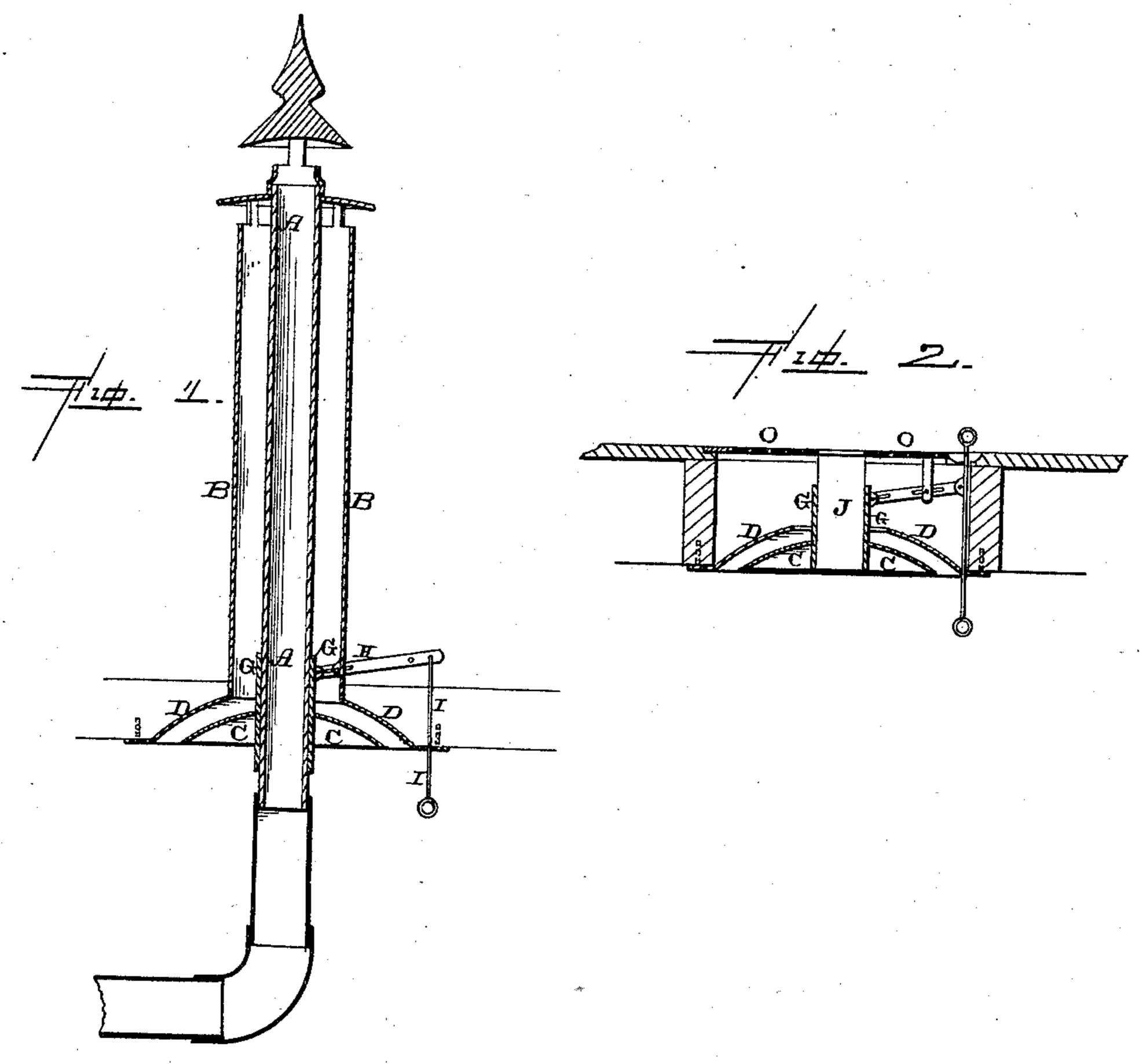
(No Model.)

## W. MOORE & J. B. CARTER. VENTILATOR FOR HOUSES.

No. 335,829.

Patented Feb. 9, 1886.



-Witnesses.-A. J. Gardner A. J. Brecht.

Mm. Moore, Ino. 13. Carter, per J. A. Lehmann, Atty

## United States Patent Office.

WILLIAM MOORE AND JOHN B. CARTER, OF KOKOMO, INDIANA.

## VENTILATOR FOR HOUSES.

SPECIFICATION forming part of Letters Patent No. 335,829, dated February 9, 1886.

