

F. A. WILSON.
REGISTER AND VENTILATOR.

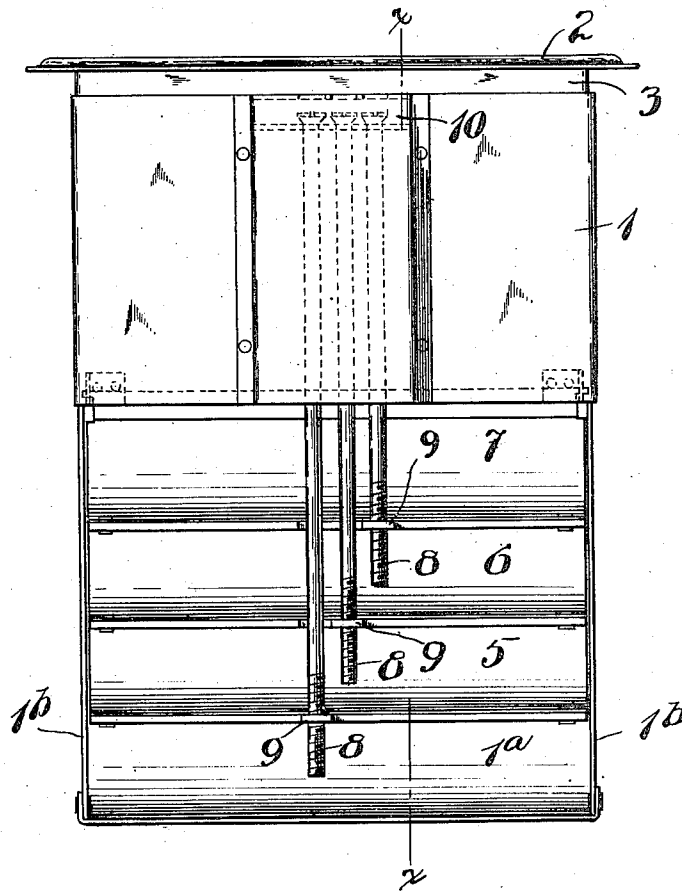
APPLICATION FILED JULY 7, 1909. RENEWED NOV. 9, 1911.

1,013,631.

Patented Jan. 2, 1912.

2 SHEETS-SHEET 1.

Fig. 1.



Witnesses:

Fred M. Kammnufelber.
Charles A. Leard

Inventor

F. A. WILSON.

By his Attorneys
Paul H. Bennett & M. A. Beecher.

F. A. WILSON.
REGISTER AND VENTILATOR.

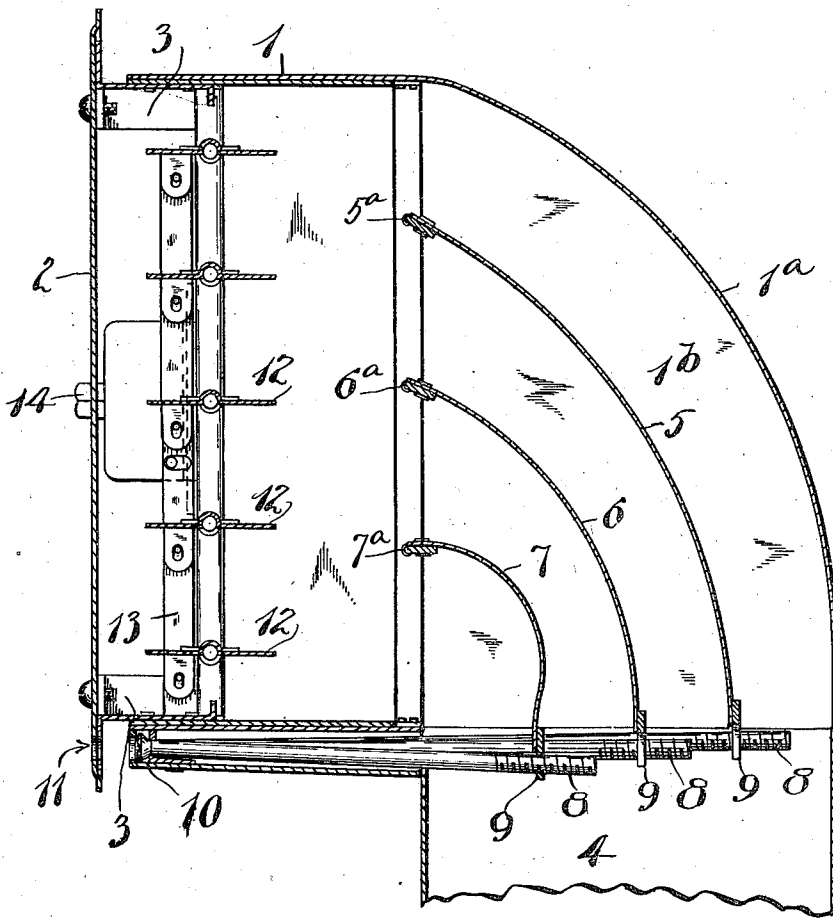
APPLICATION FILED JULY 7, 1909. RENEWED NOV. 9, 1911.

1,013,631.

Patented Jan. 2, 1912.

2 SHEETS—SHEET 2.

Fig. 2.



Witnesses:
Fred M. Dannenfelser.
Chas. A. Pearce

Inventor
F. A. WILSON.
By his Attorney
Charles B. Brown & McElwaine.

UNITED STATES PATENT OFFICE.

