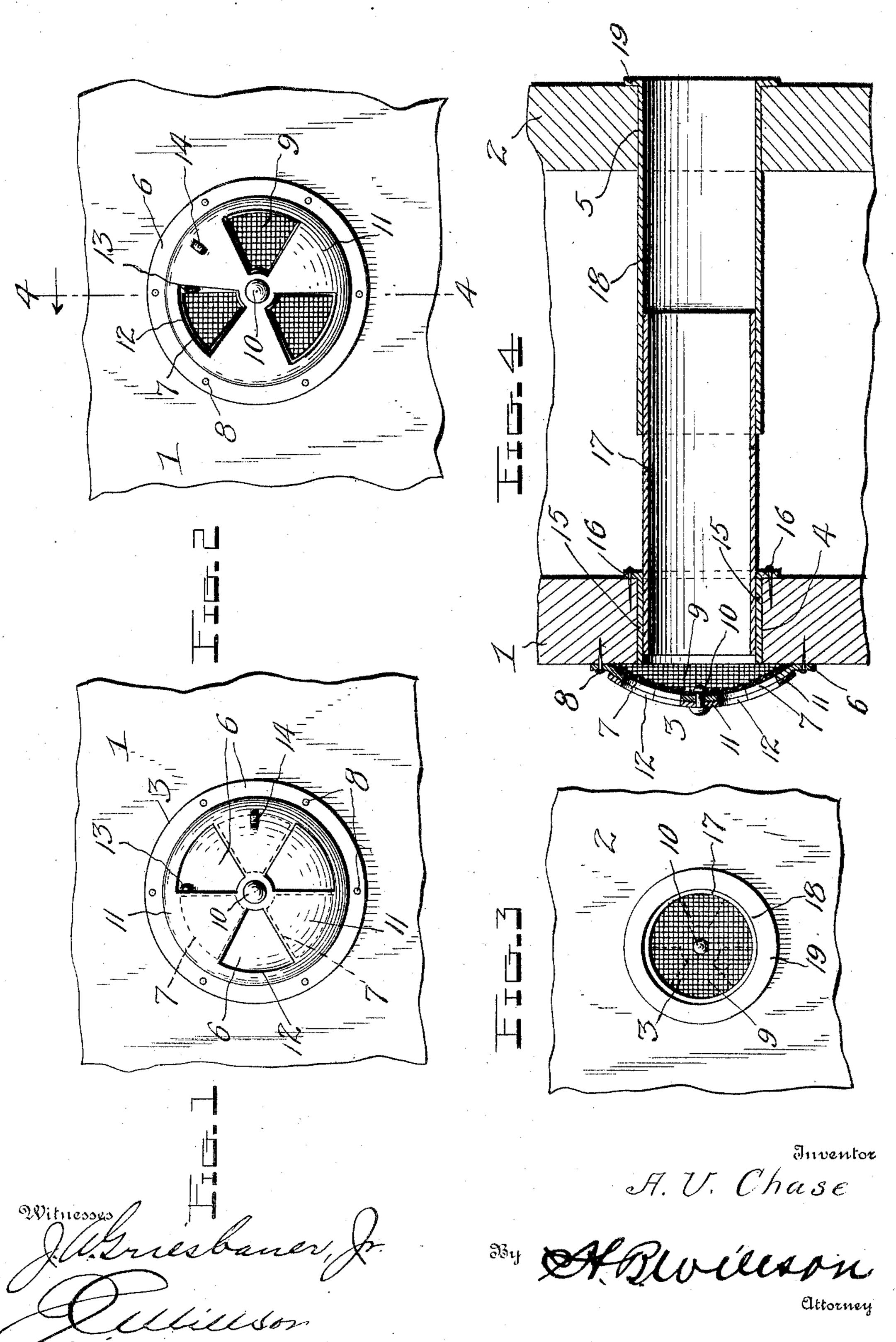
## A. U. CHASE. WINDOW VENTILATOR. APPLICATION FILED MAR. 22, 1904.

NO MODEL.



## United States Patent Office.

ASA U. CHASE, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF TO LAVERNE N. ATWATER, OF WHITECLOUD, MICHIGAN.

## WINDOW-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 775,798, dated November 22, 1904.

Application filed March 22, 1904. Serial No. 199,374. (No model.)

To all whom it may concern:

Be it known that I, Asa U. Chase, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Window-Ventilators; and I do 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.

