

W. F. GULNERICH.

VENTILATOR.

APPLICATION FILED JUNE 20, 1911.

1,002,056.

Patented Aug. 29, 1911.

2 SHEETS—SHEET 1.

Fig 1

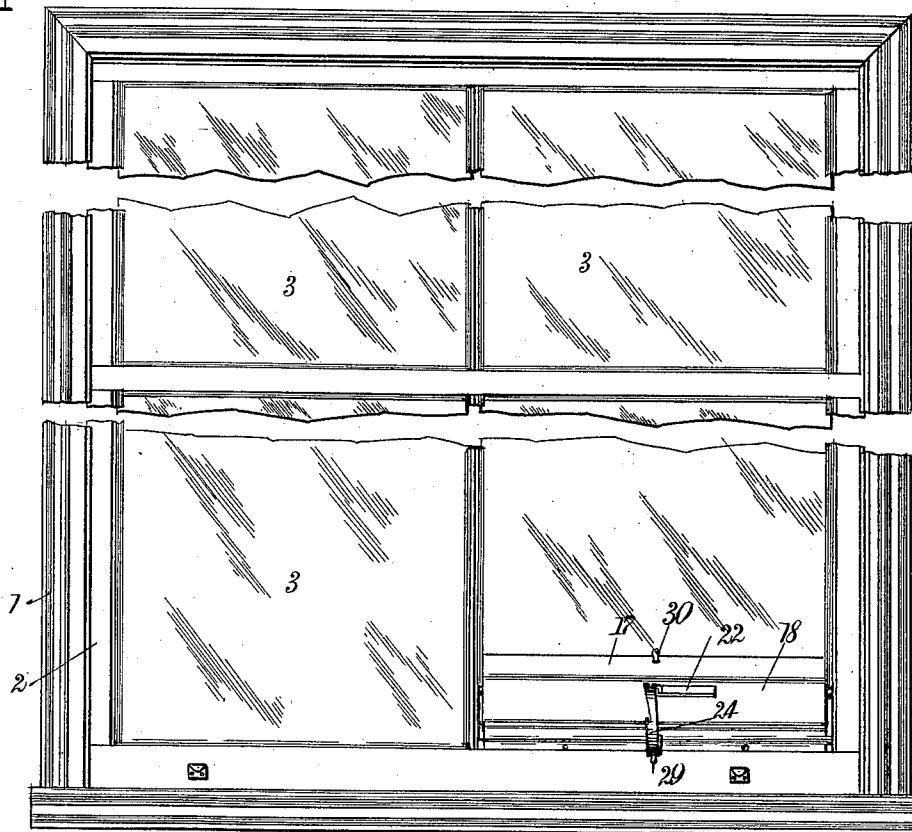
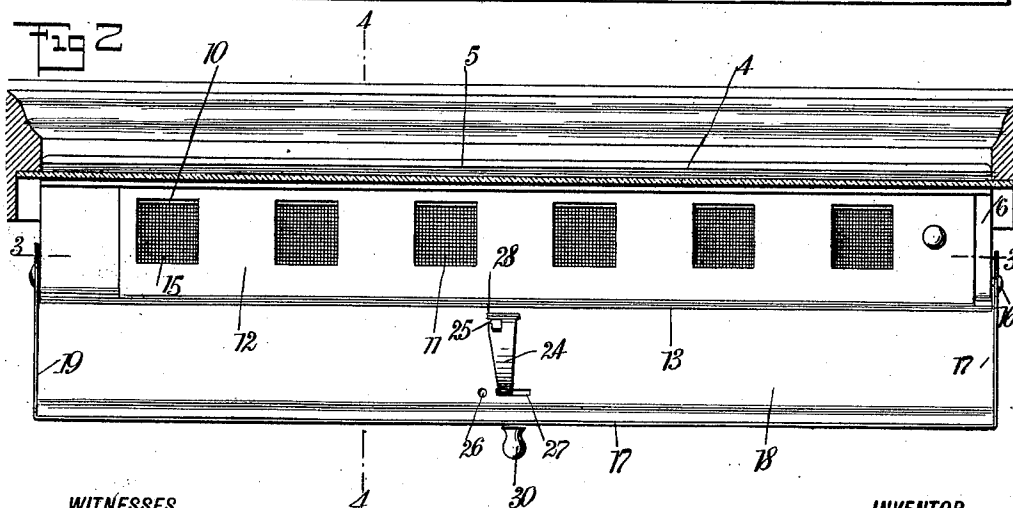


Fig 2



WITNESSES

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2 SHEETS-SHEET 2.

