

E. A. TUTTLE.
Hot-Air Registers.

No. 153,024.

Patented July 14, 1874.

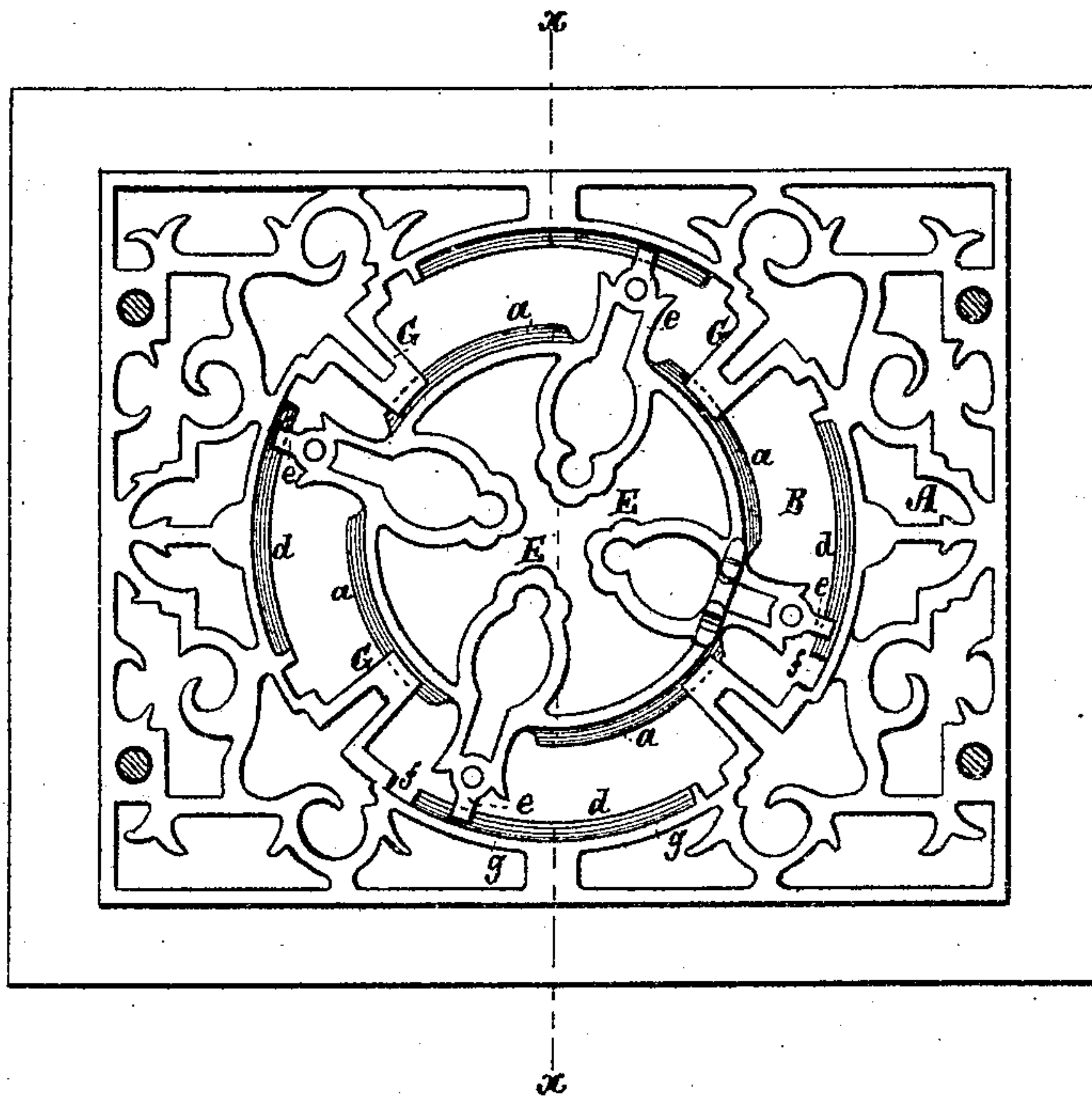


Fig. 1.

