

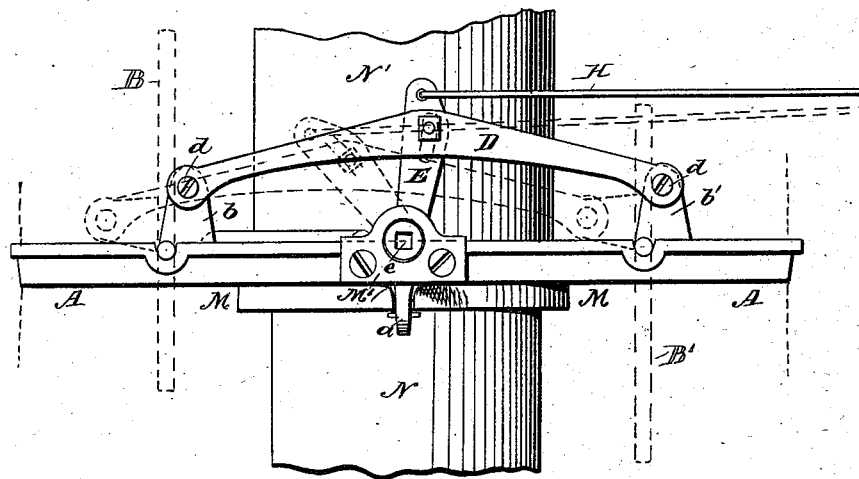
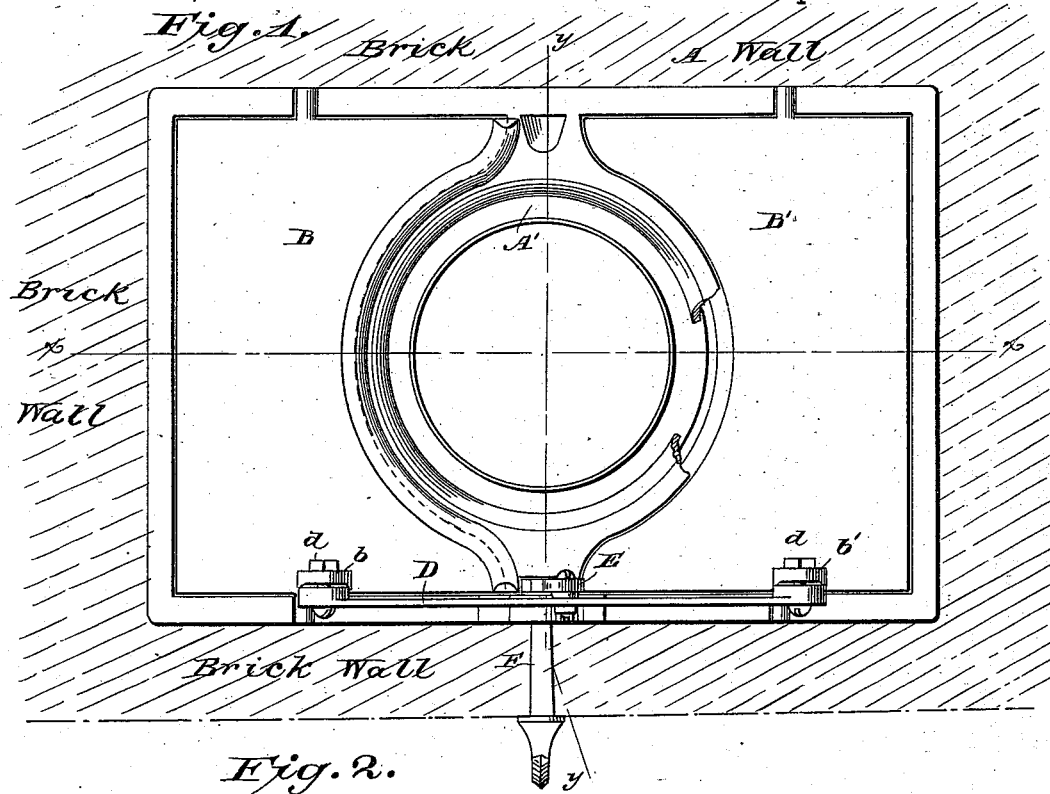
(No Model.)

