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VENTILATOR

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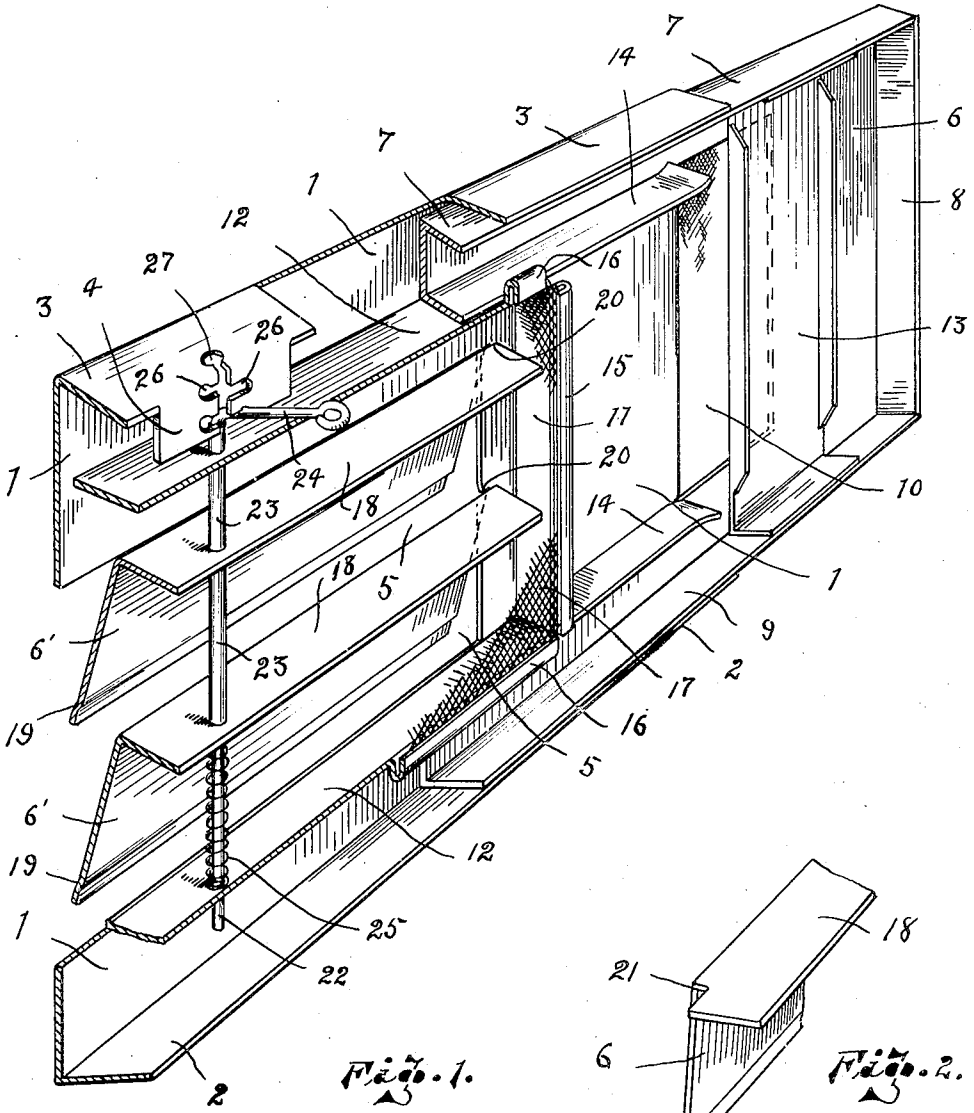

Fig. 1.

Fig. 2.

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VENTILATOR

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4 Claims. (Cl. 98—99)

This invention relates to ventilators, and has special reference to one adapted for use under a window or the like in the opening therefor, and comprises preferably a combination of screen and ventilator for such opening.

The principal objects sought are that of simplicity of construction and operation, and also provision for maximum longitudinal adjustment to accommodate different sized openings.

Other objects and advantages of the invention will appear in the following description thereof.

Referring now to the accompanying drawing, forming part of this application, and wherein like reference characters indicate like parts:

Figure 1 is a broken perspective view of the interior of the major portion of one of the improved ventilators.

Figure 2 is a perspective view of a portion of one end of one of the louvers.

In the drawing, 1 represents the central body portion of the device having the upper and lower edges thereof turned at slightly more than right angles forming flanges adjacent said edges, the lower one being indicated at 2 and the one above at 3. The latter, for a short space centrally thereof, is turned again at right angles downwardly, as at 4, forming an escutcheon for the louver operating rod, which will be described later. The major portion of the entire structure is understood to be formed of suitable sheet material, or the like, for the purpose. This central body portion is provided with a single through rectangularly shaped opening 5, through which ventilation is controlled by pivotally adjustable louvers, as at 6', in this instance, there being but two of such shown, though obviously any number may be provided.

