2 Sheets--Sheet 1.

H. M. CREAMER.

Ceiling Register and Ventilator.

No. 165,797. Patented July 20, 1875.

Fig. 1.

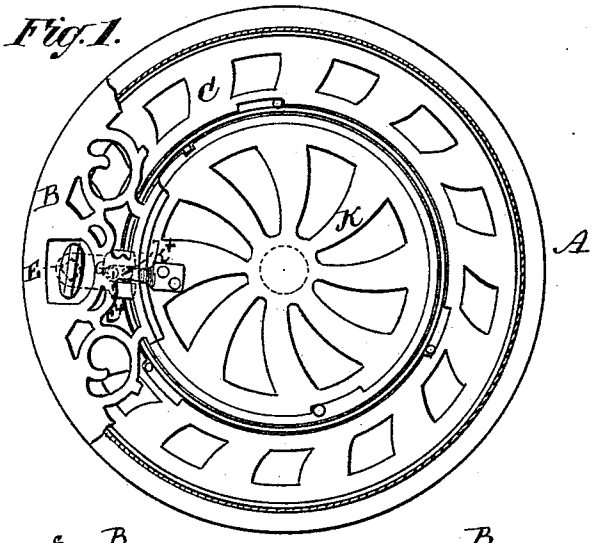


Fig. 2.

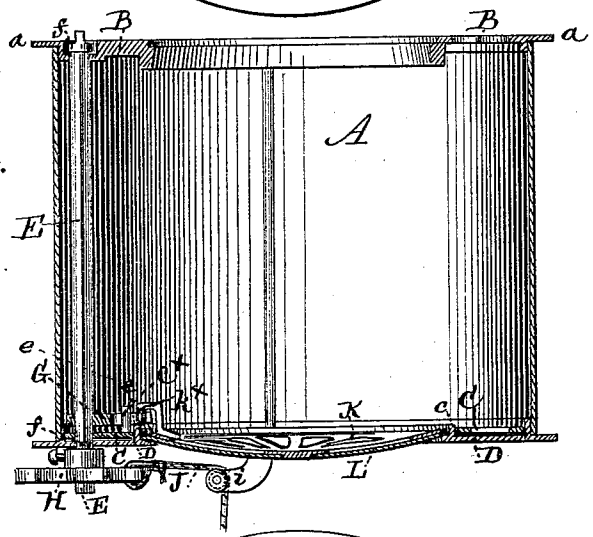
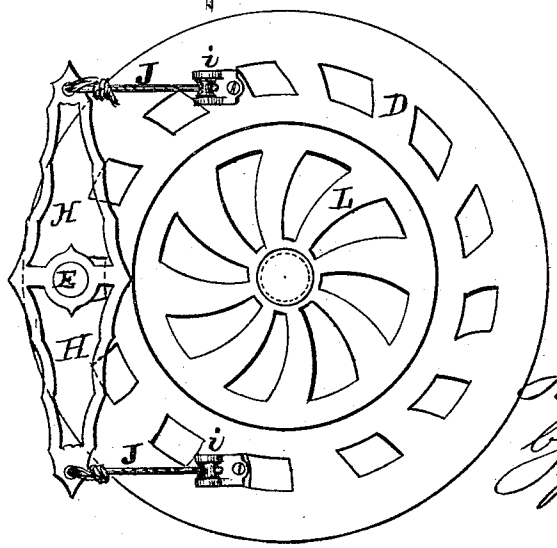


Fig. 3.



Witnesses.
John Becker.
F. Haynes

H. M. Creamer
by his Attorneys
Prowont Allen

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

2 Sheets--Sheet 2.

H. M. CREAMER.

Ceiling Register and Ventilator.

No. 165,797. Patented July 20, 1875.