2 Sheets—Sheet 1.

W. F. ROSSMAN.
HOT AIR REGISTER FOR FIRE PLACE HEATERS.

No. 381,283.

Patented Apr. 17, 1888.



WITNESSES:
George Binkenberg
C. Sedgwick

INVENTOR:
W. F. Rossman
BY *Munn & Co*
ATTORNEYS.

(No Model.)

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Fig. 3.

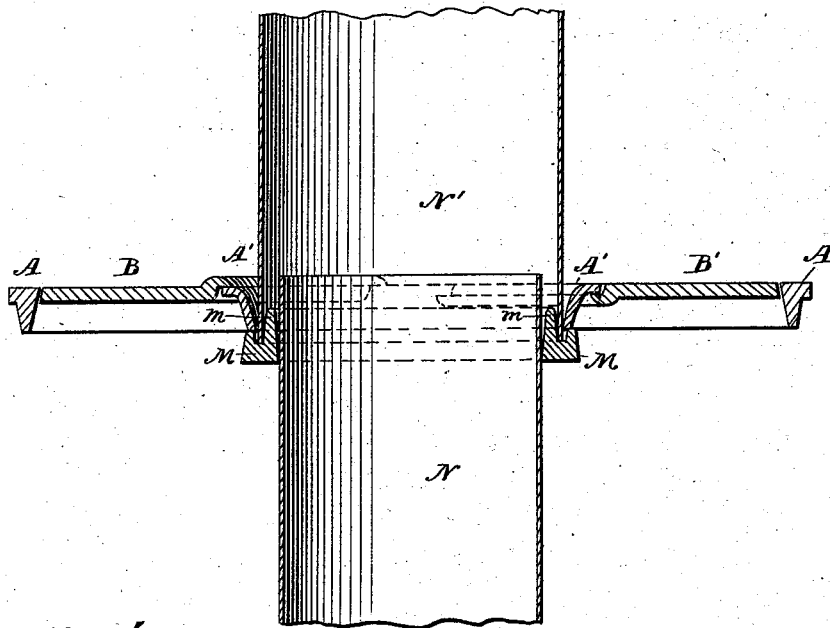
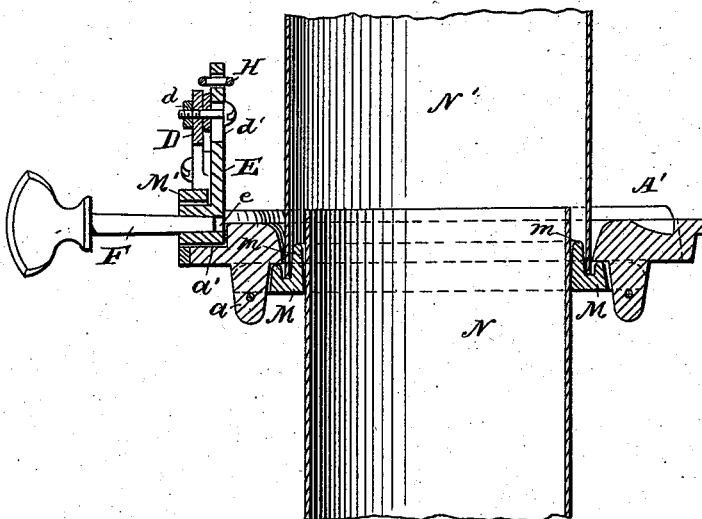


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM F. ROSSMAN, OF HUDSON, NEW YORK.

HOT-AIR REGISTER FOR FIRE-PLACE HEATERS.

SPECIFICATION forming part of Letters Patent No. 381,283, dated April 17, 1888.

Application filed April 25, 1887. Serial No. 236,101. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. ROSSMAN, of Hudson, in the county of Columbia and State of New York, have invented a new and Improved Hot-Air Register for Fire-Place Heaters, of which the following is a full, clear, and exact description.