Application filed November 4, 1885. Serial No. 181,852. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM MOORE and JOHN B. CARTER, of Kokomo, in the county of Howard and State of Indiana, have invented 5 certain new and useful Improvements in Ventilators for Houses; and we do hereby 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 perto tains to make and use it, reference being had to the accompanying drawings, which form

part of this specification.

Our invention relates to an improvement in ventilation for houses; and it consists in a 15 suitable opening made through the ceiling or floor between the upper and lower rooms, a suitable metallic frame, which is placed therein, a disk-valve for closing the opening, a guide upon which the valve moves, and a lever or 20 other means for opening and closing the valve either from the room below or the one above, as will be more fully described hereinafter.

The object of our invention is to place a ventilator in the top of a room around the 25 stove-pipe, or simply in the floor between an upper and lower room, and in which ventilator a disk-valve is used, and which can be opened from either above or below, for the purpose of allowing the warm air in the upper 30 part of the room either to escape through a flue or to pass into the room above.

Figure 1 is a vertical section showing our invention applied to a stove pipe. Fig. 2 is a similar view showing our invention placed

35 between an upper and a lower room.

A represents a stove-pipe, which is placed inside of the sheet-metal flue B. The lower end of this stove-pipe passes down into the top of the room, and to which lower end of the 40 stove-pipe are attached the other sections of the pipe which lead directly from the stove. This stove-pipe being smaller than the flue, a suitable space is left between the two for the free escape of the heated air in the room between 45 them when the valve C is open. The lower end of the flue rests upon the top of the iron casting D, which is made concave upon its under side, so as to form a funnel-shaped guide, into which the heated air freely passes. The disk-50 valve C is made of a shape to correspond to the concave portion D, so that when moved

stove-pipe and the flue will be tightly closed, and thus prevent any escape of air from the room. This disk-valve C has an opening 55 through its center, where it passes over the lower end of the stove-pipe A, so as to be guided vertically in its movements. Formed upon the top edge of this disk-valve is a flange, G, which projects upward around the stove- 60 pipe any suitable distance, and to the upper edge of this flange is loosely connected the inner pronged end of the lever H. To the outer end of this lever H is connected the rod I, which passes down through the opening made 65 in the ceiling, and through the edge of the enlarged part D into the room, where it can be readily reached at any time desired. By pulling down upon this rod H the disk-valve is made to close, so as to prevent any of the heat- 70 ed air in the upper portion of the room from escaping therefrom, and when this rod H is forced upward the valve is forced downward, so as to open the space between the stove-pipe and the flue, and thus allow the heated air to 75 freely escape.

When it is desired to place a ventilator in a floor between an upper and a lower room, the flue and the stove-pipe are dispensed with and a grate, O, is placed over the opening which so is made in the floor, and from the center of this grate there is made to project downward a guide, J, which acts in the same manner and for the same purpose as the stove-pipe to the disk-valve. The lever may be support- 85 ed from a suitable hanger which is formed on the under side of the grate and connected to the disk-valve, as shown, or in any other way that may be preferred. When the rod and lever are moved so as to open the valve, the 90 heated air in the lower room passes upward into the upper one as from a register; but when the disk-valve is closed there is no communication whatever between the two rooms so far as this ventilator is concerned.

Having thus described our invention, we

claim—

1. In a ventilator for houses, the ceiling or the floor between the rooms provided with an opening, the perforated metallic casting D, roo which is placed in the opening, the disk-valve located in the lower end of the opening and acting in conjunction with the casting, the guide up against the part D the space between the lupon which the disk-valve moves, and a mechanism for moving the valve, whereby it can be closed from the lower room, the parts being

combined substantially as shown.

2. In a ventilator for houses, the ceiling or the floor between two rooms provided with an opening, the perforated metallic frame D, which is placed therein, and a disk-valve placed in the lower end of the opening beneath the frame D, and which is moved vertically for the purpose of opening and closing the opening in the floor, the parts being combined to operate as described.

3. In a ventilator for houses, the flue D, placed in an opening between two rooms, the

grating O, the guide J, connected thereto, the 15 valve C, provided with the flange and moving upon said guide, the lever for moving the valve, and the rod connected to the lever, the parts being combined to operate substantially as specified.

In testimony whereof we affix our signatures

in the presence of two witnesses.

WILLIAM MOORE.
JOHN B. CARTER.

Witnesses:

J. F. Morrison, W. E. Blackledge.