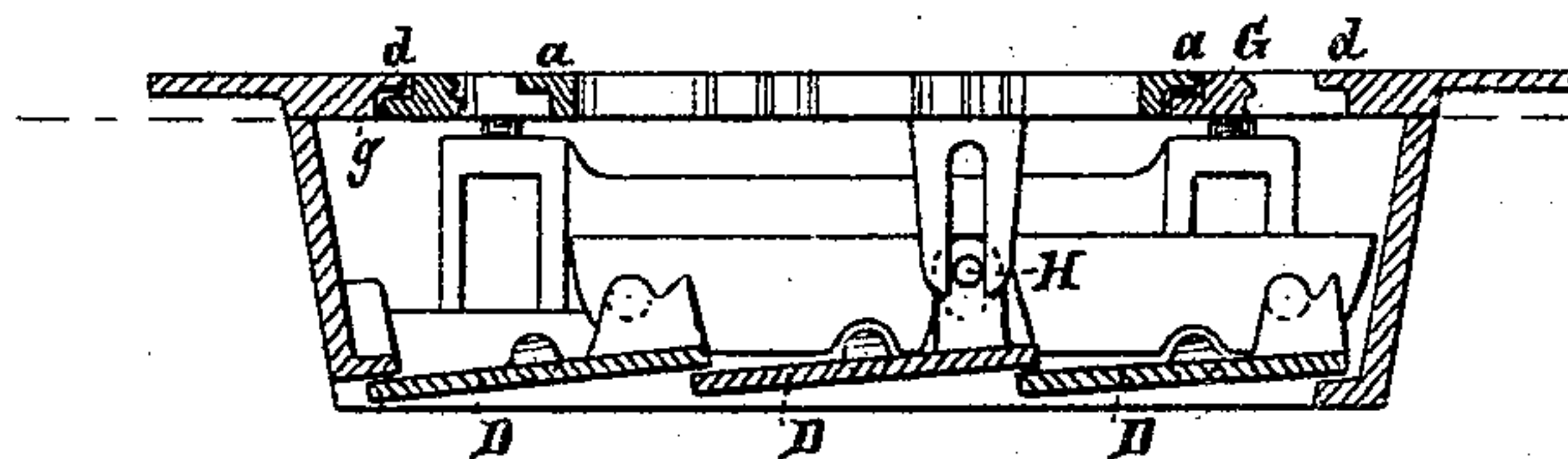


Fig. 2.

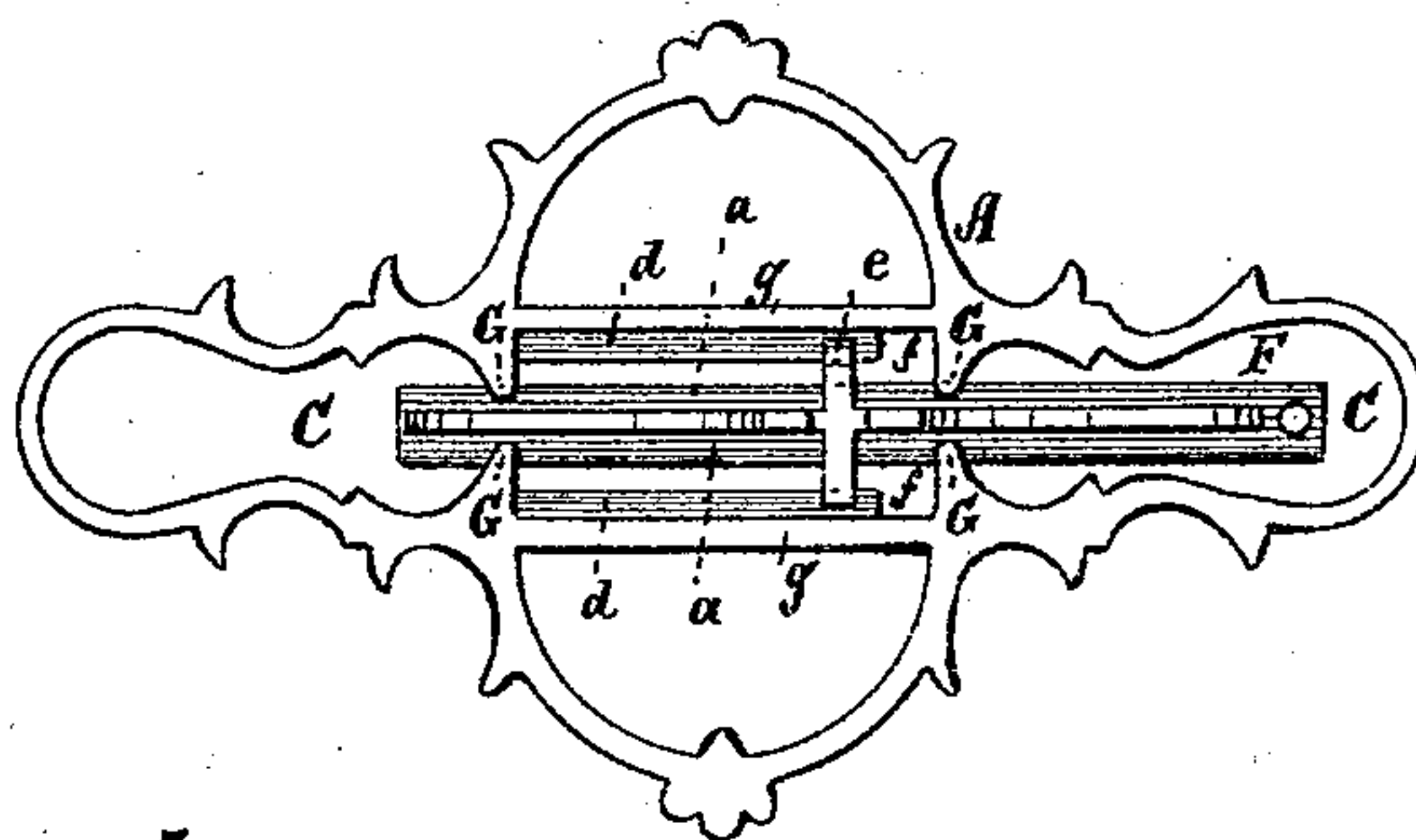
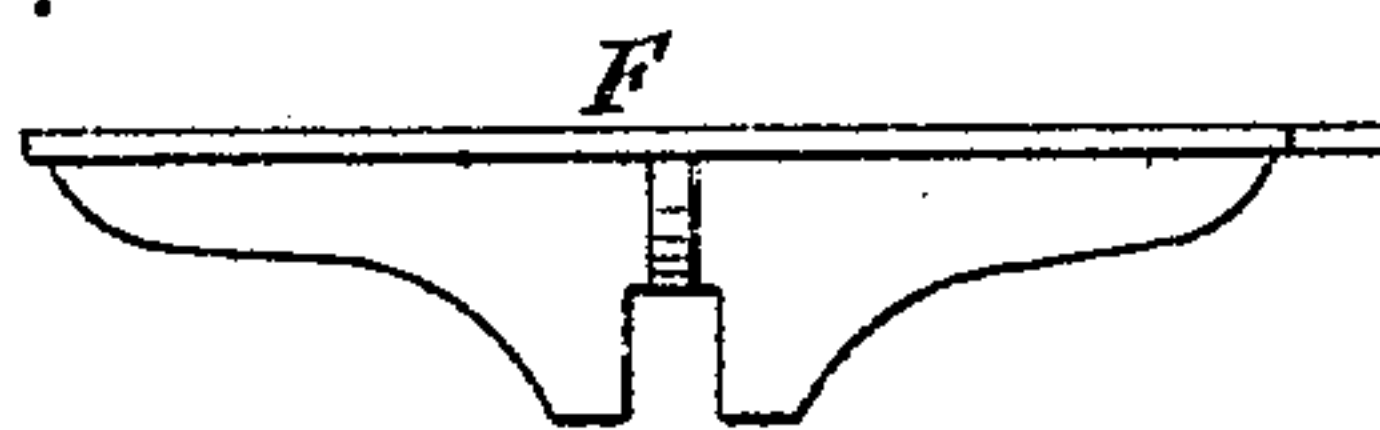


