(No Model.)

M. H. MALLORY.

Ventilator for Foot Lights of Theaters.

No. 236,505. Patented Jan. 11, 1881.

Figure 1.

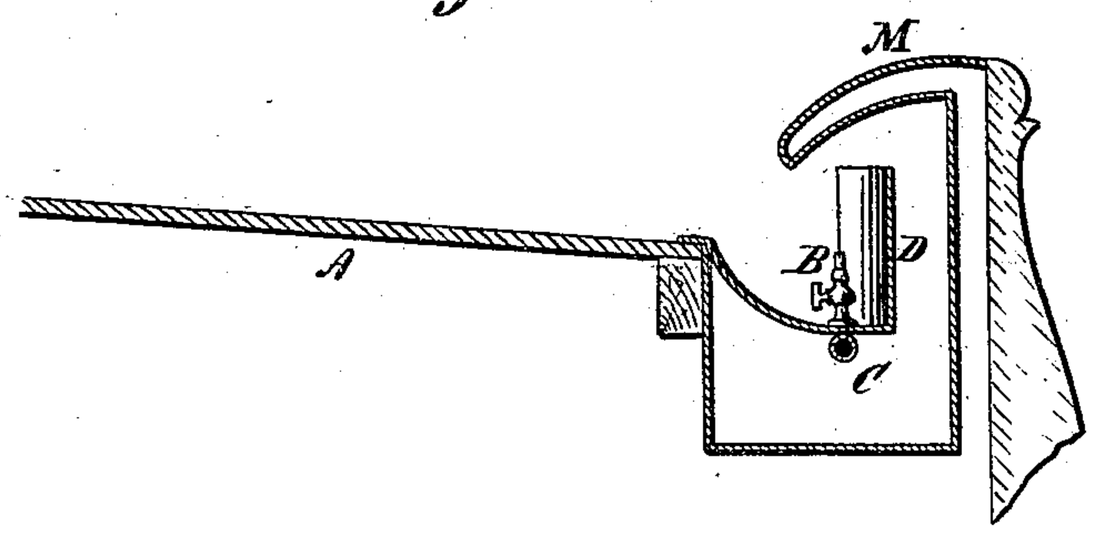
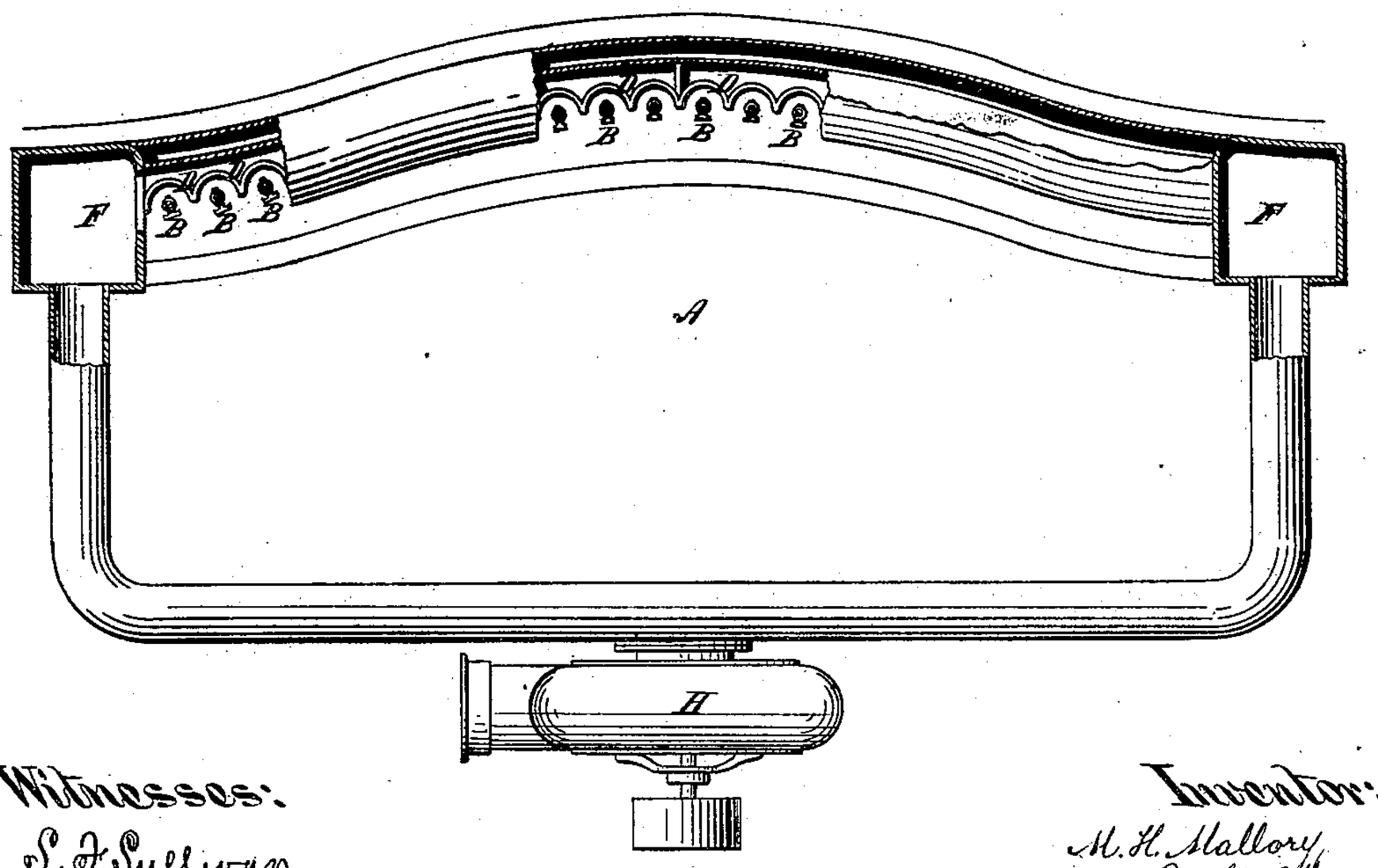


