

W. F. WARDEN,
VENTILATOR CLIP.
APPLICATION FILED OCT. 28, 1907.

925,251.

Patented June 15, 1909.

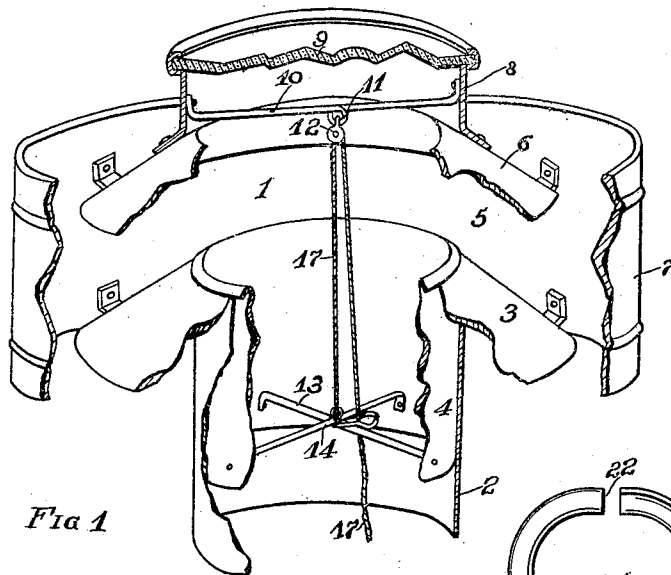


Fig 1

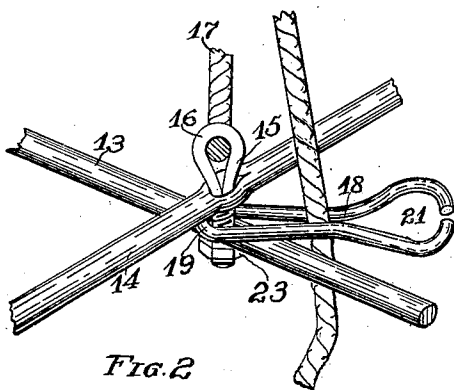


FIG. 2

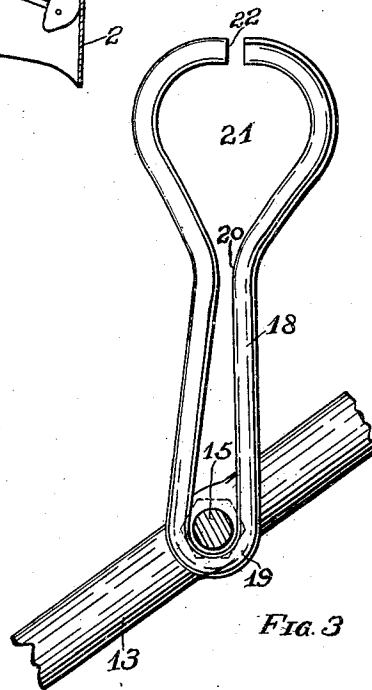


Fig. 3

WITNESSES:

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INVENTOR,
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UNITED STATES PATENT OFFICE.

WILLIAM F. WARDEN, OF AKRON, OHIO.

VENTILATOR-CLIP.

No. 925,251.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed October 28, 1907. Serial No. 399,544.

To all whom it may concern:

Be it known that I, WILLIAM F. WARDEN, residing at Akron, in the county of Summit and State of Ohio, have invented a certain
5 new and useful Improvement in Ventilator-Clips, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention relates to means whereby
10 the flexible rope or cord by which ventilator dampers are operated may be readily secured in any desired position.

The objects of the invention are to provide a means of this kind, in the form of a clip, which may be applied to the ventilator
15 without requiring any addition to or alteration in the construction thereof other than the physical presence of the clip therein; also to provide a clip of this kind which
20 shall be extremely simple and economical of production and efficient in operation. I accomplish these objects by the construction illustrated in the drawings, wherein—

Figure 1 represents a perspective view of
25 a ventilator having my clip applied thereto, parts of the ventilator being broken away; Fig. 2 represents a perspective detail of the clip and the cross bars between which it is secured; and Fig. 3 represents an enlarged detail in plan of the clip and the
30 lower cross bar.

