July 29, 1924. 1,502,887

A. SWENSEN

ADJUSTABLE VENTILATOR DEVICE

Filed March 10, 1922

Fig. 1.

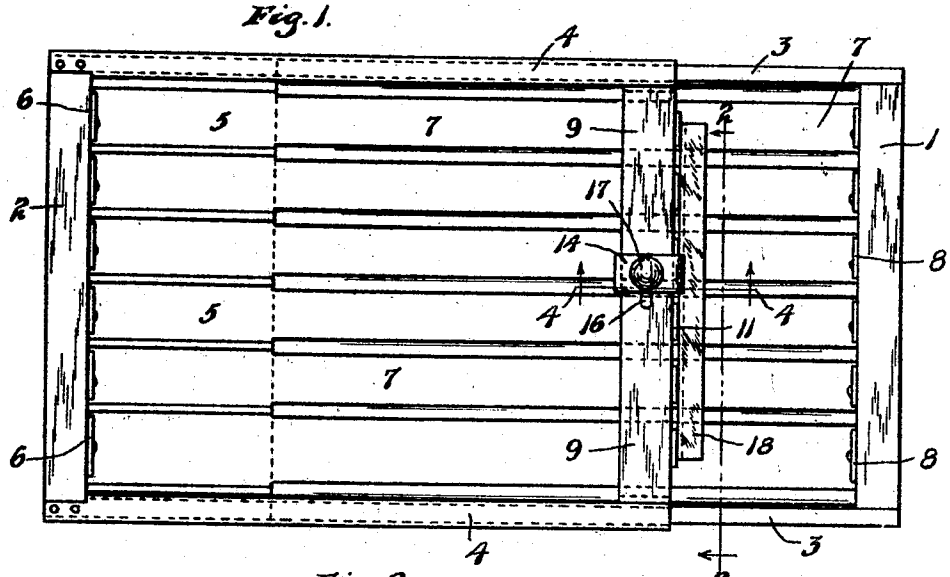


Fig. 2.

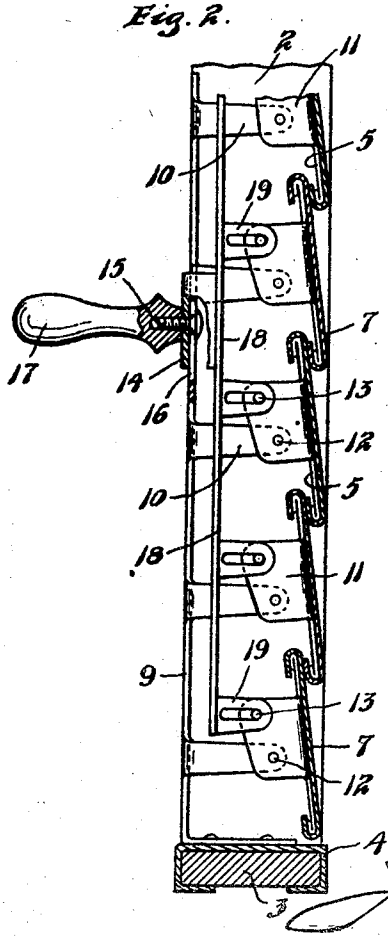


Fig. 4.

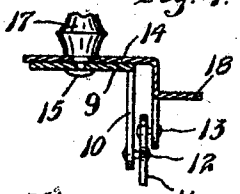
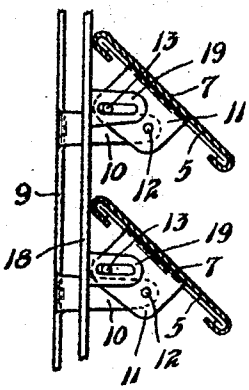


Fig. 3.



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Patented July 29, 1924. 1,502,887

UNITED STATES PATENT OFFICE.

ABRAHAM SWENSEN, OF MINNEAPOLIS, MINNESOTA; MARY SWENSEN SPECIAL ADMINISTRATRIX OF SAID ABRAHAM SWENSEN, DECEASED.

ADJUSTABLE VENTILATOR DEVICE.

Application filed March 10, 1922. Serial No. 542,547.

To all whom it may concern:

Be it known that I, ABRAHAM SWENSEN, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Adjustable Ventilator Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a ventilating device and particularly to such a device of the type adapted to be disposed above or under an open window, in a transom opening or a similar location.

It is an object of this invention to provide such a ventilator having an extensible and contractible frame, whereby the same can be fitted to openings of various widths.

It is another object of the invention to provide such a ventilator having a series of slats pivotally mounted therein which can be swung to closed position or to various open positions.

It is a further object of the invention to provide such a ventilator as described having a single means for swinging the said slats and holding the same in adjusted position.

These and other objects and advantages of the invention will be fully set forth in the following description made in connection with the accompanying drawing, in which like reference characters refer to the same parts throughout the different views, and in which,

Fig. 1 shows a view in front elevation of the device;

Fig. 2 is a partial vertical section taken on line 2—2 of Fig. 1, the same being on an enlarged scale;

Fig. 3 is a partial vertical section similar to Fig. 2 showing the parts in a different position; and

Fig. 4 is a horizontal section taken on line 4—4 of Fig. 1.