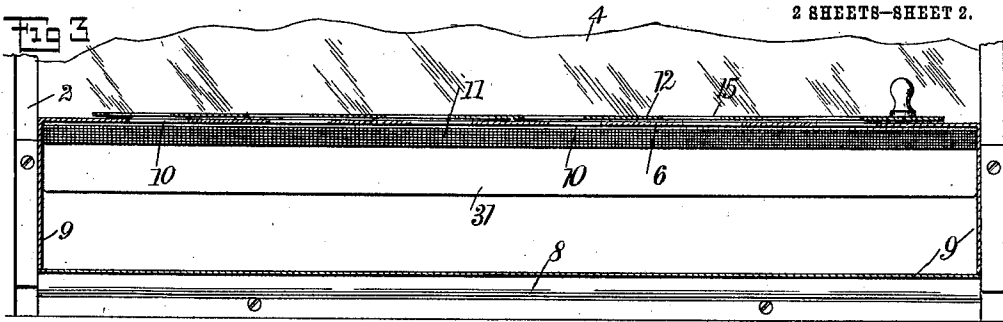


Fig 4

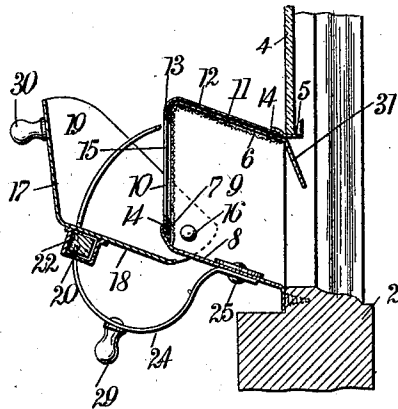


Fig 5

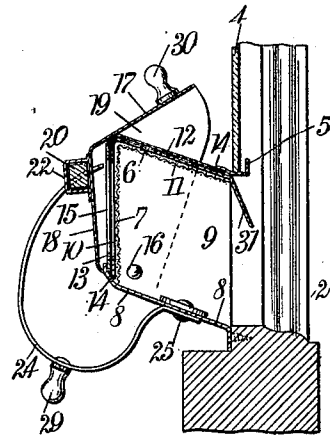


Fig 6

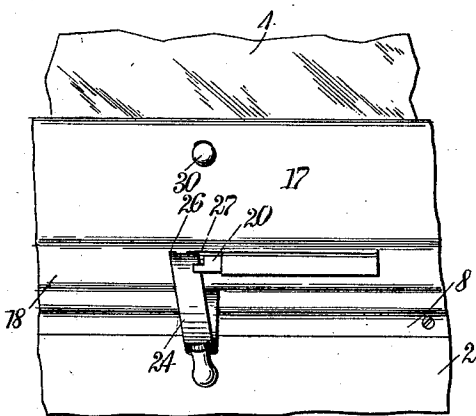


Fig 7

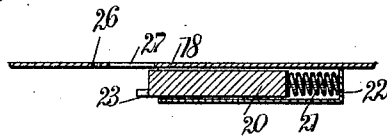
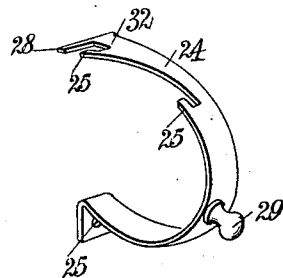


Fig 8



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UNITED STATES PATENT OFFICE.

WILLIAM F. GULNERICH, OF MERIDEN, CONNECTICUT.

VENTILATOR.

1,002,056.

Specification of Letters Patent.

Patented Aug. 29, 1911.

Application filed June 20, 1911. Serial No. 634,252.

To all whom it may concern:

Be it known that I, WILLIAM F. GULNERICH, a citizen of the United States, and a resident of Meriden, in the county of New Haven and State of Connecticut, have invented a new and Improved Ventilator, of which the following is a full, clear, and exact description.