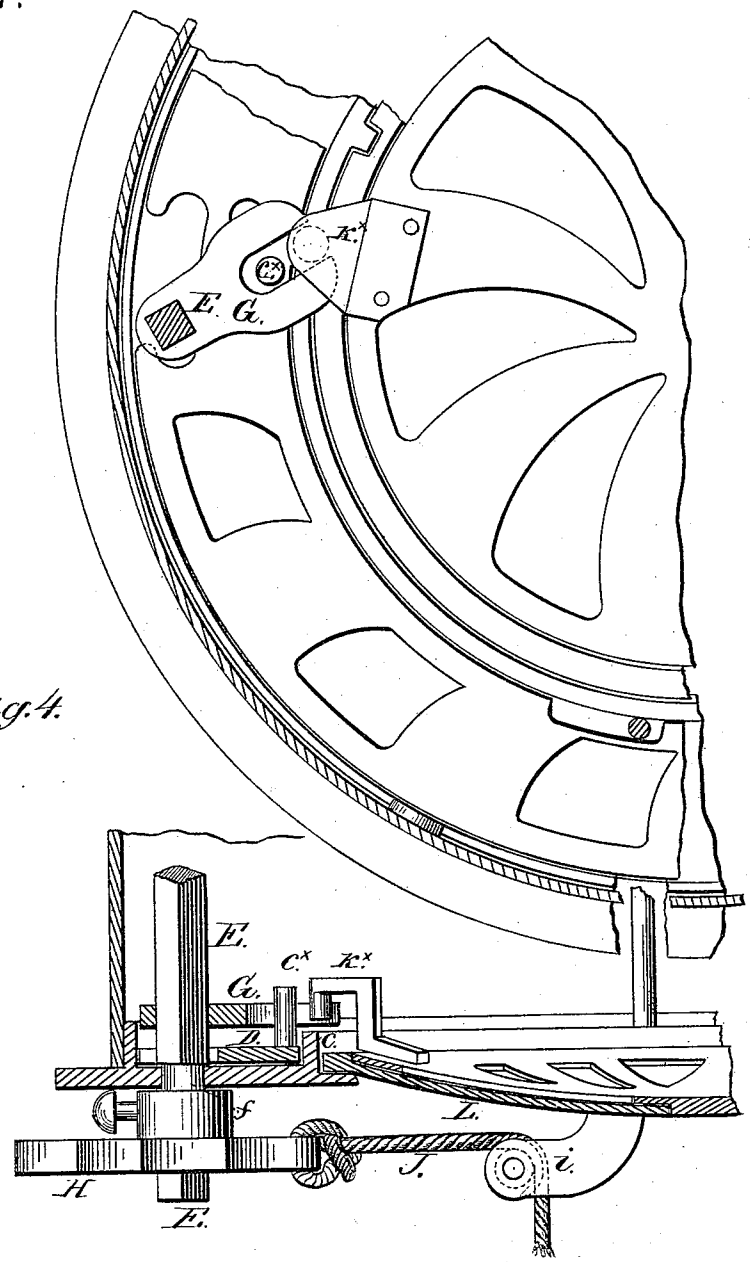


Fig. 4.

Witnesses.
John Becker
J. Haynes

Inventor:
H. M. Creamer
by his Attorneys
Brown & Allen

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HORATIO M. CREAMER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN CEILING-REGISTERS AND VENTILATORS.

Specification forming part of Letters Patent No. **165,797**, dated July 20, 1875; application filed May 31, 1875.

To all whom it may concern:

Be it known that I, HORATIO M. CREAMER, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Ceiling-Register and Ventilator; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to a ceiling-register and ventilator provided with a center-piece, which is removable to provide for the passage of a stove-pipe, and also provided with an annular register outside of the center-piece.

The invention consists in certain novel means of operating the center-piece as a register, and of also operating, at the same time, if desired, the outside annular register.

In the accompanying drawing, Figure 1 is a top view of my improved register. Fig. 2 is a vertical sectional view. Fig. 3 is a bottom view. Fig. 4 is a detail view.

A represents a jacket or casing, the upper end of which is provided with a flange, *a*, for supporting it by engagement with the floor of the upper room. The casing may be of telescopic construction, in order to enable it to be adjusted to correspond with the distance between the ceiling of the lower room and the floor of the upper room. The exterior shape of the casing may be round or square, as may be desired. A circular opening is formed in the center of the casing by providing at the upper end an annular grating or open-work ring, B, and at the lower end an annular register, consisting of a valve, C, resting on a seat, D, which seat is provided with a rim, *c*, serving as a guide for the inner edge of the valve C, and allowing for the passage of a stove-pipe without interfering with the operation of the valve. E is a vertical shaft, having its ends provided with bearings *f* in the grating B and valve-seat D. The lower portion of the shaft E is connected by a forked or slotted arm, G, with a pin, $c^{\times}$, projecting up from the valve C, so that by oscillating the shaft the valve may be opened or closed. To the lower end of the shaft is attached a double-armed lever, H, to the ends of which are attached cords or chains J J, which pass over pulleys *i i*, and hang down into the lower room within convenient reach of the occupants of said room. When one of the cords J is pulled the lever H is moved in one direction to close the valve; and when the other cord is pulled the lever is moved in the opposite direction to open the valve, and thus the register is readily operated from the lower room.

When a stove-pipe is not passed through the casing A, which may be the case when it is simply arranged over a stove in a lower room to get a portion of the heat therefrom, or in summer when the stove is not used, a removable central register is provided, consisting of a circular valve, K, and a seat, L, resting on a flange projecting inward from the rim *c*. This central valve is connected with the shaft E by means of a pin, $k^{\times}$, projecting from the valve, and engaging with the slotted arm G, so as to be opened or closed by the operation of said shaft E. The center-piece or register C D may be applied to a casing of any suitable description, whether provided with an outside annular register or not.

The location of the registers need not be confined to the lower end of the jacket, as they may be arranged at either the upper or lower end, or both; in which latter case the means are duplicated for connecting the valves with the vertical shaft. If desired, the arm G and lever H, or other suitable means, may be attached to the upper end of the vertical shaft, so as to enable it to be operated from an upper room.

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

1. The combination, with the center-piece K L, of the vertical shaft E, arm G, lever H, cords or chains J, and pulleys *i*, substantially as and for the purpose herein described.

2. The combination of the center-piece or register K L and outside annular register C D, the pins $c^{\times}$ $k^{\times}$, arm G, and shaft E, whereby the two registers are operated simultaneously, substantially as described.

HORATIO M. CREAMER.

Witnesses:
G. A. LINCOLN,
R. H. FISK.