Fig. 3.

Fig. 4.



WITNESSES:

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EDWARD A. TUTTLE, OF NEW YORK, N. Y.

IMPROVEMENT IN HOT-AIR REGISTERS.

Specification forming part of Letters Patent No. **153,024**, dated July 14, 1874; application filed May 29, 1874.

To all whom it may concern:

Be it known that I, EDWARD A. TUTTLE, of the city, county, and State of New York, have invented a new and Improved Hot-Air Register, of which the following is a specification:

My invention consists of the moving device for operating the fans of the register, and forming part of the register front or top, fitted, arranged, and secured in the stationary part by lugs in front of and behind flanges or ways on which the movable part slides to work the fans, the said lugs and the flanges or ways being so contrived that the parts subject to wear are hidden from view, and the said moving part being connected with the fans, so that when all parts are adjusted in place, its escape through the notches by which the lugs going behind the ways or flanges are introduced is thereby prevented.

The improvement is alike applicable to revolving or reciprocating devices for operating the fans.

Figure 1 is a plan of the rear or bottom side of a register front or top, having a revolving device for working the fans. Fig. 2 is a transverse section taken on the line *xx* of Fig. 1. Fig. 3 is a plan of the rear or bottom side of a register front or top, having a reciprocating device for operating the fans; and Fig. 4 is a side elevation of the reciprocating device.

Similar letters of reference indicate corresponding parts.

A represents the stationary part of the ornamental open-work front of a hot-air register, having a circular opening, B, Fig. 1, or an elongated opening, C, Fig. 2, for the moving device to work the fans D, the circular opening being for the circular moving part E of the front, and the elongated opening being for the reciprocating part F. The stationary part has projections G, which are recessed on the upper side at the inner end, as indicated by the dotted lines, Figs. 1 and 3, and in

section, Fig. 2, for the overhanging flanges *a* of the movable part to rest on, and it also has the overhanging flanges *d*, under which the projections *e* of the movable part, which are notched on the upper side of the outer end, project, to hold the said movable part in its place in the register-front. These projections are introduced behind these flanges at the notches *f*, and they are secured against escaping through said notches by the connection H with the fans, preventing them from moving back to said notches. The projections *e* are made so that they work against flanges *z*, and prevent the edges of the flanges *a* from wearing against the shoulders of projections G, where the wear would show on the upper side or front of the register. The wear of projections *e* under flanges *d*, for keeping the movable part of the front or top in place, is hidden by the flanges *d*, and the wear of flanges *a* and projections *e* is hidden by said flanges, so that no wearing portion whatever is exposed to view, and thus the whole front, which is in view, may be bronzed or otherwise ornamentally colored, and the color will remain intact.

These projections and flanges, by which the stationary and movable parts are connected and work together, are cast together with said parts, and they go together without any fitting.

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

The movable portion of a register-front, connected to the stationary part by a flange or flanges, *a*, and notched projections *e*, in combination with notched projections G and a flange or flanges, *d*, on the stationary part, substantially as specified.

EDWARD A. TUTTLE.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.