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L. W. THOMAS

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TOBACCO FLUE PROTECTOR

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FIG. 1.

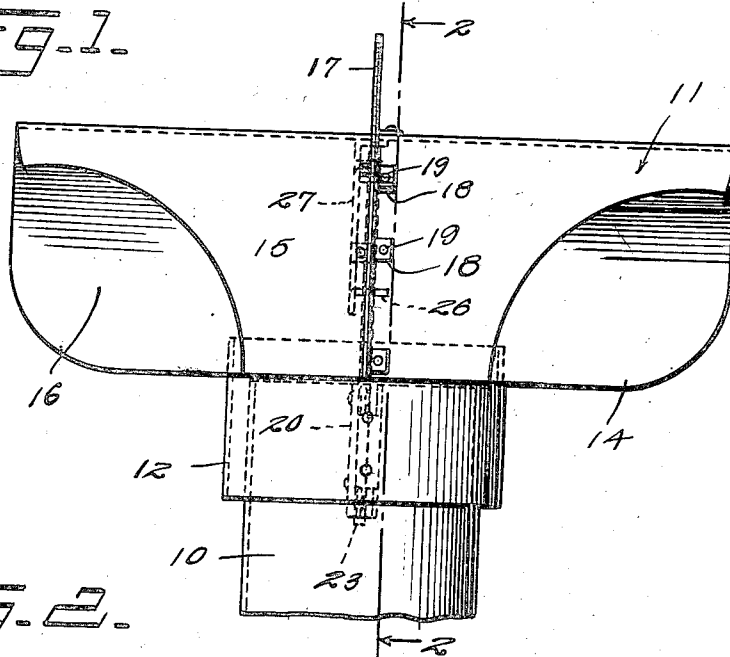


FIG. 2.

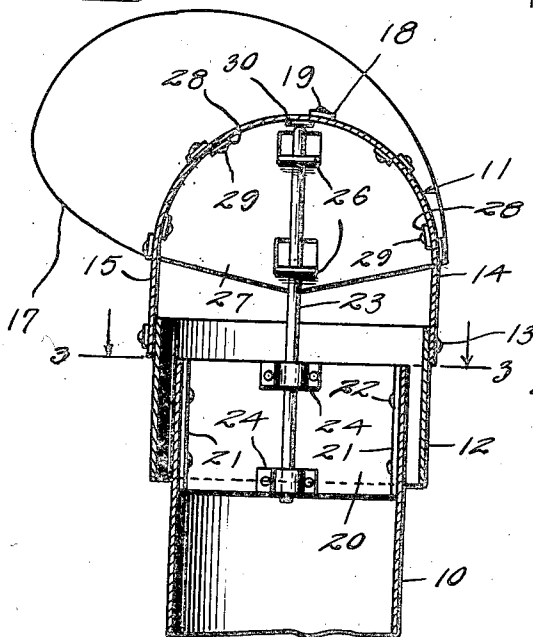
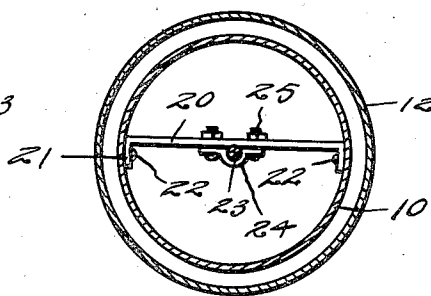


FIG. 3.



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TOBACCO FLUE PROTECTOR

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4 Claims. (Cl. 98—63)

This invention relates to ventilating devices and more particularly to a ventilator adapted to be placed on a flue for protecting tobacco against down drafts during the curing thereof.

An object of this invention is to provide a flue protector which may be mounted on a ventilating flue used in the curing of tobacco so as to form a suction from the wind, the protector being maintained in proper position with respect to the direction of the wind by means of a vane mounted on the hood of the device.

A further object of this invention is to provide a protector of this character which is exceedingly simple in construction and which may be readily mounted on the present constructions of flues without altering the construction of the flues.

The above and various other objects and advantages of this invention will in part be described in, and in part be understood from, the following detail description of the present preferred embodiment, the same being illustrated in the accompanying drawing wherein:—

Figure 1 is a detail rear elevation of a device constructed according to an embodiment of this invention.

Figure 2 is a vertical section taken on the line 2—2 of Figure 1.

Figure 3 is a section taken on the line 3—3 of Figure 2.

Referring to the drawing wherein like numerals of reference designate corresponding parts throughout the several views, the numeral 10 designates generally a flue which may be attached to a building construction and preferably to a building wherein tobacco or the like is being cured.

