

WILLIAM MELLOR.

Improvement in Furnace Grate Bars.

No. 124,966.

Patented March 26, 1872.

Fig. 1

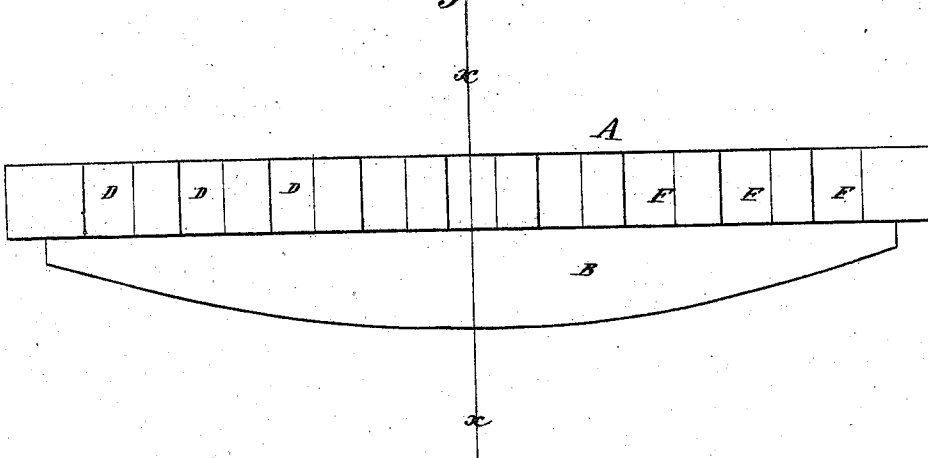


Fig. 2

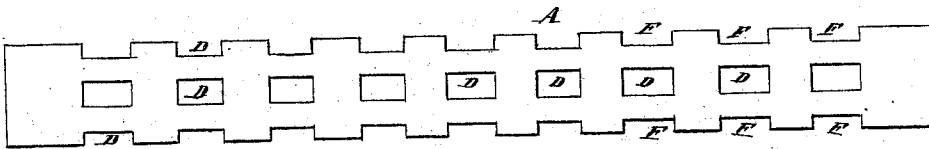
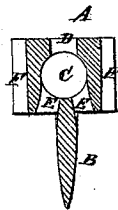


Fig. 3



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM MELLOR, OF PATERSON, NEW JERSEY.

IMPROVEMENT IN FURNACE-GRATE BARS.

Specification forming part of Letters Patent No. 124,966, dated March 26, 1872.

Specification describing a new and useful Improvement in Furnace-Grate Bars, invented by WILLIAM MELLOR, of Paterson, in the county of Passaic and State of New Jersey.

The invention will first be fully described and then clearly pointed out in the claim.

In the accompanying drawing, Figure 1 represents a side view of the grate-bar. Fig. 2 is a top view. Fig. 3 is a cross-section of Fig. 1 taken on the line *x x*.

Similar letters of reference indicate corresponding parts.

A is the main or upper portion of my improved grate-bar, which is an open tube from end to end. B is the rib attached to the under side of the bar A, as seen in the drawing. C is the tubular opening in A. D represents openings from the top of the bar into the tubular opening C. E E are openings on the under side of A, on each side of the rib B, into the tubular opening C. F represents recesses in the sides of the bar, which form full openings through the grate when the bars are placed side by side to form the grate of the furnace. These grate-bars are so placed or arranged on

their bearers at each end that the air has a free circulation from one end to the other, and they may be connected with an air-chamber at their front ends, so that when a blower is used air may be forced into the chamber and grate-bars and distributed through the side openings, not only to increase the combustion of the fuel, but to preserve the bar from the effects of intense heat. The ordinary or natural draught of the furnace operates in the same manner, but is modified in degree according to the power of the draught.

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

In a furnace-grate bar having rib B, the tube A C open at the ends of the bar and provided with openings D from the top and openings E from the bottom, as and for the purpose described.

WILLIAM MELLOR.

Witnesses:

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