Describing the parts by reference characters, 1 denotes the ventilator generally, the same being shown as of the type wherein the
35 damper comprises a sleeve which is mounted within the air shaft and movable longitudinally thereof.

2 denotes an air shaft, provided at its upper end with a downwardly extending deflector 3. Within the air shaft is mounted
40 a damper 4, said damper being illustrated as a cylindrical casing of sufficient length to close the port 5 between the deflector 3 and a similar deflector 6 supported from the
45 shield 7.

8 denotes a hood which is secured to deflector 6 and is provided with a glass cover 9.

Across the head there extends a cross bar
50 10, provided at its central portion with a loop or eye 11, which may be conveniently formed by bending the bar. This loop provides a support for a block or pulley 12.

The damper 4 is provided with a pair of
55 cross bars 13 and 14, the opposite ends of which are connected to the interior of the

damper casing. The cross bars are connected at their intersection by means of a bolt 15, the bar being perforated for the passage of the bolt. The bolt is provided at
60 its upper end with a loop 16, or similar attaching means, for the rope or cord 17.

The clip 18 which I employ for the rope or cord by means of which the damper is operated is formed from a single piece of
65 heavy spring wire bent to the shape shown in Fig. 3. That is to say, the rod or wire is bent at its middle to form a bight or loop 19 of a size to receive bolt 15. From said bight or loop, the branches gradually converge,
70 nearly meeting at points 20; thence they are bent outwardly to form jaws having therebetween an enlarged space 21, and the ends of the jaws are brought close together, at
22. The spaces provided at 20 and between
75 the ends 22 are narrower than the width of the cord or rope 17.

In applying the clip to the ventilator, the bight 19 is clamped firmly between the cross bars 13 and 14 by tightening the nut 23 on
80 bolt 15, with the body of the clip projecting outwardly into the space between the two cross bars. Rope or cord 17 is rove through block 12 and through the aperture 21 between the jaws of the clip. When it is de-
85 sired to close the damper either partly or entirely, the operator grasps the lower end of 17, lifts the damper to the desired position and then swings the rope or cord into the contracted space 20. The convergence
90 of the jaws toward 20 guides the rope or cord into the contracted space, and the resilience of the metal of the clip and the separation of the ends 22 permit the easy wedging of the rope between the jaws of the clip, as
95 shown in Fig. 2. When it is desired to shift the damper, it is only necessary to pull outwardly on 17, releasing it from between parts 20, whereupon the operator is free to adjust the damper to any other desired position.
100

In the operation of ordinary round ventilator dampers, it has been necessary to fasten the operating rope or cord in the room below the damper, generally securing the rope or cord to a nail, hook or post. It frequently
105 happens that this interferes with the operation of the machinery, and that time is lost by the necessity for untying the rope or cord. By the construction described, it will be apparent that I have produced means, in the
110 form of a clip, whereby a ventilator damper may be conveniently adjusted and secured

in such adjusted position and may thereafter be conveniently moved to any other position without any appreciable loss of time, and that I have secured these results without the necessity of alteration of the ventilator or the addition thereto of any means extraneous to the clip itself. It will be apparent also that I have obtained these results by a particularly economical and effective form of device.

I claim:

1. The combination of a ventilator having a damper with a depending sleeve, a pair of cross rods secured to said sleeve, a bolt passing through said cross rods where they cross each other, and a clip for retaining the rope secured by such bolt, said clip being formed of a rod bent on itself to surround the bolt and to provide a free guide for the rope and also an adjacent friction clamp therefor,

whereby an elevating rope connected with the cross bars may pass upwardly over a pulley and downwardly through said guide and be held by the clip to support the damper at any desired position.

2. The combination with a damper sleeve having cross rods, of a bolt passing through said rods and having an eye for the securement of a rope, and a clip adapted to lie between the cross rods, and surround the bolt, said clip being formed of a single wire, a rod bent on itself to provide an enlarged guide for the rope, and a choked portion for clamping the rope.

In testimony whereof, I hereunto affix my signature in the presence of two witnesses.

WILLIAM F. WARDEN.

Witnesses:

J. ASA PALMER,
SELMA JOHNSON.