provided with an opening 4 surrounded by a depending flange 5 which receives therein the upper end of a pipe 6 adapted to be suitably mounted in the flue of a chimney or ventilator.

A vertically disposed rod 7 is rotatably supported in the pipe 6 as shown at 8 and extends upwardly through the casing 1 and through the top wall thereof to engage a bearing 9 for the purpose of rotatably supporting the casing 1 relative to the pipe 6. A spider 10 is carried by the casing 1 and traverses the opening 4 and is provided with an opening to receive the rod 7.

A vane 11 is secured to the top wall of the casing for the purpose of maintaining the intake end 2 of the cap towards air currents. A portion of the top wall of the casing is cut away and bent upwardly to form a deflector 12. Between the deflector 12 and the intake end 2, the top of the casing is opened so that air currents travelling in a downward direction will be deflected into the casing. A partition 13 is mounted in the casing below the cut away portion of the top wall and the forward end of the partition is inclined upwardly as shown at 14 while the rear end of the partition terminates over the opening 4 so that the downwardly travelling air currents deflected into the casing will be caused to travel rearwardly through the casing in a horizontal plane and escape at the exhaust end 3. An upwardly and rearwardly extending baffle 15 is located in the casing below the partition 13 and cooperates with the inclined portion 14 in causing the air currents travelling horizontally into the casing to be deflected upwardly and rearwardly through the exhaust 3 cooperating with the heretofore described air currents exhausting from the device in creating a suction within the casing over the opening 4. This suction acts on the upper end of the pipe 6 consequently providing an efficient draft to the flue to which the pipe 6 is attached.

To strengthen the casing 1 a reinforcing element 16 is secured thereto.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the spirit and scope of my invention, as claimed.

Having thus described my invention, what I claim is:

1. A cap comprising a substantially rectangular shaped casing having intake and exhaust ends, means rotatably connecting the casing to a flue for permitting the latter to exhaust into said casing, a vane secured to said casing, the top wall of said casing being cut away to form an entrance, and a deflector for engaging air currents travelling in a downward direction, a partition in said casing and underlying the cut away portion of the top wall of the casing, and an upwardly and rearwardly extending baffle in said casing cooperating with the partition to direct air currents entering the inlet end of the casing in an upward and rearward direction.

2. A cap comprising a rectangular shaped casing having intake and exhaust ends, the bottom wall of said casing adjacent the exhaust end having an opening, a pipe received in said opening and connected to a flue, a rod journalled in the pipe and to the casing for rotatably connecting the latter to said pipe, a vane secured to said casing, the top wall of said casing having a cut away portion to form an entrance and a deflector, a horizontally disposed partition in said casing under the entrance and having a portion inclined upwardly and forwardly and terminating at the intake of the casing, an upwardly and rearwardly extending baffle in the casing and extending from the intake of the latter to a point adjacent the rear end of the partition.

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