No. 852,650. PATENTED MAY 7, 1907.

C. S. CANNON.

VENTILATING MECHANISM.

APPLICATION FILED JUNE 12, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

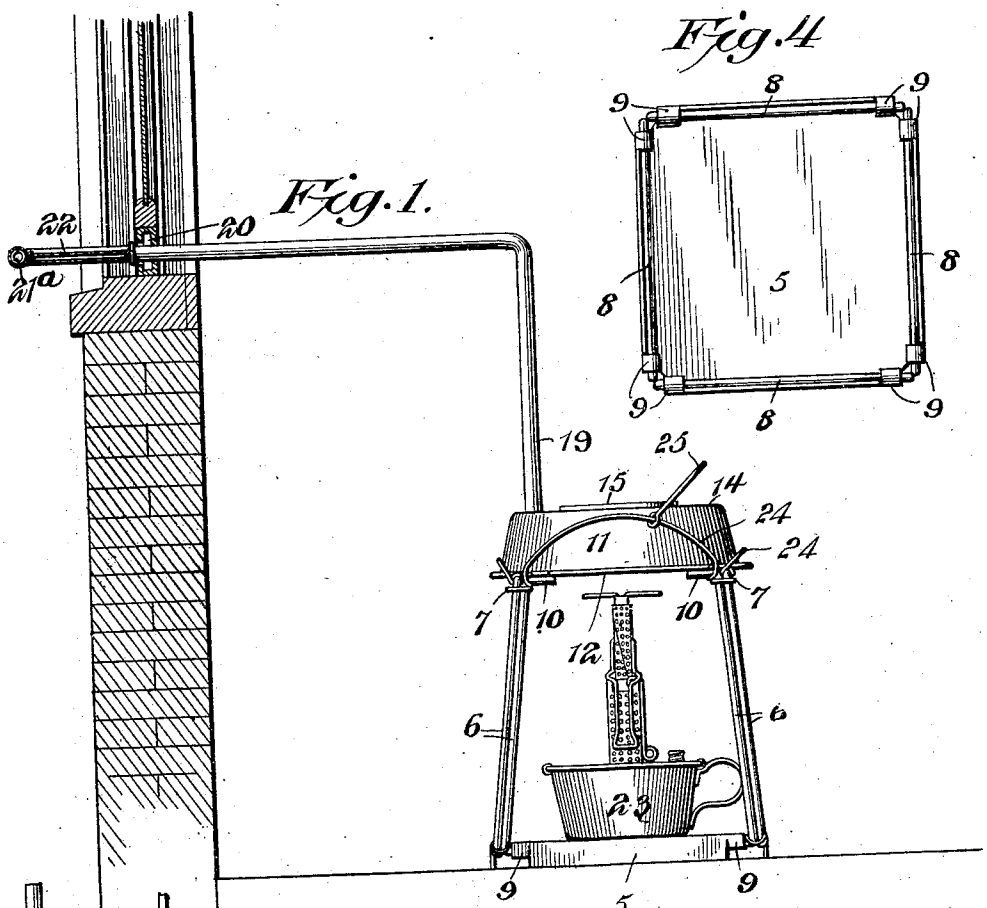
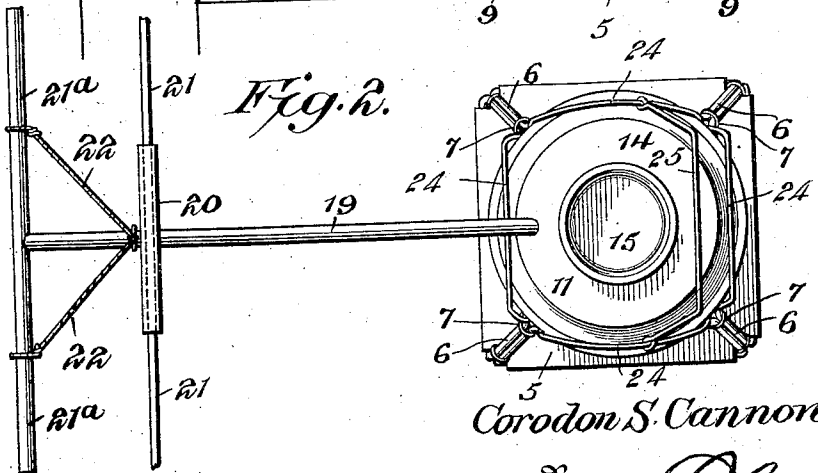


Fig. 4.

Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

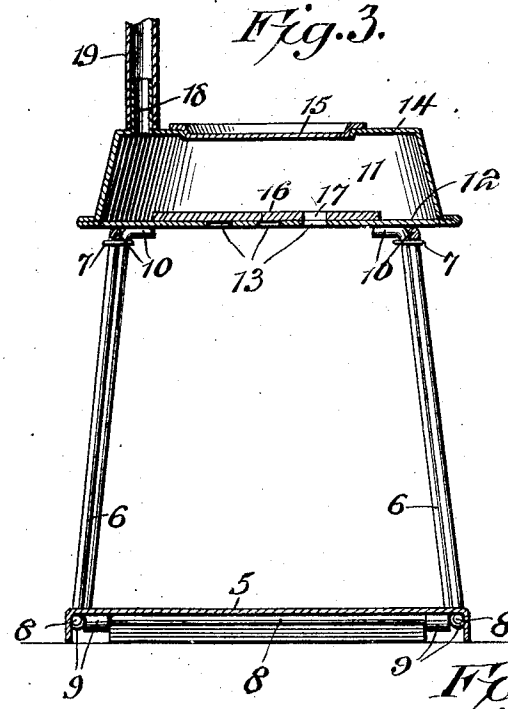


Fig. 5.

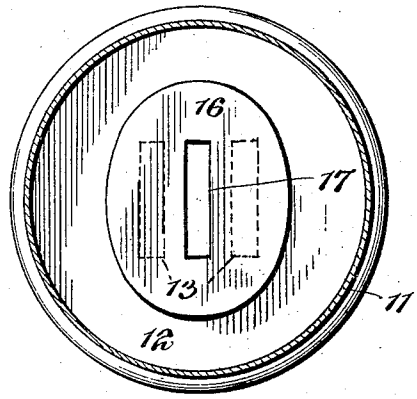


Fig. 8.

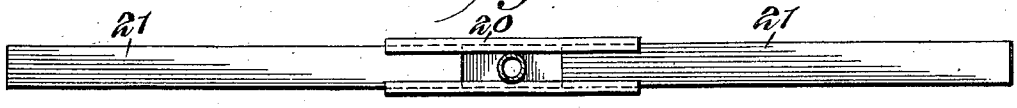


Fig. 6.

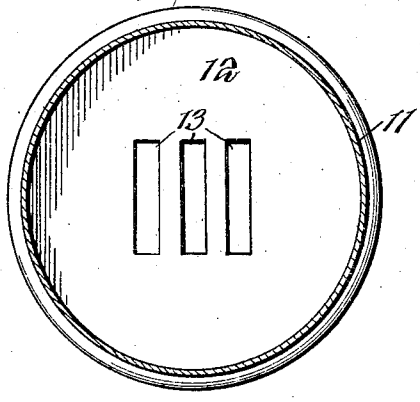
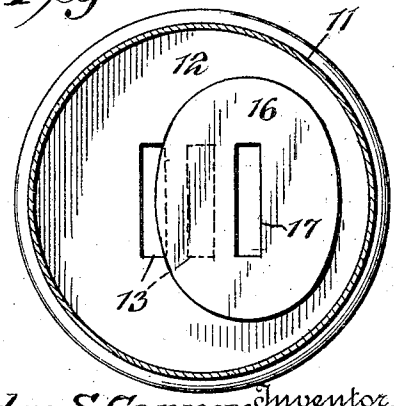


Fig. 7.



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UNITED STATES PATENT OFFICE.

CORODON S. CANNON, OF CHICAGO, ILLINOIS.

VENTILATING MECHANISM.

No. 852,650. Specification of Letters Patent. Patented May 7, 1907.

Application filed June 12, 1906. Serial No. 321,402.

To all whom it may concern:

Be it known that I, CORODON S. CANNON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Ventilating Mechanism, of which the following is a specification.

It is a well known fact that products of combustion from oil and similar burners are very deleterious to health, and yet ordinarily these products of combustion are allowed to escape freely into the rooms containing such burners.

It is the principal object in the present invention to provide novel, simple and effective means, whereby the products of combustion will be conveyed away from and discharged exteriorly of the building in which the burner is placed, said means being readily applicable to ordinary rooms, being so constructed that the radiation of heat is not materially interfered with, and furthermore, being so arranged that the proper draft is secured without regard to the changing currents of the outside atmosphere, into which the said products of combustion are discharged.

The preferred form of construction is shown in the accompanying drawings, wherein:—

Figure 1 is a side elevation of the same, showing the delivery pipe extended through a window, said window being illustrated in section. Fig. 2 is a top plan view of the structure. Fig. 3 is a vertical sectional view through a portion of the same. Fig. 4 is a bottom plan view of the receiving chamber support. Fig. 5 is a horizontal sectional view, through the receiving chamber. Fig. 6 is a similar view, showing the shutter removed. Fig. 7 is a view similar to Fig. 5, illustrating the shutter in a different position. Fig. 8 is a view in elevation of the window closure.

Similar reference numerals designate corresponding parts in all the figures of the drawings.