Referring to the drawings:

The device comprises two telescoping frames shown as of rectangular form having the end members 1 and 2 and the telescoping side members 3 and 4, respectively. Pivotally mounted to the end member 2 is a set of slats 5, these slats having laterally bent lugs 6 for pivotal connection to said end member. Pivotally connected to the end member 1 is a set of slats 7. These slats likewise having laterally bent lugs 8 form the connecting means to the member 1. The slats 5 and 7 project inwardly from said end members and the edges of the slats 7 are bent over parallel to the main body thereof to form channels in which the ends of the slats 5 are slidably disposed. The ends of the slats are thus arranged in telescoping relation and the slats form in effect, one set of slats extending across the frame. At the inner end of the side members 4, a member 9 extends transversely across the frame between said members. This member is provided with inwardly projecting lugs 10 disposed in a plane substantially normal to the plane of said slats. The slats 5 have end lugs 11 projecting laterally and normal thereto, which lugs are pivotally connected by pivots 12 to the lugs 10. The lugs 11 are also provided with pins 13 projecting from one side thereof. The slats 5 thus terminate substantially in alignment with the outer edge of member 9. A member 14 is mounted for sliding movement upon the outer side of member 9 and a stud 15 is disposed in a slot 16 in said member 9 and is threaded into a handle 17 projecting from the said member 14. The stud 15 thus forms both the connecting means for the handle 17 and the guiding means for the member 14. The member 14 extends beyond the side of member 9 and is formed as a flat bar 18 which extends transversely of the slats 5 and 7. This bar has lugs 19 projecting inwardly therefrom provided with elongated slots into which the pins 13 substantially fit and are adapted to slide.

With the above described structure, it is seen that the end members 1 and 2 can be slid toward and from each other, the members 3 and 4 telescoping in sliding engagement as well as the slats 5 and 7. The slats are pivoted in the end members 2 and 1 and are also additionally pivoted to the member 9. The slats can be moved to a closed position as shown in Fig. 2 and can be moved to various open positions by a vertical movement of the handle 17. Such movement of the handle acts through the bar 18 and the pins 13 to swing the slats about their pivots. By slightly turning the handle 17 the same may be readily moved and when the slats are suitably adjusted, the

same can be clamped in such adjusted position by the movement of the handle 17 in a clockwise direction. This tightens the head of stud 15 against bar 9 and the handle against member 14.

From the above description it is seen that I have provided a simple and efficient ventilating device and one having great adaptability to various conditions. The parts of the device are few and can be simply and inexpensively made and the device can be quickly and easily operated. The sliding frames are preferably made of sheet metal but other material may be used as desired.

It will, of course, be understood that various changes may be made in the form details and arrangement of the parts without departing from the scope of my invention, which generally stated consists in the matter shown and described and set forth in the appended claims.

What is claimed is:—

1. In a window ventilating device, the combination with two open ended frames arranged to telescope with each other, a plurality of slats pivotally connected to each frame, the slats of one frame telescoping with the slats of the other frame, an arm extending across one of the frames, transverse to the slats to which said slats are pivoted, and a bar slidably connected to said arm to move in a plane transverse to the slats and also pivotally connected to the slats by lost motion connections so as to move all of the slats for angular adjustment.

2. A ventilating device having in combination, a pair of open ended rectangular frames having end members and arranged to telescope at their open ends, a series of slats pivotally connected to each of said end members and extending inwardly therefrom, the inner end of the slats of the said series being arranged in telescoping relation, a transverse member extending across the end of one of said frames to which the slats pivoted to the end of said frame are additionally pivoted, a member mounted for sliding movement on said transverse member comprising a bar extending transversely of said slats and connected thereto by a lost motion connection and means for moving said last mentioned member in a plane normal to the plane of the slats to swing all of said slats about their pivots.

3. A ventilating device having in combination, an extensible frame, a series of telescoping slats pivoted to the end members of said frame, a member extending transversely of said frame intermediate thereof to which said slats are additionally pivoted and means slidably mounted on said member and connected to said slats for swinging the same about their pivots.

4. A ventilating device having in combination, two open ended rectangular frames having their open ends arranged in telescoping relation, a set of slats pivoted to the end members of each frame and extending inwardly therefrom, said slats being arranged in telescoping relation, a member extending transversely at one end of one of said frames and having inwardly projecting lugs, the slats pivoted to said frame terminating substantially in line with said member and having outturned lugs pivoted to said lugs and a member mounted for sliding movement on said transverse member, comprising a bar extending across said slats, said bar having inwardly projecting lugs connected by a lost motion connection to said lugs projecting outwardly from said slats, and means for moving said last mentioned member to swing all of said slats about their pivots.

5. In a window ventilating device, the combination of two frames open at opposing ends and arranged to adjustably telescope with each other, a plurality of slats connected by lugs and pivots to the closed ends of each frame, an arm extending across one of the frames transverse to the slats and outward therefrom, lugs mounted on the slats of said frame and extending normal to said slats, lugs extending inward from said arm to which said slat lugs are pivotally connected, an operating bar connected to said arm to slide in a plane transverse to the slats, and slotted lugs mounted on said bar and engaging the slat lugs by a loose pivot joint, whereby, when the operating bars move the slats are moved to various angular adjustments.

In testimony whereof I affix my signature.

ABRAHAM SWENSEN.