Figure 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

MARSHALL H. MALLORY, OF NEW YORK, N. Y.

VENTILATOR FOR FOOT-LIGHTS OF THEATERS.

SPECIFICATION forming part of Letters Patent No. 236,505, dated January 11, 1881.

Application filed August 24, 1880. (No model.)

To all whom it may concern:

Be it known that I, MARSHALL H. MALLORY, of the city, county, and State of New York, have invented a new and useful Improvement in Ventilators for the Foot-Lights of Theaters, of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

It is well known that the foot-lights of theaters are very disadvantageous in two respects: first, on account of the large amount of heat and deleterious products which they are continuously producing and feeding into the house; second, because by reason of their situation they form a shimmer or veil of heated air between the audience and the stage, which interferes with the view of the audience. No attempt, so far as I know, has been made to remedy these difficulties, and they have been difficult to overcome by reason of the situation of the foot-lights and the necessity of having a clear exposure toward the stage.

My invention consists in applying a forced ventilation to the foot-lights in such a way as to withdraw the products of combustion and heated air from the house and deliver them outside of the building through an independent pipe. This I accomplish by causing a forced circulation of air inward from the stage past the lights, and so outward into the open air, through suitable conduits.

My invention will be readily understood from the accompanying drawings, in which—

Figure 1 represents a section of a foot-light; and Fig. 2, a plan view of the stage, having the ventilating-shield partly broken away.

A represents the floor of the stage; B, the gas or other lights at the front edge thereof. These lights are usually placed in reflectors D and protected by wire screens E. Surrounding these foot-lights is the ventilating-box C G, in which C represents an open passage, situated beneath the lights, the walls of which are continued over the lights, forming a ventilating-screen, G. The passage C is connected at F F with a ventilating pipe or pipes, through which the air is exhausted by means of the blower H. It will therefore be readily seen that the air from the stage is drawn in to the burner B beneath the ventilating-screen G, then passes, charged with heat and the products of combustion, laterally through the pipe C to F, and is discharged by the blower H.

Instead of the blower H, any other forced circulation might be employed—as, for instance, an elevated chimney, causing a similar draft. I prefer, however, the arrangement shown. By this means all the products of combustion of the foot-lights are carried from the building, and no heated air is allowed to escape and rise vertically from them, thereby intercepting a distinct view of the stage.

A double hood or cover, M, extends over the foot-lights B. By providing this protector or shield with an intermediate air-space it does not become so hot, and by reason of its construction the upper roof is kept sufficiently cool not to burn the hand.

The side draft through the openings C, previously described, would have a tendency to blow the flames sidewise. I therefore place around each a reflector semi-cylindrical in shape, so that the air is drawn into each reflector independently, and over its top, and not sidewise along the row. I find that I thereby obtain a steadier flame.

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

1. The combination, with the foot-lights of a stage, of the ventilating tube or box partly surrounding the same, for the purpose of drawing the air in laterally past and over the burners downward and out of the building, and a draft-producing contrivance for causing said movement of air, substantially as described.

2. The combination, with the foot-lights of a stage, of the ventilating-shield extending over the top of the lights and connected with the ventilating-tube, which ventilating-tube is located at the side of the stage, and is connected with a forced ventilating contrivance or draft, for the purpose of drawing the products of combustion laterally past the foot-lights, so as to prevent the flicker between the audience and the stage, substantially as and for the purposes specified.

3. The combination, with the foot-lights of a stage, of a series of semi-cylindrical reflectors and the ventilator-tube connected with a forced ventilating contrivance, for the purpose of preventing flickering of the lights, substantially as specified.

MARSHALL H. MALLORY.

Witnesses:

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WM. A. POLLOCK.