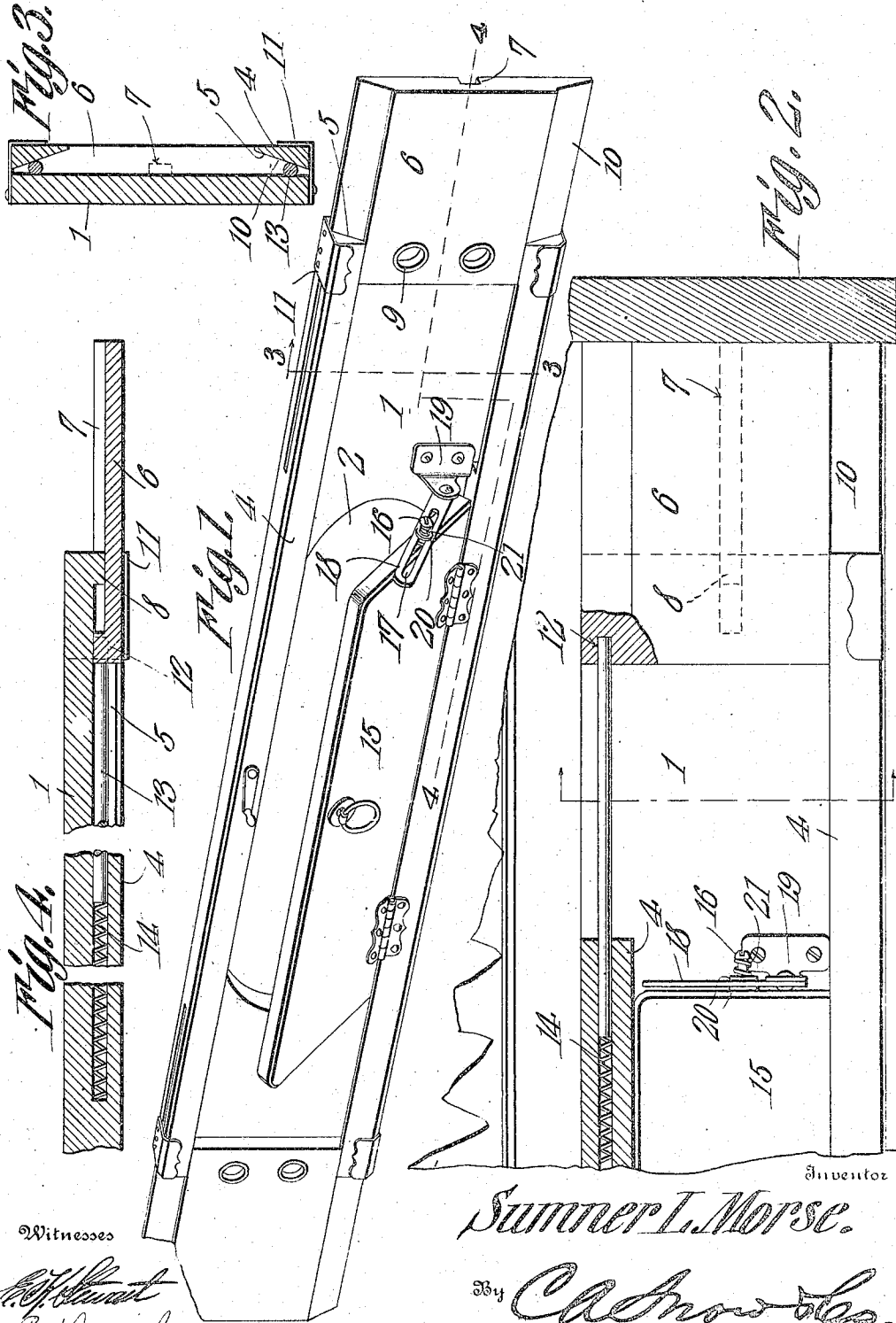


S. L. MORSE.
VENTILATOR.

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933,383.

Patented Sept. 7, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

SUMNER L. MORSE, OF ATHOL, MASSACHUSETTS.