This invention relates to ventilators, and has for its principal objects to provide a ventilator adapted to be attached to a window, and to permit the ingress of air into the interior of a building without causing a draft, at the same time keeping out all objectionable foreign matters and substances, and to provide such a ventilator with means for regulating the influx of air to the extent desired. Such objects I accomplish by the means hereinafter described and illustrated in the accompanying drawings, in which similar characters of reference indicate similar parts throughout the several views.

In the drawings, Figure 1 represents a front elevation of a ventilator embodying my invention attached to a window, shown partly broken away; Fig. 2 is a plan view of the ventilator shown in Fig. 1, enlarged; Fig. 3 is a vertical longitudinal section taken on the line 3—3 of Fig. 2; Fig. 4 is a vertical transverse section taken on the line 4—4 of Fig. 2; Fig. 5 is a similar view of my invention to that shown in Fig. 4, with the guard or shield closed; Fig. 6 is a fragmentary section of a front elevation of my device showing a shield and locking mechanism therefor; Fig. 7 is a longitudinal section of a sliding latch and connecting parts; and Fig. 8 is a perspective view of a latch for holding the guard or shield in place.

As illustrated in the drawings, 1 represents a window casing having sashes 2 of ordinary construction connected therewith, and provided with window panes 3. The sash is also preferably provided with a pane of glass 4 shorter in length than the adjacent panes 3, and the lower edge of said pane bears against a bracket 5 extending longitudinally of the ventilator. The bracket 5 may be attached to the upper plate 6 of the main frame of the ventilator in any suitable manner, or if desired may be formed integral therewith. The upper plate 6 is preferably formed integral with a front plate 7 arranged at an acute angle to the plate 6, and with said

plate 6 extending lengthwise of the ventilator. The ventilator is also preferably provided with a bottom plate 8 which is secured in any suitable manner at its inner margin to the window sash. End plates 9 are attached to the longitudinal plates of the ventilator or formed integral therewith. The upper plate 6 and front plate 7 of the ventilator are provided with apertures 10 which are protected by a screen 11 preferably arranged on the inner side of said top plate 6 and front plate 7 for the purpose of preventing objectionable foreign matter from passing through said apertures. A slide is mounted upon the top and front plates of the ventilator, and is preferably formed of an upper plate 12 and front plate 13 bent at an acute angle to each other and having their edges held and guided in grooves or ways 14. The upper and front plates of the slide are provided with apertures 15 corresponding with and adapted to register with the apertures 10 of the top plate 6, and front plate 7, so that when the apertures of the slide are brought into position to register with the apertures of the main frame or top and front plates of the ventilator, air is permitted to freely pass through the frame of the ventilator into the interior of the building. By moving said slide longitudinally of the main frame of the ventilator the area of the apertures 10 of the main frame may be varied so as to regulate the quantity of air that may be permitted to pass through the ventilator.

The slide is so constructed that if desired the openings 10 in the main frame of the ventilator may be entirely closed. A shield is pivotally mounted upon the main frame of the ventilator by means of studs 16, and said shield consists of a front plate 17 and lower plate 18 preferably formed integral with each other and with end plates 19, as shown in cross section in Figs. 4 and 5. The lower plate 18 of the shield is preferably provided with a latch 20 which is held normally pressed outward by means of a spring 21, said latch and spring preferably being inclosed within a casing 22 attached to the lower plate 18 of the shield. The outer end of the latch 20 is preferably provided with a lip 23 adapted to engage the edge of a latch 24. The latch 24 is pivotally mounted on the main frame of the ventilator by means of a stud 25 so as to permit the free end of said latch to have a lateral

movement. The latch 24 is provided with pins 25 adapted to engage a small aperture 26 on the lower plate 18 of the shield. The free end of the latch 24 engages a slot 27 formed in the lower plate 18 of the shield. Said free end is also provided with a finger or pin 28 extending transversely of said latch 24 to prevent the withdrawal of the free end of the latch through said slot 27 of the shield. The latch 24 is also preferably provided with a finger piece 29 by means of which the latch 24 may be adjusted and the front plates 17 of the shield may also be provided with a finger piece or knob 30 for moving said plate, if desired.

A deflecting plate 31 may be formed on or attached to the upper portion of the main frame or casing of the ventilator to break the force of the wind and to prevent the wind from striking directly onto the apertures 10 of the front plate or casing of the ventilator. The lower plate 8 of the main frame of the casing of the ventilator is preferably inclined upward from the window sash for the purpose of deflecting the air upward toward the apertures 10 of the casing.