My invention relates to improvements in ventilators, and particularly to those designed for use in window-sashes of either the ordinary or the double started

nary or the double storm type.

The object of my invention is to provide a device of this character which will be simple in construction, durable in use, well adapted for the purpose intended, and comparatively inexpensive to produce.

disk and is provided with openings 12, similar in shape and arrangement to the openings 7 are adapted to be covered and uncovered by oscillating the shutter upon its pivot 10 and converse shutter upon its pivot 10 and converse.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a front elevation of a portion of the inner sash of a double or storm window with my improved ventilator applied thereto, said ventilator being in its closed position. Fig. 2 is a similar view of the same, the ventilator being in its opened position. Fig. 3 is a front elevation of a portion of the outer sash of said double or storm window, the ventilator being in the position shown in Fig. 2. Fig. 4 is a vertical longitudinal sectional view through the ventilator, taken on the line 44 of Fig. 2.

Referring to the drawings by numeral, 1 denotes a portion of the inner sash of a double or storm window. 2 denotes a similar portion of the outer sash of the same, and 3 denotes my improved ventilator connecting said sashes. The said sashes are formed at any suitable point with alining openings 4 and 5, preferably circular in cross-section. Upon the inner face of the inner sash 1 is secured, concentrically over the said opening 4, a circular convex plate or disk 6, which is formed with a series of openings 7, preferably

of segmental shape, as shown. Said plate 6, 50 which is considerably larger than the opening 4, is preferably secured to the sash by small nails 8 and confines between it and the inner face of the sash the edge of a screen 9 of woven-wire fabric or other reticulate mate- 55 rial. Said screen is preferably convex, as shown, and is also retained in position by a rivet or pivot-pin 10, which passes through it and central openings or apertures formed in said plate 6 and in a rotary or oscillatory shut- 60 ter 11, which said rivet secures upon the outer face of the convex portion of said plate. Said shutter is in the form of a circular convex disk and is provided with openings 12, similar in shape and arrangement to the openings 7 65 in plate 6, which openings 7 are adapted to shutter upon its pivot 10 and causing its openings 12 to be moved into and out of register with said openings 7. The rotary movement 70 of the shutter 11 is limited by a stop 13, punched up from the convex portion of the plate 6 and projecting through one of the openings 12, so that its engagement with either one of the sides of said opening prevents fur- 75 ther movement of the shutter in that direction. Said shutter has a projection 14 punched up from it to form a finger-piece, by means of which it may be readily turned or oscillated.

Projecting into the opening 4 in sash 1, 80 from the outer face thereof, is a tubular metal sleeve 15, formed with an annular flange or rim 16, which is nailed or otherwise secured to said outer face of said sash 1 to hold the sleeve in position. Telescoping within said 85 sleeve 15 is a tube 17, and telescoping upon said tube 17 is a similar tube 18, which projects through the said opening 5 in the sash 2, as clearly shown in Fig. 4 of the drawings. The said tube 18 is formed on its outer end 90 with an annular flange or rim 19, which engages the outer face of the sash 2 to limit the inward movement of the tube 18.

The use and advantages of my invention will be readily understood from the forego- 95 ing description, taken in connection with the accompanying drawings. It will be seen that the device is of a simple, durable, and com-

paratively inexpensive construction, and that it may be readily applied to any form of window. By providing the sleeve 15 and the telescoping tubes 17 and 18 the device may be adjusted to double or storm windows of any size or kind without regard to the thickness of the sashes or the distance between them. By rotating the shutter the ventilator may be adjusted to either its opened position (shown in Fig. 2) or its closed position (shown in Fig. 1) or to any intermediate position, as desired. The screen may be of any desired form and effectively prevents the entrance of dust and dirt into the room or building.

While I have shown and described my improved ventilator as applied to a double window, it will be understood that the same may

be used in various other ways.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what

I claim as new, and desire to secure by Letters 25 Patent, is—

In combination with inner and outer sashes having alining openings, a sleeve in the opening of the inner sash and having a flange secured to the outer side of the inner sash, a 30 flanged tube extending through the opening of the outer sash and projecting toward the inner sash, a movable tube telescopically disposed in the sleeve of the inner sash and telescopically engaging the flanged tube of the 35 outer sash, a plate on the inner side of the inner sash and disposed over the inner ends of said sleeve and movable tube and having openings, and means to open and close said openings, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-

nesses.

ASA U. CHASE.

Witnesses:
CLARA S. COMEY,
CLARA J. SAUNDERS.