VENTILATOR.

933,383.

Specification of Letters Patent.

Patented Sept. 7, 1909.

Application filed December 24, 1904. Serial No. 469,100.

To all whom it may concern:

Be it known that I, SUMNER L. MORSE, a citizen of the United States, residing at Athol, in the county of Worcester and State of Massachusetts, have invented a new and useful Ventilator, of which the following is a specification.

This invention has relation to ventilators, and it consists in the novel construction and arrangement of its parts, as hereinafter shown and described.

The object of the invention is to provide a structure of the character indicated which is adapted to be applied to the aperture of a window-frame whereby air is permitted to pass through the frame, but is guided and controlled, both as to volume and direction of course, in such manner that free ventilation is had without the usual accompanying draft.

With the above object in view the ventilator includes a frame which is provided at its ends with telescopic extensions subjected to spring pressure, having a tendency to hold the said extension pieces in projected position beyond the ends of said frame. The frame is provided at an intermediate point with an aperture or opening through which the air is adapted to pass, and a shutter is hingedly mounted upon the frame and is adapted to operate over the said aperture. A holding means is mounted upon the frame and is adapted to hold the shutter in any desired position.

In the accompanying drawings:—Figure 1 is a perspective view of the ventilator. Fig. 2 is a front elevation of a portion of the same, with parts in section. Fig. 3 is a transverse sectional view of the ventilator, cut on the line 3—3 of Fig. 1. Fig. 4 is a horizontal sectional view of the ventilator, cut on the line 4—4 of Fig. 1.

The ventilator consists of the frame 1, which is provided with an opening or aperture 2. The said frame 1 is provided upon its inner side with the upper and lower rails 4, the end portions of which are cut away and form the guides 5. The extension pieces 6 are slidably mounted in the guides 5, and the said pieces are provided upon their outer sides with the grooves 7, which receive the lugs 8, mounted upon the inner side of the

frame 1. The grooves 7 are provided with inner closed ends and coöperate with the lugs 8 in limiting the outward movement of the extension pieces 6. Each extension piece is provided with finger apertures 9, and the upper and lower edges of the said extension pieces 6 are beveled or chamfered, as at 10, to fit snugly within the guides 5 of the rails 4. The bracing plates 11 are secured to the end portions of the rails 4 and project down over the forward sides of the guide portions 5 of the said rails, and prevent the said guide portions from splitting from the body portions of the rails.

The inner ends of the extension pieces 6 are provided with the sockets 12, and the outer ends of the rods 13 engage the said sockets 12, while the inner end portions of the said rods 13 lie within the guides 5 and project under the intermediate portions of the rails 4, at which points the springs 14 bear against the same. Said springs 14 are under tension with a tendency to force the extension pieces 6 beyond the ends of the frame 1.

The shutter 15 is hinged to the lower rail 4 and, when closed over the opening 2, lies between the upper and lower rails 4, mounted upon the inner side of the frame 1. The pin 16 is mounted upon one end of the shutter 15 and passes through an elongated opening 17 in a prop member 18, which, in turn, is pivotally mounted upon the plate 19. The washers 20 are mounted upon the pin 16, and a coiled spring 21 surrounds the said pin and is interposed between the head thereof and the outer washer 20. Said spring 21 is under tension with a tendency to force the outer washer 20 in close contact with the side of the prop member 18, thereby causing sufficient friction between the said washers and the prop member to hold the shutter 15 open at any desired angle.

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

A ventilator comprising an apertured frame, a shutter arranged to operate over the aperture, a pin attached to the shutter, washers located upon the pin, a coiled spring interposed between one washer and the head of the pin, a prop member having an elon-

gated opening which receives the said pin, said prop member lying between the said washers, and a supporting plate mounted upon the frame and to which the said prop member is pivotally attached said coil spring exercising its tension transversely of the prop and longitudinally of the shutter to hold the prop against lateral vibration.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

SUMNER L. MORSE.

Witnesses:

M. A. HOLTON,
FRANK F. MORSE.