

(No Model.)

G. A. BOYLSTON.
GRATE BACK.

No. 553,388.

Patented Jan. 21, 1896.

Fig. 1.

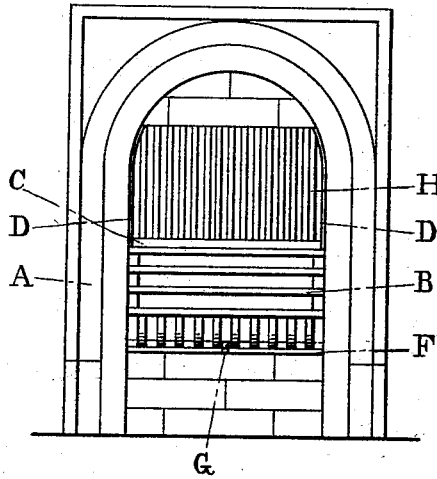


Fig. 2.

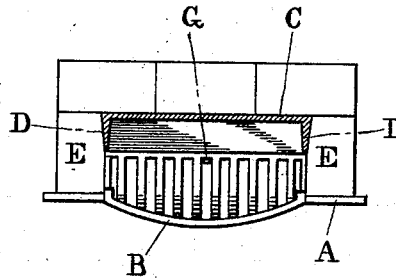


Fig. 3.

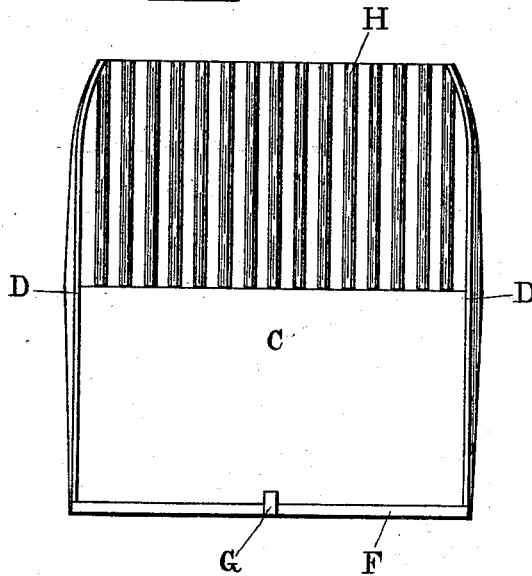
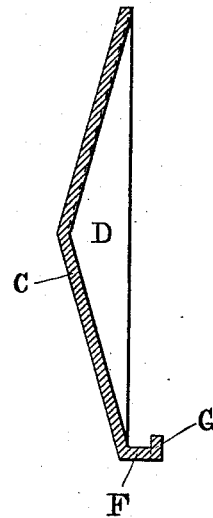


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE AUGUSTUS BOYLSTON, OF PRATT CITY, ALABAMA.

GRATE-BACK.

SPECIFICATION forming part of Letters Patent No. 553,388, dated January 21, 1896.

Application filed April 29, 1895. Serial No. 547,433. (No model.)

To all whom it may concern:

Be it known that I, GEORGE AUGUSTUS BOYLSTON, a citizen of the United States, residing at Pratt City, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Grate-Backs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in metallic backs for grates, and the objects of my improvement are, first, to provide a metallic back for grates, the back having a depression in the center with sides formed on the outer edges, the sides beveled on the outsides to form a dovetail to hold the back and side brick securely to place; second, to provide a metallic grate-back having a flange on the bottom edge, the flange projecting outwardly to form a support for the grate-basket, one or more lugs being formed on the edge of the flange, the lugs adapted to engage the back bar of the grate-basket to hold the basket securely to place on the flange of the back. I attain these objects by the device illustrated in the accompanying drawings, in which—

Figure 1 is a vertical front view of a grate fitted with my improved metallic back. Fig. 2 is a horizontal cross-sectional view of the same through the center of the depression in the back. Fig. 3 is an enlarged detail vertical plan view of my improved grate-back. Fig. 4 is a vertical cross-sectional view of same through the center.

Similar letters refer to similar parts throughout the several views.

The grate-front A and the grate-basket B, as shown, represent one of the usual forms of front and grate in general use. Any other form or variation of front and basket can be used with my improved back, no special form or design being necessary to combine with the back.

The grate-back C is made of cast-iron or other suitable metallic material. The back is

formed with a depression in the center, the depression dividing the back into a top and bottom part standing at an obtuse angle. Two sides D and D are formed on the back, the front edges of the sides extending toward the front and forming a straight line from the points of the angles at the top and bottom of the back. The sides on the outside are beveled backwardly, as shown in Fig. 2, to form a dovetail with the side brick E E when set. The bevel formed on the sides prevents the back from coming out to the front, as long as the side brick retain their position. The side brick are retained and held to place by the back, the combined construction making a durable and desirable setting that cannot fall out of place.

A flange F is formed on the lower edge of the back. The flange extends outwardly, forming a shelf for the back of the grate to rest on, one or more lugs G being attached to the flange, the lug or lugs extending upward to engage the back bar of the grate-basket to hold or retain the basket in position as first set on the flange and to prevent the basket from slipping off its bearing.

Ribs H are formed on the upper half of the back, the ribs adding strength to the plate and preventing warping by the heat, to which the back is exposed from the fire in the basket.

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

A metallic back for grates made in one piece, consisting of a back C, having ribs H, formed on the upper part, two sides D, D attached to the back, the sides beveled to the front on the outer edges, a projecting flange F attached to the back, the flange having a lug G formed thereon, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

GEO. AUGUSTUS BOYLSTON.

Witnesses:

JO. G. CREWS,
W. H. HUNTER.