

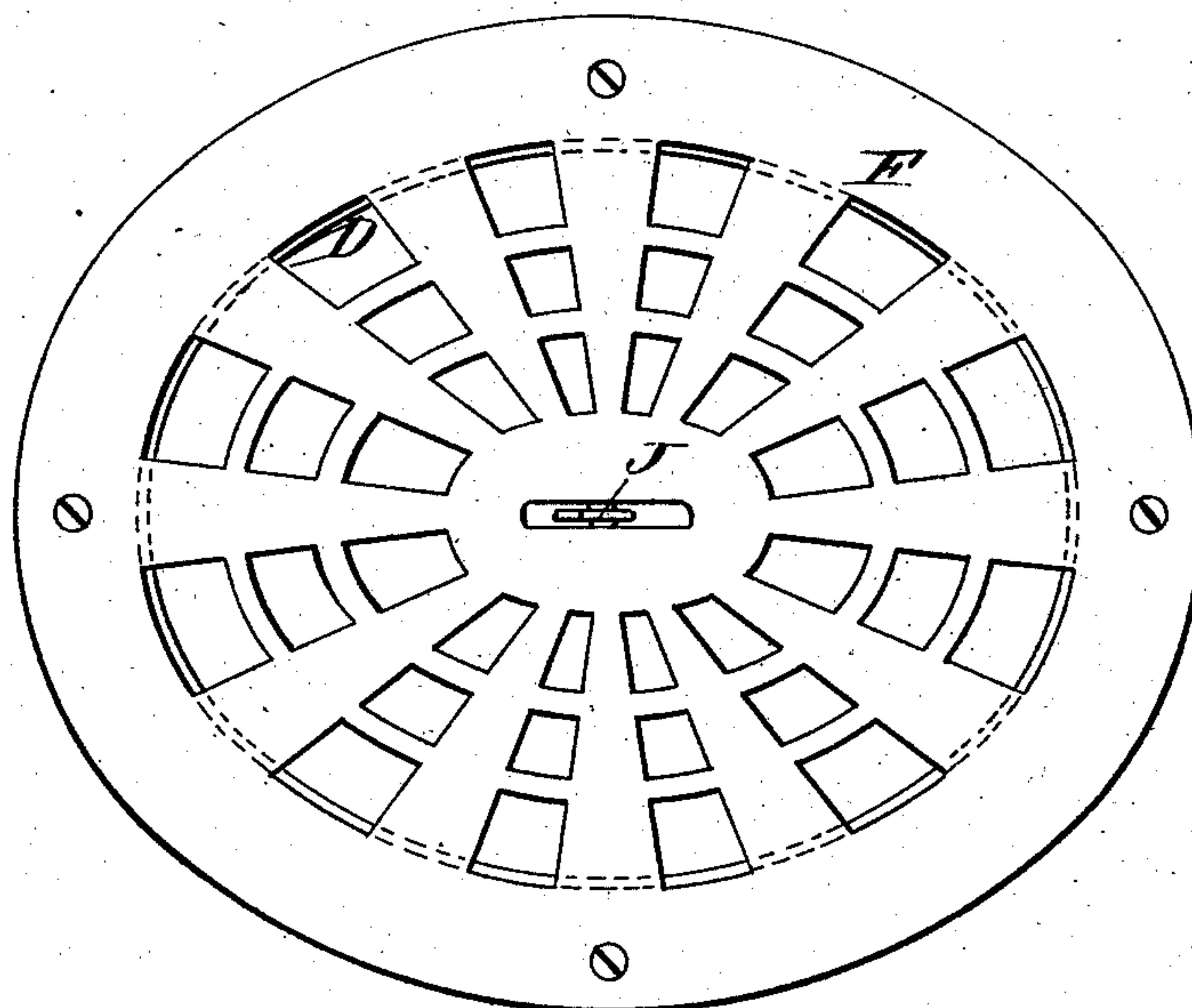
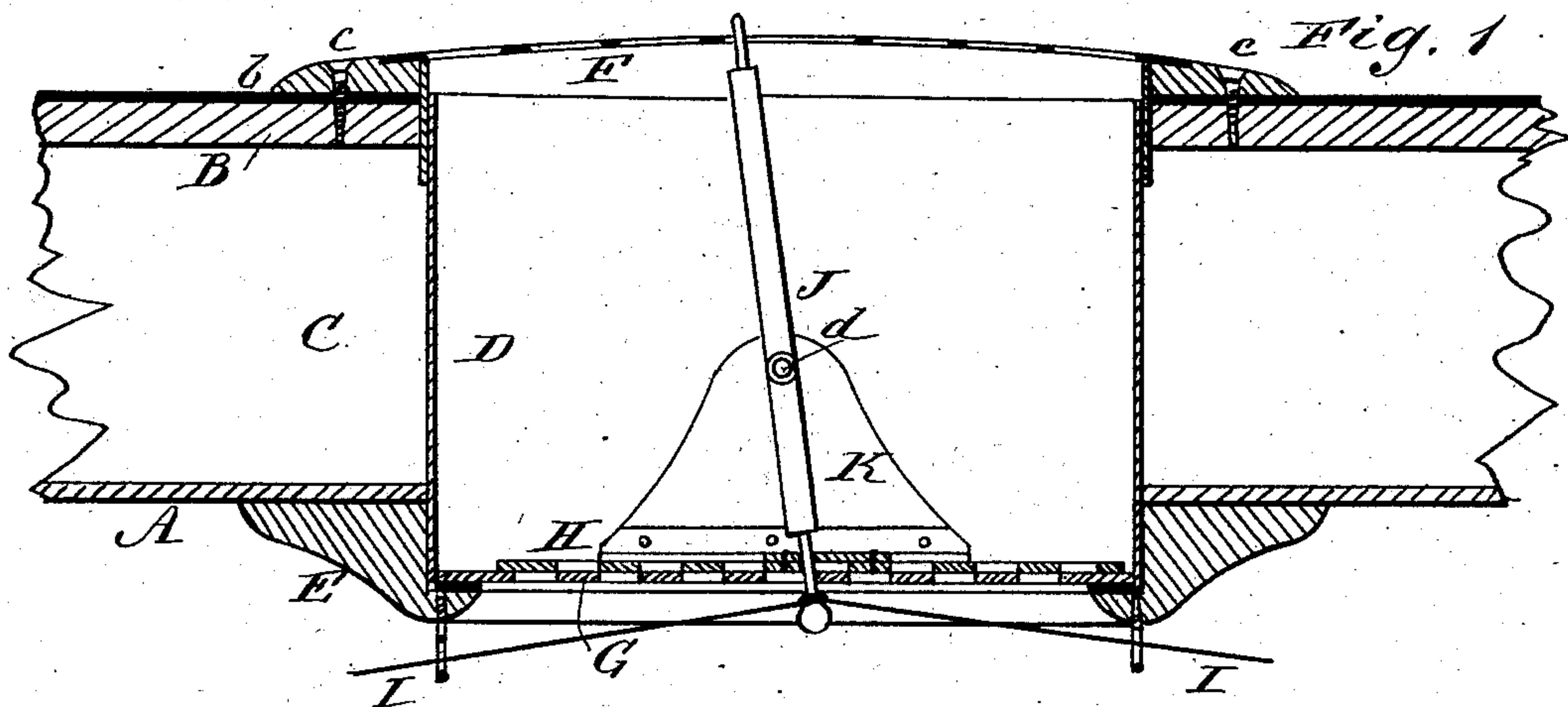
(Model.)