FREDERICK A. WILSON, OF BROOKLYN, NEW YORK.

REGISTER AND VENTILATOR.

1,013,631.

Specification of Letters Patent.

Patented Jan. 2, 1912.

Application filed July 7, 1909, Serial No. 506,261. Renewed November 9, 1911. Serial No. 659,426.

To all whom it may concern:

Be it known that I, FREDERICK A. WILSON, a citizen of the United States, residing at Brooklyn, county of Kings, State of New York, have invented certain new and useful Improvements in Registers and Ventilators, of which the following is a full, clear, and exact description.

My invention relates to improvements in registers and ventilators, the same being particularly adapted for use in a side wall.

The object of the invention is to provide an improved side wall register, the construction of which is adjustable in a variety of ways, for example, it is adjustable to the thickness of the wall and it is also adjustable as to its deflector arrangement, whereby air may be caused to flow through all parts of the register face plate uniformly. These and other advantages will be apparent to the mechanic skilled in the art from a reading of the following description.

In the accompanying drawings, Figure 1 is a view of the under side of the register. Fig. 2 is a longitudinal section on the plane of the line *x-x* Fig. 1.

1 represents a box suitably constructed of sheet metal and arranged to stand in the wall. This box 1 carries at its front a face plate 2 of the usual perforated construction, said face plate standing flush with the surface of the wall. In the preferred form of construction the face plate 2 is connected to the box 1 telescopically or in such manner as to be adjustable to and fro to compensate for walls of varying thicknesses.

3 represents the telescopic connection between the plate 2 and box 1.

4 represents conventionally the upper end of a flue, such as found between the walls of a building. In order to have the box 1 register properly with the flue 4 and so as to be properly connected therewith, it is desirable to have the aforesaid adjustable connection between the box 1 and face plate 2.

The box 1 has a rearward extension 1^a and ends 1^b—1^c. The rear extension 1^a is curved backwardly and down so as to deflect the air rising through flue 4 forwardly through the face plate 2. Inasmuch as the tendency of the air is to rise upward, it is apparent that the major part of the air might flow through the upper part of the face plate and hence to prevent this I provide supplemental curved deflecting plates 5, 6 and 7, hinged respectively at 5^a, 6^a and

7^a. Each of these curved deflectors is connected at its lower end with a suitable adjusting device. Each adjusting device in this case comprises a screw 8 passing through a threaded nut 9 on the lower end of each deflector respectively. The forward end of each screw 8 is accessible from the front side of the register. In the particular form shown, each screw is held in a housing 10 in such a manner that when rotated each screw will have the effect of moving the lower end of its respective deflector toward or from the rear wall 1^a. The adjustment of each deflector 5, 6 and 7 may be effected independently of the others. A suitable perforation or perforations is provided at the front to afford access to the end of the screw for operation.

12—12 are shutters carried within the box 1 and arranged to be operated by bar 13 by which said shutters are linked together so that when said bar is moved, said shutters will be opened or closed.

14 is an exposed operating member connected with the bar 13 and accessible at the front of the register, whereby the shutters 12 may be opened and closed.

By the aforesaid construction, the deflectors 5, 6 and 7 may be so adjusted as to cause air rising through the flue 4 to project forwardly and through the perforated face plate 2 uniformly throughout the entire area of the latter.

In the preferred arrangement of the deflector adjusting screws, they are placed side by side as best seen in Fig. 1, each overlapping the other and yet not interfering in any way.

What I claim is:

1. In a side wall register, a face plate, a box extending rearwardly therefrom and opening at the rear, an extension at the rear of said box, said extension being closed at its sides and rear and opening downwardly only, deflectors within said extension and arranged between the side walls thereof and means to independently move said deflectors with respect to each other, to shift the position of the same relatively to the rear wall of the downward extension and a plurality of shutters in advance of said deflectors with means for operating the same.

2. In a side wall register, a face plate, a box extending rearwardly therefrom and opening at the rear, an extension at the rear of said box, said extension being closed at

- its sides and rear and opening downwardly only, a deflector within said extension and arranged between the side walls thereof and an adjusting device operatively connected
5 with said deflector to shift the position of the same relatively to the rear wall of the downward extension, said adjusting means terminating at the rear of the edge of the face plate, a slidable connection between
10 said face plate and the rearward extension for adjusting the apparatus to walls of different thicknesses, said face plate having passages to afford access to said deflector adjusting device.
- 15 3. In a side wall register, a box having an integral rearward extension opening downwardly, a plurality of curved deflectors therein, said deflectors inclining forwardly toward, the front of the box and being pivoted to said box, an adjusting device for one
20 of said deflectors, said adjusting device being operable from the front of the register and a threaded connection between said adjusting device and said deflector.
- 25 4. In a side wall register, a box having a

rearward extension opening downwardly, a plurality of curved deflectors therein, said deflectors inclining forwardly toward the front of the box and being secured thereto at their upper outer ends, the lower ends of
30 said deflectors being free to be adjusted, and independent adjusting devices for the lower ends of said deflectors, said adjusting devices being operable from the front of the register.

5. In a side wall register, a box having a rearward extension opening downwardly, a plurality of curved deflectors therein, said deflectors inclining forwardly toward the front of the box and being secured thereto at their upper outer ends, the lower ends of
40 said deflectors being free to be adjusted, and adjusting means for the lower ends of said deflectors, said adjusting means being operable from the front of the register.

FREDERICK A. WILSON.

Witnesses:

CHAS. A. PEARD,
ALICE MORFORD.