P. MIHAN.

Ventilating-Halls, &c.

No. 164,928. Patented June 29, 1875.

Fig. 1.

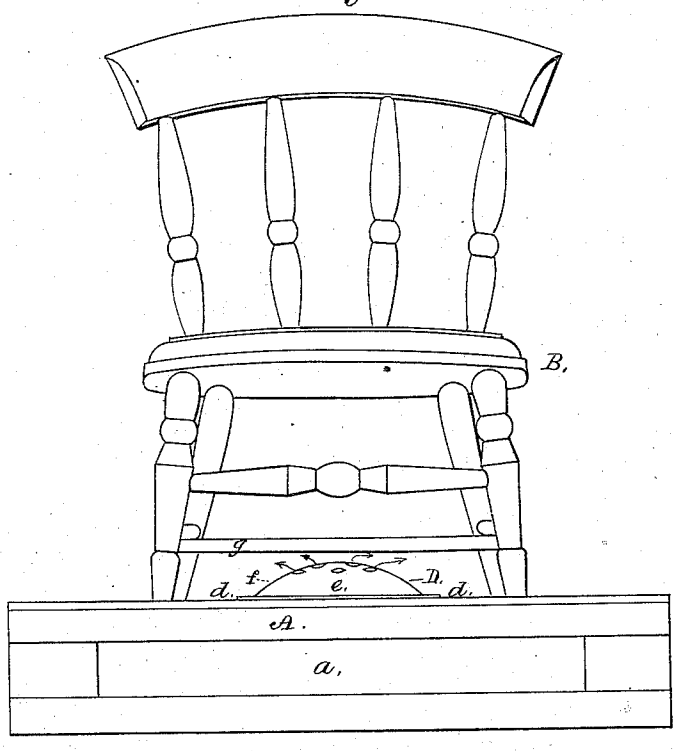
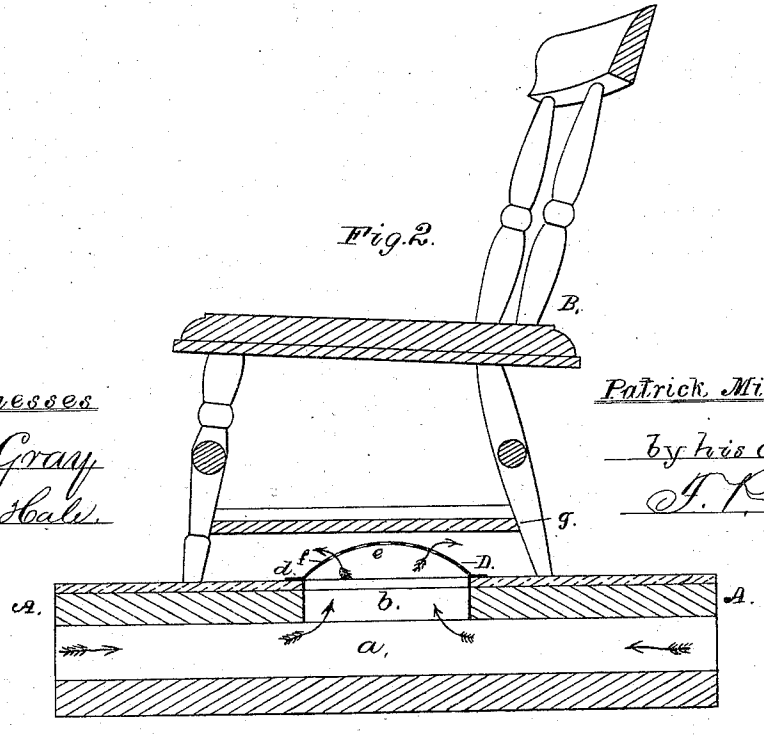


Fig. 2.



Witnesses
Geo Gray
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by his attorney
T. P. Hale

UNITED STATES PATENT OFFICE.

PATRICK MIHAN, OF CAMBRIDGEPORT, MASSACHUSETTS.

IMPROVEMENT IN VENTILATING HALLS, &c.

Specification forming part of Letters Patent No. **164,928**, dated June 29, 1875; application filed April 23, 1875.

To all whom it may concern:

Be it known that I, PATRICK MIHAN, of Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in the System of Ventilating Halls, School-Houses, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention is especially designed for ventilating large rooms, halls, school-houses, &c., in which the rooms are provided with a large number of separate seats or desks, the object of my invention being to obtain a purer atmosphere around each individual or occupant of a seat or chair than has heretofore been effected; and my invention consists in the introduction of separate currents of atmospheric air through a supplying-port disposed under each chair or seat, in such manner that the direct-entering currents, by impingement against a deflecting-surface disposed above the said port, shall have their force broken, and be equably and laterally distributed or diffused about a person when sitting on the chair or seat.

I am aware that exhaust-ports have been arranged in the floors of halls, &c., for the withdrawal of the denser or foul air from the apartment. This I do not claim, my invention being directly the reverse—viz., to supply or introduce currents of pure air into the room.

In the said drawing, Figure 1 denotes an elevation of a portion of the floor of a room, having an air-chamber below the same and an air-supplying port arranged underneath a chair, illustrating my invention. Fig. 2 is a vertical section taken through the air-supplying port.

In the said drawing, A denotes a portion of the floor of a room, and *a* an air chamber or duct located below it, into and through which air may be forced or caused to pass by means of a fan, or otherwise, as may be desirable. B is a chair, which is firmly secured to the floor in any suitable manner, and directly over an opening or port, *b*, communicating with the said chamber. Within such opening is placed an air-distributing cap, D, which may be of any desirable form, as shown in the drawing. It consists of a short cylindrical tube to extend down into the said opening, such tube having an annular flange, *d*, extending from it at right angles, and having a diameter sufficient to lap or rest upon the floor or carpet. This tube has a raised or dome-shaped top, *e*, which has a series of perforations made in the same around its apex or upper portion, the lower part *f* of the raised top or dome being plain or unperforated, so as to prevent the dust or other matters upon the floor, when the latter may be swept, from entering the cap. Above the air-supplying port or cap I arrange a deflecting-plate, *g*, which may be supported upon an arm extending up from the cap or floor, or be attached to the chair, as shown in the drawing, the object of such plate being to break the force of the in-rushing currents, and cause them to be equably and laterally distributed around the contiguous chair or seat.

From the above it will be seen that, by the peculiar construction of the air-distributing port or caps—viz., with their tops raised above the plane of the floor, and with their upper part perforated and their lower portion plain, as described—a certain protection against the entrance of dust and other extraneous matters into the air-ports while the room is being swept is obtained.

Having described my invention, what I claim is—

In a system of ventilating halls, &c., substantially as described, an air-supplying chamber, *a*, located beneath the floor, and provided with a supply-port, *b*, opening under each seat, a distributing-cap, D, disposed over the supply-port, and a deflector, *g*, arranged over the said cap, the whole being combined and arranged in manner as shown and described.

In testimony that I claim the foregoing as my own invention, I affix my signature in presence of two witnesses.

PATRICK MIHAN.

Witnesses:
F. P. HALE,
F. C. HALE.