W. H. MAXFIELD.

## COMBINED REGISTER AND VENTILATOR.

No. 290,084.

Patented Dec. 11, 1883.



**WITNESSES :**

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**INVENTOR:**

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# UNITED STATES PATENT OFFICE.

WILLIAM H. MAXFIELD, OF MAYSVILLE, INDIANA.

## COMBINED REGISTER AND VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 290,084, dated December 11, 1883.

Application filed March 13, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. MAXFIELD, of Maysville, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in a Combined Register and Ventilator, of which the following is a full, clear, and exact description.

This invention consists in certain constructions and combinations of parts in a ventilator, or combined register and ventilator, for use either in ceilings or elsewhere, whereby, while the whole is made to present an ornamental appearance, increased facility is afforded for removing and cleaning the interior or working parts of the device, and for operating it from opposite ends of its air-box, substantially as hereinafter described.

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 both the figures.

Figure 1 represents a vertical section of my improved register and ventilator applied to connect the ceiling of one room with the floor of a room above, and Fig. 2 a plan of the same.

Referring to the drawings, A indicates the ceiling of one room, and B the floor of a room immediately above it. C is one of the joists supporting said floor.

D is the air-box of the device, of oblong or oval form in its horizontal section to provide for giving it an increased capacity, and at the same time arrange for its insertion between the joists when close to one another. This box extends down below the ceiling A and up to or about the level of the floor B. Its lower end is inclosed within a molding, E, which underlaps the plastering of the ceiling A for some distance all around the opening for the box in said ceiling, and forms an ornamental center-piece when the device is arranged to occupy a central position relatively to the rooms. The upper end of said box is entered within a socket-piece on the under side of a perforated register plate or top, F, arranged to extend beyond the opening in the floor and receiving the carpet *b* of the floor beneath it. Said top may be fastened to the floor by screws *c*, which, on being taken out, admit of the register plate or top being raised and removed to get at the internal or working parts of the device, that may then be taken out and cleaned or dusted. The air-box D is entered to its place from beneath and afterward the

molding E fitted around and beneath the same to support it, and fastened by screws to the ceiling A or joists C, which carry the floor B.

G is the perforated plate or grate in the bottom of the box D, on or over which the slotted slide or regulating-valve H works to open more or less or wholly close the openings in the grate G. This valve H may either be worked from below by pulling upon either end of a cord, I, passing through or over suitable guides and attached either indirectly to the valve through a lever, J, or directly thereto, as in the case of other ceiling-ventilators, or it may be operated from the floor above; and to this end the lever J, by which it is actuated, is arranged to project upward and to a limited extent through or above an aperture in the register-plate F, so that by simply touching or moving the upper end of said lever with the foot the valve may be worked as required. This lever J is fast on a shaft, *d*, which has its bearings in side strips, K K, fastened at their lower ends to the grate G, and sprung to bear at their upper ends against the walls of the box D, which insures the proper location of the lever and valve. By this arrangement or combination of parts the whole working mechanism, including the valve H and grate G, can be readily lifted out, for the purpose of cleaning or dusting them, upon removing the register-plate F, and afterward be as readily reinserted to their places.

The device also may be used in side walls or partitions, and whether thus applied or applied to ceilings and floors, it presents a neat and ornamental appearance, and, used in sitting and other rooms, forms quite an ornamental center-piece.

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

The combination, with the removable register plate or top F and the air-box D, of the valve H, grate G, and lever J, with its shaft or fulcrum *d*, all carried by side or bearing strips arranged to fit loosely within the box, whereby the working mechanism and interior parts of the box may be readily inserted to their places and be removed for the purposes of cleaning when required, essentially as described.

WILLIAM H. MAXFIELD.

Witnesses:

AMOS P. MURPHY,  
WM. I. HAYES.