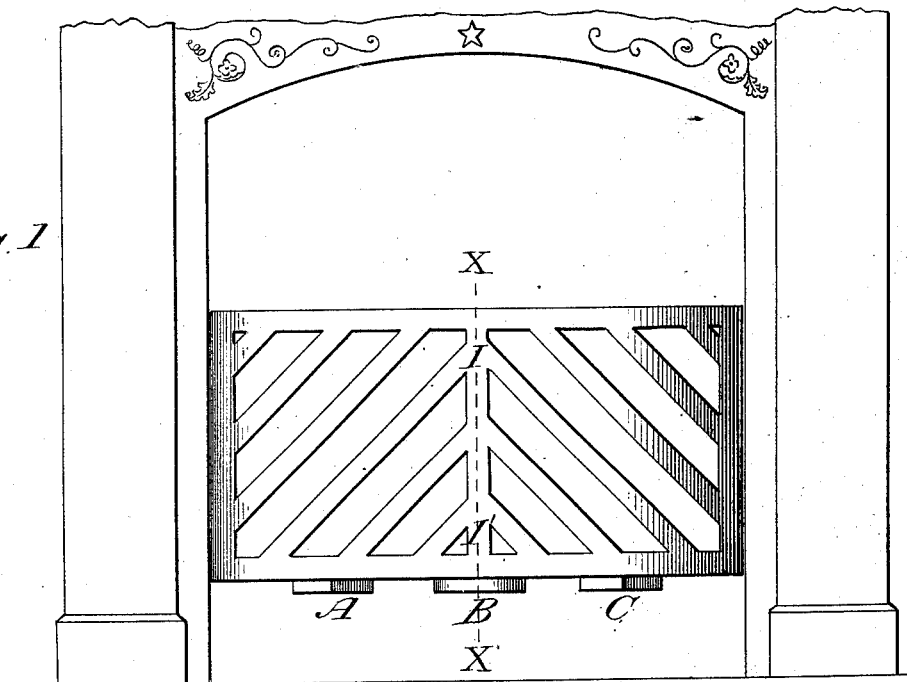


J. B. TARVER.  
Fire-Place Grate.

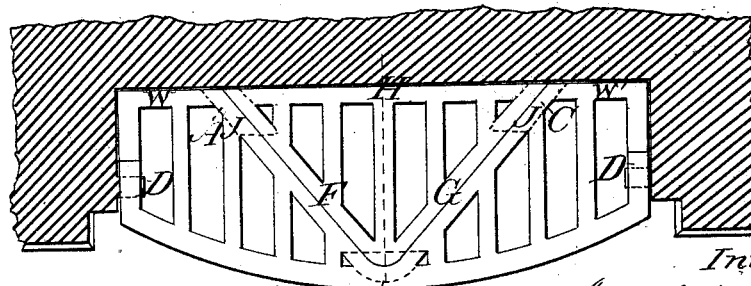
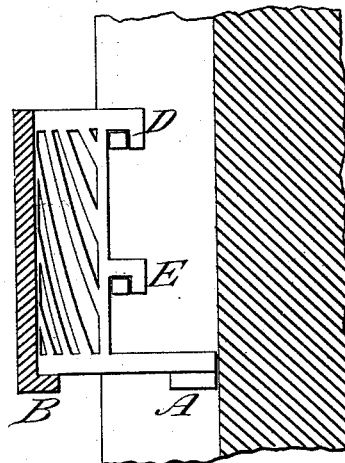
No. 216,769.

Patented June 24, 1879.

*Fig. 1*



*Fig. 3*



Attest:  
A. A. Williams  
John L. Bluffe,

Fig. 2.

Inventor:  
John B. Tarver  
Emile Hannan  
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# UNITED STATES PATENT OFFICE.

JOHN B. TARVER, OF COLUMBUS, GEORGIA.

## IMPROVEMENT IN FIRE-PLACE GRATES.

Specification forming part of Letters Patent No. **216,769**, dated June 24, 1879; application filed November 26, 1878.

*To all whom it may concern:*

Be it known that I, JOHN B. TARVER, of Columbus, in the county of Muscogee and State of Georgia, have invented a new and useful Improvement in Coal-Fire Grates, of which the following is a specification.

The invention relates to an improved fire-grate basket.

Heretofore such baskets have very commonly been made cast solidly in one piece, and the mode of fastening them to their places has been generally by means of simple lugs or hooks in each side, together with a pin-hook in the back of the chimney brick-work and projecting therefrom, holding the basket in its proper position.

The present mode of construction and arrangement of said baskets the inventor regards as objectionable, for reasons which will appear in his specification and claims, hereinafter set forth.

The invention consists in an improved construction of grate-baskets, by which the following objects are to be secured:

First, the basket is not rendered entirely valueless, as heretofore, by long use or burning out. It is known that baskets are very frequently destroyed by the breaking and burning of the bottom bars. To provide more effectually against this defect, this invention contemplates a movable plate or segment, cast or forged, and fitted solidly, consisting of a triangular frame of iron bars. This frame or plate is to be inserted in a corresponding vacancy, to which it closely fits in the bottom of the basket.

In the drawings, similar letters of reference indicate like parts.

Figure I is a front elevation, Fig. II is a plan, and Fig. III a central cross-section, of a basket.

The size of the basket is not considered material.

In Fig. II, F G H is the movable plate or frame aforesaid, fitting closely in a V-shaped opening in the basket-bottom, and resting upon the lugs A B C. (Shown in all the figures of the drawings above referred to, and also exhibited by dotted lines in Fig. II.) These lugs are cast solid with the basket.

The plate does not appear in Figs. I and

III, for the obvious reasons that in Fig. I it is hidden from view, and in Fig. III it is omitted, in order to show the lugs A B more plainly.

The operation of the device is as follows: When, by continued use, the plate F G H is burned out, cracked, or broken, it may be removed and a new one put in its place.

Second, the basket is held more securely to its place by the use of four supporting-lugs instead of two. An additional advantage given by the use of four lugs is, that the necessity of a pin-hook or other device to be inserted in the chimney-back, and thus supporting the basket, is obviated, because the four lugs rest each upon one rigid point of support, so that the basket is thereby firmly braced.

Third, the entire change in the arrangement of the basket front bars. This consists in the following arrangement: Heretofore these bars have commonly been cast so as to be horizontal and unsupported, except at their extremities, where they are solid with the outside vertical posts or bars of the basket, which mode of construction frequently leads to the great damage and inconvenience of the same being sprung, warped, cracked, or broken, thereby spilling out the burning matter therein contained.

In the drawings referred to, (see Figs. I and III,) these front bars are shown to be obliquely located, terminating in the upper, lower, and vertical outside bars of the basket, and also in a central vertical bar, I, as in Fig. I, extending from the upper outside bar to the lower one, thus acting as diagonal braces.

What I claim is—

1. The triangular movable plate F G H, resting in and fitting accurately to the space inclosed by the basket-jaws J J, and reposing upon the lugs A B C, these lugs being cast solid with jaw-bars J J.

2. The front grate-bars extending diagonally downward and outward, inclosed by and cast in one piece with the upper, lower, and two vertical bars of the outside grate and the central post.

J. B. TARVER.

Witnesses:

JAMES M. SMITH,  
SAML. B. HATCHER,