

M. OHMER,  
Fire-Place Grate.

No. 127,916.

Patented June 11, 1872.

Fig. 1.

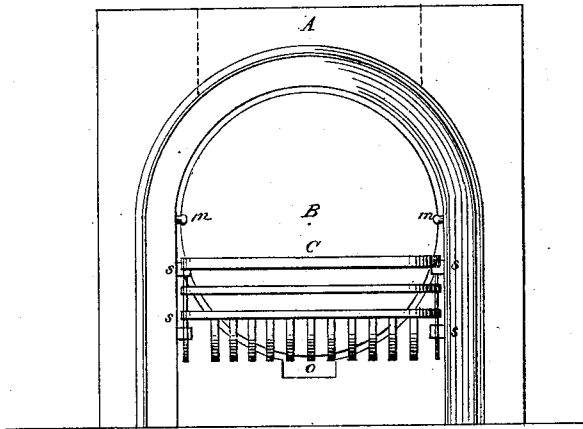


Fig. 2.

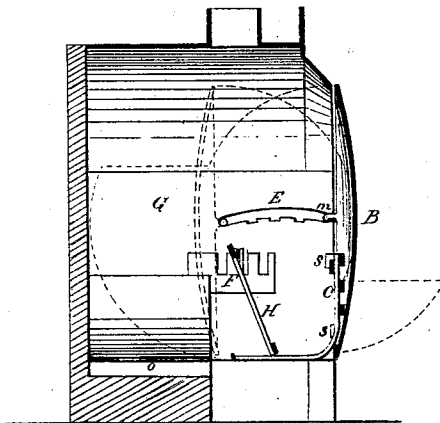
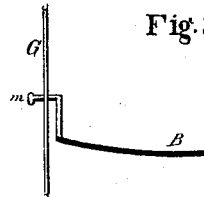


Fig. 3.



WITNESSES:

*m ss blank*  
*B. Pickering*

INVENTOR:

*Michael Ohmer*

# UNITED STATES PATENT OFFICE.

MICHAEL OHMER, OF DAYTON, OHIO.

## IMPROVEMENT IN FIRE-PLACE GRATES.

Specification forming part of Letters Patent No. 127,916, dated June 11, 1872.

Specification describing certain Improvements in Fire-Grates, invented by MICHAEL OHMER, of Dayton, in the county of Montgomery and State of Ohio.

My invention relates to an adjustable back, which is so supported that it may be carried forward of the grate to serve the purpose of a blower, when so required.

Figure 1 is a front elevation of the grate. Fig. 2 is a view of the side of the grate, with a sectional view of front and rear grate, and the back when in position as a blower. Fig. 3 is a section of the side and back, showing the elbow which supports the back in its bearings.

A represents the front of the grate, which is constructed in the usual form, and has projections *s* to support the front grate C. The cast-iron back B is a circular concavo-convex plate, suspended in a slot at each side by the elbows *m*, and quite nearly fills the space at sides and bottom. The flue has sufficient space to the rear for the back to rotate on its elbows. The base is built up with brick to near the lower edge of the back, with an opening at *o* at the center for a rear circulation. The dotted lines show the flue. The elbows rest within the slots, (see E, Fig. 2,) and, by means of these lengthened slots, with the notches on the bottom of the same, the back is adjustable, so as to open or contract the throat of the flue and also enable the back to be brought forward of the grate and occupy the position as shown at B, Fig. 2, when it serves the purpose of a blower to enliven the fire. There is no peculiarity of the front grate C, which is suspended and supported in position by the projections *s*. The side of the plate G, Fig. 2, may be cast in one plate having the slot E and notched plate F, for adjustment of rear grate-bar H; or these

parts may be constructed separately and secured to the mason-work. The rear grate-bar is constructed in the usual form, with these exceptions: the upper back part is made convex, with projections to prevent the back from coming in contact with it, and projections which enter the notches of the plate F. It is set forward or backward in the notches for the purpose of contracting or enlarging the grate-space, that much or little coal may be consumed, as conditions may demand. At B, Fig. 2, is shown a vertical section of the back in position as a blower, closing up the front of the grate. To carry it back from this position the lower part is raised and then slid back in the slot, the back being carried to nearly a vertical position behind the rear grate, and is then in position to produce a contracted throat for the flue. At Fig. 3 is shown the relation of the back to the side and the elbow *m* that supports the one within the other. Another device may be substituted for the notches within the lengthened slot to adjust the back from rear to front, and vice versa. The flue-throat is thus regulated to suit the circumstances.

I claim as my invention—

1. The revolving back plate B having elbows *m*, or their equivalents, constructed and arranged substantially as described, and for the purposes specified.

2. The combination and arrangement of the revolving back plate B, adjustable grate H, front grate C, notched plate F, and slotted plate G, substantially as described.

MICHAEL OHMER.

Witnesses:

W. H. CLARK,  
B. PICKERING.