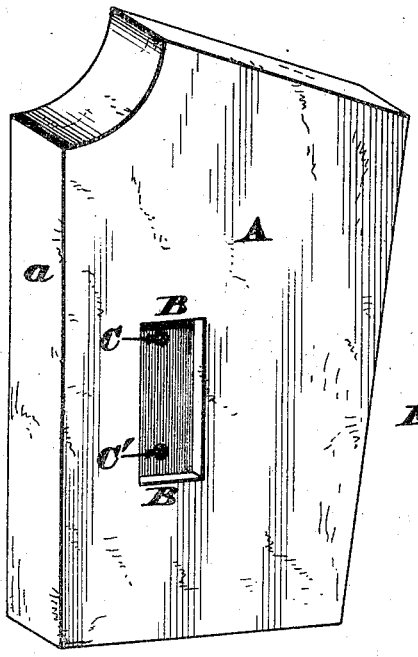
(No Model.) 2 Sheets—Sheet 1.

J. V. NICOLAI.

JAMB TILE FOR GRATES.

No. 305,756. Patented Sept. 30, 1884.

FIG. 1.



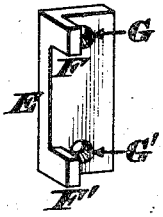


FIG. 2.

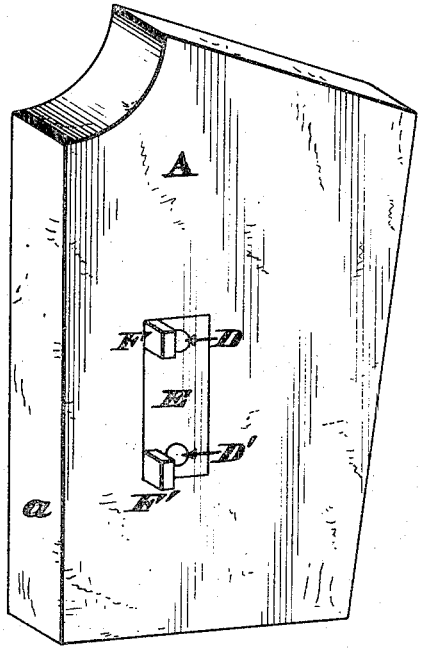


FIG. 3.

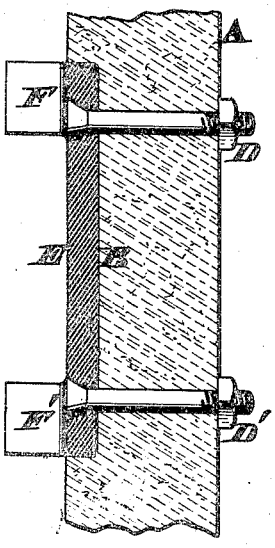


FIG. 4.

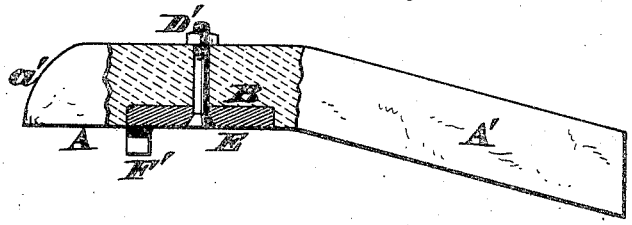
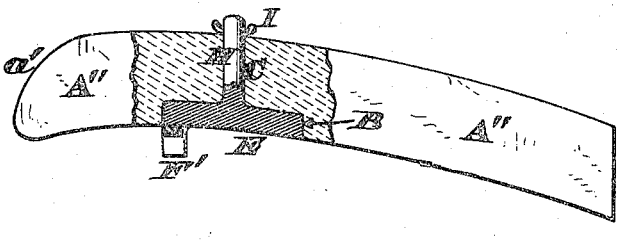


FIG. 5.



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Inventor:
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By James N. Layman & Atty.