In the construction herein shown the slide is made of two plates 12—13 formed integral with and at an acute angle to each other. If desired the upper plate 12 of the casing may be formed separately from the plate 13 and be operable independently of each other, and if desired one of the plates and the corresponding aperture of the adjacent side of the casing may be omitted.

When the device is in use a current of air entering the interior of the casing of the ventilator is deflected upward by the inclined plate of the ventilator and confined to some extent within the interior by the deflecting plate 31, and passes through the apertures 10 of the casing to the interior of the building. The quantity of air desired to pass through the casing may be regulated by the slide 12—13 and the admission of air through the casing may be entirely shut off by said slide when desired. In addition to regulating the quantity of air desired to pass through the casing of the ventilator by means of said slide the shield 17—18 may be also used for that purpose. When the shield is in an open position, as shown in Fig. 4, it has but little effect in controlling the passage of air through the casing of the ventilator, but when in a closed position, as shown in Fig. 5, the lower plate 18 of the shield limits the quantity of air that can pass through the apertures 10 of the front plate 7 of the casing, and the upper plate 17 of said shield when in such position acts as a deflector on the air passing through the apertures 10 of the upper plate 6 of the casing into the interior of the building.

Having thus described my invention,

what I claim as new and desire to secure by Letters Patent is:

1. A ventilator comprising a casing having apertures formed therein, a screen covering said apertures, a slide movable longitudinally of said screen to cover said apertures and regulate the exposed area of said apertures, a shield pivoted to said main frame and extending longitudinally thereof, a latch pivoted to said main frame and having a lateral movement at its free end engaging the main frame, and a sliding latch mounted on said main frame adapted to bear against the lateral edge of said pivoted latch.

2. A ventilator comprising a casing having an inclined lower plate, and a top and a front plate arranged at an acute angle to each other and provided with apertures, a screen covering said apertures, end plates, a slide movable longitudinally of the plates of said casing and adapted to limit the exposed area of said apertures, a shield having a top plate and a front plate extending longitudinally of said main casing, end plates connected with said longitudinal plates, a latch pivoted to said casing and having a lateral movement at its free end adapted to engage an aperture formed in said shield, and a sliding latch mounted on said shield adapted to bear against the edge of said pivoted latch.

3. A ventilator comprising a main frame having an inclined lower plate, front and top plates arranged at an acute angle to each other and connected to the lower plate, and provided with apertures, a screen covering said apertures, a deflecting plate extending longitudinally of said top plate, a shield pivoted at its lower portion to said main casing and provided with a front plate having an aperture formed therein, a top plate arranged at an acute angle to said front plate, end plates connected with said top and front plates, a latch pivoted to said casing, a bent latch pivoted at its lower end to said casing and engaging with its free end the aperture of said shield, and provided on its free end with a pin extending transversely thereof to prevent the withdrawal of said free end from the aperture of said casing.

4. A ventilator comprising a main frame having apertures formed therein, a screen covering said apertures, a shield provided with front and top plates extending longitudinally of said main frame, said front plate being provided with a slot and an aperture adjacent to said slot, end plates connected with said front and top plates, a bent latch pivoted at its lower end to said main frame and having its free end adapted to engage the slot of said shield and provided with pins adapted to engage the opening in said shield adjacent to said slot, and

a sliding spring-actuated latch having a forked end adapted to engage the side of said pivotal latch.

5 5. A ventilator comprising a main frame having three sides, the upper and front sides being arranged at an acute angle to each other and the lower side arranged at an obtuse angle to the front side, one of said sides being provided with apertures
10 and a screen covering said apertures, a shield having two sides arranged at an obtuse angle to each other, one of said sides being provided with an aperture, end plates connected with said front and top plates, a
15 pivotal connection between said shield and main frame, a bent latch pivoted to the cas-

ing and having a lateral movement at its free end, said free end being adapted to engage said slot and interlock with one of the sides of said shield, and a spring-actuated latch
20 adapted to bear against the edge of said pivoted latch and hold the free end of said pivoted latch in locked engagement with said shield.

In testimony whereof I have signed my
25 name to this specification, in the presence of two subscribing witnesses.

WILLIAM F. GULNERICH.

Witnesses:

HUGO L. PATZOH,

WILLIAM H. CUMBERLIDGE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents
Washington, D. C."