In order to provide a protector for preventing down draft in the flue 10 and so as to prevent dust or the like from passing downwardly through the flue 10, I have provided a hood, generally designated as 11, which is secured to a cylindrical nipple 12 as by securing devices 13 in the form of rivets, bolts or the like. The hood 11 is preferably constructed of a relatively long sheet of metal which is bent in arcuate form and provided with a front face 14 which is relatively wider than the rear face 15. Preferably this rear face 15 is reduced in a downward taper, as shown in Figure 1, so that when the wind strikes the forward face 14 of the hood, the wind will pass over the hood and about the ends of the hood and form a suction in the space 16 formed by the reduction of the rear wall 15 of the hood.

A vane 17, provided with lugs 18, is secured to the hood 11 in substantially the longitudinal center thereof and is disposed at a right angle to the length of the hood 11. The lugs 18 are secured as by rivets or other fastening devices 19 to the outer surface of the hood 11. The vane 17 is of a sufficient size to constantly maintain the hood 11 with the front side 14 thereof at substantially right angles to the direction of the wind.

The hood 11 is swingably mounted on the ventilating pipe or member 10 by means of a partition or plate 20 which extends diametrically across a pipe 10 adjacent the upper end thereof and, as shown in Figure 3, the opposite ends of the plate or partition 20 are bent as shown at 21, and fastened as by rivets, bolts or the like 22, to the inner surface of the pipe 10.

A hood supporting shaft or bar 23 is secured as by straps 24 to the plate 20 in substantially the center thereof and in substantially the axial center of the pipe 10. The straps 24 are fastened to the plate 20, as by bolts or fastening devices 25. The hood supporting member 23 extends upwardly and beyond the upper end of the pipe 10 and is loosely disposed through a pair of guide members 26 which are struck out of a plate 27 secured to the inside of the curved surface of the hood 11. The plate 27 has outwardly extending lugs 28 fastened as by rivets or other fastening devices 29 to the inside of the hood 11. The upper end of the hood supporting member 23 engages against a bearing member 30 on the inside of the hood 11 so that the hood 11 may freely turn upon the pivot formed by the upper end of the supporting member 23.

As shown in the drawing, the cylindrical apron or nipple 12, secured to the hood 11, is of a diameter greater than the diameter of the pipe 10 so that the hood 11 may freely turn in a horizontal movement upon the pivot or supporting member 23.

In the use of this device, the hood 11 is mounted on the pivot or supporting member 23, carried by the diametrically disposed plate 20, secured to the stack or ventilator 10. Through the use of this device the wind will not be permitted to pass downwardly through the pipe 10 as the hood 11 will be disposed with the flat side 14 against the wind, being maintained in this position by the vane 17. Any heat or smoke rising in the ventilator 10 will be permitted at all times to pass out of the hood 11 irrespective of the direction of the wind or the pressure thereof. It will, therefore, be obvious that where this de-

vice is used in the curing of tobacco, the heat or smoke in the building can readily pass out of the stack 10 and no cold air will be permitted to flow down the ventilator pipe or stack 10.

- 5 It is, of course, understood that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes
10 and modifications being restricted only by the scope of the following claims.

I claim:—

1. A device as set forth comprising a hood substantially U-shaped in transverse section and provided with open opposite ends, said hood including a relatively wide front wall and a relatively narrow rear wall, a vane secured to the hood in substantially the center thereof and adapted to maintain the front wall of the hood at right angles to the direction of the wind, and means for swingably supporting the hood.

2. A device as set forth comprising a hood substantially U-shaped in transverse section and provided with open opposite end portions, said hood including a relatively wide front wall and a relatively narrow rear wall, a vane secured to the hood in substantially the center thereof and disposed at right angles to the length of the hood, a supporting plate, and coacting means carried by the plate and the hood on the inside thereof for

mounting the hood on a ventilator pipe for horizontal swinging movement.

3. A device as set forth comprising a hood substantially U-shaped in transverse section and provided with open opposite ends, said hood having a relatively wide front wall and a relatively narrow rear wall, a vane disposed at right angles to the length of the hood and positioned in substantially the longitudinal center thereof, means for securing the vane to the hood, said vane maintaining the hood at substantially right angles to the direction of wind and means for swingably supporting the hood.

4. A device as set forth comprising a hood substantially U-shaped in transverse section and provided with open opposite ends, said hood including a relatively flat and wide front wall and a relatively narrow tapering rear wall, a vane disposed in substantially the longitudinal center of the hood and positioned at right angles to the length of the hood for maintaining said front wall at right angles to the direction of wind striking the vane, a plate, means for securing the plate to a ventilator pipe, a shaft fixed to the plate and extending upwardly therefrom, a plate disposed within the hood in substantially the longitudinal center thereof and guide means carried by said second plate and engaging the shaft to swingably support the hood relative to the first plate.

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