Within the flanges 2 and 3 of this body portion 1 and extending from either end thereof (though but one end is illustrated in the drawing) is a frame-like structure including the portions 6, 7, 8 and 9; the portions 7 and 9 being horizontally disposed flanges which fit snugly though slidably within the flanges 2 and 3 of the body portion. The portion 6 of the end extension has an opening therethrough indicated at 10 so that the horizontal extent of the portion 6 does not exceed the distance between the adjacent end of the body portion 1 and the end 11 of the frame-like wall 11—12 about the opening 5 of the central portion 1; this being to permit of the telescopic end being slid inwardly so as to not project beyond the longitudinal limits of the central portion. However, to compensate for an extension of the device to accommodate an abnormally wide opening, which would necessitate the movement of the extendible portions to such an extent that an opening such as illustrated at 10 would occur between the innermost edge of the member 6 and the adjacent end of the body portion 1, there is provided the slidable wall member 13 carried intermediate of the flanges 7 and 9 of the extendible portion. This member 13 is the width only of the member 6 so that it may be retained therein when the extensions are fully telescoped, and the member 13 may be slid to cover the opening 10, thus providing a closed wall the full length of the ventilator when in its fully extended position. It will be noted that the flanges 7 and 9 are of U-shaped construction at their innermost ends providing longitudinally disposed stops 14 against which the wall member 13 abuts when adjusted to fully close the opening 10 formed by the extreme extension of the device. It will be noted, too, that this member 13 is provided with marginal flanges for convenient manipulation by the fingers of the operator.

The walls 11 and 12 about the opening 5 of the central portion are preferably of a depth equal to approximately the width of the flanges 2 and 3 as well as the members 14 so that the latter preferably rest upon the upper and lower wall 12, and the edges of the walls 11 and 12 are provided with bead like grooves or folds indicated at 15 and 16 into which may be pressed the edges of any kind of suitable screening indicated at 17 so that the passageway of the ventilator is screened upon its innermost side and provided with louvers on the outer side.

These louvers and their adjustment are novel in that the louvers are of inverted L-shape each having a flange 18 disposed at right angles to the portion indicated at 6', and which latter portions have stepped or offset edges 19 to overlap each other as well as the lower one overlapping the lower edge of the opening 5 to make a tight surface when closed. As support for the louvers there are simply formed slots indicated at 20 in the ends of the opening 5 where the louvers are to be pivotally suspended, and the innermost edges of the portions 18 of the louvers being stepped as at 21 and extending considerably beyond the portion 6' (see Fig. 2), thus providing an exceedingly simple pivotal mounting for the louvers, it being noted that the upper lip of the slots 20 are slightly arcuate in form.

The operating device of the louvers comprises the rod 22 extending through the portions 18 of the louvers and which rod is mounted within short pieces 23 of tubing intermediate the louver

as well as between the uppermost louver and the right angularly bent handle 24 of the rod to insure proper simultaneous movement of the louver when adjusted, there being installed between the portion 18 of the lowermost louver and the flange 12 an expansive helical spring 25.

As a selective holding means for the handle 24 of the rod I have provided the notched escutcheon 4, previously referred to, so that the handle may be slipped either one way or the other into any one of the notches 26 to insure its remaining in any one of the four adjusted positions illustrated, it being wholly removable as desired by drawing the same upwardly through the hole 27.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. A combined ventilator and screen for window openings comprising a central body portion having a central rectangular opening therethrough, telescopic extensible portions within opposite ends of said body portion, operable overlapping louvers within said central opening and normally covering said opening, a vertically adjustable rod extending through portions of said louvers for operating same, a spring surrounding said rod for normally holding the louvers closed and a screened frame structure about said opening upon the inner wall of the ventilator.

2. A ventilator for window openings comprising a central body portion having a central opening therethrough, extensible portions also having openings therethrough and telescopically mounted within opposite ends of said body portion, operable overlapping louvers mounted within said central opening and normally closing same, and a vertically adjustable rod extending through portions of said louvers for operating same.

3. A ventilator of the character described having an opening therethrough and pivotally operable louvers transverse said opening for control of air passage therethrough, characterized by the pivotal support of the louvers consisting only of slots in the marginal edges of said opening and extensions at the corners of either end of said louvers for holding same pivotally within said slots, a spring biased rod extending through portions of said louvers for operating same, said rod being biased by said spring to hold said louvers in closed position.

4. A ventilator of the character described having a central body portion, an extensible portion telescopically mounted within the end of said body portion and overlapping same a predetermined extent when fully retracted, and a wall member slidable within said extensible portion for selective use in covering an opening formed by extension of said telescopic portion greater than the width of said overlapping portion.

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