In carrying out the invention, a support is employed, comprising a base 5, from which rise convergently disposed standards 6. The standards comprise parts of substantially U-shaped frames, the upright rods of which are tied together, as shown at 7. The cross rods 8 support the base 5, said base having lips 9 wrapped about said cross rods. The upper ends of the standards are provided with offset terminal portions 10, on which rests a receiving chamber 11. This receiving chamber is circular in form, and has a flat bottom 12 provided with a plurality of slots 13 arranged side by side. A top 14 for the chamber is provided with a central opening closed by a suitable cover 15. A shutter or damper 16 is arranged within the chamber and comprises a flat plate that is substantially elliptical in form, said plate having a slot 17 at one side of its center, which slot corresponds in shape to the slots 13 in the bottom wall. The shutter is so constructed that the slot 17 may be placed in alinement with any of the slots 13. The receiving chamber 11 is furthermore provided with an upstanding nipple 18, and connected thereto is a conducting pipe 19, preferably in the form of an elbow. This pipe is arranged to be passed through a window beneath the sash. In order to close the space beneath said sash, a closure is employed, comprising an intermediate metallic section 20, having end sections 21 slidably associated therewith. A cross pipe 21^a is connected between its ends to the outer end of the conducting pipe 19, said cross pipe being of substantially the same diameter as the pipe 19. Braces 22 connect the outer portions of the pipes, as shown, and serve to hold the pipe 21 rigidly fixed.

The receiving chamber 11 is maintained in position upon the support by means of bails 24, which are mounted upon the offset terminals 10 of the standard and embrace the adjacent marginal portions of the receiving chamber, as clearly shown in Figs. 1 and 2. Certain of these bails are connected by a handle 25, which, as illustrated in Figs. 1 and 2, passes over the chamber and is adapted to be swung to one side of the cover 15.

In using the device, a suitable burner or heater, as 23 is placed upon the base, with its upper end beneath the receiver. In the present embodiment, the heater shown is fully set forth in co-pending application, Serial No. 321,401, but it will be evident that practically any form of oil, or analogous, stove may be employed. The products of combustion from this heater or stove will enter the receiving chamber 11, the entrance of course being controlled by the shutter 16. From this chamber, the said products of combustion will pass through the conducting

pipe 19 into the cross pipe 21, from whence they will be discharged into the outer atmosphere.

It will be observed that this structure is readily applicable to practically any room, and can be used in conjunction with any ordinary heater. The products of combustion are carried away thereby, and yet the radiation of heat is not materially interfered with. The employment of a comparatively long and comparatively small cross pipe in the relation shown and in combination with the other features is important, as experience has demonstrated that the varying currents of air will not prohibit the escape of the products of combustion or cause the same to pass out into the room instead of into the outer atmosphere.

From the foregoing, it is throught that the construction, operation, and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a ventilator of the character described, the combination with an extensible closure arranged to be placed in a window frame at one side of the sash, of a conducting pipe that passes therethrough, a discharge pipe of substantially the same diameter as the conducting pipe and connected between its ends to the outer end of said conducting pipe, and a receiving chamber connected to the inner end of the conducting pipe and having a bottom provided with an inlet opening.

2. In a ventilator of the character described, the combination with an extensible closure arranged to be placed in a window frame at one side of the sash, of a conducting pipe that passes therethrough, a discharge pipe of substantially the same diameter as the conducting pipe and connected between its ends to the outer end of said conducting pipe, a receiving chamber connected to the inner end of the conducting pipe and having a bottom provided with an inlet opening, and means for controlling the opening.

3. In a ventilator of the character described, the combination with an extensible closure arranged to be placed in a window frame beneath the sash and comprising an intermediate section and end sections slidably associated therewith, of a conducting pipe that passes through the intermediate section and has a cross pipe at its outer end, a receiving chamber connected to the inner end of the conducting pipe, and means for supporting said chamber.

4. In a ventilator of the character described, the combination with a receiving chamber having a bottom wall provided with a plurality of openings, of a shutter loosely located on the bottom wall and movable over the different openings, and a conducting pipe connected to the chamber.

5. In a ventilator of the character described, the combination with a receiving chamber having a substantially circular bottom wall provided with a plurality of slots, of a substantially elliptical shutter loosely located on the bottom wall and movable over the slots, said shutter having a slot movable into alinement with the slots of the bottom wall.

6. In a ventilator of the character described, the combination with a support including standards, of a receiving chamber mounted on the standards and having a bottom opening, chamber-engaging means mounted on the standards, a handle secured to said means, and a conducting pipe leading from the chamber.

7. In a ventilator of the character described, the combination with an extensible closure arranged to be placed beneath a window sash and comprising an intermediate section, and end sections slidably associated therewith, of a conducting pipe passing through the intermediate section, a cross pipe connected between its ends to the outer end of the conducting pipe, braces connecting the cross pipe and conducting pipe, a receiving chamber connected to the inner end of the conducting pipe and having a bottom provided with an opening, means for controlling the opening, and a support for the receiving chamber.

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

CORODON S. CANNON.

Witnesses:
LOUIS GROTHMAN,
JOHN J. HANNAN.