My improved register is designed to be placed in the chimney just above the fire-place heater. By adjustment of its pivoted valves the heat from the stove may be readily thrown out altogether into the room in which the stove or heater is situated or be partially or wholly thrown into an adjoining room or rooms or into chambers above, and wherein the said damper may be applied to any flue in which the smoke-pipe must necessarily pass through the damper.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the register, the chimney in which the same is placed for use being shown in dotted lines. Fig. 2 is a side elevation thereof. Fig. 3 is a transverse vertical section upon line *x x* of Fig. 1, and Fig. 4 is a similar section upon line *y y* of Fig. 1.

In carrying out the invention an open frame, A, is provided, which may be either oval, square, round, or any desired shape best adapted to the flue in which the registers are to be placed.

The frame A is adapted to be placed above the heater, and is provided with a central integral ring, A', having apertured ears *a* cast solid with the lower side of the ring near its union with the frame, and a recess, *a'*, is formed in one upper side of the ring and also in the frame, as shown in Fig. 4.

In the upper face of the frame A valves B B' are journaled, which valves are adapted, when in their closed position, as shown in Fig. 1, to completely close the opening intervening the sides of the frame and the ring A', the one valve B being adapted to close down upon the top of the ring A' and the other, B',

against the opposite and under side, as shown in Fig. 3.

Integral with one side edge of each valve B B' upwardly-extending lugs *b b'* are provided, to each of which lugs one end of an upwardly curved or arched bar, D, is pivotally attached, preferably by means of nuts and screws *d*, the said arched bar being pivoted in an elongated slot, *d'*, centrally of a rocking bar, E, connecting said rocking bar and valves and having a bearing in the recess *a'*, as shown in Fig. 4. The lower end of the rocking bar E is made cylindrical and provided with a square aperture, *e*, in which a proper key, F, is inserted, whereby the valves are opened or closed at pleasure. In an aperture at the top of the rocking bar a rod, H, is secured, which may extend out into the room and have suitable connection with any portion thereof, so that the said valves may be operated without approaching the heater.

A collar, M, is held in connection with the under side of the ring A' by engaging with the lugs *a*, which collar is provided with an upwardly-projecting flange, *m*, integral with the inner face, over which flange to a bearing upon the collar is sprung the section of pipe N', projecting up the flue, the lower section, N, of pipe extending from the heater being adapted for engagement with the inner surface of the collar, as illustrated in Figs. 3 and 4.

An apertured plate, M', is attached to the side of the frame A, in which the projecting end of the cylindrical portion of the rocking bar or lever E is journaled, the said plate being purposed to keep said bar E down in its bearing in the frame. It will be observed that by the foregoing construction a close and tight register is obtained when needed, and that at the same time a passage is provided through the register for the smoke-pipe without interfering with the free operation of the valves.

From the foregoing description, taken in connection with the accompanying drawings, the operation will be readily understood.

It will be observed that the upper section of pipe is at all times supported by the collar M, so that the heater may be detached and replaced at pleasure with ease and celerity without disturbing the length of pipe passing up

the flue, the short section leading from the heater being readily adjusted in or detached from the collar.

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

1. The hot-air register for use in flues or chimneys in connection with fire-place heaters, the same consisting of the rigid frame A, the ring rigidly secured within it, and one or more valves which are pivoted in said frame and are adapted to close the opening or openings between it and the said ring, as shown and described.

2. The combination, substantially as shown and described, of the ring-shaped collar M, having vertical flange *m*, with a supporting-frame to which it is attached, valves B B', an upper flue-pipe resting on said collar, and the

lower pipe entering said collar and having a slip or sliding connection therewith.

3. The combination, with a frame adapted to be placed and supported in a fire-place or flue, of a ring-shaped and flanged collar, M *m*, which is detachably connected with the under side of said frame, and valves B B', substantially as shown and described.

4. The combination, with frame A, the central ring, A', and the valves B B', pivoted upon said frame at each side of the ring, of the rocking bar E, connecting-bar D, and a rod for operating the valves, as shown and described.

WILLIAM F. ROSSMAN.

Witnesses:

MILO P. MOORE,
MILTON M. HALL.