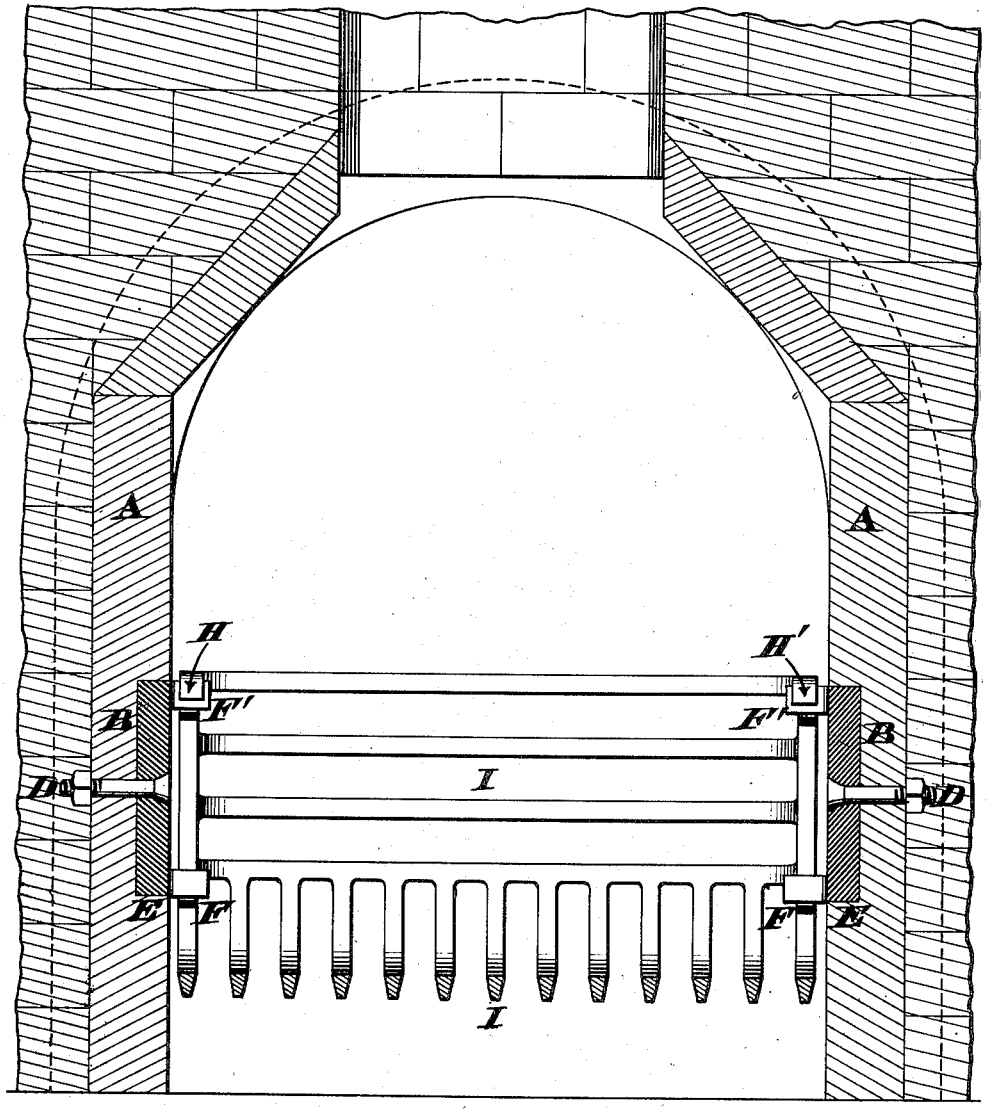
(No Model.) 2 Sheets—Sheet 2.

J. V. NICOLAI.

JAMB TILE FOR GRATES.

No. 305,756. Patented Sept. 30, 1884.

FIG. 6.



Attest.
S. Sayford,
John Becker

Inventor.
John V. Nicolai.
by James N. Bayman
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UNITED STATES PATENT OFFICE.

JOHN V. NICOLAI, OF CINCINNATI, OHIO.

JAMB-TILE FOR GRATES.

SPECIFICATION forming part of Letters Patent No. 305,756, dated September 30, 1884.

Application filed November 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN V. NICOLAI, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Jamb-Tiles for Grates, &c., of which the following is a specification, reference being had therein to the accompanying drawings.

My invention comprises a peculiar combination of devices wherewith grates can be readily and securely suspended from the jambs of fire-places, &c. To accomplish this result I make the jamb, or at least a large portion of the same, of a single tile or slab composed either of fire-clay or other suitable refractory material or materials, the exposed face of said tile having a recess or niche, into which latter is fitted a plate provided with one or more lugs that support the grate or basket in the usual manner. This recess or niche is made in the tile when the latter is molded, and at the same time one or more perforations are formed in said tile to admit bolts or other retaining devices. These bolts prevent the lugged plate falling out of the niche, while the shoulders or ledges at the top, bottom, and both sides of said niche prevent any possible lateral shifting of said plate. Furthermore, this niche, recess, or socket is situated at such a distance from the front or outer edge of the tile as to allow the basket to be applied in its proper place without projecting either beyond the grate-frame or the front edge of said tile. As a result of this location of the recess the summer-front, which is straight across from side to side and from top to bottom, can be inserted at any time and without detaching said basket, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a perspective view showing the lugged plate and recessed jamb-tile separated from each other. Fig. 2 is a perspective view showing said plate fastened in the tile. Fig. 3 is an enlarged vertical section of the tile and plate taken in the plane of the bolts or screws. Figs. 4 and 5 are horizontal sections of two modifications of my invention. Fig. 6 is a vertical section showing a basket suspended from a pair of my lugged plates, said section being taken from the rear and looking toward the front of the grate.

A represents a tile or slab of any suitable refractory material, the shape and size thereof being determined by the peculiar formation of the grate or other fire-chamber within which said tile is to be fitted. The exposed face of said tile has a pit, recess, niche, or alcove, B, perforated transversely at C C′ to admit bolts, screws, rivets, or other devices, D D′, that retain the plate E in said recess or socket B. This recess must be situated a suitable distance from the front edge of the tile—say about three inches, more or less—and must be so deep as to admit a plate sufficiently thick to resist the intense heat of the fire, said plate being preferably of cast-iron and having at its front corners one or more lugs, F F′, or their equivalents, to support the grate, basket, or cresset. Furthermore, this plate is perforated at G G′ to allow the heads of the bolts D D′ to countersink therein. After the tile has been cast, the lugged plate E F F′ is seated in the recess or socket B, and is retained therein by passing the bolts D D′ through the coincident holes C G C′ G′, and then screwing the nuts on said bolts.

Reference to Figs. 1, 2, 4, and 5 shows that the recess B is located at some distance from the front edge of the tile, in order that the basket when suspended from the lugs F F′ may not project beyond the grate-frame, thereby enabling the summer-front to be inserted without detaching said basket. Furthermore, this location of the recess renders it impossible for the perforations C C′ to crack the tile toward its front edge.

The tiles A are so constructed as to form the opposite sides or jambs of a fire-place or other fuel-chamber, as seen in Fig. 6, in order that the hooks H H′ of an ordinary grate or basket, I, may engage over the upper lugs, F F′, of the plates E E, fitted in said tiles, the lower lugs, F F, of said plates serving simply as bearings for the end bars of the basket to rest against. When thus fitted together, it is evident the bolts D D′ prevent the plates falling out of their respective recesses, while the shoulders or ledges of said recesses serve as abutments or bearings that hold the plates from moving either up or down or toward the

front or rear of the fire-place; hence, there will be be no possibility of the grate shifting in either direction, although it can be readily lifted off from the lugs when required.

In the modification of the invention seen in Fig. 4 the tile has an angling portion, A′, while in Fig. 5 the tile A″ is curved, thereby indicating that the invention is not confined to any special shape of such linings for fire-places. Furthermore, Fig. 5 shows the plate E; having a single stump, H, cast with it, through which latter is passed a key or other keeper, I, that bears against the rear side of the tile, thus showing that the plate may be retained in position with any device that can be most conveniently applied. Again, in Figs. 1 and 2 the front edge, *a*, of the tile is represented as being at right angles to the recessed side of the same, while in Figs. 4 and 5 said edge is rounded off at *a′*, so as to fit snugly in the outwardly-bowed portion of the grate-frame.

The recess B may be located a greater or less distance from the front edge, *a*, of the tile or from the bottom of the latter, according to the peculiar shape of the grate or basket. Finally, in some cases, either one of the lugs F or F′ may be omitted from the plate E.

I am aware it is not new to fit metallic grate-holders directly in the outer edge of fire-place walls or jambs, as such holders are seen in the patent issued to Howdon and Wood, August 13, 1878; hence, my claims are not to be construed as an attempt to cover devices of the character described in said patent, but the invention is expressly limited to the recess when made in the side of the tile and at such a distance from the front edge of the latter as to prevent the basket projecting beyond the grate-frame in order that the summer-front may be inserted in said frame without disengaging the basket therefrom.

I claim as my invention—

1. As a new article of manufacture, a jamb-tile, A, recessed on its side at B, to admit a plate, E, which latter is retained in place by one or more keepers, D, and has a lug that supports the basket, said recess being situated at such a distance from the outer edge of the tile as to prevent the front of the basket projecting beyond said edge, for the purpose herein described.

2. The combination, in a fire-place, of a pair of jamb-tiles, A A, recessed on their opposite sides at B B, to admit the plates E E, which latter are retained in place by suitable keepers, D D, and have lugs with which are engaged the hooks H H of basket I, said recesses being at such a distance from the outer edges of the respective tiles as to prevent the front of the basket projecting beyond said edges, for the purpose herein described.

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

JOHN V. NICOLAI.

Witnesses:

JAMES H. LAYMAN,

SAML. S. CARPENTER.